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Poland

Improving the financial sustainability of the hospital sector: towards a systemic approach

POLICY NOTE

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List of abbreviations

BGK	Bank Gospodarstwa Krajowego (only state-owned bank in Poland)
DRG	Diagnostic-related groups
EU27	The 27 Member States of the European Union
GDP	Gross domestic product
NFZ	Narodowy Fundusz Zdrowia (National Health Insurance Fund)
OECD	The Organisation for Economic Co-operation and Development
PLN	Polish zloty
SPZOZ	Samodzielny publiczny zakład opieki zdrowotnej – Independent Public health care entity (Traditional status of public facilities when not corporatized)

Improving the financial sustainability of the hospital sector in Poland: towards a systemic approach

Policy Note [1]

April 2014

Plain English Summary

It is increasingly recognized that the role of hospitals everywhere must change in order to maximize the benefits of medical progress and technology and to better respond to the needs of an aging population for coordinated and integrated care, all the while maintaining health spending at a level society can afford. Achieving this requires, among other measures, organizing a clear hierarchy between hospitals so that patient care is provided at the appropriate level, concentrating the delivery of highly specialized services to ensure quality and safety of patients, increasing the amount of services provided on an outpatient basis thus avoiding inpatient stays for patients where possible, and coordinating pathways with primary and social care to ensure patients receive care in the right setting.

In Poland, the deficits and debts of public hospitals have long been a concern, which successive bail-out plans have failed to resolve. Some argue that this is due to chronic underfunding of the sector or the role of the health insurance fund. Our analysis here, however, shows large variation in the financial standing of hospitals. Some regions have made a lot of progress in reducing their debt, while the situation continues to deteriorate in others. Poor regions or regions with many hospitals are not systematically more in debt. These results indicate that the problem does not have a simple and single explanation and that it is possible to perform well, given the resources available. This policy note seeks to identify the root causes of the problem and suggests that the solution will require a comprehensive set of reforms.

For historic reasons as well as due to incentives in the current system, the Polish hospital system remains oversized and hospitals tend to compete - rather than coordinate - with each other, investments in new services are weighted towards those that appear profitable, in a way which does not ultimately benefit the patients – or the tax payers. For example, where one department could serve the needs of the regional population for open-heart surgery, three hospitals compete. In the end, each department is underutilized, which is potentially detrimental to quality and wastes resources which could otherwise be better used to address other bottlenecks in the system, e.g. waiting lists.

[1] Prepared by Agnès Couffinhal, Senior Economist at the Word Bank and Kate Mandeville, Public Health Specialist.
The authors are grateful to Anna Koziel who collected valuable information and provided comments as well as Antonio Duran and the team of Tecsalud who supported the background work in regions which fed into this note. The team thanks Marcelo Bortman, Christophe Lemiere, April Harding and Daniel Dulitzky who provided insightful comments and suggestions on an earlier version. Boris Balabanov prepared the cover. The authors are also grateful for comments received from the Ministry of Health.

Recent regulatory efforts have focused on increasing the pressure on hospital founders to ensure their hospitals are properly managed by forcing them to cover their deficits, with the ultimate expectation that this would rationalize the system and that hospitals which are not needed would ultimately close. This is a welcome move as several case studies in Poland show that capable and committed management have the capacity to pull their hospitals into good financial standing, whereas poor management can lead to the accumulation of debt at an unsustainable pace. But the fact remains that a number of "toxic" hospitals have not been touched, and they will continue to cripple the system until their situation is effectively dealt with. Moreover, the experience of other developed countries suggests that moving towards the optimum model described above requires decisive, sustained, and complex regulatory interventions.

This policy note thus argues that increasing the accountability of hospital founders is only one part of the reform jigsaw needed to put the system on the right path. An important way to complement these changes is to introduce "health maps", which measure the health needs of a local population in order to plan the most efficient mix of services and to optimize the organization of health care providers, including hospitals, accordingly. Currently, there is no specific regulation to ensure the right number of hospitals provides the right mix of services. These health maps would be the tool demonstrating (for instance) that only one of the open heart surgery unit is needed in a given region. It is immediately evident from that example that implementation would require choosing which of the three departments would be strengthened and which would be closed. Translating health maps into reality would thus require making complex, controversial and politically difficult decisions in all regions, even if there is enough evidence to show that it would ultimately benefit the public. Health maps, however important, are only one of an array of incentives and regulations which will need to be modified to ensure that the many actors who deliver hospital services all work in the same direction and improve the outcomes for the population. All this will require a bold vision, strong and sustained leadership at the national level.

Executive summary and key recommendations

1. **Poland has made significant progress in rationalizing its hospital system, but the modernization agenda remains unfinished as can be seen through the systematic accumulation of liabilities by publicly owned hospitals**. Debt and arrears incurred by health facilities in the Polish health sector have been a source of concern for more than two decades. At the end of 2012, the total debts of public hospitals in Poland stood at 10.6 billion zlotys (0.7% GDP), 23% of which was arrears[2]. These debts have been a perennial concern for successive Governments and only alleviated temporarily by various debt relief plans.

2. **This policy note outlines a pathway towards improving the financial sustainability of the hospital sector in Poland.** Major obstacles to financial health are systematically reviewed, within the context of current and historical health reforms. The root causes of these barriers are analyzed from a managerial as well as a health system perspective, including the role of regulatory and financing constraints. Health systems are under tremendous pressure to adapt in the face of demographic and technological changes, a process which is likely to redefine the role of hospitals in the future. Preliminary recommendations are made distinguishing: (i) system-level changes which will require national-level policy interventions and (ii) options for local government and facility managers to work better within the existing system and enhance the chances of selecting “no regret move” investments.

3. **Analysis of the debt problem shows that, in real terms, the debt stock has decreased by 17% since its 2005 peak and the stock of arrears has been reduced by two thirds**. Although the overall financial standing of public hospitals remains worrisome, the situation has somewhat improved since 2004. In 2004 and 2005, the hospital sector’s debt represented more than 1% of GDP and 60% was in the form of arrears (“matured liabilities). When the amount is adjusted for inflation, the debt stock has decreased by 17% since its 2005 peak and the stock of arrears has been reduced by two thirds.

4. **Differences across regions cannot be easily explained**. Some regions have made a lot of progress in reducing the stock of debt, while the situation continues to deteriorate in others. There is no correlation between the hospital debt in a region and income for that region. Likewise, there is no relationship between the density of beds or occupancy ratios for these beds and the level of debt. In other words, there is no simple explanation of the variation. This picture challenges the idea that the growth of debt in the hospital sectors has a single and straightforward explanation, for instance the underfunding of the health sector or the role of the Health insurance fund (NFZ). Some regions are clearly more proficient at managing the problem than others, including some which started-off in a very bad position.

5. **A wave of reforms, initiated in 2009, promoted the corporatization of hospitals as a permanent way out of the debt crisis.** Public hospitals benefited from a series of bail-out programs over time with no lasting effect. In 2009, the Government adopted a new strategy which aims to transform hospitals into commercial code companies. The logic behind this proposal is that the corporatization ensures that the facilities’ arrears and debts are treated as those of any commercial enterprise which faces the possibility of bankruptcy if it cannot pay its bills. The expectation is that the increased accountability creates powerful incentives to restructure, improve management, and transform hospital into financially sustainable entities. Overall, the uptake of the corporatization program initiated in 2009 has been slower than anticipated. There is little evidence so far that corporatization per se has helped improve

[2] Technically, this figure reflects the stock of debt of SPZOZs (Independent public health care entities). SPZOZ is the traditional legal status of public hospitals. Not all SPZOZ are hospitals, and some hospitals, owned by public entities, now are commercial code companies. Their debt is not included in this number.

the financial standing of facilities. Further, the hospitals with the highest stock of debt have not typically benefitted from this reform.

6. **These reforms have nevertheless brought about a welcome increase in the accountability of most public hospital owners.** Indeed, the 2011 Law on therapeutic services, which was part of the corporatization program, also critically created an obligation for all hospital owners to cover the hospitals' deficits. Hospitals owners now have to face the financial consequences of allowing hospital to run chronic deficits. This could turn out to be a powerful and lasting incentive for them to become more proactive in the supervision and management of hospitals. The law in its current form however cannot meaningfully be translated to all public facilities, including university hospitals and institutes, some of which are among the most indebted facilities in Poland. The Ministry should rapidly take the necessary steps to ensure that the responsibility and the authority for undertaking and financing the reorganization of these facilities or for paying the price of not doing the needful are fully aligned for the long run.

7. **Whilst the reform of hospital legal status is one approach to the hospital debt problem, this note argues that a number of external factors continue to undermine the financial sustainability of hospitals in Poland and that more comprehensive reforms would be needed in order to bring about long-lasting changes**.

8. **The Ministry of Health and many stakeholders are largely cognizant of the problems and the possible solutions**. The document groups the factors which influence a given hospital's behavior in four domains: governance, regulation, purchasing of health services, and the interface with other health service providers. In each domain, it highlights some reforms which could create an environment more conducive to improving the financial sustainability of the system. Key reforms include:

- ✓ **Develop and implement service planning mechanisms.** Although previous attempts at introducing such regulation have failed, there is an increasing demand from local governments for the Ministry of Health to provide a framework which would allow/facilitate and even incentivize national or regional coordination of service planning as well as the creation of hospital networks at the regional level, irrespective of ownership status. The new planning mechanisms should aim to adapt service delivery to better meet current and future population health needs in the most efficient way. They should also promote modern principles for organizing service delivery, including the definition of well delineated levels of care and the concentration of specialized services that will help ensure quality of services and the safety of patients. These plans, generally known as maps in Poland, should also guide and help prioritize much-needed investments in the sector's infrastructure and the purchase of medical equipment to ensure better, more efficient and ultimately more sustainable investment.

  This planning exercise first requires setting some strategic directions and ambitious but achievable objectives based on present and future population needs. Second, and perhaps even more importantly, the frameworks and tools need to be developed which will ensure that local solutions emerge to meet these objectives. In a highly pluralistic system, the negotiation and implementation of these solutions is a very complex undertaking. Putting this in plain terms, and as an example, if it were rigorously and undisputedly established that only one hospital in a given regional capital should provide cardio-thoracic surgery, when currently three departments have a contract with the NFZ for these services in facilities owned by three different founders, how will the plan be operationalized? Who will be accountable for reaching the target? At what pace? How will the decision be taken of which department will remain open? In 2013, the Ministry of Health initiated the development of regional health maps, which is very encouraging

step in the right direction, but the debate has yet to start on how these maps would be translated into reality.

- ✓ **Improve the Diagnostic Related Group (DRG) costing base**. The long term financial sustainability of the sector requires devising a robust and sustained costing system. Hospitals in Poland are paid on the basis of DRGs, which are essentially flat payments per hospital stay for categories of patients whose diagnostic and other characteristics suggest they should require similar services. In theory, DRGs generate incentives to deliver services efficiently and reduce unnecessary procedures but distortions in service delivery can occur if the relative weights of DRGs do not reflect the resources required to produce the right amount of care. Changes between the relative prices of different DRGs are currently made on an *ad hoc* basis and distortions generate incentives for hospitals to "invest" in some profitable DRGs and select the location of care (in versus outpatient) based on price rather than on principles of good medical practice combined with an eye for economic efficiency. Overall, the payment system should better (i) ensure that hospitals who end up taking care of more complex cases are not at a disadvantage, (ii) promote more efficient patterns of care and (iii) promote quality standards. Specific legislation drafted in 2010 to create a "tariff agency" was temporarily put aside by the Ministry which aims to include this in a broader reform package, still under discussion.

- ✓ **While retaining a purchaser-provider separation, the purchasing framework should encourage longer-term relationships and integrated decision-making between providers and the NFZ**. As more stringent planning mechanisms are introduced, purchasing practices will need to be adapted to ensure they are consistent with and even support service reorganization. This might require for instance limiting the number of facilities which can be selected to provide specialized services in one area or limiting the scope of services some categories of establishments can apply for. Providers should have enough certainty about strategic directions which will be pursued in the mid-term to be able to make rational investment decisions. Reducing the uncertainty – perceived or actual – in the facilities revenue stream should further help them access financing for these investments.

- ✓ **The promotion of modern, high quality service delivery should become a more explicit part of the NFZ mandate.** The NFZ should be empowered to use pricing and contracting to pursue system-level objectives such as the promotion of outpatient surgery or the coordination of care. All in all, the NFZ will need to become a much more selective and proactive purchaser of services. The Government has been considering draft legislation to decentralize the NFZ. If the process goes ahead, it would be important to articulate how the new system would contribute to resolving the problems laid out above and help strengthening strategic purchasing along the above lines.

