THE JUNE 2021 GOODRX EFFECT

How GoodRx is Changing the Economics of Healthcare

GoodRx Research Team

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OVERVIEW

It's no secret that prescription drugs, and healthcare in general, have become increasingly unaffordable. List prices (the official prices set by drug manufacturers) for many drugs continue to <u>increase</u> faster than inflation. (While list prices are not the "usual and customary," or retail, prices a user may pay at the pharmacy, they do help indicate general pricing trends in the industry.) And when it comes to insurance, patient cost-sharing has <u>grown</u> faster than wages.

Since 2011, GoodRx has been working to help reduce these high costs for consumers. To date, we have helped consumers save approximately \$30 billion on their prescription drug costs with prices found on the GoodRx platform, based on the pharmacies' usual and customary (or retail) prices.

But GoodRx's impact goes beyond consumers' pocketbooks. By saving people money, GoodRx also positively impacts people's health, including by helping people stick to their medication regimens (medication adherence), which leads to improved health outcomes

This paper breaks down what we call "The GoodRx Effect" — the ways in which GoodRx has improved social welfare by helping people access affordable healthcare. In it, we will lay out the four main impacts GoodRx has had on healthcare and well-being.

OUR FOUR MAIN IMPACTS

In this report, we lay out the four main impacts GoodRx has had on healthcare and well-being:

01

Helping Americans, with or without insurance, save on their prescription medications

In 2020, GoodRx users saved an average of 79% off retail prices (also referred to as the usual and customary price or cash price). That same year, for the 100 most purchased medications, GoodRx users paid less than average commercial insurance copays 55% of the time, and users who paid less than the average commercial insurance copay saved an average of 52% off the average copay. To date, we have helped Americans save approximately \$30 billion on their prescription medications through the discounts found on the GoodRx platform.



Improving medication adherence

By lowering out-of-pocket medication costs, GoodRx has helped patients obtain at least 78 million prescriptions they otherwise may not have been able to afford.

03

Improving overall health outcomes

Better medication adherence thanks to GoodRx also means better health outcomes. For example, by helping patients with high cholesterol and heart disease afford their statin prescriptions, GoodRx has directly contributed to the prevention of over 1,000 avoidable hospitalizations and helped save nearly 500 lives, all from discounts on statins alone.

04

Freeing up funds for other necessities

Over 20% of Americans have trouble paying for basic necessities like food or housing due to their medication costs, based on a <u>2020 survey</u>. By reducing the burden of medication expenses, GoodRx helps people afford other essentials.

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GOODRX HELPS AMERICANS BOTH WITH AND WITHOUT INSURANCE SAVE ON THEIR PRESCRIPTION MEDICATIONS

Americans bear the brunt of rising prescription medication costs. A recent <u>survey</u> from the GoodRx Research team indicated that more than 37% of Americans struggle to pay for their medications and are often forced to forgo therapy, borrow money, or skip out on food or housing.

And insurance isn't what it used to be. A <u>poll</u> from NPR noted that more than one-third of adults, across all income levels, find that medications prescribed by their doctor are not covered by their insurance, forcing them to pay out of pocket or skip filling their medication.

Patients that lack insurance, or find that their drug is not covered by their insurance, often pay the retail price of their prescription medications, which is the price paid without insurance or discounts. In addition, individuals who are on high deductible plans, which <u>cover</u> as many as 51% of private-sector employees, may pay the retail price of the drug until they hit their prescription deductible.

Insurance coverage restrictions like <u>prior authorization</u> requirements may also result in insured patients paying retail prices for their medications. In many cases, retail prices can be unaffordable, even for typically "affordable" generic medications.

With GoodRx discounts, patients achieve significant savings compared to the retail price of their medication. In 2020, GoodRx users saved an average of 79% off retail prices. These savings can add up, especially for patients taking regular medications to treat a chronic condition. For example, many drugs treating diabetes are notoriously <u>expensive</u>, and patients often require drug therapy on an ongoing basis for the rest of their lives. In 2020, GoodRx discounts saved consumers purchasing diabetes medications an average of 37% off the retail price of these drugs.

Similarly, GoodRx discounts saved an average of 84% off the retail price of medications indicated for high cholesterol and an average of 72% off the retail price of medications indicated for hypertension. By using GoodRx, consumers also saved an average of 82% off medications to treat depression and 70% off medications to treat anxiety.



Average GoodRx Savings Off Prescription Retail Price

Note: Average GoodRx savings reflect the average savings off retail prices for prescriptions filled using a GoodRx discount for the given medical condition in 2020.

