Administrative Inefficiency and The United States Healthcare System

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ABSTRACT

Administrative inefficiency undermines the US healthcare system by inflating the cost while reducing the quality of care. The snowball effect ultimately costs time and money to both the patients and the health care professionals alike. An exhaustive literature search identified administrative complexity inherent to the multi-payer system and the lack of incentive by firms to economize due to misaligned incentives as the primary cause of administrative inefficiency in the US. Administrative complexity has also been shown to deter lower-income and marginalized populations from getting access to care leading to a poor health matrix. Similarly, misaligned incentives result in a ballooning of health care expenditure. It is only sensible to infer that a multi-faceted approach would be needed to address administrative inefficiencies. First, legislation at the federal level is necessary to improve standardization and simplification of all health administrative activities, e.g., prior authorization, quality reporting, etc. Additionally, the promotion of proper economic incentives through legislation can be used to reduce market failures that exist in healthcare while providing the financial pressure for firms to streamline administrative tasks. Second, the promotion of high-productivity innovation, which is disruptive, is necessary to reduce costs, which improves administrative efficiency. Legislation should take guidance from other successful healthcare systems which demonstrate efficiency, e.g., the Netherlands. However, this should be done with utmost attention to the current climate of the US Healthcare system. Similarly, health care innovation should be done with an eye on practicality and cost reduction.

Introduction

Out of all 11 high income countries, the US performs the worst in Health Care System Performance Rankings, representing the issues with our current health system (Schneider et al., 2021). Health Care Performance was measured by access to care, care processing, administrative efficiency, equity, and healthcare outcomes, many of which are subpar in the United States compared to other countries. Similarly, it has become clear that rising healthcare costs are a huge issue in the United States. The burdens of increasing healthcare costs fall upon the patients and families who need healthcare to survive. One contributor to the rising costs of healthcare is due to a lack of administrative efficiency, which "refers to how well health systems reduce documentation (paperwork) and other bureaucratic tasks that patients and clinicians frequently face during care" (Schneider et al., 2021). Alternatively, administrative inefficiency or waste can be defined as "any administrative spending that exceeds that necessary to achieve the overall goals of the organization or the system as a whole" (Bentley et al., 2008). Spending on administrative tasks should not extend beyond that which is necessary to complete documentation and bureaucratic tasks effectively – as this spending does not add value to the system.

Administrative activities in healthcare can be divided into four functional categories. Transaction-related activities consist of "billing, claims processing"; Benefits management activities consist of "insurance product designs, verification of benefits"; Sales/marketing costs consist of "producing, selling, or purchasing competitive products in the marketplace"; Regulatory/Compliance costs consist of compliance "with government and nongovernmental regulations and accreditation" (Bentley et al., 2008). Most administrative costs are generally reduced to billing and

insurance-related (BIR) functions, where administrative activities "move money from payer to provider in accordance with agreed-upon rules" (Bentley et al., 2008). Inefficient activities in each functional group contribute to wasteful utilization of administrative activities with the overwhelming majority of costs stemming from BIR functions.

Overall, administrative inefficiency has become a sizable problem in the US: in addition to ranking last in Health Care Performance, the US also ranks last in performance for administrative efficiency (Schneider et al., 2021). Administrative issues cost time and money to patients and healthcare professionals, and take away resources that can improve quality of care. High administrative costs can disproportionately affect poorer and marginalized populations from obtaining access to healthcare. Lower income people can have difficulty dealing with a myriad of complex administrative requirements (like insurance eligibility rules and application procedure complexity) and can feel deterred from completing the requirements necessary to get care (Schneider et al., 2021).

Evidently, it is vital to understand how we can better improve our healthcare systems and reduce unnecessary costs. The cost of healthcare should not be a barrier for people to seek healthcare services. It is vital that healthcare systems adapt and become more efficient so that the cost of healthcare does not continue to unnecessarily burden patients nor lead to complexities in the patient experience. Therefore, the research question that will be explored is- *What are the causes for administrative inefficiency and what changes should be made to remedy this issue in the US Healthcare System?* Without an answer to this question, it is likely that administrative costs will continue to burden patients, taking away vital resources from our healthcare systems and detering disadvantaged populations from getting proper care.

