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# Assessing the Value of D-SNP Enrollment for Partial-Benefit Dually Eligible Individuals: D-SNP Enrollment Among Full and Partial-Benefit Dually Eligible Individuals—Final Report

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## I. Background and study purpose

### A. Policy relevance

Partial-benefit dually eligible (PBDE) individuals are Medicare enrollees who are also eligible for Medicaid assistance with Medicare premiums (and in some cases, Medicare cost sharing) but are not eligible for other state Medicaid benefits. PBDE individuals have similar medical needs to full-benefit dually eligible (FBDE) individuals (that is, those eligible for full Medicaid benefits) (ATI Advisory 2021). Yet although about 40 percent of all FBDE individuals qualify for Medicaid long-term services and supports including institutional or home- and community-based services (MedPAC and MACPAC 2018), PBDE individuals do not qualify for Medicaid-funded long-term services and supports because they have income and assets that exceed state eligibility standards or because their need for assistance with activities of daily living does not meet institutional level of care criteria. Still, some PBDE individuals are at risk of becoming FBDE individuals over time as their financial circumstances and care needs change.

In 2019, more than half (52 percent) of PBDE individuals were enrolled in any type of Medicare Advantage (MA) plan, which is higher than the percentage of FBDE individuals (36 percent) and those with only Medicare coverage (35 percent) enrolled in these plans (CMS 2021). In all states that operate MA Dual Eligible Special Needs Plans (D-SNPs), FBDE individuals have option to enroll.<sup>2</sup> PBDE individuals also have the option of enrolling in a

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### Key Findings

- About 22 percent of individuals dually eligible for Medicare and Medicaid with partial benefits (more than one of every five) were enrolled in Dual Eligible Special Needs Plans (D-SNPs) in 2020, an increase from 17 percent in 2018.
  - About 30 percent of D-SNP enrollees were partial-benefit dually eligible individuals, which remained largely constant during the three-year period.
  - Each year, about 8 to 9 percent of partial-benefit dually eligible individuals became full-benefit dually eligible individuals. Among those who transitioned from partial to full benefits, about 18 percent were enrolled in D-SNPs in 2020, an increase from 12 percent in 2018.
  - The distribution of D-SNP enrollment and switching to full benefits from partial benefits varied by state and individual characteristics, including age, sex, race and ethnicity, original reason for entitlement, and urbanity (that is, urban versus rural residence).▲
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<sup>2</sup> D-SNPs are specialized MA plans serving only dually eligible individuals.

D-SNP in most states, but a few states restrict D-SNP enrollment to FBDE individuals.<sup>3</sup> D-SNPs are required by federal law to coordinate Medicare and Medicaid benefits and provide care coordination services for their members, which can improve care outcomes and generate cost savings over the long term.<sup>4</sup> Regular MA plans and MA D-SNPs also provide supplemental benefits to enrollees, which might help PBDE individuals by slowing or preventing decline in health and function that leads to more costly use of Medicaid long-term services and supports over time if they become eligible for such services.

Yet little is known about PBDE individuals' enrollment in D-SNPs. The share of PBDE individuals enrolled in D-SNPs has thus far not been reported, and it is unclear whether D-SNP enrollment patterns among PBDE individuals vary across states or differ by individual characteristics. Nor is it known how many PBDE individuals enrolled in D-SNPs transition to full benefits relative to those who were previously enrolled in traditional fee-for-service (FFS) Medicare and regular MA plans. Understanding these enrollment patterns can help inform future studies, including analyses about whether PBDE individuals who become FBDE individuals benefit from the care coordination and other services they received as a D-SNP enrollee, or whether D-SNP enrollment affects the health and long-term care trajectories of PBDE D-SNP enrollees. These types of analyses can help determine whether D-SNP enrollment helps PBDE individuals, informing policy debates regarding whether to restrict D-SNP enrollment to FBDE individuals (as some states already have done).

## B. Research questions

To better understand the potential value of D-SNP enrollment for PBDE individuals, we address the following research questions:

1. What proportion of PBDE individuals are enrolled in D-SNPs, Program of All-Inclusive Care for the Elderly (PACE), or Medicare-Medicaid Plans (MMPs) compared with the proportions enrolled in regular MA plans and traditional FFS Medicare nationally, and how does this vary by state and individual characteristics?<sup>5</sup>
2. What proportion of D-SNP enrollees (nationally and by state and individual characteristics) are PBDE versus FBDE individuals?
3. Among PBDE individuals who become FBDE individuals, how many were enrolled in D-SNPs, PACE or MMPs, regular MA plans, and traditional FFS Medicare prior to the switch, and how does this vary by state and individual characteristics?

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<sup>3</sup> In 2021, seven states restricted D-SNP enrollment to FBDE individuals, and 38 states allowed PBDE individuals to enroll in D-SNPs (Mathematica's analysis of states' 2021 contracts with D-SNPs). Of the 38 states that allowed PBDE individuals to enroll in D-SNPs in 2021, three (Pennsylvania, Tennessee, and Virginia) required D-SNPs to use separate plan benefit packages to serve full- and partial-benefit dually eligible members.

<sup>4</sup> The Medicare Improvements for Patients and Providers Act of 2008, as amended by the Affordable Care Act of 2010, requires all MA D-SNPs to contract with the state Medicaid agency in each state in which they operate. At a minimum, the contract must meet the requirements at 42 CFR 422.107, including a description of how the D-SNP will "coordinate the delivery of Medicaid benefits for individuals who are eligible for such services." In addition, federal law requires D-SNPs to set forth a model of care that meets SNP model-of-care standards and has earned approval from the National Committee for Quality Assurance. See the model-of-care standards at <https://snpmoc.ncqa.org/resources-for-snps/scoring-guidelines/>.

