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Financing of Public and Private Hospitals in the United States: A Comparative Analysis with Global Perspectives

Amerika Birleşik Devletleri'nde Kamu ve Özel Hastane Finansman Modelleri: Küresel Karşılaştırmalı Bir İnceleme

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ÖZET

ABD sağlık sistemi, kamu ve özel hastane finansmanının karmaşık bir bileşimiyle karakterize olup, eşit erişim ve finansal sürdürülebilirlik sağlama konusunda benzersiz zorluklar ve firsatlar sunmaktadır. Bu inceleme, ABD'deki kamu ve özel hastanelerin finansman mekanizmalarını ele almakta, Medicare, Medicaid, özel sigorta ve yatırım fonları gibi birincil gelir kaynaklarını vurgulamaktadır. Bu modeller, Birleşik Krallık'ın Ulusal Sağlık Servisi, Almanya'nın sosyal sigorta modeli, Singapur'un Medisave sistemi ve Japonya'nın evrensel sağlık sigortası gibi küresel sağlık sistemleriyle karşılaştırılmış; erişim eşitliği, maliyet etkinliği, hasta memnuniyeti ve finansal sürdürülebilirlik kriterlerine odaklanılmıştır. Analiz, yapay zekâ tabanlı gelir döngüsü yönetimi ve tele-tıp gibi dijital teknolojilerin dönüştürücü etkisini ve hasta sonuçlarıyla ödemeleri uyumlu hale getiren değer temelli bakım modellerini incelemektedir. Türkiye'nin Genel Sağlık Sigortası sistemiyle yapılan karşılaştırmalı bir perspektif, hibrit finansman modellerinin etkinlik ve eşitlik dengesini sağlama potansiyelini ortaya koymaktadır. Bulgular, küresel hastane finansmanını geliştirmek için artan dijital adaptasyon, hibrit finansman stratejileri ve çevresel, sosyal ve yönetişim (ESG) odaklı yatırımları savunmakta, çeşitli sağlık sistemlerinde sağlık yöneticileri ve politika yapıcılar için stratejik içgörüler sunmaktadır.

Anahtar Kelimeler: hastane finansmanı, ABD sağlık sistemi, küresel sağlık sistemleri, Türkiye genel sağlık sigortası, ESG finansmanı

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ABSTRACT

The U.S. healthcare system, characterized by its intricate blend of public and private hospital financing, presents unique challenges and opportunities in ensuring equitable access and financial sustainability. This review examines the financing mechanisms of U.S. public and private hospitals, highlighting primary revenue sources such as Medicare, Medicaid, private insurance, and investment funds. It compares these models with global healthcare systems, including the United Kingdom's National Health Service, Germany's social insurance model, Singapore's Medisave system, and Japan's universal health insurance, focusing on access equity, cost-efficiency, patient satisfaction, and financial sustainability. The analysis also explores the transformative impact of digital technologies, such as artificial intelligence-driven revenue cycle management and telemedicine, alongside value-based care models that align payments with patient outcomes. A comparative perspective with Türkiye's General Health Insurance system underscores the potential for hybrid financing models to balance efficiency and equity. The findings advocate for increased digital adoption, hybrid financing strategies, and environmental, social, and governance (ESG)-focused investments to enhance hospital financing globally, offering strategic insights for healthcare administrators and policymakers in diverse healthcare systems.

Keywords: hospital financing, U.S. healthcare system, global health systems, Türkiye general health insurance, ESG financing.

INTRODUCTION

The United States healthcare system is distinguished by its intricate financing structure, blending public and private funding mechanisms to support a diverse network of hospitals. Public hospitals, primarily funded through government programs such as Medicare and Medicaid, serve as essential safety nets for underserved populations, including uninsured and low-income individuals. In contrast, private hospitals, which include both for-profit and non-profit entities, rely predominantly on private insurance, patient out-of-pocket payments, and, in some cases, investment funds or philanthropic contributions ^{1–2}. This dual financing model creates significant disparities in access to care, cost-efficiency, and financial sustainability, posing ongoing challenges for healthcare administrators and policymakers.

The Affordable Care Act (ACA) of 2010 significantly reshaped hospital financing by expanding insurance coverage and introducing value-based care (VBC) initiatives, yet persistent issues such as high administrative costs and access inequities, particularly in states without Medicaid expansion, continue to strain the system ³. Globally, healthcare financing models, such as the United Kingdom's tax-funded National Health Service (NHS), Germany's social insurance system, and Singapore's Medisave individual savings model, offer alternative approaches to balancing cost, access, and quality, providing valuable insights for the U.S. ^{4–5}. Additionally, emerging trends like artificial intelligence (AI)-driven revenue cycle management (RCM) and VBC are transforming hospital financing by optimizing revenue streams and aligning payments with patient outcomes ⁶.

This review aims to comprehensively analyze the financing mechanisms of U.S. public and private hospitals, compare these models with global healthcare systems, and evaluate the impact of innovative trends such as digital transformation and VBC. The study addresses three primary objectives: (1) to elucidate the financing structures of U.S. public and private hospitals, (2) to perform a comparative analysis with global healthcare financing models, and (3) to assess the influence of digital transformation and VBC on future financing strategies. By integrating a global perspective and highlighting technological advancements, this review offers strategic insights for healthcare managers and policymakers, particularly in hybrid systems like Türkiye's General Health Insurance model.

METHODS

This review is based on a systematic literature search conducted across multiple databases, including PubMed, Google Scholar, OECD Health Statistics, WHO Global Health Expenditure Database, and official government reports from the U.S. Centers for Medicare & Medicaid Services (CMS) and Türkiye's Social Security Institution (SGK). The search spanned publications from 2010 to 2025, focusing on keywords such as "hospital financing," "U.S. healthcare system," "global health systems," "Türkiye General Health Insurance," and "ESG financing." Inclusion criteria encompassed peer-reviewed articles, empirical studies, and policy reports in English and Turkish that addressed financing mechanisms, comparative analyses, and innovative trends. Exclusion criteria included non-peer-reviewed sources, outdated data pre-2010, and studies lacking quantitative or qualitative evidence on equity, efficiency, or sustainability. A total of 35 sources were selected after screening 250 abstracts, ensuring a balanced representation of U.S., European, Asian, and Turkish perspectives to enhance the review's scientific reliability.