Through this, it will be understood that a combination of governmental interventions and allowing market forces to allocate efficiently on its own is necessary to create a more efficient administrative outcome. A multi-faceted approach is necessary, consisting of legislation to improve standardization and simplification, promotion of high-productivity innovation, and promotion of proper economic incentives to provide financial pressure for firms to improve processes that exist in healthcare. Legislation should take guidance from other successful healthcare systems and innovation must be tried and tested in healthcare settings to determine whether costs can be reduced.

Causes of Administrative Inefficiency

Administrative Complexity

A primary cause of administrative inefficiency in healthcare is the administrative complexity that currently exists. Bentley et al. contend that the increased administrative costs primarily come from the complexity of the US payment and insurance systems (2008). This inherently also stems from the multiple-payer system in the US, where "healthcare organizations interact with multiple payers, each of which has its own billing mechanisms and requirements" (Bentley et al., 2008). Chernew, who has a Ph.D. in economics and Mintz, who has an MPH, explains that this high administrative cost is due to the unique societal values of the US. In our country, people want to have different choices among payment plans, which leads to the fragmentation of payers (Chernew & Mintz, 2021). Sahni et al. also acknowledge the administrative complexity of healthcare citing "multiple transaction nodes", "private payers", and complex "compliance requirements", as items that drive administrative costs (2021). With so many entities interacting with one another, simplification is difficult. This complexity contributes to administrative inefficiencies as these costs are not inherently needed to have a successful system. This contributes to the overwhelming waste in healthcare.

Lack of Incentives to Economize

Another major cause of administrative inefficiency (and inefficiency in healthcare as a whole) is the lack of incentives for firms to economize and create efficient outcomes. Waste in healthcare occurs because there is an incentive to

produce "inefficient" and "low-value services" with no real incentive to economize compared to other economic sectors (Bentley et al., 2008). Blumenthal, the President of The Commonwealth Fund, explains that healthcare does not reach the assumptions for an efficient market (2018). Blumenthal explains that consumers lack perfect information, since prices are virtually unknowable. Rational decision-making is also difficult because consumers can be compromised due to their medical condition; it is difficult to be rational during emotional turmoil due to illness. In addition, there isn't adequate competition in healthcare due to the consolidation of insurers and health organizations, which drives up prices (Blumenthal, 2018). All of these factors cause market failures for the healthcare system, leading to inefficient outcomes for the US Healthcare system as a whole.

For administrative activities particularly, there are unique issues that the lack of incentive causes. According to Sahni et al., markets have "contrasting incentives, for example, market-driven checks and balances, such as prior authorization" (Sahni et al., 2021). Prior authorization, a utilization management strategy by insurers to make sure utilization of services adheres to guidelines, creates barriers for patients to get appropriate health care access, causes healthcare professionals to waste resources, and incentivizes insurers to create complex systems for appropriate use of treatments (Psotska et al., 2020). Additionally, the uncertainty of healthcare expenditure leads to the need for insurance by consumers. This insurance itself distorts proper market incentives, leading to over-usage and increased prices (Chernew & Mintz, 2021). This occurs because insurance hides the true cost of healthcare (Bentley et al., 2008). This leads to consumers at times not fully understanding the breakdowns of the costs of the treatment they are receiving, enabling healthcare systems to be inefficient. Because of this, the lack of economic incentives in the healthcare system leads to inefficient outcomes for the whole healthcare system and the administrative component of healthcare. Misaligned incentives can enable health firms to have no financial incentive to improve administrative efficiency.

Solutions of Administrative Inefficiency

Through the identification of major causes of administrative inefficiency, the solutions proposed intend to address the root causes of inefficiency as well as use novel methodologies to improve existing processes.

