Barriers to Better Health: Examining Systemic Failures in the U.S. Healthcare System

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Ryan Erny

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

Advisor

Caitlin D. Wylie, Department of Engineering and Society

Introduction

The United Nations Population Division estimates that the average person born in the United States can expect to live up to six years less than a person born in other developed nations in the world (Worldometers, 2024). In spite of this, the United States ranks as the world's number one healthcare spender per capita (OECD, 2022). Why this discrepancy? Built on the backbone of an American society that has consistently been renowned for its scientific and medical innovative prowess, the U.S. healthcare system is continually negatively affected by prohibitive pricing, confusing regulations, and incommensurate patient outcomes. This complex system and its involved parties can be robustly analyzed using the framing of multi-level perspective theory (MLP) (Rip, 1998). Through this analysis, I will demonstrate several pitfalls in the U.S. healthcare system including its subversion of patient trust, misallocation of resources, and inordinate regulatory hindrance. Contributing to these key problems are physician-patient miscommunication, lack of financial guidance, changing demographics, and confusing lengthy regulatory processes.

Socio-technical Analysis

MLP theory is defined by its tiered categorization system: the socio-technical landscape, the socio-technical regime, and the niche innovations. The broadest layer, the landscape, can be defined as the overarching societal sentiment for an institution. For example, recent advocacy for equitable healthcare access sets the context for which all other activities occur, placing pressure on the subsequent level, the regime. The regime level describes the dynamically stable mainstream practices. Within the healthcare system structure, this includes influential actors like regulatory organizations, the consumer market, and insurance and large pharmaceutical

companies. The most specific level, the niche innovations, is where ideas and new approaches to health care are invented and attempted to be implemented. It is through the lens of this theory and defined terms that I will discuss how the U.S. healthcare system has developed to its current standing.

The Barriers to Better Health

In a field where precise communication can be the difference between life and death, data suggests that misinformation is common among physician-patient interactions, and is amplified among minority groups. For example, a published peer-reviewed study of terminally ill patients found that their estimated remaining survival time was significantly shorter than what was communicated. These patients were told they would have a mean survival time of 90 days, while physicians themselves estimated only 75 days, whereas in reality survival was just 26 days (Lamont, 2001). Another study on colorectal cancer patients found that 81% "did not understand that chemotherapy was not at all likely to cure their cancer" (Weeks, 2012, p. 1713). Furthermore, this lack of adequate communication between physicians and their patients is heightened among patients with lower education or English fluency. This discrepancy is not ultimately reduced by employing the use of translators, as a peer-reviewed study found an average of 31 errors per encounter between physician-translator-patient arrangements (Hansen, 2012). The propagation of these mistakes results in non-US-born patients being less likely to receive recommended therapies, and less likely to report excellent care (Hansen, 2012). Medicine is a highly specialized field and, by nature, exposes people to a world with which they often have little to no familiarity. Combining this with the often present heightened emotional sensitivity can obfuscate the reality of the situation, making communication and genuine understanding more difficult. A study of physicians who underwent serious illnesses during the

time of their employment evaluated how this experience changed their views on physician-patient communication. Through their first-hand experiences as a patient, they discovered that improving communication is not only possible, but often only requires simple changes like speaking plainly, listening emphatically, and asking what matters most to the patient (Klitzman, 2006). Peer-reviewed studies like this that aggregate the real life experiences of physicians and patients provide evidence that simply making a more concerted effort to connect with the patient on a personal level could ameliorate this problem.

Paying the Price: When Recovery Comes with a Bill

One of the most pervasive burdens facing patients within the U.S. healthcare system is financial toxicity, defined as the general problems that a patient faces directly related to the cost of their medical care (National Cancer Institute, 2024). Previous studies have observed that 71% of patients report financial toxicity within one year of a cancer diagnosis (Winstead, 2022). This isn't merely a peripheral concern, as this can compromise a patient's ability to manage personal finances and mental health during a time when active employment may be impossible, and with implications extending to their immediate family members. Despite this, conversations about the financial implications of treatment are often left out of clinical encounters. A key contributor to this problem is a lack of clear, proactive communication between physicians and patients regarding the cost of care. Admissions from physicians themselves lend credence to this contention, among whom have stated they have "no motivation to consider the cost to the system", and even that they are "encouraged to prescribe expensive treatments", while they "lack studies that show the best practices and values for patients" (National Cancer Policy Forum, 2013, p 16-17). Access to financial counseling presents a potential solution to this problem. A study among head and neck cancer patients found that providing a financial counselor to patients

results in significantly lower financial difficulty (Farrugia, 2021). Rather than imploring physicians to take on more explanatory responsibilities, this study provides evidence that outsourcing this to dedicated in-house financial counselors alone could ease this prevalent problem.

