

## DATA POINT January 24, 2023 (revised October 2, 2023)

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# Insulin Affordability and the Inflation Reduction Act: Medicare Beneficiary Savings by State and Demographics

Under the Inflation Reduction Act, out-of-pocket costs for insulin in Medicare are now capped at \$35 per monthly prescription for Part D, as of January 1, 2023, with a similar cap taking effect in Part B on July 1, 2023. Medicare beneficiaries who use insulin would have saved \$734 million in Part D and \$27 million in Part B if these caps had been in effect in 2020.

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#### **KEY POINTS**

- The Inflation Reduction Act (IRA) caps insulin out-of-pocket spending at \$35 per month's supply of each insulin product covered under a Medicare Part D plan, with similar limits for out-of-pocket costs for insulin supplied under Part B, and reduces out-of-pocket drug spending in Medicare in other ways. These provisions will make insulin more affordable for people covered by Medicare.
- We examined out-of-pocket spending on insulin using 2019 survey data for individuals with Medicare, Medicaid, or private insurance, and for those without health coverage. We then estimated the potential effects of the IRA's insulin cap provisions on out-of-pocket spending for insulin among Medicare beneficiaries using 2020 Medicare claims data.
- Nationally, the average out-of-pocket cost was \$58 per insulin fill, typically for a 30-day supply.
  The average cost per fill among people who were uninsured for the entire year was \$123, more
  than double the national average. Patients with private insurance or Medicare paid about \$63 per
  fill on average.
- About 37 percent of insulin fills for Medicare enrollees (Part B and Part D) required cost-sharing exceeding \$35 per fill, including 24 percent that exceeded \$70 per fill. About 36 percent of insulin fills for people without insurance and 35 percent for people with private insurance had cost sharing above \$35 per fill. These estimates are only for enrollees who filled an insulin prescription and do not include potential costs for patients who did not fill their insulin due to cost or other reasons.
- We estimate that 1.5 million Medicare beneficiaries would have benefited from the new IRA insulin cost-sharing limits if they had been in effect in 2020, with savings to those beneficiaries of about \$734 million in Part D and \$27 million in Part B or approximately \$500 in average annual savings per person among those benefiting from the provision.

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#### **BACKGROUND**

An estimated 37 million Americans, representing about 11.3 percent of the U.S. population, have diabetes. <sup>1</sup> Diabetes is characterized by insulin dysfunction that occurs when the pancreas does not produce enough insulin (type 1 diabetes), or when the body does not respond to insulin properly and/or have enough insulin production to overcome this deficit (type 2 diabetes). <sup>2,3</sup> More than 7 million individuals with diabetes, including all individuals with type 1 diabetes and a substantial number of those with type 2 diabetes, need to use insulin daily to manage their blood sugars and prevent the adverse consequences associated with uncontrolled diabetes. <sup>4</sup>

Although insulin is critical for the patients who require it to manage their illness, it can be expensive. List prices have increased over time, nearly doubling between 2012 and 2016, <sup>5</sup> before stabilizing somewhat in recent years. High insulin prices can contribute to challenges with adherence to prescribed insulin regimens, which can, in turn, lead to complications including ketoacidosis, \* kidney disease, vision loss, and others. <sup>6</sup> These complications are expensive to treat, severely impact patients' quality of life, and may lead to hospitalizations, amputations, and death. <sup>7</sup>

Recognizing the importance of insulin affordability, <sup>†</sup> the Inflation Reduction Act (IRA) of 2022 includes provisions to limit out-of-pocket costs of insulin for people with Medicare, a population with higher prevalence of diabetes (nearly 30 percent) than the general population (about 11 percent). <sup>8, 9</sup> Most people with Medicare coverage access insulin through Medicare Part D, which covers injectable insulin, inhaled insulin, and disposable "patch" pumps. <sup>10</sup> Cost sharing for insulin in Part D varies depending on whether the enrollee qualifies for the Low-Income Subsidy (LIS) and, prior to the IRA, the Part D coverage phase of the enrollee at the time that they obtained insulin. <sup>‡</sup>

Medicare Part B provides coverage for insulin when it is medically required to be administered through non-disposable insulin pumps. <sup>11</sup> Prior to the IRA, under Medicare Part B, beneficiaries were responsible for 20 percent of the cost after they met the Part B deductible, which may have been covered for some beneficiaries by supplemental coverage.

The IRA includes several provisions that limit out-of-pocket spending on insulin for Medicare Part D and Part B enrollees: 12

Effective January 1, 2023, people enrolled in a Medicare Part D prescription drug plan (PDP) or a
Medicare Advantage plan with prescription drug coverage (MA-PD) have no deductible for covered
insulin products and have a copayment cap of \$35 per month supply of each covered insulin product. §

<sup>\*</sup> Ketoacidosis occurs when the body does not have enough insulin to use glucose, the body's normal source of energy, and this condition produces life-threatening metabolic disturbances that can lead to coma and death.

