# Revista de Derecho

ARTÍCULO DE INVESTIGACIÓN RESEARCH ARTICLE https://dx.doi.org/10.14482/dere.56.348

# Regulatory framework, the US health system, and international health displacement

Marco normativo, sistema sanitario estadounidense, y el desplazamientosanitario internacional

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# Abstract

This article studies the endogenous and exogenous causes of the high prices of US medical goods and services and their relationship with the international health displacement of their patients through the economic and normative analysis of the legal provisions of national medical care. It was found that the deregulation of health sector agents has caused an increase in direct and indirect costs with very detrimental effects on patients. This article contributes new knowledge since it identifies market concentration and federal deregulation as motivators for the displacement of patients to other destinations for medical purposes.

#### Keywords

Servicios médicos, Estados Unidos, caso de estudio, barreras internas.

# Resumen

Este artículo estudia las causas endógenas y exógenas de los altos precios de los bienes y servicios médicos estadounidenses, y su relación con el desplazamiento sanitario internacional de sus pacientes a través del análisis económico y normativo sobre las disposiciones legales de la atención médica nacional. Se encuentra que la desregulación de los agentes del sector salud ha provocado un aumento de los costes directos e indirectos con efectos muy perjudiciales para los pacientes. Este artículo contribuye al nuevo conocimiento ya que identifica a la concentración de mercado, y desregulación federal como motivantes del desplazamiento de pacientes a otros destinos con fines médicos.

#### PALABRAS CLAVE

Servicios médicos, Estados Unidos, caso de estudio, barreras internas.

#### I. INTRODUCTION: LEGISLATIVE AND PRICE DYNAMICS IN THE UNITED STATES

The United States government approved, in 1983, a subsidy to public hospitals for Medicare program patient bills (medical care for those over 65 years of age), based on a value determined by 467 medical associations (Cebul et al., 2008). Previously, the healthcare system was eminently public, with isolated actions from private organizations. Hospitals and medical organizations fulfilled a social function, and there was a strict regulation on the prices of medical procedures and drugs that required a prescription from specialists. Health insurance coverage only reached 25% of the population (Tomassi et al., 2019).

In 1976, capitation was applied, as a form of financing for the federal health system, which is a fixed payment per patient, transferring the risk of care to private entities or Health Maintenance Organizations (HMO) to health professionals (McGahan, 2019), which facilitated the operators of the system to increase the prices of procedures and drugs to promote competitiveness and health coverage. This deregulatory incentive fostered competition and growth in policyholder coverage to reach 74% (Morain et al., 2019).

Companies are the main source of national health insurance, covering more than 100 million individuals (Fuchs, 2018). The federal government covers 39.2 million individuals in special regimes such as veterans and Medicare, or health care for people in multidimensional poverty, (39 million) and Medicaid (41 million) (Anderson et al., 2019).

However, the increase in coverage does not mean an improvement in the quality of medical care. Since there is deregulation of prices in medical procedures and drugs, and due to the fact that patients are not sufficiently informed of the prices, they assume that procedures do not have comprehensive coverage. The individual cost of healthcare and medical products are high compared to other countries in the Organization for Economic Cooperation and Development (Tessema et al., 2020).

The cost of general medical insurance has increased in recent decades, surpassing other services (education, digital entertainment, among others). Between 1989 and 1996, the average amount an employee contributed to basic family health coverage increased from \$935 to \$1,778 (US dollars) (Mintzberg, 2018). In the 1990s, US companies went from spending \$177 billion on health benefits for workers and their dependents to \$252 billion in 1996 (Frandsen et al., 2019), meaning that price deregulation does not necessarily involve financial relief for patients.

The US healthcare system has a high cost, compared to OECD member countries. In 2016, the United States gross domestic product (GDP) was \$14.29 trillion, and health spending was \$2.38 trillion or 16.2%. From 1965 to 2016, health spending as a percentage of GDP increased from 5.9% to 16.2%, leaving a part of the population without coverage (Zohrabian et al., 2018).