<sup>5</sup> We separated PACE and MMPs from other MA plans because these plans provide comprehensive Medicare and Medicaid benefits to dually eligible individuals, and many D-SNPs only coordinate Medicaid benefits.

## II. Data and methods

### A. Data sources and study cohort

We used Medicare data, including the Medicare Beneficiary Summary File (MBSF) and two publicly available reports from the Centers for Medicare & Medicaid Services (CMS), to analyze the proportion of PBDE individuals enrolled in different Medicare coverage types (D-SNP, PACE or MMP, regular MA, and traditional FFS Medicare) from 2018 through 2020 as well as the proportion of D-SNP enrollees who were PBDE versus FBDE individuals during the study period. We used U.S. Census data to obtain information about whether each individual’s residence county was rural or urban.

For each study year, we restricted our analysis to Medicare enrollees living in the 50 states or Washington, DC.<sup>6</sup> We identified dually eligible individuals as those with at least one month of dual eligibility in each calendar year. We defined PBDE individuals as those with at least one month of partial-benefit dual eligibility during the calendar year and FBDE individuals as those who had full-benefit coverage for all months with dual eligibility of the year. Table 1 shows the final sample sizes for each year.

**Table 1. Study sample**

Year	All dually eligible individuals	Partial-benefit dually eligible individuals		Full-benefit dually eligible individuals	
	Number	Number	Percent	Number	Percent
2018	12,187,318	3,790,452	31.1	8,396,866	68.9
2019	12,337,027	3,883,864	31.5	8,453,163	68.5
2020	12,474,539	3,750,949	30.1	8,723,590	69.9

Source: Mathematica’s analysis of 2018-2020 MBSF.

Notes We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dual eligibility in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year.

MBSF = Medicare Beneficiary Summary File.

**Coverage type.** In each year, we identified all D-SNPs in each state from the SNP comprehensive reports and all PACE organizations and MMPs in each state from the MA Contract Service Area by State and County reports.<sup>7</sup> We used this information to code individual-level plan information in the MBSF so we could identify whether each individual was enrolled in a D-SNP, PACE organization, MMP, regular MA plan, or traditional FFS Medicare.

**Individual characteristics.** We also defined select individual characteristics based on the MBSF, including age group (younger than 65, 65 to 74, 75 to 84, and 85 and older), sex (male versus female), race and ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, and other), original reason for Medicare entitlement (age, disability, and end-stage renal disease), and urbanity (urban versus rural

<sup>6</sup> Although Puerto Rico has D-SNPs, the territory does not have any PBDE individuals because Medicare Savings Program benefits are not available in Puerto Rico.

<sup>7</sup> Both reports are available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAAdvPartDENrolData>.

residence). We measured age at the end of the year and based urbanity on the residence county in the first month of the year when the individual was dually eligible.

## B. Descriptive analysis

We produced descriptive output nationally, by state, and by individual characteristics for each year from 2018 to 2020, including the proportion of PBDE individuals enrolled in each type of Medicare coverage, the proportion of dually eligible D-SNP enrollees who were PBDE versus FBDE individuals in each study year, the number of PBDE individuals who became FBDE individuals during each study year (which we will call switchers), and the proportion of switchers who were enrolled in each type of Medicare coverage prior to their switch.

## III. Results

Nationally, the proportion of PBDE individuals enrolled in D-SNPs increased from 16.7 percent in 2018 to 22.3 percent in 2020, as did the share enrolled in regular MA plans, increasing from 30.7 percent in 2018 to 36.1 percent in 2020 (Table 2). The proportion enrolled in traditional FFS Medicare decreased from 52.3 percent in 2018 to 41.5 percent in 2020, and the proportion enrolled in a PACE organization or MMP, which was very small (0.2 to 0.3 percent), remained roughly constant in all three study years.<sup>8</sup>

**Table 2. Proportion of partial-benefit dually eligible individuals enrolled in D-SNPs, PACE programs or MMPs, regular MA plans, or traditional FFS Medicare, 2018–2020**

Year	Total	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018	3,790,452	632,843	16.7	9,776	0.3	1,164,775	30.7	1,983,058	52.3
2019	3,883,864	743,913	19.2	11,090	0.3	1,263,874	32.5	1,864,987	48.0
2020	3,750,949	836,963	22.3	6,243	0.2	1,352,553	36.1	1,555,190	41.5

Source: Mathematica’s analysis of 2018–2020 MBSF data, supported by use of CMS SNP comprehensive reports and MA Contract Service Area by State/County reports.

Notes We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dual eligibility in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; FFS = fee for service; MA = Medicare Advantage; MBSF = Medicare Beneficiary Summary File; MMP = Medicare-Medicaid Plan; PACE = Program of All-inclusive Care for the Elderly; SNP = Special Needs Plan.

The absolute number of PBDE individuals enrolled in D-SNPs increased by more than 200,000 over that time, a 32 percent increase (Table 3). But the proportion of D-SNP enrollees who were PBDE individuals remained stable over the study period (from about 30.5 percent in 2019 to 29.3 in 2020), as did the share who were FBDE individuals (69.5 in 2019 to 70.7 percent in 2020).

<sup>8</sup> These small proportions align with our expectations for this study. MMPs cannot allow PBDE individuals to remain enrolled in the MMP beyond an eligibility “deeming” period. Although some PACE organizations do enroll PBDE individuals, PACE organizations enroll a relatively low proportion of dually eligible individuals overall, so we would not expect large proportions of PBDE individuals to be enrolled in either of these Medicare coverage types.