<sup>\*</sup> Recognizing insulin affordability as a key priority, even prior to the IRA, the Centers for Medicare and Medicaid Services launched the Part D Senior Savings Model (PDSS), which tested changes to the Part D benefit design including requirements that enrollees of participating plans would not need to pay more than \$35 for a monthly supply of insulin. Details about the PDSS Model are available here: <a href="https://innovation.cms.gov/innovation-models/part-d-savings-model">https://innovation.cms.gov/innovation-models/part-d-savings-model</a>.

<sup>&</sup>lt;sup>‡</sup> For eligible enrollees whose income and resources are limited, the Medicare Prescription Drug, Improvement and Modernization Act of 2003 established extra help (a subsidy) for prescription drugs, referred to as the Low-Income Subsidy (LIS). Subsidies are paid by the Federal government to drug plans and provide assistance with premiums, deductibles, and co-payments.

<sup>§</sup> Many patients with diabetes requiring insulin therapy have complex insulin regimens that may include a combination of therapies, including insulin with other oral medications or multiple different types of insulin to manage diabetes and reduce risk of serious health effects.

- Effective July 1, 2023, Medicare Part B beneficiaries or those enrolled in a Medicare Advantage plan who use an insulin pump furnished via durable medical equipment will no longer have to pay a deductible for insulin and will have a copayment cap of \$35 per month supply for their Part B covered insulin.
- Effective January 1, 2024, one year after the \$35 cap, eligibility for the Part D LIS will expand. The IRA raises the income limit for certain people covered by Medicare for the full LIS from 135 percent of the Federal Poverty Level (FPL) to 150 percent of FPL, which will allow these enrollees to further reduce their out-of-pocket costs for insulin and other medications.

In this Data Point, we examine out-of-pocket costs of insulin and the average cost per insulin prescription fill by health insurance coverage type. We then examine what would have happened to out-of-pocket spending on insulin among Medicare beneficiaries if the IRA's monthly copayment cap of \$35 for a one-month supply of a covered insulin product had been in effect in 2020. For more information about this research, see our recently released Report to Congress. \*\* 13

#### **METHODS**

We used the 2019 Medicare Expenditure Panel Survey Household Component (MEPS HC) to examine out-of-pocket cost per insulin fill, which was most commonly a 30-day supply of insulin. We also examined the average cost per fill of insulin by the type of health coverage.

Next, we focused specifically on the Medicare population to examine the IRA insulin provisions that aim to reduce out-of-pocket spending and improve affordability of insulin for Medicare enrollees. We used the Medicare Prescription Drug Event, Enrollment, and Part B data files to calculate the total amount enrollees spent on insulin per month. Then for each enrollee, we computed the total amount spent above the IRA's limits on cost sharing for insulin. This allowed us to estimate how much people with Medicare Part D and Part B would have saved in out-of-pocket costs if the IRA insulin out-of-pocket cap had been in effect in 2020. We identified the number of enrollees who would have had lower out-of-pocket costs for insulin and their total savings compared with what they actually paid in 2020, if the insulin cap had been in effect in 2020. These estimates are based on the number of Medicare Part D enrollees who spent more than \$35 in any month of 2020 on insulin in Part D and Part B combined.

We did not model other provisions of the IRA that may impact Medicare enrollees' out-of-pocket spending for insulin, such as the additional effect of LIS expansion, which will be implemented in 2024, or the potential effects of negotiation on prices for selected prescription drugs, which will begin in 2026. Moreover, the estimates presented are based on Medicare enrollees who filled an insulin prescription in 2020 and do not take into account individuals who did not fill their insulin prescription. For Part D, our estimates include both Medicare Advantage prescription drug plans (MA-PD) and prescription drug plans (PDP) enrollees. Except as noted, Part B estimates are only for individuals covered by fee-for-service Medicare.

#### **FINDINGS**

#### **Out-of-Pocket Spending for Insulin**

Table 1 indicates that the overall mean out-of-pocket cost for insulin obtained from retail, mail, and online pharmacies in 2019 was \$58 per fill. Among the prescriptions with reported days supplied, 30 days was the

<sup>\*\*</sup> This Data Point includes selected findings from the Insulin Affordability Report to Congress: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. Report on the Affordability of Insulin. December 16, 2022. https://aspe.hhs.gov/reports/insulin-affordability-rtc

mode and median number of days, indicating that fills typically represent an approximate 30-day supply of insulin. These estimates are only for individuals who filled an insulin prescription in 2019 and do not include estimates for those who did not fill an insulin prescription because of cost or other reasons.

The estimates in Table 1 demonstrate wide variation in the amounts paid in out-of-pocket costs for insulin by type of coverage for prescription drugs. Among people uninsured for the entire year, the average out-of-pocket cost per fill was \$123, more than double the overall average. Patients with private insurance or Medicare both paid \$63 per fill on average. The median overall out-of-pocket payment was substantially lower than the mean at \$9, meaning that half of fills were for that amount or less. The large difference between the mean and median estimates indicates variability in the data and suggests that a subset of patients have a higher out-of-pocket cost burden than the mean or median estimates.