#### II. LEGAL AND ECONOMIC FRAMEWORK: THE COST OF THE AMERICAN HEALTHCARE SYSTEM

Healthcare in the United States is roughly twice as costly as in any other developed country (de la Puente, 2015a). The cost of this huge financial burden to each household due to higher premiums, taxes, and additional out-of-pocket expenditure is more than \$8,000 per capita (de la Puente, 2015b; Butowski, 2018; Hampson et al., 2018). The following are the reasons why this country has a high individual cost in its health system:

# **Administrative Costs**

The costs of medical attention are so high due to administrative expenses represented in the health system budget. An example is the case of Duke University Hospital, which has 1,300 employees and only has 900 beds (Vargas - Bustamante, 2019) but that have administrative staff whose function is to supervise compliance with insurance billing requirements, to avoid inappropriate resource management (Yabroff et al., 2019).

#### **Medication Costs**

Another difference in healthcare costs between the US and all other developed nations is the cost of drugs. In most countries, the government negotiates drug prices with manufacturers, but when the US Congress created Medicare Part D, it denied Medicare the right to use its power to negotiate drug prices (Sharma et al., 2018). The Veterans Administration Office and Medicaid, which can negotiate drug prices, pay lower prices (Cassel, 2018). The Congressional Budget Office found that by giving low-income Medicare Part D beneficiaries the same discount as Medicaid beneficiaries, the federal government would save \$116 billion over ten years (Ott & Olsen, 2019).

# **Defensive Medicine**

Another great driver of the high cost of health goods and services is that because doctors fear being sued, they request several prior diagnostic tests before performing invasive procedures. Therefore, patients and policyholders pay more for their insurance premiums and copayments, as well as taxes that are used to pay for government healthcare programs (Hogan, 2018).

# Various Treatments and Procedures that Increase Individual Spending

American doctors also tend to use a more expensive combination of treatments. According to a 2019 report by the Organization for Economic Cooperation and Development (OECD), 17.1% of the GDP of the United States was spent on health, in 2018 (Eisemberg, 2018). Additionally, more patients in the US are treated by specialists, compared to other OECD countries, whose fees are higher than primary care physicians (Emanuel, 2018).



# Salaries and Labor Regulations

Salaries and staffing also increase costs in American healthcare. Specialists demand high reimbursements, and the overuse of specialists through the current referral decision-making process increases healthcare costs. The National Commission for the Reform of Medical Payments was the first step to solve this problem. A 2013 report stated that the entity adopted 12 recommendations to obtain control over physician payments (Sarpatwari, 2018; de la Puente et al., 2019). The Commission has continued to work with Congress to find a way to implement some of these recommendations, although tangible policy results have yet to be followed (Kumar, 2011).

# Marketing and Advertising

The vendors who can command the highest prices are the ones who create a brand that everyone wants. "In some markets, prestigious medical institutions can set their price," says Allen (2018), from the Catalyst for Payment Reform program, a nonprofit organization that works with large employers to control healthcare costs (Allen, 2018).

The Affordable Care Act (ACA) has somewhat delayed the high costs created by brands in central Florida, for example, Florida Hospital is one of the better-known brands in the area (Blattner & Holtkamp, 2018; Kirkland et al., 2018), and in 2018, the ACA policies offered by Humana (an insurer) did not include the services provided by this brand.

Health systems in other countries do not have as many restrictions on specialist care, so the unit costs of care are lower than in the United States, due to a greater negotiation capacity between state entities compared to the United States for the setting of prices of medicines, medical equipment, and hospital services (Noone et al., 2019; Sasongko et al., 2019).

Little political action in favor of greater regulation towards private intermediaries of the healthcare system has maintained the high costs for end customers. The Affordable Care Act focused on ensuring access to healthcare but maintained the status quo to encourage competition between insurers and healthcare providers, which means that there will be multiple payers for services, and less control over prices by healthcare service providers (Okpala et al., 2019).

