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Hospital sector in the United States – basic characteristics and current financial challenges

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Abstract

Hospital sector in the United States – basic characteristics and current financial challenges

The aim of this article is to present the basic characteristics of the U.S. hospital sector (with an emphasis on structure, utilization level and the system of financing) as well as its current challenges and reform trends. Hospitals in the U.S. constitute a complicated and heterogeneous subsystem. There are diverse types of hospitals, functioning independently or in networks, developing innovative care models and using a multiple payer structure. The recent health care reform has created new organizational and financial challenges on both the macro and micro levels. The major ones are: the extension of the insured population; Medicare Hospital Readmissions Reduction Program; new requirements for non-profit hospitals regarding charity services; the role of accountable care organizations (ACOs). Additional challenge results from a strong public pressure for hospital's price transparency.

Key words: cost containment, hospitals, Obama care, United States

Słowa kluczowe: ograniczanie kosztów, reforma Obamy, Stany Zjednoczone, szpitale

Introduction

The United States operates a health care system that is unique among nations. It is the most expensive of systems (measured by the GDP percentage spent on health care) and reaches high technical standards [1] yet population health indicators are not satisfactory when compared with other countries nor is the level of financial protection (against catastrophic healthcare costs to be paid by the patients). Nearly one-third of all health care spending in the United States is attributed to inpatient hospital services [2]. Hospitals in the U.S. constitute a complicated and heterogeneous subsystem. There are diverse types of hospitals, functioning independently or in networks, developing innovative care models and using a multiple payer structure. The aim of this article is to present the basic characteristics of the U.S. hospital sector (with an emphasis on structure, utilization level and the system of financing) as well as its current financial challenges and reform trends.

The hospital sector in the United States

Historical development

At the beginning of the 19th century only a few hospitals existed in the United States[1] and the main health care institutions were the almshouses (also called poorhouses) run by the local governments. Services in the almshouses were more akin to social welfare than to medicine (providing food, shelter and some basic nursing care for the sick) [3]. During the following decades almshouses were gradually transformed into community-owned hospitals supported mainly by private charitable donors. Influential donors, being members of the boards exercised control over hospitals (or opened new ones) leading to private non-for-profit hospitals domination in the American hospital landscape. Medical discoveries at the turn of the 19th and 20th centuries lead to further development of the hospitals which started to be regarded as places of superior

medical services and surgical procedures. Additionally, the first profit-making hospitals operated by physicians or corporations were opened. By the end of the 19th century there were 149 hospitals with a bed capacity of more than 35,000 (less than 10% of these were under any kind of government control) [3, 4].

During the 20th century the U.S. hospital sector experienced both a long phase of stable development as well as the first downsizing initiatives in the 1990s. From the beginning of the century further development of the hospitals was influenced by three main factors. The first was the wider availability of private health insurance after 1930 (early insurance plans provided generous coverage for inpatient care which resulted in increasing demand). The second factor was the introduction of the Hospital Survey and Construction Act of 1946, which provided federal grants to the states for increasing hospitals' bed capacity (the objective of this legislation, known as Hill-Burton program, was to increase the U.S. community hospitals capacity to 4.5 beds per 1000 in the civilian population, which was achieved in 1980) [3]. Finally, the creation of two public insurance programs: Medicaid and Medicare in 1965 additionally enhanced the demand growth of inpatient care. Between 1965 and 1980 the number of beds in community hospitals increased from 741,000 to 988,000.

Beginning in the 1980s, the introduction of the first cost-containment policies started to heavily influence the hospital sector. Two major factors contributing to the downsizing of hospitals were: changing the reimbursement method from a retrospective to a prospective payment system and the growth of managed care institutions. In 1983 the diagnosed related groups (DRG) method of reimbursement was introduced under which hospitals received a pre-established fixed rate per admission. The method provided strong incentives to cut the operating costs and discharge patients more quickly. The managed care institutions on the other hand, started to promote using outpatient services (ambulatory care, home health agencies, skilled-care nursing homes) instead of admitting patients to hospitals. Many hospitals were forced to close when they had difficulty coping with these new determinants. Both factors contributed to reducing the growth of national spending on hospital inpatient care to 5% in the 1990s in comparison to 14% in the 1970s. [3]. The trend of the gradual reduction of the hospital sector's capacity (closing hospitals and/or reducing the number of beds) continued through the first decade of the 21st century.

Structure and utilization level

The current structure and capacity of the U.S. hospital sector as well as its changes in the period of 1990–2012 are presented in **Tables I** and **II**. The data presentation includes the most common hospital classification – according to the ownership and services profile. In general, hospitals can be divided into federal (maintained by the federal government) and non-federal (owned by state or local governments, private or social institutions).

Federal hospitals are maintained primarily for special groups of federal beneficiaries such as Native Americans, military personnel, and veterans [3]. In 2012, there were 211 federal hospitals down from 337 in 1990. The significant decrease in the number of hospitals correlates with the reduction of the number of beds from 98,000 in 1990 to 45,000 in 2009 (no open access data for 2012). Veteran Health's Administration hospitals constitute the largest group among federal hospitals – according to the data for 2014, there are 141 veteran medical centers [5]. They are governed centrally by the Department of Veteran Affairs.