Out-of-pocket costs for uninsured patients would likely have been greater if not for charity care, safety net providers, patient assistance programs, free or sliding scale access through federally qualified health centers and safety net providers, and coupons. †† Availability of some types of insulin at low cost from certain commercial retailers and authorized generic products from manufacturers with no rebates may contribute to reduced costs of insulin for patients who do not have insurance. Similarly, out-of-pocket costs for patients with private insurance would likely have been greater if not for patient assistance programs and coupons. In addition, many patients covered through Marketplace with low incomes qualify for cost-sharing reductions, which reduce their out-of-pocket costs.

Table 1. Median and Mean Out-of-Pocket Cost Per Insulin Fill, by Type of Coverage, 2019

Type of Coverage	Mean		Med	ian
Overall	\$58		\$9	
Private	\$63		\$25	**
Medicare	\$63		\$10	a
Medicaid	\$6	** a	\$0	** a
Uninsured <sup>b</sup>	\$123	**	\$12	

Source: Medical Expenditure Panel Survey (MEPS), 2019. Civilian noninstitutionalized population.

Notes: The insurance categories are treated as mutually exclusive according to the following hierarchy: Medicare (with or without Part D drug coverage, including Medicare only, Medicare and Medicaid, and Medicare and private insurance), private insurance (including private insurance only and Marketplace any time during the year), Medicaid (includes Medicaid only or Medicaid and other government programs), other government programs only, and uninsured (lacked insurance from any source for the entire calendar year). "Medicare" includes fills under Part D (MA-PDP and PDP) and Part B (Fee for Service and Medicare Advantage). "Overall" also includes adults who had insurance through other government programs.

- \* Statistically significantly different from overall at the .05 level.
- \*\* Statistically significantly different from overall at the .01 level.

Figure 1 presents the shares of insulin prescription fills, by type of coverage, for which there was any out-of-pocket spending. Overall, 63 percent of insulin fills required some cost-sharing, with 32 percent of fills

<sup>&</sup>lt;sup>a</sup> Estimates are imprecise due to small sample sizes.

<sup>&</sup>lt;sup>b</sup> For the uninsured population, annual average estimates are from the MEPS, 2014-2019 due to small sample sizes in 2019. Out-of-pocket expenditures on insulin for 2014 to 2018 are inflated to 2019 dollars using the Consumer Price Index for prescription drugs. For overall, private, Medicare, and Medicaid coverage categories, we used the 2019 MEPS data.

<sup>&</sup>lt;sup>††</sup> Manufacturer programs and coupons are treated like other discounts and are not counted as expenditures by the patient or other payers.

requiring more than \$35, and 20 percent requiring more than \$70. Fills for privately insured and uninsured patients were significantly more likely to require cost-sharing than other coverage groups, while most Medicaid beneficiaries with insulin fills had no cost-sharing at all. Among Medicare patients, 68.5 percent had out-of-pocket costs, with 37 percent paying more than \$35 per prescription fill – including nearly a quarter who paid more than \$70 per fill.

While 30 days was the most common prescription length in the dataset, 32 percent of prescriptions lacked information on the number of days supplied, and smaller numbers of prescriptions may represent more or less than a 30-day supply; these factors introduce some uncertainty into our estimates of the proportion of insulin users paying more than \$35 per 30-day supply.

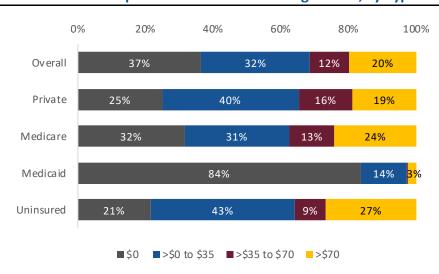


Figure 1. Share of Insulin Prescription Fills with Cost Sharing Per Fill, by Type of Coverage, 2019

Source: Medical Expenditure Panel Survey (MEPS), 2019. Civilian noninstitutionalized population.

Notes: The insurance categories are hierarchical (see Notes to Table 1). "Medicare" includes fills under Part D (MA-PDP and PDP) and Part B (Fee for Service and Medicare Advantage). "Overall" also includes adults who had insurance through other government programs. For overall, private, Medicare, and Medicaid coverage categories, we used the 2019 MEPS data. For the uninsured population, annual average estimates are from the MEPS, 2014-2019 due to small sample sizes in 2019. Out-of-pocket expenditures on insulin for 2014 to 2018 are inflated to 2019 dollars using the Consumer Price Index for prescription drugs.

#### Effects of IRA Insulin Provisions on Out-Of-Pocket Spending for Medicare Enrollees

Our analyses of the impact of the IRA's out-of-pocket insulin cap estimated how much individuals with Medicare Part D and Part B would have saved if these provisions had been in effect in 2020. Table 2 shows that nearly 1,518,000 Part D enrollees would have benefited, saving \$734 million, if the IRA insulin provisions had been in effect in 2020. \*\* Most of the savings would have accrued to enrollees who do not qualify for LIS, which reduces out-of-pocket costs for Part D enrollees who meet income and resource limits.

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<sup>&</sup>lt;sup>‡‡</sup> Our estimate of 1.5 million Part D enrollees who would have had lower out-of-pocket costs for insulin if the IRA provisions had been in effect in 2020 is slightly different from the CMS estimate of 1.4 million (https://www.cms.gov/newsroom/fact-sheets/inflation-reduction-act-lowers-health-care-costs-millions-americans).

