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INDUSTRY PROFILE

Health Care Sector

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Industry Overview

Companies in this industry provide a wide range of health care and social services through hospitals, doctors' offices, nursing homes, outpatient surgery centers, and other facilities. Major companies include Ascension, HCA Healthcare, Kaiser Permanente, and Tenet Healthcare (all based in the US), as well as Fresenius (Germany), National Hospital Organization (Japan), and Ramsay Health Care (Australia).

Worldwide, health care expenditures total about $7.5 trillion annually, or about 10% of global GDP, according to the World Health Organization. Total health spending (both public and private) as a portion of GDP among industrialized nations ranges from about 4% in countries such as Turkey to about 17% in the US, according to the Organisation for Economic Co-Operation and Development.

The US health care sector includes about 890,000 establishments (single-location companies and units of multi-location companies) with combined annual revenue of about $2.7 trillion.

Competitive Landscape

Health care reform efforts in the US and other developed countries are changing how providers are reimbursed for care. More attention is being focused on rewarding or penalizing institutions based on efficiency standards and the quality of care delivered. As pay-for-performance reimbursements are implemented, health companies are consolidating to better compete and negotiate with suppliers and insurers. Slim operating margins and a minimal ability to raise prices makes eliminating wasteful processes essential. Obtaining grants and federal funds is key to profitability in the case of many nonprofit health care providers.

Hospitals, surgery centers, and other facilities may compete for physicians, seeking to attract doctors with state-of-the-art equipment and quality work environments. Hospitals and ambulatory surgery centers also compete for procedure volumes, as health care shifts toward outpatient settings. Physician practices and ambulatory clinics in cities generally have several direct competitors in the immediate geographic area, but those serving in remote regions may have little to no competition for patients. Smaller care providers can find success in offering specialized services and building a local reputation for quality care. The US health care sector is highly fragmented: the top 50 organizations generate about 15% of revenue.

Competitive Advantages:

Diverse Services Network - Health networks that provide care in a variety of settings, including hospitals, clinics, and physician practices, can benefit from the shift toward outpatient care. Hospital care is becoming more specialized, while routine procedures are increasingly performed in ambulatory facilities. Increasing bargaining power with insurers and suppliers is essential in the changing health care landscape.

Advanced Technologies - Having access to the most advanced medical care technologies and emerging fields of medical research helps boost the reputation of health care facilities. Hospitals that participate in clinical research programs can offer patients experimental treatments and cutting-edge care techniques. Having access to digital systems that help determine treatment protocols and avoid redundant processes is also beneficial.

Insurer Relationships - Companies depend on commercial insurance contracts for the majority of reimbursement revenue. In the US, government mandates aim to lower Medicare and Medicaid spending, and commercial insurers often follow the lead of Medicare and Medicaid in setting rates. Managed care organizations include hospitals in their provider networks based on quality, price, and the availability of services in the area.

Companies to Watch:

HCA Healthcare is the largest for-profit operator of hospitals in the US, with about 180 facilities in 20 states. It also runs more than 100 ambulatory, surgery, and urgent care centers across the country and has operations in the UK. The diversified company is expanding its portfolio of specialized hospital services and outpatient care facilities.

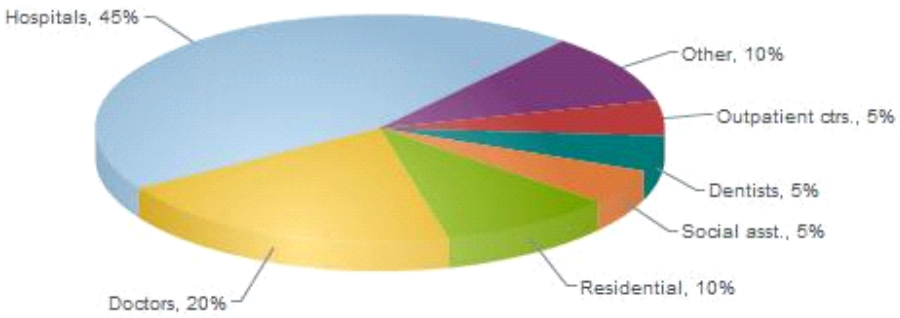
Fresenius operates nearly 4,000 dialysis clinics worldwide, as well as more than 100 hospitals in Germany and Spain. The company also provides infusion equipment and hospital management services. Fresenius operates in more than 100 countries and has expanded in recent years through acquisitions.

Tenet Healthcare operates major urban medical centers and small community hospitals in about 10 US states. Like HCA, Tenet operates ambulatory health centers and has operations in the UK. It also provides patient billing and communications services to affiliates and nonaffiliates across the US through its Conifer Health Solutions subsidiary.