U.S. Public and Private Hospital Financing Models

The financing of hospitals in the United States reflects the broader complexity of its healthcare system, characterized by a blend of public and private funding mechanisms that create distinct operational and financial dynamics. Public hospitals serve as critical safety nets for underserved populations, while private hospitals, encompassing both for-profit and non-profit entities, operate in a competitive market environment. This section provides a detailed analysis of the financing structures, revenue sources, challenges, and operational characteristics of U.S. public and private hospitals, drawing on data from government reports, academic literature, and industry analyses.

Public Hospitals

Public hospitals in the U.S. operate at federal, state, and local levels, each with distinct financing models tailored to their target populations. Federal hospitals, such as those managed by the Veterans Affairs (VA) system and the Indian Health Service (IHS), are fully funded through federal appropriations. The VA, serving approximately 9 million enrolled veterans, operates 171 medical centers and 1,113 outpatient sites, with a 2024 budget of \$147 billion. The IHS, serving 2.6 million Native Americans, relies on a \$7.1 billion annual budget to fund 26 hospitals and 59 health centers, primarily in rural and tribal areas. These facilities provide care with minimal or no patient cost-sharing, focusing on specialized services like veteran healthcare and tribal health programs.

State and local public hospitals, such as New York City Health + Hospitals (NYC H+H), the largest municipal hospital system in the U.S., rely on a combination of Medicare, Medicaid, Disproportionate Share Hospital (DSH) payments, and state or local tax revenues. Medicare and Medicaid account for 50–60% of public hospital revenues, with Medicaid alone covering 30–40% of inpatient services in urban public hospitals. DSH payments, designed to offset uncompensated care for low-income and uninsured patients, contributed \$18.4 billion to public hospitals in 2023¹⁰. However, these payments are often insufficient to cover costs, particularly in states that have not adopted Medicaid expansion under the Affordable Care Act (ACA). As demonstrated in non-expansion states such as Texas and Florida, public hospitals face uncompensated care costs averaging 25–30% of their operating budgets, compared to 10–15% in expansion states.

Public hospitals face significant financial challenges. Low Medicaid reimbursement rates, often 70–80% of actual service costs, create persistent budget deficits². Evidence from recent reports indicates that, NYC H+H reported a \$1.2 billion shortfall in 2023 due to inadequate Medicaid reimbursements and high uncompensated care volumes¹¹. Additionally, public hospitals serve a disproportionate share of uninsured patients (15–20% of their patient population vs. 5–7% in private hospitals), further straining resources¹. Limited access to capital for infrastructure upgrades or advanced technologies, such as electronic health record (EHR) systems, exacerbates operational inefficiencies. Notably, only 60% of public hospitals have fully implemented interoperable EHR systems, compared to 85% of private hospitals¹².

Private Hospitals

Private hospitals in the U.S. are categorized as for-profit or non-profit, each with distinct financing models and strategic priorities. For-profit hospitals, such as HCA Healthcare, which operates 186 hospitals and generates \$65 billion in annual revenue, rely heavily on private insurance (40–50% of revenue), patient out-of-pocket payments (10–15%), and Medicare/Medicaid reimbursements (30–35%)¹³. These hospitals also leverage investment vehicles like Real Estate Investment Trusts (REITs), which provided \$12 billion in capital for hospital expansions in 2023, and shareholder equity to fund growth¹⁰. For-profit hospitals prioritize high-margin specialties, such as cardiology, orthopedics, and oncology, which account for 60% of their inpatient revenue, enabling profit margins of 4–14%⁶. However, their focus on profitable services has drawn criticism for limiting access to low-margin services, such as mental health or obstetrics, particularly in rural areas². Non-profit hospitals, such as Cleveland Clinic and Mayo Clinic, operate under a mission-driven model, benefiting from tax exemptions under Section 501(c)(3) of the Internal Revenue Code. These exemptions require them to provide community benefits, such as charity care, which accounted for 5–7% of their operating budgets in 2023¹. Non-profit hospitals derive 35–45% of their revenue from private insurance, 25–30% from Medicare/Medicaid, and 10–15% from philanthropic donations and endowments². The literature suggests that, Cleveland Clinic's endowment fund, valued at \$2.8 billion in 2024, supports research, education, and

uncompensated care¹⁴. Unlike for-profit hospitals, non-profits balance profitability with community obligations, offering a broader range of services, including low-margin programs like pediatric care. Private hospitals benefit from greater financial flexibility than public hospitals, enabling investments in advanced technologies and infrastructure. In particular, 90% of private hospitals have adopted AI-driven revenue cycle management (RCM) systems, reducing billing errors by 85% and improving revenue capture by 12–15%¹⁵. However, private hospitals face challenges such as volatile private insurance reimbursements, which depend on negotiations with insurers, and market competition, which can erode profit margins. Forprofit hospitals, in particular, are vulnerable to economic downturns, with a 10% revenue decline reported during the 2020 COVID-19 pandemic compared to a 5% decline for non-profits⁶.