### 1.5 million

Medicare beneficiaries would have saved money in Part D, Part B, or both under the IRA's \$35 insulin cap provisions.

Table 2 also shows that the IRA's Part B insulin out-of-pocket cap would have produced additional savings of \$27 million for about 31,000 Part B beneficiaries, or about \$866 per beneficiary in 2020.

There is some overlap between the Part D and Part B insulin users who benefit from the out-of-pocket cap, but some Part B beneficiaries do not have Part D coverage. Overall, about 1.52 million Medicare enrollees would have saved money in Part D, Part B, or both under the IRA's \$35 insulin cap provisions. Combining the estimated Part D and Part B savings, total savings in 2020 would have been \$761 million, or just over \$500 per beneficiary with savings.

Table 2. Estimated Out-of-Pocket Savings If Inflation Reduction Act \$35/month Out-of-Pocket Insulin Cap Had Been in Effect in 2020

	Part D			Part B	Total		
Outcome	Non-LIS	LIS	Total	Total	(Combined Part B and D)		
Total IRA Savings (\$ millions)	\$723.2	\$10.8	\$734.0	\$27.2	\$761.16		
Number of Insulin Users with Savings	1,477,327	76,503	1,517,817	31,376	1,519,856		
Average Savings per Insulin User with Savings (\$)	\$490	\$141	\$484	\$866	\$501		

Source: ASPE analysis of CMS Medicare Part D 2020 Prescription Drug Event (PDE), Enrollment, and Part B data files. LIS = Low-Income Subsidy

Table 3 shows the distribution of savings by gender, race, ethnicity, and age. The estimates indicate that substantial numbers of beneficiaries are likely to benefit from the policy across all demographic groups analyzed. A greater share of 2020 Part D LIS enrollees who would have benefitted from the cap were women, Black, Latino, or below the age of 65 (indicating eligibility for Medicare on the basis of disability or End-Stage Renal Disease) compared to Part D non-LIS enrollees or Part B beneficiaries. Overall, about 1.2 million White beneficiaries, 158,000 Black beneficiaries, 131,000 Latino beneficiaries, 31,000 Asian beneficiaries, and 7,000 American Indian / Alaska Native beneficiaries would have benefitted from the new provision. The majority of enrollees with savings resided in urban areas (about 1.2 million), though a sizeable number resided in rural areas (about 281,000).

Table 3. Demographic Characteristics of Medicare Enrollees with Out-of-Pocket Savings If Inflation
Reduction Act Insulin Provisions Had Been in Effect in 2020

		Part	t D		Part	В	Total	ı
	Non-LIS		LIS		Total			
Category	(n)	%	(n)	%	(n)	%	(n)	%
Gender						,		
Female	708,281	47.9%	43,862	57.3%	16,465	52.5%	732,649	48.2%
Male or Unknown	769,046	52.1%	32,641	42.7%	14,911	47.5%	787,074	51.8%
Race and Ethnicity								
White	1,128,714	76.4%	49,279	64.4%	28,569	91.1%	1,156,344	76.1%
Black	150,764	10.2%	13,818	18.1%	911	2.9%	158,101	10.4%
Latino	125,178	8.5%	10,450	13.7%	606	1.9%	131,102	8.6%
Asian	30,307	2.1%	1,420	1.9%	247	0.8%	30,998	2.0%
AI/AN	6,613	0.4%	520	0.7%	46	0.1%	6,865	0.5%
Other	35,751	2.4%	1,016	1.3%	997	3.2%	36,313	2.4%
Age								
Under 65	115,104	7.8%	20,366	26.6%	4,674	14.9%	128,610	8.5%
65-69	284,559	19.3%	14,413	18.8%	7,722	24.6%	292,574	19.3%
70-74	420,654	28.5%	15,092	19.7%	10,153	32.4%	428,856	28.2%
75-79	319,859	21.7%	11,566	15.1%	5,618	17.9%	325,828	21.4%
80-84	196,240	13.3%	8,281	10.8%	2,356	7.5%	200,272	13.2%
85-89	95,927	6.5%	4,454	5.8%	700	2.2%	97,834	6.4%
90 or Older	44,984	3.0%	2,331	3.0%	153	0.5%	45 <i>,</i> 749	3.0%
Geographic Area								
Urban	1,166,915	79.0%	56,822	74.3%	22,897	73.0%	1,198,078	78.8%
Rural –	159,184	10.8%	9,973	13.0%	4,209	13.4%	164,890	10.9%
Micropolitan	133,184	10.0%	3,313	13.0%	4,209	13.470	104,090	10.5%
Rural – Other	111,719	7.6%	7,696	10.1%	3,324	10.6%	116,082	7.6%
Unclassified	39,509	2.7%	2,012	2.6%	946	3.0%	40,673	2.7%

Source: ASPE analysis of CMS Medicare Part D 2020 Prescription Drug Event (PDE), Enrollment, and Part B data files. <sup>a</sup>Totals represent unduplicated estimates of enrollees benefitting from the cap who are enrolled in both Medicare Part B and Part D. Totals shown in this table are slightly lower than elsewhere in this Data Point due to exclusion of claims from enrollees who could not be matched to the Medicare Part B enrollment database.