Products, Operations & Technology

Major services include **hospital medical care** (45% of industry revenue) and **outpatient care** provided by **physicians** (20%). Other services include dental work, urgent care, elderly and hospice care, medical labs, home health, rehabilitation, and social assistance. Leading health care entities in the US include a number of **for-profit entities**, an exception to the global norm of nationalized medicine. However, of the 7,000 US hospitals, around 75% are not-for-profit. Most doctor's offices and ambulatory care centers are run as for-profit enterprises.

Revenue by Service - US Census Bureau



Hospitals can be operated by the government, charitable organizations, or for-profit corporations. Hospitals typically have between 50-1,000 beds and provide both **inpatient** and **outpatient** services, with larger facilities providing more complex care. Many hospitals are part of multi-facility health systems. About 75% of hospitals are general medical and surgical hospitals, while about 25% provide psychiatric and other specialized services. Physician practices are typically small, with 75% of practices having fewer than 10 employees, but a growing number of doctors are joining **group practice organizations** (GPOs) or affiliating with hospitals.

Federal and state governments are heavily involved in the US health care sector as direct-care providers (such as the Department of Veterans Affairs); operators of health insurance programs (Medicare for the elderly, Medicaid for the low-income and disabled); and as providers of various social services programs.

About 91% of Americans are covered by some form of private or government health insurance; about 9% are uninsured. Many are covered by combinations of private and government policies. More than half of Americans are covered by **employer-sponsored** health insurance, the most common type; others are covered by Medicare, Medicaid, direct-purchase, and military plans. The 2010 Affordable Care Act (ACA) has reduced the uninsured rate by extending health care coverage to more Americans through state health exchanges, subsidy programs, and expanded Medicaid programs. The combination of employer-sponsored plans, individual insurance, subsidized insurance, and the uninsured creates a complex web of payers (private insurance companies, the government, and self-payers), known in the industry as a multi-payer system.

Some providers enter managed care contracts with payers that encourage plan members to use certain facilities. Government and commercial health plans use tax dollars and premiums collected from individuals and businesses to **reimburse providers** for taking care of insured patients at pre-negotiated rates. Some companies and organizations are switching to self-funded insurance plans, where claims are paid for directly by the business, in order to reduce expenses. Beyond contributing to premiums, individuals also pay additional **direct** or **out-of-pocket** expenses to providers for health care services.

In total, US government expenditures account for around 45% of total health care costs and private expenditures 55%, according to the World Health Organization.

Technology

Growth in the industry is heavily dependent on **scientific advances**, **medical research**, and the development of health care **information technology**. Many of these advances are led by **research hospitals** that maintain a staff of PhDs specializing in research and discovery. Molecular biology, largely federally funded, has advanced understanding of the cellular processes involved in disease, largely by identifying defective proteins and gene mutations. New **treatments**, often developed in partnership with pharmaceutical and medical device firms, counter the effects of these abnormalities. Advances in computer technology have produced new **diagnostic imaging systems** like ultrasound, MRI, CAT, and PET that can detect abnormalities in their earliest stages, as well as minimally invasive surgical systems that reduce patient recovery times. The R&D that drives these discoveries is costly.

In response to health care reform mandates aimed at improving efficiencies, health care providers are implementing health information technology (**HIT**) systems. Electronic health records (**EHRs**) are used to share information and coordinate patient care among doctors at multiple facilities. By the end of 2017, 80% of US office-based physicians had adopted certified EHRs (systems that meet federal meaningful use criteria). More than 95% of hospitals adopted certified EHR systems. Many US hospitals and doctors have received incentive payments from the Centers for Medicare and Medicaid Services (CMS) for demonstrating meaningful use of EHRs; eligible providers face Medicare reimbursement reductions for not demonstrating meaningful use. With the increased use of EHR systems, the industry is struggling to improve **interoperability** among providers. The US Office of the National Coordinator for HIT is working with technology firms to standardize system structures, data security methods, and services, including through open and accessible application programming interfaces (APIs). Protecting patient data is also a major concern.

Some physician practices are adopting personal health record (**PHR**) systems, where consumers can contact health professionals and access certain parts of their EHR, as a method of reducing repetitive in-person patient encounters. Other HIT systems include medical coding, claims filing, billing, inventory, and prescription management software. Some hospitals have adopted wireless technologies to give doctors and nurses access to records at bedside. Telemedicine and remote patient monitoring systems are also growing in popularity.

Sales & Marketing

Typical customers are individuals requiring urgent medical care, routine check-ups, and long- or short-term help including nursing home care, day care, and social services.