Non-federal hospitals include three categories: community hospitals, psychiatric and other units (mainly: long term general and special hospitals, tuberculosis clinics and hospital units of institutions – e.g. prison hospitals, college infirmaries). The largest category, in terms of the number of hospitals and beds capacity, is that of community hospitals. By definition, a community hospital is a non-federal, short stay (up to 25 days) hospital whose services are available to the general public [3]. Included here are both general and specialty units, academic medical centers or other teaching hospitals – if open to the general public. According to the ownership structure, community hospitals can be divided into three subcategories:

- nongovernmental non-for-profit (called private nonprofit or voluntary hospitals);
- investor owned for-profit (called private for profit);
- state and local government (called state or local public hospitals).

The first subcategory of community hospitals – private nonprofit hospitals are operated by community associations, philanthropic foundations and church organizations[2]. Their primary mission is to benefit the communities in which they are located. Their operating expenses are covered from patient fees, third-party reimbursement, donations and endowments. The tax-exempted status of private nonprofit hospitals (they are exempted from federal, state and local taxes in exchange for providing charity services) is one of the highly debated issues by the current health sector policy makers and will be discussed in further sections of this article. The second subcategory, private for-profit hospitals (called also proprietary hospitals) are owned by individuals, partnerships or corporations. They are operated for the financial benefit of their stockholders. A significant trend over the past years has been the building or acquisition of a substantial number of hospitals by investor owned corporations, which has resulted in the constitution of large multihospital chains owned by for-profit corporations [3]. Examples include the Hospital Corporation of America (owning 165 hospitals and 115 freestanding surgery centers) or the Community Health System (operating 208 hospitals) [6, 7]. The third subcategory of community hospitals are those owned by state and local governments. They are often located in large urban areas where they serve mainly inner-city indigent and disadvantaged populations. Due to the generally poor health status of these populations and inner-city violence, these hospitals incur higher utilization than hospitals located in suburban areas [3]. Some large public community hospitals are af-

Type of hospital	1990		1995		2000		2005		2009		2012	
	Number	Structure	Number	Structure	Number	Structure	Number	Structure	Number	Structure	Number	Structure
Federal government	337	5.07%	299	4.75%	245	4.22%	226	3.93%	211	3.64%	211	3.69%
Community hospitals:	5,384	80.97%	5,194	82.56%	4,915	84.60%	4,936	85.75%	5,008	86.42%	4,999	87.35%
Nongovernmental non-for-profit	*3,191*	*47.99%*	*3,092*	*49.15%*	*3,003*	*51.69%*	*2,958*	*51.39%*	*2,918*	*50.35%*	*2,894*	*50.57%*
Investor owned for-profit	*749*	*11.26%*	*752*	*11.95%*	*749*	*12.89%*	*868*	*15.08%*	*998*	*17.22%*	*1,068*	*18.66%*
State and local government	*1,444*	*21.72%*	*1,350*	*21.46%*	*1,163*	*20.02%*	*1,110*	*19.28%*	*1,092*	*18.84%*	*1,037*	*18.12%*
Psychiatric	757	11.39%	657	10.44%	496	8.54%	456	7.92%	444	7.66%	413	7.22%
Other (long term general and special, tuberculosis, hospital units of institutions)	171	2.57%	141	2.24%	154	2.65%	138	2.40%	132	2.28%	100	175%
All hospitals	**6,649**	**100.00%**	**6,291**	**100.00%**	**5,810**	**100.00%**	**5,756**	**100.00%**	**5,795**	**100.00%**	**5,723**	**100.00%**

Table I. *Number of hospitals in the United States (selected years 1990–2012).*

Source: Authors own work based on the U.S. Census Bureau, Statistical Abstracts of the United States: 2012 and American Hospital Association 2014 data.

Type of hospital	1990		1995		2000		2005		2009		2012*	
	Beds (in thsd)	Structure	Beds (in thsd)	Structure	Beds (in thsd)	Structure	Beds (in thsd)	Structure	Beds (in thsd)	Structure	Beds (in thsd)	Structure
Federal government	98	8.06%	78	7.22%	53	5.40%	46	4.86%	45	4.77%	n/d	n/d
Community hospitals:	927	76.42%	873	80.76%	824	83.73%	802	84.69%	806	85.31%	801	86.97%
Nongovernmental non-for-profit	*657*	*54.17%*	*610*	*56.43%*	*583*	*59.27%*	*561*	*59.24%*	*556*	*58.88%*	*n/d*	*n/d*
Investor owned for-profit	*102*	*8.39%*	*106*	*9.81%*	*110*	*11.17%*	*114*	*12.04%*	*122*	*12.92%*	*n/d*	*n/d*
State and local government	*169*	*13.95%*	*157*	*14.52%*	*131*	*13.29%*	*128*	*13.52%*	*127*	*13.45%*	*n/d*	*n/d*
Psychiatric	158	12.99%	110	10.18%	87	8.80%	82	8.66%	76	8.05%	n/d	n/d
Other (long term general and special, tuberculosis, hospital units of institutions)	31	2.53%	20	1.85%	20	2.07%	17	1.80%	18	1.87%	n/d	n/d
All hospitals	**1,213**	**100.00%**	**1,081**	**100.00%**	**984**	**100.00%**	**947**	**100.00%**	**944**	**100.00%**	**921**	**100.00%**

* *no data for specific types of hospitals (n/d)*

Table II. *Number of hospital beds in the United States (selected years 1990–2012, in thousands).*

Source: Authors own work based on the U.S. Census Bureau, Statistical Abstracts of the United States: 2012 and American Hospital Association 2014 data.

filiated with medical schools and play a significant role in medical staff training processes.

