Evaluation of the Part D Modernization Model

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This report was authored by staff of the Centers for Medicare & Medicaid Services (CMS). CMS analysis was informed by data and deliverables provided by the PDM Model Monitoring Contractor, Acumen, LLC, under Contract No. 75FCMC19F0001.

Abstract

Background: The Part D Modernization (PDM) Model was implemented from January 1, 2020 to December 31, 2021, and most Medicare Advantage prescription drug plans (MA-PDs) and stand-alone prescription drug plans (PDPs) were eligible to participate. The PDM Model implemented a redesign of the catastrophic coverage phase of the Part D benefit by establishing an annual Spending Target Benchmark for federal reinsurance spending against which the actual federal reinsurance spending of participating Part D plans was compared, resulting in either performance-based gains or losses. The PDM Model also offered participating Part D plans several optional programmatic flexibilities.

Methods: CMS analyzed trends in PDM Model participation and enrollment from 2019 through 2021. Outcome measures included Part D drug spending and utilization measures and healthcare service utilization. Due to the small number of participating plan sponsors, CMS descriptively compared outcome measures for PDM participating plans against a set of reference Part D plans with similar proportions of low-income subsidy (LIS) enrollees during the same period.

Results: Two Part D plan sponsors participated in the PDM Model: Health Plan Partners (HPP), with three MA-PDs, and UnitedHealthcare (UHC), with six PDPs in 2021, respectively. The patterns for HPP and its reference MA-PDs were similar for the percentage of enrollees reaching the catastrophic phase and catastrophic phase spending per enrollee. For UHC, CMS observed a reduced percentage of enrollees reaching the catastrophic phase and lower catastrophic phase spending per enrollee, along with a relative reduction in total 30-day equivalent prescription drug fills compared to reference PDPs. Because these comparisons are descriptive, the role of the PDM Model in these observed patterns cannot be determined.

Conclusions: Due to limited uptake of the PDM model, we were unable to determine whether the PDM Model as designed would have reduced federal reinsurance spending while maintaining or improving quality of care. The limited participation in the model highlighted the challenge of designing a voluntary model that provides Part D plan sponsors sufficient incentive to accept greater financial risk in the Part D program. Although the PDM Model was terminated prior to the conclusion of its planned performance period, the principle of reducing federal liability in the catastrophic coverage phase was included in the Part D benefit redesign provisions of the Inflation Reduction Act of 2022 (IRA).

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Introduction

The Centers for Medicare & Medicaid Services (CMS) Innovation Center (CMMI) is authorized under Section 1115A of the Social Security Act to test innovative payment and service delivery models with the goal of reducing program expenditures while preserving or enhancing the quality of care provided to Medicare, Medicaid, and Children's Health Insurance Program (CHIP) beneficiaries. This report presents the findings of CMS's evaluation of the Part D Modernization (PDM) Model, a voluntary model tested from January 1, 2020 through December 31, 2021.

The Medicare Part D Prescription Drug Benefit Program provides outpatient prescription drug coverage to over 47 million Medicare beneficiaries as of 2020.[1] The Medicare Part D program is administered by Part D plan sponsors. Part D plan sponsors are private health insurers that sign annual contracts with CMS to offer Part D plans that provide outpatient prescription drug coverage to eligible Medicare beneficiaries. Medicare beneficiaries generally have two options available to enroll in Part D plans to receive outpatient prescription drug coverage. First, Medicare beneficiaries can enroll in traditional Medicare fee-for-service (FFS) to receive Parts A and B coverage and enroll in stand-alone prescription drug plans (PDPs) for their Part D coverage. Second, Medicare beneficiaries can enroll in Medicare Advantage prescription drug plans (MA-PDs) to receive both medical (Parts A and B) and outpatient prescription drug coverage (Part D).

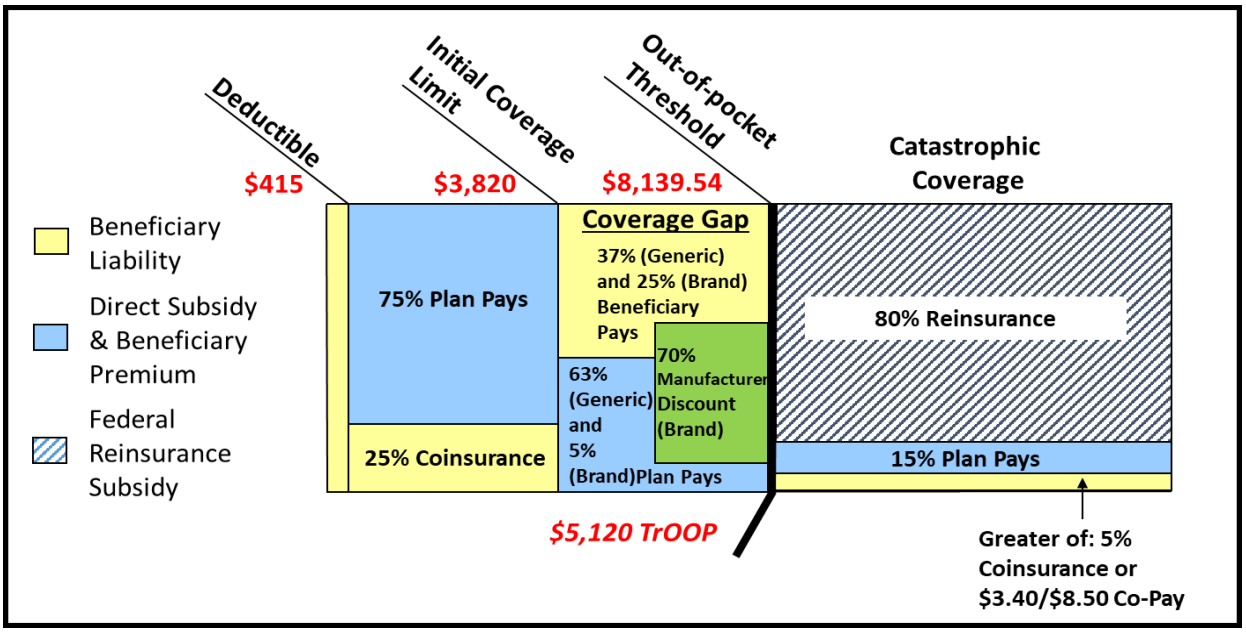
The defined standard Part D benefit for 2019 can be found in Figure 1 below. The defined standard Part D benefit is composed of four benefit phases. Enrolled beneficiaries, Part D plans, manufacturers, and government all share liability, with each party's liability varying based on the particular benefit phase:

- **Deductible**— beneficiaries pay the full cost up to $415;
- **Initial Coverage Phase**— Once the deductible amount is met, beneficiaries then pay 25 percent coinsurance of total drug costs up to $3,820 in total drug costs. Plans pay the remaining 75 percent during this phase.
- **Coverage Gap**— After $3,820 in total drug costs, beneficiaries enter the coverage gap. Liability depends on whether or not the drug is a brand name drug/biologic/biosimilar or generic drug. For generic drugs, beneficiaries pay 37 percent of total drug costs while Part D plans the other 63 percent. For brand name drugs/biologics/biosimilars, drug manufacturers provide a 70 percent discount (through the Medicare Coverage Gap Discount Program), with the remaining 30 percent covered by beneficiaries at 25 percent and Part D plans at 5 percent.
- **Catastrophic**— Once true out-of-pocket (TrOOP) costs, which are a subset of total drug costs that reflects beneficiary liability, hits $5,120, beneficiaries enter the

[1] https://data.cms.gov/summary-statistics-on-beneficiary-enrollment/medicare-and-medicaid-reports/cms-program-statistics-medicare-part-d-enrollment accessed 3/5/2026.

catastrophic phase. In the catastrophic phase, beneficiaries pay the greater of 5 percent coinsurance or $3.40/$8.50 copays for generic drugs and brand name drugs, respectively. CMS covers 80 percent of catastrophic costs through the reinsurance subsidy, and Part D plans pay the remaining 15 percent.

Figure 1: Standard Part D Benefit Design in 2019



Most Part D plans choose to use an alternative benefit design from the defined standard Part D benefit design presented in Figure 1. Most Part D plans use formularies with multiple tiers defined by the cost sharing type (copay vs coinsurance) and copay amounts or coinsurance rates. However, these alternative benefit designs must be at least actuarially equivalent to the defined standard Part D benefit design. Some Part D plans choose an enhanced alternative benefit design, where benefits exceed the defined standard Part D benefit.

The Medicare Part D program is funded through various payments made by CMS and Part D beneficiaries. On average, CMS pays for 74.5 percent of Part D plan liability and reinsurance costs (blue and diagonal shaded areas in Figure 1). CMS makes prospective payments to Part D plans during the calendar year called the direct subsidy to cover Part D plan liability (blue shaded area in Figure 1). Direct subsidy payments are reconciled to actual plan costs through the Part D program's risk corridors (please see Appendix Figure 1) the following year. CMS also makes prospective payments to Part D plans for reinsurance costs to cover these costs for CMS during the calendar year. Part D plans are made whole for these reinsurance costs by a dollar-for-dollar reconciliation of the prospective payments to actual reinsurance costs the following year. Beneficiaries pay the remaining 25.5 percent as the basic premium. Beneficiaries enrolled in enhanced alternative Part D plans pay for

the entirety of benefit costs above the defined standard benefit through an additional enhanced premium. Lastly, CMS provides cost sharing and premium support for beneficiaries who qualify for the low-income subsidy.[2]

The prescription drug market has undergone significant changes since the Medicare Part D program began in 2006. In the early years of the Medicare Part D program, spending growth was largely driven by the widespread use of brand name drugs used to treat common chronic conditions. As these blockbuster drugs began to face generic competition around 2010, however, the source of program spending growth shifted to higher cost brand name drugs and new more complex biological products that are used to treat uncommon conditions, commonly referred to as specialty drugs. By 2019, spending associated with these specialty drugs accounted for a 79 percent share of aggregate Part D spending despite only accounting for 10 percent of aggregate prescriptions.[3] Concurrently, pharmacy benefit managers (PBMs), who contract with Part D plan sponsors and negotiate with manufacturers and pharmacies on behalf of their clients, extracted greater prescription price concessions such as manufacturer rebates after the point-of-sale known as post-sale direct and indirect remuneration (DIR) primarily for drug classes with significant brand name drug or biological product competition.[4] The confluence of these two issues, along with the inherent structure of the Part D benefit design has changed the composition of the federal spending in the Part D program over time.

Specifically, direct subsidy payments have decreased over time while reinsurance payments have increased. Part D beneficiaries progress through the four benefit phases based on either total drug costs or TrOOP, both of which do not reflect post-sale DIR transactions. Therefore, the increasing use of high-priced specialty drugs has accelerated the progress by which Part D beneficiaries who use these drugs go through the benefit phases, with a greater percentage of beneficiaries and drug spending ending up in the catastrophic phase, where the federal government is responsible for the 80 percent reinsurance. At the same time, Part D plan sponsors have been able to limit Part D plan liability through greater DIR. The consequence is a shift in federal liability from the direct subsidy to the reinsurance subsidy. Some experts have expressed the concern that this "high-price/high-rebate" paradigm has established the incorrect incentives for Part D plan

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[2] Please see Chapter 13: Premium and Cost-sharing Subsidies for Low-Income Individuals of the Medicare Prescription Drug Benefit Manual: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/PartDManuals accessed 3/5/2026.

[3] Please see Table 13-4 on page 486 found in Chapter 13 The Medicare prescription drug program (Part D), Status Report of MedPAC's March 2022 Report to Congress: https://www.medpac.gov/document/march-2022-report-to-the-congress-medicare-payment-policy/ accessed 3/5/2026.

