

# MANUFACTURED CRISIS

How Devastating Drug Price Increases Are Harming  
America's Seniors



## EXECUTIVE SUMMARY

This report examines the history of rising drug prices for the brand-name drugs most commonly prescribed for seniors. Each year, Americans pay more for prescription drugs, and rising drug prices have a disproportionate impact on older Americans.<sup>1, 2</sup> Older individuals, for example, are far more likely to have used at least one prescription drug, as well as a greater number of prescription drugs, in the past 30 days than other Americans.<sup>3</sup> According to the Centers for Disease Control and Prevention, 91% of individuals over the age of 65 reported taking at least one prescription drug, with 67% of all seniors taking at least three prescription drugs, and 41% taking five or more.<sup>4</sup> In 2015 alone, the average retail prices for 768 prescription drugs widely used by older Americans—including 268 brand-name drugs, 399 generic drugs, and 101 specialty drugs—increased 6.4% compared with a general inflation rate of 0.1%.<sup>5</sup> Increases on brand-name drugs were even higher, with retail prices for brand-name drugs widely used by older Americans increasing by an average of 15.5% in 2015—marking the fourth year in a row with a double-digit increase.<sup>6</sup>

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<sup>1</sup> Modern Healthcare, *Price Hikes Doubled Average Drug Price Over 7 Years: AARP* (Feb. 28, 2016) ([www.modernhealthcare.com/article/20160228/NEWS/302219999](http://www.modernhealthcare.com/article/20160228/NEWS/302219999)).

<sup>2</sup> Center for Retirement Research at Boston College, *Seniors Vulnerable to Drug Price Spikes* (Jan. 21, 2016) ([squaredawayblog.bc.edu/squared-away/seniors-vulnerable-to-drug-price-spikes/](http://squaredawayblog.bc.edu/squared-away/seniors-vulnerable-to-drug-price-spikes/)).

<sup>3</sup> Department of Health and Human Services, *Centers for Disease Control and Prevention, National Center for Health Statistics, Health, United States, 2016* (DHHS Publication No. 2017-1232) (May 2017) ([www.cdc.gov/nchs/data/hus/hus16.pdf#079](http://www.cdc.gov/nchs/data/hus/hus16.pdf#079)).

<sup>4</sup> *Id.*

<sup>5</sup> AARP, *Rx Price Watch Report: Trends in Retail Prices of Prescription Drugs Widely Used by Older Americans: 2006-2015* (Dec. 2017) ([www.aarp.org/content/dam/aarp/ppi/2017/11/trends-in-retail-prices-of-prescription-drugs-widely-used-by-older-americans-december.pdf](http://www.aarp.org/content/dam/aarp/ppi/2017/11/trends-in-retail-prices-of-prescription-drugs-widely-used-by-older-americans-december.pdf)).

<sup>6</sup> AARP, *Rx Price Watch: Trends in Retail Prices of Brand Name Prescription Drugs Widely Used by Older Americans, 2006 to 2015* (Dec. 2016) ([www.aarp.org/content/dam/aarp/ppi/2016-12/trends-in-retail-prices-dec-2016.pdf](http://www.aarp.org/content/dam/aarp/ppi/2016-12/trends-in-retail-prices-dec-2016.pdf)).

At the request of Ranking Member Claire McCaskill, the minority staff of the Committee on Homeland Security and Governmental Affairs reviewed price increases in the last five years across the top 20 most-prescribed brand-name drugs for seniors.

## KEY FINDINGS

- As a way to approximate the brand-name drugs most commonly prescribed for seniors, the minority staff identified the 20 most-prescribed brand-name drugs in the Medicare Part D program. In 2015, the top 20 most-prescribed brand-name drugs in Medicare Part D were Advair Diskus, Crestor, Januvia, Lantus/Lantus Solostar<sup>7</sup>, Lyrica, Nexium, Nitrostat, Novolog, Premarin, Proair HFA, Restasis, Spiriva Handihaler, Symbicort, Synthroid, Tamiflu, Ventolin HFA, Voltaren Gel, Xarelto, Zetia, and Zostavax.<sup>8</sup>
- Prices increased for each of these drugs in the last five years. On average, prices for these drugs increased 12% every year for the last five years—approximately ten times higher than the average annual rate of inflation.<sup>9, 10</sup>
- Twelve of these drugs (60%) had their prices increased by over 50% in the five-year period. Thirty-five percent—or six of the 20—had prices increases of over 100%. In one case, the average wholesale acquisition cost for a single drug increased by 477% over a five-year period.<sup>11</sup>
- Although 48 million fewer prescriptions were written for the brand-name drugs most commonly prescribed for seniors between 2012 and 2017, total sales revenue resulting from these prescriptions increased by almost \$8.5 billion during the same period.<sup>12</sup>