- ✓ **In parallel, a modernization of the quality assurance system is required**. It should move away from – and possibly remove - some detailed input-oriented regulations, and veer towards a greater focus on processes, output, and outcomes. A new model of clinical governance will require - among other - developing guidelines and protocols (linking with provider payments) and strengthening data collection and analysis. Ultimately, the payer (NFZ) should be able to link payments to the quality of care. A law had been drafted in 2010 to strengthen clinical governance but was not presented to the Parliament. The Ministry currently envisages starting this process in oncology.

9. **Even in the absence of systemic and regulatory changes, options are already available to the hospitals and local governments, some of which are already being used**. As highlighted earlier, however, even within the complex system they operate in, the performance of different regions appears

to vary greatly. This means that at least some founders and hospitals have become better at overcoming the existing constraints. Unpacking this, and taking some examples from good performers, have led to the following recommendations, which could be **taken on board by local governments even in the absence of major systemic reforms**:

- ✓ **Invest in developing and producing hospital indicator dashboards**. A minimum level of data reporting is mandated for all facilities across Poland. Most founders receive the data but seldom analyze it systematically or make comparisons with other facilities. Voivodships, which typically own a large number of facilities, would be in a good position to impose higher standards of data collection and benchmark facilities among themselves but the vast majority of them lack tools, time, and/or capacity. From a business perspective, it would make sense for founders and/or hospitals to individually or even jointly invest in developing and producing hospital indicators dashboards to monitor the costs, quality, efficiency and impact of delivered services. The systematic documentation and publication of comparative performance data might further generate leverage to impose politically difficult changes.
- ✓ **Increase management capacity and oversight.** Several case studies and policy dialogue conducted between 2012 and 2014 in Poland illustrate the extent to which management makes a difference to facilities' performance. Many hospitals remain under-managed, a problem hospital owners should be in a position to address. Political pressure to maintain the status quo remains a powerful deterrent. Successful restructurings have usually been driven by innovative managers (either in facilities or in the local government) with strong and sustained political support.
- ✓ **Develop systematic evaluations and joint-learning.** Successful examples of innovative management approaches are not systematically documented or shared in learning fora. Voivodships and other local Governments could clearly benefit from collecting and sharing lessons learned and assessing the impact innovative approaches have had on various performance criteria.
- ✓ **Develop mid to long term strategic frameworks and cooperate with other hospital owners**. Health maps and planning tool may eventually be introduced but at the end of the day, adapting them will be a matter of negotiating solutions and finding compromises locally. In other words, reorganizations will ultimately be designed and negotiated within and sometimes across regional boundaries. To date, many local structuring and investment decisions remain tactical in nature. They focus on short term financial opportunities and constraints and fail to incorporate best practice knowledge and evidence on changing patterns of care, population health etc. As an illustration, Voivodships, despite the fact that they own many facilities in any given region, continue to see their hospitals as separate (and competing) entities and as far as we know, none ever developed "network-level" strategic reorganization plans. The 2011 law provides opportunities to merge facilities owned by single or different local Governments but thus far, it does not appear that these options have been exerted[3]. The unstable regulatory environment and the lack of clear directions may in part account for that, but the current environment nevertheless provides plenty of opportunities for "no-regret" moves. Regions and local governments could greatly enhance their strategic planning capacity. Ideally, this strategic planning at the regional level should not limit itself to health but should include the social sector which contributes to meeting the needs of the aging population.

[3] A group of hospitals in Dolnaslaskie is apparently considering such a merger.

10. **The analysis suggests that Poland still has a solid hospital reform agenda to tackle. There is a fair amount of technical and expert agreement on what the problems are as well as on many of the "blocks" which are needed to build a sustainable solution.**

11. **To summarize and conclude, the experience of other countries points to the need to strengthen system-level stewardship in Poland[4].**

12. **Well–performing pluralistic and market-oriented systems rely on complex regulation and strong institutions.** Health systems across the world rely more or less on market forces and competition to achieve the outcomes they set for themselves in terms of access to quality services and efficiency in the use of public resources. Countries with well-performing pluralistic systems and which put more emphasis on market-based incentives, such as the Netherlands, Germany or Estonia, also have developed over time strong regulation, monitoring mechanisms, and institutions which typically aim to enable collaborative solutions in order to ensure that the system is moving towards system-level targets.

13. **These tools and institutions are underdeveloped in Poland**. Poland has a highly pluralistic hospital system and - for instance through the most recent corporatization reforms - has generally sought to increase the space for market forces to reshape the sector. Yet, as highlighted in this paper, competition between hospitals as it is currently taking place in Poland has probably had detrimental effect on the targeting of investments, the fragmentation of the system, and even quality. In Poland, no explicit strategy is set out for the hospital (or generally the service delivery) system. There is no common framework to analyze the performance of individual hospitals or of regional networks, and to provide this information to decisions-makers or the public. There are no formal systematic and organized discussions between hospital founders, either nationally or in regions. More broadly, when fundamental trends in medical progress, population health and expectations as well as financial constraints call for a better organization and coordination of service providers, no entity has taken the responsibility to steer the system in this direction.

14. **Strengthening stewardship will take efforts to build consensus, sustained political will and a measure of investment.** Transforming and modernizing the system to improve its capacity to meet the needs of the population may require building a consensus on a comprehensive diagnostic about the root causes of the problem and the objectives of the reform. Considerations about the financial health of individual hospitals, although important, cannot be the only area of focus, especially since there are potential conflicts between short-term hospital level decisions and system-wide sustainability objectives. In addition to a broader-based agreement that improving the hospital system sustainability will require complex and concerted interventions over a period of time, a strong political commitment to reforming the system will be needed. These changes will require that more resources be spent to lead, organize and manage the hospital system as well as to monitor its contribution to health system outcomes.

15. The comprehensive reform should probably start with the development of a strategy for service delivery. Once key parameters are set and main options are identified, the pathway to building the institutions and accountability mechanisms which are required to manage the pluralistic system of Poland will need to be designed at country level, taking into account institutional, technical and political factors. This pathway should be designed collaboratively and a dialogue platform should be put in place to involve the wide range of stakeholders which would be affected by a reform to enhance the system's stewardship.

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[4] Stewardship is understood here as the overall leadership of the (hospital) system to ensure it contributes to achieving better outcomes.

Improving the financial sustainability of the hospital sector in Poland: towards a systemic approach

Policy Note

1 Introduction

1. **Over the past twenty years, the Polish health system has undergone several deep systemic changes**. In many respects, and in comparison with countries which joined the EU in the past decade, the health system performs quite effectively and delivers services at a reasonable cost. Health outcomes such as life expectancy are increasing steadily. At the same time, substantial scope remains for improvements in resource allocation and service delivery.

2. **Poland spends more of its healthcare budget on inpatient hospital care than comparable countries, signaling an area of inefficiency that requires reform ahead of demographic trends.** Expenditure on inpatient hospital care as a proportion of total health expenditures is the fifth highest in the OECD, behind Australia, Austria, the Netherlands and Japan[5]. There are high admission rates for conditions and surgical procedures that can be treated equally well without inpatient care. This overreliance on hospital care is unlikely to be sustainable in light of demographic trends: the fertility rate in Poland is one of the lowest among the EU27, and the effective old-age dependency ratio in 2060 will be the highest in Europe at over 100%.[6]

3. **Ownership of public hospital facilities[7] is fragmented between different levels of government, leading to multiple stakeholders and a lack of accountability**. As in many Eastern Europe countries, when territorial governments were created, they were given the ownership of hospitals which serve the population in their territory. In Poland[8], Voivodships and Powiats manage regional and local hospitals respectively, with universities and a vast array of other public units managing additional facilities. Thus in any given region, powiat, Voivodship, university and other publicly-owned hospitals coexist. As this note will develop, the system is organized in such a way that this creates competition among levels of Government rather than the coordination necessary for efficiency and quality gains. In addition, as until recently they had no direct stake in the financial sustainability of service delivery facilities, the vast majority of entities which owned public hospitals took limited interest in the monitoring of their performance and their management.

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[5] Boulhol, H., et al. (2012), "Improving the Health-Care System in Poland", OECD Economics Department Working Papers, No. 957, OECD Publishing.

[6] European Union, 2009

[7] The relevance of the distinction between private and public hospitals has decreased since the passing of the 2011 Law on Therapeutic Activities. The term "public facility" is used in this note to describe hospitals whose founding body – or main owner - is a public entity. The health facility itself could be a commercial code company.

[8] There are 3 levels of local governments in Poland: Voivodships (Regions) of which there are 16 since the 1999 administrative reform, with a population between 1 and 5 million, Powiats (districts) and Gminas (municipalities). Local government leaders are elected and manage independent budgets, financed partly from the center and partly from their own resources. Poland moved quite rapidly towards decentralization in many sectors, including health. Local governments own the vast majority of public hospitals (services are funded by a health insurance scheme as explained later).

4. **Poland has made significant progress in rationalizing its hospital system and reducing the number of beds, but the reform agenda remains unfinished as evidenced by the continuing debt issue.** A key manifestation of this has been the systematic and inordinate accumulation of liabilities by publicly owned hospitals. These debts[9] have been a perennial concern for successive Governments and only alleviated temporarily by various debt relief plans.

5. Over time, the government has implemented reforms to increase the accountability of hospital owners to tackle the debt issue, but additional measures are required to help address the causes of the problem in addition to the symptom.

6. **This note outlines a path to improving the financial sustainability of the hospital sector in Poland.** The "anatomy" of the debt problem is examined and major obstacles to financial health are systematically reviewed. The root causes of these barriers are analyzed from a managerial as well as a health system perspective, including the role of regulatory and financing constraints. In making the "case for change", the report also discusses how secular trends, for instance in population health and service delivery, need to be taken into account as plans to reshape the hospital system are being formulated. Preliminary recommendations are made distinguishing: (i) system-level changes which will require national-level policy interventions and (ii) options for Voivodships and facility managers to work better within the existing system and enhance the chances of selecting "no regret move" investments.

2 Hospital debt in Poland: scope of the problem and attempted solutions

2.1 Anatomy of the "debt problem"

7. **Debt and arrears incurred by health facilities in the Polish health sector have been a source of concern for more than two decades**. At the end of 2012, the total debts of public hospitals in Poland stood at 10.6 billion PLN (0.7% GDP), 23% of which was arrears ("matured liabilities"). Although the overall financial standing of the public hospitals remains worrisome, the situation has somewhat improved since 2004 (Figure 1 and 2). In 2004 and 2005, the hospital sector's debt represented more than 1% of GDP and 60% was in the form of arrears. Over time, in real terms, the debt stock has decreased by 17% since its 2005 peak and the stock of arrears has been reduced by two thirds. A debt forgiveness plan implemented by the central government in 2005 and 2006 may be a factor in this decline, although it has been argued this only restructured the debt.

[9] Various terms and translations are used to describe "debts". The convention in this document is that generally the term debt refers to all the liabilities of the hospitals. "Arrears" are all the overdue liabilities, and are thus included in the debt. A deficit is the excess of hospital expenditures over revenue in one financial year i.e. the increase in debt over that time period.

Figure 1: Overall debt and arrears as a % of GDP between 2004 and 2012

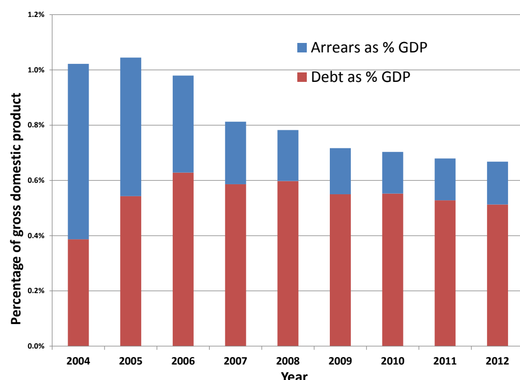
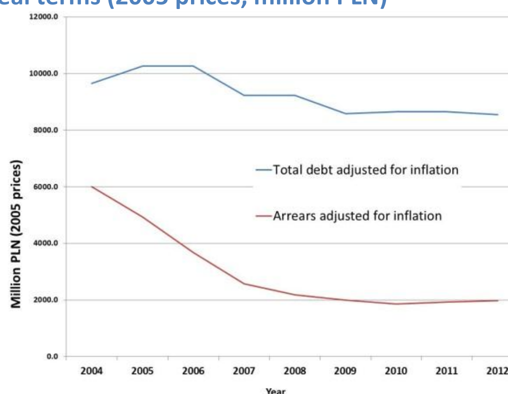


Figure 2: Change in the stock of debts and arrears in real terms (2005 prices, million PLN)



Source: Ministry of Health

8. **The analysis of publicly available data on debt and arrears challenges the idea that the debt in the hospital sectors has a single and straightforward explanation**. It is a widely held view that hospital debts arise from the chronic underfunding of the health sector or the role of the Narodowy Fundusz Zdrowia (NFZ) - the national health insurance fund. In order to investigate this, an analysis was carried out of aggregate information about hospital debts and arrears by regions published by the Ministry of Health. The data is insufficient to analyze the determinants of hospital debt, yet the following conclusions can be made (see Annex for additional details):

- ✓ **Debt levels vary greatly among regions**. The average stock of debt per hospital bed in 2012 is around PLN 68,000, but levels range by region in a ratio of one to three around this figure. The debt per bed is over PLN 85,000 in Mazowieckie, Pomorskie, and over PLN 100,000 in Kujawsko-Pomorskie and Lubuskie). At the other hand of the spectrum, in Opolskie, Zachodniopomorskie and Warmińsko-Mazurskie, the debt per hospital bed is below PLN 40,000.
- ✓ **Progress in managing the debt is very unequal**. For instance, Dolnośląskie, which had the second highest debt burden per bed in 2006, is at the average for Poland in 2012. The debt was also reduced by more than 45% in real terms in Łódzkie, Pomorskie and Lubuskie. In contrast, the situation in Lubelskie, Kujawsko-Pomorskie and Mazowieckie continues to deteriorate.
- ✓ **No simple explanation can account for regional differences**. First, the very existence of such variations challenges the commonly accepted idea that hospital debts arise from chronic underfunding or the role of the NFZ. Further, debt is not more prevalent in poor than rich regions or in regions that have large infrastructure. Analyses nevertheless suggest that regions which have made significant strides in reducing the stock of debt are also regions where the number of beds has decreased more rapidly than elsewhere.
- ✓ **Similarly, not one single category of hospital owner appears to perform systematically worse than the others**. In fact, the Ministry of Health reports that around 67% of all SPZOZ[10] are free from debt and that 10% of these entities account for 80% of the stock. In other words, not all hospitals in Poland are facing financial problems or high levels of debt, and the majority is in reasonable financial standing.

