

DATA POINT

Prescription Pharmaceutical Price Changes since the Release of the President's Drug Pricing Blueprint

August 21, 2018

Executive Summary

- Using manufacturer-reported prescription pharmaceutical prices, we observe that the number of price increases has been reduced considerably since the release of the President's Drug Pricing Blueprint, compared to the same time period in the year prior.
- Since its release, there are 60% fewer brand name product price increases in 2018 compared to the same period in 2017, and 54% more brand and generic product price decreases combined.

Introduction

On May 11, 2018, the President and the Secretary of the Department of Health and Human Services announced a blueprint for taking action against rising prescription drug prices.¹ The Department, through queries of subscription prescription drug pricing compendia, has been tracking changes in the list prices of pharmaceuticals as reported by their manufacturer. This paper compares the number of reported price changes at product levels following the release of the blueprint in 2018, to the same time period in 2017.

Methods

Manufacturers report their price changes at the National Drug Code (NDC) level to independent databases known as pricing compendia. These vendors aggregate this information for purchasers, such as wholesalers, pharmacies, and hospitals. These databases are available for purchase under

subscription licenses allowing for daily updates. The Department acquired licenses to two such databases this year.

Both databases report price changes at the NDC level with sufficient data fields available to aggregate to the product and labeler levels. We define a product as a grouping of NDCs having the same branded name and being sold by the same labeler. For example, Paxil, sold by the manufacturer Apotex, is a different from Paxil CR (a continued release form of the molecule), also sold by Apotex. As a product, Paxil and Paxil CR are identified separately from several generic paroxetine HCl products, sold by over two dozen generic manufacturers. As a result of mergers and acquisitions in these markets, a manufacturer may be responsible for multiple labeler codes. However, not having access to a public database specifically linking labelers to parent manufacturers, we aggregate products only at the labeler level. Large pharmaceutical manufacturers like Pfizer may control more than a dozen labeler codes.

In this data point, we report the number of price increases and decreases at the product level. Our results were robust at the NDC level (the most granular unit of analysis available) and at the

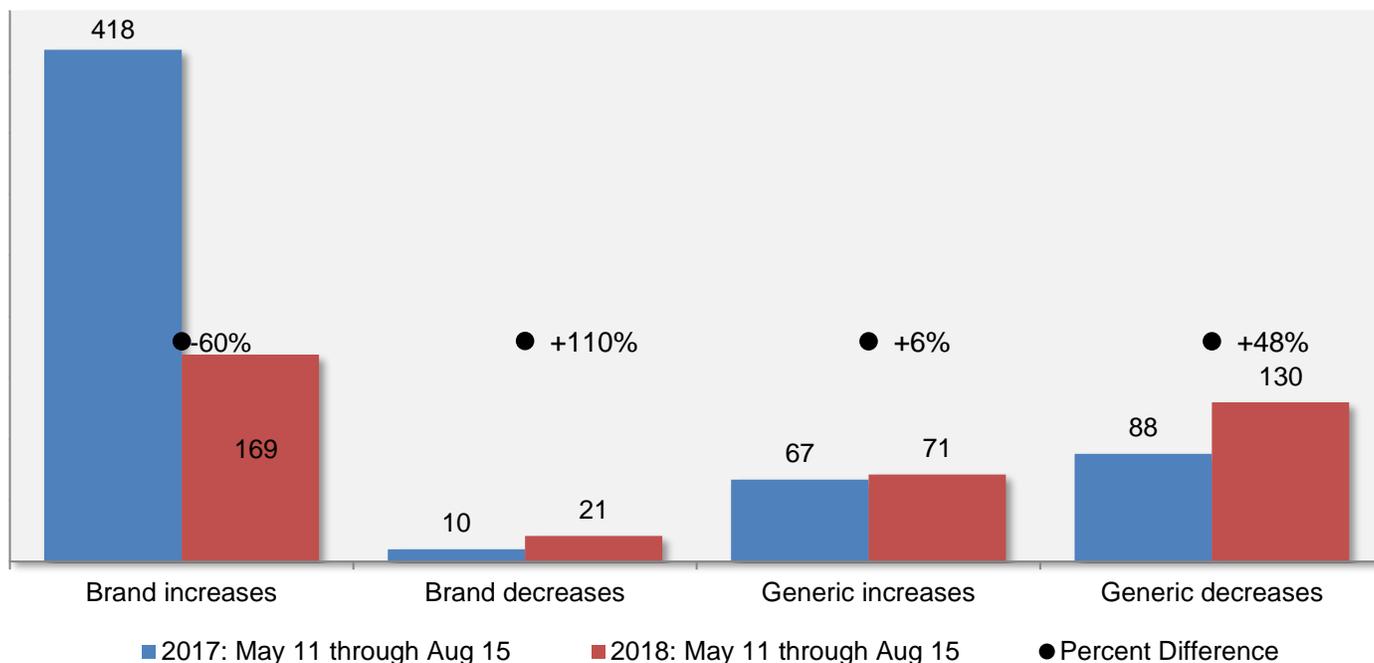
¹ See <https://www.whitehouse.gov/briefings-statements/president-donald-j-trumps-blueprint-lower-drug-prices/>, May 11, 2018; and <https://www.hhs.gov/about/leadership/secretary/speeches/2018-speeches/remarks-on-drug-pricing-blueprint.html>, May 14, 2018.

