



Using Bulk Purchasing To Lower Prescription Drug Prices

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Introduction and summary

COVID-19 has highlighted the importance of an effective government response to infectious diseases, epidemics, and pandemics. In the United States, the initial federal response to the coronavirus crisis was insufficient, causing up to an estimated 180,000 avoidable deaths.¹ And as the vaccine rollout continues to expand under increased federal efforts, the government must consider the tools it has to address not only COVID-19 but also pandemics and epidemics more broadly.

One of these tools is bulk purchasing—the purchase of a large volume of a drug or vaccine with the aim of lowering the unit price of the drug in order to increase access among those who would benefit from it.

This report explores how the federal government can use bulk purchasing of prescription drugs, including vaccines, to address several ongoing public health crises in the United States, including the HIV/AIDS epidemic, the opioid epidemic, and COVID-19. First, the report provides an overview of how prescription drug prices have risen in recent years and of the significant impacts that high prescription drug prices have on patients. It then describes several methods that state and federal governments currently use to bulk purchase prescription drugs and other medical supplies. The final section outlines the crises noted above, which bulk purchasing is especially well-suited to help address.

An overview of prescription drug prices in the United States

Prescription drug prices have risen dramatically over the past several decades—at a rate much higher than inflation. A 2020 study by the University of Pittsburgh’s Center for Pharmaceutical Policy and Prescribing found that from 2007 to 2018, the list price for brand-name drugs increased by 159 percent on average.² The same study found that net prices of prescription drugs increased by an average of 60 percent over the same period.³

Pharmaceutical companies even raised the prices of more than 800 drugs during the COVID-19 pandemic, increasing the cost of nearly 70 drugs by an average of 3.1 percent in July 2020.⁴ This trend has continued in 2021: A GoodRx analysis found that in January, drug companies raised prices on 832 drugs by an average of 4.5 percent.⁵ These increases have been driven primarily by increases in the prices of brand-name drugs: In both 2020 and 2021, the overwhelming majority of drugs whose prices increased were brand-name drugs.⁶ While the percentage-point increase in prices was higher for generic drugs in 2020, brand-name drugs are more than six times as expensive on average.⁷ This means that a smaller percentage-point increase in the cost of a brand-name drug can often result in a larger dollar amount increase for patients.

In addition to consistently increasing the prices of drugs, pharmaceutical companies often set higher prices in the United States than in other industrialized countries. A recent study by the Rand Corporation examined the list price charged for prescription drugs in the United States and 32 other countries, including Mexico, Canada, and the United Kingdom. It found that drug prices in the United States were an average of 2.56 times higher than in the comparison countries.⁸ Even after adjusting for rebates and other discounts, prices for drugs in the United States were still 90 percent higher than in the comparison countries.⁹ A recent report by the U.S. Government Accountability Office arrived at a similar conclusion, finding that prices in the United States were between two and four times higher than those in Australia, Canada, and France.¹⁰

These high drug prices and price increases have real, deadly consequences. A late 2019 poll by Gallup found that 22.9 percent of Americans reported that it was somewhat or very difficult to afford their prescription drugs, and 3 in 10 Americans did not take their medicine as prescribed because of cost.¹¹ Rationing medication can lead to serious

negative health outcomes, including death. A 2019 study published in the *Journal of the American Medical Association* found that patients who rationed insulin were nearly three times as likely to have poor blood sugar control than those who did not have to ration.¹² After time, insulin rationing can lead to death.¹³ A similar study published in *Circulation* found that high drug costs were associated with medication nonadherence in patients with heart disease.¹⁴

High prescription drug costs also strain federal and state budgets. A 2018 report by the U.S. Department of Health and Human Services found that Medicare pays nearly twice as much for physician-administered drugs than it would if U.S. prices were similar to those in many other industrialized countries.¹⁵ In 2019, Medicare and Medicaid spent nearly \$290 billion on prescription drugs.¹⁶ A 2021 report from the Medicaid and CHIP Payment and Access Commission highlights states' struggles to contain costs for high-price drugs and the need for federal action.¹⁷ For these reasons, policymakers must adopt reforms to ensure that prescription drugs are affordable for the patients who need them.

How bulk purchasing can lower drug spending and help patients

Bulk purchasing has many different forms, and both the federal and state governments already use the practice. This section outlines three bulk purchasing programs in use in the United States and how they can serve as models for future bulk purchasing efforts.

The Vaccines for Children program

The largest and oldest bulk purchasing program in the United States is the Vaccines for Children (VFC) program, which provides vaccines to children who otherwise would not be vaccinated due to an inability to pay.¹⁸ The program was a response to the 1989–1991 measles epidemic, during which tens of thousands of children contracted measles due to low immunization rates.¹⁹

Under VFC, a program of the U.S. Centers for Disease Control and Prevention (CDC), the federal government purchases vaccines at a negotiated discount through the CDC and then distributes them across the country to state health departments and other public health agencies.²⁰ Because the program centralizes the purchase of the vaccines, the federal government is able to obtain the necessary vaccines at a reduced price. The discounts are primarily achieved through the CDC's market power—the VFC program is estimated to purchase more than 40 percent of childhood vaccines in the United States—and the prices for vaccines are capped at the inflation-adjusted price the CDC paid before the program was established.²¹ A CDC estimate of the program's benefit found that from its inception in 1994 through 2018, VFC prevented 419 million illnesses, 26.8 million hospitalizations, and 936,000 deaths—and saved nearly \$2 trillion in societal costs.²²

Importantly, VFC is an entitlement program, meaning it establishes a federal right for eligible children to receive all CDC-recommended vaccines.²³ The program also limits eligible families' costs to administration fees and office fees and explicitly prohibits an eligible child from being refused a vaccination due to a family's inability to pay an administration fee.²⁴ These critical protections must be included in future bulk purchasing programs that address public health crises.