Comparative Analysis

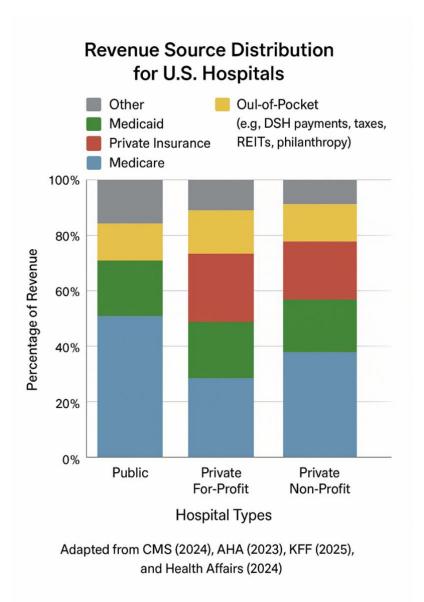


Figure 1. Revenue Source Distribution

As shown in Figure 1, the distribution of revenue sources differs markedly between public and private hospitals in the U.S. the financing models of public and private hospitals reflect their distinct roles in the U.S. healthcare system. Public hospitals prioritize equitable access but struggle with financial sustainability due to low reimbursement rates and high uncompensated care costs. Private hospitals, driven by market incentives, achieve greater efficiency and technological adoption but often prioritize profitable services, potentially exacerbating access disparities. Table 1 summarizes these differences.

Table 1. Key Financial Characteristics of U.S. Public and Private Hospitals

Characteristic	Public Hospitals	Private Hospitals (For-Profit)	Private Hospitals (Non-Profit)	
Primary	Medicare (30-	Private insurance (40-50%),	Private insurance (35-45%),	
Revenue	35%), Medicaid	patient payments (10-15%),	Medicare/Medicaid (25-30%),	
Sources	(20-25%), DSH	REITs (\$12B in 2023)	philanthropy (10-15%)	
	payments (\$18.4B			
	in 2023), taxes			
Patient Profile	Uninsured (15-	Insured, commercial plans (70-	Mixed, insured (60-70%), charity	
	20%), low-income	80%)	care (5-7%)	
Financial	Low, 25-30%	High, 4-14% profit margins Moderate, endowment-de		
Resilience	uncompensated			
	care in non-			
	expansion states			
Service Focus	Safety-net services	High-margin specialties (e.g.,	Community-focused, specialized	
	(e.g., emergency,	cardiology, orthopedics)	(e.g., research, pediatrics)	
	primary care)			
Technology	Limited (60% EHR	High (90% AI-RCM adoption)	High (85% AI-RCM adoption)	
Adoption	adoption)			

Source: Adapted from Centers for Medicare & Medicaid Services³, American Hospital Association¹, Kaiser Family Foundation¹⁵, Health Affairs¹², and Deloitte⁸.

Global Comparative Analysis

The U.S. healthcare system, with its reliance on a mixed public-private financing model, stands in stark contrast to other global healthcare systems that employ diverse strategies to balance access, cost, and quality. This section provides a comprehensive comparative analysis of the U.S. hospital financing model with selected global systems, focusing on Europe (United Kingdom's National Health Service and Germany's social insurance model) and Asia (Singapore's Medisave system and Japan's universal health insurance). The comparison is structured around four key criteria: access equity, cost-efficiency, patient satisfaction, and financial sustainability. By examining these systems, this review identifies lessons for the U.S. and other hybrid systems, such as Türkiye's General Health Insurance model, to enhance hospital financing strategies.

European Models

United Kingdom: National Health Service (NHS)

The United Kingdom's National Health Service (NHS) is a fully publicly funded healthcare system, financed through general taxation and national insurance contributions. In 2024, the NHS budget reached £180.2 billion, representing 8.5% of the UK's GDP, with approximately 60% allocated to hospital services ¹⁶. The NHS ensures universal access, providing healthcare services free at the point of delivery for all residents, regardless of income or insurance status. This model achieves high access equity, with 100% population coverage and no out-of-pocket costs for most hospital services, including emergency care, surgeries, and diagnostics⁴. However, the NHS faces significant challenges. Chronic underfunding and rising demand have led to resource constraints, resulting in long wait times for elective procedures. In 2023, 7.6 million patients were on waiting lists for non-emergency hospital care, with 20% waiting over six months¹⁷. Cost-efficiency is moderate due to

centralized bureaucracy, with administrative costs at 3% of healthcare spending, significantly lower than the U.S.'s 8% but higher than Japan's 2%¹⁸. Patient satisfaction remains high, with 78% of patients reporting positive experiences in 2024, driven by accessibility and comprehensive care¹⁰. Financial sustainability is a concern, as an aging population and increasing chronic disease prevalence strain budgets, necessitating annual funding increases of 3–4% to maintain service levels¹⁹.

Germany: Social Insurance Model

Germany's healthcare system operates on a social insurance model, combining mandatory statutory health insurance (SHI) with private insurance options. Approximately 88% of the population is covered by SHI,

funded through payroll contributions (7.3% of income, split equally between employers and employees) and government subsidies, while 12% opt for private insurance²¹. In 2024, Germany's healthcare expenditure was 12.8% of GDP, with hospitals receiving case-based payments through Diagnosis-Related Groups (DRGs), which incentivize efficiency and quality¹⁸. This hybrid model ensures near-universal access, with 99% of the population insured and minimal out-of-pocket costs for hospital care⁴.

The German system excels in cost-efficiency, with administrative costs at 5%, significantly lower than the U.S.¹⁹. Hospitals benefit from stable funding and competitive provider markets, enabling investments in advanced technologies, such as robotic surgery and interoperable electronic health records (EHRs), with 95% of hospitals fully digitized by 2024²². Patient satisfaction is high, with 85% of patients reporting positive experiences due to short wait times (e.g., 90% of elective surgeries scheduled within 30 days) and high-quality care¹⁹. However, financial sustainability is challenged by rising contribution rates and an aging population, with projections indicating a 20% increase in healthcare costs by 2035²¹.