Comparisons of Health Systems

Since the US performs poorly in administrative efficiency in relationships with other high income countries, it is clear that there is much that the US can learn from other countries. Woolhandler et al. argue that adopting a Canada-style system could reduce costs (2003). Under a global-budget healthcare system, the government can negotiate with hospitals to lower costs (Woolhandler et al., 2003). Many studies have found that billions of dollars are projected to be saved in administrative costs by switching to a Canada-style system. Woolhandler et al. (2003) suggest 280.4 billion dollars in savings, Aaron (2003) suggest 213.3 billion dollars in savings, GAO (1992) suggest 127.1 billion dollars in savings, and Sheils et al. (1992) suggest 89.1 billion dollars in savings (Bentley et al., 2008). However, there are some pitfalls to the arguments of these studies. The studies conducted ignored the potential benefits of competition and choices that are present in a multi-payer system (Bentley et al., 2008). Additionally, it should also be noted that Canada only ranks number 7 on administrative efficiency in relation to the 11 high income countries according to Schneider et al.'s report, which isn't as good as we should aspire to be. With the opportunity to do better in administrative efficiency, it isn't necessary to fully adopt the same system as Canada. There is a lot, however, the US can learn from Canada and other top-performing countries. Schneider et al., through a look at all 11-high income countries, came to the conclusion that the US should simplify insurance and payment systems through legislation, particularly by following some of the model countries (2021). For example, Norway has decided to standardize copayments across regions and the Netherlands have decided to keep mandatory minimum benefits packages for all residences, community ratings to protect sicker individuals from discrimination, and cost-sharing caps to limit out of pocket payments (Schneider

et al., 2021). Other countries like Canada and Germany negotiate provider payments administratively, overall suggesting that collective negotiation and standardization are good strategies to reduce costs (Schneider et al., 2021). Therefore, there is potential for the US to implement policies that follow guidance from other countries – particularly systems where similarities with the US already persist. Highly effective policies that have worked abroad should be implemented in the US; although it must be considered if legislation remains in the realm of political feasibility. Overall, implementation of adapted policies from other countries is vital to amend the issues in the US healthcare system. This requires the need to compile an extensive analysis of other nations and identify what policies would effectively improve administrative efficiency in the United States.

A Discussion of Single-Payer Healthcare

Although adoption of similar policies is vital for the United States, an argument can be made that it is necessary to fully adopt a single-payer system, where a single entity (like the government) is responsible for reimbursements to healthcare professionals and hospitals for medical services (Diamond, 2009). Certain proponents of this system would contend that nothing else would suffice to fix our healthcare system – administratively and otherwise. This argument generally stems from the idea that the majority of administratively efficient countries have single-payer systems and that a single-payer system could control costs greatly. It is contended that the goal is to improve access to care and reduce healthcare costs through a reduction of administrative expenses (Diamond, 2009). Although this may seem like an appealing proposition, there are other dangers to switching to the single-payer system, leading to negative ripple effects in our healthcare system. Diamond, a medical professional who publishes healthcare research, explains that an over-attention to administrative costs can distract us from other issues that arise from single-payer systems (2009). The single-payer system allows the government to set prices, which leads to inadequate reimbursement by physicians and hospitals, reduction in quality of care and healthcare innovation, and an increased rationing of resources and wait times for services (Diamond, 2009). This type of intervention may seem to be successful by reducing administrative costs, but through the negative effects in quality of care, innovation, and resource allocation, it would eventually become abundantly clear that the single-payer system is not the perfect solution. Reducing administrative costs at the expense of other components of our healthcare system wouldn't be a good plan of action; it does not make logical sense to create a drastic change in our healthcare system if there are not exponentially more gains than losses from switching to a single-payer system. More importantly, previous attempts to implement single-payer type systems at small-scales have proved unsuccessful in the United States. In 1994, Tennessee attempted this with TennCare which provided health insurance to most uncovered patients while attempting to control costs and in 2006, when Massachusetts created legislation to move towards near-universal healthcare (Diamond, 2009). Unfortunately, TennCare collapsed, which was credited to improper management and impractical financial planning. Similarly, Massachusetts had inadequate expansion of the provider workforce, which led to some patients having absolutely no access to care with costs rising beyond expectations (Diamond, 2009). If single-payer government-run healthcare doesn't work at the small-scale, it would be preposterous to take the risk for the US to adopt this system at an exceedingly large scale. It is more than likely, therefore, that this could lead to an even worse healthcare system. Therefore, it is clear that allowing the government to set up such a system could be detrimental to other determinants of healthcare performance and, given the evidence we have of state-level interventions, may not even be practical for the United States.