[10] SPZOZ (Samodzielny publiczny zakład opieki zdrowotnej) is the default legal status of public health care entities.

2.2 Regulatory efforts to tackle the "debt problem"

9. **There have been repeated attempts at resolving hospital debt issues**. After a series of debt forgiveness plans by the central government in 2005 and 2006, hospital debt rapidly accumulated again, leading a newly elected government in 2007 to search for an alternative plan to improve hospital financial sustainability.

10. **The most recent efforts focus on corporatization as a means of achieving sustainability**. In 2008, a proposal was put forward by the government for the mandatory transformation of all publicly owned hospitals into commercial companies. The logic behind this proposal is that the transformation of a hospital into a commercial entity ensures that its arrears are treated as those of any commercial enterprise which is required to follow commercial financial reporting requirements and thus face the possibility of bankruptcy if it cannot pay its bills. The expectation is that ultimately, the increased accountability of hospital owners creates powerful incentives to restructure, improve management, and transform hospital into financially sustainable entities.

11. **Corporatization (in the legal sense) was encouraged under the "Plan B" reforms of 2009**. Whilst an initial proposal to corporatize all hospitals was vetoed by the then-president, a subsequent proposal nicknamed Plan B was put forward in 2009. This offered state assistance to local governments that transformed hospitals under their ownership into commercial companies. Critically, transformation was undertaken on a voluntary basis – in other words, hospital owners self-selected into the scheme. Overall, the take-up of Plan B was limited, with 24 hospitals transformed into commercial entities by its conclusion in December 2011 (Source: Ministry of Health)[11].

12. **The 2011 Law on Therapeutic Activities built on the principles of Plan B but critically now forces hospital owners to be liable for hospital deficits**. The law obliges all hospital owners to cover any deficit incurred within three months of the end of the fiscal year (starting in 2013 for 2012 financial results). Founders that choose to not address these liquidity issues are required, by this law, to initiate, and complete within 12 months, a corporatization or a liquidation process during which the existing debt of the facility will be absorbed and/or restructured. More specifically, if the facility is corporatized, the

Box 1: The impact of a hospital restructuring on a Powiat's finances: A concrete illustration

In 2003, the Powiat council of Kluczborski (Opolskie) decided to corporatize the local hospital. At that time, the hospital debt was equal to 45% of the powiat's revenues, and the Powiat's own debt represented 25% of its revenues. The new hospital started off with no debt but became responsible for funding its own investments. A 2008 case study details the managerial decisions which were taken and the transformation of the hospital which was able to undertake capital investments starting in 2005 and pay dividends to the Powiat in 2008. The cost of tackling the hospital restructuring was very high for the Powiat: its operating deficit dipped to 16% of its revenues in 2005 and its liabilities to revenues ratio reached 57% in 2007. In 2011, the debt to revenue ratio of the Powiat was close to 70%. In 2012, the Powiat's operating deficit was still 4% of its revenues. Its debt to revenue ratio formally decreased to 56%, in part as a consequence of the sale by the Powiat to the hospital of a building it is operating in. However, at the end of 2012, the Powiat took out a loan to finance investment in schools which further increased the ratio to nearly 80%. Clearly, six years after having taken on the hospital's restructuring, the Powiat's finances remain unbalanced and the bailing out of the hospital has undermined the Powiats capacity to undertake other investments.

Source: Malinowska-Misiag E, Misiag W, Tomalak M (2008) The use of Public Resources in hospitals, Case study of Poland, Gdansk institute of Market Economics and public data.

[11] Over the same period, 30 additional hospitals changed their status but not under plan B.

newly created entity's initial debt cannot exceed 50% of its expected revenues. In order to encourage speedy adoption, the law provided for a 1.7 billion PLN public debt relief program to which hospitals needed to apply before the end of 2013, otherwise their debt would not be assumed by the government[12].

13. **The impact of the 2011 law on local governments' finances is likely to be significant**. Simulations were undertaken using 2010 public information on local governments' public finances and data obtained from the Ministry of Health on hospital finances. Only aggregate data was available by region and by type of local government. On average, data showed that Voivodships' deficits represented around 8% of their revenues. If the 2010 deficit of Voivodship-owned hospitals was added to this result, the Voivodships' deficits increased by 3 percentage points on average (and by more than 5 percentage points in 6 Voivodships)[13]. This analysis put into perspective the debt of the local governments and that of the hospitals they owned. Local governments' debt, excluding hospitals, represented around 3.9% of GDP in 2010. If the debt of the local-government owned hospitals was included, this figure increased to 4.4% of GDP. If Voivodship hospitals' debt was added to the Voivodship governments' debt, their ratio of debt to revenue would nearly double, from 30 to 58 percent[14]. The increase appears smaller for Powiats (11 percentage points) and Gminas (one percentage point) but this average masks the fact that many local governments do not own hospitals[15]. In sum, although hospitals debt are not formally part of the local governments' debts, the stakes are quite high for them and it is likely that the law will create a strong incentive for local government to become much more diligent in their management of hospitals.

[12] Not all debt was eligible and additional criteria had to be met.

[13] This is an underestimate. The data availed by the Ministry of Health only includes, by level of government, the sum of all revenues of hospitals and all expenditures of hospitals, not the actual result of each hospital. So for instance, if a Voivodship owns two hospitals with a deficit of 50 and one hospital with a surplus of 100, the aggregate result is shown as zero, and the law may appear to have no impact on the deficit of the Voivodship, when in fact at the end of the year, the Voivodship would have to cover the deficit of the two hospitals (100). A similar simulation shows that powiats' deficits increase by one percentage point. However, the result is not as meaningful as, in this case, the 'net' deficit of hospitals is split among all Powiats, not just those who own hospitals, which further underestimates the result.

[14] Until 2014 there was a uniform ceiling on local governments' debt of 60 percent of revenues. The ceiling is now replaced by a different fiscal rule for local governments which also aims to ensure debt sustainability at the local level.

[15] There are 314 Powiats and 65 Powiat cities. The number of hospitals jointly owned by these two categories of local governments is 230. In other words, 60% of Powiat and Powiat cities or less own a hospital (some Powiat cities, like Warsaw, own more than one).

Table 1: Decision of founders regarding 2012 deficit (as of August 2013)

Region	Number of SPZOZ with a deficit	Deficit (total)	Decision of Founder				
			Founder Covers Deficit	Facility covers the deficit from its own sources	Transformation	Closing of facility	No decision taken
Dolnośląskie	32	15,651,637	5	7	2	3	4
Kujawsko-Pomorskie	14	6,806,480	0	9	2	0	1
Lubelskie	4	9,741,817	4	0	0	0	0
Lubuskie	2	458,655	1	0	1	0	0
Łódzkie	25	14,563,481	5	6	8	0	0
Małopolskie	10	3,088,954	8	0	1	1	0
Mazowieckie	40	101,802,751	3	5	4	2	0
Opolskie	4	1,655,007	1	2	1	0	0
Podkarpackie	12	7,054,050	11	0	0	1	0
Podlaskie	5	1,959,237	0	1	0	0	4
Pomorskie	5	4,993,922	1	0	1	2	1
Śląskie	25	56,716,100	11	0	3	0	11
Świętokrzyskie	13	10,666,882	3	10	0	0	0
Warmińsko-Mazurskie	10	3,927,080	1	4	1	1	3
Wielkopolskie	5	13,129,452	2	0	1	0	2
Zachodniopomorskie	6	3,124,464	2	0	2	0	2
TOTAL:	212	255,339,969	58	44	27	10	28

14. **In 2012, the deficit vast majority of SPZOZ in the red was eventually covered, either from their own resources or by their founders.** The 2011 law implementation effectively started in 2013, when founders had to decide what to do about the 2012 deficits. Table 1 shows that in 2012, 212 public hospitals incurred a deficit (around a quarter of public facilities). The deficit accumulated across these facilities was 255 million PLN16. As of August 2013, founders has decided to transform 27 of these hospitals, applying for around 100 million PLN worth of support (less than 10% of the sum availed under the law) 17. The decision had also been made to close ten facilities. In around half the hospitals with a deficit, a decision was made to cover the deficit, either from founder or hospital resources.

[16] The 2010 data discussed earlier showed a deficit of 1 billion PLN for public hospitals that year. Although it is too early to identify a trend, it will be interesting to find out if this significant reduction in deficit and promising sign of greater financial discipline is sustained.
[17] By December 2013, 43 hospitals were slated for transformation and applications covered 25% of the funds.

15. **The recent reform program has over time led to the transformation of around 20% of SPZOZ into commercial code companies**. In total, 168 public hospitals (around 20% of public hospitals) now operate as corporatized entities under commercial law. Out of these, 71 (less than half) were transformed between 1999 and 2008, prior to the introduction of incentives by the government. From 2009 to 2011, a further 54 hospitals were transformed, out of which 24 were under „Plan B". A PLN 1.38 million envelope was available to support transformations under plan B, of which around 55% was eventually used, mainly to pay-off the transformed hospitals' arrears on public debt. On average, local Governments which used plan B were able to obtain a subsidy of around half of the transformed hospitals' debt they had to cover. Overall, uptake of corporatization has been slower than anticipated by the promoters of the reform and the absorption of the available subsidies mediocre.

16. **Another question is whether the reform program initiated in 2009 has helped tackle the debt problem.** According to the Ministry, over the last 14 years, around PLN 3 billion has been spent from the state budget for debt forgiveness and corporatization initiatives. In addition, the BGK Bank has provided PLN 2 billion loans to local governments for health, out of which 70% was written off. Yet, as shown earlier, the stock of debt of public hospitals has been roughly stable in nominal terms over the last few years. Comparing with previous periods, achieving this stabilization of the debt is certainly a positive result. A separate question is whether the reform program can help reduce the stock of debt. A gradual decrease can certainly be expected, as transformations and liquidations – which typically require that the facility's debt be renegotiated and at least partly paid-off, will happen over time. However, discussions with stakeholders suggest that the worse-off hospitals (in terms of debt ratio) have for the most part been unable to benefit from the new generation of debt relief programs because their founders cannot absorb the share of the debt that is theirs to pay-off. In other words, even if they wanted to transform the hospitals to benefit from the subsidies or to limit their responsibility in the hospitals' financial stake in the long run, some founders are simply unable to take advantage of the opportunity. Given that the debt is concentrated among a small number of hospitals, it may be the case that the most indebted hospitals will require specific support to extinguish the debt.

17. **A systematic evaluation of the impact of the transformation on hospital performance would be beneficial.** The Ministry of Health reports that it monitors the financial standing of transformed hospitals, but no systematic evaluation of the impact of these transformations is available. A 2013 report from the Supreme Audit Office[18] examined 15 cases of corporatization and reviewed the adequacy of the use of public funds as well as the impact on the transformed entities. For 12 of the 15 entities, the decision to transform was motivated by their very poor financial standing. Recognizing that it was too early to draw firm conclusions, the report showed that:

- ✓ Four of the facilities had rapidly turned the financial situation around through improvements in management, a reorganization of services to meet population needs and an adjustment of the capacity to the actual size of the NFZ contract which translated into significant reduction in staff;
- ✓ In most other cases, the transformed hospitals were still generating losses. In general, in these cases, no action had been taken to improve management, restructure activities, and the number of employees had not changed much;
- ✓ A number of local governments were shown to not have paid close attention to the rules governing the process and a number of irregularities were detected.

