

Analysis of Inflated Drug Prices in the United States Simryn Patel

Abstract

In August of 2023, a listed price of the drug Ozempic was \$936 dollars in the United States, nearly quintupling the price of the second highest, Japan, with a price of \$169 (Peterson, 2025). The US consistently ranks the highest amongst other countries in terms of the cost for prescription drugs and healthcare in general. Essentially, the drugs in each country do not vary all that much, but what does vary greatly is the prices of these drugs. Healthcare should keep one thing above all else–keeping people healthy. Part of that is keeping drug prices affordable to all groups in the US. Medicare and Medicaid only cover 50-77% of healthcare costs for people over the age of 65 or with certain disabilities (The Commonwealth Fund, 2025). However, this is only for that select group of people and even with this help, it is less impactful for those who still have very high amounts of medical payments. This article will explore why drug prices are so high in the United States. Specifically, going into patent difficulty and lack of regulation.

What are drugs and what is the process of production?

According to the National Cancer Institute, drugs are any substance with the exception of food used to "prevent, diagnose, treat, or relieve symptoms of a disease or abnormal condition." (National Cancer Institute, n.d.) Drugs can be both preventative and remedial, depending on the situation. Drugs like Opioids and Fentanoyl can be highly addictive and very dangerous when misused (National Cancer Institute, n.d.). The process of creating drugs can be simply explained in 5 steps. The first step of drug production begins with research (National Cancer Institute, n.d.). Researchers must first study a disease to understand how the disease functions in the human body. This could potentially entail years of laboratory testing to get a good idea of how to create a drug to combat the disease. These tests could include how a compound is absorbed, how it interacts with other substances, and how it's distributed within the body. However, other ways that drugs can be discovered include exploring existing treatments and new technologies. The next step can be described by the FDA as "Preclinical Research" National Cancer Institute, n.d.). The purpose of this step is to determine whether a drug can be harmful to the human body which in turn could potentially make researchers rethink their project. Researchers utilize a set of materials in compliance with GLP regulations. The third step of this process can be described as "Clinical Research" (National Cancer Institute, n.d.). This is a pivotal step in the creation of drugs because studies and trials are conducted on people. This step is very time consuming because clinical trials require large amounts of planning and logistics. The number of people, controls, independent and dependent variables, how the drug will be administered, and more are all taken into deep consideration by researchers. This step also comes with numerous risks.



Because this is a trial, a lot of side effects are unknown to both people in the trial and the researchers so there is a lot of room for error. Additionally, clinical trials can come out to be inconclusive or easily disrupted if a small part of the experiment is compromised. Clinical trials begin with about 70 people (depending on the size of the trial) volunteering or being chosen with a certain disease to participate in the trial. This part of the trial could take anywhere from 6-12 months and the purpose being to ensure the drug is safe. About 70% of drugs will continue on to the later phases. The next phase of a trial includes a larger number of people (several 100s) taking the drug for an extended period of time up to two years. The main objective of this stage is to discover possible side effects and test the efficacy of the drug. As the phases progress, less and less drugs continue to the next phases and for this phase, only 33% of drugs will continue on. Phase three involves an even wider scale of people numbering up to 3,000 and the duration can last up to 4 years. This phase is crucial in understanding and watching for adverse reactions to the drugs which sometimes will reveal themselves in strange ways. Only about 27% drugs will move onto the next phase. The fourth stage of the clinical trial is done for the purpose of safety and efficacy one last time (National Cancer Institute, n.d.). This involves thousands of volunteers that have the respective disease and has no select time duration. During this journey, drug producers always have the choice of recruiting the FDA for help during the process but they are not obligated to if their clinical trial is well planned and ethical. The FDA has 30 days to review the submission for a clinical trial. The fifth step of this process is gaining the approval of the FDA drug review (National Cancer Institute, n.d.). In this step, drug producers will utilize all of the new data and findings from the clinical trials along with some other information to fill out an NDA or New Drug Application. The FDA will then choose to deem the NDA complete or incomplete. If the NDA is complete, the FDA will then spend anywhere from 6-10 months deciding whether on approving a drug. Then, the labeling process commences which includes understanding how the new drug will be prescribed. The fifth and final step of this process is the "FDA Post-Market Drug Safety Monitoring" where drugs will continue to be watched even after they are approved to ensure safety.

How do patents determine drug prices?