<sup>7</sup> Lantus/Lantus Solostar are both insulin glargine drugs used to treat diabetes. Lantus is an injectable drug that is sold as a vial and syringe set. Lantus Solostar is an injectable pen.

<sup>8</sup> Centers for Medicare & Medicaid Services, *Part D Prescriber Data CY 2015: National Summary Table* (May 25, 2017) ([www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html](http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html)).

<sup>9</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018) (internal analysis of IQVIA data).

<sup>10</sup> Federal Reserve Bank of Minneapolis, *Consumer Price Index, 1913-* ([www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913](http://www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913)) (accessed Feb. 28, 2018).

<sup>11</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018).

<sup>12</sup> *Id.* These figures include prescriptions and sales figures nationwide, not just in Medicare Part D.

## BACKGROUND AND METHODOLOGY

Soaring drug prices are driving up health care costs each year. In 2016, prescription drug spending totaled \$328.6 billion.<sup>13</sup> According to the most recent National Health Expenditure (NHE) data published by the Centers for Medicare and Medicaid Services (CMS), retail prescription drug spending grew at an average pace of 4.8% between 2006 and 2015, with two of the highest-growth years occurring in 2014 and 2015 at 12.4% and 9.0%, respectively.<sup>14</sup>

Even with Medicare coverage, many older individuals also face substantial out-of-pocket costs, particularly for specialty and brand-name drugs.<sup>15</sup> In 2013, the latest year for which CMS cost and use data is available, \$1 out of every \$5 that Medicare beneficiaries spent in out-of-pocket health care costs (excluding premiums) went towards prescription drugs.<sup>16</sup>

Medicare beneficiaries' average out-of-pocket health care spending is projected to continue to increase. According to one study, this spending is expected to rise from 41% of beneficiaries' per capita Social Security income in 2013 to 50% in 2030.<sup>17</sup> In 2030, Medicare beneficiaries ages 85 and over are projected to spend a full 87% of their Social Security income—\$4,400 more out of pocket for health care on average—while beneficiaries ages 65 to 74 are projected to spend an additional \$2,000 on out-of-pocket spending on average.<sup>18</sup>

At the request of Ranking Member Claire McCaskill, the minority staff of the Committee on Homeland Security and Governmental Affairs reviewed the history of price increases across the most-prescribed brand-name drugs for seniors over the last five years to better understand the role brand-name drug price increases play in driving health care costs. As a way to approximate the brand-name drugs most commonly prescribed to seniors, the minority staff collected CMS data for the top 20 most commonly prescribed brand-name drugs to Medicare Part D beneficiaries in 2015, the most recent year for which prescriber data is available. Using data from the IQVIA Institute for Human Data Science, National Sales Perspectives, the minority staff evaluated the annual prescription numbers, sales numbers, and weighted prices for the average wholesale acquisition cost for those 20 brand-name drugs.<sup>19</sup> The annual weighted average wholesale acquisition cost is calculated based on the total number of prescriptions for each particular brand-name drug over the course of the year.<sup>20</sup> Using the annual weighted

<sup>13</sup> Centers for Medicare & Medicaid Services, *NHE Fact Sheet* (Dec. 06, 2017) ([www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html](http://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html)).

<sup>14</sup> Quintiles IMS Institute, *Understanding the Drivers of Drug Expenditure in the U.S.* (Sept. 2017) ([www.iqvia.com/institute/reports/understanding-the-drivers-of-drug-expenditure-in-the-us](http://www.iqvia.com/institute/reports/understanding-the-drivers-of-drug-expenditure-in-the-us)).

<sup>15</sup> Kaiser Family Foundation, *10 Essential Facts About Medicare and Prescription Drug Spending* (Nov. 10, 2017) ([www.kff.org/infographic/10-essential-facts-about-medicare-and-prescription-drug-spending/](http://www.kff.org/infographic/10-essential-facts-about-medicare-and-prescription-drug-spending/)).