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GoodRx can also help when insurance coverage for medications comes up short. Our <u>analysis</u> of Medicare Part D formulary data from 2014 to 2020 revealed that Americans are caught in a pinch as the share of drugs covered by Medicare shrinks and more restrictions are placed on the drugs that are covered. Privately insured patients are also seeing <u>greater</u> cost-sharing through deductibles and coinsurance, ultimately leaving Americans on the hook for higher out-of-pocket costs. In 2020, over 55% of prescriptions filled using GoodRx (including our Gold and Kroger membership savings programs) were cheaper than the average commercial insurance copays for the 100 most purchased medications, based on industry data.

When GoodRx users paid less than average commercial insurance copays, they saved on average 52% off average commercial insurance copays in 2020.

(We note that actual prescription costs for individuals with insurance may be even higher than the average commercial insurance copays we used for this analysis if a prescription is not covered or if a patient has a high deductible plan and is in the prescription deductible phase of their plan, during which they pay the retail price for a prescription.)

What's more, the best GoodRx discount price available (including our Gold and Kroger membership savings programs), regardless of geographic proximity and convenience, beats the average commercial insurance copayment 89% of the time.

That is, the lowest price available nationwide on GoodRx's platform is lower than the average commercial insurance copay for the medication 89% of the time.

These savings occur for popular generic medications like <u>fluticasone propionate</u> (generic Cutivate) and <u>celecoxib</u> (generic Celebrex), where savings can reach over \$15 per fill for a 30-day supply.

For these reasons, we encourage individuals with insurance to do a quick search for prescription prices and coupons online and compare prices to those provided by insurance. (You can check prices for GoodRx, as well as the GoodRx Gold and Kroger membership savings programs, without registering.)

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Average Savings When GoodRx Is Cheaper Than Average Insurance Copay for Example Drugs

Note: Average insurance savings reflect the difference between the average commercial insurance copay in 2020 and the average (non-membership program) discount price on prescriptions filled using a GoodRx discount in 2020, when the GoodRx discount price is cheaper than the average commercial insurance copay. Additional savings with GoodRx Gold or Kroger Membership reflect the difference between the average (non-membership program) discount price on prescriptions filled using a GoodRx discount in 2020 and the average discount price on prescriptions filled using a GoodRx discount in 2020 and the average discount price on prescriptions filled through the GoodRx Gold and Kroger savings programs in 2020, when the GoodRx discount price is cheaper than the average commercial insurance copay.

All told, since our founding in 2011, Americans have saved approximately \$30 billion by using GoodRx.

GOODRX IMPROVES MEDICATION ADHERENCE

By helping people price shop and providing discounts on prescription drugs, GoodRx makes taking medication more affordable. For many GoodRx users, this means the difference between adhering to their prescribed regimen or skipping treatment altogether.

Medication adherence is the extent to which patients take a medication as prescribed by their provider. Among the many reasons why a patient may or may not adhere to their medication, one of the most commonly <u>reported</u> is high outof-pocket costs. According to a GoodRx <u>survey</u>, about 1 in 3 people who take prescription drugs for a chronic condition reported skipping at least one prescription fill due to cost. Another <u>poll</u> found that 3 in 10 adults in the United States reported not taking their medicines as prescribed because of the cost.

By lowering the cost of medication, GoodRx helps patients access their medication who otherwise wouldn't have been able to do so.

To estimate how much savings from GoodRx have improved medication adherence, we looked at a sample of the most commonly filled medications, used our data to estimate the average savings for GoodRx users relative to either the average retail price or the average insurance copay, and then modeled the change in expected medication adherence associated with the lower prices available through GoodRx based on the results of medical studies quantifying the link between medication price and adherence.

For the most purchased medications, averaging the estimated savings for users who would have paid cash and users who would have paid commercial insurance copays, the average GoodRx user saves approximately \$60 per prescription (not including additional savings from switching pharmacies), based on our internal data. Based on the medical <u>literature</u>, this translates to an increase in medication adherence (as measured by prescriptions filled over a given time period) from 45% to nearly 70%.

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Other <u>research</u> has found that, even if medications were free, there would be an adherence ceiling at around 80%, owing to the complexity of a medication regimen, socioeconomic factors, or other reasons.