Community units constitute the basis of the U.S. hospital sector. Within the period of 1990–2012 the total number of community hospitals fell from 5,384 units in 1990 to 4,999 in 2012, with a respective decrease in the number of beds from 927,000 to 801,000. However, the share of community units in the total number of hospitals beds increased from 76.42% in 1990 to 86.97% in 2012 (Tables I and II). Within the group of community hospitals, private nonprofit units dominate – in 2012 there were 2,894 of this type of hospitals which constituted 50.57% of all hospital units and 57.89% of community units. In the years 2000, 2005 and 2009 private nonprofit hospitals beds constituted about 59% of all hospitals' bed capacity. As for the two remaining community hospital categories (investor owned for profit and state/local government owned), in the period 2009–2012 the trends of decreasing the number of public community hospitals (from 1,444 units to 1,037) and increasing the number of private for profit ones (from 749 to 1,068) are visible.

Psychiatric hospitals as well as those included in the 'other' category (Tables I and II) are also owned by state or local governments (they are however not open to the general public as community hospitals are). The number of psychiatric hospitals fell from 757 in 1990 to 413 in 2012 (within the two decades of 1990–2009 the total number of psychiatric hospitals beds fell from 158,000 to 76,000). Within the 'other' hospital category the largest group consists of long term care hospitals – their number fell from 131 units in 1990 to 89 in 2012.

In general, within the period of 1990–2012 the total number of hospital beds decreased by 292,000 (including a reduction of community hospital beds by 126,000). The trend of hospital bed reduction is visible when comparing the indicator of the hospital bed number per 1000 people which for all hospitals fell from 4.9 in 1990 to 2.9 in 2012 (**Table III**). In the same period the number of community hospital beds per 1000 people decreased from 3.7 to 2.5. Within two decades (1990–2009) the U.S. hospital sector was characterized by a lower value of hospital beds per 1000 people indicator than the OECD country average [8].

The utilization indicators for community hospitals are presented in **Table IV**. In the period of 1990–2011 a trend of technical efficiency improvement can be observed. The average length of stay shortened and the number of patients admitted per bed increased. The trend of outpatient care promotion (at the expense of inpatient services) is also visible – the indicator of the number of hospital admissions per 1000 people decreased from 125 in 1990 to 112 in 2011, whilst the number of outpatient visits per 1,000 people increased from 1,207 to 2,106. The influence of managed care organizations is perceived as the major driving force of this changes.

Financing

U.S. hospitals generate revenue in diverse ways. It is crucial to distinguish between different types of revenue. The basic and most important is operating revenue – that is income generated by delivering medical services. However, other types of revenue (e.g. income for providing nonmedical services, money for investments, donations and grants from individuals, foundations and the government) can strongly influence a hospital's financial situation [9]. Operating revenue is generated via reimbursement for medical services provided. There are a multitude of payers for hospital services which can use different payment methods. In general, the payers can be categorized into three main groups: public insurance

Type of hospital	1990	1995	2000	2005	2009	2012
Community hospitals	3.7	3.3	2.9	2.7	2.6	2.5
All hospitals	4.9	4.1	3.5	3.2	3.1	2.9

Table III. *Hospital beds number per 1000 population.*

Source: Authors own work based on the U.S. Census Bureau, Statistical Abstracts of the United States: 2012 and American Hospital Association 2014 data.

Community hospitals	1990	1995	2000	2005	2006	2007	2008	2009	2011
Admissions per 1000 people	125	116	117	119	118	117	118	116	112
Admissions per bed	34	35	40	44	44	43	44	44	n/d
Average length of stay (in days)	7.2	6.5	5.8	5.6	5.5	5.5	5.5	5.4	5.4
Outpatient visits per 1000 people	1,207	1,556	1,852	1,976	2,002	2,000	2,053	2,091	2,106

Table IV. *Community hospitals utilization rates (selected years 1990–2011).*

Source: Authors own work based on the U.S. Census Bureau, Statistical Abstracts of the United States: 2012 (data for 1990–2009) and National Center for Health Statistic, Health, United States, 2013 (data for 2011).