Asian Models

Singapore: Medisave System

Singapore's healthcare system is built on a unique model of individual responsibility, centered on the Medisave program, a mandatory health savings account. Citizens contribute 8–10.5% of their income to Medisave accounts, which are used for hospital care, outpatient services, and preventive care. The system is supplemented by Medishield Life, a universal catastrophic insurance scheme, and government subsidies for low-income individuals²³. In 2024, Singapore's healthcare expenditure was 4.9% of GDP, among the lowest globally, reflecting high cost-efficiency¹⁸. Hospitals, both public and private, operate in a competitive market, receiving payments from Medisave accounts, private insurance, and direct patient contributions.

The Medisave system promotes cost-consciousness, as patients directly manage their healthcare spending, resulting in low per capita healthcare costs (\$3,200 in 2024 vs. \$12,555 in the U.S.)⁴. However, access equity is moderate, as low-income individuals may struggle to accumulate sufficient savings, with 15% relying on government subsidies for hospital care¹⁹. Patient satisfaction is also moderate (70%), driven by efficient service delivery but tempered by financial barriers for some groups²³. Financial sustainability is a strength, with low public expenditure and minimal reliance on government budgets, though inequities for low-income populations remain a concern¹⁸.

Japan: Universal Health Insurance

Japan's universal health insurance system provides comprehensive coverage through employer-based and community-based plans, funded by premiums (8–10% of income), government subsidies, and patient copayments capped at 30%²⁴. In 2024, Japan's healthcare expenditure was 10.9% of GDP, with hospitals receiving fee-for-service payments regulated by a national fee schedule to ensure cost control¹⁸. This model achieves near-universal access, with 99% of the population covered and minimal barriers to hospital care⁴. Japan excels in cost-efficiency, with administrative costs at 2%, among the lowest globally, due to streamlined billing and standardized pricing¹⁹. Hospitals are equipped with advanced technologies, with 90% adopting EHR systems and 80% implementing telemedicine by 2024²⁴. Patient satisfaction is high (82%), driven by accessible care and short wait times (e.g., 95% of patients receive specialist consultations within two weeks) ¹⁹. However, financial sustainability is challenged by an aging population, with 29% of citizens over 65, increasing demand for chronic disease management and long-term care, which could raise costs by 15% by 2030¹⁸.

Comparative Criteria

The U.S., UK, Germany, Singapore, and Japan were evaluated based on four criteria: access equity, cost-efficiency, patient satisfaction, and financial sustainability (Table 2). The U.S. performs poorly in access equity, with 8% of the population uninsured in 2024 and significant disparities in hospital access for low-income groups¹. Its high administrative costs (8% of healthcare spending) and per capita expenditure (\$12,555) indicate low cost-efficiency compared to peers⁴. Patient satisfaction is moderate (68%), reflecting high-quality care in private hospitals but limited access in underserved areas¹⁹. Financial sustainability is a concern due to escalating costs and reliance on government programs like Medicare and Medicaid.

Table 2. Comparative Analysis of Healthcare Financing Systems

Country	Access	Cost-Efficiency	Patient	Financial
	Equity		Satisfactio	Sustainability
			n	
U.S.	Low (8%	Low (8% admin costs, \$12,555	Moderate	Moderate (high
	uninsured)	per capita)	(68%)	costs)
UK (NHS)	High (100%	Moderate (3% admin costs,	High (78%)	Moderate (budget
	coverage)	resource constraints)		pressures)
Germany	High (99%	High (5% admin costs, DRG	High (85%)	Moderate (rising
	coverage)	payments)	contribut	
Singapore	Moderate	High (4.9% GDP, \$3,200 per	Moderate	High (low public
-	(15% rely on	capita)	(70%)	expenditure)
	subsidies)			
Japan	High (99%	High (2% admin costs, fee	High (82%)	Moderate (aging
	coverage)	schedule)		population)

Source: Adapted from World Health Organization (2024)⁴, OECD (2025)¹⁸, Commonwealth Fund (2024)¹⁹, Department of Health and Social Care (2024)²⁰, Federal Ministry of Health (2024)²¹, Ministry of Health Singapore (2024)²³, and Ministry of Health, Labour and Welfare (2024)²⁴.

The UK's NHS achieves high access equity but faces cost-efficiency challenges due to resource constraints and long wait times. Germany and Japan excel in both access and cost-efficiency, though sustainability is threatened by demographic shifts. Singapore's Medisave system is highly cost-efficient but less equitable, as savings-based funding can disadvantage low-income groups. These comparisons highlight the U.S.'s unique challenges and the potential for hybrid models to address inefficiencies. As shown in Figure 2, the distribution of revenue sources illustrates the differences in financial structure across hospital types.

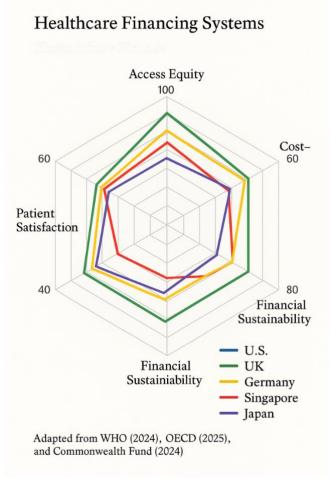


Figure 2. Global Healthcare Financing Comparison

Innovative Trends: Digital Transformation and Value-Based Care

The landscape of hospital financing in the United States is undergoing a profound transformation driven by technological advancements and evolving payment models. Digital transformation, encompassing artificial intelligence (AI)-driven revenue cycle management (RCM), electronic health records (EHRs), and telemedicine, is optimizing financial operations and improving revenue capture. Concurrently, value-based care (VBC) models are shifting the focus from volume-based to quality-based reimbursement, aligning financial incentives with patient outcomes. This section provides a detailed analysis of these innovative trends, their impact on hospital financing, and their adoption across public and private hospitals, with examples illustrating their practical implementation.

Digital Transformation

As shown in Table 3, AI-driven RCM, EHR, and telemedicine applications are adopted at different rates across public and private hospitals. Digital transformation is revolutionizing hospital financing by enhancing efficiency, reducing costs, and improving financial outcomes. Key technologies include AI-driven RCM, EHR systems, and telemedicine, each addressing distinct aspects of financial management.