<sup>16</sup> *Id.*

<sup>17</sup> Kaiser Family Foundation, *Medicare Beneficiaries' Out-of-Pocket Health Care Spending as a Share of Income Now and Projections for the Future* (Jan. 26, 2018) ([www.kff.org/report-section/medicare-beneficiaries-out-of-pocket-health-care-spending-as-a-share-of-income-now-and-projections-for-the-future-report/](http://www.kff.org/report-section/medicare-beneficiaries-out-of-pocket-health-care-spending-as-a-share-of-income-now-and-projections-for-the-future-report/)).

<sup>18</sup> *Id.*

<sup>19</sup> NHE data published by CMS reflects an estimation of net spending for payers (including patients) on prescription drugs using total spending amounts reported by retail and mail order pharmacies. The IQVIA data reflecting the total number of annual prescriptions and annual sales for the top 20 Medicare Part D brand-name drug prescriptions are calculated based on wholesale costs, including invoiced sales by wholesalers and direct sales by manufacturers to customers. IQVIA data incorporates known discounts and rebates available for sales to pharmacies and reported by prescription numbers. However, this information is not widely available and the data typically do not capture off-invoice discounts, coupons, or rebates offered by manufacturers to non-pharmacy customers. However, limited research on net prices available from IQVIA shows that net prices of brand-name drugs are also increasing, but at a slower rate than wholesale acquisition costs. IQVIA Institute for Human Data Science, *Medicines Use and Spending in the U.S.* (May 2017).

<sup>20</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018).

average price for wholesaler acquisition cost, the minority staff determined the approximate increase in drug prices for the top 20 brands.<sup>21</sup> All references to price increases below refer to the wholesale acquisition cost for each product.

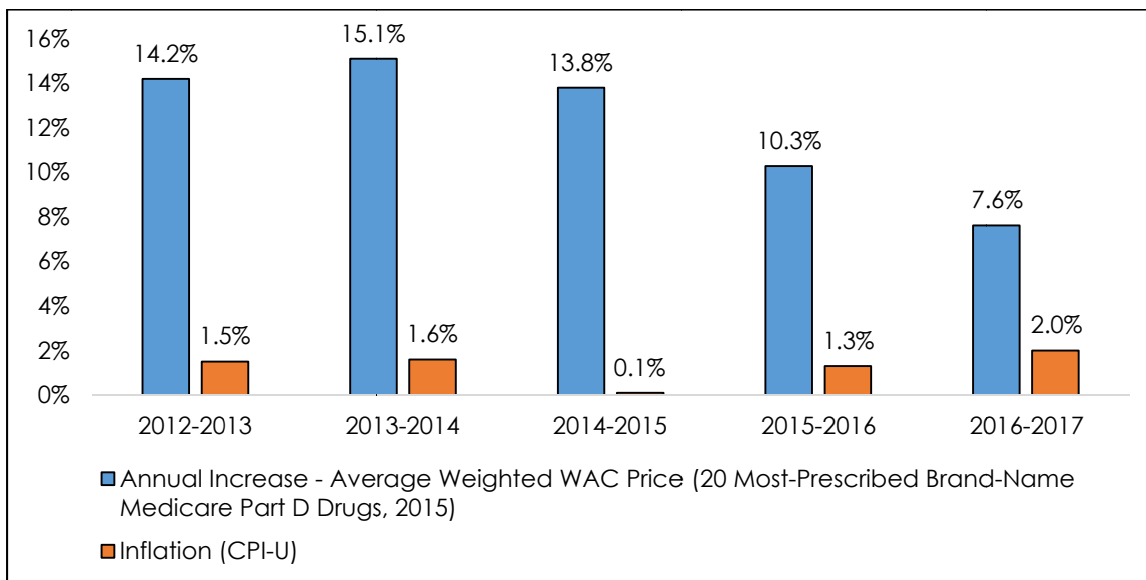
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<sup>21</sup> Typically, the wholesaler acquisition cost (WAC) price reflects the list price. WAC price generally does not account for any coupons or discounts that manufacturers provide insurers, medical providers, and pharmacy benefit managers (PBMs). The annual weighted average WAC price is based on the total number of prescriptions for each particular brand-name drug over the course of the year. However, because of periodic price changes throughout the year, or changes in supply or form of the prescription, drug pricing trends associated with the weighted average WAC price may not accurately reflect the drug pricing trends for the most popular type of prescription for each brand-name drug (i.e., the most popular dosage, form, or length of supply).