[4] Frank RG & Zeckhauser RJ. High-Priced Drugs in Medicare Part D: Diagnosis and Prescription. Hutchins Center Working Paper #28. January 2018: https://www.brookings.edu/wp-content/uploads/2017/05/wp28-formatted-new .pdf accessed 3/5/2026.

sponsors and their PBMs when negotiating with manufacturers and pharmacies, which has repercussions for beneficiaries in terms of cost sharing and premiums.

The CMS Innovation Center started the Part D Modernization (PDM) Model in January 2020 to test how changes to the Part D benefit design and incentives would affect overall Part D prescription drug spending and beneficiary out-of-pocket costs.[5] This voluntary Model, which was available to eligible PDPs and MA-PDs, tested whether changes to the Part D payment structure created new incentives for Part D plans, patients, and providers to choose drugs with lower list prices, as a way to address rising federal reinsurance Part D subsidy and beneficiary out-of-pocket costs. The Part D Model attempted to shift more of the drug cost liability in the catastrophic phase, and the accompanying financial incentive, from the government to plans and by offering plans flexibilities and additional tools to manage drug costs. This was expected to increase the liability of plans and thus slow the movement of beneficiaries into the catastrophic phase. The PDM Model concluded on December 31, 2021.

The purpose of this evaluation report is to examine the association of the PDM Model with Medicare expenditures and quality of care. Other contents of the evaluation report include information on Part D plan and beneficiary Model participation rates and the adoption and implementation of programmatic flexibilities by participating Part D plans during the PDM performance period. This evaluation report was prepared internally by the Research and Rapid Cycle Evaluation Group staff within the CMS Innovation Center using the results from PDM monitoring reports submitted by Acumen, LLC to CMS under Contract Number HHSM-500-2014-00027I, Task Order No. 75FCMC19F0001.

PDM Model Design

Spending Target Benchmark

The PDM Model implemented a redesign of the catastrophic coverage phase of the Part D benefit by establishing an annual benchmark for federal reinsurance spending (henceforth "the benchmark") against which the actual federal reinsurance spending of participating Part D plans was compared, resulting in either performance-based gains or losses. Actual federal reinsurance spending of participating Part D plans was aggregated to the Part D plan sponsor, separately for PDPs and MA-PDs. The benchmark was calculated retrospectively and separately for PDPs and MA-PDs using a multiple linear regression statistical model based on the federal reinsurance spending of non-participating PDPs and MA-PDs. If a Part D plan sponsor's spending was above the benchmark, the Part D plan sponsor paid ten percent of the difference between actual and the benchmark. If the Part D sponsor's spending was below the benchmark, then it will receive 30 percent of the differential between the benchmark and actual federal reinsurance spending and an

[5] https://innovation.cms.gov/innovation-models/part-d-payment-modernization-model

additional 50 percent of marginal savings above three percent and actual spending. The benchmark and determination of any payments from or due to CMS was performed retrospectively during the year following a Model performance year to ensure all relevant data needed for the calculation (DIR, Part D Prescription Drug Event, etc.) was finalized.

Optional Programmatic Flexibilities

The PDM Model offered six optional programmatic flexibilities to participating Part D plans in 2021:

1. Medication Therapy Management + (MTM+) Programs;
2. New Flexibilities to Lower Costs for Beneficiaries: Limited Initial Days' Supply and Cost Sharing Smoothing;
3. Part D Rewards and Incentives;
4. Reduction or Elimination of Cost Sharing on Generic Drugs and Biosimilars for LIS Beneficiaries;
5. Plan Timeliness for Standard Initial Coverage Determinations; and
6. Additional Flexibility under the De Minimis Policy.

Below are brief descriptions of each of the flexibilities. For a more complete description, please see the 2021 PDM Request for Applications, available on the CMMI website.[6]

1. Medication Therapy Management + (MTM+) Programs

All Part D plans must offer a CMS-approved MTM program as part of their plan benefit package as required by 42 CFR 423.153(d). The general requirements outlined in 42 CFR 423.153(d) are that MTM programs target enrollees who meet all of the following: (i) have multiple chronic diseases, with three chronic diseases being the maximum, a Part D sponsor may require to qualify for targeting and two being the minimum; (ii) are taking multiple Part D drugs, with eight Part D drugs being the maximum number a Part D sponsor may require to qualify for targeting; and (iii) are likely to incur an annual Part D drug cost of $4,255 or more (for 2020). The regulation at 42 CFR 423.153(d) also outlines that the Part D sponsor must establish an MTM program that ensures covered Part D drugs are used to optimize therapeutic outcomes through improved medication use, reduces the risk of adverse events, is developed in cooperation with licensed and practicing pharmacies and physicians, and may be furnished by pharmacists or other qualified providers.

The PDM Model gave participating Part D plans the opportunity to implement innovative MTM programs called MTM+ programs. The PDM Model provided waivers of MTM requirements for targeting, interventions, and engagement, as well as uniformity and accessibility of benefits requirements to interested Part D plans. Part D plans had to provide

[6] https://innovation.cms.gov/files/x/part-d-pymntmodernization-cy21rfa.pdf accessed 3/5/2026

detailed information about their MTM+ programs to CMS, including the proportion of enrollees who are expected to be targeted for MTM+ program, and the proportion of enrollees who are projected to be engaged. The test of MTM+ programs under the PDM Model was considered separate and distinct from the testing of the Enhanced MTM Model because there was no additional funding and performance-based payments related to total Parts A and B spending like in the Enhanced MTM Model.[7]

2. New Flexibilities to Lower Costs for Beneficiaries: Limited initial Days' Supply and Cost Sharing Smoothing

The PDM Model offered participating Part D plans optional programmatic flexibilities to reduce enrollee cost sharing for medications. Participating Part D plans had the ability to limit the first fill of a new medication to a clinically and operationally feasible time frame of less than a 30-days' equivalent supply for Part D drugs on the Part D plan's formulary when appropriate. Situations where patients experience significant adverse side effects early on after starting therapy and therefore likely to discontinue use before the medication quantity was exhausted were considered opportunities for the application of a limited initial days' supply policy.