Type of payer	Main programs/elements	Reimbursement methods
Public insurance	**Medicare** – federal health program designated for seniors (above 65 years old) and some disabled people (Medicare part A program covers mostly hospital services and is financed from payroll taxes).	Diagnosis related groups (DRG)
	Medicaid – joint federal and state funded insurance mainly for low-income families (Disproportionate Share Hospitals – DSH Medicaid provides additional payments for hospitals serving a large number of patients).	Vary between the states – most often: • Diagnosis related groups (DRG) • Per diem • Capitation
Private insurance	**Health Maintenance Organizations (HMOs)** – managed care organizations that provide members with a comprehensive set of services through their provider network	• Diagnosis related groups (DRG) • Per diem • Discounted charges • Negotiated capitation rates
	Preferred Provider Organization (PPOs) – managed care plans that contract with networks of providers to guarantee services availability based on a negotiated fees schedule	• Negotiated charges
	Point of Service (POS) – managed care plans that combine features of both pre-paid and fee for service insurance	• Discounted fee-for-service • Capitation
	Indemnity Insurance – traditional health insurance plans in which members pay a premium and must first meet a deductible	• Charges
Out-of-pocket	**Self–Pay** – concerns the population that is not covered by health insurance and pays directly for the medical services provided	• Charges

Table V. *Paying for hospital services in United States – payers and methods.*

Source: Authors own work based on: A Community Leaders Guide to Hospital Finance, The Access Project, Harvard School of Public Health 2001: 3–15 and Reinhardt U.E., The pricing of U.S. hospital services – chaos behind a veil of secrecy, Health Affairs (2006); 25(1): 59–69.

Type of payer	1980	2000	2012
Medicare	34.6%	38.3%	39.7%
Medicaid	9.6%	12.8%	16.3%
Other Government	6.1%	1.4%	1.8%
Private Payer	41.8%	38.7%	3.40%
Uncompensated Care *(bad debt and charity care expressed in costs – lost revenues)*	5.1%	6.0%	6.1%
Non-patient *(non medical services: cafeterias, parking lots, gift shops)*	2.7%	2.8%	2.2%

Table VI. *Distribution of community hospitals costs by payer type (1980, 1990, 2012).*

Source: American Hospital Association, Trends in Hospital Financing, Trendwatch chartbook 2014 (http://www.aha.org/research/reports/tw/chartbook/ch4.shtml; accessed: 29.07.2014).

(Medicare and Medicaid programs), private insurance (managed care plans and private insurance policies) and out-of-pocket patients' payments. The payers main features as well as the payment methods used are presented in **Table V**.

The 'payer-mix' structure (the single payers share in the hospitals revenue) can be analyzed using data on community hospital costs by payer type (**Table VI** and **Figure 1**). According to data for 1980, 1990 and 2012 public programs (Medicare, Medicaid and other smaller government programs) jointly covered the majority of community hospitals costs: from 50.3% in 1980 to 52.5% in 2000 and 57.8% in 2012. The dominant payer was the Medicare program which covered from 34.6% of hospital costs in 1980 to 39.9% in 2012. The share of private insurance payers decreased from 41.8% in 1980 to 34.0% in 2012. Uncompensated care constituted from 5.1% of hospital costs in 1980 to 6.1% in 2012, whilst the non-patient services cost share decreased from 2.7% to 2.2%. The trend of public payers share in hospital financing growing is expected to continue due to implementation of the Affordable Care Act of 2010 (ACA)[3]. The reform commonly known as 'Obamacare" aims at reducing the number of uninsured Americans i.e. by extending the scope of public insurance programs.

As shown in Table V specific payers can use diverse payment methods. Detailed characteristic of the hospital services payment methods is described in the literature [10, 11] and goes far beyond the scope of this article. Nevertheless it is crucial to emphasize that the diversity of payment methods provides a complicated array of financial incentives. Medicare uses the diagnosis re-

