



Prescription drug cost considerations for COVID-19 vaccine and treatment

A race to find a vaccine and improve treatments and how that could impact employer health care costs

September 2020

In 2020, as a result of the COVID -19 pandemic, Congress passed the Coronavirus Aid, Relief and Economic Security Act (CARES Act). The CARES Act mandates that plan sponsors cover any COVID drug within 15 days of approval without participant cost-sharing.¹ What does this mean for your pharmaceutical spending in 2020 /2021 and beyond?

While it's difficult to determine which drugs will be successful and how they'll be priced, some of the dynamics and possible outcomes are now coming into focus. As the COVID-19 global pandemic evolves, a race is on in the pharmaceutical industry to develop, test, manufacture, and distribute life-saving drugs. Several angles are being explored, including repurposing existing drugs, interventions, anti-viral drugs, and ultimately a vaccine.

General Factors in Rx Pricing (“more art than science”) - The remdesivir example

In 2019, it was estimated that the cost of bringing a new drug to market is \$2.6B before the drug maker realizes a profit. And, according to a study by Tufts Center for Drug Development, only 12 % of drugs will get approved.² As a result, drug makers may see these newly marketed COVID-19 drugs as an opportunity to recoup their costs.

On June 29, 2020, Gilead announced it was pricing a COVID-19 intervention drug, remdesivir, at \$3,120 for a typical 5-day course for private payers. Remdesivir is an investigational drug that has not yet been FDA approved and is administered in the hospitals. This eye-popping price tag sparked reaction from markets and

“Employers should plan for an increase in spend under both medical and prescription drugs.”

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consumer advocates leaving many to wonder how a firm comes up with a price of a new drug like this. It is more an art than science. But there are a few guidelines and limiting factors to consider. Let's take a look.




The cost to the manufacturer – including R&D, ingredient, manufacturing, and distribution.

For example, it is estimated that remdesivir will cost \$100 to \$200 per script for Gilead, including 2020 development costs. This is the low end of the potential price range as Gilead has to at least cover its costs.

Value of therapeutic savings.

Using the same remdesivir example, it is anticipated that the shortened stay in a complex ICU setting is worth about \$12,000 in savings. That is the high end of the potential range. It would be difficult for Gilead to argue that this treatment be more expensive than the existing treatment.

OTHER FACTORS:



Where the Rx is being sold

Wealthier nations pay more, less wealthy nations pay less



Who is buying

Insurers and plan sponsors pay more, while Medicare/Medicaid pay less



What is the market

Process of floating a price that is somewhere between cost and justifiable high end, then revise, if necessary subject to regulatory and public reaction

So, for the case of remdesivir, the range was between \$200 and \$12,000, and they settled on \$3,120, and are now enduring the market reaction. It was an exercise in maximizing the price relative to the \$12,000 therapeutic savings, and in fact, some industry observers think it could have been priced higher. As high cost as remdesivir may be, it is important to keep in mind that this is only used in severe COVID-19 cases to shorten the length of stay on a ventilator. Therefore, it will not be widely used among the employer-covered populations.



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Now that we have reviewed the basic mechanisms of Rx pricing, let's review what other drugs are in the pipeline for COVID-19 treatment.

Some drugs on the market and in development look promising.

As we write this article, there are several anti-viral drugs that have been identified as potential COVID-19 treatments. Similar to the familiar Tamiflu (oseltamivir), these drugs may be used to shorten the duration and severity of symptoms by interrupting the way the virus replicates and spreads through the body.

At the present time, the drugs include:

- Victrelis (boceprivir) – a Hepatitis C treatment – two calpain inhibitors, and
- a drug that was being developed to treat coronaviruses in cats.

Only one anti-viral – Victrelis – is currently approved for use while the others are considered investigational, and so costs are difficult to predict. Victrelis is priced at \$1,100 a week for hepatitis C treatment up to 24 weeks of treatment, so that could represent significant cost to plan sponsors depending on how many doses are needed to treat COVID-19. If other anti-virals are approved, pricing will again depend on R&D and manufacturing costs, with an eye for maximizing profits.

Additionally, the world celebrated the apparent effectiveness of dexamethasone – a low cost and common steroid that may reduce probability of death in severe cases of COVID-19 respiratory failure. Similar to remdesivir, this drug would only be used in cases where the patient is on oxygen or a ventilator. Low frequency of use and a relatively low cost of less than \$100 mean this drug will likely not be a factor in drug spending for plan sponsors.

Convalescent Plasma – approved but needs additional study

On August 23, 2020, the FDA approved an Emergency Use Authorization for convalescent plasma treatment for inpatient COVID-19 cases. This treatment involves giving patients an infusion of blood plasma collected from people who have previously contracted COVID-19. The hope is that this treatment will lessen the duration and severity of symptoms in severe cases, reducing mortality.

