HEALTH MANAGEMENT ASSOCIATES

ISSUE BRIEF #2

Medicare Coverage of Drugs That Receive FDA Accelerated Approval

Jennifer Podulka

August 2022

WWW.HEALTHMANAGEMENT.COM

Executive Summary

The Medicare Supplementary Medical Insurance Trust Fund, which includes Part B and Part D, has been and is projected to continue to experience spending growth in excess of Gross Domestic Product growth. Part of this growth is comprised of spending on Part B-covered drugs, which increased nearly 10% per year over the last decade. Part B drugs that are approved through the Food and Drug Administration's accelerated approval pathway are a particular concern for spending growth and potential unintended consequences for quality of care. Congress could require manufacturers of these drugs to offer Medicare a rebate or discount on the price of the drugs until regular full approval is granted. A Medicare drug coverage policy like this could reduce program spending by more than $11 billion over 10 years and improve the quality of care for beneficiaries.

This brief was supported by Arnold Ventures.

Acknowledgements

I thank Arnold Ventures for supporting this work and Alexandra Spratt, Amber Burkhart, Andrea Noda, Erica Socker, and Lee-Lee Ellis for their guidance and support throughout the project. I also express my appreciation to Eric Hammelman for contributions to this issue brief.

Issue

While the impending insolvency of the Medicare Part A Trust Fund receives more attention, the Supplementary Medical Insurance (SMI) Trust Fund that covers Part B and Part D is also experiencing high expenditure growth.[1] Part B and Part D have grown at the average annual rate of 6.7% and 1.0%, respectively, over the last 5 years, compared to Gross Domestic Product (GDP) growth of 4.2% per year.[2] The Medicare Trustees project that Part B and Part D cost growth will continue to exceed GDP growth over then next 5 years, averaging 10.3% and 7.4%, respectively, compared to 5.3%.[3] While the SMI Trust Fund will not become insolvent as by design income increases to meet expenditures, this automatic increase in income through increases in general revenue taxes, federal borrowing, and premiums is a growing strain on taxpayers and beneficiaries.

Medicare pays for prescription drugs and biologic products that are not typically self-administered, mostly those that are administered by infusion or injection in physician offices and hospital outpatient departments, under Part B.[4,5] These payments accounted for only about 5 percent of total Medicare spending in 2019 but have been increasing quickly.[6] Between 2009 and 2019, total spending grew at an average annual rate of 9.7 percent.[7]

---

[1] 2022 annual report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, Boards of Trustees (June 2022)
[2] Ibid
[3] Ibid
[4] For brevity we use "drugs" and lieu of "drugs and biologic products" throughout the rest of this issue brief.
[5] Part B Drugs Payment Systems, MedPAC (November 2021)
[6] Ibid.
[7] Ibid.

Part B drugs include a mix of products, some inexpensive (e.g., vaccines, corticosteroids, vitamin B-12) and some very expensive (e.g., biologics, cancer medications).[8,9] As a result, spending is concentrated in a small number of expensive products. In 2019, the top ten drugs accounted for more than 40 percent of total Part B spending on drugs.[10] Expensive Part B drugs cost tens or hundreds of thousands of dollars a year per patient.[11] This expense affects the Medicare program, beneficiaries, and other insurance that provides secondary coverage. Medicare beneficiaries without supplemental coverage that covers cost-sharing must pay cost sharing of 20 percent for most Part B drugs.[12] Medicare beneficiaries with additional coverage do not bear this financial burden directly, but the costs are passed along to these other payers. For instance, state Medicaid programs pay Medicare cost sharing for beneficiaries who are dually eligible for both programs.[13]

By statute, Medicare pays physicians and suppliers 106 percent of the average sales price (ASP) for most Part B drugs.[14] Physicians and suppliers receive 106 percent of ASP regardless of the actual price they pay for each drug. ASP reflects the average price that the manufacturer receives for sales to most purchasers, generally including manufacturer rebates, discounts, and price concessions.[15] The manufacturer rebate is the return of part of the purchase price by the seller to the buyer. Generally, rebates are employed to provide an incentive for pharmacy benefit managers (PBMs) and health insurers to include the specific drugs on their formularies. For Part B drugs, rebates are made to the clinicians who administer the drugs, which may have some effect on their choice of drug when there are multiple options available.[16]

By statute, Medicare coverage of Part B drugs, like other items and services, is limited to those that are reasonable and necessary for the diagnosis or treatment of an illness or injury.[17] The process for meeting this threshold can begin with Food and Drug Administration (FDA) approval of a new drug and culminates with various Medicare administrative contractors making local

[8] Ibid.