Standardization and Simplification

It is rather far more reasonable to aim for cost-containment rather than a single-payer system. This means that it should be sought out to obtain the benefits of the single-payer system without fully integrating a single-payer system. This should be done through standardizing and simplifying administrative tasks through a variety of methods. Ginsburg et al. suggest developing administrative tools and technologies for healthcare, similar to those that are common in other

industries which can be adapted for healthcare (2020). Ginsburg et al. also advocate for standardizing prior authorization through the use of federal legislation, and standardizing quality reporting by creating agreed upon requirements between private insurers and Medicare (2020). Chernew & Mintz additionally contend that policy must acknowledge the negative ramifications of unnecessary costs and can be used to standardize requirements and rules for patient care administrative work (2021). Lastly, Ginsburg et al. advocate that increased data interoperability to improve sharing of health data would also contribute to a reduction of costs and would be a better alternative plan to lead to savings (2020). Through this method, it is possible to keep the benefits of the single-payer system without sacrificing the other benefits that already exist in the US. These methods would improve simplicity, which would help us capture savings through addressing the complexity of the US multi-payer system.

Sahni et al. expand on this idea by suggesting potential organizational level and industry level interventions to simplify administration. At the organization level, the researcher suggests the automation of repetitive work through the:

> Generation of standard invoices and financial reports; using analytical tools for human resources departments to better predict and address temporary labor shortages; integrating a suite of tools and solutions to coordinate staffing for nurse managers; and building strategic communications platforms between payers and hospitals to send unified messages. (Sahni et al., 2021)

These solutions would allow firms to simplify repetitive work and streamline processes through the use of healthcare technologies. If used correctly, technology can be a powerful tool to improve efficiency, which would produce a lower net cost. Sahni et al. (2021) contend that an implementation of current technologies have been successful in certain healthcare organizations, where tools are used to streamline financial and human resource inefficiencies. These tools not only reduce costs but are beneficial for the organizations in terms of economic profit, indicating that improving efficiency by firms improves financial success (Sahni et al., 2021). At the industry level, the researcher supports the use of broad level intervention, where collaboration between firms is necessary to bring massive change to the healthcare system. Particularly, the researcher identified sets of macro-level interventions:

> These include new technology platforms such as the use of a centralized, automated claims clearinghouse; operational alignment such as standardizing medical policies across payers, for example, requiring the same set of diagnostics and clinical data before agreeing to cover a more complicated procedure or drug therapy; and payment design such as globally capitated payment models for segments of the care delivery system. (Sahni et al., 2021)

This indicates that, at the industry level, it is possible to standardize and simplify processes through the use of automation and by creating a set of consistent guidelines for the payment of healthcare. Through these means, it is projected that organizational level interventions could result in $210 billion in savings, and at the industry level, savings could reach $105 billion (Sahni et al., 2021). This shows the potential of significant reductions in administrative costs through the implementation of organization and industry-level reforms. Therefore, in order to standardize, it is vital that firms standardize processes and use technology to streamline processes, while the government should also have a role in implementing policy to make standardization a requirement.