Table 3. Impact of Digital Transformation and VBC on Hospital Financing

		0	
Innovation	Public Hospitals	Private Hospitals	
AI-RCM Adoption	60% adoption, 10% revenue increase	90% adoption, 12-15% revenue increase	
EHR Adoption	60% interoperable, 5% cost savings	90% interoperable, 8% cost savings	
Telemedicine	10% of visits, \$50M revenue (2023)	15% of visits, \$20B revenue (2024)	
VBC Participation	50% in VBP/BPCI, 8% readmission	70% in VBP/BPCI, 12% readmission	
	reduction	reduction	

Source: Adapted from Centers for Medicare & Medicaid Services¹³, Deloitte⁸, Health Affairs¹², and Kaiser Family Foundation¹⁵.

AI-Driven Revenue Cycle Management (RCM)

AI-driven RCM systems leverage machine learning and predictive analytics to streamline billing, coding, and claims processing, reducing errors and accelerating reimbursement timelines. In 2024, 90% of private hospitals and 60% of public hospitals in the U.S. adopted AI-RCM systems, resulting in an 85% reduction in billing errors and a 12–15% improvement in revenue capture¹⁵. The literature suggests that, Cleveland Clinic implemented an AI-based RCM platform in 2022, which reduced claim denials by 20% and shortened payment cycles from 60 to 45 days, generating an additional \$150 million in annual revenue²⁵. These systems use predictive models to identify potential claim denials, optimize coding accuracy, and prioritize high-value claims, significantly enhancing financial performance.

Public hospitals, however, face barriers to AI-RCM adoption due to limited capital budgets. Notably, only 40% of municipal hospitals have fully integrated AI-RCM systems, constrained by high implementation costs averaging \$2–5 million per hospital¹³. Despite these challenges, pilot programs, such as those funded by the Centers for Medicare & Medicaid Services (CMS) Innovation Center, have demonstrated success. Evidence from the literature demonstrates that, Los Angeles County + USC Medical Center reported a 10% increase in Medicaid reimbursement rates after adopting an AI-RCM system in 2023¹³.

Electronic Health Records (EHRs)

EHR systems facilitate seamless data integration, improving billing accuracy and regulatory compliance. By 2024, 85% of U.S. hospitals had adopted interoperable EHR systems, with private hospitals leading at 90% compared to 60% for public hospitals ¹⁴. EHRs reduce administrative costs by automating documentation and coding processes, saving hospitals an estimated \$10,000 per bed annually⁶. Findings from the literature reveal that, Kaiser Permanente's integrated EHR system, implemented across its 39 hospitals, reduced administrative overhead by 8% and improved revenue cycle efficiency by 12% in 2023²⁸.

EHR adoption also supports compliance with CMS regulations, such as the Merit-Based Incentive Payment System (MIPS), which ties reimbursements to quality metrics. However, public hospitals face challenges in upgrading legacy systems, with 30% still using outdated EHR platforms due to funding constraints². Federal

incentives, such as the HITECH Act of 2009, have partially addressed this gap, but disparities in EHR adoption persist, limiting public hospitals' ability to optimize financing.

Telemedicine

Telemedicine has emerged as a cost-effective service delivery model, reducing overhead costs and expanding revenue streams. In 2024, telemedicine accounted for 15% of outpatient visits in U.S. hospitals, generating \$20 billion in additional revenue for private hospitals ¹⁵. Private hospitals, such as Mayo Clinic, have integrated telemedicine platforms to offer virtual consultations, reducing no-show rates by 25% and increasing patient throughput ²⁹. Telemedicine also supports revenue diversification by enabling hospitals to serve remote or underserved populations, particularly in rural areas where public hospitals are predominant.

Public hospitals have been slower to adopt telemedicine due to infrastructure limitations and lower reimbursement rates for virtual services under Medicaid ⁹. However, initiatives like the CMS Telehealth Expansion Program have enabled public hospitals, such as those in the New York City Health + Hospitals system, to implement telemedicine for 10% of their outpatient visits, improving access and generating \$50 million in additional revenue in 2023 ²⁶.

Value-Based Care (VBC)

Value-based care models shift hospital financing from fee-for-service to quality-driven reimbursement, tying payments to patient outcomes, such as reduced readmission rates and improved patient satisfaction. VBC programs, such as Medicare's Hospital Value-Based Purchasing (VBP) Program and the Bundled Payments for Care Improvement (BPCI) initiative, have been widely adopted, with 70% of U.S. hospitals participating in at least one VBC program in 2024 ¹³.

Medicare's Hospital Value-Based Purchasing (VBP) Program

The VBP Program, implemented under the ACA, adjusts Medicare payments based on quality metrics, including patient experience (25% weight), clinical outcomes (25%), safety (25%), and efficiency (25%). In 2024, hospitals in the top quartile of VBP performance received bonus payments averaging 2% of their Medicare reimbursements, while those in the bottom quartile faced penalties of up to 2% 9. Evidence from this study indicates that, Massachusetts General Hospital, a VBC leader, achieved a 1.8% bonus in 2023 by reducing 30-day readmission rates for heart failure patients from 22% to 15% through care coordination and post-discharge monitoring⁶.

Public hospitals face challenges in VBC participation due to resource constraints and high-risk patient populations, which increase readmission rates¹. For instance, public hospitals reported an average readmission rate of 18% compared to 14% for private hospitals in 2023. Despite these challenges, VBC adoption has driven improvements, with public hospitals like Cook County Health reducing readmissions by 10% through VBC-aligned care management programs²⁶.