## INVESTIGATION OF PRICES FOR DRUGS FOR SENIORS

In 2015, the top 20 most commonly prescribed brand-name drugs for seniors were Advair Diskus, Crestor, Januvia, Lantus/Lantus Solostar, Lyrica, Nexium, Nitrostat, Novolog, Premarin, Proair HFA, Restasis, Spiriva Handihaler, Symbicort, Synthroid, Tamiflu, Ventolin HFA, Voltaren Gel, Xarelto, Zetia, and Zostavax.<sup>22</sup> On average, prices for these drugs increased 12% every year for the last five years—approximately ten times higher than the average annual rate of inflation.<sup>23, 24.</sup> See Figure 1.

Figure 1: Popular Drug Price Change vs. Inflation<sup>26, 27, 28</sup>



All 20 of these drugs experienced consistent price increases over the last five years, with total percentage increases ranging from 31% to 477%. See Figure 2.

<sup>22</sup> Centers for Medicare & Medicaid Services, *Part D Prescriber Data CY 2015: National Summary Table* (May 25, 2017) ([www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html](http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html)). The manufacturers of the top 20 drugs are GlaxoSmithKline (Advair Diskus, Ventolin HFA), AstraZeneca (Crestor, Nexium, Symbicort), Merck & Co., Inc. (Januvia, Zetia, Zostavax), Sanofi-Aventis (Lantus/Lantus Solostar), Pfizer (Lyrica, Nitrostat, Premarin), Novo Nordisk (Novolog), Teva Pharmaceutical Industries (Proair HFA), Allergan (Restasis), Boehringer Ingelheim Pharmaceuticals, Inc. (Spiriva Handihaler), AbbVie Inc. (Synthroid), Hoffmann-La Roche (Tamiflu), Endo Pharmaceuticals, Inc. (Voltaren Gel), Janssen Pharmaceutica (Xarelto).

<sup>23</sup> Centers for Medicare & Medicaid Services, *Part D Prescriber Data CY 2015: National Summary Table* (May 25, 2017) ([www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html](http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html)).

<sup>24</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018).

<sup>25</sup> Federal Reserve Bank of Minneapolis, *Consumer Price Index, 1913-* ([www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913](http://www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913)) (accessed Feb. 28, 2018).

<sup>26</sup> Centers for Medicare & Medicaid Services, *Part D Prescriber Data CY 2015: National Summary Table* (May 25, 2017) ([www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html](http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html)).

<sup>27</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018).

<sup>28</sup> Federal Reserve Bank of Minneapolis, *Consumer Price Index, 1913-* ([www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913](http://www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913)) (accessed Feb. 28, 2018).

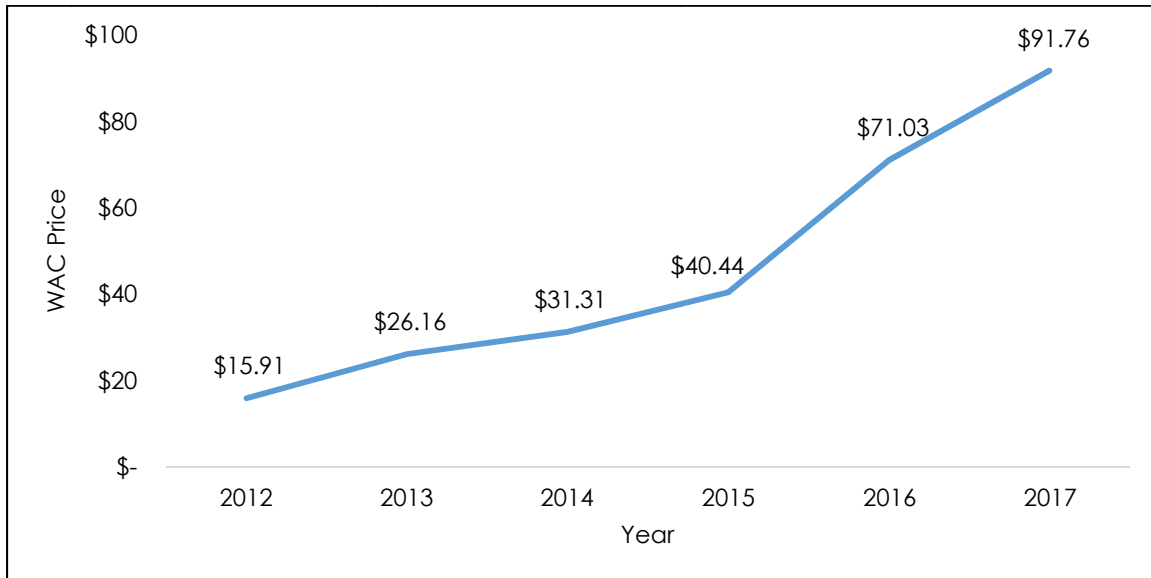
Figure 2: Annual Price Increases of Most Commonly Prescribed Brand-Name Drugs<sup>29</sup>