[18] Najwyzsza Izba Kontroli –NIK

18. **Good quality management, rather than corporatization per se, appears to be a key driver for success**. The report of the Audit Office as well as the 2008 case studies[19] provided a number of examples which contrasted success and failure; the former appeared to be systematically characterized by proactive and strategic management and the latter by lack of decisive action which led to a downward spiral. These studies further found no evidence that corporatization systematically brought good management about or that good management and the restructuring of a facility was not possible in the context of an SPZOZ. Case studies of successful and unsuccessful restructuring all pointed towards staffing levels as a major lever to reduce cost, without necessarily decreasing activity. In other words, productivity gains. Other success factors included a strong coordination between the local governments and the hospital managers.

19. **Over the last few years, the accountability of hospital founders has substantially increased**. Repeated bailing out of hospitals in financial difficulty by the central government in the past has undermined a culture of "sink or swim". The new wave of reform may have helped reverse the trend. It has led to some hospital restructurings, including outside of formal debt relief programs. Some local governments are also developing innovative solutions, such as leasing hospitals to private management firms and generally it appears that they pay more attention to the management of hospitals. The incentives put in place by the 2011 law have the potential to keep a check on the level of debts incurred by hospitals and avoid further ballooning. It is important to recognize that corporatization per se does not alleviate the pressure governments are under to maintain facilities open. Hospital closure, whether of a newly privatized entity or a publicly owned facility, will still face public and political resistance. Further, so far, many of the most indebted hospitals have remained out of the reform realm. The credibility of the entire program hinges on the government's ability to manage the resulting political pressure.

20. **Is this enough?** Whilst the reforms to legal liability are one approach to the hospital debt problem, there are a number of continuing external constraints to the financial sustainability of hospitals in Poland. These are discussed in detail in the next section, followed by recommendations for more comprehensive reforms in order to bring about long-lasting changes.

3 Constraints to financial health: a systemic view

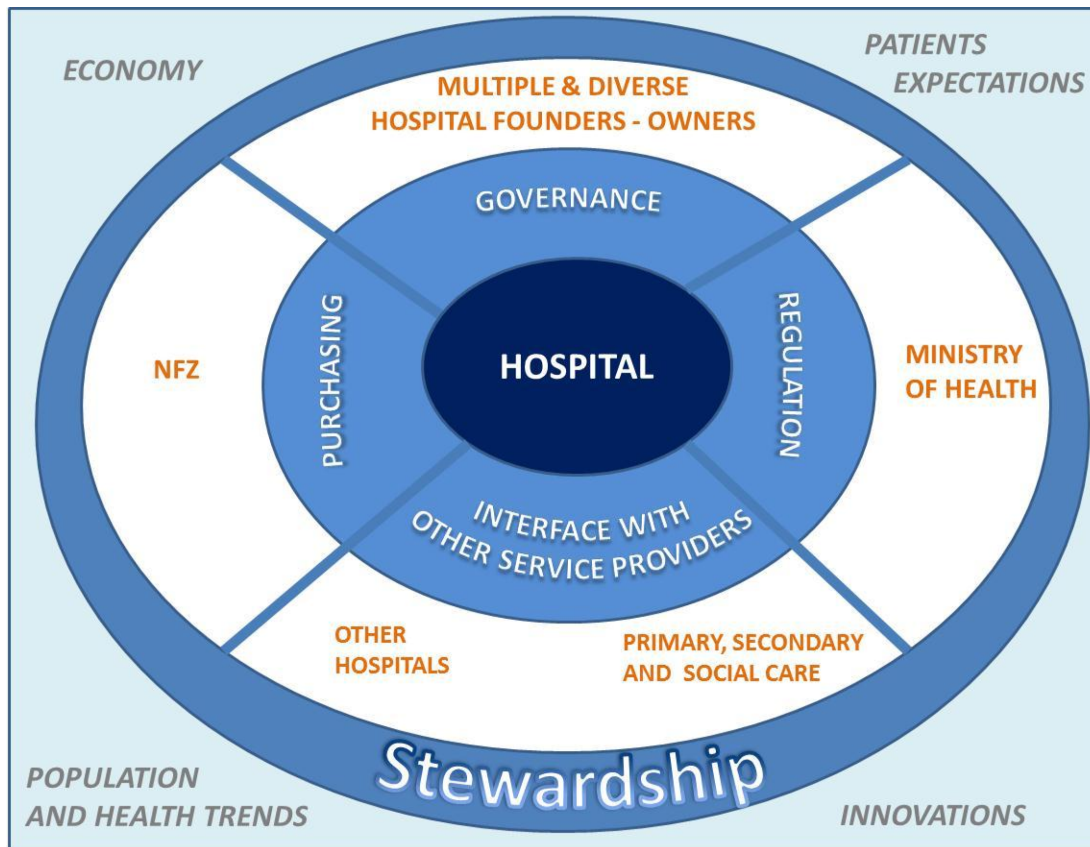
3.1 Proposing an analysis framework

21. No hospital works in isolation. Each facility is part of a complex health system, interacting with many other entities and actors at different levels of the health system as part of the daily "business" of providing healthcare. Each of these exerts an influence on the behavior of hospitals, shaped by the broader national context and international trends[20]. The following lays out a framework which organizes the factors which influence hospital behavior. The framework is presented and applied to Poland.

[19] Malinowska-Misiag E, Misiag W, Tomalak M (2008) The use of Public Resources in hospitals, Case study of Poland, Gdansk institute of Market Economics

[20] Hospitals in a Changing Europe, Editors Martin McKee and Judith Healy, European Observatory 2002

Figure 3: Factors influencing hospital behavior: a framework and its application to Poland



Source: Adapted from Jakab et al (2002)[21]

22. **Figure 3 groups the factors which influence a given hospitals' behavior in four domains**. The first domain is **governance**, understood here as the active exercise of ownership, incorporating oversight and accountability of both corporate and clinical processes. In Poland, as noted in the previous section, hospitals are owned by a very diverse group of hospital owners/founders. Secondly, **regulation**, which in Poland is primarily issued and enforced by the Ministry of Health and third, **purchasing**, which is conducted by the NFZ. The fourth set of factors which influence hospital behavior is the hospital's **interface with other service providers**: other (neighboring) hospitals, as well as primary, community, and potentially social care providers.

23. **The framework focuses on mezzo-level governance.** The four-domain framework presented here focuses on a "meso"-level analysis, but it is important acknowledge two additional "macro" and "micro" issues. First, on the "macro" level, the characteristics of each domain are, in large part, organized by the Government (or the Ministry of Health). Indeed, the Government insofar as it is in charge of organizing the health system and improving its overall performance, selects the laws and regulations which define the boundaries and rules of the games for governance, purchasing, regulation. It can also influence the organization of service delivery. In other words, the Ministry of Health or more broadly the Government is meant to exercise **overall stewardship** for the hospital sector, irrespective of hospital ownership.

[21] Jakab, M. Preker, A. Harding, A., Hawkins, L. (2002). The introduction of market forces in the public hospital sector: from new public sector management to organizational reform.

24. On the "micro" level, it is important to acknowledge that hospitals, at the core of the framework and represented here in the center, are implicitly identified with their managers. In the process of running the facilities, managers must manage the interface with other providers, adhere to regulation, be accountable to the entities that govern them and respond to the incentives set by those who purchase services. In reality, and in addition to the institutional and external influences described above, managers also face other forms of direct internal pressure, for instance from their staff. More than half of hospital income is spent on its employees in the form of salaries, and they hold considerable sway in the running of their facility. In particular, physicians form an especially powerful lobby group that hold significant influence over service provision, staffing and equipment decisions.

25. The following sections will look in turn at the four quadrants, starting with a brief description of the service delivery system. The intention here is not to be comprehensive but rather to highlight the problems and main bottlenecks in each area that help explain the situation of Polish hospitals.

3.2 Health system and service delivery environment

26. **Health systems in Europe are under tremendous pressure to adapt in the face of well-known challenges, a process which is likely to redefine service delivery and the role of hospitals**. The first of this constraint is the economic situation which puts pressure on the public and private resources available to finance health care and creates pressure for more efficiency. The second is aging: the proportion of people aged over 65 years old in Poland is expected to double by 2035, and this older population may require more medical and social care[22]. At the same time, innovations in medical care and technology have the potential to reshape the hospital landscape. Developments in minimally invasive surgery and anesthesia have led to a greater proportion of surgery undertaken as day cases, reducing lengthy pre- and post-operative stays. Many conditions are now fully managed in primary care and outpatient care, allowing patients to avoid disruptive inpatient stays. There is also a need to concentrate specialized services to provide access to the best quality of care and complex treatment in facilities that can deal with increasingly polypathological patients. These trends in technology and innovation contribute further pressure to changing the role of hospitals to optimally meet population health needs ahead of demographic trends[23].

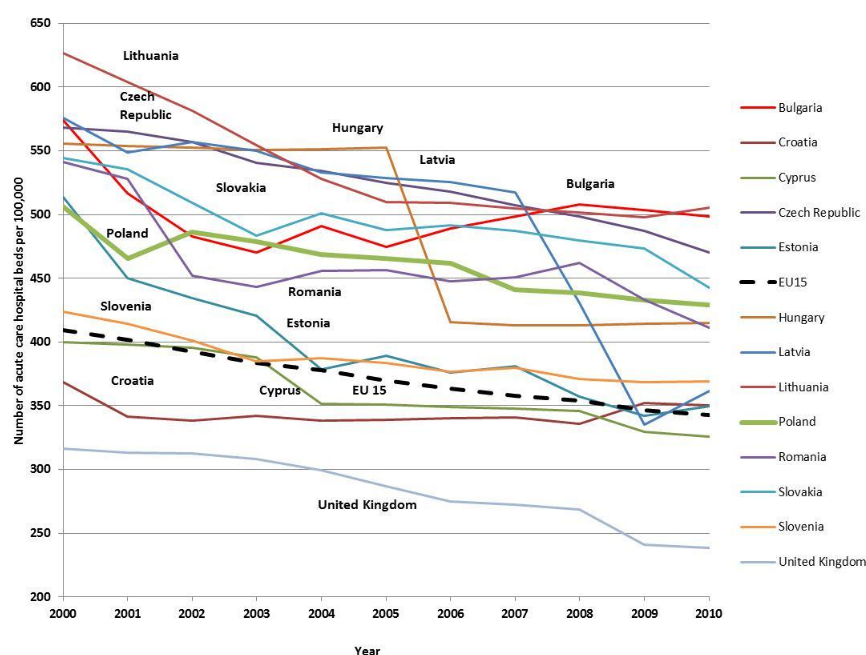
27. **The required adaptation is perhaps more difficult to achieve in health systems which, like in Poland, remain shaped by a Semashko legacy**. Health systems in Eastern Europe were modeled on the Soviet "Semashko" system with highly centralized planning and considerable investment into physical and human resources. Inpatient care was seen as the gold standard, with the main function of primary care being to identify and refer cases up to secondary care. Many monoprofile hospitals were established to concentrate specialist services, which are increasingly ill-adapted for a patient population with multiple co-existing diseases. This has led to a legacy of hospital overcapacity, combined with sentimental attachment by the population to their local hospitals with fierce resistance to closure. Conversely, primary and outpatient care are typically underdeveloped.

[22] The complexity of health problems tends to increase as populations age, with more people suffering from multiple comorbidities and chronic diseases, whilst receiving a wide range of treatments that could potentially interact with each other. Adapting to this requires: i) emphasis on health and wellness and disease prevention programs that target the main causes of morbidity and premature mortality, ii) coordination of care across health and social services, as well as across different levels of the health care system; and iii) recognition of the important role played by primary care providers in helping patients optimize their medical care.

[23] The influence of population trends, the economic situation and innovations goes beyond "service delivery and impact the entire health system – which is why they are represented in an "outer circle".

28. **There is evidence that service provision is disproportionately focused towards inpatient care**. Poland has high admission rates compared to other OECD countries for ambulatory care-sensitive conditions like diabetes and asthma for which treatment approaches are available that avoid costly inpatient stays when implemented correctly. In addition, surgical procedures are contracted in such a way that hospitals are reimbursed more for inpatient admission, discouraging the development of ambulatory surgery facilities. For example, cataract surgery performed without hospital admission accounts for more than 97% of cases in Sweden, Finland and the Netherlands, whereas it is below 35% in Poland. [24] This signals an overuse of inpatient care, to the detriment of primary and ambulatory care.