However, the risks and benefits of this treatment remain unclear. Many experts expressed concern over the lack of data necessary to definitively determine effectiveness and patient outcomes. It is also not clear how this treatment should be priced – it is based on voluntary donations of plasma, but costs are associated with collection and processing for use.

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In any event, employers and plan sponsors will not likely face a significant incremental cost for this treatment as, similar to remdesivir, its use is limited to severe inpatient COVID-19 cases.

The Holy Grail – COVID-19 vaccine

While some plan sponsors reeled at the high prices, recall that remdesivir is only used in the sickest cases, and so will see relatively low utilization. However, the COVID-19 vaccine will be distributed to as many people as are willing and able to receive it, and plan sponsors will be on the hook to pay for it.

What are some early and existing indicators of what the winners of the vaccine race may charge?



Most vaccines in the US cost between about \$20 to \$250.



A relevant data point is the cost of more recently developed vaccines. The HPV vaccine is one of the more recently approved and widely used vaccines, and it's priced at about \$260.

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Another variable to monitor is the number of doses that will be required for maximum immunity – if a vaccine requires a booster several months after the initial dose, this could increase the total cost to vaccinate.

It is anticipated that the upcoming elections results in the US will influence the price plan sponsors will pay. The appetite for controls and protections for payers will depend on who is leading the FDA and HHS in January 2021.

Another possible protection would be the invocation of “march-in rights” by which the federal government can seize patents of drugs that have received federal funding if the manufacturer has priced the drug too high or isn't making enough. These rights have never been exercised in their 40 years of existence, and the current administration has made changes in recent contracting with pharmaceutical companies by disallowing the suspension of an exclusive patent due to price. However, they may be a powerful tool in right-sizing vaccine costs depending on whose ends up running HHS.

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What are the vaccine front-runners saying about their pricing strategy?

While the world waits for an effective and safe vaccine, speculation is beginning to swirl around what a vaccine may ultimately cost governments and health care payors. The pharmaceutical firms who will ultimately bring a vaccine to market will again try to balance R&D investment, profitability, and social responsibility when setting the price.

Pfizer's CEO, Albert Bourla, said, "If we were to implement free, open-market principles in pricing the product, we could go to huge prices and sell everything we can manufacture. But it would be unethical, I think. We will not do it, because that's really taking advantage of a situation, and people will not forget if you do that."³ With this in mind, we can look to Pfizer's best-selling drug, Prevnar, listed at \$800 per vaccination, as a likely high end of the possible range. Meanwhile, Pfizer has contracted with the US government to provide 100 million doses of its COVID-19 vaccine for \$19.50 per unit. This is likely the low end of the possible range.

So, where does this wide range leave plan sponsors?

As the treatment trials with multiple drugs and vaccines are being investigated, it is uncertain which will be successful and ultimately be considered an effective treatment, and how they will be priced. However, what is certain for plan sponsors is participants who contract COVID-19 will drive increases in hospital and post-recovery costs under both the medical and the prescription drug benefit. Once recovered, there are reports of long-term kidney, heart and lung diseases, as well as mental health effects. The combined budget impact cannot be fully predicted until more treatments are defined.

Employers should keep a watchful eye as the course of the pandemic continues to evolve. The availability and pricing of drugs to treat and prevent COVID-19 will certainly impact employer cost and member health.

For more information

For more information on this topic or to discuss health care program strategy and design, please contact your Fidelity Managing Director or email the Fidelity Workplace Consulting group at fidelityworkplaceconsulting@fmr.com.



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- 1 ASHP, "Issue Brief: CARES Act and COVID-19 Diagnostic Testing and Immunization", March 2020, <https://www.ashp.org/Advocacy-and-Issues/Key-Issues/Other-Issues/GRD-Issue-Brief-CARES-Act?loginreturnUrl=SSOCheckOnly#:~:text=The%20law%20includes%20provisions%20to,cover%20it%20without%20cost%2Dsharing>.
- 2 Policy & Medicine: A Rockpointe Publication, "A Tough Road: Cost To Develop One New Drug Is \$2.6 Billion; Approval Rate for Drugs Entering Clinical", March 2019, <https://www.policymed.com/2014/12/a-tough-road-cost-to-develop-one-new-drug-is-26-billion-approval-rate-for-drugs-entering-clinical-de.html>
- 3 AXIOS, "Pfizer says it won't put "huge price" on coronavirus vaccine", June 2020, <https://www.axios.com/pfizer-coronavirus-vaccine-price-52a7b1bf-68f0-444b-8d87-2119ed007d7e.html>

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