Marketing efforts vary depending on the type of service provided. Doctors typically stick with traditional approaches like word-of-mouth, referrals, and insurance approved-provider lists. A growing number of physicians use TV, online, and print advertisements and direct mailings (including email) and have **websites** and even personal blogs -- though doctors must avoid violating patient's rights and privacy laws when writing about specific cases or incidences. Hospitals market to doctors, insurers, and individuals using a variety of means, including medical presentations, brochures, magazine and newspaper ads, targeted press releases, informational websites, and TV and radio ads.

Prices vary depending on the services offered, the length of the patient stay, the patient's insurance policy, and the level of government support. For hospitals, the average length of stay is about 4.6 days; the average cost of a stay is about $11,000. Medicare (and, in many cases, supplemental state insurance policies) sets limits on reimbursable charges. In a typical scenario, a doctor visit costs around $150, but Medicare may pay less than half of that. The patient pays the rest through Medigap insurance or out of pocket. To offset these losses, doctors often limit the number of Medicare patients they accept, shorten time spent with patients, or raise prices on private payers through what's known as **cost shifting**.

Finance & Regulation

Hospital **operating margins** average between 5% and 7%. Some hospitals have high levels of uninsured patients, and about 30% of hospitals have a negative operating margin. As payer and service mixes change, and competitive and regulatory pressures rise, hospitals are looking to reduce wasteful processes. The ability to raise prices is limited. Hospitals, as well as ambulatory care providers, are consolidating to gain scale and are **outsourcing**

noncore functions such as revenue cycle and environmental services.

Accounts receivable in the sector can be high, as payments from insurers may not arrive for months after a patient has been treated. Disputes with insurers are common, as insurers often deny or reduce reimbursement requests. Health care providers can lower the amount of write-offs from uncollected bills by working with insurance programs to increase the number of patients covered. Overall, the health care sector is **labor-intensive**: average annual revenue per employee in the US is about $130,000.

Working Capital Turnover by Company Size

The working capital turnover ratio, also known as working capital to sales, is a measure of how efficiently a company uses its capital to generate sales. Companies should be compared to others in their industry.

Financial industry data provided by MicroBilt Corporation collected from 32 different data sources and represents financial performance of over 4.5 million privately held businesses and detailed industry financial benchmarks of companies in over 900 industries (SIC and NAICS). More data available at www.microbilt.com.

Regulation

Health care providers are subject to extensive state and federal **regulations.** Almost all health care providers participate in **Medicare** or **Medicaid** programs, run by the Centers for Medicare & Medicaid Services (CMS). Medicare and Medicaid participants must abide by a large number of regulations concerning their operating, accounting, and billing procedures. **Medicare** has a major influence on the payments hospitals receive, as many other payers use Medicare payment schedules as their benchmark.

Recent federal legislation has tried to address the rapid growth in national health care costs, especially the health care reform law of 2010 (the Affordable Care Act, or ACA), which substantially expanded health care coverage to previously uninsured Americans. Other important laws affecting the health care system include the Balanced Budget Act of 1997 (BBA); the Medicare Balanced Budget Refinement Act of 1999; the Medicare, Medicaid, and State Children's Health Insurance Program (S-CHIP) Benefits Improvement and Protection Act of 2000; the False Claims Act; the Criminal Health Care Fraud Statute; the False Statement Statute; the Anti-Kickback Statute and Stark Law (provisions of the Social Security Act; and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). The Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), part of the American Recovery and Reinvestment Act (ARRA), established financial incentives for Medicare providers to achieve meaningful use of electronic health records. The HITECH Act also strengthened HIPAA patient information privacy regulations.

State health and finance regulations can vary widely. Some states mandate a specific level of staffing per patient, or require a "certificate of need" before a hospital can invest in capital improvements. Most states manage a network of state health regulators to inspect health care facilities (such as hospitals, surgery centers, and clinics) to ensure safe working conditions and a low risk of infectious diseases. Physicians must pass exams and be licensed by a state medical board to practice in a particular state. State boards respond to complaints about doctors but typically don't monitor activities or inspect offices.

International Insights

Worldwide, health care expenditures total about $7.5 trillion annually, or about **10% of global GDP**, according to the World Health Organization (WHO). Total **health spending** (both public and private) as a portion of GDP among industrialized nations averages about 9% and ranges from about 4% in countries such as Turkey to about 17% in the US, according to the Organisation for Economic Co-Operation and Development (OECD). Leading global health care firms include Fresenius (Germany), HCA (US), National Hospital Organization (Japan), and Ramsay Health Care (Australia).