LIS = Low-Income Subsidy

AI/AN = American Indian and Alaskan Native

#### Effects of IRA Insulin Provisions on Out-Of-Pocket Spending by State

We also examined the effects of the IRA insulin cap on out-of-pocket spending for people with Medicare coverage in each state. Table 4 shows that across both Medicare Part D and B, 114,000 beneficiaries in Texas, 108,000 in California, and 90,000 in Florida are projected to have the highest number of enrollees that will benefit from the new IRA provision. Among those projected to have out-of-pocket savings, Texas (\$50,395,627), Pennsylvania (\$43,565,423), and Florida (\$42,920,606) have the highest projected savings from the IRA's \$35 insulin caps. North Dakota (\$805), Iowa (\$725), and South Dakota (\$725) have the highest average annual out-of-pocket savings per individual among those with savings. Separate estimates for Medicare Part D and Part B are presented in Appendix Tables A1 and A2.

Table 4. Estimated Out-of-Pocket Savings If Inflation Reduction Act \$35 Out-of-Pocket Insulin Cap Had Been in Effect in 2020, by State

State	Total Number of Enrollees in Part D and B Who Would Experience Savings	Projected IRA Savings (\$)	Mean Annual Out-of-Pocke Savings Per Enrollee with Savings (\$) \$439	
Alabama	29,127	\$12,800,687		
Alaska	1,026	\$613,867	\$598	
Arizona	28,124	\$14,545,058	\$517	
Arkansas	15,559	\$8,395,598	\$540	
California	108,164	\$36,622,758	\$339	
Colorado	16,085	\$8,288,613	\$515	
Connecticut	11,444	\$6,749,195	\$590	
Delaware	6,066	\$2,707,378	\$446	
District of Columbia	650	\$262,462	\$404	
Florida	90,181	\$42,920,606	\$476	
Georgia	45,625	\$21,764,218	\$477	
Hawaii	3,703	\$1,440,292	\$389	
Idaho	7,927	\$4,801,119	\$606	
Illinois	59,718	\$30,975,919	\$519	
Indiana	42,310	\$22,876,374	\$541	
lowa	18,834	\$13,648,044	\$725	
Kansas	15,657	\$10,170,650	\$650	
Kentucky	27,797	\$12,590,086	\$453	
Louisiana	22,071	\$9,095,485	\$412	
Maine	5,976	\$3,169,201	\$530	
Maryland	21,052	\$9,868,664	\$469	
Massachusetts	26,287	\$13,248,195	\$504	
Michigan	66,726	\$26,908,214	\$403	
Minnesota	27,128	\$18,232,052	\$672	
Mississippi	15,366	\$8,344,497	\$543	
Missouri	34,881	\$18,256,529	\$523	
Montana	4,835	\$2,913,023	\$602	
Nebraska	9,716	\$6,576,898	\$677	
Nevada	10,769	\$4,725,569	\$439	
New Hampshire	6,586	\$3,533,326	\$536	
New Jersey	39,641	\$20,239,433	\$511	
New Mexico	8,716	\$3,856,841	\$443	
New York	75,601	\$36,526,747	\$483	
North Carolina	56,921	\$25,580,364	\$449	
North Dakota	4,527	\$3,642,152	\$805	
Ohio	72,854	\$36,536,703	\$502	
Oklahoma	19,556	\$10,417,603	\$533	
Oregon	17,915	\$10,586,279	\$591	
Pennsylvania	80,197	\$43,565,423	\$543	
Rhode Island	4,678	\$2,269,088	\$485	
South Carolina	31,235	\$14,896,443	\$477	

South Dakota	4,568	\$3,313,226	\$725	
Tennessee	39,562	\$19,534,028	\$494	
Texas	114,242	\$50,395,627	\$441	
Utah	11,393	\$7,110,735	\$624	
Vermont	3,118	\$2,153,816	\$691	
Virginia	36,461	\$18,597,268	\$510	
Washington	28,063	\$16,917,285	\$603	
West Virginia	12,656	\$5,706,666	\$451	
Wisconsin	31,935	\$20,064,260	\$628	
Wyoming	2,469	\$1,597,721	\$647	
Total	1.5 million	\$761 million	\$501	

Source: ASPE analysis of CMS Medicare Part D 2020 Prescription Drug Event (PDE), Enrollment, and Part B data files.

#### **CONCLUSION**

Patient out-of-pocket costs impact adherence to insulin, and non-adherence can worsen the rates of diabetes-related complications. <sup>14, 15</sup> High out-of-pocket health care costs can also contribute to financial hardships that impact an individuals' overall health and wellbeing as individuals may have to make tradeoffs between health spending and other basic living necessities. <sup>16</sup> Our analysis of survey and administrative data on insulin costs indicate that 1.5 million Medicare beneficiaries using insulin will experience savings under the IRA's new out-of-pocket spending cap that took effect on January 1, 2023. In addition, the IRA insulin cap may allow increased access to insulin for patients who were previously unable to fill their insulin prescription due to cost. Based on the research evidence on the role of medication adherence in improving outcomes for patients with diabetes, these changes may produce downstream health benefits as well. Future research should monitor the impacts of these new provisions.