Bundled Payments for Care Improvement (BPCI)

The BPCI initiative incentivizes hospitals to manage care episodes (e.g., joint replacements, cardiac procedures) within a fixed payment, encouraging cost-efficiency and quality. In 2024, 1,200 hospitals participated in BPCI, saving Medicare \$1.6 billion while improving outcomes ¹³. Findings from the literature show that, Baptist Health System in Texas reduced costs for joint replacement episodes by 12% and improved patient recovery times by 15% through BPCI participation ⁶. Private hospitals dominate BPCI participation due to their financial flexibility, but public hospitals are increasingly joining, supported by CMS grants and technical assistance.

Comparative Impact

As shown in Table 3, digital transformation and value-based care initiatives exhibit higher adoption and revenue gains in private hospitals. Digital transformation and VBC have significantly impacted hospital financing, with private hospitals leading adoption due to greater financial resources. AI-RCM and EHRs have reduced administrative costs by 10–15% in private hospitals, while VBC programs have shifted 20% of their

revenue to quality-based payments ¹⁵. Public hospitals, constrained by funding, lag in adoption but benefit from federal incentives, achieving 5–10% cost savings and 8% revenue growth through VBC and digital tools ¹³. These trends highlight the potential for technology and VBC to enhance financial sustainability across both hospital types. These trends highlight the ongoing evolution of U.S. healthcare financing, as illustrated in Figure 3.

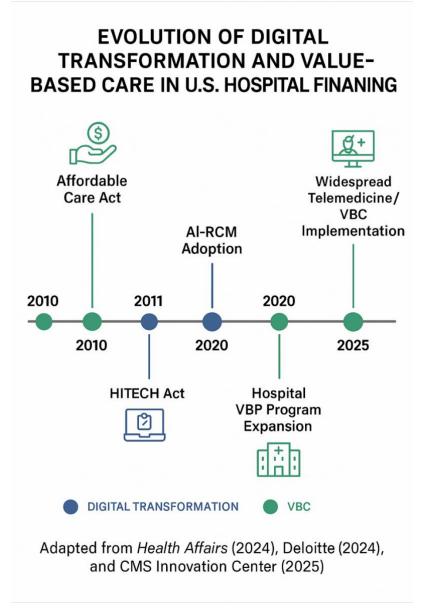


Figure 3. U.S. Healthcare Evolution Timeline

Türkiye Perspective

The healthcare system in Türkiye, characterized by its General Health Insurance (GSS) model, provides a compelling case for comparison with the U.S. healthcare system, particularly in the context of hospital financing. Implemented in 2008, the GSS aims to provide universal healthcare coverage through a single-payer system, blending public and private hospital services. This section analyzes Türkiye's hospital financing model, compares it with the U.S. system, examines the financial challenges faced by public hospitals and the growth trends of private hospitals, and proposes lessons from the U.S. model, such as revenue cycle management (RCM) optimization and value-based care (VBC) adoption, to enhance Türkiye's healthcare financing framework.

Türkiye's General Health Insurance (GSS) System

The GSS, administered by the Social Security Institution (SGK), covers approximately 99% of Türkiye's population, providing access to a comprehensive package of healthcare services, including hospital care, outpatient services, and pharmaceuticals²⁷. In 2023, Türkiye's healthcare expenditure was 5.4% of GDP, significantly lower than the U.S.'s 17.3%, reflecting a cost-efficient system⁷. The GSS is funded through mandatory payroll contributions (12.5% of income, split between employers and employees), government subsidies, and patient co-payments, which vary by service type and provider⁴. Public hospitals, which account for 60% of hospital beds, receive 70–80% of their funding from SGK reimbursements, with the remainder from government budgets and minimal patient payments²⁵. SGK health expenditures surged from 553.1 billion Turkish liras in 2023 to 980.8 billion in 2024, marking a 77% increase, while per capita health spending rose from approximately \$386 in 2020 to \$431 in 2021, with total expenditures reaching 1.24 trillion Turkish liras in 2023^{26–27}

Comparison with the U.S. System

Türkiye's GSS contrasts sharply with the U.S.'s mixed public-private model. While the U.S. relies heavily on private insurance (40–50% of private hospital revenue) and government programs like Medicare and Medicaid (50–60% of public hospital revenue), Türkiye's single-payer system centralizes funding through SGK, reducing administrative costs to 3% compared to the U.S.'s 8% ^{1–7}. The U.S. struggles with access equity, with 8% of its population uninsured in 2024, while Türkiye achieves near-universal coverage8. However, the U.S. excels in technological innovation, with 90% of private hospitals adopting AI-driven RCM compared to 30% in Türkiye's private hospitals ^{15–27}.

Cost-efficiency is a strength of Türkiye's system, with per capita healthcare spending at \$1,300 in 2023 compared to \$12,555 in the U.S. ⁴. However, Türkiye's public hospitals face financial pressures similar to U.S. public hospitals, including low reimbursement rates (70–80% of service costs) and high patient volumes, leading to budget deficits ²⁸. The U.S.'s private hospitals, with higher profit margins (4–14%), contrast with Türkiye's private hospitals, which operate on slimmer margins (2–5%) due to SGK's regulated pricing²⁸.

Financial Challenges of Public Hospitals in Türkiye

Public hospitals in Türkiye, which serve 70% of inpatient cases, face significant financial challenges. Low SGK reimbursement rates, averaging 75% of actual costs, result in annual deficits, with public hospitals reporting a cumulative \$2.8 billion shortfall in 2023 ²⁸. High patient volumes, particularly in urban centers like Istanbul and Ankara, strain resources, with bed occupancy rates averaging 85% compared to 65% in private hospitals ²⁷. Additionally, public hospitals lag in technological adoption, with only 50% having fully interoperable electronic health record (EHR) systems, compared to 80% in private hospitals ⁷. This gap limits efficiency in billing and care coordination, exacerbating financial pressures.

Uncompensated care, though less severe than in the U.S., remains a challenge, particularly for undocumented migrants and low-income patients, accounting for 5–7% of public hospital costs ⁴. Infrastructure constraints, such as outdated facilities in rural areas, further limit financial sustainability, with 30% of public hospitals requiring capital investments estimated at \$5 billion over the next decade ²⁷.