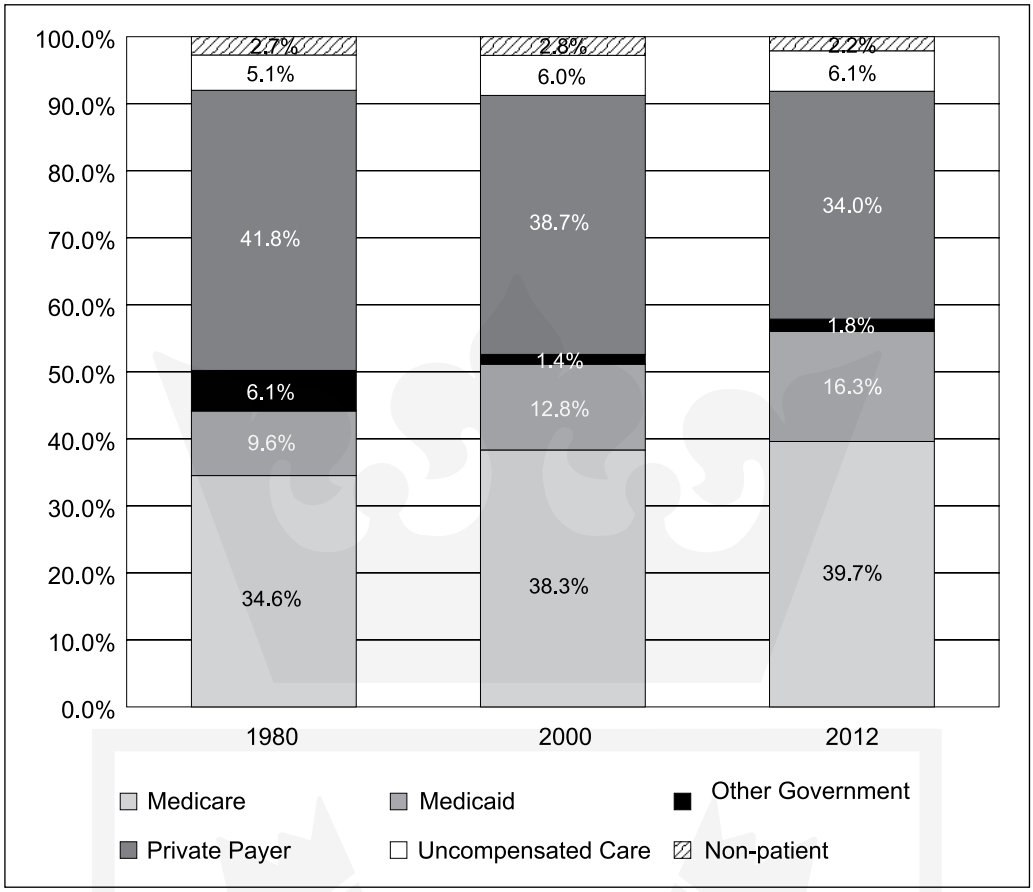

Figure 1. *Distribution of community hospitals costs per payer type (1980, 1990, 2012).*

Source: American Hospital Association, Trends in Hospital Financing, Trendwatch chartbook 2014 (http://www.aha.org/research/reports/tw/chartbook/ch4.shtml; accessed: 29.07.2014).

lated groups (DRG) method according to which hospital receives a lump sum per case/group type. For a given DRG, Medicare makes the same level of payment for all hospitals in the country, except for an adjustment for geographic variations [9]. In general, if a hospital has low costs and/or is able to reduce the length of patient's stay at the hospital it can make a profit from the case type (if not – the payment will not cover the hospital costs). In case of the second public program – Medicaid – payment methodologies vary by state. The most typical are DRGs and an all-inclusive per diem. In some states Medicaid uses managed care plans to provide hospitals services (the public insurer pays a fixed monthly amount per each enrolled recipient – the method knows as capitation). Private insurers use a vast array of payment methods including DRGs, per diems, discounted/negotiated charges, negotiated capitation rates and a discounted fee for service. The distinguishing feature of managed care plans which represent the majority of private insurance programs is the negotiation process between the payer and the provider at the level of the actual payment (so called negotiated or discounted payments). As a result a hospital can receive a different level of payments for provision of the same service – depending on the payer. Additionally, there are a number of uninsured patients who pay the cost of medical services provided out of pocket. If an individual does not have the adequate resources to pay the bill, hospitals can secure payment in a number of ways, including extended payment plans and liens on property. Hospitals may also have policies regarding charity care for those of limited means [9].

Current challenges and reform trends

Health systems around the world, including the U.S.'s share many common challenges. Examples include: rising costs, pressure to improve efficiency, introduction of quality assurance procedures, an aging population, medical staff deficits. Hospitals, being the central part of health systems, are under the strong influence of all these processes. Currently in the United States several factors can be indicated, which determine the functioning of the hospital sector and/or constitute its reforms main drivers. Some challenges result from new legal regulations whilst others can stem from rising patient's expectation or public scrutiny. Numerous challenges are interrelated or hinged into each other. In the opinion of the authors of this article, currently there are two major challenges

influencing the functioning of hospitals: the implementation the Affordable Care Act of 2010 (ACA) and strong public pressure for hospital's price transparency. Within the first, several factors can be distinguished: the extension of the insured population; Medicare Hospital Readmissions Reduction Program; new requirements for non-profit hospitals regarding charity services; the role of accountable care organizations (ACOs).

The **Affordable Care Act (ACA)**, signed into law in March 2010, constitutes the most significant health system reform within the last several decades. The law is aimed at increasing the quality and affordability of health insurance, lowering the uninsured rate by expanding insurance coverage (both public and private), and reducing the costs of healthcare for individuals and the government. In the context of the hospital sector, several issues are crucial. Extended coverage might result in higher utilization and changes is the 'payers mix' structure. One of the ACA provisions is that Medicaid will be extended to uninsured adults with incomes of up to 138% of the Federal Poverty level (FPL). Till 2016 the federal government is going to cover 100% of the costs; afterward – the states will have to participate in financing. The Supreme Court decision of 2012 made it optional for states to participate in the Medicaid expansion program [12].

From the hospital sector's point of view, the **Medicaid expansion** might result firstly in a reduction of costs for uncompensated care (due to a decrease in the number of uninsured patients) and secondly in Medicaid's growing share in the inpatient care 'payers mix' structure. The second process might be difficult for hospitals to deal with due to Medicaid's low compensation rates [13]. According to the American Hospital Association (AHA) analysis both public insurance programs (Medicare and Medicaid) pay for the hospital services at a level below the costs of providing them [14]. Payment rates for Medicare and Medicaid, with the exemption of managed care plans, are set by law rather than through the negotiation process as with private insurers. This results in underpayment for the hospital services provided for those programs. According to the AHA in the period of 2009–2011 the 'payment – to – costs ratio' for Medicare was at the level of 90%–92%, for Medicaid 89%–94% and for private insurers at the level of about 134% [15]. Extension of the population covered by public insurance programs might lead to difficulties in hospitals financial situation as well as stronger cost-shifting between the payers (the situation in which the payers with stronger market power force 'weaker payers' to cover a disproportionate share of providers' fixed costs and/or when providers simply succeed in charging higher prices when they can) [16].