GoodRx Savings for the Most Commonly Filled Drugs Help Improve Medication Adherence



Note: The slope of this line is based on a meta-analysis of 160 cost-related nonadherence studies in Eaddy et al. (2012). Based on the literature, for every \$10 savings, medication adherence is estimated to increase by 3.8%. Average savings are estimated for a sample of 181 of the most purchased medications, averaging estimated savings relative to average retail prices and estimated savings relative to average commercial insurance copays.

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Our analysis suggests that in 2020, 33.2% of GoodRx fills were newly adherent, meaning they would not have been filled without GoodRx. As GoodRx continues to work on getting patients the best discounts, the gains to medication adherence can only continue to improve.

Since the founding of GoodRx, we estimate GoodRx has helped patients fill at least 78 million prescriptions that they otherwise may not have been able to afford.

GOODRX IMPROVES HEALTH OUTCOMES

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Better medication adherence can <u>improve</u> health outcomes by slowing the progression of disease and avoiding unnecessary hospitalizations. These gains also translate to savings in <u>healthcare spending</u>.

Poor medication adherence can be very costly, both for the individual patient as well as the healthcare system as a whole. In some cases, medication adherence can mean the difference between life and death. For example, diabetes patients rely on insulin to regulate their blood sugar levels; if they skip or ration their insulin, it can lead to <u>fatal complications</u>. For people with high cholesterol and heart disease, the use of <u>statins</u> has been shown to <u>lower</u> the risk of hospitalization and death from heart attack and stroke.

To illustrate the degree to which savings through GoodRx improve patient health by increasing medication adherence, we looked at GoodRx's contribution to statin adherence. With a GoodRx discount, patients can get a month's supply of popular statins like <u>atorvastatin</u> (generic Lipitor) and <u>simvastatin</u> (generic Zocor, FloLipid) for less than \$10, with average savings of over 83% off the retail price.

As discussed earlier, we estimated that GoodRx has helped patients fill 78 million prescriptions they otherwise may not have been able to afford. Based on our internal data, this includes statin prescriptions for over 1 million patients or about 5 months' worth on average.

Scaling the clinical health benefits of statin use from the medical <u>literature</u> down to the average GoodRx statin user, we estimate that newly adherent statin users saw an average 8% reduction in bad cholesterol (as measured by LDL score) from affording 5 months of additional therapy.

These health improvements translate to over 1,000 fewer hospitalizations and over 490 fewer deaths from heart attack or stroke since GoodRx was founded.

The GoodRx Effect on Statin Adherence and Health Outcomes, 2012-2020

Number of newly adherent statin users	1,008,893
Average reduction in LDL score	9.2 mg/dL (8%)
Estimated reduction in deaths	492

Note: Newly adherent statin users estimated based on 4.5% statin use among newly adherent GoodRx users. Reduction in LDL score, deaths, and hospitalizations are based on Grabowski et al., Health Affairs (2012) and scaled according to GoodRx users' average statin adherence over one year.

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By helping patients avoid unnecessary healthcare expenditures like hospitalization, better medication adherence can also substantially <u>reduce</u> healthcare costs. In 2012, an estimated <u>\$105 billion</u> of healthcare spending in the United States could have been avoided with better medication adherence.

For statin users, for example, medication adherence is key to reduce expensive, preventable hospitalizations. The average <u>cost</u> of hospitalization from a heart attack is \$73,300, and the average cost of hospitalization from a stroke is \$20,000.

With over 1,000 fewer hospitalizations thanks to better statin adherence, GoodRx has helped save the healthcare system over \$60 million in avoidable hospitalization costs

The GoodRx Effect on Statin Adherence and Avoidable Healthcare Costs, 2012-2020

Estimated reduction in healthcare costs	\$60.5 M
Estimated reduction in hospitalizations from heart attack or stroke	1,025
Number of newly adherent statin users	1,008,893

Note: Newly adherent statin users estimated based on 4.5% statin use among newly adherent GoodRx users. Reduction in hospitalizations are based on Grabowski et al., Health Affairs (2012) and scaled according to GoodRx users' average statin adherence over one year. Average cost of hospitalization from heart attack and stroke are \$73,300 and \$20,000, respectively.

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Note that this analysis considers just one class of medication and one condition. A recent <u>study</u> found that reducing out-of-pocket costs across all drugs by \$10 per prescription can decrease monthly mortality rates by 33%. Given the millions of prescriptions across several thousand drugs that GoodRx has helped enable, there are conceivably thousands more people who can attribute their health to GoodRx.

GOODRX FREES UP FUNDS FOR OTHER NECESSITIES

The benefits of GoodRx savings are not limited to just newly adherent users. These savings benefit all users — even those who still would have filled their prescriptions without GoodRx — by freeing up funds for other goods and services.