Figure 4: Trends in acute care hospital beds per 100,000 in selected European countries, 2000 - 2011



29. **Poland has made substantial progress in re-organizing the hospital system but some problems remain**. In 2009, there were 754 general hospitals, of which 70% were public and 52 psychiatric hospitals in Poland. The proportion of private hospitals has increased from 5% in 2000 to 30% in 2009. Overall, analysis shows:

- There is still overcapacity in comparison with other EU members (Figure 4). At 429 acute hospital beds per 100,000 population in 2011, this was still significantly higher than the average for the EU15 of 343 per 100,000.
- The distribution of beds across regions within Poland shows substantial regional differences, which is historical and does not reflect current or future population health needs (Lubelskie has 60% more beds per population than Pomorskie).
- The number of monoprofile institutions also has substantially decreased.

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[24] Boulhol, H. et al. (2012), "Improving the Health-Care System in Poland", OECD Economics Department Working Papers, No. 957, OECD Publishing.

- A large number of hospitals in Poland are rather small. Fifty percent of all hospitals in Poland have fewer than 150 beds[25] and private facilities tend to be smaller. While the evidence that economies of scale can be achieved beyond a certain hospital size is limited, there is evidence that quality of care increases with volume in many surgical and some medical specialties. Also, larger but fewer hospitals might be easier to staff to optimal levels. A degree of further consolidation of infrastructure would certainly be warranted in Poland on these two grounds.

30. **Hospital infrastructure is ageing and requires significant investment.** One of the results of sustained overcapacity in a context of limited public resources was chronic underinvestment and poor maintenance of hospital infrastructure: a problem which is now coming to the fore. According to a 2006 survey by the Ministry of Health, the average age of hospital buildings was 42 years. Some public hospitals use buildings constructed before the Second World War, whereas the majority of private facilities have been built after 1999 and tend to have better infrastructure. Although funding for health services from the NFZ should also enable hospitals to pay for maintenance and renovations, there is rarely sufficient funding remaining for upkeep of infrastructure after current expenditures[26]. Capital investment, on the other hand, is financed by hospital owners. Many facilities will require significant upgrading in the next few years if current patterns of service provision are to be maintained.

31. Poland has received considerable investment for hospital infrastructure from the European Union under the current Operational Programme 2007-2013[12]. Whilst further funding for infrastructure and modernization may be available under the next Operational Programme, sustained funding for the health system under the next Operational Programme is not yet certain. Combined with hesitant economic growth in the context of the continuing international financial crisis that may lead to decreased government health expenditures and household disposable income, this uncertainty of funding makes the economy a key shaper of the health system environment that influences the actions of all the key agencies connected to hospitals.

3.3 The governance of hospitals

32. **Ownership of public hospital facilities is fragmented between different levels of government**. As often happened in transition economies, existing hospitals were devolved to different levels of Government based on their level of complexity. When territorial governments were created, they were given the ownership of hospitals which serve the population in their territory, with regional governments (Voivodships) managing regional hospitals and lower level government – Powiats (districts) and Gminas (municipalities) – typically managing local hospitals. In Poland, ownership is particularly fragmented: hospitals can also be owned by the central government either directly (Ministry of Health but also Ministry of Interior and Defense) or more indirectly (clinical hospitals are owned by universities but supervised by the Ministry of Health). In any given region, thus Powiat, Voivodship, university and other public hospitals coexist. Table 2 provides an overview of the role of various categories of hospital founders.

[25] "… hospital bed is not the physical structure, but shorthand for a comprehensive package of nursing care, supporting staff and monitoring equipment. It can encompass one of 20 long-stay beds in a rehabilitation ward staffed by a single nurse to a high-technology bed with one-to-one care in an intensive care unit. With this variation, bed numbers as a hospital indicator reveals less and less about the capacity or expense of a hospital and it is difficult to make valid comparisons" (Hospitals in a Changing Europe, Editors Martin McKee and Judith Healy, European Observatory 2002). Additionally, as the criteria used for classifying beds in Poland are often unclear, if not ambiguous, these numbers should be interpreted with caution.

[26] Poland: Health System in Review. Health Systems in Transition series, 2011, European Observatory

Table 2: Indicative breakdown of hospital ownership in Poland

	Number of hospitals	Total number of beds
University Hospitals	40	21,290
Voivodship Hospitals	175	69,231
Powiat-owned hospitals	186	47,172
Gminas and Powiat Cities hospitals	43	11,933
Hospitals accountable to the Ministry of Health (including research institutes) and other Ministries	48	14,507
Private hospitals	605	43,923
Total	1,097	208,056

Source: Ministry of Health.

Note: There are various official registries of hospitals which do not all provide the same numbers, and the definition of what constitutes a hospital is not standardized. All types of facilities are included here, including specialized hospitals and facilities which would not quality as hospital (e.g. less than 5 beds – many of these are in the private sector). The Ministry estimates that there are around 800 hospitals in Poland of which 500 are general hospitals.

33. **Voivodships in this context play an important role but have a complex mandate to fulfill.** In any given region, the Voivodship governments are typically the largest single owner of hospitals. Voivodships are also legally responsible for ensuring access to quality health services to the population in the region. This mandate should not, strictly speaking, be interpreted as implying that Voivodships need to provide in their facilities all the services their population might need, but many struggle with this distinction. On the other hand, and despite the lack of a legal framework to enforce any coordination, this obligation provides Voivodships with some legitimacy in taking the leadership for elaborating and implementing regional-level action plans.

34. **As previously discussed, until 2011, hospital founders had limited incentives to effectively manage the hospitals and ensure their sustainability.** Elected local officials typically have strong incentives to maintain or even develop hospitals which employ large numbers of staff. Hospitals are also valued by citizens who equate access to services and the existence of a local facility. Conversely, the restructuring of hospital services and the closing of facilities are politically very difficult and unlikely to be promoted by elected officials in the absence of counter-incentives. In Poland, local governments and other hospital founders do not directly finance service delivery and were until recently not accountable for their performance. For the most part, they limited their effort to mobilizing funding for investments and renovations – irrespective of whether these were actually sustainable. By making them accountable for hospitals' deficits and (to an extent) debt, the 2011 law aimed to change this situation.

35. **It will take time for many hospital founders to develop their capacity to actively manage the facilities they own**. The capacity and drive to manage hospitals varies greatly across regions and local governments. Background work and in depth interviews in more than 6 regions suggests that local governments are overall insufficiently equipped to deal with their mandate. For instance, a review of a number of strategic documents produced by local governments for health showed limitations in their capacity to translate populations' needs assessment into service delivery strategies and to incorporate innovative trends in service delivery. A rapid assessment of the information base available to decision makers in two Voivodships highlighted that they have limited themselves to collecting mandatory data and carried out few analyses and comparisons. Some Voivodship have taken more innovative steps but their experience is not widely documented and peer to peer learning appears limited.

3.4 Regulation

36. Hospital regulation generally focuses on two domains: i) safety and quality of care and ii) ensuring the "market" meets population health needs i.e. planning. In Poland, regulation of quality is limited in scope and strategic planning is non-existent.

37. **Quality regulation is primarily focused on inputs**. The focus is generally on compliance with minimum input standards. A first set of standards is used for licensing. They generally pertain to the characteristics of the buildings in which services are delivered. These requirements were first issued in 1991 and updated in 2012, but so far full compliance has not been enforced. Many facilities use old buildings simply cannot meet these criteria, but in a large number of cases, the hospitals cannot afford to undertake the necessary investments to meet the standards. Although closing some facilities and rebuilding modern ones might in many cases be the best option, it rarely happens. As it stands, all hospitals are supposed to comply by all standards in 2016. A second set of standards applies to the basket of services covered and contracted by the NFZ. These standards are also very detailed and focus on other types of inputs, such as staff and equipment. While minimum standards can help ensure patient safety, discussions with a number of hospital experts suggest that the Polish "minimum standards" are unnecessarily detailed[27]. The minimum personnel and equipment standards put many binding constraints to the search for cost-efficient solutions within hospitals, in particular because they overlook the possibility of sharing and managing resources across departments.

38. Interviews in hospitals provided examples of how such regulation leads to inefficiencies and unnecessary or at least poorly prioritized investments. Examples included:

- the need to purchase duplicate equipment rather than sharing across departments, even if one unit would be enough for combined patient needs;
- the requirement to have helipads (when evidence on the effectiveness and cost benefit of helicopter medical services is weak[28])
- the requirement that an anesthesiologist cannot assist more than one procedure at the same time (for instance two epidurals), when this is common practice elsewhere
- the requirement for all facilities providing delivery care to have at least one obstetrician, a midwife plus an anesthesiologist on duty at all times (as opposed to on call for instance – and in facilities with very few deliveries).

39. At the same time, observations and interviews in facilities suggested that the actual details of the rules are effectively rarely known to key health staff and managers and that their interpretation and application is not uniform across facilities or even departments. It was also suggested that these regulations can be selectively used or manipulated to enforce decisions supported by vested interests (e.g. to close a department, to prioritize the purchase a piece of equipment) or serve specific interest groups (eg staff or unions). This obviously raises questions about the capacity to enforce such standards and monitor compliance. More generally, the attention paid to inputs is disproportionate to the detriment of the assessment of the quality of processes, outputs, and outcomes.

[27] This was also highlighted in a June 2013 PWC report: Ustawa o dzialalności leczniczej - podsumowanie dwóch lat funkcjonowania

[28] Galvagno, et al. (2013). "Helicopter emergency medical services for adults with major trauma." Cochrane database of systematic reviews . Taylor, C. B., M. Stevenson, et al. (2010). "A systematic review of the costs and benefits of helicopter emergency medical services." Injury 41(1): 10-20.

40. **Strategic planning of service delivery at the territorial level is inexistent, a regulatory gap which until now has proved insurmountable**. In Poland, market entry is free (as long as licensing requirements are met) and each facility is free to decide what services they offer. There is no certification of needs, either for new facilities or purchasing of equipment. Despite an expert consensus that a master plan or other strong coordination mechanisms would be required for hospital services, several attempts at introducing such regulations have failed (the last one vetoed by the President at the time). Such a regulatory framework would encourage service consolidation and networking, limit duplication of services and help prioritize and concentrate strategic investments. It would require that many stakeholders (including local governments and hospitals) formally relinquish some prerogatives in deciding what health services they offer, a major stumbling block for elected governments and service providers.

41. **This vacuum of the strategic service planning leads to poorly coordinated care that risks being of low quality**. In many health systems, low-volume high-complexity care (for example, trauma care or neurosurgery) is concentrated into a few, geographically dispersed facilities in order to maintain clinical excellence and provide access for the whole population. Moreover, many routine procedures such as angiography or deliveries require a minimum patient throughput per year in order to maintain clinical skills. The consolidation of hospitals into networks would allow these services to be provided on one site of the network, rather than duplicated in several neighboring facilities.

42. **The Ministry is currently developing legislation and tools to support more systematic planning in the health system.** A 2012 draft law still under elaboration aims, among many other reforms, to introduce some planning tools and the Ministry of Health is currently developing “health maps”.

3.5 Purchasing

43. **Poland, during transition introduced a purchaser provider split**. Many countries of Eastern Europe, in the transition process, introduced a purchaser-provider split in order to enhance the accountability of providers by building incentives into the contractual relationship to improve service delivery, and increase cost containment, efficiency, organizational flexibility, quality and responsiveness of services to patient needs. The incentives were also meant to be strengthened by a degree of competition between providers. Achieving these results has proven difficult, and Poland is no exception. Strategic purchasing of services requires interventions on the many components of the purchasing function, including the choice of services to be covered based on assessment of population needs, the active management of contracting arrangements and payment methods to achieve coverage and influence service delivery, and decisions on role and scope for competition among providers[29]. Assessing strategic purchasing in Poland goes beyond the scope of this paper, but this section highlight some of the key issues surrounding the purchasing of hospital services.

44. **The NFZ was created in 2003 following the merger of the 16 regional health insurance funds**. It is responsible for purchasing services to meet the population’s needs within the available resources. Sixteen regional branches contract with selected providers and have some autonomy to respond to local needs assessment. The public resources available to hospitals ultimately depend on decisions by the NFZ on service price and volumes, and hospitals compete with each other to obtain contracts and thus funding. For the most part, the relationship between NFZ branches and hospitals is strained, with the NFZ on one side arguing that it is legally bound to apply rules and operate within strict financial

[29] Figueras, J., E. Jakubowski and R. Robinson, eds. 2005. Purchasing to Improve Health Systems Performance. Maidenhead: Open University Press.

parameters and providers on the other criticizing the apparent arbitrary nature of NFZ decisions. Clearly, improvement of the purchasing framework is required, with the most salient issues pertaining to:

- ✓ **The fragmentation of contracts.** The NFZ branches puts out tenders and all providers which meet the criteria for providing services are allowed to compete to provide a given type of service. Once the valid bids are identified, closed negotiations take place with the bidder (or bidders) which submits the best offer in terms of price and other criteria. During this process, volumes and prices are negotiated with each provider. In practice, this appears to result in the distribution of the available volume between all eligible providers. For high cost, low frequency procedures, this fragmentation increases the risk that patients receive complex services from professionals who are not adequately skilled and/or do not perform enough specialized services to maintain these skills. Given the lack of information and emphasis on quality outcomes, the consequences cannot be properly assessed. Yet, field visits and interviews highlighted the case of some large hospitals which only carry complex surgeries infrequently, contrary to the principle that low volume, high complexity services should be concentrated to encourage and maintain clinical excellence. At the other end of the spectrum, high volume, low complexity procedures are often in large part contracted to private providers, leading to "cherry-picking" of less complex patients and lack of training opportunities for physicians in the public sector.