Product	2012 Annual Weighted Average WAC Price	2017 Annual Weighted Average WAC Price	Average Annual Percent Change (2012-2017)	Percent Change (2012-2017)
<b>Advair Diskus</b>	\$227.60	\$360.86	10%	59%
<b>Crestor</b>	\$349.31	\$615.65	12%	76%
<b>Januvia</b>	\$306.58	\$517.91	11%	69%
<b>Lantus</b>	\$121.88	\$250.24	15%	105%
<b>Lantus Solostar</b>	\$144.15	\$354.12	20%	146%
<b>Lyrica</b>	\$264.43	\$600.35	18%	127%
<b>Nexium</b>	\$256.99	\$368.85	7%	44%
<b>Nitrostat</b>	\$15.91	\$91.76	42%	477%
<b>Novolog Flexpen</b>	\$131.95	\$313.05	19%	137%
<b>Premarin</b>	\$255.94	\$554.60	17%	117%
<b>Proair Hfa</b>	\$39.96	\$54.05	6%	35%
<b>Restasis</b>	\$167.62	\$321.26	14%	92%
<b>Spiriva</b>	\$244.77	\$348.30	7%	42%
<b>Symbicort</b>	\$206.05	\$293.46	7%	42%
<b>Synthroid</b>	\$96.35	\$153.82	10%	60%
<b>Tamiflu</b>	\$97.94	\$143.18	8%	46%
<b>Ventolin</b>	\$34.67	\$50.68	8%	46%
<b>Voltaren Gel</b>	\$35.86	\$50.96	7%	42%
<b>Xarelto</b>	\$258.82	\$449.51	12%	74%
<b>Zetia</b>	\$225.63	\$483.71	16%	114%
<b>Zostavax</b>	\$1,044.36	\$1,363.08	5%	31%

<sup>29</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018).

Manufacturers increased prices by over 50% for 12 out of these 20 drugs—or 60% of the drugs—during the five-year period. Manufacturers increased prices by 100% for six of the 20 drugs—or 35%—during this same period. See Figure 2. Nitrostat<sup>30</sup> had the most significant price increase of all 20 drugs. According to IQVIA data, the weighted average wholesale acquisition cost for Nitrostat increased 477% between 2012 and 2017.<sup>31</sup> See Figures 2 and 3.

Figure 3: Price Increase for Nitrostat<sup>32</sup>



<sup>30</sup> Nitrostat (Nitroglycerin) is used to treat and prevent chest pain. GoodRx, *Nitrostat* ([www.goodrx.com/nitrostat/what-is](http://www.goodrx.com/nitrostat/what-is)) (accessed Feb. 16, 2017).