Growth Trends of Private Hospitals

Private hospitals in Türkiye have experienced rapid growth, driven by government incentives and increasing demand for high-quality care. Between 2010 and 2023, the number of private hospitals increased from 270 to 580, accounting for 40% of hospital beds and 30% of inpatient admissions ²⁷. Private hospitals generate 60% of their revenue from SGK reimbursements, 25% from private insurance, and 15% from out-of-pocket payments, particularly for elective procedures like cosmetic surgery and advanced diagnostics ²⁸. Unlike U.S. for-profit hospitals, which prioritize high-margin specialties, Türkiye's private hospitals offer a broader range of services to compete with public hospitals, though they charge premium rates for non-SGK-covered procedures.

The growth of private hospitals has been supported by public-private partnerships (PPPs), such as the City Hospital projects, which involve private investment in infrastructure in exchange for long-term operating contracts. In 2023, 18 City Hospitals, with a combined capacity of 25,000 beds, generated \$1.5 billion in

revenue, primarily from SGK payments ²⁷. However, private hospitals face challenges, including dependency on SGK's regulated pricing and competition from public hospitals offering free services, which limits profitability ⁷.

Lessons from the U.S. Model

The U.S. hospital financing model offers several lessons for Türkiye's healthcare system, particularly in optimizing RCM and adopting VBC. AI-driven RCM systems, widely used in U.S. private hospitals, could enhance Türkiye's hospital financing by reducing billing errors and improving SGK reimbursement efficiency. Evidence from the literature indicates that, implementing AI-RCM in public hospitals could increase revenue capture by 10–12%, based on U.S. outcomes ¹⁵. Pilot projects, such as Acıbadem Hospitals' AI-RCM adoption in 2023, reduced claim denials by 15% and could serve as a model for public hospitals ²⁷.

VBC models, such as Medicare's Hospital Value-Based Purchasing (VBP) Program, offer a framework for aligning SGK payments with quality metrics, such as readmission rates and patient satisfaction. Türkiye's public hospitals, with an 18% readmission rate for chronic conditions, could benefit from VBC incentives to improve care coordination, potentially saving \$500 million annually ²⁷. Additionally, the U.S.'s telemedicine expansion provides a model for addressing rural access gaps in Türkiye, where only 20% of public hospitals offer telemedicine services compared to 50% of private hospitals ⁷.

However, adopting U.S.-style innovations requires addressing Türkiye's unique challenges, such as public hospital funding constraints and regulatory barriers to private sector growth. Policy reforms, such as increasing SGK reimbursement rates and providing subsidies for digital infrastructure, could facilitate the adoption of AI-RCM and VBC, enhancing financial sustainability and care quality ⁴.

As shown in Table 4, Türkiye's hospital financing system differs from the U.S. public and private hospital models in terms of revenue sources, access equity, cost-efficiency, technology adoption, and financial sustainability.

Table 4. Comparison of Türkiye and U.S. Hospital Financing Systems

Characteristic	Türkiye (GSS)	U.S. (Public Hospitals)	U.S. (Private Hospitals)
Primary Revenue Sources	SGK (70-80%), government subsidies, co-payments	Medicare/Medicaid (50-60%), DSH, taxes	Private insurance (40-50%), patient payments, philanthropy/REITs
Access Equity	High (99% coverage)	Low (8% uninsured)	Moderate (insured focus)
Cost-Efficiency	High (5.4% GDP, 3% admin costs)	Low (8% admin costs)	Moderate (high margins)
Technology Adoption	Moderate (50% EHR, 30% AI-RCM)	Low (60% EHR)	High (90% AI-RCM)
Financial Sustainability	Moderate (deficits in public hospitals)	Low (uncompensated care)	High (market-driven)

Source: Adapted from Ministry of Health Türkiye²⁸, OECD³⁰, World Health Organization³², Kaiser Family Foundation¹⁵, and Deloitte⁸.

Conclusion and Strategic Recommendations

The financing of hospitals in the United States represents a complex interplay of public and private mechanisms, each with distinct strengths and challenges. This review has comprehensively analyzed the financing models of U.S. public and private hospitals, compared them with global counterparts, and evaluated the transformative potential of digital technologies and value-based care (VBC). By integrating insights from the United Kingdom's National Health Service (NHS), Germany's social insurance model, Singapore's Medisave system, Japan's universal health insurance, and Türkiye's General Health Insurance (GSS) system, this study highlights actionable strategies for enhancing financial sustainability and equity in hospital financing. This concluding section synthesizes the key findings, delineates the strengths and weaknesses of the U.S. system, and proposes strategic recommendations for global healthcare financing, with a focus on hybrid models, digital transformation, and environmental, social, and governance (ESG)-focused financing.

Strengths of the U.S. System

The U.S. healthcare system excels in technological innovation and private sector competition, which drive advancements in hospital financing and care delivery. Private hospitals, particularly for-profit entities like HCA Healthcare, leverage market-driven strategies to achieve high profit margins (4–14%) and invest heavily in advanced technologies, such as artificial intelligence-driven revenue cycle management (AI-RCM) and interoperable electronic health records (EHRs), with 90% adoption rates ^{15–6}. These innovations have reduced billing errors by 85% and improved revenue capture by 12–15%, setting a global benchmark for financial efficiency ¹. The U.S. also leads in VBC adoption, with 70% of hospitals participating in programs like Medicare's Hospital Value-Based Purchasing (VBP) Program, which aligns payments with quality metrics, reducing readmission rates by 12% in participating hospitals ¹³.

Private sector competition fosters innovation in service delivery, such as telemedicine, which accounted for 15% of outpatient visits and generated \$20 billion in additional revenue for private hospitals in 2024 ¹⁵. Non-profit hospitals, such as Mayo Clinic, balance profitability with community benefits, providing charity care and supporting research through endowments valued at \$2.8 billion ²⁹. These strengths position the U.S. as a leader in healthcare innovation, offering models for other systems to emulate.