The Affordable Care Act introduced also the **Medicare Hospital Readmissions Reduction Program** which imposes a financial penalty (beginning on October 2012) on hospitals with excess readmissions [17]. Within the program the term readmission refers to a situation in which a patient is readmitted to the same or another acute care hospital within 30 days of discharge. Excess readmissions are defined as those that exceed a hospital's 'expected readmission rate' which is the national mean readmission rate, risk-adjusted for the demographic characteristics and severity of illness of the hospital's patients. The penalty is calculated using a complex formula based on the amount of Medicare payments received by the hospital for the excess readmissions. The penalties are collected from the hospitals through a percentage reduction in their base Medicare inpatient claims payments, up to a cap [18]. According to the Medicare Payment Advisory Commission – 13% of all 2009 hospitals admissions were followed by a readmission that could possibly have been prevented [19]. The program has two parallel goals: to reduce Medicaid expenses and to push hospitals to look beyond their walls and improve care coordination across providers (in order to reduce readmissions).

The ACA introduced also new requirements regarding **non-for-profit hospitals**. In 2009 there were 2,918 nonprofit hospitals which constituted 59% of total hospital bed capacity. Almost all such hospitals are tax-exempt (from income, property, and sales taxes) on the basis that they qualify as charitable organizations. Although federal, state, and local standards for defining a charitable organization may differ, there is a general expectation that tax-exempt hospitals will benefit their communities by charitable activities. However, the question of whether tax-exempt hospitals provide appropriate levels of community benefits has generated considerable controversy [20]. Beginning in 2009, nonprofit hospitals are obliged to report their expenditures on activities classified as community benefits. Special form (990 – Schedule H) is used which distinguishes eight categories of community benefits: charity care at cost, unreimbursed Medicaid, unreimbursed other means-tested government programs, community health improvement services and community benefit operations, health professions education and training, subsidized health services, research, and cash and in kind contributions to community groups [21]. The first national level analysis of the Schedule H data showed that in 2009 nonprofit hospitals spent on average 7.5% of their operating expenses on community benefit activities (with considerable variations between hospitals – from 20.1% to 1.1%) [20]. The majority of spending was devoted to direct patient care (charity care and unreimbursed costs for public programs, mainly Medicaid). The ACA main objective – broad extension of insured population may strongly influence the nonprofit hospitals' ability to provide charity care (for the uninsured).

The issue of the community benefits provision (its principles and value) constitutes the basis of nonprofit hospitals functioning. There are however two major controversies debated by the experts. Firstly in some hospitals' cases – the value of the community benefit provided might be lower than the 'tax revenue lost' and secondly – there can be lack of any correspondence between the actual community needs and charity care provided [20, 22, 23]. As for the first issue, some states introduced the minimum threshold of community benefit spending which hospitals need to meet in order to keep the tax-exempt status. Regarding the second issue, according to the ACA regulations, beginning from 2013, non-profit hospitals are obliged to conduct a community health

needs assessment every three years. The analysis has to be based on sound methodology, include community representatives' opinions and a description of existing health care resources. It should contain a prioritized description of the community's health needs and provide a strategy to meet these needs. The ACA also introduced the obligation for hospitals to provide written financial assistance policy including e.g. patients' eligibility criteria.

Accountable care organizations (ACO) are another proposal promoted by ACA which can strongly influence the hospital sector's functioning. According to the Centers for Medicare and Medicaid Services, the ACOs are groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients [24]. The goal of coordinated care is to ensure that patients, especially the chronically ill, get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors (under the ACA each ACO has to manage the health care needs of a minimum of 5,000 Medicare beneficiaries for at least three years) [25]. When an ACO succeeds in both delivering high-quality care and spending health care dollars more wisely, it will has its share in the savings achieved for the Medicare program [24]. For a hospital, participation in ACO means intense cooperation with other providers – especially primary health care doctors. Hospitals cannot function as stand-alone facilities focused on inpatient services, but have to provide also extensive outpatient care (via large networks of medical professional reaching into the community) [26]. Within the ACO the hospital has the financial incentive to keep the patients' population healthy (not only to treat them as under the fee for service payment method).