Participating Part D plans were also able to smooth enrollee cost sharing through all of the Part D phases. Participating Part D plans that offered cost sharing programs would give enrollees the ability to pay for their medications during the year through multiple payments during the year, rather than all of the costs upfront. Enrollees had to elect to participate in the cost sharing smoothing program.

3. Part D Rewards and Incentives

The PDM Model allowed participating Part D plans the opportunity to offer Part D Rewards and Incentives (RI) programs. Part D RI programs were expected to focus on promoting improved health, medication adherence, and the efficient use of healthcare resources. Participating Part D plans could use medication adherence metrics or switching to a generic or biosimilar as a qualifying event for the enrollee to receive the reward or incentive. However, Part D plan participants were not permitted to have medication adherence or switching as the sole qualifying event in their Part D RI programs. CMS provided guidance to participating Part D plans on generally permissible Part D RI program designs: disease state management programs, encouraging enrollee participation in the plan's MTM program, encouraging enrollees to receive preventive health services such as vaccines, and programs that improve enrollees' knowledge of their Part D plan benefits.

4. Reduction or Elimination of Cost Sharing on Generic Drugs and Biosimilars for LIS Beneficiaries

Participating plans were allowed to reduce cost sharing for generics and biosimilars for LIS beneficiaries. The reduced amount was required to be set below the statutory

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[7] https://innovation.cms.gov/innovation-models/enhancedmtm accessed 3/5/2026

maximum copayment for LIS cost sharing. Participating Part D plans would still receive low-income cost sharing subsidy (LICS) payments that reflect the plan's cost sharing amount and the LIS statutory maximum copayment amount.

5. Plan Timeliness for Standard Initial Coverage Determinations

Participating Part D plans were permitted to extend the standard coverage determination timeframe to 96 hours for requests for drug coverage under the Model. Regulations at Subpart M of 42 C.F.R. Part 423 requires that standard coverage determinations made by an enrollee must be completed by Part D plans as expeditiously as the enrollee's health condition requires, but not later than 72 hours after receipt of the request. The expectation was the increase in the standard coverage determination timeframe would increase adherence to medications at first fill, increase initial determination approvals, and decrease re-determinations.

6. Additional Flexibility Under the De Minimis Policy

Participating Part D plans were allowed to waive a greater *de minimis* amount than is allowed in the Part D program. Each year, a proportion of LIS beneficiaries enrolled in Part D plans with premiums above the LIS benchmark[8] are randomly reassigned to new Part D plans to ensure these LIS beneficiaries maintain zero-premium coverage. Part D plans are allowed to waive the *de minimis* amount above the LIS benchmark to prevent the reassignment of their LIS beneficiaries to other Part D plans. The *de minimis* amount is set by CMS each year. The PDM Model programmatic flexibility to waive a *de minimis* amount greater than the one set by CMS in the Part D program was offered to reduce the number of reassignments that the LIS beneficiaries enrolled in participating Part D plans experience.

Methods

Plans and Enrollees

Because Part D plan sponsors may consolidate multiple Part D plans in one year into a single Part D plan the next year, CMS identified and tracked Part D plans across years using the following approach. First, CMS identified the Part D plans participating in the PDM Model in 2021, then mapped these 2021 PDM participating plans back to their 2020 and 2019 plans to account for these consolidations during 2019-2021. This enabled the evaluation to track plans across years.

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[8] Please see Section 50- Premium Subsidy of Chapter 13: Premium and Cost-sharing Subsidies for Low-Income Individuals of the Medicare Prescription Drug Benefit Manual: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/PartDManuals accessed 3/5/2026

CMS selected separate sets of reference MA-PDs and PDPs as a comparison to better understand how enrollment, healthcare service utilization, and Part D drug spending and utilization changed for participating Part D plans. The first step was to apply the PDM plan eligibility rules to the group of non-participating Part D plans in 2019.[9] Then MA-PDs and PDPs with similar LIS enrollment percentages to PDM participating MA-PDs and PDPs, respectively, were selected as the final set of reference Part D plans. CMS then mapped these 2019 Part D reference plans to their 2020 and 2021 plans.

Each calendar quarter CMS identified enrollees in participating PDM plans and determined the set of reference plans. CMS excluded Part D beneficiaries who disenrolled from a PDM participating plan and switched either to another PDM participating plan or to a reference plan during a calendar quarter under a Special Enrollment Period (around 1 percent of total enrollment across PDM participating plans).

Measures

CMS tracked quarterly enrollment in PDM participating plans during 2019-2021. The demographics of PDM participating PDPs and MA-PDs and corresponding reference PDPs and MA-PDs were also captured from Medicare administrative and enrollment data to understand how these enrollee populations differed. The following demographics were examined; age grouped into the following categories (age under 65, 65-74, 75-84, and 85+), race/ethnicity determined using the RTI Race Code, proportion LIS recipients, and sex. CMS also report the number of enrollees targeted and engaged by the optional programmatic flexibilities selected by PDM participating plans over time.

CMS evaluators calculated the quarterly proportion of beneficiaries who reached the Part D benefit catastrophic phase and the quarterly catastrophic phase spending per enrollee for participating PDM plans and reference plans during 2019 to 2021 to examine the PDM Model's association with federal reinsurance spending.

CMS evaluators also calculated several Part D drug utilization measures to explain the potentially observed PDM Model association with federal reinsurance spending. The generic drug substitution rate was calculated to see if the PDM Model was associated with the increased use of lower cost generic medications. They also calculated the quarterly total number of prescription drug fills per enrollee and total number of 30-day equivalent prescription drug fills per enrollee. The evaluators constructed these alternate versions of the prescription drug fill measure to account for the potential increase or decrease in the days' supply of prescription drug fills because of the PDM Model.