A Discussion of Technological Innovation in Healthcare

Since the use of technology and innovation has been suggested by researchers, an argument can be made that such innovation has not improved administrative costs so far, and therefore, interventions that use technology as a centerpiece may not be successful. Generally, this idea is propagated by studies that have been conducted on Health Information Technology (HIT), which was proposed to reduce billing and insurance-related (BIR) costs by streamlining processes (Pearson & Frakt, 2018). Pearson, who is an expert in health policy, and Frakt, who is a health economist,

suggest that this type of technology so far hasn't had any indication of success in reducing administrative costs, and have only improved clinical outcomes (2018). Arndt reports that health IT hasn't been successful because systems are not yet ready to deal with the complexity of multiple-payer contracts, where payers and providers do not exchange information efficiently (2018). This means that health IT has not been able to completely adhere with the health systems currently in place. Terry, co-director of the Hall Center of Law and Health, expands on this by explaining that health information technologies have not proved to be as disruptive and rather have only been sustaining to our current flawed healthcare system – unable to address rising costs, reduced access, and market failures (2013, p. 757). This makes sense because many current technologies produced in the United States are more sustaining than disruptive, meaning that technology in healthcare doesn't always reduce costs.

This is because new innovations may not increase productivity enough for its cost. Rather, low productivity innovations are bad for cutting costs because technology is only additive in nature by sustaining the current healthcare system (Cahan et al., 2020). Although this may give the impression that innovation in healthcare may not be able to help reduce costs, this conclusion should not be made. Instead, it is necessary that there are incentives that promote the right type of innovation. Cahan et al. contend that these incentives should encourage innovation to focus on cost-reduction, substitutive, and disruptive innovations (2020). These innovations require frugality and need to focus on improving net productivity to be effective in reducing costs (Cahan et al., 2020). By focusing on net productivity and disruption, cost-reductions can occur, since disruptive processes are transformative to healthcare delivery. Because of this, it becomes abundantly clear that HIT must have new "truly novel transformative technologies" for it to effectively work well with our current system, since it is not disruptive enough at the moment to create significant cost reductions (Terry, 2013, p. 757). Therefore, to figure out whether innovation is disruptive in healthcare, it is vital that research in healthcare settings is conducted rigorously to determine if cost reductions occur. Thus, the power of technological innovation should not be immediately disregarded – rather, it is necessary to encourage disruptive innovation. By doing this, technology can provide an important role in standardizing processes; although, it is necessary that the innovation is tried and tested in the real world and coordinates well with healthcare systems for cost reduction to occur.

Improving the Incentives to Economize

Due to the lack of incentives to economize, it is necessary to create a better market outcome and improve healthcare incentives. Bentley et al. contend that the US needs a variety of reforms that promote the need for efficient health care administrations (2008). With this, systems must be given the incentive, the knowledge, and the tools to economize (Bentley et al., 2008). Additionally, there should be corrections to the market failures that exist in healthcare to provide better incentives to firms. Blumenthal suggests the need for more price transparency, promotion of rational decision making, and an increase in competition with healthcare organizations (Blumenthal, 2018). Currently, price transparency comes in the form of publishing raw data on prices of care, which isn't a good indicator of the actual cost burden that patients experience due to subsequent hospitalization and downstream costs (Blumenthal, 2018). Therefore, price transparency and quality measurements must be completely understood by customers to guide their decision making (Blumenthal, 2018). One example of improving incentives of the consumers that has been proposed is through incentivizing the use of MSAs (Medical Savings Accounts), where patients can "spend tax-free income on health care before meeting their insurance deductible, and they are allowed to keep the money they do not spend" (Diamond, 2009). This allows consumers to be incentivized to search for better prices, making it necessary for firms to economize while promoting rational decision-making by consumers. Additionally, the government must find a way to promote competition among healthcare providers to allow markets to work properly (Blumenthal, 2018). Overall from this discussion, Blumenthal advocates that it is naive to believe that market solutions in itself will fix these incentives, rather conditions must be set up by governments as well to foster proper market activities (2018). Therefore, by creating proper legislation that targets the improvement of economic incentives, the result would produce increased efficiency throughout the whole healthcare system.