Subscription-based purchasing

In response to the high initial list prices of hepatitis C cures in the early 2010s, payers—including public insurance programs—imposed “significant access restrictions” on the drugs in order to reduce the impact on their budgets.²⁵ Despite these restrictions, the high price of one of these cures, Sovaldi, continued to significantly burden public insurance programs, especially Medicaid. State Medicaid programs spent \$1.3 billion on the drug to treat less than 17,000 of roughly 700,000 enrollees with hepatitis C.²⁶ To increase access, states explored alternative payment methods for the drug, including subscription-based purchasing.

Subscription-based purchasing works similarly to the subscription models used by streaming services: Drug purchasers pay a flat, negotiated fee to the pharmaceutical company in exchange for an increased supply of a particular drug over a negotiated period.²⁷ States have used this model to great success in their prescription drug purchasing, especially with high-cost, specialty drugs.

Louisiana was a pioneer in the use of subscription-based purchasing. In June 2019, the state signed a contract with Asegua Therapeutics, a subsidiary of Gilead Pharmaceuticals that manufactures Harvoni, a cure for hepatitis C.²⁸ Due to the high unit price of these cures, in 2018, the state was only able to treat approximately 1,000 of the 40,000 people in its Medicaid and incarcerated populations who had hepatitis C.²⁹ The state has treated more than 7,500 people since the program’s inception.³⁰ While this is slightly short of its goal of 10,000 by the end of 2020, it still represents a considerable improvement over its pre-bulk purchasing treatment levels.³¹

Washington state has also pursued subscription-based purchasing for hepatitis C drugs. The state uses a “modified subscription model,” paying a negotiated price for the drugs up to a maximum total expenditure, after which the state pays a nominal amount for additional drugs.³² Another difference in Washington’s approach is the manufacturer. In 2019, the state contracted with AbbVie, the company that produces Mavyret, another cure for hepatitis C.³³ The state treated about 7,300 of its estimated 59,100 residents with hepatitis C in 2018; Washington officials said that after beginning the program the next year, the state treated noticeably more cases, after which the number of people treated each month decreased and remained steady.³⁴

The experiences of Louisiana and Washington state highlight several features of subscription-based purchasing that are useful in addressing other diseases, epidemics, and pandemics. First, they highlight the efficacy of bulk purchasing drugs to treat diseases for which there are few treatment options or for which treatments are produced

by a limited number of prescription drug companies. Gilead and AbbVie produce five of the six FDA-approved and recommended cures for hepatitis C,³⁵ increasing their negotiating power and potentially reducing supply of the drugs. Early experiences with Sovaldi, and later Harvoni, demonstrate that pharmaceutical companies will often price drugs as high as they think will be acceptable, regardless of the impact on access. For payers with limited budgets, such as state governments, this can introduce significant access barriers. Second, they demonstrate the variety of approaches possible under the umbrella of subscription-based purchasing, ranging from Louisiana's experience with a direct subscription—a single flat fee for increased supply—to Washington's use of a modified subscription model, which is essentially unlimited use after a negotiated level of spending. Above all, these states' efforts show that increasing access to prescription drugs does not require purchasers to increase their spending. Washington state spent around the same amount on these drugs as before the subscription model while treating nearly twice as many patients.

Medicaid drug purchasing

A third example of leveraging volume to lower prescription drug prices in the United States is state governments' implementation of supplemental prescription drug rebates through multistate drug purchasing pools. There are three multistate Medicaid drug purchasing programs: the National Medicaid Pooling Initiative (NMPI), the Top Dollar Program, and the Sovereign States Drug Consortium (SSDC).³⁶ Among the three programs, a total of 30 states and Washington, D.C., pool their Medicaid drug purchasing to obtain additional discounts beyond federally required rebates.³⁷

These Medicaid drug purchasing programs primarily achieve savings through the use of supplemental rebates, which are essentially additional discounts to state governments from pharmaceutical companies for their drugs.³⁸ Currently, 46 states and Washington, D.C., have negotiated supplemental rebates for their Medicaid programs; Hawaii, New Jersey, New Mexico, and South Dakota do not negotiate rebates independently or as part of a purchasing pool.³⁹ By pooling drug purchasing, these programs increase the market power of the state purchasers, as the potential for multiple states to impose similar utilization management restrictions on prescription drugs that are too expensive could represent a greater loss of revenue than the negotiated supplemental rebates.