[9] Excluded plan types from the PDM Model were: Employer Group Waiver Plans, Medicare-Medicaid Plans, Medical Savings Account Plans, Private FFS Plans, Section 1876 Cost Plans, Section 1833 Plans, PACE Plans, Demonstration Plans, and Religious Fraternal Benefit Plans.

CMS evaluators calculated additional Part D drug utilization measures for select drug classes used to treat conditions commonly targeted by participating PDM plans as part of their MTM+ programs to examine the association of the MTM+ programs with drug use. Specifically, quarterly percent of total enrollees with at least one diabetes drug fill, quarterly percent of total enrollees with at least one statin fill, and quarterly percent of total enrollees with at least one renin-angiotensin system (RAS)-acting drug.

CMS evaluators calculated inpatient hospitalization rates and emergency department visit rates during 2019-2021 to examine the PDM Model's association with healthcare service utilization. They also calculated the quarterly rates of inpatient hospitalizations for participating PDM plans and reference plans as the number of enrollees with at least one inpatient admission divided by the total number of enrollees in each quarter. Similarly, they calculated the quarterly rates of emergency department visits for participating PDM plans and reference plans as the number of enrollees with at least one emergency department visit divided by the total number of enrollees in each quarter. They generated the quarterly inpatient hospitalization rates and emergency department visit rates from Medicare Advantage Encounter Data for MA-PDs and traditional FFS Parts A and B claims data for PDPs.

Statistical Method

CMS evaluators compared the results of the above measures between participating PDM Model plans and reference plans over time. Due to the small number of participating plans, we were unable to estimate the causal impact of the PDM Model reliably. We rely on descriptive comparisons between participating PDM Model plans and reference plans using figures and tables instead of estimating statistical models that adjusts for additional differences between the two groups because of low statistical power. Therefore, the reader should not interpret the differences between participating PDM Model plans and reference plans as an estimate of the causal impact of the PDM Model.

Limitations

This evaluation has several important limitations that affect the interpretation of findings. First, only two Part D plan sponsors participated in the PDM Model during its performance period. The small number of participants precludes the use of inferential statistical methods and limits the generalizability of findings to the broader population of Part D plan sponsors. Observed patterns in outcomes for participating plans may reflect characteristics specific to those plan sponsors rather than effects of the PDM Model.

Second, because the low level of participation precluded the construction of a formal comparison group, CMS used a set of reference Part D plans with similar proportions of low-income subsidy (LIS) enrollees for descriptive comparison purposes. These reference plans were not randomly assigned and may differ from participating plans in ways that are not fully captured by the matching criteria. Accordingly, observed differences between

participating and reference plans should not be interpreted as causal estimates of model effects.

Third, the inability to draw causal inferences from descriptive comparisons means that this evaluation cannot determine whether the PDM Model, as designed, would have reduced federal reinsurance spending or affected quality of care had participation been more substantial.

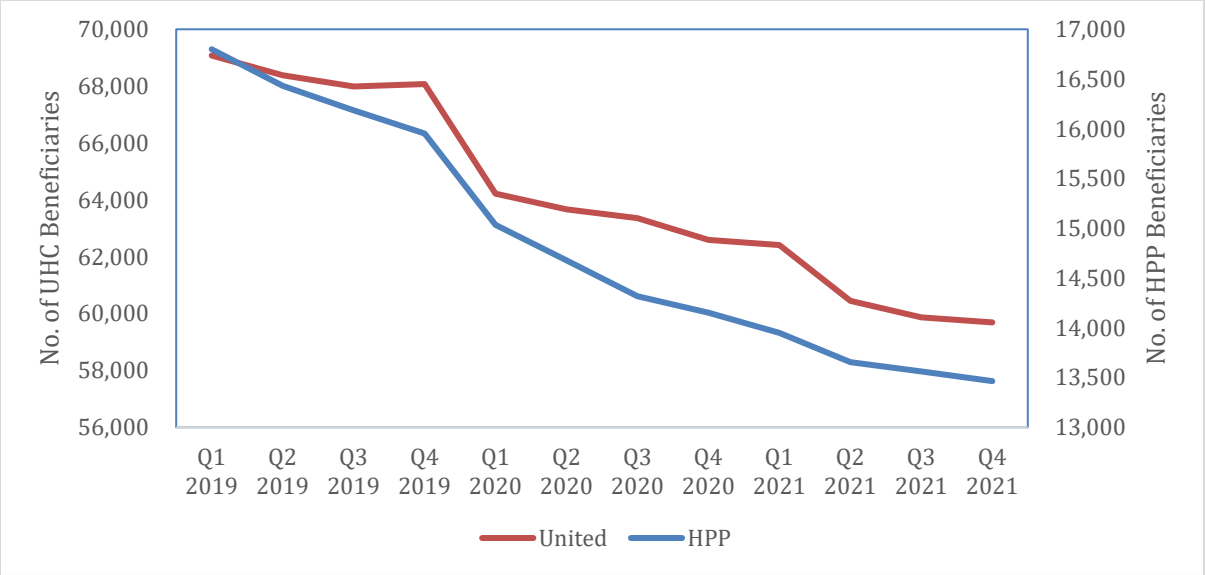
Results

Model Participation

Only two Part D plan sponsors participated in the PDM Model during its existence from January 1 2020 to December 31 2021. Health Plan Partners (HPP) joined the PDM Model in 2020 with two MA-PDs. HPP would later add a third and fourth MA-PD to the PDM Model in 2021, while simultaneously removing a MA-PD that participated in 2020, resulting in three HPP MA-PDs participating in the PDM Model in 2021. UnitedHealthcare Group, Inc. (hereafter referred to as UHC or United) joined the PDM Model with six PDPs in 2020, and these same six PDPs remained in the PDM Model in 2021.