Developed countries around the globe face pressure to reconfigure their health care systems in order to **rein in costs** and deliver care more efficiently. Major expenses include **inpatient hospital stays,** outpatient care, pharmaceuticals, and long-term care. Health spending in industrialized countries has shown consistent growth in recent decades, other than a slowdown following the late-2000s economic crisis. Doctor per capita ratios are highest in Greece, Austria, Portugal, and Norway, while nurse per capita ratios are high in Switzerland, Germany, and Nordic nations.

In countries around the globe, **aging populations** are putting a strain on health care delivery. As citizens get older, they are more prone to expensive chronic illnesses such as diabetes and heart disease. Not only high-income nations such as France and Japan but also emerging economies with improving health systems such as Brazil, China, and India are experiencing **demographic shifts** as life expectancies increase. By 2050, 80% of older people will live in low- and middle-income countries, according to the WHO.

Developing countries are vulnerable to public health woes such as high infant and maternal mortality, undernourishment of children, and high rates of HIV/AIDS. Low-income countries account for more than 80% of the world's population but only 20% of global health spending, according to the WHO. Poor public health has an impact on a country’s wealth; for example, AIDS strikes adults who would normally be in the workforce. For these countries, the goal of reducing or alleviating these and other public health issues is complicated by lack of money and resources such as doctors, clinics, and medicines.

Health spending is increasing more rapidly (6% or more annually) in low- and middle-income countries than in high-income markets (about 4% annually). The proportion of spending coming from out-of-pocket payments declined from 56% in 2000 to 44% in 2016, as funding from government sources has increased.

Doctors around the world are making use of **electronic health records (EHRs)**, which can help a physician track a patient's health, check for potential harmful drug interactions, and provide medical decision support. The use of EHRs among health providers is highest in countries that have a unifying government health IT organization, such as Denmark, Finland, and Sweden, where use of EHRs is nearly universal.

Regional Highlights

In the US, health care costs and availability vary from state to state. The number of doctors per 100,000 people averages about 270 for the US, ranging from a high of 445 in Massachusetts to a low of 185 in Mississippi. States in the Northeast tend to have the highest concentration of physicians. Consumer spending on health care is highest in the Midwest and lowest in the South.

The Midwest also has the highest number of **hospital beds** per capita, between 2.1 and 4.8 per 1,000 people. The western states have the fewest, between 1.7 and 3.6 beds per 1,000. In the Northeast, the District of Columbia has 4.8beds per 1,000 population, but surrounding states have far fewer (Maryland, Connecticut, Rhode Island, and Vermont have just about 2 beds per 1,000).

California, Hawaii, New Mexico, the District of Columbia, and Oregon residents have some of the highest participation rates in HMOs. Some states -- often less populated states like Wyoming and Alaska -- have HMO participation of 3% or less.

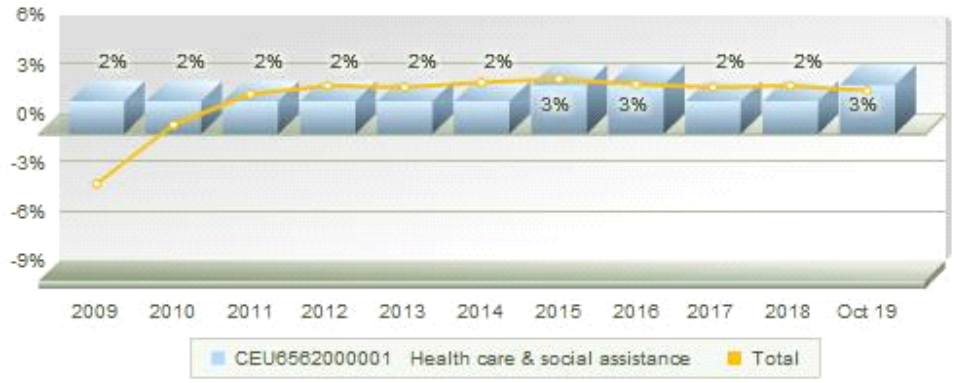
States with high **Hispanic populations**, such as California and Texas, often require doctors and staff to speak basic Spanish. Signs, disclosures, and forms are often printed in both English and Spanish.