Supplemental rebate agreements represent significant savings for state governments. For example, after joining the SSDC in 2008, Vermont saved an additional 4.7 percent—more than \$5 million—on prescription drug spending that year.⁴⁰ New York reported significant savings through its program as well, spending more than \$80 million less in 2007 than it otherwise would have due to its participation in the NMPI.⁴¹

Medicaid purchasing pools demonstrate the ability to focus efforts across multiple states, which is particularly important for diseases that are more prevalent in some regions of the country than others. For example, HIV and opioid use disorder are more prevalent in the South and Appalachia, respectively, than in the rest of the country.⁴² Multistate purchasing allows regions of the country to address their unique health issues holistically rather than split their effort across state lines. The practice also emphasizes the ability of existing mechanisms to address high prescription drug costs, negating the need for an entirely new program.

What crises should the federal government focus on with bulk purchasing?

There are several ongoing health crises that a federal bulk purchasing program would be well-suited to address. All of these can be addressed through medication use, but the prescription drugs needed for prevention or treatment are unaffordable for many people.

HIV/AIDS

A federal bulk purchasing program for HIV prevention drugs could be a critical tool in helping end the HIV/AIDS epidemic in the United States. Originally discovered in the 1980s, HIV is an autoimmune virus that attacks the body's ability to resist disease.⁴³ In 2012, the U.S. Food and Drug Administration (FDA) approved Truvada, the first drug to prevent—rather than treat—HIV infection.⁴⁴ The practice, called preexposure prophylaxis (PrEP), is incredibly effective. When taken daily as prescribed, PrEP drugs reduce the spread of HIV through sex by about 99 percent, leading the U.S. Preventive Services Task Force (PSTF) in 2019 to recommend its prescription to high-risk patients.⁴⁵ Under the Ryan White HIV/AIDS Program, the federal government already funds the AIDS Drug Assistance Program that provides drugs to treat HIV in low-income people, but the funds cannot be used to purchase PrEP drugs because the funds are designated for the care and treatment of people diagnosed with HIV, rather than prevention.⁴⁶

Unfortunately, PrEP drugs are unaffordable for many of the patients who need them. Truvada costs around \$1,600 to \$1,800 per month, and a more recent PrEP drug, Descovy, costs more than \$2,000 per month.⁴⁷ These high prices lead to serious disparities in infection rates. African American and Hispanic/Latino people constituted nearly 70 percent of new HIV infections in 2018, and 65 percent of those infections were among men who have sex with men.⁴⁸

Considerations for bulk purchasing

The federal government should consider several factors when establishing a bulk purchasing program to respond to epidemics or expand such a program to other diseases:

- Is the disease treatable or preventable by medication?
- Is cost a barrier to accessing the medicine?
- To what extent does the cost of a drug burden health system finances?
- How can other interventions, such as government patent use or march-in rights, be used to further reduce the price of the drug?

These disparities in infection rates are in part caused by disparities in health coverage: In 2018, Black people and Hispanic people were, respectively, more than 53 percent and 153 percent more likely to be uninsured than white people.⁴⁹ While the PSTF recommendation means that most insurers must cover these drugs without cost-sharing,⁵⁰ uninsured individuals must find other methods of payment if they cannot pay for the drugs out of pocket. The recommendation also does nothing to lower the price paid for the drug, meaning that health care funds are spent less efficiently. For example, there are an estimated 2 million incarcerated people living with HIV in the United States, and prison conditions often cause increased risk of HIV transmission.⁵¹ High prices for PrEP drugs strain state budgets, further reducing access to care for these patients.

Bulk purchasing of PrEP drugs by the federal government would be an extremely effective intervention to help end the HIV/AIDS epidemic in the United States. While insured patients now have access to PrEP drugs without cost-sharing, uninsured patients represent a disproportionately at-risk group. Ensuring access to these needed prescription drugs would reduce HIV rates and, importantly, disparities. Bulk purchasing would also work to reduce the unit price paid across payers, ensuring that coverage mandates do not have the unintended consequence of increasing the cost of insurance premiums.

Bulk purchasing to reduce the unit price of PrEP drugs could potentially be made even more effective through the use of—or even the threat of using—either the federal government’s patent use authority or its ability under the Bayh-Dole Act to “march in” on patents that are based on federally funded research.⁵² The federal government has the authority to license patents for any good so long as it provides “reasonable and entire compensation” to the patent holder, and the federal government can also exercise its march-in rights to license a patent that resulted from federally funded research if a drug company has not achieved practical application of the research.⁵³ Because the initial research into PrEP drugs was federally funded and conducted, multiple courts have found that the federal government owns some of the patents for Truvada.⁵⁴ This opens the drugs up to march-in rights. The federal government should assert its patents to lower Truvada’s unit price and target bulk purchasing at the portions of the patents that the government does not own, further increasing bulk purchasing’s efficacy.