#### **APPENDIX**

Table A1. Estimated Medicare Part D Annual Out-of-Pocket Savings If Inflation Reduction Act \$35/month Out-of-Pocket Insulin Cap Had Been in Effect in 2020, by LIS Status and State

State	Non-LIS		L	IS		Total Part D		
	Number with Savings	Total Savings (\$)	Number with Savings	Total Savings (\$)	Number with Savings	Total Savings (\$)	Mean Annual OOP Savings Per Enrollee with Savings (\$)	
Alabama	28,003	\$11,815,018	1,775	\$268,778	29,066	\$12,083,796	\$415.74	
Alaska	990	\$582,152	58	\$5,802	1,023	\$587,953	\$574.73	
Arizona	27,455	\$13,830,586	1,109	\$166,823	28,075	\$13,997,410	\$498.57	
Arkansas	14,841	\$7,805 <i>,</i> 379	1,132	\$177,075	15,521	\$7,982,454	\$514.30	
California	106,345	\$35,250,745	4,022	\$358,146	108,092	\$35,608,891	\$329.43	
Colorado	15,649	\$7,860,192	746	\$103,227	16,062	\$7,963,419	\$495.79	
Connecticut	11,253	\$6,540,640	520	\$18,080	11,433	\$6,558,720	\$573.67	
Delaware	5,933	\$2,536,364	243	\$30,213	6,060	\$2,566,577	\$423.53	
District of Columbia	619	\$252,990	64	\$950	647	\$253,940	\$392.49	
Florida	87,486	\$40,173,151	4,646	\$521,412	90,003	\$40,694,563	\$452.15	
Georgia	43,873	\$20,475,237	2,982	\$362,556	45,532	\$20,837,793	\$457.65	
Hawaii	3,629	\$1,410,522	137	\$20,251	3,701	\$1,430,774	\$386.59	
Idaho	7,717	\$4,623,058	338	\$52,263	7,909	\$4,675,321	\$591.14	
Illinois	58,329	\$29,231,359	2,810	\$330,467	59,642	\$29,561,826	\$495.65	
Indiana	41,389	\$21,695,855	1,896	\$179,074	42,253	\$21,874,929	\$517.71	
lowa	18,358	\$13,062,005	790	\$107,007	18,783	\$13,169,011	\$701.11	
Kansas	15,150	\$9,692,101	836	\$113,857	15,630	\$9,805,958	\$627.38	
Kentucky	26,531	\$11,747,790	2,976	\$286,489	27,750	\$12,034,278	\$433.67	
Louisiana	21,378	\$8,713,930	1,393	\$148,732	22,038	\$8,862,661	\$402.15	
Maine	5,851	\$2,925,752	388	\$6,293	5,967	\$2,932,045	\$491.38	
Maryland	20,285	\$9,209,453	1,155	\$189,666	20,996	\$9,399,119	\$447.66	
Massachusetts	25,790	\$12,695,158	961	\$121,436	26,264	\$12,816,594	\$487.99	
Michigan	65,305	\$25,804,236	2,540	\$388,152	66,674	\$26,192,388	\$392.84	
Minnesota	26,570	\$17,248,122	1,025	\$156,585	27,083	\$17,404,707	\$642.64	
Mississippi	14,765	\$7,668,044	935	\$138,816	15,336	\$7,806,860	\$509.05	
Missouri	33,782	\$17,205,616	1,874	\$252,922	34,817	\$17,458,538	\$501.44	
Montana	4,692	\$2,744,380	218	\$34,469	4,829	\$2,778,849	\$575.45	
Nebraska	9,466	\$6,197,689	440	\$57,578	9,702	\$6,255,267	\$644.74	
Nevada	10,499	\$4,554,867	429	\$61,393	10,755	\$4,616,260	\$429.22	
New Hampshire	6,398	\$3,327,493	333	\$49,725	6,572	\$3,377,218	\$513.88	
New Jersey	38,813	\$19,425,572	1,630	\$263,276	39,612	\$19,688,849	\$497.04	
New Mexico	8,452	\$3,692,046	473	\$58,173	8,702	\$3,750,219	\$430.96	
New York	73,739	\$35,101,368	4,280	\$481,505	75,526	\$35,582,873	\$471.13	
North Carolina	54,677	\$23,913,854	3,637	\$554,791	56,848	\$24,468,645	\$430.42	
North Dakota	4,443	\$3,519,944	165	\$28,390	4,522	\$3,548,334	\$784.68	
Ohio	71,057	\$35,024,530	3,382	\$472,564	72,798	\$35,497,094	\$487.61	