Human Resources

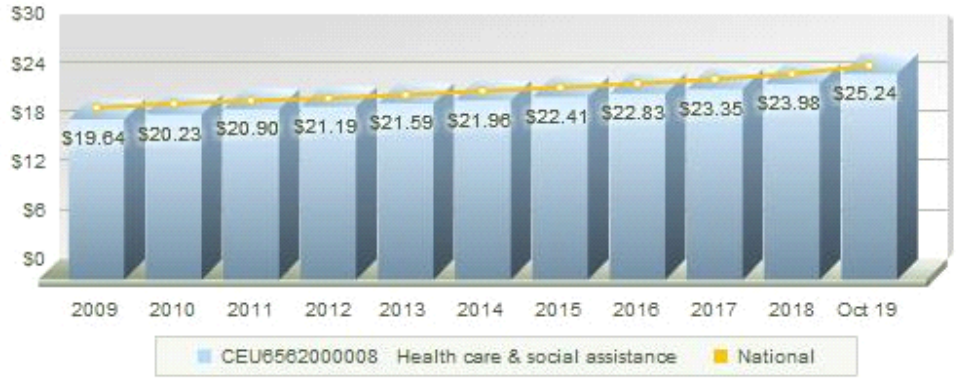
Wages in the health care sector vary widely by job function and training requirements, from nurses and aides and orderlies at one end to surgeons and other medical specialists at the other. Overall, average wages for the sector in the US are slightly higher than the national average. Employee turnover rates are moderately lower than the US average.

Injury rates in the US health care sector are about 45% higher than the national average. Common injuries include back strains and sprains from moving patients or from falls.

Industry Employment Growth
Bureau of Labor Statistics



Average Hourly Earnings & Annual Wage Increase
Bureau of Labor Statistics



Industry Growth Rating

Demand: Driven by medical advances and demographics
Need efficient use of labor and equipment
Risk: Healthcare reforms and limited coverage from insurers

Quarterly Industry Update

8.31.2020

Challenge: US Rural Hospitals more at Risk of Closure - In the US, rural hospitals that are already at risk of closure before the COVID-19 pandemic find it more challenging to remain open due to lost revenue and additional expenses brought about by the pandemic. In order to comply with restrictions that aim to prevent the transmission of coronavirus, rural hospitals had to suspend elective procedures such as hip or knee replacements and outpatient services. The revenue from telehealth, which allows patients to consult with doctors virtually, is not sufficient to offset the revenue loss due to the deferment of in-person visits. In order to accept COVID-19 patients, these hospitals have

invested in procuring personal protective equipment (PPE) for the staff. While some rural hospitals in the US have a large number of COVID-19 patients, most have only a few cases such that the return does not justify the investment on PPE. The US Department of Health and Human Services (HHS) has established a Provider Relief Fund with the $100 billion appropriation by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) and the $75 billion appropriation by the Paycheck Protection Program and Health Care Enhancement Act for healthcare providers. These federal aids are intended to offset the adverse effect of the pandemic on the hospitals' finances but these are not sufficient to offset the huge fiscal deficits of some rural hospitals before the pandemic. To remain stable, some rural hospitals have entered into partnerships with larger hospitals such as the regional providers.

Industry Impact - To recover from additional fiscal deficit due to the COVID-19 pandemic, rural hospitals in the US should avail of the relief payments from the HHS and the Accelerated Payment Program of the Centers for Medicare & Medicaid Services (CMS). Larger hospitals can help struggling rural hospitals through profitable partnerships.

5.11.2020

Challenge: Health Care Providers Struggle With COVID-19 Patient Influx and Halt in Elective Procedures - The COVID-19 pandemic is causing operational and financial difficulties for hospitals and other health care facilities, from large health networks to small physician practices. Hospitals in areas hit hard by the coronavirus are struggling to manage patient loads and secure protective gear and treatment equipment. But many hospitals across the nation are facing financial duress due to insufficient patient volumes as elective procedures - a key revenue earner - have been put on hold. While the shift away from outpatient care has been critical in helping some facilities deal with high coronavirus patient loads, other facilities saw a sharp drop in revenue and were forced to cut significant portions of staff and halt capital spending. Overall, some 135,000 hospital jobs were cut during April, and some networks fear they won't be able to bring all the positions back, according to The Wall Street Journal. Dental and physician practices took the hardest hit in health care job losses in April, accounting for about 500,000 and 250,000 job cuts respectively, as nonessential visits were halted. Despite protective gear and testing supply shortage concerns, some hospitals are beginning to bring back elective procedures gradually as state public health restrictions ease, while remaining versatile in case an uptick in area coronavirus patients occurs. Dental and medical offices are also starting to reopen with caution as restrictions are lifted.

Industry Impact - The COVID-19 outbreak could have a significant long-term financial impact on hospitals and other health care practices that rely on elective and outpatient services for a large portion of revenue. Hospitals are having to prepare for a variety of scenarios, including an increase in virus cases, and determine how to maintain optimal procedural volumes and staffing levels in an uncertain future environment.