Opioid use disorder

The United States can also address opioid use disorder (OUD)—also known as the opioid epidemic or opioid addiction—through bulk purchasing. In the late 1990s, pharmaceutical companies assured providers that opioids were nonaddictive pain relievers,

resulting in high rates of prescription.⁵⁵ Over the next two decades, three waves of opioid overdose deaths emerged: first from prescription opioids; second from heroin; and third from other synthetic opioids such as tramadol and fentanyl.⁵⁶ From 1999 to 2019, nearly 588,000 people died from an opioid overdose in the United States, with 71,000 of those deaths occurring in 2019.⁵⁷ An estimated 1.6 million people had an OUD in 2019.⁵⁸

In recent years, the FDA has approved several drugs to treat OUD. These drugs are prescribed in conjunction with counseling and other behavioral health interventions and reduce withdrawal symptoms and psychological cravings for opioids.⁵⁹ Referred to as medication-assisted treatment (MAT), these drugs are extremely effective at treating OUD. Each of the three drugs that the FDA has approved for MAT use—methadone, buprenorphine, and naltrexone—significantly increase patient adherence to behavioral health treatment and reduce opioid misuse and deaths.⁶⁰ More modern, injectable versions of these drugs are more effective than daily oral use but are significantly more expensive, reducing access to effective treatment.⁶¹ MAT is also associated with reduced transmission of HIV and hepatitis C, as it helps reduce risky injection practices.⁶²

Medication-assisted treatment as harm reduction

MAT is part of a larger strategy of “harm reduction.” Throughout history—from Prohibition, which started in the early 1920s, to the modern war on drugs—adult use of many drugs has been criminalized, and the police have enforced these laws much more aggressively in communities of color, especially Black communities.⁶³ Harm reduction seeks to support people affected by substance

misuse by reducing the negative consequences associated with drug use rather than focusing solely on reducing drug use itself.⁶⁴ Importantly, harm reduction acknowledges the reality that drug use is part of society and works to give people the tools to use drugs more safely, including tools to reduce physical and psychological dependency.⁶⁵

Bulk purchasing of MAT drugs would help increase access to them, reducing opioid overdose deaths. In 2020, the Pew Charitable Trusts identified several barriers to MAT use in the treatment of OUD.⁶⁶ Bulk purchasing could directly address two of these gaps—limited insurance coverage and stigma associated with opioid use disorder—and the federal government has recently taken steps to address the barrier of a lack of qualified prescribers.

The Affordable Care Act requires health insurers to cover substance use disorder treatments, but it does not specify what benefits must be covered.⁶⁷ Unlike PrEP drugs, whose no-cost coverage is required due to PSTF recommendation, there is no mandate

for health insurers to cover MAT or for similar organizations to establish such a mandate.⁶⁸ Because of this, some plans only cover less effective treatments such as abstinence-based counseling, meaning patients enrolled in MAT programs may have to pay for their drugs entirely out of pocket. A bulk purchasing program would allow for the federal government to fill in gaps in this coverage for both underinsured and uninsured patients.

Similarly, the federal government embracing and supporting the widespread use of MAT to treat OUDs would help address stigma associated with drug addiction and treatment. For example, the widespread use of medication to treat depression has helped reduce stigma associated with the mental health condition.⁶⁹ It would also represent a significant embrace of harm reduction in the federal government's response to the opioid epidemic, rather than continued criminalization, further promoting the idea of OUD as a disease to be treated rather than a moral failure to be punished.⁷⁰ The federal government is already taking steps in this direction: In 2018, Congress enacted the SUPPORT for Patients and Communities Act, which, among other things, expanded Medicare coverage of MAT services to include those provided by opioid treatment programs.⁷¹ More recently, the Biden administration announced that it is loosening the regulations around buprenorphine prescribing, further lessening the stigma associated with MAT and reducing the barriers to prescription for patients.⁷²

In addition to improved health outcomes that would result from increased MAT access, bulk purchasing can help reduce spending on these drugs without risking patient access. Medicaid spending on MAT drugs, for example, has increased dramatically over the past decade. In 2010, Medicaid programs spent less than \$20 million on buprenorphine, naloxone, and naltrexone before rebates; by 2019, that amount had increased to nearly \$280 million—a more than 1,300 percent increase.⁷³ This level of spending is somewhat understandable given the concentration of people with OUD who are Medicaid beneficiaries. The Kaiser Family Foundation estimates that the program covers 38 percent of nonelderly adults who have OUD and that about 5 percent of beneficiaries were diagnosed with OUD in 2016.⁷⁴

MAT spending is also high in the criminal justice system. Among incarcerated people, this number is nearly double that of the general population. Some prisons report opioid dependency rates of nearly 10 percent.⁷⁵ A 2018 study published in the *American Journal of Drug and Alcohol Abuse* examined the experiences of a large urban jail in New Mexico and found that the average cost of MAT was \$115 per week and \$689 for an average course of treatment.⁷⁶ This can result in significant costs associated with MAT use in prisons, especially in states that have not expanded Medicaid.⁷⁷ Utilizing bulk purchasing to reduce the cost of OUD drugs is key to reducing government spending and improving outcomes.