For administrative activities, firms must also be given the financial incentives to economize and make processes more efficient. Without any financial incentive through legislation to economize, it is unlikely that industry level strategies will improve efficiency. For example, the industry intervention strategies presented by Sahni et al. specifically have a hard time being implemented because individual firms at the moment do not have financial incentives to create more simple processes like automated clearinghouses, which would automatically help check medical documents for errors (2021). This lack of financial incentive gives no reason for firms to economize. Similarly, misguided incentives by markets lead to disastrous consequences for those who need healthcare the most. Currently, financial pressures in healthcare encourages the "creation of wasteful enrollment barriers for entitlement programs", where certain states create administrative complexity to limit the number of enrollees in Medicaid (Bentley et al., 2008). By shortening the application and reducing the required documentation, it is projected that 40% of administrative costs can be reduced to enroll a child in Medicaid (Bentley et al., 2008). This demonstrates how necessary it is for proper economic incentives to be sought out, as such punitive measures by individual states is disastrous for people who need Medicaid – something that should never be incentivized by firms. Therefore, legislation is necessary to standardize processes and incentivize investment in improving the efficiency of individual firms. It has been found that particular legislation can successfully improve administrative efficiency in the private insurer market; the reforms in the Netherlands referenced in the "Comparison of Health Systems" section have found to incentivize "insurers to compete on service and quality rather than on avoidance of people with higher health risks" (Schneider et al., 2021). Legislation such as this is necessary to form aligned incentives in healthcare – producing the best market outcome for all those involved. It is clear that firms need to have a financial incentive to economize, and by correcting these incentives through legislation, it is possible to improve administrative efficiency. Therefore, alongside simplification and standardization, legislation should also aim to address these misalignments in incentives that exist in healthcare. This pressure, alongside a proper understanding by firms on how to economize, will eventually help a reduction in costs at a larger scale and improve administrative efficiency.

Conclusion

It is abundantly clear that administrative activities in the US Healthcare system overburden the system. Administrative inefficiencies are mainly caused by administrative complexity and the lack of incentives to economize by firms. Administrative complexity is inherently built into our multi-payer system, where multiple payers and requirements lead to excess waste. The inherent market failures that exist in healthcare lead to the lack of incentives for healthcare organizations to economize.

The solutions of administrative inefficiency must navigate the complexity of our healthcare systems and provide solutions to correct the lack of incentives to economize. The solution of administrative inefficiency requires a focus on simplification, standardization, and an encouragement of proper economic and innovative incentives. The simple answer to reduce administrative costs is to convert the US Healthcare system to single-payer and governmentally run. The most successful countries so far in cost containment are single-payer systems, since they inherently don't have the added costs of multiple payers. Although this answer exists, this is not the optimal solution for the United States. Instead of this approach, a variety of interventions should be used. For simplification and standardization, prior authorization and quality reporting should both be standardized through the use of federal legislation. Additionally, data interoperability and streamlining processes should be bolstered by investing heavily into highly net productive innovation. With these interventions, an improvement in economic incentives should be sought out through legislative means, improving the misaligned incentives that exist in administrative activities. Legislation should take pointers from other successful healthcare systems like the Netherlands, providing a multitude of ways to incentivize simplification and standardize administrative activities. Lastly, legislation and innovative technologies should be enacted that have consistently worked in the real world, which are proven to reduce costs consistently.

Although much research has already been conducted on this topic, more research is required to understand what works best in a practical setting. Innovation, specifically, must be tested in healthcare settings to understand what

works best. Therefore, future research needs to be conducted at the firm level and industry level to understand the effectiveness of interventions. Theoretically, it can be easy to understand that simplification and incentives should be promoted; however, the fine details of what the proposal should consist of is one that requires a lot more research. Research into the successes of legislation and innovation should be rigorously conducted to come closer to the best possible solution to reduce administrative costs. With more research, we can continue to acquire information necessary to allow us to make an informed decision about what the future of our healthcare system should look like.

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