12.23.2019

Challenge: Health Care Providers Faced with Growing Antibiotic-Resistant Infections - The number of antibiotic-resistant bacteria and fungi (known as Super Bugs) is rising, and hospitals and other health care providers are struggling to effectively prevent and treat the resulting volume of patient infections. Super Bugs cause more than 2.8 million infections and 35,000 deaths in the US annually, according to a new CDC report. While infection rates are increasing, the number of infections resulting in death has actually declined 18% since 2013, largely due to the emergence of hospital infection-control programs. The report, which states that more progress is needed in infection prevention, calls out 18 drug-resistant bacteria or fungi, plus a watch list of new pathogens identified in other areas of the world that could spread in the US. One urgent threat, the *C. difficile* bacteria, caused another 224,000 infections and 12,800 deaths; *C. difficile* is not considered antibiotic-resistant but its infections are fueled by overuse of antibiotics. Drug-resistant infections raise costs for hospitals due to extended stays and more expensive treatments, and medical providers are often unable to perform needed surgeries or cancer treatments in patients with drug-resistant bacteria due to the risk of infection. The number of infections occurring outside hospital settings is also growing, putting more pressure on outpatient care providers to establish stronger protocols. Pharmaceutical manufacturers have cut back on development of new antibiotics due to low profitability prospects, leaving providers with fewer options to treat deadly infections when they occur.

Industry Impact - As the number of Super Bugs increases, care providers will need to come up with new strategies to prevent the spread of drug-resistant germs and curb overuse of antibiotics.

9.16.2019

Opportunity: Hospital Consolidation Trend Found to Lower Costs - As hospitals face pressure to lower the cost of care, many are turning to mergers or partnerships with other health systems to help improve efficiencies and enhance competitive positions. This tactic can be a successful means of lowering operating expenses, according to a recent study from Charles River Associates sponsored by the American Hospital Association. The new version of the report shows a 2.3% average reduction in expenses at acquired hospitals. It also found a 3.5% reduction in revenues per admission, indicating that cost savings are passed on to patients and insurers. The study also

concluded that mergers can improve quality through best practice standardization and lower readmission and mortality rates. However, criticism remains that cost savings are not always passed on to payers through lowered health care prices. One past study from the National Bureau of Economic Research found that when two hospitals that are located close to each other merge, prices actually increase due to elimination of competition - a theory that the FTC has vowed to scrutinize more closely in hospital merger transactions.

Industry Impact - Hospitals have been buying competitors and complimentary care providers to get a better handle on cost containment, patient care data, and revenue streams. Hospitals face pressure to lower consumer and insurer prices as the cost of health care in the US continues to rise.

Industry Indicators

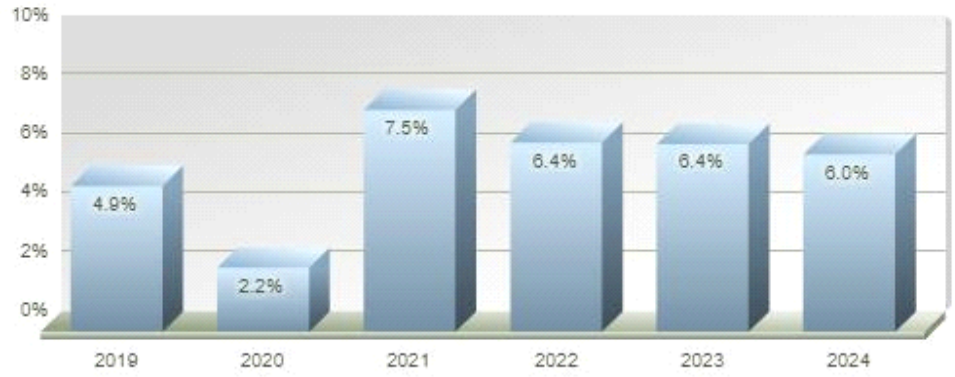
US consumer prices for medical care commodities, an indicator of healthcare costs, rose 0.8 percent in August 2020 compared to the same period in 2019.

US consumer prices for medical care services, an indicator of profitability for healthcare services, rose 5.3 percent in August 2020 compared to the same month in 2019.

Total US revenue for healthcare and social assistance fell 8.0 percent in the second quarter of 2020 compared to the same period in 2019.

Industry Forecast

Revenue (in current dollars) for US healthcare, a sector that includes physicians, dentists, hospitals, home healthcare, nursing homes, and daycare services, is forecast to grow at an annual compounded rate of 7% between 2020 and 2024. Data Published: July 2020



First Research forecasts are based on INFORUM forecasts that are licensed from the Interindustry Economic Research Fund, Inc. (IERF) in College Park, MD. INFORUM's "interindustry-macro" approach to modeling the economy captures the links between industries and the aggregate economy. Forecast FAQs

Industry Drivers

Changes in the economic environment that may positively or negatively affect industry growth.