A more systemic problem within the U.S. healthcare ecosystem is the disproportionately poor patient outcomes in comparison to large national spending. A comparative study conducted by the Organization for Economic Co-operation and Development (OECD) examined thirteen developed countries, selected based on economic size and GDP per capita, including Switzerland, Sweden, Canada, Japan, and Australia. In 2022, the United States spent an estimated $12,724 per capita on healthcare, making it the highest-spending country in the study, 29% more than the next highest country and 46% more than the average of all other countries (OECD, 2022). Additionally, healthcare expenditures have ballooned to 17% of total GDP in 2022, compared to just 5% in 1962 (OECD, 2022). Historically, the Consumer Price Index (CPI) for medical care has increased at an average annual rate of 3.1%, compared to 2.6% for overall goods and services (OECD, 2022). While some recent analyses suggest medical care inflation has fallen below general inflation, this is likely a temporary fluctuation rather than a reversal of the long-term trend (Hosseini, 2015). Many explanations attempt to blame this high spending on medical innovation costs and increasing provider wages, while others counter by attributing this to the complexity of the health insurance industry (Hosseini, 2015). Despite these costs, the United States lags behind in key health metrics such as life expectancy, infant mortality, and chronic disease management, particularly for conditions like diabetes (OECD, 2022). These data points suggest that large spending does not necessarily translate to better health outcomes.

Further investigation shows where these costs and trends are derived from, providing insight into mechanisms of improvement.

The changing demographic landscape within the U.S. significantly contributes to these high costs. The proportion of Americans aged 65 and older, a population that relies heavily on healthcare services, has risen from 14% in 2012 to 17% in 2022, with projections indicating it will reach 21% by 2032 (U.S. Bureau of Labor Statistics, 2022). This demographic shift places additional strain on Medicare and other healthcare programs, requiring increased resource allocation to support chronic disease management, long-term care, and hospital services. As demand for healthcare rises, so do costs, particularly in a system that lacks mechanisms to control medical expenses found in other countries, such as government price negotiation for medical services and pharmaceuticals.

Administrative expenses in the U.S. healthcare system vastly exceed those of peer nations. The United States spends nearly five times more per capita on administrative costs than other OECD countries (OECD, 2022). These costs arise from the complexity of the insurance system, with multiple private payers, varying reimbursement structures, and an extensive network of billing and claims processing (Gottlieb, 2018). Unlike single-payer systems or those with more standardized insurance models, the U.S. system necessitates vast bureaucratic oversight, increasing inefficiencies and diverting resources away from direct patient care. This administrative burden contributes to inflated healthcare costs without necessarily improving care quality or patient outcomes.

Another major issue facing the U.S. healthcare system is hospital consolidation. Over the past several decades, large healthcare systems have absorbed independent hospitals and private

practices, reducing competition and limiting choices for patients (Wennberg, 2022). While proponents of this concept argue that consolidation leads to improved coordination of patient care, others argue that consolidation results in higher prices, decreased accessibility, and overall reduced patient autonomy (Wennberg, 2022). Large hospital systems control significant market power which allows them to negotiate high rates with insurers, ultimately raising costs for patients. This issue is exacerbated in rural areas, as hospital consolidation creates healthcare deserts. This concept refers to the phenomenon where a single hospital system dominates a vast area, leaving consumers no choice with alternative options (Coombs, 2022). These accessibility issues are further strained by the increasing elderly population in many rural areas.

Analyzing the effectiveness of the U.S. healthcare system relative to its spending presents a contrast between investment and outcome. Despite allocating more financial resources than any other developed country, the U.S. consistently underperforms in key health metrics. Rising healthcare costs, an aging population, excessive administrative spending, and hospital consolidation collectively contribute to inefficiencies that limit patient access, increase financial burdens, and result in suboptimal health outcomes. Policymakers and healthcare leaders operating within the regime level must foster positive public sentiment at the landscape level for research not only into medical technology but also into economic and financial analysis to explore how fund reallocation can amend the disproportionality between cost and clinical outcome. These niche innovations include explorations into strategies to contain costs while improving care delivery, drawing on lessons from international healthcare systems that achieve better results with fewer resources. Addressing these systemic inefficiencies will be crucial to ensuring that the U.S. healthcare system can meet the needs of its population in the coming decades.