- ✓ **The limited term of contracts**. Contracts between providers and the NFZ have a maximum duration of 3 years, and even in this case, the maximum amount which the NFZ will pay for a type of service can only be defined over one fiscal year. This considerably limits the capacity of facilities to plan (as well as their access to financing, cf. next section).

- ✓ **A largely passive purchasing strategy.** There is little evidence that the NFZ or its regional branches take a proactive and long term approach to shaping the market or adapting the contracts to the populations needs. In practice, contract volumes mostly reflect past trends and none of the stakeholders interviewed could point to either a national strategy or regional multiyear plans to shape service delivery. When changes are made in terms of the types and amounts of services that will be contracted, they are often perceived by providers as arbitrary and sometimes inconsistent over time. Similarly, there are no visible efforts to lever the contractual relationship to encourage the modernization of practices or efficiency gains. For instance, minimally invasive surgical processes that can usually be treated in ambulatory settings (eg., cataracts or hernia repairs) are contracted in such a way that hospitals are reimbursed more for inpatient admission, discouraging the development of ambulatory surgery facilities. Overall, both contracting and service planning need to be strengthened and better coordinated.

- ✓ **Service pricing**. In 2008, Poland introduced Diagnosis Related Groups-based payments (DRGs) for secondary and tertiary care financing[30]. DRGs, as long as they are economically homogenous and fair, create powerful incentives for providers to combine resources efficiently. To date, however, high-quality cost information is not available in Poland to calibrate payments with the actual cost of resources consumed. This may create distortions and incentives to select between over and underpaid services. Although this is not systematically documented, there is a widespread claim that private providers have entered profitable market segments, focusing on patients without complex disease, thereby further reducing the volumes of contracts available for public facilities and their capacity to cross-subsidize among simple and complex cases.

[30] DRGs are a payment method that relates the type of patients a hospital treats with the resources they consume. Hospitals receive payments based on an "average" episode of care for a group of patients, taking into account demographic and clinical characteristics.

3.6 Hospital strategies

45. Given the environment described in the previous sections, what strategies have public hospitals and their founders employed to meet their day to day challenges? The following highlights some typical responses which help explain the current situation of the hospital sector in Poland.

46. **In Poland, the degree of actual autonomy granted to public hospital managers is significant.** In the past decade, many countries have moved to increase the autonomy of public hospital managers and allow them to respond to the incentives put in place in the system. In former transition economies, this process has often been slow and in many cases chaotic. Quite often, the rules (for instance on staffing, salaries, input norms, budget reallocation etc.) are such that managers are in reality unable to do exert their responsibilities. It is not so much the case in Poland. Hospitals are independent entities. Their founders can decide to transform the legal status of the entities they own, and they can merge, liquidate or reorganize them. They can decide which services to offer or not (provided they meet the input requirements discussed earlier). Hospital founders typically own the buildings in which the facilities are set and can thus manage the real estate (in case of commercial code companies local Governments typically lease the buildings to the facility). They make decisions on investments. Staff are contracted by the facilities, either as salaried employees or self-employed (this status is advantageous for higher income staff). Around 40% of physicians are self-employed, the rest are salaried as well as the majority of nurses. Salaries are not regulated. In other words, there is space to take a large number of strategic and managerial decisions.

47. **In reality, the management of public hospitals is not always effective or efficient, for three main reasons**. First, as highlighted earlier, incentives and accountability mechanisms are not strong. Until recently, founders did not really have a stake in the financial standing of the facilities they owned, the interest or the capacity to manage them. This has changed recently and therefore it is early to assess the consequences of such changes. Secondly, ward heads[31] traditionally have a substantial amount of authority and managers are in a relatively weaker position. This is particularly the case in University hospitals, and many studies (Boulhol et al. 2012, op. cit.) have identified this as a barrier to hospital management and rationalization[32]. Last, skills in hospital management need strengthening.

48. **Anecdotal evidence collected in facilities highlight at least two areas where weak management impacts efficiency**. One is excessive staffing patterns. They may be partly driven by regulation and staffing norms mentioned earlier, but case studies suggest that employment is not systematically adapted to efficient service delivery. For instance, the 3 cases studies of successful restructuring presented in Malinowska-Misiag et al (2008) mentioned a reduction of 36% in staff for Oploskie regional hospital, 40% for Powiat Hospital in Kluczbork and 37% the Zakopane Powiat Hospital – without significant reduction in the volume of services provided[33]. The second area is financial management, particularly loans taken out on commercial terms in order to meet debt servicing. Many hospitals facing liquidity constraints turned over time to financial intermediaries providing loans on very expensive terms and imposing conditions such as a clause of immediate repayment of liabilities prior to any debt restructuring. Over time, hospitals financial expenditure on debt servicing has increased dramatically and further compounded the financial constraints. A 2013 report commissioned by the Government following extensive media coverage of the near bankruptcy of the prestigious Children's Hospital in

[31] The head of the various departments

[32] OECD, op.cit.

[33] Similar patterns were described as key to restructuring in interviews conducted by the team with hospital founders.

Warsaw provides a stark illustration of how these two factors contributed to hospital debt levels. In the case of the Children's Hospital, financial intermediaries own more than half of the debt (see Box 2).

Box 2: Highlights from the Children Hospitals' Diagnostic and recommendations report (2013)

January 2013, a report was commissioned to independent experts by the Ministry of Health to examine the situation of the Children's Memorial Health Institute (Centrum Zdrowia Dziecka- IPCZD), the largest specialist pediatric hospital in Poland, which is also a research institute. The IPCZD has 23 hospital departments open around the clock, 4 day-care departments, 33 outpatient clinics and 8 diagnostic departments. All together there are 554 beds in hospital departments and the occupancy rate in 2012 was 74%.

In 2012, the institute's financial situation became so dire that it was effectively bankrupt, which drew a lot of media attention and generated widespread public outrage. The institute's debt amounted to around PLN 240 million (around PLN 433,000 per bed, more than 7 times more the average for Poland and more than the facility's revenue for that year) and it ran a deficit of PLN 42 million (by September).

The experts report listed several of the system-level issues mentioned in the present document as factors contributing to the institutes situation including: the NFZ contracting practices, the under-pricing of specialized services, and the fact that the Ministry of Health does not appear to have monitored the situation closely and taken remedial action which were within its authority to make. The experts' main message however was abundantly clear: the Institute has been grossly mismanaged.

The experts provided many examples of inefficiencies, among which:

- Excessive staffing, particularly for non-health staff. An index relating their number to hospital capacity gave the institute a ratio of 3.62 when in two comparable hospitals the ratio was around 1.8. This was true despite the fact that the services of cleaning, orderlies and laboratories were outsourced. Further, overtime was frequent, including for non-health staff. Labor costs kept increasing as a percentage of NFZ contract from year to year and were reaching 78% of NFZ revenues in 2012;
- Only 5/27 departments and 7/33 clinics were not generating an operating deficit. In many departments, staffing cost had been exceeding the value of the NFZ contract for years and in the outpatient department headed by the Director of the institute, staffing cost represented 170% of revenues generated by the NFZ contract;
- Several equipment and facilities were used at about a third of their capacity;
- Meal costs for a day was about PLN 31 (vs less than 13 in two comparable hospitals), a third of which was interests paid for renovating the kitchen;
- Expenditure on IT was PLN 34 million, compared with 9 in a comparable hospital, which had a better system and 70% of IT hardware was obsolete;
- The institute had made no effort over time to negotiate with creditors and instead transferred claims to "secondary creditors" which owned half of the hospitals' debt.

The report also highlighted that no apparent effort had been made to address these problem and provided a range of recommendations, noting that the restructuring of the debt would probably require a public subsidy.

Source: Opinia zespołu roboczego do przeprowadzenia postępowania przygotowawczego mającego na celu ocenę potrzeby oraz warunków reorganizacji instytutu „pomnik – centrum zdrowia dziecka", prepared by P. Pobrotyn, K. Warzocha and M. Ilnicka-Mądry, 2013.

49. **Taking a more systemic view, the focus on competition for NFZ contracts led over the years to a significant amount of "unhealthy competition**", as for instance highlighted in a recent Price Waterhouse Cooper report. "*District (poviat) hospitals, which for many years were focused on the four basic medical areas (internal diseases, pediatrics, gynecology and obstetrics, and general surgery), in view of relatively low pricing of those services by the National Health Fund have been seeking other*

developmental opportunities in more profitable fields, such as invasive cardiology or orthopedics, for example. The same is true of regional (voivodship) hospitals, which more and more frequently offer services at the highest reference level, including highly specialized services which for many years had remained in the domain of university hospitals. Moreover, there have been cases when medical entities of the same founding organ, e.g. regional or university hospitals, have been competing against other entities owned by the same body, e.g. by opening hospital departments of identical profile or by competing for qualified personnel or investments of similar profile from external sources" .

50. **Many health facilities over-invested in new technology and capacity in an attempt to attract larger market shares, regardless of whether these could be sustained in the long run**. Investment decisions rarely reflect the fact that these investments often represent contingent liabilities and that an economic analysis of the efficiency of the investment at the facility - if not the system level - should be part of the decision process.

51. **This arms-race was to an extent facilitated by the availability of capital funding and the lack of coordination of investments**. Investments are funded by a multitude of actors, including the Ministry of Health, the local Government budgets, and structural funds from the European Union. This fragmentation of funding with no coordinated investment strategy lead to duplications and gaps in services, with little regard for population health needs and future operating costs. The same is true for highly specialized equipment, such as scanners, which are mainly funded through the Ministry of Health with EU funds following requests from local government (see Box 3 for an illustration).

52. Unfortunately, investments are often not coordinated with the NFZ, or more specifically, there can be no guarantee that the NFZ contract will be

Box 3: The hospital sector of a typical Voivodship

The example of this Voivodship is used to illustrate the overcapacity and duplication of services that exist throughout the hospital sector in Poland, with little regard to population needs or service quality.

In this Voivodship, 39 facilities serve a population of 1.2 million people. Twenty-one of these facilities are in the capital city of the Voivodship, with the rest spread throughout the rural areas. There are three "regional" hospitals; 15 "general" hospitals; two "teaching" hospitals; 4 "psychiatric and addiction therapy" facilities (including a 900 bed psychiatric hospital); and 15 "specialty" hospitals. The size of the facilities varies dramatically, with only eight facilities having more than 250 beds and seven offering between 11 and 40 beds.

Many hospitals which are close to one another provide an almost identical basket of services (e.g. general surgery; cardiology; obstetrics and gynaecology; orthopaedics; paediatrics; neonatology etc). Specific examples of sub-optimal organization include:

- Gynecological and obstetric services which are available in 19 facilities. All facilities, except the psychiatric and monoprofile hospitals, offer delivery services. However, as the number of births in the Voivodship in 2011 was 11,199, many of the facilities had less than 300 deliveries/ year -this means less than one delivery/ day even without discounting complicated deliveries which by definition are referred to higher level institutions. International standards (Maier, 1977 for Germany; MSPS Ministerio de Sanidad y Política Social, 2009 for Spain) suggest that in order to optimize the use of staff and technical equipment in delivery wards, a minimum of 600 deliveries per year (ideally 1,000 to 2,000) is required.
- Two large hospitals located in close proximity of each other both have state of the art interventional cardiology suites devoted to angiography techniques and pacemaker implantation. English NHS standards (Hackett D, 2003) suggest that diagnostic cardiac catheterization and angiography laboratory should not serve less than 450,000 to 600,000 population, and that dedicated pacemaker and defibrillator implantation laboratory should at least serve 1.3 to 1.5 million population per unit. Both hospitals also contain fully equipped intensive care units.
- The same two hospitals both have state of the art accident and emergency departments, complete with helicopter landing pads. However, each of them is only open every other day. In other words, both are utilized at half capacity which means that large investments are inadequately amortized, when in the same hospitals, other areas are in need of repair.

awarded to the facility or that its size would be sufficient to provide a positive return on investment. Anecdotal evidence again suggests that some equipment goes unused or underused as the NFZ's ability to contract services for which equipment is financed is de facto restricted[34]. Field visits showed, sometimes within the same hospitals, glaring needs and underutilized investments which were not adapted to the range of services the hospital could provide and duplications of investments across facilities which are close to one another and could not be justified by the need to improve territorial coverage. Ultimately, given the fragmentation of funding mentioned earlier, even departments providing high quality services and whose existence could be justified based on population needs can fail to capture a large enough share of the NFZ contract to break even.