Data provided by First Research analysts and reviewed annually

Technology Innovation Advances in science and technology, including information technology

Government Regulations Changes in federal, state, or local government regulations or business-related policies

Critical Issues

Health Care Reform - Government health reform efforts are changing how medical care is acquired and paid for in countries around the globe. In the US, the Affordable Care Act (ACA) aims to make health coverage available to all Americans and to keep health care costs low. Provisions of the law include health insurance exchanges, expansion of Medicaid, more medical training, and the establishment of health care technologies that improve efficiencies. Reimbursements are increasingly influenced by how well providers manage patient outcomes and cost efficiencies. For instance, hospitals that don't succeed in cutting readmission rates receive lower Medicare reimbursements. In Europe, some governments are working to control costs by cutting health budgets and reducing payments for providers, pharmaceuticals, and devices.

Shortage of Physicians and Nurses - Demand for health care workers is increasing, but the available labor pool is inadequate. The Association of American Medical Colleges predicts a shortage of up to 120,000 doctors by 2030, a problem compounded by health reform, the aging US population, insufficient residency opportunities, and impending retirements of older physicians. The American Association of Colleges of Nursing projects a nursing shortage as some one million RNs are expected to retire by 2030. Other analyses, however, say that shortages are regional rather than countrywide and may be met with incentives for providers to practice in rural and other underserved areas.

Business Challenges

Containing Rising Costs - Prescription drug prices, aging populations that require more care, and the increasing cost of medical technology have contributed to the rising cost of health care in recent years. Countries around the globe are working to control costs through proposals including the adoption of electronic health records, more focus on quality and efficiency, emphasis on less-expensive preventive care over more expensive services, and government regulation to keep insurance premiums and treatment payments low.

Dependence on Reimbursement Rates - Most medical bills are paid by various third-party health care insurers, and health providers are dependent on gaining competitive managed care contracts with payers. Exclusion from provider lists and reductions in reimbursement rates could have a significant effect on revenues. The consolidation of third-party payers in the past decade has produced a number of large payers that frequently follow Medicare's lead in setting rates. Large hospital organizations such as Tenet deal with thousands of managed care contracts, which can make it difficult to efficiently bill and process accounts.

Medical Errors - The incidence of medical errors resulting in hospital readmission or patient death is an issue of critical importance to the health care industry. To encourage hospitals to improve care quality, Medicare has established penalties for hospitals with high rates of preventable medical errors, such as catheter-associated urinary tract infections. Hospitals are looking at ways to reduce readmissions and patient deaths, including electronic medication tracking, procedural checklists, and safety training.

Malpractice Insurance - Malpractice insurance costs are significant for health care practitioners. Providers are subject to legal action that can involve significant defense costs and large monetary claims. Facilities typically purchase professional, general, and umbrella liability insurance coverage to protect against excessive claims. A rise in premiums or claims may lead doctors to practice defensive medicine, such as by ordering more tests. Many doctors support tort reform, which would reduce or limit jury awards for damages. Several states impose caps on awards, which state officials say help them retain and recruit physicians. However, some states have reversed caps in recent years.

Disclosure Rules - Under the US Sunshine Act, manufacturers of covered drugs, medical devices, biological products, and medical supplies have to report to Medicare any payments to physicians and teaching hospitals, such as investment interests, ownership, or other transfers of value. The law took effect in 2014, requiring manufacturers to compile the information annually. The Sunshine Act is designed to make transactions between manufacturers and physicians transparent to patients and others.

Business Trends

Increasingly Informed Patients - Consumers are more aware of their health status and appropriate diagnostic care. Many patients use the Internet to access websites such as WebMD to research diseases and symptoms, and join online communities to discuss health issues and concerns. With insurance companies limiting doctor office visits to as little as five minutes, many patients are now taking it upon themselves to increase their medical knowledge, unwilling to rely solely on the advice of hurried medical professionals.

Employment Continues to Rise - Despite a pending shortage of doctors and nurses in the coming decade, employment in the US health care sector increased more than 20% over the past 10 years. Employment in the sector is expected to increase about 18% by 2026 (from 2016), with the strongest growth expected in health care support occupations, health care practitioners, and technical occupations.

Consolidation - Changing reimbursement practices and other reform measures have spurred unprecedented consolidation in the health care industry, altering the competitive landscape. Hospitals have been buying competitors, independent physician groups, and insurance companies, all to get a better handle on cost containment, patient care data, and revenue streams. Physicians are joining group practice organizations or affiliating with hospitals to gain efficiencies and reduce risk. Participation is growing in accountable care organizations (ACOs), which are networks of hospitals, physicians, and other providers that coordinate patient care.