Medical tourism has surged as Americans increasingly travel abroad for procedures that are either too expensive or involve long wait times back home (Chaulagain, 2021). Whether by relocating permanently or engaging in the act of medical tourism, patients have found refuge from the high costs and inefficiencies of the U.S. healthcare system. People living or visiting countries with universal healthcare often describe superior accessibility, affordability, and quality of care compared to what they experienced in the United States. Examples like these provide a significant shock to most Americans, so much so that popular press news sources are prompted to write articles about it. While these reports are not presenting peer-reviewed data, the consumer appetite for stories of legitimate affordable healthcare option nevertheless is present. For instance, an article detailing such cases highlighted the experiences of two travel bloggers who documented the financial superiority of foreign healthcare environments. In Australia, a traveler was able to schedule a telehealth appointment and receive two months' worth of antibiotics for just $48, all without insurance, in contrast to the prohibitive costs faced at home (Poposki & News.com.au, 2025). Similarly, another person paid only $300 for an MRI, compared to the $1,700 price tag they previously encountered in the U.S. (Poposki & News.com.au, 2025). Countries like Mexico, Thailand, and India are common destinations for medical tourism by Americans, as they offer quality medical procedures at a fraction of U.S. prices, with patients saving between 40% and 65% on major surgeries (Chaulagain, 2021). Additionally, some foreign hospitals provide advanced treatments that are either unavailable in the U.S. or require excessive regulatory approval. These anecdotal experiences and costs highlight the fact that foreign healthcare systems can provide cost-effective and fast care, eliminating financial barriers that are commonplace in the United States. The combination of affordability, efficiency, and access to quality medical care emphasizes the ever-present differences between the U.S. healthcare system

and those of other nations. Moreover, these successes provide evidence that such a transformation is in principle possible in the U.S.

Medical technology innovation serves as a key driver for improvements in patient outcomes, but the speed and direction of innovation are heavily influenced by government funding and the overarching regulatory environment. In the United States, national investments into biomedical research have led to many breakthroughs. However inefficient funding allocation and lengthy approval processes can significantly slow scientific progress. While leading other countries in overall financial investment, misaligned funding priorities and regulatory delays detract certain areas of research from progress, which ultimately affect patient care.

The United States government as a whole is the world's largest funder of biomedical research, with total research and design spending reaching $245 billion in 2020 (Rainer, 2023). This level of investment exceeds that of any single other country or region. For example, the European Commission's health research budget is estimated at just 15% of the NIH's budget (Rainer, 2023). However, studies have found that U.S. biomedical funding is often unaligned with public health needs, indicating a greater need for priority-based research. In fact, recent analysis has found "very weak and declining correlations" between research funding and metrics like disease prevalence or disability-adjusted life years, with R^2 values of <0.1 (Ajr & M, 2024, p. 1). This data portrays that funding is often not prioritized to seek treatment for the diseases afflicting Americans the most. An earlier study noted that depression research was underfunded by an estimated $719 million when taking into account its respective health impact (Gillum et al., 2011). Ultimately, patient outcomes suffer when common, costly illnesses do not receive attention commensurate with their impact. Researchers Carter and Gevorkian (2024) concluded that such "long-standing inefficiencies in the NIH disease funding allocation process" indicate

room for a more evidence-driven approach to maximize the benefit passed onto the public. Continuing to identify and invest in research aligned with the needs of the American people could ensure that the best possible balance is struck between research time expended among a vast array of diseases.

Separate from funding, the U.S. Food and Drug Administration (FDA) plays a massive regulatory role in evaluating the safety and effectiveness of novel medicinal innovations before allowing them to market. While a crucial agency with an important mission, producers often complain about regulatory delays, claiming that they are excessively long (8-year average drug approval time), and increase development costs (Van Norman, 2018). During this period of review, patients with life-threatening conditions who have no existing treatment options are essentially waiting on the regulatory process. Economist Ariel Stern found that the complex and drawn-out nature of the FDA approval process favors large companies that can absorb the delay and inevitable cost overruns (Stern, 2017). Scientists in drug discovery and adjacent clinically translational fields interfacing with the FDA report that considerable portions of their working hours are dedicated solely to writing grant proposals. Funding bodies like the NIH reward approximately only 20% of applications, meaning that labs must constantly seek grants to survive (Daniels, 2015). This detracts from time spent doing science, as researchers spend weeks on grant paperwork, a frequent complaint in the biomedical research community. The average age at which a principal investigator receives their first major NIH grant has risen to their early 40s (Daniels, 2015). This ultimately pushes young, talented scientists to leave academia and research as a whole due to discouragement. Leading researchers have warned that flat or declining NIH budgets can create a lost generation of scientists and slow the momentum of discovery (“Erosion of Funding for the National Institutes of Health Threatens U.S. Leadership

in Biomedical Research," 2014). This process artificially selects for large pharmaceutical companies while decreasing overall competition and innovation. As a result of this, the United States is stifling, not nurturing, a competitive market for advanced, life-saving medical technology. This serves to hinder the innovative niche level, restricting the ability of new ideas to enter the mainstream, and ultimately acts to maintain the status quo.