[9] In contrast to most drugs that are chemically synthesized and their structure is known, most biologics are complex mixtures that are not easily identified or characterized. Biologics are isolated from a variety of natural sources - human, animal, or microorganism - and may be produced by biotechnology methods and other cutting-edge technologies. Source: What Are "Biologics" Questions and Answers, FDA (February 2018)

[10] Part B Drugs Payment Systems, MedPAC (November 2021)

[11] Medicare Part B Drug Spending Dashboard, CMS.

[12] Drug Coverage under Different Parts of Medicare, CMS.

[13] Cost-sharing coverage is limited to beneficiaries who are fully eligible for both the Medicare and Medicaid programs, known as Qualified Medicare Beneficiaries (QMBs). Source: Dually Eligible Beneficiaries Under Medicare and Medicaid, CMS. (February 2020)

[14] Part B Drugs Payment Systems, MedPAC (November 2021)

[15] Ibid.

[16] Rena M. Conti, Francis J. Crosson, Allan Coukell, and Richard G. Frank. Reform Medicare Part B To Improve Affordability And Equity. *Health Affairs Blog* (June 2021)

[17] Medicare Coverage Determination Process, CMS (December 2021)

coverage determinations (LCDs) or the Centers for Medicare & Medicaid Services (CMS) making a national coverage determination (NCD.)[18,19]

FDA's drug approval process includes multiple pathways for getting drugs to market. Since 1992, FDA has used an "accelerated approval" process to allow new drugs for serious conditions that fill an unmet medical need to be approved based on a "surrogate endpoint."[20,21] Surrogate endpoints are used in lieu of indications of "clinical benefit," which are indications of positive therapeutic effect that is clinically meaningful in the context of a given disease, such as extended survival time, as these may take longer to determine in clinical trials. Instead, surrogate endpoints measure a marker, such as a "laboratory [value], radiographic image, physical sign or other measure," that indicate that a clinical benefit is likely – but not guaranteed.[22]

The accelerated approval process is designed make new treatments available to seriously ill patients sooner than would be possible otherwise while full "confirmatory trials" are conducted to determine if the drug does, in fact, result in a clinical benefit. This expedited access can be a tremendous boon for patients but comes with a significant possible downside. Confirmatory trials can take years to complete and may yield final results that indicate that the approved drug does not provide a clinical benefit to patients, resulting in the approval being withdrawn. In these situations, patients take prescription medications (many of which come with significant side effects) for years that they later learn were not helping to address their condition. In a worst-case scenario, the drugs could have been detrimental to their health, or a different available medication could have been a better option.

The benefits of Medicare's coverage of drugs that have received an accelerated approval may outweigh the risks in many cases. But this policy appears to be contributing to an unintended consequence that elevates risks to patients in some cases—the ability to continue to receive Medicare payment for drugs may contribute to a delay in results from confirmatory trials. For example, researchers found that between 2009 and 2013, the FDA granted accelerated approval to 22 drugs for 24 indications.[23] (The FDA approves drugs for specific indications (e.g., treatment of certain cancer diagnoses). Qualified providers can then prescribe the approved drug for these "on-label" indications or for other "off-label" indications. For 14 (58%) of the 24 indications granted accelerated approval from 2009 to 2013, results from required confirmatory studies were not available after a median of 5 years of follow-up.[24]

---

[18] Ibid.

[19] James D. Chambers, Katherine E. May, and Peter J. Neumann. Medicare Covers The Majority Of FDA-Approved Devices And Part B Drugs, But Restrictions And Discrepancies Remain. *Health Affairs*, VOL. 32, NO. 6, (June 201).

[20] Accelerated Approval, FDA.

[21] The accelerated approval process that was initially implemented through FDA regulations was subsequently codified in the Food and Drug Administration Safety Innovations Act (FDASIA) of 2012. Source: Accelerated Approval, FDA.

[22] Accelerated Approval, FDA.

[23] Huseyin Naci, Katelyn R. Smalley, Aaron S. Kesselheim, Characteristics of Preapproval and Postapproval Studies for Drugs Granted Accelerated Approval by the US Food and Drug Administration. *JAMA*. 318(7):626–36 (August 2017)

[24] Ibid.