4 Pathway towards financial sustainability

53. The previous sections systematically explored the reasons why the hospital sector continues to generate deficits, inefficiencies and patient dissatisfaction. The nature, size and complexity of the issues and problems affecting the health system in Poland vary, yet mostly lie in the sphere of service production; other issues (linked to financing and stewardship) are somewhat more systemic in nature and define the environment in which the stakeholders operate. This limits the system's capacity to face the health needs of the population under new demographic and epidemiological circumstances as well as expectations from patients and citizens.

54. The Ministry of Health and many stakeholders are largely cognizant of the problems and the possible solutions, yet decisive and concerted action has been slow to materialize. The following section highlights how the Ministry of Health and other institutions at the central level could create an environment more conducive to improving the financial sustainability of the system and modernizing service delivery. As highlighted earlier, however, the performance of hospitals appears to vary greatly despite the complex health system environment. This means that at least some founders and hospitals have become better at overcoming the existing constraints. The section also highlights some options that could help other founders and hospitals towards better financial health.

4.1 Changes at the national level

55. The first set of recommendations pertains to reforms which should be promoted by the Ministry of Health.

56. **Continue to support the orderly and systematic resolution of the current debt problem and the strengthening of accountability frameworks.** As mentioned earlier, the situation of some of the most indebted facilities is such that the existing options offered by the 2011 law on Therapeutic services may not apply to them. In some of these cases, and setting aside political considerations which will undoubtedly come into play, their liquidation may not be a sensible option from a health systems' perspective. It is therefore reasonable to assume that the Government will have to step in and help resolve the issue, as some founding institutions, like universities for teaching hospitals cannot be expected to pay off the debt of teaching hospitals, some of which are among the most indebted facilities in Poland. The challenge will be to devise a system which does not induce the moral hazard which has characterized previous attempts. Clearer lines of authority and accountability will need to be put in place to ensure that the responsibility and the authority for undertaking and financing the reorganization of these facilities or for paying the price of not doing the needful are fully aligned for the long term.

[34] Poland: Health System in Review. Health Systems in Transition series, 2011, European Observatory

57. **Develop and implement service planning mechanisms.** Although previous attempts at introducing such regulation have failed, there is an increasing demand from local governments for the Ministry of Health to provide a framework which would allow/facilitate and even incentivize national or regional coordination of service planning as well as the creation of hospital networks at the regional level, irrespective of ownership status. This reform has also been supported by health sector experts for a long time. The new planning mechanisms should first aim to adapt service delivery to better meet current and future population health needs in the most efficient way. They should also promote modern principles for organizing service delivery, including the definition of well delineated levels of care and the concentration of specialized services that will help ensure quality of services and the safety of patients. Planning would also support a coherent strategy for much-needed investments in the sector's infrastructure and guide the purchase of medical equipment to ensure better, more efficient and ultimately more sustainable investments. This planning exercise thus first requires setting some strategic directions and ambitious but achievable objectives based on present and future population needs.

58. In addition to setting norms, the introduction of a planning system will require identifying which incentives or regulation are required to ensure that stakeholders, and in particular founders, work together towards the stated objectives. In a highly pluralistic system, the negotiation and implementation of these solutions is a very complex undertaking. Putting this in plain terms, and as an example, if it were rigorously and undisputedly established that only one hospital in a given the regional capital should provide invasive cardiac surgery, when currently three departments have a contract with the NFZ for these services in facilities owned by three different founders, how will the system go from here to there? Who will be accountable for reaching the target? At what pace? How will the decision be taken?

59. The Ministry of Health has taken steps to design "health maps". The maps will state some norms in terms of access to service, but ultimately, the adaptation of the existing infrastructure will have to be decided at the local level taking into account an array of constraints, including current patterns of use, service delivery and recent investments. Pathways towards meeting these "normative" objectives will need to be negotiated at the local level.

60. **Improve the DRG costing base**. The long term financial sustainability of the sector requires devising a robust and sustained costing system. Changes between the relative prices of different DRGs are currently made on an ad-hoc basis and distortions generate incentives for hospitals to "invest" in some profitable DRGs and select the location of care (in versus outpatient) based on price rather than on principles of good medical practice combined with an eye for economic efficiency. A law introducing a tariff agency was first drafted in 2010 and later revised but has yet to be presented to parliament. Overall, the payment system should better (i) ensure that hospitals who end up taking care of more complex cases are not at a disadvantage, (ii) promote more efficient patterns of care and (iii) quality standards.

61. **Modernize, in parallel, the quality assurance system is required**. It should move away from, and in fact remove some detailed input-oriented regulations, and veer towards a greater focus on processes output and outcomes. A new model of clinical governance will require – among other - developing guidelines and protocols (linking with provider payments) and strengthening data collection and analysis. Ultimately, the payer (NFZ) should be able to link payments to the quality of care. A law had been drafted in 2010 to strengthen clinical governance but was not presented to the parliament.

62. **A second set of interventions pertains to the purchasing function, currently undertaken by the NFZ though its regional branches**.

- ✓ As more stringent planning mechanisms are introduced, purchasing practices will need to adapt. If for instance the objective to concentrate specialized services is pursed, contracting practices will need to promote and support the required transitions and incorporate agreed norms into the contracting framework. This might require for instance limiting the number of facilities which can be selected to provide specialized services in one area or limiting the scope of services some categories of establishments can apply for.
- ✓ While retaining a purchaser-provider separation, the purchasing framework should encourage longer-term relationships and integrated decision-making between providers and the NFZ. Providers should have enough certainty about strategic directions which will be pursued in the mid-term to be able to make rational investment decisions. Reducing the uncertainty – perceived or actual – in the facilities revenue stream should help them access financing for these investments.
- ✓ The promotion of modern service delivery should become a more explicit part of the NFZ mandate. The NFZ should be empowered to use pricing and contracting to pursue system-level objectives such as the promotion of outpatient surgery or the coordination of care. Along these lines, the Ministry of Health and NFZ have been considering a pilot project which, by integrating financing across levels, would provide networks of facilities opportunities to reorganize and improve service delivery.
- ✓ As mentioned earlier, quality should play a greater role in NFZ's purchasing decisions.

63. **All in all, the NFZ will need to become a much more selective and proactive purchaser of services**. The Government has been considering draft legislation to decentralize the NFZ. If the process goes ahead, it would be important to articulate how the new system would contribute to resolving the problems laid out above and help strengthening strategic purchasing along the above lines.

64. **Ultimately, hospital reforms are only one piece of service delivery reforms**. The lack of coordination of care across primary, specialized outpatient, and hospital care generates inefficiencies in a system geared towards hospital-based curative care. These translate, among other into high admission rates for ambulatory care-sensitive conditions. Although primary and outpatient care are not within the scope of this note, it is important to recognize that the promotion of efficiency and quality in the health system needs to happen coherently across levels of care. It will require strengthening the capacity, incentives and accountability of outpatient providers and may involve coordination with the social sector. A starting point for this discussion could be an analysis of the care pathways for categories of patients who cost a lot to the system and/or represent a large share of the burden of disease and audit of the quality of care provided to them.

4.2 Changes at the sub-national or hospital level

65. Overall, founders and public hospitals need to modernize their management style. Unpacking this and taking some examples from good performers, suggest the following priorities. For the most part, these changes could be implemented even in the absence of significant changes at the national level.

66. **Intelligence gathering and utilization.** Field visits in 6 different regions highlighted that very few local governments collect and analyze data on the performance of the facilities they own. A minimum level of data reporting is mandated for all facilities across Poland. Most founders receive these data but seldom analyze it systematically or make comparisons with other facilities. At best, they monitor hospital-level financial data, data on inputs, and basic output data (days, discharges etc.), but do not routinely combine these data to measure performance in more complex ways (eg cost per bed, per day, per department, output measure per input level…) or benchmark hospitals.

67. Among encouraging initiatives, the team identified:

- ✓ A number of Voivodships have mandated common accounting standards across the facilities they own. Combined with output data, this could help identify facilities or department which do business more or less efficiently and guide restructuring decisions;
- ✓ A private company in Poland is proposing two products which respectively aim to provide to hospitals/founders (i) intelligence about their environment and the market they operate in and (ii) benchmarking information (hospitals purchasing the service and providing data are compared with their peers).

68. Health authorities and hospital managers, by and large, have very low capacity to understand which data to collect and routinely use in order to monitor performance and hold service producers accountable for it. Voivodships, which typically own a large number of facilities, would be in a good position to impose higher standards of data collection and benchmark facilities among themselves but the vast majority of them lack tools, time, and/or capacity. From a business perspective, it would make sense for founders and/or hospitals to invest in developing and producing hospital indicators dashboards to monitor the costs, quality, efficiency and impact of the services delivered.

69. **Investment in management capacity**. Despite a fairly high level of autonomy, the actual exercise of management authority at facility level appears to have traditionally been insufficient encouraged by a limited accountability, and impeded by tradition (e.g. the role of ward heads), capacity, as well as - to an extent- by the regulatory environment. The previous sections highlighted how changes in the rules of the game already have increased accountability and how further changes could potentially facilitate the reorganization of hospitals towards more sustainable models. The range of experiences across regions suggests that progress can be achieved, even in the absence of system-level change. Examples collected over the past year have highlighted some interesting strategies:

- ✓ A number of local Governments, primarily Powiats have "contracted out" the management of the facilities they own. This represents an interesting model of public private partnership. It would be interesting and useful to many self-government entities to (i) evaluate the actual impact of these transactions on the local governments' finances and (ii) assess the effectiveness of these contractual arrangement in improving the outcomes of interest to them.
- ✓ A Voivodship was able to leverage infrastructure investment to negotiate significant organizational changes, more specifically, the merger of three hospitals into one to be set in an entirely new building;

- ✓ More often than not, it seemed that successful transformations were negotiated one by one rather than in a "big-bang" approach. Interviews also suggested that a key success factor was the sustained support from the "founder"- and in particular in the case of the local governments, the Marshall and the Council.

70. As encouraging as these few examples are, they have not been systematically documented or evaluated. Voivodships and other local Governments could clearly benefit from collecting and sharing lessons learned and assessing the impact that innovative approaches have had on various performance criteria.

71. **Development of mid to long term strategic frameworks**. In conclusion, even the most successful hospitals and local governments encountered in the context of this work will need to adapt their practice. A lot of the structuring and investment decisions remain tactical in nature, and focus on short term financial opportunities and constraints. Voivodships, despite the fact that they own many facilities in given regions have not developed "network-level" reorganization and continue to see their hospitals as separate (and competing) entities. The 2011 law provided opportunities to merge facilities owned by single or different local Governments but thus far, it does not appear that these opportunities have been seized. The unstable regulatory environment and the lack of clear directions in part account for that, but ultimately, the modernization of the hospital system will require a better common understanding of the ways the health system needs to evolve to meet the needs of the aging population.

4.3 A wide-ranging stewardship reform

72. **The above analysis suggests that Poland still has a solid hospital reform agenda to tackle. There is a fair amount of technical and expert agreement on what the problems are as well as on many of the "blocks" which are needed to build a sustainable solution.** Taking a broader perspective, and contrasting Poland with other countries in the region, the final hypothesis of this review is that the current status quo, focus of the recent reforms, and slow of progress in adding new building blocks, point to a deficit of stewardship in the hospital sector. In other words, there is no evidence of a concerted effort to organize governance, regulation, purchasing, and the overall coordination between health and social service providers with the objective to ensure that global health systems goals are met, given the available resources. Poland suffers from a gap in system-level stewardship.

73. **Well–performing pluralistic and market-oriented systems rely on complex regulation and sophisticated institutions.** Health systems across the world rely more or less on market forces and competition to achieve the outcomes they set for themselves. Countries with well-performing pluralistic systems and which put more emphasis on market-based incentives, such as the Netherlands, Germany or Estonia, also have developed over time strong regulation, monitoring mechanisms, and institutions which typically aim to enable collaborative solutions in order to ensure that the system is moving towards system-level targets in terms of access to quality services and efficiency in the use of public resources.