State governments have already experimented with bulk purchasing to respond to the opioid epidemic. In particular, states have used bulk purchasing to increase access to naloxone, a drug meant to quickly reverse an opioid overdose, addressing the potential acute consequences of OUDs.⁷⁸ Massachusetts has operated a bulk purchasing program for naloxone since 2015 in response to increasing numbers of opioid overdose deaths.⁷⁹ In the first year of the program, more than 80 cities and towns in the state participated, saving more than \$185,000.⁸⁰ The state purchases the drug through the U.S. Communities Government Purchasing Alliance, a nonprofit that coordinates government procurement nationwide.⁸¹ Similar to Medicaid drug purchasing pools, this allows Massachusetts to leverage even greater volume in its discount negotiations.

COVID-19

Finally, bulk purchasing has already been used to respond to the COVID-19 pandemic, and it should be extended to include potential future vaccine boosters. During the spring of 2020, evidence emerged that remdesivir, an antiviral drug originally developed to treat Ebola, was effective at treating COVID-19.⁸² In May, the FDA granted emergency use authorization to the drug, and in June, the federal government announced it had purchased large amounts of the drug to help facilitate access throughout the country.⁸³ In July 2020, the Trump administration purchased 100 million doses of the Pfizer-BioNTech vaccine, and in December 2020, the Trump administration purchased an additional 100 million doses of the same vaccine.⁸⁴ While the December purchase was a more traditional bulk purchasing arrangement, leveraging the federal government's purchasing power to increase access to these needed vaccines, the July purchase also served to help reduce the risk of research and development costs to the pharmaceutical company, which the federal government has pursued for other infectious diseases—such as Zika and Ebola—for which vaccines otherwise may not have been developed.⁸⁵

More recently, the Biden administration has increased bulk purchasing to improve access to the three vaccines currently authorized for use by the FDA. Shortly after President Joe Biden's inauguration, his administration announced it had purchased 200 million doses of the Pfizer-BioNTech and Moderna-NIH vaccines. And in February 2021, the administration announced it had purchased an additional 100 million doses of both vaccines, increasing the total vaccine supply purchased to 600 million doses.⁸⁶ In March 2021, the administration announced the purchase of 100 million doses of the Johnson & Johnson vaccine, which allowed every adult to be vaccine-eligible by May 1, 2021, when combined with previous vaccine purchases.⁸⁷

The bulk purchasing efforts to respond to the COVID-19 pandemic have been successful because they have incorporated features of other bulk purchasing programs. As with the Vaccines for Children program, access to the COVID-19 vaccines is an entitlement of every eligible patient, regardless of immigration or health insurance status.⁸⁸ Importantly, federal law requires that health insurers—or the Health Resources and Services Administration, for uninsured patients—cover administration fees.⁸⁹

These protections should be extended beyond the public health emergency. Both Pfizer and Moderna are testing whether a third booster dose of their vaccines is effective at addressing the emerging variants of the coronavirus, and Pfizer, Moderna, and Johnson & Johnson have indicated that they intend to raise the price of their vaccines.⁹⁰ Increasing the price of the vaccines would restrict access and strain federal budgets, potentially extending the spread of the virus and allowing it to evolve into more contagious variants. Applying an approach similar to the Vaccines for Children program would help ensure that pharmaceutical companies' price increases do not endanger public health or unnecessarily increase federal spending.

Conclusion

The COVID-19 pandemic has made clearer than ever the importance of an effective government response to health crises in the United States. The nation is currently facing multiple epidemics in addition to the pandemic. Two of these—the HIV/AIDS epidemic and the opioid epidemic—are in part fueled by a lack of access to the prescription drugs needed to most effectively treat them.

The federal response to the COVID-19 pandemic has demonstrated the efficacy of bulk purchasing in responding to infectious disease epidemics. By establishing a bulk purchasing program for PrEP drugs to prevent the spread of HIV and MAT drugs in order to address opioid use disorders, the federal government can help put a stop to these epidemics and close disparities in rates of transmission and death from these diseases. Prescription drugs' high prices have resulted in worse outcomes from several epidemics in the United States, and bulk purchasing is an important tool for both state and federal governments to respond more effectively.

About the author

Thomas Waldrop is a policy analyst for Health Policy at the Center for American Progress.