**Table 3. Proportion of D-SNP enrollees who were partial-benefit versus full-benefit dually eligible individuals, 2018–2020**

Year	Partial-benefit dually eligible individuals		Full-benefit dually eligible individuals	
	Number	Percent	Number	Percent
2018	632,843	30.1	1,470,740	69.9
2019	743,913	30.5	1,693,600	69.5
2020	836,963	29.3	2,017,948	70.7

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports.

Notes We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dual eligibility in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; MBSF = Medicare Beneficiary Summary File; SNP = Special Needs Plan.

On average, 317,000 PBDE individuals became FBDE individuals (that is, switchers) each year from 2018 to 2020, which is about 8 to 9 percent of all partial-benefit individuals (Table 4). Consistent with the overall enrollment trends among PBDE individuals, individuals who switched from PBDE to FBDE status were more likely to have been enrolled in a D-SNP or regular MA plan prior to their switch. The proportion of switchers enrolled in D-SNPs prior to their switch was 12.4 percent, 14.3 percent, and 17.7 percent in 2018, 2019, and 2020, respectively. The proportion of switchers enrolled in regular MA plans prior to their switch was 22.5 percent, 22.6 percent, and 30.0 percent, respectively; and the proportion enrolled in traditional FFS Medicare prior to their switch was 64.4 percent, 62.4 percent, and 51.7 percent, respectively.

**Table 4. Among partial-benefit dually eligible individuals who became full-benefit dually eligible individuals, the proportion who were enrolled in D-SNPs, PACE programs or MMPs, regular MA plans, or traditional FFS Medicare prior to the switch, 2018–2020**

Year	Total number of switchers Number	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018	312,132	38,575	12.4	2,080	0.7	70,372	22.5	201,105	64.4
2019	352,876	50,307	14.3	2,627	0.7	79,644	22.6	220,298	62.4
2020	286,143	50,574	17.7	1,728	0.6	85,826	30.0	148,015	51.7

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports and MA Contract Service Area by State/County reports.

Notes We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dual eligibility coverage in the given year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; FFS = fee for service; MA = Medicare Advantage; MBSF = Medicare Beneficiary Summary File; MMP = Medicare-Medicaid Plan; PACE = Program of All-inclusive Care for the Elderly; SNP = Special Needs Plan.

The enrollment patterns by state and individual characteristics (that is, age, sex, race and ethnicity, original reason for entitlement, and urbanity) were consistent from 2018 to 2020, so, for brevity, we present only the 2020 figures in this report.

**State variation.** Enrollment patterns varied substantially across states. The proportion of PBDE individuals enrolled in D-SNPs in 2020 in individual states varied from 0.2 percent to 44.7 percent (Appendix A, Table A.1), and there were more than 30 percent of PBDE individuals enrolled in D-SNPs in Alabama, District of Columbia, Florida, Louisiana, and Texas. In Alabama and Florida, PBDE individuals were most likely to be enrolled in D-SNPs relative to other types of Medicare coverage. The share of D-SNP enrollees who were PBDE varied from 0.6 percent to 74.2 percent (Appendix A, Table A.2), and states with higher proportion of PBDE versus FBDE individuals in D-SNPs included Alabama, Connecticut, Florida, Georgia, Mississippi, and Montana. The proportion of switchers who were enrolled in D-SNPs prior to their switch varied from 0.4 percent to 36.8 percent (Appendix A, Table A.3).<sup>9</sup>

**Variation by individual characteristics.**

**Race and ethnicity:** Enrollment patterns also varied greatly across individual characteristics. PBDE individuals who were non-Hispanic Black and Hispanic were more likely to be enrolled in D-SNPs overall and prior to switching to FBDE status compared with those who were non-Hispanic White. The proportion of PBDE individuals enrolled in D-SNPs in 2020 varied from 16.9 percent for individuals who were non-Hispanic White to 33.1 percent for individuals who were Hispanic (Appendix A, Table A.4). Conversely, the proportion of D-SNP enrollees who were PBDE varied from 13.1 percent for members of the “Other” race and ethnicity group to 32.9 percent for individuals who were non-Hispanic Black (Appendix A, Table A.5), and the proportion of switchers enrolled in D-SNPs before their switch varied from 14.0 percent among individuals who were non-Hispanic White to 23.4 percent among those who were Hispanic (Appendix A, Table A.6).

**Urbanity:** PBDE individuals who lived in urban areas were more likely to be enrolled in D-SNPs overall and prior to switching to FBDE status than those who lived in rural areas. The proportion of PBDE individuals enrolled in D-SNPs in 2020 was higher in urban than rural areas (23.4 versus 12.3 percent), and the proportion of switchers enrolled in D-SNPs prior to their switch was also higher in urban than rural areas (18.4 versus 10.1 percent).

**Age:** The enrollment patterns varied substantially across age. PBDE individuals age 85 or older were less likely to be enrolled in D-SNPs overall and prior to switching to FBDE status than other age groups. The proportion of PBDE individuals enrolled in D-SNPs in 2020 was lower in those age 85 or older, at 16.5 percent compared with 22 to 24 percent in other age groups, along with the proportion of switchers enrolled in D-SNPs prior to their switch (12 percent among those age 85 or older compared with 17 to 20 percent among other age groups).