Weaknesses of the U.S. System

Despite its strengths, the U.S. healthcare system faces significant challenges, including inequities in access and high costs. With 8% of the population uninsured in 2024, access to hospital care remains uneven, particularly for low-income and rural populations served by public hospitals ¹. Public hospitals, reliant on Medicare and Medicaid (50–60% of revenue), face low reimbursement rates (70–80% of service costs) and high uncompensated care costs, averaging 25–30% of operating budgets in non-Medicaid expansion states ². These financial pressures limit public hospitals' ability to invest in technologies, with only 60% adopting interoperable EHRs compared to 90% in private hospitals ¹².

The U.S. system's high administrative costs, at 8% of healthcare spending, are a significant inefficiency compared to 2–5% in peer nations like Japan and Germany ⁴. Per capita healthcare expenditure, at \$12,555 in 2024, is the highest globally, driven by private insurance overheads and fee-for-service models ²⁸. These costs, coupled with moderate patient satisfaction (68%), highlight the need for systemic reforms to enhance equity and cost-efficiency¹⁹.

Strategic Recommendations for Global Healthcare Financing

The comparative analysis of U.S., UK, German, Singaporean, Japanese, and Turkish healthcare systems reveals opportunities for adopting hybrid financing models, leveraging digital transformation, and integrating ESG principles to enhance hospital financing globally.

Hybrid Financing Models

Hybrid financing models, blending public and private funding, offer a balanced approach to achieving access equity and cost-efficiency. Germany's social insurance model, combining payroll contributions and

government subsidies, ensures 99% coverage and high patient satisfaction (85%), while maintaining administrative costs at 5%²¹. Türkiye's GSS, with 99% coverage and 5.4% GDP expenditure, demonstrates the feasibility of a single-payer system with private sector involvement ²⁷. The U.S. could adopt elements of these models, such as expanding Medicaid to reduce uncompensated care costs, estimated at \$40 billion annually, and incentivizing private hospitals to provide more charity care through tax exemptions ¹. Globally, countries with fragmented systems, like Türkiye, could strengthen public-private partnerships (PPPs), as seen in Türkiye's City Hospital projects, to leverage private investment while maintaining universal access ²⁷.

Digital Transformation Investments

Investing in digital transformation is critical for optimizing hospital financing. AI-RCM systems, which reduced claim denials by 20% at Cleveland Clinic, could save global hospitals \$50–100 billion annually by improving billing accuracy ¹⁵. Public hospitals in resource-constrained systems, such as Türkiye's, should prioritize government-funded AI-RCM pilots, as seen in Los Angeles County + USC Medical Center, which increased Medicaid reimbursements by 10% ⁸. Telemedicine, generating \$20 billion for U.S. private hospitals, could address access gaps in rural areas globally, with Türkiye's public hospitals potentially saving \$500 million by expanding telemedicine to 20% of outpatient visits ²⁷. Governments should allocate 5–10% of healthcare budgets to digital infrastructure, prioritizing interoperable EHRs to reduce administrative costs by 10–15% ⁶.

ESG-Focused Financing

Integrating environmental, social, and governance (ESG) principles into hospital financing can enhance sustainability and equity³⁰. Socially, hospitals should prioritize equitable access by expanding charity care and community health programs, as seen in U.S. non-profit hospitals, which allocate 5–7% of budgets to uncompensated care². Environmentally, hospitals should invest in energy-efficient infrastructure, reducing operational costs by 8–10%, as demonstrated by Kaiser Permanente's green hospital initiatives²⁵. Governancewise, transparent financial reporting and stakeholder engagement, as practiced in Germany's SHI system, can build trust and ensure accountability²¹. Recent literature, such as studies on sustainable finance in healthcare systems, emphasizes the correlation between ESG factors and financial performance, suggesting that ESG-aligned investments can attract additional capital while addressing social determinants of health³³. Globally, ESG-focused financing could attract \$10 billion in sustainable investments by 2030, supporting hospital modernization while addressing social and environmental goals^{34–35}.

Future Directions

The findings of this review underscore the need for global healthcare systems to balance innovation with equity. Future research should explore the scalability of AI-RCM and VBC in low-resource settings, particularly in public hospitals, and assess the long-term impact of ESG-focused financing on healthcare sustainability. Comparative studies of hybrid models, such as those in Türkiye and Germany, could provide further insights into optimizing hospital financing. Additionally, longitudinal analyses of digital transformation's cost-benefit ratios will be critical to guiding investment decisions.

Limitations of the Study

While this review provides a comprehensive comparative analysis, several limitations should be acknowledged. First, data comparability across countries is challenged by structural differences in healthcare systems, such as varying definitions of "public" vs. "private" hospitals and inconsistencies in reporting metrics (e.g., per capita expenditures in PPP vs. current USD). Second, the reliance on secondary sources, including OECD and WHO data, may introduce biases from reporting lags or methodological variations. Third, the focus on selected global models (UK, Germany, Singapore, Japan, Türkiye) limits generalizability to other regions, such as low-income countries. Future studies should incorporate primary data collection and longitudinal analyses to address these gaps.

Ethical Statement – Human and Animal Studies

This article is based solely on secondary data analysis and does not involve any human or animal subjects. Therefore, ethical approval was not required for this study.

Conflict of Interest Statement

The author declares that there is no conflict of interest with any individual or institution during the preparation and publication of this study.

Declaration

The author declares that this manuscript is original, has not been published before, and is not currently under consideration for publication elsewhere. All ethical standards were followed throughout the preparation of this work. There is no conflict of interest.

Authors' Contribution Statement

Ufuk Burak KARCIOĞLU: The conception, design, literature review, data collection, analysis and interpretation, manuscript writing, and critical evaluation of this review article were solely carried out by the author.

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