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Endnotes

- 1 Steffie Woolhandler and others, "Public policy and health in the Trump era," *The Lancet* 297 (10275) (2021): 705–753, available at [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)32545-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32545-9/fulltext).
- 2 Inmaculada Hernandez and others, "Changes in List Prices, Net Prices, and Discounts for Branded Drugs in the US, 2007–2018," *Journal of the American Medical Association* 323 (9) (2020): 854–862, available at <https://jamanetwork.com/journals/jama/article-abstract/2762310>.
- 3 Ibid.
- 4 Tori Marsh, "Live Updates: July 2020 Drug Price Increases," GoodRx, August 3, 2020, available at <https://www.goodrx.com/blog/july-drug-price-hikes-2020/>.
- 5 Tori Marsh, "Live Updates: January 2021 Drug Price Increases," GoodRx, January 19, 2021, available at <https://www.goodrx.com/blog/january-drug-price-hikes-2021/>.
- 6 Ibid.; Marsh, "Live Updates: July 2020 Drug Price Increases."
- 7 U.S. Food and Drug Administration, "Generic Drug Facts," available at <https://www.fda.gov/drugs/generic-drugs/generic-drug-facts> (last accessed March 2021).
- 8 Andrew W. Mulcahy and others, "International Prescription Drug Price Comparisons: Current Empirical Estimates and Comparisons with Previous Studies" (Santa Monica, CA: RAND Corporation, 2021), available at https://www.rand.org/pubs/research_reports/RR2956.html.
- 9 Ibid.
- 10 U.S. Government Accountability Office, "Prescription Drugs: U.S. Prices for Selected Brand Drugs Were Higher on Average than Prices in Australia, Canada, and France," March 29, 2021, available at <https://www.gao.gov/products/gao-21-282>.
- 11 Dan Witters, "Millions in U.S. Lost Someone Who Couldn't Afford Treatment," Gallup, November 12, 2019, available at <https://news.gallup.com/poll/268094/millions-lost-someone-couldn-afford-treatment.aspx>.
- 12 Darby Herkert and others, "Cost-Related Insulin Underuse Among Patients with Diabetes," *JAMA Internal Medicine* 179 (1) (2019): 112–114, available at <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2717499>.
- 13 Right Care Alliance, "High insulin costs are killing Americans," available at <https://rightcarealliance.org/actions/insulin/> (last accessed March 2021).
- 14 Rohan Khera and others, "Cost-Related Medication Non-adherence in Adults With Atherosclerotic Cardiovascular Disease in the United States, 2013 to 2017," *Circulation* 140 (25) (2019): 2067–2075, available at <https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.119.041974>.
- 15 Office of the Assistant Secretary for Planning and Evaluation, "Comparison of U.S. and International Prices for Top Medicare Part B Drugs by Total Expenditures" (Washington: 2018), available at <https://aspe.hhs.gov/pdf-report/comparison-us-and-international-prices-top-medicare-part-b-drugs-total-expenditures>.
- 16 U.S. Centers for Medicare and Medicaid Services, "Medicare Part D Drug Spending Dashboard and Data," available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Information-on-Prescription-Drugs/MedicarePartD> (last accessed March 2021); U.S. Centers for Medicare and Medicaid Services, "Medicare Part B Drug Spending Dashboard," available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Information-on-Prescription-Drugs/MedicarePartB> (last accessed March 2021); U.S. Centers for Medicare and Medicaid Services, "Medicaid Drug Spending Dashboard," available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Information-on-Prescription-Drugs/Medicaid> (last accessed March 2021).
- 17 Chris Park, "High-Cost Specialty Drugs: Review of Draft Chapter and Recommendations," Medicaid and CHIP Payment and Access Commission, April 8, 2021, available at <https://www.macpac.gov/wp-content/uploads/2021/04/High-Cost-Specialty-Drugs-Review-of-Draft-Chapter-and-Recommendations.pdf>.
- 18 U.S. Centers for Disease Control and Prevention, "Vaccines for Children Program (VFC)," available at <https://www.cdc.gov/vaccines/programs/vfc/index.html> (last accessed March 2021).
- 19 U.S. Centers for Disease Control and Prevention, "About VFC," available at <https://www.cdc.gov/vaccines/programs/vfc/about/index.html> (last accessed March 2021).
- 20 U.S. Centers for Disease Control and Prevention, "Vaccines for Children Program (VFC)."
- 21 Alan R. Hinman, Walter A. Orenstein, and Lance Rodewald, "Financing Immunizations in the United States," *Clinical Infectious Diseases* 38 (10) (2004): 1440–1446, available at <https://academic.oup.com/cid/article/38/10/1440/346900>; Legal Information Institute "42 U.S.C. 1396s – Program for distribution of pediatric vaccines," available at <https://www.law.cornell.edu/uscode/text/42/1396s> (last accessed May 2021).
- 22 Cynthia G. Whitney and others, "Benefits from Immunization During the Vaccines for Children Program Era—United States, 1994–2013," *Morbidity and Mortality Weekly Report* 63 (16): 352–355, available at <https://www.cdc.gov/mmwr/pdf/wk/mm6316.pdf>.
- 23 U.S. Centers for Disease Control and Prevention, "Vaccines for Children Program (VFC)."
- 24 Ibid.
- 25 Senate Committee on Finance, "Wyden-Grassley Soverdi Investigation Finds Revenue-Driven Pricing Strategy Behind \$84,000 Hepatitis Drug," Press release, December 1, 2015, available at <https://www.finance.senate.gov/ranking-members-news/wyden-grassley-sovaldi-investigation-finds-revenue-driven-pricing-strategy-behind-84-000-hepatitis-drug>.
- 26 U.S. Senate Committee on Finance, "Wyden-Grassley Soverdi Investigation Finds Revenue-Driven Pricing Strategy Behind \$84,000 Hepatitis Drug," Press release, December 1, 2015, available at <https://www.finance.senate.gov/ranking-members-news/wyden-grassley-sovaldi-investigation-finds-revenue-driven-pricing-strategy-behind-84-000-hepatitis-drug>.