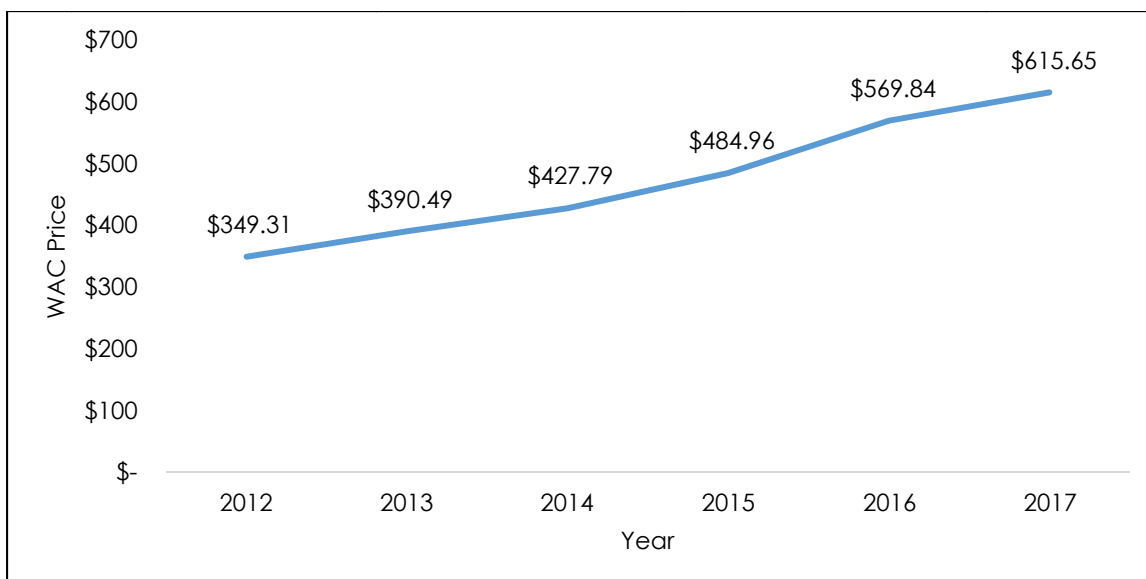
<sup>31</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018).

<sup>32</sup> *Id.*



Even smaller percentage increases can result in significantly higher prices for expensive and commonly prescribed prescription drugs. For example, the third most commonly prescribed drug, Crestor, experienced what appears to be a common price increase of 12% in weighted average wholesale acquisition cost each year for the past five years.<sup>33, 34</sup> These annual price increases resulted in a 76% price increase for Crestor over five years, taking the price from \$349.31 in 2012 to \$615.65 in 2017.<sup>35</sup> See Figure 4.

Figure 4: Price Increase for Crestor<sup>36</sup>



Price increases for the top 20 most commonly prescribed brand-name drugs for seniors have driven an astonishing increase in sales revenue for their manufacturers. Despite the fact that total prescriptions written for these drugs decreased by more than 48 million between 2012 and 2017, total sales revenue resulting from these prescriptions increased by almost \$8.5 billion.<sup>37</sup> See Figure 5.

Figure 5: Total U.S. Prescriptions of Most Commonly Prescribed Brand-Name Drugs<sup>38</sup>

Product	2012 Prescriptions (U.S. total)	2017 Prescriptions (U.S. total)	Prescription Difference (2012-2017)	Percent Change (2012-2017)
<b>Ventolin HFA</b>	17,414,376	27,069,765	9,655,389	55%
<b>Proair HFA</b>	24,873,170	25,977,546	1,104,376	4%
<b>Synthroid</b>	23,073,988	18,411,640	-4,662,348	-20%
<b>Lantus</b>	18,558,937	17,004,123	-1,554,814	-8%
<b>Lantus Solostar</b>	(combined figure)	(combined figure)	(combined figure)	(combined figure)

<sup>33</sup> Centers for Medicare & Medicaid Services, *Part D Prescriber Data CY 2015: National Summary Table* (May 25, 2017) ([www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html](http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/PartD2015.html)).

<sup>34</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D* (2018).