During the research stages of a drug, most drug producers will choose to obtain a patent for their product (Nega, 2023). A patent is a right to an invention given out by the government with the purpose of protecting the creators of inventions of all kinds. The National Library of Medicine states that "During patent exclusivity, prices of products are typically set higher to permit patent holders to realize greater profits that would be achievable in a competitive marketplace" (Nega, 2023). The effect of this is extremely inflated prices for consumers and manufacturers trying to compete. Traditionally, patents served to protect inventors and promote innovation among the population. However, in a capitalism dominated company and the extreme lack of regulation, the pharmaceutical industry is using patents to create monopolies. For example, more than 80% of the patents filed for drugs are now for new drugs, they are for



preexisting ones (Nega, 2023). These patents are numerous and often will violate the allotted 20 years set by congress. There is a direct relationship between the number of patents for a drug and price, emphasizing the dark side of patents that many people fail to see (Nega, 2023). The reason behind not wanting a patent to expire is that if a patent expires, now new sellers of the generic drug can join the competitive market (previously dominated by the patented and price-inflated drug) and offer a large discount to buyers. Because of the failure of the government to find a better solution for the extreme patenting and in turn price inflation, the pharmaceutical industry is one of the most dangerous and powerful. One way a company might go about sneakily filing for another patent would be through "Product Hopping" (CSRxP, 2025). This strategy is when drug producers will make very minimal changes to their drugs with the motive of filing for a new patent. Additionally, they will strategically do this just before their old patent expires to keep a tight hold on their drug prices and market share. The less conspicuous way that "Big Pharma" companies manage to keep a tight grip on their prices is through "Patent Thicketing" (CSRxP, 2025). In this process, drug producers file tens of hundred or thousands of patents in hope of keeping a barrier up that benefits them. While legislation has been passed, this industry is constantly finding ways around regulation and accounts for over 16 billion dollars (CSRxP, 2025). Oftentimes, a lot of these patents purposely leave out information, violating FDA regulation, and in turn, creating chaos. Ultimately, what "Big Pharma" is doing right now is significantly impacting the prices of all drugs today.

How do profit-focused motives from Big Pharma affect drug prices?

It is a well known fact that the US has significantly higher drug prices than other countries do. While this section will not be a direct comparison, it will help explain why the United States pharmaceutical industry is money hungry without hesitation. The straight forward answer lies in the fact that the drug companies will choose their pricing which the US does not regulate unlike other countries like England. Pharmacy Benefit Managers (PBM)'s are often relied on to choose a sufficient price but often have other motives when choosing a number (). In recent news, the Trump administration has cracked down on policies regarding pricing and are giving companies 30 days to make significant changes to their pieces before further action is taken. A possible solution to this looming issue is having consumers buy directly from manufacturers but this requires a great amount of planning, time, and money. All in all, the profit motivations from Big Pharma companies in the United States directly cause extremely high prices for drugs.

How do US drug prices compare to drug prices in other countries?

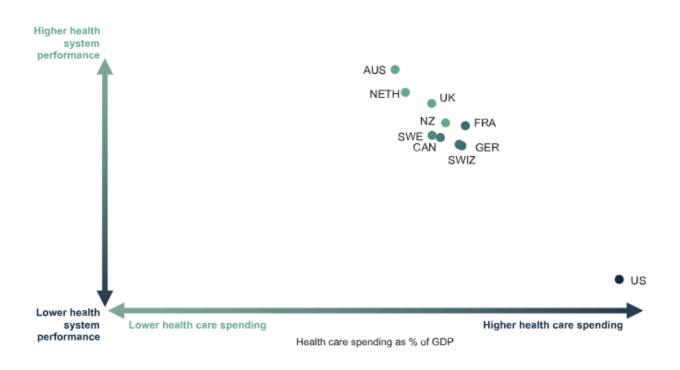


Figure 1 - the chart above displays the performance levels of the healthcare systems of 10 different countries in relation to the spending than each country does on their respective healthcare systems. In the center of the image, it's apparent that many of the countries lie within the same area while the United States is a clear negative outlier (Blumenthal et al, 2024).

This figure is a clear cut example showing just how disproportionate our spending and performance are in the US (Blumenthal et al, 2024). As stated previously, the US has very laid back regulation on the healthcare industry especially when considering spending. Countries like the Netherlands and the United Kingdom have universal coverage for healthcare meaning that all citizens of those countries have access to affordable healthcare that will not leave them with heaping sums of debt like in the US (Blumenthal et al, 2024). In these select countries, the government has control over their healthcare industry and in turn is regulating it so it can be affordable and available to their people (Blumenthal et al, 2024). On the other hand, the US clearly lacks affordability. Because of the insurance system currently in place, many Americans need a job to obtain health insurance (Blumenthal et al, 2024). While Medicaid still helps out a large population of people, just about 26 million United States citizens are still uninsured,



leaving them without equal access to healthcare due the price (Blumenthal et al, 2024). This includes their prescription drugs that many uninsured people require to survive and are frequently unable to obtain. Another piece of information is that the US has a shorter lifespan in comparison to the other 10 countries despite spending (Blumenthal et al, 2024). In summary, in comparison to the healthcare systems of other countries, the United States performs significantly below them lacking affordability and effectiveness.

Conclusion

The US earns high ranks in comparison to other countries in terms of the cost for prescription drugs and healthcare in general. Despite their excessive spending, the level of care continues to be low and the pieces of drugs are sky-rocketting still. Due to the misuse of patents and the profit motivations of "Big Pharma", the pharmaceutical industry is quickly monopolizing with no apparent signs of a successful plan of action. While the process of making a new drug is complex and very rarely successful, Big Pharma should ask itself, "Are we benefitting our nation?". As stated earlier, healthcare should keep one thing above all else–keeping people healthy.

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