**Medicare entitlement:** Enrollment patterns varied substantially across original reason for Medicare entitlement. PBDE individuals with original reason for Medicare entitlement in the end-stage renal

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<sup>9</sup> The low percentages of PBDE individuals in D-SNPs in Minnesota, New Jersey, and a few other states is explained largely by state Medicaid policies that restrict D-SNP enrollment to FBDE individuals. In addition, Illinois, Nevada, South Dakota, and several other states do not have D-SNPs during the study period (see Appendix A, Tables A.1 to A.3 for the list of states). The fact that any PBDE individuals appear to have been enrolled in D-SNPs in these two sets of states is likely because of how we defined PBDE individuals (that is, those with at least one month of partial-benefit coverage in a given year) and how we defined individuals’ residences (that is, their residence information at the end of that year). Because we identified D-SNP enrollment at any time in a given year and we did not track whether individual enrollees moved from one state to another during the year, in a small number of cases, enrollees might have been labeled as enrolled in a D-SNP while residing in a particular state when they were actually enrolled in a D-SNP in a different state before moving to their identified state before the end of the calendar year.

disease group were less likely to be enrolled in D-SNPs overall and prior to switching to FBDE status than other groups. The proportion of PBDE individuals enrolled in D-SNPs in 2020 lowest among the end-stage renal disease group (5 percent) compared with the age 65 or older and disability groups (about 22 to 23 percent), along with the proportion of switchers enrolled in D-SNPs prior to their switch (4 percent among the end-stage renal disease group compared with 18 percent among the age 65 or older and disability groups).

## IV. Discussion

Overall, the findings of this analysis indicate that D-SNPs are a growing Medicare coverage type for partial-benefit dually eligible individuals, with the proportion of PBDE individuals enrolled in D-SNPs rising from 17 percent in 2018 to 22 percent in 2020, which is more than one of every five PBDE individuals. If D-SNPs are an increasingly popular choice of Medicare coverage among partial-benefit dually eligible individuals, it is important to understand whether they provide greater value for this population than other Medicare options.

In addition, about 50,000 individuals in 2020 who were enrolled in a D-SNP (or one of every six PBDE individuals) switched to full benefits. D-SNPs might be able to help slow or prevent decline in health and function for these switchers by providing care coordination and supplemental benefits that other PBDE individuals do not receive in regular MA plans or traditional FFS Medicare. Because of the number of individuals who switch from partial benefits to full benefits in each year, our next steps are to examine whether enrollment in a D-SNP prior to someone's switch affects their subsequent use of health and long-term services and supports relative to other switchers who had been enrolled in other types of Medicare coverage.

**Limitations.** These results are subject to two key limitations. First, we defined PBDE individuals as those with at least one month of partial-benefit coverage in a given year, which might overestimate the proportion of D-SNP enrollees who were PBDE versus FBDE individuals. This definition also yields D-SNP enrollment among individuals in seven states that do not allow PBDE individuals to enroll in D-SNPs. Second, we identified individual's residence at the end of that year, which cannot account for potential changes in residence during the year. This method of determining residence yielded small amounts of apparent D-SNP enrollment in states that did not have D-SNPs during the study period. We will consider excluding individuals from these two sets of states from future analyses for these reasons.

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## **Appendix A**

### **Supplemental Results**

**Table A.1. Proportion of partial-benefit dually eligible individuals enrolled in D-SNPs, PACE programs or MMPs, regular MA plans, or traditional FFS Medicare in 2020, by state**

State	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	<b>836,963</b>	<b>22.3</b>	<b>6,243</b>	<b>0.2</b>	<b>1,352,553</b>	<b>36.1</b>	<b>1,555,190</b>	<b>41.5</b>
Alabama	56,787	40.1	–	–	37,095	26.2	47,800	33.7
Alaska <sup>a</sup>	–	–	0	0.0	60	3.7	1,551	96.3
Arizona <sup>b</sup>	2,059	3.2	21	0.0	39,633	61.5	22,773	35.3
Arkansas	12,748	17.6	20	0.0	29,633	40.8	30,180	41.6
California	2,743	3.9	1,902	2.7	32,889	47.0	32,381	46.3
Colorado	6,196	12.8	161	0.3	18,904	39.0	23,194	47.9
Connecticut	33,201	25.8	–	–	44,348	34.5	51,176	39.8
Delaware	2,450	13.8	–	–	3,320	18.6	12,033	67.6
District of Columbia	5,032	40.4	0	0.0	1,054	8.5	6,382	51.2
Florida	232,498	44.7	162	0.0	160,852	31.0	126,047	24.3
Georgia	62,713	27.0	11	0.0	92,595	39.8	77,317	33.2
Hawaii <sup>b</sup>	610	7.6	0	0.0	4,498	56.2	2,893	36.2
Idaho <sup>b</sup>	275	1.1	–	–	9,080	37.7	14,721	61.1
Illinois <sup>a</sup>	163	0.2	304	0.4	26,630	36.8	45,302	62.6
Indiana	21,387	24.8	–	–	26,859	31.2	37,946	44.0
Iowa	1,268	5.6	14	0.1	9,340	41.2	12,073	53.2
Kansas	1,576	4.9	44	0.1	10,864	34.0	19,504	61.0
Kentucky	16,742	18.3	12	0.0	25,758	28.1	49,219	53.7
Louisiana	33,674	30.5	30	0.0	31,618	28.6	45,044	40.8
Maine	6,587	16.6	0	0.0	13,015	32.8	20,108	50.6
Maryland	5,211	7.3	–	–	8,161	11.4	58,230	81.3
Massachusetts <sup>b</sup>	431	1.2	75	0.2	11,355	31.4	24,323	67.2
Michigan	5,496	7.2	863	1.1	25,607	33.6	44,330	58.1
Minnesota <sup>b</sup>	306	1.5	–	–	7,929	39.1	12,040	59.4
Mississippi	17,221	18.5	–	–	22,020	23.6	53,932	57.9
Missouri	5,689	11.5	–	–	23,015	46.7	20,615	41.8
Montana	920	7.2	–	–	2,636	20.6	9,226	72.2
Nebraska	246	3.9	–	–	2,553	40.3	3,539	55.8
Nevada <sup>a</sup>	111	0.2	–	–	24,726	49.9	24,713	49.9
New Hampshire <sup>a</sup>	52	0.3	–	–	4,024	27.1	10,793	72.6
New Jersey <sup>b</sup>	352	1.1	–	–	18,348	56.9	13,553	42.0
New Mexico	12,083	25.8	26	0.1	14,323	30.6	20,324	43.5
New York	36,846	20.5	60	0.0	91,738	50.9	51,497	28.6
North Carolina	9,161	9.5	85	0.1	45,947	47.8	40,943	42.6
North Dakota <sup>a</sup>	17	0.4	–	–	813	18.0	3,676	81.6