# **High Prices for Hospital Care**

The federal government estimates that health care spending per capita reached \$17,000 in 2021, and those costs will continue to grow more than 6.7 percent annually over the next decade (Blatt-ner et al., 2018; Switzer et al., 2013).

It is projected that around \$1.9 billion will be spent on hospital care alone in 2022 (Callander et al., 2017; Crawford et al., 2009). Hospitals have a profit margin of 8 percent, a level higher than



the margins in the pharmaceutical industry, or in the insurance industry. In acute care hospitals, total revenues exceeded expenses by more than \$71 billion in 2018, according to an analysis by the Center for American Progress (Fayet-Moore et al., 2018).

It is estimated that commercial insurers pay about twice what Medicare does for hospital care. According to all payers, hospitals receive an average reimbursement of about 134 percent of what Medicare pays. High prices do not always indicate better quality; in fact, they often mask inefficiencies in the hospital business (Cainzos-Achirica et al., 2019).

Some notable trends in the hospital business have occurred alongside earnings growth. One of the most important is that hospitals have shifted their growth strategy to expanded outpatient services. Hospital care now accounts for just over half of total health care centers (Kim et al., 2019).

Additionally, with dozens of hospital mergers each year, competition continues to decline. The market for healthcare providers is becoming more established, resulting in higher prices for patients.

Kerr et al. (2019) found that a higher concentration in the hospital market leads to higher costs. Compared to regions served by four or more competing hospitals, regions with three hospitals have prices that are 7 percent higher; those with two hospitals have prices that are 9 percent higher, and those with only one hospital have prices that are 15 percent higher.

For example, North Carolina is among the markets dominated by a small number of powerful healthcare systems. For example, Sutter Health (hospital services company) has an expanding network comprising 24 hospitals, 35 outpatient centers, and 5,500 member physicians. This reflects the increase in prices in several states where there is little supply of highly complex hospitals.

# **III.DETERMINANTS OF THE PRICES OF MEDICAL SERVICES**

#### **Place of Residence**

Per capita, healthcare expenditures in the high-spending regions of the United States are approximately 40 percent higher than in the poorest regions (the Midwest and the Southeast). The variation in spending among Medicare beneficiaries is largely due to differences in use, rather than in price, because reimbursement rates are set by the federal government, with some adjustments for regional costs (Wangqin et al., 2018; Rea et al., 2019).

Among the privately insured population, prices play a much larger role in spending variance. Rea et al. (2019) found that the variation in spending in the commercial insurance market is mainly due to differences in provider prices, rather than differences in the use of healthcare services.



Pricing data for employer-sponsored plans shows wide geographic variation in what hospitals are paid for care. Health Care Cost Institute business claim analysis demonstrate the enormous range of the price of care, both within and across metropolitan areas. For example, the average price for a cesarean delivery ranged from a low of \$3,636 in the Greater Knoxville, Tennessee area, to a high of \$20,721 in the San Francisco area (Ouyang et al., 2018; Shortell et al., 2019).

Typically, insured patients pay only a fraction of their hospital bills out of pocket, in the form of copayments, and most patients may be unaware of their total hospital charges. Hospital markets with the least competition have health insurance market premiums that are 5 percent higher than average, according to a recent study by McCormick et al. (2018).

# Type of Patient Coverage

Although public and private reimbursement rates have diverged over the study period, the precise payment rates depend on how supplemental government payments to hospitals are counted. According to the Medicaid Access and Payment Commission (2018), Medicaid reimbursement levels are higher than Medicare's if supplemental payments are counted toward Medicaid payments.

Cited studies have documented that private payment rates are much higher than Medicare's. Researchers at the Congressional Budget Office estimated that the price of a hospital stay was on average 189 percent the Medicare rate in 2013 (de la Puente et al., 2019). More recently, a study by Weng et al. (2018) found that employer-sponsored plans pay hospitals 241 percent the Medicare levels on average, for inpatient and outpatient care, with some hospital systems receiving as little as 150 percent and up to 400 percent of Medicare fees. And a report on California hospitals found similar results, with private insurers paying 209 percent Medicare rates.