74. **These tools and institutions are underdeveloped in Poland**. Poland has a highly pluralistic hospital system and - for instance through the most recent corporatization reforms - has generally favored the creation of more space for market forces to reshape the sector. Yet, as highlighted in this paper, competition between hospitals as it is currently taking place in Poland has probably had detrimental effect on the targeting of investments, the fragmentation of the system and even quality. In Poland, no explicit strategy is set out for the hospital (or generally the service delivery) system. There is no common framework to analyze the performance of individual hospitals or of regional networks, and to provide

this information to decisions makers or the public. There are no formal systematic and organized discussions between hospital founders, either nationally or in regions. More broadly, when fundamental trends in medical progress, population health and expectations as well as financial constraints call for a better organization and coordination of service providers, no entity has the responsibility, mandate or authority to steer the system in this direction.

75. **Strengthening stewardship will take efforts to build consensus, sustained political will and a measure of investment**. Transforming and modernizing the system to improve its capacity to meet the needs of the population may require building a consensus on a comprehensive diagnostic about the root causes of the problem and the objectives of the reform. Considerations about the financial health of individual hospitals, although important, cannot be the only area of focus, especially since there are potential conflicts between short-term hospital level decisions and system-wide sustainability objectives. In addition to a broader-based agreement that improving the hospital system sustainability will require complex and concerted interventions over a period of time, a strong political commitment to reforming the system will be needed.

76. **There are no pre-set recipes for developing the tools and institutions for overall hospital stewardship in a given country**. One possible pathway could start with the creation of regional hospital or service delivery observatories, which would be jointly funded and operated by the MoH, NFZ and founders. These observatories could collect, analyze and disseminate clinical, management and financial data and benchmark hospitals. Alternatively, these functions could be built into the existing regional Public Health centers. In that case however, modalities would need to be defined to ensure collegiality of the process and joint ownership of the results. In a subsequent stage, these observatories could be turned into Voivodship-level hospital agencies (combining planning and purchasing functions). France, which initiated a similar journey 15 years ago, now has created “Regional Health Agencies” which are in charge of directing the entire social and health services network of a given region. The regional branches of the Health Insurance Fund no longer exist. These regional agencies are also responsible for organizing democratic and consultative fora in which the interests of all stakeholders, including patients, are represented. The pathway to building the institutions and accountability mechanisms which are required to manage the pluralistic system of Poland will need to be designed at country level, taking into account institutional, technical and political factors.

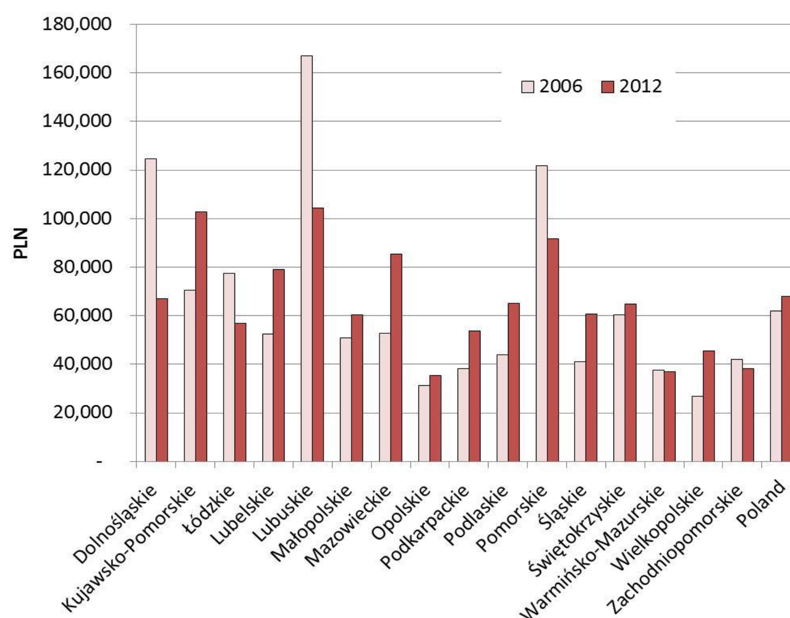
77. The comprehensive reform we believe is needed in Poland should probably start with the development of a strategy for service delivery and, once key parameters are set and main options are identified, a dialogue platform should be put in place to involve the wide range of stakeholders which would be affected in the design a Poland-specific solution.

Appendix: Additional data on hospital debt: variation by region and ownership status

Regional variations and trends

1. **The level of debt varies widely between geographical regions**. As expected, each region's stock of debt is commensurate with the size of its hospital sector. To correct for size, Figure 3 shows the level of debt per public hospital bed in Poland in 2006 and 2012[35]. The average stock of debt per hospital bed in 2012 is around PLN 68,000, but levels range by region from one to three times this figure. The debt per bed is over PLN 85,000 in Mazowieckie, Pomorskie, and over PLN 100,000 in Kujawsko-Pomorskie and Lubuskie.). At the other hand of the spectrum, in Opolskie, Zachodniopomorskie and Warmińsko-Mazurskie, the debt per hospital bed is below PLN 40,000. The proportion of debt which is overdue (i.e. arrears) ranges from 9 percent in Opolskie to nearly 36 percent in Mazowieckie, and the higher the debt per bed in a region the higher the proportion of arrears tends to be (not shown).

Figure 5: Total debt per public bed by region in 2006 and 2012 (PLN)



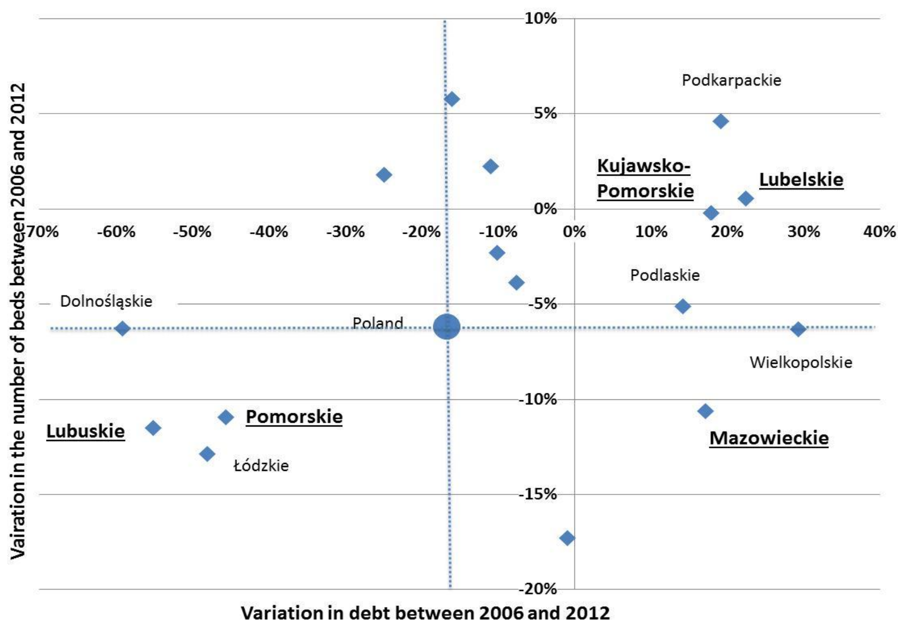
2. **The regions ability to control the level of their debt stock is also variable**. Figure 3 also shows very different trends in the stock of debt per bed across regions over time: in some regions, hospitals overall have cut debt significantly (e.g. Lubuskie) and in other, liabilities have continued accumulating at a rapid pace (e.g. Mazowieckie). Figure 4 first confirms that whilst the total stock of hospital debt has decreased by 17% in real terms in Poland between 2006 and 2012, this varied significantly by regions. The position of a region on the horizontal axis denotes the variation in stock of debt of the region and the five regions

[35]Debt is for 2012, the number of public beds is the latest available (2011).

in bold have the highest debt per bed in 2012 (the position on the vertical axis shows whether the number of beds in the region has increased or decreased – see following paragraph for a discussion). Focusing on the horizontal axis shows that the debt decreased in real terms in ten regions (situated in the two quadrants on the left side of the graph) but increased in six (left side). Four regions have made particularly impressive strides towards reducing hospital debt. For example, Dolnośląskie, which had the second highest debt burden per bed in 2006, is now at the average for Poland (per Figure 3). The debt was also reduced by more than 45% in real terms in Łódzkie, Pomorskie and Lubuskie but debt per bed of the latter two remains among the highest in Poland (bold dots). Some of the regions which have seen their debt increase in real terms remain below the average debt per bed for Poland, but the situation of Lubelskie, Kujawsko-Pomorskie and Mazowieckie has been rapidly deteriorating and they respectively now have the first, second and fourth highest ratio of debt per bed in the country (per Fig 3).

3. **No single or simple reason can explain differences across regions once the size of their hospital sector is taken into account**[36]. In particular, there is no correlation between the hospital debt in a region and income for that region. In other words, hospitals in regions at an overall socio-economic disadvantage are not less able of managing hospital debts. Likewise, there is no relationship between the density of beds or occupancy ratios for these beds and the level of debt in that region, meaning that regions with large infrastructure or in which beds are not used to their full potential are not systematically accumulating more debt. In other words, there is no simple explanation of the variation.

Figure 6: Change in the number of beds and the stock of debt in real terms by regions between 2006 and 2012



Note: The five regions with the highest debt burden in 2012 (as measured by debt/bed)are in bold.

4. An interesting question is whether regions which more actively try to right-size the hospital sector are also more successful in managing the debt (and vice versa). Although it does not provide hard

[36] In absolute terms, regions with larger populations have – almost by definition - more hospitals and hospital beds and thus larger stocks of debts. A meaningful comparison needs to look at standardized figures that take account of this scale factor.

evidence, Figure 6 suggests that this could be the case. The vertical axis of Figure 4 ranks regions based on how the number of beds changed over time (number of beds being a crude proxy for size of their hospital infrastructure). The eight regions above the horizontal axis have seen an increase in the number of beds and those below a decrease. Overall, the number of beds in Poland has decreased by around 6 percent between 2006 and 2012. The dotted axes separate the regions in 4 groups around Poland average. The top right quadrant denotes regions in which the number of beds has decreased less than the average (or even increased) and the debt has decreased less than the average for Poland (or increased). The bottom left quadrant around Poland includes the regions which have significantly reduced both their stock of debt and beds more than the average. The four regions which have most reduced their debt are in that quadrant. Conversely, regions of Poland where the debt has not decreased much are also for the most part those in which the number of beds has not decreased much (Mazowieckie is a notable exception: the increase in debts has come despites significant progress in reducing the number of beds). Overall, decreases in the stock of debt and in the number of beds appear to have gone hand in hand over the last few years (and increases in both as well).

5. In sum, this analysis challenges the idea that the debt in the hospital sectors has a single and straightforward explanation, for instance the chronic underfunding of the health sector or the role of the Narodowy Fundusz Zdrowia (NFZ) the national health insurance fund. On the contrary, it shows that some regions are clearly more proficient at managing the problem than others, including those which started off in a worse position.

Variations depending on ownership

6. **The share of public hospital debt by owner is proportional to their share of hospital turnover, and Voivodships account for the largest share of the public hospital debt stock.** Figure 7 describes the share of each category of owner in total public hospital revenues in 2010. Given that acute care hospitals are primarily paid based on their activity though diagnostic-related groups (DRGs), the breakdown of revenues provides a visualization of the "size" of each type of actor's share in the Polish market of hospital services[37]. Voivodships are the largest operators in the market (40%), followed by powiats (24%) and universities (17%)[38]. The share of each type of founder in the deficit of public hospitals is roughly in proportion to its share in the turnover. In other words, in aggregate terms, all categories of owners on average incurred similar levels of deficits in 2010 (except university hospitals which had a lower one). The share of each type of provider in the stock of debt is also roughly in line with its shares in hospital revenues. The only difference appears to be on arrears which represent a higher share of university hospitals' debt (34%) and Ministry of Health owned facilities (33%) than for other types of owners (not shown).

7. **Data suggest that there is a tremendous variation across hospitals**. Efforts to obtain (anonymous) hospital-level data and provide a better view of the variations in their financial standing have not been successful. The Ministry of Health reports that around 67% of all SPZOZ[39] are free from debt and that

[37] DRG-based revenues are correlated with the volume and complexity of care (so for instance a specialized hospital with the same number of beds and patients as a non-specialized one would earn more revenue due to the complexity of its caseload. As the bulk of hospital revenues comes from the NFZ through DRGs and as a reasonable degree of correlation between complexity and price can be assumed, the breakdown of revenues by type of owner thus gives a sense of their respective 'share' in the market of hospital services. One caveat is that the data only includes public hospitals. Private facilities represent around 10% of beds and tend not to provide complex services and would probably account for less than 10% of the overall market.

[38] See Table 2 Table 2 for a discussion of the data on hospitals.

[39] SPZOZ (Samodzielny publiczny zakład opieki zdrowotnej) is the default legal status of public health care entities.

10% of these entities account for 80% of the stock. In other words, not all hospitals in Poland are facing financial problems or high levels of debt, and the majority is in reasonable financial standing.

Figure 7: Share of each type of owner in the public hospital sector revenues, deficit, debt and arrears (2010)