Table A.1 (continued)

State	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Ohio	35,665	25.1	1,690	1.2	46,372	32.7	58,118	41.0
Oklahoma	353	1.3	19	0.1	12,558	44.6	15,202	54.0
Oregon <sup>b</sup>	339	0.5	18	0.0	27,367	41.7	37,832	57.7
Pennsylvania	12,438	12.0	164	0.2	51,400	49.4	40,069	38.5
Rhode Island	692	7.4	203	2.2	5,028	53.9	3,413	36.6
South Carolina	781	2.2	45	0.1	23,633	65.9	11,387	31.8
South Dakota <sup>a</sup>	17	0.2	0	0.0	2,605	27.2	6,939	72.6
Tennessee	39,824	29.7	26	0.0	49,973	37.2	44,382	33.1
Texas	122,008	31.2	143	0.0	134,654	34.4	134,381	34.4
Utah	1,194	9.9	–	–	5,201	43.2	5,637	46.9
Vermont <sup>a</sup>	–	–	0	0.0	1,547	17.2	7,438	82.8
Virginia	1,304	1.7	43	0.1	32,167	42.5	42,154	55.7
Washington	20,782	27.4	26	0.0	17,528	23.1	37,429	49.4
West Virginia	5,091	11.7	–	–	11,509	26.4	27,019	61.9
Wisconsin	3,589	15.3	–	–	9,546	40.7	10,307	44.0
Wyoming <sup>a</sup>	–	–	–	–	225	5.2	4,105	94.8

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports and MA Contract Service Area by State/County reports.

Notes: We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dually eligibility in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year. We suppressed data for small value cells and noted them with a dash.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; FFS = fee for service; MA = Medicare Advantage; MBSF = Medicare Beneficiary Summary File; MMP = Medicare-Medicaid Plan; PACE = Program of All-inclusive Care for the Elderly; SNP = Special Needs Plan.

<sup>a</sup> These states did not have D-SNPs in 2020. Some partial-benefit dually eligible individuals in these states are still identified as D-SNP enrollees because we identified individuals’ residences at the end of each calendar year, which does not account for any changes in residence during the year. In other words, the partial-benefit dually eligible individuals identified as D-SNP enrollees in these states were likely enrolled in a D-SNP in a different state before moving to these states before the end of the year.

<sup>b</sup> These states only allowed full-benefit dually eligible individuals to enroll in D-SNPs in 2021. Although 2021 was after our study period, we expect that many or all of these states restricted D-SNP enrollment to full-benefit dually eligible individuals in 2020 as well because of the low proportions of partial-benefit dually eligible individuals shown as enrolled in D-SNPs in these states.

**Table A.2. Proportion of D-SNP enrollees who were partial-benefit versus full-benefit dually eligible individuals in 2020, by state**

State	Partial-benefit dually eligible		Full-benefit dually eligible	
	Number	Percent	Number	Percent
Total	836,963	29.3	2,017,948	70.7
Alabama	56,787	68.0	26,687	32.0
Alaska <sup>a</sup>	–	–	51	100.0
Arizona <sup>b</sup>	2,059	1.9	103,858	98.1
Arkansas	12,748	44.4	15,955	55.6
California	2,743	2.0	136,567	98.0
Colorado	6,196	29.7	14,642	70.3
Connecticut	33,201	74.2	11,570	25.8
Delaware	2,450	49.6	2,491	50.4
District of Columbia	5,032	44.6	6,247	55.4
Florida	232,498	58.8	162,766	41.2
Georgia	62,713	59.4	42,801	40.6
Hawaii <sup>b</sup>	610	2.4	24,860	97.6
Idaho <sup>b</sup>	275	3.0	9,004	97.0
Illinois <sup>a</sup>	163	34.7	307	65.3
Indiana	21,387	43.7	27,578	56.3
Iowa	1,268	7.7	15,096	92.3
Kansas	1,576	19.4	6,527	80.6
Kentucky	16,742	45.1	20,389	54.9
Louisiana	33,674	42.7	45,137	57.3
Maine	6,587	37.5	11,000	62.5
Maryland	5,211	48.4	5,564	51.6
Massachusetts <sup>b</sup>	431	0.7	61,447	99.3
Michigan	5,496	12.8	37,482	87.2
Minnesota <sup>b</sup>	306	0.6	50,827	99.4
Mississippi	17,221	53.8	14,814	46.2
Missouri	5,689	13.3	37,122	86.7
Montana	920	51.1	882	48.9
Nebraska	246	2.9	8,361	97.1
Nevada <sup>a</sup>	111	34.5	211	65.5
New Hampshire <sup>a</sup>	52	38.2	84	61.8
New Jersey <sup>b</sup>	352	0.6	56,147	99.4
New Mexico	12,083	40.6	17,710	59.4
New York	36,846	9.9	336,788	90.1
North Carolina	9,161	10.6	76,885	89.4
North Dakota <sup>a</sup>	17	15.3	94	84.7
Ohio	35,665	44.3	44,932	55.7