In parallel with pressures regarding the ACA's implementation there is a vital debate regarding the lack of **hospitals' price transparency**. As mentioned in the previous section of this article, in the U.S. there are no uniform rates or payment systems for the hospitals[4]. Each hospital develops its 'chargemaster', that is the list of prices of every procedures and supply items provided in the hospital. The chargemasters are updated at least annually but often more frequently (there is not any common practice and/or rule on 'how', 'when' and 'on what basis' the prices are changed). In some experts' opinion, hospital prices are set according to the hospital's financial manger's opinion concerning the level of expected payment "not in any relationship to the cost of goods sold or the combination of wages and materials, or anything else that would go into a genuine cost measurement" [27]. In addition in the majority of states – hospitals are not required to post their chargemasters for public view [28]. Typically, a hospital will submit for all its patients, detailed bills after the services are provided. The prices are then negotiated between the individual payers and providers. Depending on the payer negotiating and/or market power – the hospital can accept different payments for the same service provision (the situation described as 'price discrimination'). The actual payment received from the specific payer might be far below the prices listed in the chargemaster. According to the American Hospital Association data on 'payment-to-cost ratio' for three main inpatient services payers (Medicare, Medicaid and private insurers) – the prices paid by the public insurers do not cover the actual cost of their provision [15], thus hospitals shift this cost into payment received from private insurers. This cost shifting is seen as one of the major reasons for the higher medical cost trends for private insurers [16]. The issue of hospital prices prompted vital public debate in 2013 when Time magazine published the now famous Peter Brill report titled: **"**Bitter Pill: Why Medical Bills Are Killing Us" [29] and the Centers for Medicare and Medicaid Services released (for public view) the Medicare Provider Utilization and Payment Data [30] which include e.g. data on inpatient services prices. Despite differences in scope, and methodology both sources showed enormous differences in hospital prices which shocked public opinion [31]. Health policy makers emphasized the need for transparency in hospital pricing process as well as introduction of new payment methods. As Peter Brill concluded: "Put simply, with Obamacare we've changed the rules related to who pays for what, but we haven't done much to change the prices we pay" [29].

Presented above, the description of the U.S. hospital sector's current challenges provides only a superficial picture of the legal and organizational factors. Comprehensive analysis should also refer to the epidemiological and demographic data. Nevertheless the challenges described are the main drivers of some hospital sector changes observed within the last decade. Examples of such changes are: the trend of the growing number of hospitals' mergers and acquisitions and a stronger reliance on outpatient services as a source of revenue (including the incorporation of primary care units).

Figure 2 presents a number of announced **hospital mergers and acquisitions** in the period of 1998–2012. There have been 50 or more deals in every year but one (2003) within the whole period. The number of hospitals involved in transactions has increased in the last 3 years (2010–2012) relative to the preceding years.

Data on individual transactions reveals that more than half of the acquired hospitals in that period had fewer than 150 beds, which may suggest the influence of financial and economic pressures and/or healthcare reform determinants [32]. The decision on merging and/or joining the hospitals' networks may result from the need to increase the size and thus the negotiating clout with payers and/or reducing the costs. Merger activity is characterized largely by single firm acquisition rather than "mega-mergers" – the majority of hospitals involved in transactions since 2007 were stand-alone hospitals and many of these combined via mergers or acquisitions with just one or two other hospitals [32]. This trend lead to a further decrease in the number of independent hospitals in favor of those functioning in diverse systems or networks. **Figure 3** present the hospitals revenues structure in the period of 1998–2011. The share of outpatient services in the hospitals' gross revenue increased in that period from 33% to 44%. Hospitals are not only networking with each other but are also shifting to a more **outpatient-focused care model**. The cost-containment

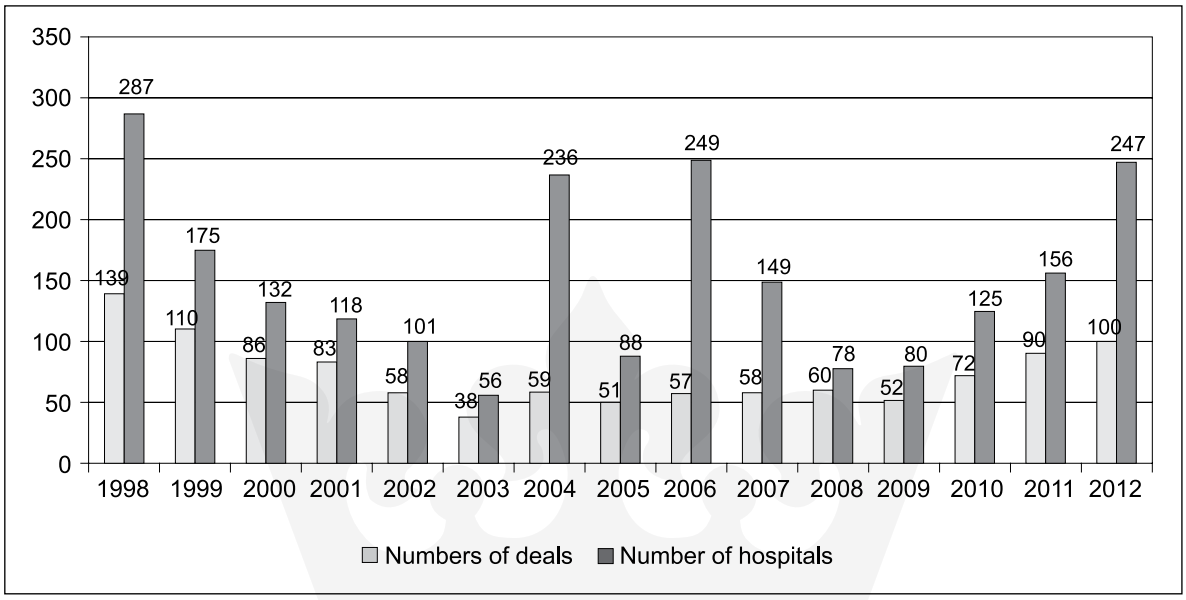

Figure 2. *Announced hospital mergers and acquisitions in the period 1998–2012.*

Source: Guerin-Calvert M.E., Maki J.A., Hospital Realignment: Mergers Offer Significant Patient and Community Benefits, Center for Healthcare Economics and Policy, January 2014: 7.