Proposed Policy

One option to encourage the timely completion of confirmatory trials for drugs that have received FDA's accelerated approval is for Congress to enact legislation requiring that these drug manufacturers provide Medicare a 25% of ASP rebate until a confirmatory trial is completed. Congress could opt to apply this policy for all indications of Part B drugs that receive accelerated approval from the FDA or just for those indications that received the accelerated approval. This requirement for Medicare coverage of drugs under Part B would be similar to a recent MACPAC recommendation for Medicaid drug coverage that calls for an increase the minimum rebate percentage on drugs that receive accelerated approval from the FDA and share some similarities with a MedPAC recommendation from 2017 that, among other changes, would require manufacturers to pay Medicare a rebate, in this case when the ASP for their product exceeds an inflation benchmark.[25,26] Such a policy could share this price reduction with beneficiaries by calculating the 20% Part B drug cost sharing based on the reduced price

Proposed Policy

Medicare could require that manufacturers of drugs that receive an accelerated approval from the FDA offer a 25% rebate off of the average sales price to be covered under Medicare Part B until confirmatory trials are completed and the drug has received full FDA approval.

including the new rebate. Physicians and suppliers could essentially be held harmless if Medicare continued to pay them their 6% add-on based on the price excluding the new rebate.

Based on our analysis of data on the drugs that Medicare currently covers under Part B that received only accelerated approvals, we anticipate that requiring a 25% rebate off of ASP for drugs that are approved by the FDA under accelerated approval as proposed, beginning in 2025 would yield savings of more than $12 billion over 10 years. This is designed to be a conservative estimate as Congress could opt to include additional drugs in a 25%-of-ASP-rebate policy, such as those where only some of the drugs' indications received accelerated approval. These estimated savings do not reflect a behavioral response on the part of drug manufacturers in terms of price setting. Affected drug manufacturers might respond to the policy differently from what we have projected, for example by raising prices for other purchasers, thus increasing ASP. Manufacturer responses other than those included in the model could affect the estimated savings.

[25] Addressing High-Cost Specialty Drugs, MACPAC (June 2021)
[26] Report to the Congress: Medicare and the Health Care Delivery System, MedPAC (June 2017)

Potential Savings

Requiring that manufacturers of drugs that receive an accelerated approval from the FDA offer a 25% rebate off of the average sales price to be covered under Medicare Part B until confirmatory trials are completed and the drug has received full FDA approval could yield $11.4 billion in savings to the Medicare program over 10 years.

Of greater importance, requiring a 25% rebate off of ASP for drugs that are approved by the FDA under accelerated approval as proposed would provide a strong incentive to drug manufacturers to complete confirmatory trials in a timely manner. Obtaining these results sooner will benefit affected patients and their providers by providing them with information about the drugs' effects on indications of clinical benefit rather than surrogate endpoints. The results will equip patients and their providers with evidence either confirming that the drug is beneficial for their condition or revealing that the drug has not been shown to improve outcomes of importance to them, and in some instances that the drugs' harms may outweigh its benefits.

Potential Quality of Care Improvement

Requiring that manufacturers of drugs that receive an accelerated approval from the FDA offer a 25% rebate off of the average sales price to be covered under Medicare Part B until confirmatory trials are completed and the drug has received full FDA approval would improve incentives to complete confirmatory trials in a timely manner, enabling patients and their providers to make better-informed treatment decisions.

Methodology and Assumptions

I identified 30 drugs that are currently paid by Medicare Part B and received accelerated approvals between 1995 and 2021 (see Appendix). Using data from the Center for Drug Evaluation and Research (CDER), the FDA Orange Book, and the FDA Purple Book, I determined the date of original approval, the date(s) of accelerated approval for specific indications, and the date(s) of full approval or withdrawal for the same specific indications. I then excluded from my analysis seven products that had received a full approval for at least one indication prior to an accelerated approval for a second indication, as well as eight products that received full approval prior to 2010. Of the remaining 15 products, 13 converted to full approval between 2010 and 2020; weighted by 2020 spending, these 13 products required an average of 35 months to complete their confirmatory trials.

I next measured total Medicare Part B fee-for-service (FFS) spending between 2010 and 2020 for the 15 drugs with only accelerated approvals using CMS's Medicare Part B Drug Spending

Dashboard. I measured both total Part B spending per year, as well as spending limited to the time period between the accelerated approval date and the full approval date for the 13 products which either converted to full approval or were withdrawn between 2010 and 2021. On average, Part B drugs that were only available due to an accelerated approval accounted for 3.1 percent of total Part B drug spending between 2010 and 2020, ranging from a low of 0.5 percent in 2014 to a high of 6.8 percent in 2018.

I then projected total Part B drug spending over the next 10 years, basing this forecast on data from the 2022 Medicare Trustees report. Given the varying historic rate of spending on products with an accelerated approval, I assumed approximately 3.9 percent of total Part B drug spending would be on these products each year over the next decade.