- 51 Avert, "Prisoners, HIV and AIDS," available at <https://www.avert.org/professionals/hiv-social-issues/key-affected-populations/prisoners> (last accessed April 2021).
- 52 Maura Calsyn and Thomas Waldrop, "How the Next Administration Can Lower Drug Prices" (Washington: Center for American Progress, 2020), available at <https://www.americanprogress.org/issues/healthcare/reports/2020/09/17/490140/next-administration-can-lower-drug-prices/>.
- 53 Ibid.
- 54 Mark Terry, "Gilead Versus HHS: Gilead Loses 2nd Patent Invalidation Challenge," BioSpace, February 21, 2020, available at <https://www.biospace.com/article/gilead-loses-2nd-patent-challenge-in-a-month/>.
- 55 National Institute on Drug Abuse, "Opioid Overdose Crisis," available at <https://www.drugabuse.gov/drug-topics/opioids/opioid-overdose-crisis> (last accessed March 2021).
- 56 U.S. Centers for Disease Control and Prevention, "Understanding the Epidemic," available at <https://www.cdc.gov/drugoverdose/epidemic/index.html> (last accessed March 2021).
- 57 U.S. Centers for Disease Control and Prevention, "America's Drug Overdose Epidemic: Putting Data to Action," available at <https://www.cdc.gov/injury/features/prescription-drug-overdose/index.html> (last accessed May 2021); U.S. Department of Health and Human Services, "About the Epidemic," available at <https://www.hhs.gov/opioids/about-the-epidemic/index.html> (last accessed March 2021).
- 58 U.S. Department of Health and Human Services, "About the Epidemic."
- 59 Substance Abuse and Mental Health Services Administration, "Medication-Assisted Treatment (MAT)," available at <https://www.samhsa.gov/medication-assisted-treatment> (last accessed March 2021).
- 60 Pew Charitable Trusts, "Medications for Opioid Use Disorder Improve Patient Outcomes" (Philadelphia: 2020), available at <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2020/12/medications-for-opioid-use-disorder-improve-patient-outcomes>.
- 61 Indivior Inc., "How does Sublocade work?," available at <https://www.sublocade.com/how-sublocade-works> (last accessed May 2021); Drugs.com, "Sublocade Prices, Coupons and Patient Assistance Programs," available at <https://www.drugs.com/price-guide/sublocade> (last accessed April 2021).
- 62 Substance Abuse and Mental Health Services Administration, "Co-Occurring Disorders and Other Health Conditions," available at <https://www.samhsa.gov/medication-assisted-treatment/medications-counseling-related-conditions/co-occurring-disorders> (last accessed March 2021).
- 63 Nora D. Volkow, "Addiction Should Be Treated, Not Penalized," Health Affairs Blog, April 27, 2021, available at <https://www.healthaffairs.org/doi/10.1377/hblog2010421.168499/full/>.
- 64 National Harm Reduction Coalition, "Principles of Harm Reduction," available at <https://harmreduction.org/about-us/principles-of-harm-reduction/> (last accessed March 2021).
- 65 Ibid.
- 66 Pew Charitable Trusts, "Medications for Opioid Use Disorder Improve Patient Outcomes."
- 67 Ibid.
- 68 Katie Keith, "USPSTF Recommends Access Without Cost Sharing To HIV Prevention," Health Affairs Blog, June 13, 2019, <https://www.healthaffairs.org/doi/10.1377/hblog20190613.596797/full/>; Pew Charitable Trusts, "Medications for Opioid Use Disorder Improve Patient Outcomes."
- 69 Nora Volkow, "Addressing the Stigma that Surrounds Addiction," National Institute on Drug Abuse, April 22, 2020, available at <https://www.drugabuse.gov/about-nida/noras-blog/2020/04/addressing-stigma-surrounds-addiction>.
- 70 Robert A. Matano and Stanley F. Wanat, "Addiction is a treatable disease, not a moral failing," *Western Journal of Medicine* 172 (1) (2000): 63, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1070736/>.
- 71 Cliff Binder and Johnathan H. Duff, "Medicare Coverage of Medication Assisted Treatment (MAT) for Opioid Addiction," Congressional Research Service, available at <https://crsreports.congress.gov/product/pdf/IF/IF10875> (last accessed May 2021).
- 72 Lev Facher, "Biden administration will allow nearly all providers to prescribe buprenorphine," STAT, April 27, 2021, available at <https://www.statnews.com/2021/04/27/biden-administration-allow-nearly-all-providers-to-prescribe-buprenorphine/>.
- 73 Urban Institute, "Tracking Medicaid-Covered Prescriptions to Treat Opioid Use Disorder," available at <https://www.urban.org/policy-centers/health-policy-center/projects/tracking-medicare-covered-prescriptions-treat-opioid-use-disorder> (last accessed March 2021).
- 74 Julie Donohue and others, "Opioid Use Disorder among Medicaid Enrollees: Snapshot of the Epidemic and State Responses" (Washington: Kaiser Family Foundation, 2019), available at <https://www.kff.org/report-section/opioid-use-disorder-among-medicare-enrollees-snapshot-of-the-epidemic-and-state-responses-issue-brief/>.
- 75 Substance Abuse and Mental Health Services Administration, "Medication-Assisted Treatment (MAT) in the Criminal Justice System: Brief Guidance to the States," available at https://store.samhsa.gov/sites/default/files/d7/priv/pep19-matbriefjs_0.pdf (last accessed March 2021).
- 76 Brady P. Horn and others, "The economic costs of jail-based methadone maintenance treatment," *The American Journal of Drug and Alcohol Abuse* 44 (6) (2018): 611–618, available at <https://www.tandfonline.com/doi/abs/10.1080/00952990.2018.1491048?journalCode=iada20>.
- 77 Substance Abuse and Mental Health Services Administration, "Medication-Assisted Treatment (MAT) in the Criminal Justice System."
- 78 National Institute on Drug Abuse, "Opioid Overdose Reversal with Naloxone (Narcan, Evzio)," available at <https://www.drugabuse.gov/drug-topics/opioids/opioid-overdose-reversal-naloxone-narcan-evzio> (last accessed March 2021).
- 79 Shira Schoenberg, "Communities save estimated \$186K through state bulk buying program for anti-overdose drug Narcan," MassLive, November 30, 2016, available at https://www.masslive.com/politics/2016/11/state_bulk_buying_of_anti-over.html.
- 80 Ibid.
- 81 Executive Office of Health and Human Services, "2017 Municipal Naloxone Bulk Purchase Trust Fund Annual Report" (Boston: Massachusetts Department of Public Health, 2018), available at <https://malegislature.gov/Bills/190/SD2599.pdf>.