Another commonly cited measure of hospital profitability is the payment-cost ratio, which represents the average payment over the average cost per patient, representing both patient-specific clinical costs and fixed costs, such as equipment, buildings, or facilities. According to the American Hospital Association (Hunter, 2018), private insurance payments average 144.8 percent of the cost, while Medicaid and Medicare payments are 88.1 and 86.8 percent of the cost, respectively.

Several studies suggest that Medicare reimbursements are well above the incremental cost. The Medicare Payment Advisory Commission (MedPAC) notes, in its March 2019 report to Congress, that Medicare payments exceed the marginal cost of caring for Medicare patients by 8 percent (Ouyang et al., 2018; Shortell et al., 2019).

A persistent argument in the debate over hospital payment is that hospitals make cost changes, raising prices to private payers to compensate for the underpayment of public programs. There is little evidence that hospitals can change costs and much stronger empirical evidence that high prices for private payers result from the market power of hospitals.



An alternative explanation for the gap between public and private hospital fees is that the latter may demand high prices from private payers (either private or insured patients), enjoying a larger financial cushion and evading the pressure to reduce costs.

#### IV. RESULTS: POLICIES TO REDUCE THE COST OF HOSPITAL CARE

Several public policy options could reduce hospital costs, many of which have already been implemented at the federal or state level, lowering prices and slowing the growth of hospital expenses. Hospital payment rates could be lowered directly through rate settings for all payers, reference prices, or regulations to limit rates. Federal policies to improve competition in hospital markets, including stronger antitrust enforcement, fairer payment rules, and greater transparency, could also lower prices and control the growth of hospital costs in the US (Van Bausekom, 2019).

# **To End Abusive Hospital Billing Practices**

Surprise bills generally come from medical companies associated with the hospital network and can also arise from emergencies where patients cannot be expected to find an in-network provider.

#### **Reference Prices**

In the absence of broad-based government action on hospital fees, individual taxpayers can take steps to lower the cost of hospital care through reforms such as benchmark pricing. Based on the reference price, a payer sets the maximum they will pay for a service or set of services, which could be tied to a percentile in commercial claims or Medicare rates. Providers who refuse to accept the reference price are excluded from the payer's network, or patients who choose that provider are responsible for paying the difference out of pocket. The reference price incentivizes patients to visit lower-cost providers and puts pressure on providers to cut costs to maintain their business.

Various states have implemented benchmark pricing forms for public plans. The California Public Employees Retirement System was one of the first payers to adopt reference prices for a limited set of scheduled procedures (Makhele et al., 2019; De la Puente et al., 2015c).

#### **Rates Regulation**

By capping all payers' rates closer to cost, state or federal regulators could lower current hospital prices. For example, former Obama administration officials Robert Kocher and Donald M. Berwick suggest capping hospital prices to 120 percent of current Medicare rates (Branfield et al., 2019). Others have suggested 125 percent of Medicare fees as a starting point.

Even with rates set to reach the current average and allow efficient hospitals to make some profit, rate regulation could generate savings by simplifying hospital administration and eliminating the need for



rate negotiations between hospitals and payers. Alternatively, assuming hospitals can reduce costs by operating more efficiently, all payers' rates could be set below current levels to increase savings.

Using data from the AHA, Huang et al. (2018) calculated that reimbursing all hospital care at Medicare rates, as proposed in Senator Bernie Sanders' Medicare for All (I-VT) bill, would reduce total payments by 15.9 percent, or \$151 billion among hospitals across the country.

The overall budget can control overall hospital costs by limiting the total amount spent on services, rather than just the price at which care is provided. One of the most successful examples of state rate reform took place in Maryland, which has used rate setting for all payers to regulate cost growth since the 1970s, and, more recently, adopted global budgets for hospitals.

# **Transparency in Hospital Prices**

A popular response to the opacity and variation in hospital prices has been to request more public information on the rates of procedures. Pricing transparency can be more helpful to insurers and employers who want to steer patients toward lower-cost care. Patients cannot compare emergency room prices after a bicycle accident or switch to a lower-priced anesthesiologist in the middle of surgery. Furthermore, the most prominent price for patients is not the insurer's negotiated charge, but the out-of-pocket cost, which is a fixed amount.