Under the proposed policy, I assumed that my baseline projections for total spending on products with only accelerated approvals would be affected by the combined effect of four elements:

1) A 25% percent rebate off of ASP for drugs available only due to an accelerated FDA approval,
2) 20% Part B drug beneficiary cost sharing based on the reduced price including the new rebate,
3) Physicians' and suppliers' 6% add-on based on the price excluding the new rebate, and
4) A somewhat shorter period between accelerated approval and full approval as manufacturers focused on completing the additional confirmatory trials.

I assumed no behavioral response on the part of drug manufacturers in terms of price setting or in submitting drugs for Medicare coverage. Affected drug manufacturers might respond to the policy differently from what we have projected, for example by raising prices for other purchasers, thus increasing ASP. Manufacturer responses other than those included in the model could affect the estimated savings.

Finally, I made adjustments to the estimated change in spending to account for the budget financing interactions with Part B copays, premiums, Medicaid, and Medicare Advantage.

Appendix

Drug and Biologic Products Currently Covered by Medicare Part B that Received Accelerated Approvals Between 1995 and 2021

Name	Manufacturer	Initial approval date	First accelerated approval date	Conversion status	Conversion date	Months between accelerated approval and conversion
Fabrazyme	Genzyme	Apr-2003	Apr-2003	Converted	Mar-2021	217.7
Doxil	Janssen Products LP	Nov-1995	Nov-1995	Converted	Jun-2008	153
Synercid	King Pharmaceuticals	Sep-1999	Sep-1999	Application Withdrawn	Nov-2010	135.7
Erbitux	Eli Lilly And Company	Feb-2004	Feb-2004	Converted	Jul-2012	102.2
Vectibix	Amgen	Sep-2006	Sep-2006	Converted	May-2014	93.2
Adcetris	Seattle Genetics	Aug-2011	Aug-2011	Converted	Mar-2018	80.2
Temodar	Merck Sharp & Dohme	Aug-1999	Aug-1999	Converted	Mar-2005	68.1
Tecentriq	Genentech	May-2016	May-2016	Indication Withdrawn	Apr-2021	59.7
Remicade	Janssen Biotech	Aug-1998	Aug-1998	Converted	Apr-2003	56
Arzerra	Novartis Pharmaceuticals	Oct-2009	Oct-2009	Converted	Apr-2014	54.5
Perjeta	Genentech	Jun-2012	Sep-2013	Converted	Dec-2017	51.4
Opdivo	Bristol Myers Squibb	Dec-2014	Dec-2014	Converted	Mar-2019	51.2
Remodulin	United Therapeutics	May-2002	May-2002	Converted	Mar-2006	46.6
Imfinzi	Astrazeneca	May-2017	May-2017	Indication Withdrawn	Feb-2021	46.3
Avastin	Genentech	Feb-2004	Feb-2008	Indication Withdrawn	Nov-2011	45.5
Lartruvo	Eli Lilly And Company	Oct-2016	Oct-2016	Application Withdrawn	Feb-2020	40.8
Bavencio	EMD Serono	Mar-2017	Mar-2017	Converted	Jun-2020	39.8
Blincyto	Amgen Inc	Dec-2014	Dec-2014	Converted	Jul-2017	31.7
Camptosar	Pfizer	Jun-1996	Jun-1996	Converted	Oct-1998	28.7
Tysabri	Biogen	Nov-2004	Nov-2004	Converted	Jun-2006	18.6
Eloxatin	Sanofi Aventis	Aug-2002	Aug-2002	Converted	Jan-2004	17.3
Keytruda	Merck Sharp & Dohme Corp	Sep-2014	Sep-2014	Converted	Dec-2015	15.7
Darzalex	Janssen Biotech Inc	Nov-2015	Nov-2015	Converted	Nov-2016	12.4
Folotyn	Allos Therapeutics	Sep-2009	Sep-2009	Not Yet Converted		
Istodax	Teva Pharmaceuticals USA	Nov-2009	Jun-2011	Not Yet Converted		
Elaprase	Shire Human Genetic	Jul-2006	Jun-2013	Not Yet Converted		
Beleodaq	Spectrum Pharmaceuticals	Jul-2014	Jul-2014	Not Yet Converted		
Yervoy	Bristol Myers Squibb	Mar-2011	Jul-2018	Not Yet Converted		
Libtayo	Regeneron	Sep-2018	Feb-2021	Not Yet Converted		
Trodelvy	Immunomedics Inc	Apr-2020	Apr-2021	Not Yet Converted		

Source: HMA analysis of data from the Center for Drug Evaluation and Research (CDER), the FDA Orange Book, and the FDA Purple Book