Table A.2 (continued)

State	Partial-benefit dually eligible		Full-benefit dually eligible	
	Number	Percent	Number	Percent
Oklahoma	353	3.6	9,545	96.4
Oregon <sup>b</sup>	339	1.5	22,595	98.5
Pennsylvania	12,438	7.4	154,617	92.6
Rhode Island	692	14.6	4,053	85.4
South Carolina	781	1.8	41,645	98.2
South Dakota <sup>a</sup>	17	27.9	44	72.1
Tennessee	39,824	32.8	81,508	67.2
Texas	122,008	48.4	129,998	51.6
Utah	1,194	15.2	6,637	84.8
Vermont <sup>a</sup>	–	–	26	100.0
Virginia	1,304	3.2	39,382	96.8
Washington	20,782	32.5	43,076	67.5
West Virginia	5,091	39.5	7,784	60.5
Wisconsin	3,589	7.5	44,122	92.5
Wyoming <sup>a</sup>	–	–	33	100.0

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports.

Notes: We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dual eligibility in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year. We suppressed data for small value cells and noted them with a dash.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; MBSF = Medicare Beneficiary Summary File; SNP = Special Needs Plan.

<sup>a</sup> These states did not have D-SNPs in 2020. Some partial-benefit dually eligible individuals in these states are still identified as D-SNP enrollees because we identified individuals’ residences at the end of each calendar year, which does not account for any changes in residence during the year. In other words, the partial-benefit dually eligible individuals identified as D-SNP enrollees in these states were likely enrolled in a D-SNP in a different state before moving to these states before the end of the year.

<sup>b</sup> These states only allowed full-benefit dually eligible individuals to enroll in D-SNPs in 2021. Although 2021 was after our study period, we expect that many or all of these states restricted D-SNP enrollment to full-benefit dually eligible individuals in 2020 as well because of the low proportions of partial-benefit dually eligible individuals shown as enrolled in D-SNPs in these states.

**Table A.3. Among partial-benefit dually eligible individuals who became full-benefit dually eligible individuals, the proportion who were enrolled in D-SNPs, PACE programs or MMPs, regular MA plans, or traditional FFS Medicare prior to the switch in 2020, by state**

State	Total number of switchers	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	286,143	50,574	17.7	1,728	0.6	85,826	30.0	148,015	51.7
Alabama	2,457	837	34.1	0	0.0	463	18.8	1,157	47.1
Alaska <sup>a</sup>	207	–	–	0	0.0	23	11.1	184	88.9
Arizona <sup>b</sup>	3,410	434	12.7	–	–	1,523	44.7	1,453	42.6
Arkansas	2,361	454	19.2	0	0.0	822	34.8	1,085	46.0
California	29,431	1,526	5.2	1,044	3.5	12,555	42.7	14,306	48.6
Colorado	4,765	593	12.4	27	0.6	1,645	34.5	2,500	52.5
Connecticut	6,677	1,526	22.9	0	0.0	1,330	19.9	3,821	57.2
Delaware	621	83	13.4	–	–	102	16.4	436	70.2
District of Columbia	623	229	36.8	0	0.0	46	7.4	348	55.9
Florida	30,008	9,764	32.5	34	0.1	8,414	28.0	11,796	39.3
Georgia	7,511	1,966	26.2	0	0.0	2,340	31.2	3,205	42.7
Hawaii <sup>b</sup>	1,189	260	21.9	0	0.0	498	41.9	431	36.2
Idaho <sup>b</sup>	1,884	91	4.8	0	0.0	536	28.5	1,257	66.7
Illinois <sup>a</sup>	17,423	68	0.4	133	0.8	4,679	26.9	12,543	72.0
Indiana	13,655	3,516	25.7	–	–	3,212	23.5	6,927	50.7
Iowa	1,648	139	8.4	–	–	557	33.8	952	57.8
Kansas	2,657	175	6.6	–	–	757	28.5	1,725	64.9
Kentucky	4,319	756	17.5	0	0.0	1,026	23.8	2,537	58.7
Louisiana	7,813	2,306	29.5	–	–	1,950	25.0	3,557	45.5
Maine	2,107	351	16.7	0	0.0	485	23.0	1,271	60.3
Maryland	1,631	84	5.2	–	–	195	12.0	1,352	82.9
Massachusetts <sup>b</sup>	2,489	67	2.7	–	–	633	25.4	1,789	71.9
Michigan	15,076	1,261	8.4	233	1.5	3,575	23.7	10,007	66.4
Minnesota <sup>b</sup>	3,147	61	1.9	0	0.0	744	23.6	2,342	74.4
Mississippi	2,175	348	16.0	0	0.0	400	18.4	1,427	65.6
Missouri	10,010	1,441	14.4	–	–	3,389	33.9	5,180	51.7
Montana	1,681	124	7.4	0	0.0	247	14.7	1,310	77.9
Nebraska	943	67	7.1	0	0.0	284	30.1	592	62.8
Nevada <sup>a</sup>	1,628	11	0.7	0	0.0	649	39.9	968	59.5
New Hampshire <sup>a</sup>	1,403	0	0.0	0	0.0	312	22.2	1,091	77.8
New Jersey <sup>b</sup>	2,057	57	2.8	0	0.0	873	42.4	1,127	54.8
New Mexico	2,210	611	27.6	–	–	638	28.9	961	43.5
New York	21,109	6,870	32.5	11	0.1	6,737	31.9	7,491	35.5