Outsourcing Services - To lower operating costs, hospitals and clinics are increasingly outsourcing services to third-party providers. Food service, housekeeping, laundry, IT, pharmacy, inpatient care management, and ER services can be outsourced to independent contractors, boosting margins and increasing efficiencies.

Industry Opportunities

Health Information Technology - Health information technology (HIT) integrates electronic health records, decision support systems, and computerized physician order entry for medications. Hospitals and physicians that invest in HIT may be able to improve scheduling, lower nurse administrative time, improve drug use, and lower the risk of adverse drug reactions. The US government has put financial incentives in place to encourage the adoption of HIT as a way to ultimately improve medical care and lower costs. However, hospitals have found that development of HIT is complex and expensive and may outweigh eventual cost savings. Interoperability among providers is a barrier to success, as companies may use software programs that don't speak to each other.

Aging US Population - The aging US population both strains and presents opportunities for the American health care system over the next decade. Health care spending per person for those over 65 is about three times as much as for the rest of the population. The US population 65 and older is expected to increase by about 49% between 2016 and 2030, compared to a 10% increase in the population as a whole.

Personalized Medicine - Personalized medicine uses a person's genetic profile to identify potential risk for diseases such as cancer, diabetes, heart disease, and kidney failure. Since the 2003 sequencing of the human genome, scientists and physicians have begun to identify treatments and strategies for complex conditions that can be tailored to individuals.

Preventive Medicine - Medical advances show that many disorders can be prevented or delayed through early intervention, such as lowering cholesterol. Insurers and employers that provide health care benefits have a vested interest in promoting less-expensive preventive care to avoid expensive surgical procedures. This may benefit physicians who actively manage their patients' overall health. Hospitals are hiring professionals tasked with overseeing a patient's stay and providing preventive care counseling to reduce readmissions, length of stay, and errors.

Telemedicine - Doctors are accustomed to using videoconferencing and online technology to consult with other doctors; now they are using the same technology to treat patients. Telemedicine allows doctors to consult with and treat patients who live in rural areas. It also lets patients see specialists who may be unavailable in a local market. Insurance companies are rolling out telemedicine consultations to their networks as a way to increase access to care and control costs.

Handheld Technology - Handheld devices such as portable ultrasound machines will let doctors and emergency responders gather medical data in the field and transmit it to a hospital or emergency room. Other devices such as smartphones and health applications are making inroads into the health care field as well. However, the FDA has determined that certain smartphone health apps (those that could put patients at risk if they don't work properly or that impact the functionality of traditional devices) are to be classified as medical devices requiring approval.

Growth of Noninsurance Practices - Some doctors are seeing fewer patients, but charging them more, with the bulk of the cost paid for by the patient rather than a third-party payer. So-called concierge practices may serve only 300 patients rather than the typical 1,000, but charge each an annual fee of $1,500 to $2,000 for regular checkups and

advice. At the other end of the spectrum, doctors are offering similar services to patients who can't afford health insurance and who may pay between $15 and $75 per month. Though the costs are low, doctors can recoup expenses because they avoid complex insurance billing systems.

Industry Websites

Agency for Healthcare Research and Quality
News, research, funding opportunities, quality assessments, clinical consumer health data.

America's Health Insurance Plans (AHIP)
Advocacy, research, news.

American Association of Healthcare Administrative Management (AAHAM)
Patient accounts, billing admission, registration.

American Hospital Association
Advocacy, research, news.

American Medical Association (AMA)
Advocacy, research, news.

Centers for Medicare & Medicaid Services
Research, statistics.

Consumer Healthcare Products Association
Industry news, issues, and statistics.

HealthCareCAN
Issues, news, reports, advocacy, events, education resources.

JAMA
Information and links for 95 different physician specialties.

Managed Healthcare Executive
Magazine for managed health care industry.

Modern Healthcare
Weekly business news.

National Center for Health Statistics (NCHS)
Surveys and data collection systems, health initiatives, research.

Pharmaceutical Research and Manufacturers of America
Publications, policy views, and press releases.

US Department of Health & Human Services
News, research, policies, administrative tools, search engines.

World Health Organization
International health care issues, reports, statistics, and news.

Glossary of Acronyms

ACA - Affordable Care Act of 2010

AHRQ - Agency for Healthcare Research and Quality

AMA - American Medical Association

CMS - Centers for Medicare and Medicaid Services

DHHS - Department of Health and Human Services

EHR - electronic health records

HIPAA - Health Insurance Portability and Accountability Act

HIT - health information technology

HMO - health maintenance organization

MCO - managed care organization

NIH - National Institutes of Health

PhRMA - Pharmaceutical Research and Manufacturers of America

PPN / PPO - preferred provider network / organization

S-CHIP - State Children's Health Insurance Programs

WHO - World Health Organization