In 2018, the Center for Medicare and Medicaid Services (CMS) began enforcing the provision of the Affordable Care Act that requires each hospital to post their list prices online (Shaik et al., 2018; Wang et al., 2018). Price lists typically name services using billing code jargon rather than simple English descriptions, and the information is not standardized or centralized, making parallel comparisons difficult. Another limitation of published pricing information is that charge managers only have a relaxed relationship with the negotiated rates that insurers pay. The Trump administration is considering forcing hospitals to disclose the rates they negotiate for providers, medical devices, and drugs - information providers generally consider proprietary.

# More Application of Antitrust Actions in the Hospital Industry

While mergers between nearby hospitals have the greatest effect on prices, economic research shows that mergers between markets can also lead to higher hospital prices by weakening the bargaining power of insurers. Given the large body of evidence that market power raises hospital costs without commensurate improvements in the quality of care, antitrust authorities should set a higher bar for hospital mergers and monitor anti-competitive behavior by healthcare systems.

Rising hospital prices, in turn, continue to increase premiums and cost-sharing for patients, hitting people who have commercial insurance the most. Serious efforts to control healthcare costs



will require addressing the largest sources of health spending in the US. Hospital payment reform is necessary to lower costs and improve equity among patients and payers.

#### V. DISCUSSION: EFFECTS ON INTERNATIONAL HEALTH DISPLACEMENT

The localities with the greatest attraction of American patients in the curative and preventive segment are Costa Rica, Mexico, Panama, Thailand, Singapore, and China (McKinsey, 2014), while the most demanded services are radiotherapy, chemotherapy, pelvic floor reconstructive surgery, cardiovascular surgery with different purposes, and low complexity trauma treatments (De la Puente, 2015c). The patients ´ budgetary restrictions specialists ´ scarcity and differences in prices of medical procedures between states encourage the projected medical displacement of patients by 25% per year, especially in the Eastern states of the country, where medical procedures are 35% more expensive in the Midwest (Dalen & Albert, 2019). Expenditure per patient is estimated to be \$3,800 to \$6,000 (cash), and the total spent per year is projected at \$45-\$72 billion. Medical supply is estimated at around 25% from specialized clinics to specialists in cardiology, cosmetic surgery, dentistry, and dermatology. American patients choose to travel to Mexico, Central America, and South America. The most treated conditions include dentistry, cosmetic surgery, and weight-loss surgeries.

According to McGahan (2019), in the 2012-2014 period, the number of companies with more than 300 employees that contracted with a medical insurance company services for the care of employees outside the United States increased from 9,620 to 64,211, which exposes an opportunity for growth in the face of the consolidation of reform (de la Puente et al., 2019). The generalities in medical insurance contracts range from the guarantee of care for patients abroad, through an international office in the clinics, where matters such as visa, dialogue between the doctor in the place of origin and destination, and diagnostic tests are attended. In case of absence in the place of origin, transportation service, accommodation, special meals, and access to both generic and commercial drugs, depending on the coverage of the insured. Under this scenario, the actions to be taken by the agents involved in the sector are diverse.

Hospitals in destination locations must direct differentiated advertising and marketing through insurance brokers or intermediaries to attract patients to their location. Investment in brand image at an international level is necessary through strategic alliances with US clinics to strengthen the external brand, as well as publication in specialized journals that increases the international reputation of the clinic of interest.

# **Final Considerations**

Oligopolistic actions and deregulation of the health system have led operators to condition access to medical services, generating very little room for maneuver for patients to access medical services that they can pay for. This situation has encouraged the medical tourism sector or the



movement of patients seeking access to quality procedures with lower costs. Although this situation generates access to new financial resources in developing countries like Colombia, the moral dilemma is so evident that there are already voices that advocate greater intervention in hospitals and medical practices that dignify patients.

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