The quarterly enrollment trends from 2019 to 2021 of HPP and UHC PDM plans that participated in the PDM Model in 2021 can be found in Appendix Table 1 and Figure 2. Enrollment for HPP participating plans declined about 20 percent from 16,799 enrollees in the first quarter of 2019 to 13,464 enrollees in the fourth quarter of 2021. For participating plans, enrollment declined about 14 percent from 69,076 enrollees in the first quarter of 2019 to 59,689 enrollees in the fourth quarter of 2021. The extent to which the enrollment decreases observed among PDM participating plans during 2019 to 2021 are attributable to the PDM Model cannot be determined.

Figure 2: Downward enrollment trends 2019 to 2021 Q4 for HPP and UHC's PDM participating plans during 2019-2021



Enrollee Characteristics

There were some remaining differences between the selected enrollee characteristics of HPP and UHC participating PDM plans and their respective reference plans as of the last quarter of 2021 (complete set of results from 2019 to 2021 can be found in Appendix Tables 2 and 3). A smaller percentage of HPP enrollees received the LIS when compared to the enrollees of reference plans, but the overwhelming majority of enrollees in both groups received the LIS. Fewer differences for the selected demographics were observed between UHC PDM participating plan enrollees and the enrollees of reference PDPs (see Figure 4). These observed differences among the presented demographics are not unexpected, as the reference plans were selected based solely on LIS enrollment.

Figure 3: HPP enrollees were less likely to receive the LIS when compared to reference MA-PD enrollees in 2021 Q4

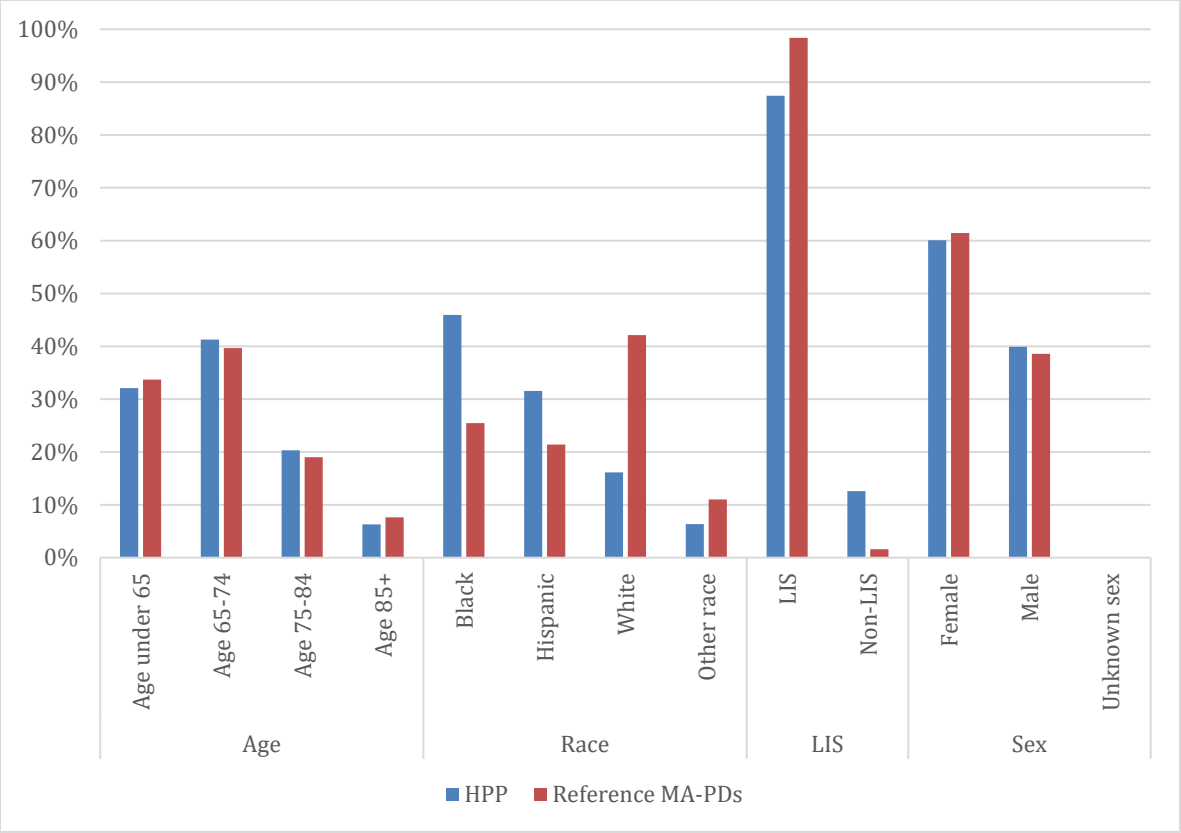
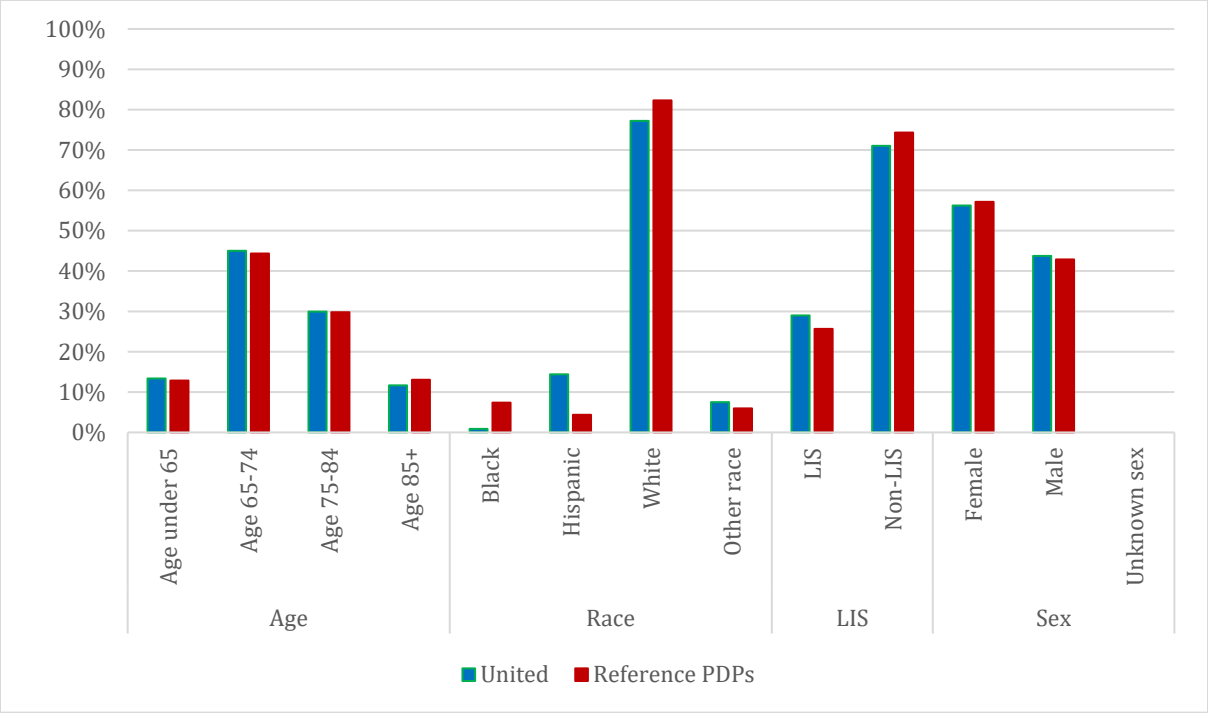