labeler level (to assess whether manufacturer behavior differs). We present charts at the NDC and labeler levels in the Appendix. We count the number of these changes during the calendar period of May 11 to August 15 of each year, to isolate any changes in pricing behavior that correlate to the period immediately following the release of the Blueprint. We note that historically, July 1 of each year, which occurs within our study window, is the second most frequent price change date. Only January 1 sees more price changes each year. We limit our queries to pharmaceuticals requiring a prescription because labeler decisions to seek over-the-counter status seem unrelated to the release of the blueprint. Otherwise, our queries are broad and intended to capture the range of prescription pharmaceutical products broadly defined. We capture brand and generic drugs, biologics and biosimilars, mass-market and orphan drugs, specialty drugs, and prescription combination products like auto-injectors in these queries, for example.

Results

Between May 11, 2017 and August 15, 2017, price changes were recorded for 592 products. Of these, 485 products (418 brands and 67 generics) had price increases and 98 products had price decreases (10 brand and 88 generic products, respectively). In 2018, over the same time period, only 391 products had price changes – more than 200 fewer products. Brand product price increases occurred 60% less often in the study window during 2018, while generic increases grew 6% (observing 169 brand and 71 generic increases, respectively). Brand price decreases were more than twice as common in 2018 compared to 2017 (21 in 2018 compared to 10 in 2017). Generic price decreases were 48% more frequent (130 in 2018 compared to 88 in 2017). In total, price decreases grew by 54%, year over year. The chart below compares price increases and decreases at the product level, for brand and generic drugs.

Chart: Price Changes by Product, Post Blueprint Period in 2017 compared to the Same Time Period in 2018



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Conclusion

In comparing the two identical time periods in the most two recent calendar years, there are clear reductions in the numbers of price increases taken at the product level. Due to our inability in these databases to link directly to sales volume, we are unable to conclude much about the magnitude of the price changes themselves other than by simple counts and descriptives, or on their effect on overall prescription drug spending. However, if these manufacturer pricing behaviors have changed permanently, we should observe durable effects in National Health Expenditures in the coming years, and in other series such as the Department of Commerce's Bureau of Labor Statistics Consumer and Producer Price Indices,² as possible independent measures.

Given the narrow scope of this paper, we wish to list several important limitations. First, we used only one of the two subscription databases (AnalySource) for which we have a license to generate these charts. However, our experience in using these over the past several months indicates that the databases contain nearly identical information, with the main differences generally being the date on which a price change is noted.

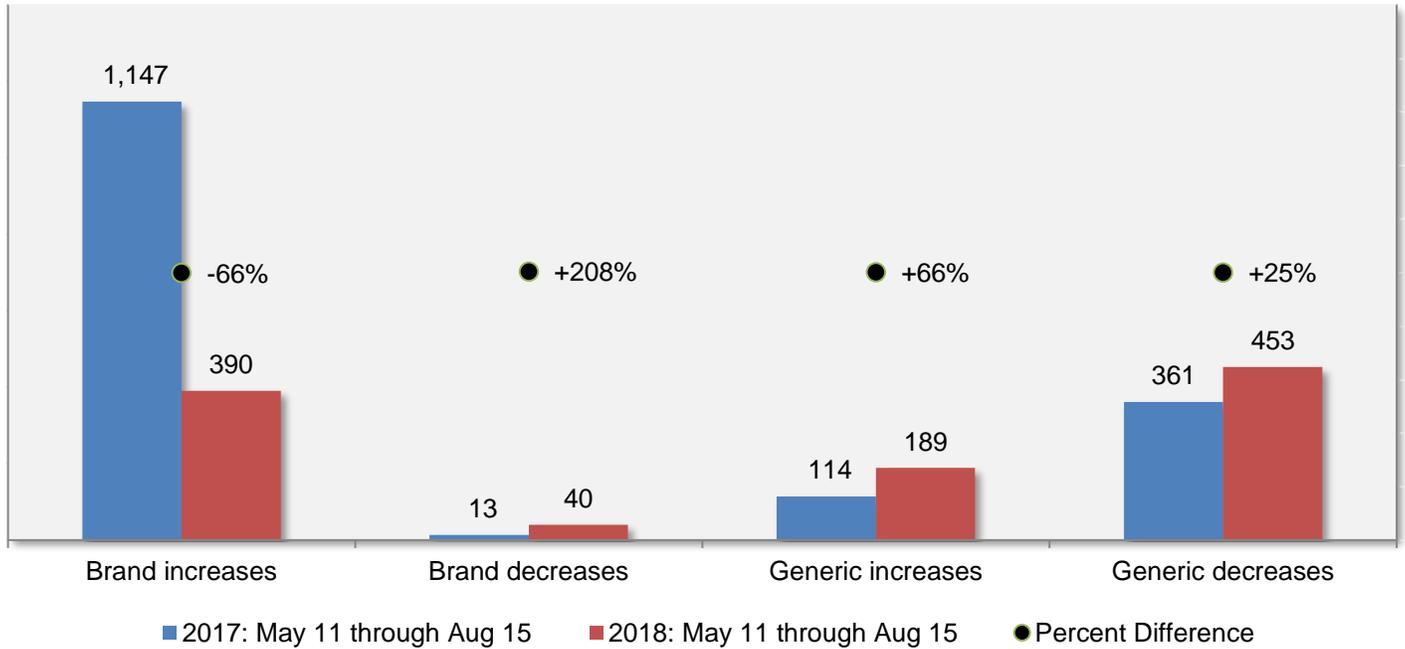
Second, changing prices for existing NDCs is only one method by which a labeler may raise its prices. For example, a labeler could issue new NDCs for existing products, with slight changes in package configuration, which would not yield observable changes to existing NDC package or unit prices. For example, they could sell packages of 30 rather than 28 pills, at a higher cost per pill, under a NDC, and it would not be recorded as a price increase in our screening methodology. Further work we are undertaking will evaluate this potential behavioral response.