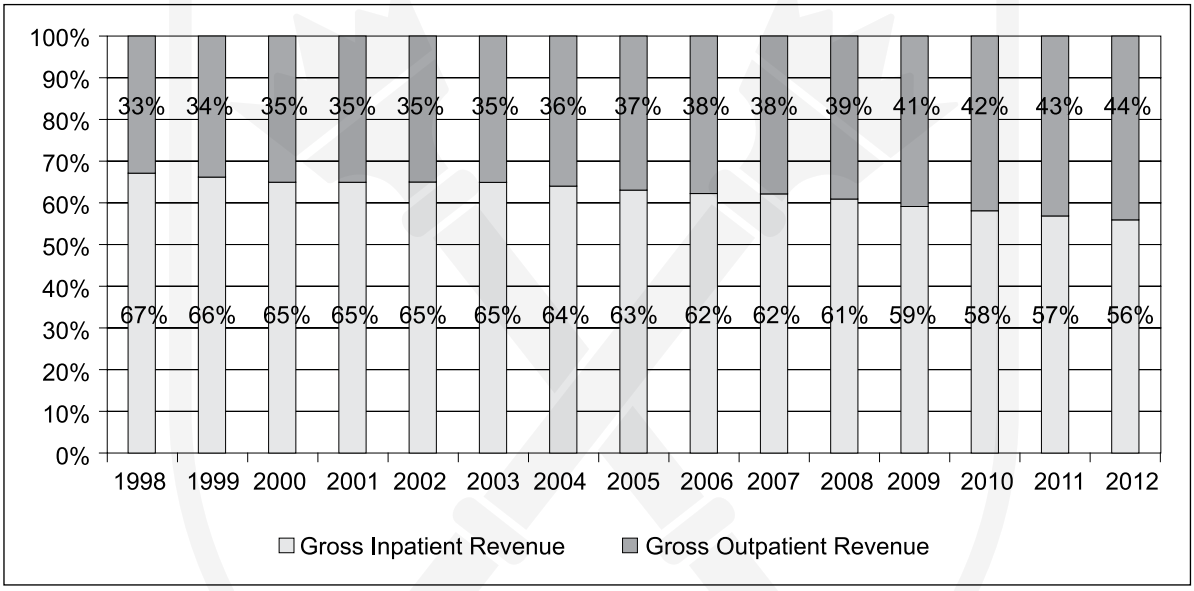

Figure 3. *Hospitals' gross revenue structure in the period 1998–2011.*

Source: American Hospital Association, Trends in Hospital Financing, Trendwatch chartbook 2013 (http://www.aha.org/research/reports/tw/chartbook/ch4.shtml; accessed: 30.07.2014).

pressures of the Affordable Care Act and regulations on coordinated care constitute major determinants.

Conclusions

The hospital sector in the United States has a very complicated structure and is unique in many aspects. No other country has such a heterogeneous collections of hospitals, payers and payments methods for hospitals services [33]. This diversity is strengthened by the lack of uniformity in states' legal regulations regarding the health sector. Yet, as in many other countries around the world, hospitals in the U.S. are under the strong pressure of cost containment policies and face challenges of epidemiological and demographic changes. The recent health care reform has created new organizational and financial

challenges on both the macro and micro levels. The hospital sector's ability to adapt to new circumstances and its reaction to external changes is therefore crucial and will determine the sector's future. Analysis of the U.S. hospital sector's reform experiences may help in developing recommendations for European health systems where in many cases hospital commercialization and market orientation are being introduced and promoted.

Notes

[1] The first hospital was established in 1663 on Manhattan Island – and was dedicated to soldiers, whilst one of the first almshouses was established by William Penn in Philadelphia in 1713 [4].

[2] In 2009 the Catholic Church operated 620 hospitals across the U.S. and delivered care to one-sixth of all hospital patients each year. There were also hospitals run by Jewish and Protestants organizations [3].

[3] The law was enacted in two parts: The Patient Protection and Affordable Care Act was signed into law on March 23, 2010 and was amended by the Health Care and Education Reconciliation Act on March 30, 2010. The name "Affordable Care Act" is used to refer to the final, amended version of the law (Source: www.healthcare.gov; accessed: 30.07.2014).

[4] Only the state of Maryland has retained an all-payer prospective rate-setting system for a hospital care, under which services are paid for by multiple third party payers but all partners must adopt the same methods and hospital-specific rates (Source: Wiley M., Laschober M.A., Gelband H. (ed.), *Hospital financing in seven countries*, Washington DC 1995: 138).

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