Scientists also feel the impact of regulatory burden on research itself. Complex rules for clinical trials such as IRB approvals, while important, can frustrate scientists. A common complaint is the unpredictability of the FDA, as its guidelines can seem unclear, leading to costly follow-up trials (Stern, 2017). However, Stern found that clear, revised FDA guidelines reduced the approval time for medical devices, providing evidence that lack of clarity, not excessive stringency, may be a culprit in this inefficiency. Simply spending time to clarify the FDA criteria may present a viable solution in increasing speed while decreasing headache, all without sacrificing safety.

Physicians and patients alike have felt the effects of medical device review time in the United States. The transcatheter aortic valve replacement (TAVR) was approved in Europe nine years before it was in the United States (Stern, 2017). This frustrated American cardiologists as they believed in the effectiveness of this novel innovation, and that their patients wouldn't be able to receive the best care possible. Since then, patient advocates have put pressure on the FDA to change the nature of their regulation, representing a change in the socio-technical landscape. A push for the "Right-to-Try" legislation in 2018 was successful, allowing an FDA bypass for patients in dire need with no other options (Van Norman, 2018). Beyond this, other programs have been adopted to expedite the process in times of particular need, such as the "Fast Track", and "Breakthrough Therapy" designations (Joppi et al., 2020). Evidence shows that these new

designations have helped spur innovation, as the U.S. exceeded Europe in the number of new drugs approved in 2020 (Joppi et al., 2020). In fact, some suggest that the success seen with the changes in the FDA approval processes have influenced Japan's introduction of an early approval pathway for regenerative medicines (Tobita et al., 2016). Even more promising was the success story of U.S.-funded "Operation Warp Speed" during the COVID-19 pandemic. This unprecedented funding initiative poured billions into vaccine research and development. The result was a vaccine in under a year, a remarkable turnaround that overcame the usual inefficiencies by financial investment and streamlined authorized review. This event showed that innovation can be accelerated in times of need. The challenge is applying those lessons to other medical domains that, while less visibly urgent than a pandemic, are no less important in the long run.

Government funding and regulation remain the backbone of the medical innovation ecosystem in the United States. While the U.S. maintains strengths in overall funding, analysis has shown inefficiencies in the allocation of funding and management of innovation. An ideal system is one where funding decisions are guided by scientific merit and public health impact, and where regulatory oversight is rigorous but also clear and efficient. In recent years, positive steps have been taken showing the ability to adapt such as Operation Warp Speed. However, the current political climate holds the fate of the NIH and the overall medical research landscape in limbo. While this analysis importantly points out inefficiencies in funding allocation, it would be irresponsible to take backward steps by making large absentminded funding cuts to this program. The effects of such an action would certainly make medical research more laborious while simultaneously shrinking the next generation of innovative scientists, ultimately having disastrous results for patients with currently uncured diseases.

Conclusion

In conclusion, this analysis reveals that the U.S. healthcare system is hampered by inefficiencies that span from critical miscommunication in patient-physician interactions to systemic financial and regulatory burdens. The evidence indicates that miscommunication and misaligned patient expectations not only compromise patient care but also contribute significantly to financial toxicity. Patients face exorbitant costs and inadequate guidance regarding treatment options, leading to detrimental impacts on the overall quality of life to them and those close to them. Moreover, excessive spending on administrative processes and regulatory practices worsen these issues, ultimately diverting resources away from patient-centric care.

These challenges are compounded by an evolving demographic landscape that places increased strain on already overburdened systems, while the current funding and regulatory mechanisms fail to keep pace with the urgent needs of modern healthcare. The shocking contrast between the high levels of expenditure and the underwhelming health outcomes underscores the urgent need for reform. Streamlining communication protocols, rebalancing funding priorities to better reflect public health needs, and adopting evidence-based regulatory adjustments are essential steps toward creating a more efficient, equitable, and innovative healthcare environment.

Ultimately, the pursuit of systemic improvements in the U.S. healthcare system is not merely a matter of increasing government spending efficiency. We have a critical imperative as society to maximize the success of patient outcomes, and ensure that we remain leaders of medical innovation, translating foundational research into tangible, life-saving applications.

Future policy initiatives must be guided by a commitment to transparency, efficiency, and the reinvestment of savings into direct patient care and research, ensuring that the U.S. healthcare system evolves to meet the demands of its diverse and aging population.

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