Oklahoma	18,972	\$9,959,808	980	\$142,137	19,524	\$10,101,945	\$517.41
Oregon	17,408	\$10,181,803	816	\$125,532	17,891	\$10,307,335	\$576.12
Pennsylvania	77,935	\$41,238,148	4,028	\$662,135	80,108	\$41,900,282	\$523.05
Rhode Island	4,522	\$2,146,243	273	\$37,724	4,675	\$2,183,967	\$467.16
South Carolina	30,164	\$14,015,620	1,820	\$301,840	31,179	\$14,317,459	\$459.20
South Dakota	4,450	\$3,175,345	198	\$29,276	4,558	\$3,204,621	\$703.08
Tennessee	38,074	\$18,055,834	2,403	\$375,905	39,494	\$18,431,739	\$466.70
Texas	110,446	\$48,013,573	6,511	\$955,289	114,122	\$48,968,862	\$429.09
Utah	11,183	\$6,850,762	349	\$60,050	11,378	\$6,910,811	\$607.38
Vermont	2,981	\$2,030,768	244	\$49,463	3,117	\$2,080,231	\$667.38
Virginia	35,343	\$17,595,051	1,876	\$267,486	36,405	\$17,862,537	\$490.66
Washington	27,253	\$16,147,677	1,305	\$198,890	27,985	\$16,346,568	\$584.12
West Virginia	12,133	\$5,411,873	843	\$149,416	12,642	\$5,561,289	\$439.91
Wisconsin	31,439	\$19,348,080	1,121	\$111,812	31,895	\$19,459,892	\$610.12
Wyoming	2,410	\$1,511,413	108	\$10,092	2,464	\$1,521,505	\$617.49

Source: ASPE analysis of CMS Medicare Part D 2020 Prescription Drug Event (PDE) and Enrollment data files.

OOP = Out-of-Pocket

Table A2. Estimated Medicare Part B Annual Out-of-Pocket Savings If Inflation Reduction Act \$35/month Out-of-Pocket Insulin Cap Had Been in Effect in 2020, by State

State	Number with Savings	Total Savings (\$)	Mean Annual OOP Savings Pe Enrollee with Savings
Alabama	679	\$716,891	\$1,056
Alaska	41	\$25,913	\$632
Arizona	727	\$547,648	\$753
Arkansas	459	\$413,144	\$900
California	1,332	\$1,013,795	\$761
Colorado	450	\$324,247	\$721
Connecticut	205	\$190,475	\$929
Delaware	159	\$140,386	\$883
District of Columbia	12	\$8,522	\$710
Florida	2,433	\$2,225,736	\$915
Georgia	1,052	\$926,236	\$880
Hawaii	15	\$9,518	\$635
Idaho	195	\$125,798	\$645
Illinois	1,559	\$1,412,609	\$906
ndiana	1,170	\$1,000,730	\$855
lowa	754	\$474,335	\$629
Kansas	583	\$363,689	\$624
Kentucky	558	\$555,808	\$996
Louisiana	279	\$232,811	\$834
Maine	273	\$237,156	\$869
Maryland	543	\$469,439	\$865
Massachusetts	518	\$431,601	\$833
Michigan	843	\$715,826	\$849
Minnesota	945	\$793,885	\$840
Mississippi	604	\$537,637	\$890
Missouri	880	\$797,746	\$907
Montana	177	\$134,174	\$758
Nebraska	454	\$320,834	\$707
Nevada	146	\$109,309	\$749
New Hampshire	180	\$156,109	\$867
New Jersey	585	\$550,309	\$941
New Mexico	148	\$106,622	\$720
New York	989	\$943,874	\$954
North Carolina	1,239	\$1,111,681	\$897
North Dakota	108	\$79,880	\$740
Ohio	1,154	\$1,038,659	\$900
Oklahoma	361	\$315,658	\$874
Oregon	396	\$278,944	\$704
Pennsylvania	1,651	\$1,665,126	\$1,009
Rhode Island	95	\$85,121	\$896
South Carolina	664	\$578,953	\$872

South Dakota	155	\$99,248	\$640	
Tennessee	1,071	\$1,101,514	\$1,028	
Texas	1,645	\$1,425,196	\$866	
Utah	240	\$199,924	\$833	
Vermont	94	\$73,584	\$783	
Virginia	802	\$734,731	\$916	
Washington	751	\$570,156	\$759	
West Virginia	192	\$145,377	\$757	
Wisconsin	698	\$576,426	\$826	
Wyoming	104	\$76,216	\$733	

Source: ASPE analysis of CMS Medicare Enrollment and Part B data files. OOP = Out-of-Pocket