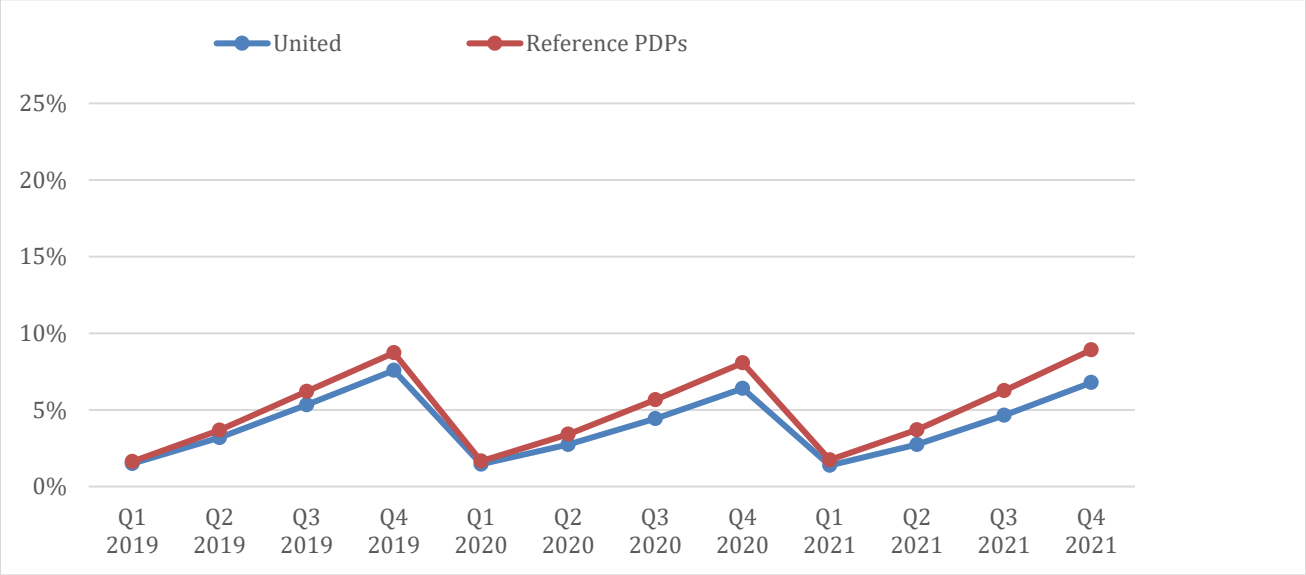
Figure 4: Fewer demographic differences between UHC vs. Reference PDP enrollees in 2021 Q4



Part D Utilization and Spending

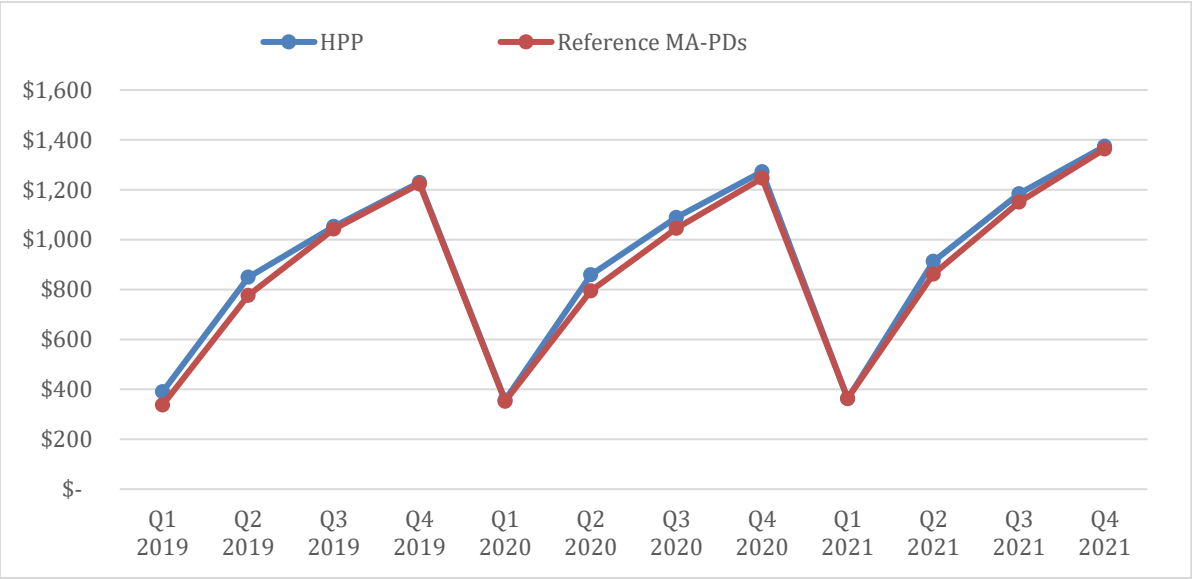
The two participating Part D plan sponsors demonstrated different patterns during the 2019 to 2021 time period for the two drug measures focused on the catastrophic phase of the Part D benefit (please see Appendix Tables 4 and 5 for the complete set of results). Figure 5 shows the percent of enrollees who reach the catastrophic phase of the Part D benefit. HPP and its reference MA-PDs demonstrate a very similar pattern during the time period. The two lines almost perfectly overlap. However, the percent of enrollees who reach the catastrophic phase slowed in participating UHC plans when compared to its reference PDPs.