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

Product	2012 Prescriptions (U.S. total)	2017 Prescriptions (U.S. total)	Prescription Difference (2012-2017)	Percent Change (2012-2017)
<b>Advair Diskus</b>	17,018,219	10,700,788	-6,317,431	-37%
<b>Lyrica</b>	9,114,028	10,373,276	1,259,248	14%
<b>Januvia</b>	8,893,922	9,913,198	1,019,276	11%
<b>Symbicort</b>	5,246,325	9,888,532	4,642,207	88%
<b>Xarelto</b>	1,078,207	9,593,823	8,515,616	790%
<b>Spiriva Handihaler</b>	9,625,240	5,759,976	-3,865,264	-40%
<b>Novolog</b>	3,385,303	5,045,237	1,659,934	49%
<b>Restasis</b>	2,818,474	3,037,271	218,797	8%
<b>Nexium</b>	22,021,459	2,246,968	-19,774,491	-90%
<b>Tamiflu</b>	3,316,707	2,143,796	-1,172,911	-35%
<b>Premarin</b>	5,223,690	2,046,125	-3,177,565	-61%
<b>Voltaren Gel</b>	2,954,278	1,964,665	-989,613	-33%
<b>Zetia</b>	7,915,532	1,730,633	-6,184,899	-78%
<b>Crestor</b>	25,337,566	1,604,070	-23,733,496	-94%
<b>Zostavax</b>	2,291,538	1,344,617	-946,921	-41%
<b>Nitrostat</b>	4,273,413	309,442	-3,963,971	-93%
<b>TOTAL</b>	<b>214,434,372</b>	<b>166,165,491</b>	<b>-48,268,881</b>	<b>-33%</b>

## CONCLUSION

Soaring pharmaceutical drug prices remain a critical concern for patients and policymakers alike. Over the last decade, these significant price increases have emerged as a dominant driver of U.S. health care costs—a trend experts anticipate will continue at a rapid pace. Even as the total number of prescriptions for the brand-name drugs most commonly prescribed to seniors has decreased over the past five years, total annual revenue for these drugs continues to increase each year following significant and consistent price increases. These findings underscore the need for further investigation by the Committee and other policymakers into dramatic price spikes and their impact on healthcare system costs and financial burdens for the growing U.S. senior population.

## APPENDIX

Figure 6: List of 20 Drugs and Price Increases (Weighted Average WAC)<sup>39</sup>

Product	2012 WAC Price	Percent Change 2012-2013	2013 WAC Price	Percent Change 2013-2014	2014 WAC Price	Percent Change 2014-2015	2015 WAC Price	Percent Change 2015-2016	2016 WAC Price	Percent Change 2016-2017	2017 WAC Price	CAGR % 2012-2017	Percent Change 2012-2017	2012 Prescriptions (U.S. total) <sup>40</sup>	2017 Prescriptions (U.S. total) <sup>41</sup>
<b>ADVAIR DISKUS 03/2001 GSK</b>	\$227.60	12%	\$254.79	8%	\$276.03	8%	\$297.59	11%	\$330.97	9%	\$360.86	10%	59%	17,018,219	10,700,788
<b>CRESTOR 08/2003 AZN</b>	\$349.31	12%	\$390.49	10%	\$427.79	13%	\$484.96	18%	\$569.84	8%	\$615.65	12%	76%	25,337,566	1,604,070
<b>JANUVIA 10/2006 MSD</b>	\$306.58	8%	\$331.93	16%	\$385.18	17%	\$450.88	8%	\$487.94	6%	\$517.91	11%	69%	8,893,922	9,913,198
<b>LANTUS 05/2001 S.A</b>	\$121.88	24%	\$151.63	41%	\$213.71	16%	\$248.51	0%	\$248.51	1%	\$250.24	15%	105%	18,558,937 (combined figure) <sup>42</sup>	17,004,123 (combined figure) <sup>43</sup>
<b>LANTUS SOLOSTAR 07/2007 S.A</b>	\$144.15	27%	\$182.88	40%	\$255.53	31%	\$333.81	1%	\$336.48	5%	\$354.12	20%	146%		
<b>LYRICA 08/2005 PFZ</b>	\$264.43	20%	\$316.36	21%	\$382.22	20%	\$457.72	13%	\$519.00	16%	\$600.35	18%	127%	9,114,028	10,373,276
<b>NEXIUM 03/2001 AZN</b>	\$256.99	19%	\$305.46	20%	\$367.59	12%	\$411.61	-4%	\$393.39	-6%	\$368.85	7%	44%	22,021,459	2,246,968
<b>NITROSTAT 05/1975 PFZ</b>	\$15.91	64%	\$26.16	20%	\$31.31	29%	\$40.44	76%	\$71.03	29%	\$91.76	42%	477%	4,273,413	309,442
<b>NOVOLOG FLEXPEN 02/2003 N-N</b>	\$131.95	23%	\$162.31	27%	\$206.84	30%	\$267.94	6%	\$283.42	10%	\$313.05	19%	137%	3,385,303	5,045,237
<b>PREMARIN 01/1942 PFZ</b>	\$255.94	16%	\$297.64	17%	\$347.98	18%	\$408.99	19%	\$486.13	14%	\$554.60	17%	117%	5,223,690	2,046,125
<b>PROAIR HFA 12/2004 T9V</b>	\$39.96	10%	\$44.11	7%	\$46.99	5%	\$49.29	4%	\$51.35	5%	\$54.05	6%	35%	24,873,170	25,977,546
<b>RESTASIS 03/2003 ALL</b>	\$167.62	11%	\$185.24	12%	\$207.00	18%	\$244.50	17%	\$285.72	12%	\$321.26	14%	92%	2,818,474	3,037,271
<b>SPIRIVA HANDHALER</b>	\$244.77	9%	\$265.89	6%	\$283.13	7%	\$303.38	6%	\$322.09	8%	\$348.30	7%	42%	9,625,240	5,759,976