- 82 National Institutes of Health, "NIH clinical trial shows Remdesivir accelerates recovery from advanced COVID-19," Press release, April 29, 2020, available at <https://www.nih.gov/news-events/news-releases/nih-clinical-trial-shows-remdesivir-accelerates-recovery-advanced-covid-19>.
- 83 U.S. Department of Health and Human Services, "Trump Administration Secures New Supplies of Remdesivir for the United States," Press release, June 29, 2020, available at <https://www.hhs.gov/about/news/2020/06/29/trump-administration-secures-new-supplies-remdesivir-united-states.html>.
- 84 U.S. Department of Health and Human Services, "U.S. Government Engages Pfizer to Produce Millions of Doses of COVID-19 Vaccine," Press release, July 22, 2020, available at <https://www.hhs.gov/about/news/2020/07/22/us-government-engages-pfizer-produce-millions-doses-covid-19-vaccine.html>; U.S. Department of Health and Human Services, "Trump Administration purchases additional 100 million doses of COVID-19 investigational vaccine from Pfizer," Press release, December 23, 2020, available at <https://www.hhs.gov/about/news/2020/12/23/trump-administration-purchases-additional-100-million-doses-covid-19-investigational-vaccine-pfizer.html>.
- 85 David Austin and Tamara Hayford, "Research and Development in the Pharmaceutical Industry" (Washington: Congressional Budget Office, 2021), available at <https://www.cbo.gov/publication/57126>; Moderna, "Moderna Announces Funding Award from BARDA for \$8 Million with Potential of up to \$125 Million to Accelerate Development of Zika Messenger RNA (mRNA) Vaccine," Press release, September 7, 2016, available at <https://investors.modernatx.com/news-releases/news-release-details/moderna-announces-funding-award-barda-8-million-potential-125>; Johnson & Johnson, "Johnson & Johnson Advances Investigational Ebola Prime-boost Vaccine Regimen with New Partnership," Press release, September 29, 2017, available at <https://www.jnj.com/media-center/press-releases/johnson-johnson-advances-investigational-ebola-prime-boost-vaccine-regimen-with-new-partnership>.
- 86 Jonathan Drew and Zeke Miller, "U.S. to purchase 200 million more doses of COVID-19 shots to speed vaccinations," PBS NewsHour, January 29, 2021, available at <https://www.pbs.org/newshour/health/biden-administration-to-boost-vaccine-supply-amid-shortages>; U.S. Department of Health and Human Services, "Biden Administration purchases additional doses of COVID-19 vaccines from Pfizer and Moderna," Press release, February 11, 2021, available at <https://www.hhs.gov/about/news/2021/02/11/biden-administration-purchases-additional-doses-covid-19-vaccines-from-pfizer-and-moderna.html>.
- 87 Geoff Bennett and Shannon Pettypiece, "Biden announces plan to purchase additional 100 million Johnson and Johnson Covid vaccine doses," NBC News, March 10, 2021, available at <https://www.nbcnews.com/politics/white-house/biden-announce-deal-additional-100-million-johnson-johnson-covid-vaccine-n1260408>.
- 88 U.S. Centers for Disease Control and Prevention, "Frequently Asked Questions about COVID-19 Vaccination," available at <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html> (last accessed March 2021).
- 89 Ibid.
- 90 Korin Miller, "COVID-19 Vaccine Booster Doses May Soon Be a Reality. Here's What Experts Know So Far," Prevention, March 1, 2021, available at <https://www.prevention.com/health/a35644466/covid-19-vaccine-booster-shot/>; Lee Fang, "Drugmakers Promise Investors They'll Soon Hike COVID-19 Vaccine Prices," The Intercept, March 18, 2021, available at <https://theintercept.com/2021/03/18/covid-vaccine-price-pfizer-moderna/>.

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