Table A.3 (continued)

State	Total number of switchers	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
North Carolina	7,605	1,127	14.8	23	0.3	2,414	31.7	4,041	53.1
North Dakota <sup>a</sup>	1,339	0	0.0	–	–	171	12.8	1,168	87.2
Ohio	9,463	2,206	23.3	48	0.5	2,680	28.3	4,529	47.9
Oklahoma	1,857	45	2.4	0	0.0	702	37.8	1,110	59.8
Oregon <sup>b</sup>	4,969	51	1.0	–	–	1,849	37.2	3,069	61.8
Pennsylvania	12,585	2,330	18.5	44	0.3	4,739	37.7	5,472	43.5
Rhode Island	1,252	171	13.7	71	5.7	380	30.4	630	50.3
South Carolina	1,610	119	7.4	–	–	860	53.4	631	39.2
South Dakota <sup>a</sup>	370	–	–	0	0.0	86	23.2	284	76.8
Tennessee	6,243	2,301	36.9	–	–	1,618	25.9	2,324	37.2
Texas	7,768	1,917	24.7	13	0.2	2,080	26.8	3,758	48.4
Utah	5,343	939	17.6	0	0.0	1,611	30.2	2,793	52.3
Vermont <sup>a</sup>	542	–	–	0	0.0	80	14.8	462	85.2
Virginia	5,315	196	3.7	12	0.2	1,856	34.9	3,251	61.2
Washington	6,255	1,690	27.0	0	0.0	1,214	19.4	3,351	53.6
West Virginia	1,823	262	14.4	0	0.0	425	23.3	1,136	62.3
Wisconsin	5,172	1,138	22.0	–	–	1,411	27.3	2,623	50.7
Wyoming <sup>a</sup>	266	–	–	0	0.0	11	4.1	255	95.9

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports and MA Contract Service Area by State/County reports.

Notes: We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dually eligibility in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year. We suppressed data for small value cells and noted them with a dash. Certain cells in the “Total number of switchers” column have been replaced with ranges of plausible values because of the suppression of some cells for D-SNP and PACE or MMP columns to avoid the cases in which it would have been possible to derive the small cell values in that state.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; FFS = fee for service; MA = Medicare Advantage; MBSF = Medicare Beneficiary Summary File; MMP = Medicare-Medicaid Plan; PACE = Program of All-inclusive Care for the Elderly; SNP = Special Needs Plan.

<sup>a</sup> These states did not have D-SNPs in 2020. Some partial-benefit dually eligible individuals in these states are still identified as D-SNP enrollees because we identified individuals’ residences at the end of each calendar year, which does not account for any changes in residence during the year. In other words, the partial-benefit dually eligible individuals identified as D-SNP enrollees in these states were likely enrolled in a D-SNP in a different state before moving to these states before the end of the year.

<sup>b</sup> These states only allowed full-benefit dually eligible individuals to enroll in D-SNPs in 2021. Although 2021 was after our study period, we expect that many or all of these states restricted D-SNP enrollment to full-benefit dually eligible individuals in 2020 as well because of the low proportions of partial-benefit dually eligible individuals shown as enrolled in D-SNPs in these states.

**Table A.4. Proportion of partial-benefit dually eligible individuals enrolled in D-SNPs, PACE programs or MMPs, regular MA plans, or traditional FFS Medicare in 2020, by select individual characteristics**

Groups	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	836,963	22.3	6,243	0.2	1,352,553	36.1	1,555,190	41.5
<b>Age</b>								
Younger than 65	293,081	21.6	2,527	0.2	406,177	29.9	655,079	48.3
65 to 74	343,426	24.1	2,175	0.2	554,047	38.8	527,058	36.9
75 to 84	156,884	22.3	1,035	0.1	289,413	41.1	256,027	36.4
85 and older	43,572	16.5	506	0.2	102,916	39.0	117,026	44.3
<b>Sex</b>								
Male	321,783	21.0	2,656	0.2	528,870	34.5	680,146	44.4
Female	515,180	23.2	3,587	0.2	823,683	37.1	875,043	39.5
<b>Race and ethnicity</b>								
Non-Hispanic White	356,922	16.9	2,918	0.1	763,636	36.1	991,486	46.9
Non-Hispanic Black	245,310	28.7	1,424	0.2	310,163	36.3	297,746	34.8
Hispanic	198,518	33.1	1,351	0.2	218,742	36.5	180,577	30.1
Other <sup>a</sup>	36,213	19.9	550	0.3	60,012	32.9	85,381	46.9
<b>Original reason for Medicare entitlement</b>								
Age	380,927	22.3	2,704	0.2	682,520	40.0	639,488	37.5
Disability	453,891	22.6	3,437	0.2	666,506	33.3	880,427	43.9
ESRD	2,145	5.2	102	0.2	3,527	8.6	35,275	85.9
<b>Urbanity<sup>b</sup></b>								
Rural	44,495	12.3	83	0.0	112,304	31.0	205,676	56.7
Urban	792,438	23.4	6,160	0.2	1,239,961	36.6	1,349,306	39.8

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports and MA Contract Service Area by State/County reports.