<sup>39</sup> IQVIA Institute for Human Data Science, *Top 20 Most Prescribed Brand-Name Drugs Covered By Medicare Part D (2018)*.

<sup>40</sup> These numbers reflect all prescriptions written within the United States, including those not covered under Medicare Part D.

<sup>41</sup> These numbers reflect all prescriptions written within the United States, including those not covered under Medicare Part D.

<sup>42</sup> Lantus/Lantus Solostar are both insulin glargine drugs used to treat diabetes. Lantus is an injectable drug that is sold as a vial and syringe set. The Lantus Solostar is an injectable pen. This chart reflects the prescriptions written for both forms of the single Lantus drug.

<sup>43</sup> Lantus/Lantus Solostar are both insulin glargine drugs used to treat diabetes. Lantus is an injectable drug that is sold as a vial and syringe set. The Lantus Solostar is an injectable pen. This chart reflects the prescriptions written for both forms of the single Lantus drug.

Product	2012 WAC Price	Percent Change 2012- 2013	2013 WAC Price	Percent Change 2013- 2014	2014 WAC Price	Percent Change 2014- 2015	2015 WAC Price	Percent Change 2015- 2016	2016 WAC Price	Percent Change 2016- 2017	2017 WAC Price	CAGR % 2012- 2017	Percent Change 2012- 2017	2012 Prescriptions (U.S. total) <sup>40</sup>	2017 Prescriptions (U.S. total) <sup>41</sup>
<b>05/2004 B.I</b>															
<b>SYMBICORT 06/2007 AZN</b>	\$206.05	8%	\$222.85	8%	\$241.42	8%	\$260.93	6%	\$276.88	6%	\$293.46	7%	42%	5,246,325	9,888,532
<b>SYNTHROID 12/1963 AV1</b>	\$96.35	6%	\$101.71	16%	\$118.35	13%	\$133.82	7%	\$142.89	8%	\$153.82	10%	60%	23,073,988	18,411,640
<b>TAMIFLU 11/1999 ROC</b>	\$97.94	6%	\$104.08	6%	\$110.28	3%	\$113.73	15%	\$131.27	9%	\$143.18	8%	46%	3,316,707	2,143,796
<b>VENTOLIN HFA 02/2002 GSK</b>	\$34.67	7%	\$37.01	6%	\$39.35	7%	\$42.26	16%	\$48.94	4%	\$50.68	8%	46%	17,414,376	27,069,765
<b>VOLTAREN GEL 04/2008 END</b>	\$35.86	2%	\$36.59	11%	\$40.74	11%	\$45.36	6%	\$48.08	6%	\$50.96	7%	42%	2,954,278	1,964,665
<b>XARELTO 07/2011 JAN</b>	\$258.82	11%	\$287.61	10%	\$317.27	14%	\$362.56	11%	\$401.63	12%	\$449.51	12%	74%	1,078,207	9,593,823
<b>ZETIA 11/2002 MSD</b>	\$225.63	12%	\$253.34	15%	\$292.21	15%	\$336.60	23%	\$414.33	17%	\$483.71	16%	114%	7,915,532	1,730,633
<b>ZOSTAVAX 06/2006 MSD</b>	\$1,044.36	11%	\$1,157.74	-10%	\$1,045.09	18%	\$1,234.98	9%	\$1,343.74	1%	\$1,363.08	5%	31%	2,291,538	1,344,617