Third, the mix of drugs prescribed and dispensed may change in such a way that reporting price changes at the NDC level may not identify the true effect on spending. We cannot, for example, calculate a price index in these databases, because they do not include sales volume information.

The Department will continue to monitor price changes as reported by manufacturers and improve its capabilities to observe changes in behavior at the NDC, product, and labeler levels of aggregation.

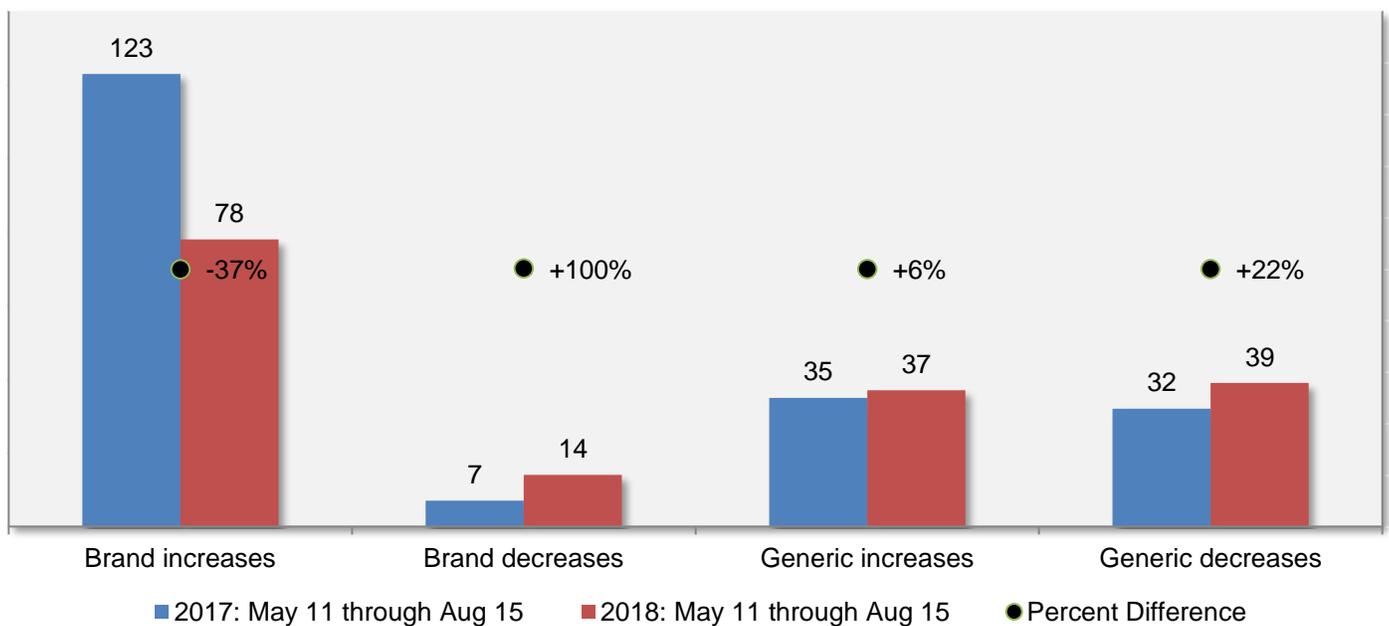
² Available at https://www.bls.gov/ppi/pharmaceuticals_recoded.htm. For a comparison of CPI and PPI for pharmaceuticals, see BLS, <https://www.bls.gov/ppi/pharmpricescomparison.pdf>.

Appendix Chart 1: Price Changes, Post Blueprint Period in 2017 compared to the Same Time Period in 2018, by Count of NDCs



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Appendix Chart 2: Price Changes, Post Blueprint Period in 2017 compared to the Same Time Period in 2018, by Labeler Code



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