These savings are especially important for those who struggle to afford basic necessities because of the cost of their medication.

According to a GoodRx <u>survey</u>, 21% of Americans had trouble paying for basic necessities like food or housing due to medication costs in 2020. Over half of those patients reported using a prescription drug discount to save money.

In the past year, have you had trouble paying for basic necessities like food or housing due to the cost of your prescription medications?









Source: GoodRx Medication Debt Survey, February 2021

Savings from GoodRx free up funds for other essential goods and services, which - depending on how the funds are spent - can then result in an additional dividend for our users. For example, researchers have found that it costs an additional \$45 each month to eat healthy. For the most filled medications based on third-party data, the average GoodRx user saves on average \$60 off the expected cost of their prescription had they paid cash or used commercial insurance, based on internal analysis taking into account estimated cash and insurance costs (not including additional savings from switching pharmacies). Those savings could be put toward eating more nutritious meals, which in turn can help reduce the need for healthcare spending in the future.

As another illustration of the benefit associated with drug cost savings, the average person with employer-sponsored health insurance pays \$104 each month in insurance premiums. An average savings of \$60 per prescription can help subsidize most of the ongoing cost of maintaining health insurance, which in turn reduces the share of a person's budget spent on healthcare.

When budgets are less constrained, people can make more optimal choices with how they spend their money. By helping people save on their prescriptions, GoodRx helps people invest in other aspects of their life, like their health, housing, education, and overall well-being.

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SUMMING IT ALL UP

From improving health outcomes, to reducing costs in the healthcare system, to helping people afford necessities like food and shelter, the GoodRx Effect extends well beyond patients' pocketbooks. By arming people with the ability to price shop and save on their medications, GoodRx helps people become more active healthcare consumers. Our consumer-driven marketplaces create more efficient care and improve upon a broken, opaque healthcare system.

At GoodRx, our mission is to help people get the healthcare they need at a price they can afford. We started by finding savings on brand and generic prescriptions at pharmacies. Next, we made affordable healthcare more accessible with mail order prescriptions, telehealth services, and additional ways for consumers to save on brand drugs such as connecting individuals to manufacturer savings programs.

As we grow, we strive to fill gaps in more parts of everyone's healthcare journey so that all Americans — regardless of income or insurance status — have the knowledge, choice, and care they need to stay healthy.

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METHODOLOGY

Average GoodRx savings:

Average GoodRx savings relative to retail prices are calculated as the total GoodRx savings relative to retail prices for prescriptions filled using GoodRx in 2020. For each medical condition, condition-level weights are applied to account for drugs with multiple indications. Average GoodRx savings relative to commercial insurance copays are calculated as the total GoodRx savings relative to average stated commercial insurance copays (not accounting for lesser of cost sharing amount rules) for prescriptions filled using GoodRx (including Gold and Kroger membership savings programs) for the 100 most prescribed drugs in 2020, where the GoodRx price is cheaper than the average insurance copay.

GoodRx effect on medication adherence:

Medication adherence with and without GoodRx was calculated based on the average amount saved per prescription for GoodRx users. Average amount saved per prescription was estimated based on median GoodRx prices, averaged across 181 commonly filled drugs and weighted by claim volume. The distribution of savings relative to insurance copay and retail price for each drug was estimated using a regression model of GoodRx relative fills on GoodRx discount off median retail price and the GoodRx discount off average commercial insurance copay, weighted by the share of commercial insurance plans without coverage. The estimated relationship between average amount saved and medication adherence is based on a meta-analysis of 160 cost-related nonadherence studies in <u>Eaddy et al. (2012)</u> and assumes an 80% baseline adherence at \$0 out-of-pocket cost. Based on the literature, for every \$10 savings, medication adherence is estimated to increase by 3.8%. The total number of newly adherent GoodRx claims since 2011 is calculated based on the estimated share of newly adherent claims in each year.

GoodRx effect on health outcomes and avoidable healthcare costs:

Newly adherent statin users is based on the estimate of newly adherent GoodRx fills and observed statin use among GoodRx users. The reductions in LDL score, deaths, and hospitalizations are based on <u>Grabowski et al. (2012)</u> and scaled according to GoodRx users' observed average statin adherence over one year. The average cost of hospitalization from heart attack and stroke are based on <u>O'Sullivan et al. (2011)</u> and assumed to be \$73,300 and \$20,000, respectively.