Notes We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dually eligible coverage in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; ESRD = end-stage renal disease; FFS = fee for service; MA = Medicare Advantage; MBSF = Medicare Beneficiary Summary File; MMP = Medicare-Medicaid Plan; PACE = Program of All-inclusive Care for the Elderly; SNP = Special Needs Plan.

<sup>a</sup> The race and ethnicity group labeled Other includes individuals who were Asian/Pacific Islander, American Indian/Alaska Native, other, or unknown race and ethnicity status.

<sup>b</sup> There were 526 individuals with missing information about urban and rural status.

**Table A.5. Proportion of D-SNP enrollees who were partial-benefit versus full-benefit dually eligible individuals in 2020, by select individual characteristics**

Groups	Partial-benefit dually eligible		Full-benefit dually eligible	
	Number	Percent	Number	Percent
Total	836,963	29.3	2,017,948	70.7
<b>Age</b>				
Younger than 65	293,081	29.1	713,843	70.9
65 to 74	343,426	31.2	758,853	68.8
75 to 84	156,884	29.0	383,298	71.0
85 and older	43,572	21.2	161,954	78.8
<b>Sex</b>				
Male	321,783	30.0	752,309	70.0
Female	515,180	28.9	1,265,639	71.1
<b>Race and ethnicity</b>				
Non-Hispanic White	356,922	31.2	785,626	68.8
Non-Hispanic Black	245,310	32.9	500,179	67.1
Hispanic	198,518	28.8	491,179	71.2
Other <sup>a</sup>	36,213	13.1	240,964	86.9
<b>Original reason for Medicare entitlement</b>				
Age	380,927	27.7	995,995	72.3
Disability	453,891	30.9	1,014,607	69.1
ESRD	2,145	22.6	7,346	77.4
<b>Urbanity<sup>b</sup></b>				
Rural	44,495	31.5	96,727	68.5
Urban	792,438	29.2	1,921,118	70.8

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports.

Notes We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dually eligible coverage in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; ESRD = end-stage renal disease; SNP = Special Needs Plan.

<sup>a</sup> The race and ethnicity group labeled Other includes individuals who were Asian/Pacific Islander, American Indian/Alaska Native, other, or unknown race and ethnicity status.

<sup>b</sup> There were 133 individuals with missing information about urban and rural status.

**Table A.6. Among partial-benefit dually eligible individuals who became full-benefit dually eligible individuals, the proportion who were enrolled in D-SNPs, PACE programs or MMPs, regular MA plans, or traditional FFS Medicare prior to the switch in 2020, by select individual characteristics**

Groups	Total number of switchers	D-SNP		PACE or MMP		Regular MA		FFS Medicare	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	286,143	50,574	17.7	1,728	0.6	85,826	30.0	148,015	51.7
<b>Age</b>									
Younger than 65	114,885	19,909	17.3	562	0.5	26,235	22.8	68,179	59.3
65 to 74	96,735	19,361	20.0	694	0.7	31,959	33.0	44,721	46.2
75 to 84	48,470	8,292	17.1	324	0.7	18,161	37.5	21,693	44.8
85 and older	26,053	3,012	11.6	148	0.6	9,471	36.4	13,422	51.5
<b>Sex</b>									
Male	115,948	19,104	16.5	788	0.7	32,377	27.9	63,679	54.9
Female	170,195	31,470	18.5	940	0.6	53,449	31.4	84,336	49.6
<b>Race and ethnicity</b>									
Non-Hispanic White	162,333	22,682	14.0	598	0.4	46,378	28.6	92,675	57.1
Non-Hispanic Black	57,300	13,272	23.2	322	0.6	17,099	29.8	26,607	46.4
Hispanic	47,509	11,113	23.4	599	1.3	17,232	36.3	18,565	39.1
Other <sup>a</sup>	19,001	3,507	18.5	209	1.1	5,117	26.9	10,168	53.5
<b>Original reason for Medicare entitlement</b>									
Age	120,875	21,324	17.6	868	0.7	42,811	35.4	55,872	46.2
Disability	160,790	29,080	18.1	841	0.5	42,728	26.6	88,141	54.8
ESRD	4,478	170	3.8	19	0.4	287	6.4	4,002	89.4
<b>Urbanity<sup>b</sup></b>									
Rural	24,554	2,472	10.1	12	0.0	5,722	23.3	16,348	66.6
Urban	261,538	48,101	18.4	1,716	0.7	80,076	30.6	131,645	50.3

Source: Mathematica’s analysis of 2018–2020 MBSF, supported by use of CMS SNP comprehensive reports and MA Contract Service Area by State/County reports.

Notes We excluded Medicare enrollees in U.S. territories. Partial-benefit dually eligible individuals are Medicare enrollees with at least one month of partial-benefit dually eligible coverage in the year. Full-benefit dually eligible individuals are those who had full-benefit coverage for all months with dual eligibility of the year.

CMS = Centers for Medicare & Medicaid Services; D-SNP = Dual Eligible Special Needs Plan; ESRD = end-stage renal disease; FFS = fee for service; MA = Medicare Advantage; MBSF = Medicare Beneficiary Summary File; MMP = Medicare-Medicaid Plan; PACE = Program of All-inclusive Care for the Elderly; SNP = Special Needs Plan.

<sup>a</sup> The race and ethnicity group labeled Other includes individuals who were Asian/Pacific Islander, American Indian/Alaska Native, other, or unknown race and ethnicity status.

<sup>b</sup> There were 51 individuals with missing information about urban and rural status.