#### **REFERENCES**

- <sup>1</sup> Centers for Disease Control and Prevention. (2022, June 29). *National Diabetes Statistics Report.* Centers for Disease Control and Prevention. Retrieved November 28, 2022, from <a href="https://www.cdc.gov/diabetes/data/statistics-report/index.html">https://www.cdc.gov/diabetes/data/statistics-report/index.html</a>
- <sup>2</sup> Martinez, R. (Ed.). (2022, January 24). *Pancreas hormones*. Endocrine Society. Retrieved November 28, 2022, from <a href="https://www.endocrine.org/patient-engagement/endocrine-library/hormones-and-endocrine-function/pancreas-hormones">https://www.endocrine.org/patient-engagement/endocrine-library/hormones-and-endocrine-function/pancreas-hormones</a>
- <sup>3</sup> American Diabetes Association. (2022). *Insulin and Other Injectables. Insulin Basics*. Retrieved November 28, 2022, from https://diabetes.org/healthy-living/medication-treatments/insulin-other-injectables/insulin-basics
- <sup>4</sup> Cefalu, W. T., Dawes, D. E., Gavlak, G., Goldman, D., Herman, W. H., Van Nuys, K., Powers, A. C., Taylor, S. I., Yatvin, A. L. (2018, May 11). *Insulin access and affordability working group: Conclusions and recommendations*. American Diabetes Association. Retrieved January 23, 2023, from <a href="https://diabetesjournals.org/care/article/41/6/1299/36487/Insulin-Access-and-Affordability-Working-Group">https://diabetesjournals.org/care/article/41/6/1299/36487/Insulin-Access-and-Affordability-Working-Group</a>
- <sup>5</sup> Cefalu, W. T., Dawes, D. E., Gavlak, G., Goldman, D., Herman, W. H., Van Nuys, K., Powers, A. C., Taylor, S. I., Yatvin, A. L. (2018, May 11). *Insulin access and affordability working group: Conclusions and recommendations*. American Diabetes Association. Retrieved January 23, 2023, from <a href="https://diabetesjournals.org/care/article/41/6/1299/36487/Insulin-Access-and-Affordability-Working-Group">https://diabetesjournals.org/care/article/41/6/1299/36487/Insulin-Access-and-Affordability-Working-Group</a>
- <sup>6</sup> Gafney, A, Himmelstein, D, & Woolhandler, S. (2022) Prevalence and correlates of patient rationing of insulin in the United States: A National Survey. *Annals of Internal Medicine Letters*, 175(11), 1623-1626
- <sup>7</sup> Stanley, T. (2019, January 7). What happens when a lifesaving drug becomes intolerably expensive? The Washington Post. Retrieved November 28, 2022, from <a href="https://www.washingtonpost.com/news/magazine/wp/2019/01/07/feature/insulin-is-a-lifesaving-drug-but-it-has-become-intolerably-expensive-and-the-consequences-can-be-tragic/">https://www.washingtonpost.com/news/magazine/wp/2019/01/07/feature/insulin-is-a-lifesaving-drug-but-it-has-become-intolerably-expensive-and-the-consequences-can-be-tragic/</a>
- <sup>8</sup> Centers for Medicare and Medicaid Services. (2020). "Diabetes period prevalence by state, 2020." Retrieved from: <u>b2-diabetes-state-current-year.ipg</u> (1536×600) (ccwdata.org)
- <sup>9</sup> Centers for Medicare and Medicaid Services. "Diabetes disparities in Medicare fee-for-service beneficiaries. Retrieved from: <u>Diabetes Disparities in Medicare (cms.gov)</u>
- <sup>10</sup> Centers for Medicare and Medicaid Services. "Your Medicare Coverage: Insulin." Retrieved from: https://www.medicare.gov/coverage/insulin
- <sup>11</sup> Centers for Medicare and Medicaid Services. "Your Medicare Coverage: Insulin." Retrieved from: <a href="https://www.medicare.gov/coverage/insulin">https://www.medicare.gov/coverage/insulin</a>
- <sup>12</sup> United States Congress. (2022, August 16). *Text H.R.5376 117th Congress (2021-2022): Inflation reduction act.* Congress.gov. Retrieved January 23, 2022, from <a href="https://www.congress.gov/bill/117th-congress/house-bill/5376/text">https://www.congress.gov/bill/117th-congress/house-bill/5376/text</a>
- <sup>13</sup> Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. Report on the Affordability of Insulin. December 16, 2022. <a href="https://aspe.hhs.gov/reports/insulin-affordability-rtc">https://aspe.hhs.gov/reports/insulin-affordability-rtc</a>
- <sup>14</sup> McAdam-Marx, C., Ruiz-Negron, N., Sullivan, J. M., & Tucker, J. M. (2022). The effects of patient out-of-pocket costs for insulin on medication adherence and health care utilization in patients with commercial insurance; 2007-2018. *Journal of Managed Care & Specialty Pharmacy*, 28(5), 494–506. <a href="https://doi.org/10.18553/jmcp.2022.21481">https://doi.org/10.18553/jmcp.2022.21481</a>
- <sup>15</sup> Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. Report on the Affordability of Insulin. December 16, 2022. <a href="https://aspe.hhs.gov/reports/insulin-affordability-rtc">https://aspe.hhs.gov/reports/insulin-affordability-rtc</a>
- <sup>16</sup> Stanley, T. (2019). "Insulin is a lifesaving drug, but it has become intolerably expensive. And the consequences can be tragic." *Washington Post*, January 7. <a href="https://www.washingtonpost.com/news/magazine/wp/2019/01/07/feature/insulinis-a-lifesaving-drug-but-it-has-become-intolerably-expensive-and-the-consequences-can-be-tragic/">https://www.washingtonpost.com/news/magazine/wp/2019/01/07/feature/insulinis-a-lifesaving-drug-but-it-has-become-intolerably-expensive-and-the-consequences-can-be-tragic/</a>

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