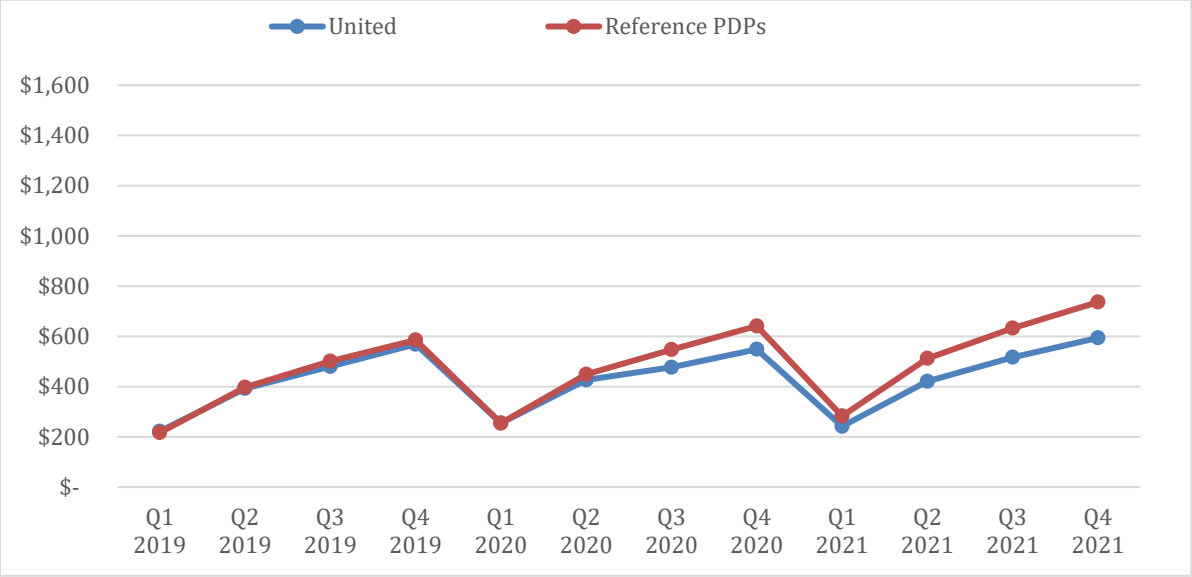
Figure 5: Similar percentage of enrollees reached the catastrophic phase of the Part D benefit for HPP vs reference MA-PDs (top panel) and UHC vs reference PDPs (bottom panel) during 2019-2021 time period



The patterns of catastrophic phase spending per enrollee were similar to the patterns of percentage of enrollees who reach the catastrophic phase of the Part D benefit (Figure 6). The patterns in catastrophic phase spending for HPP PDM participating plans and reference MA-PDs are nearly identical. However, catastrophic phase spending of the UHC PDM participating plans slowed during 2019 to 2021 relative to its reference PDPs.

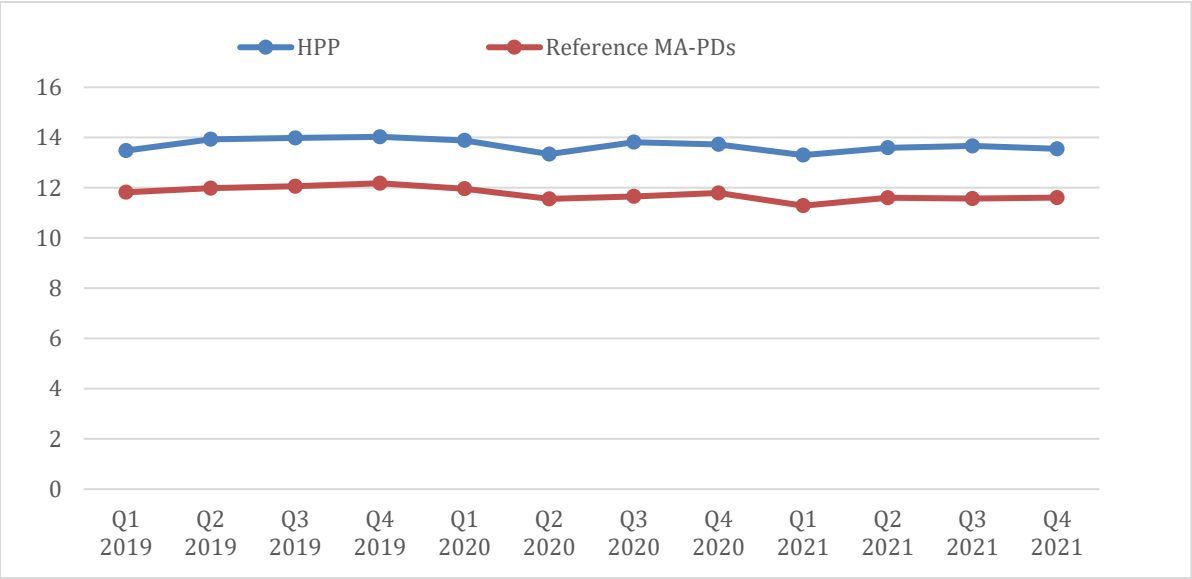
Figure 6: Catastrophic phase spending per enrollee for HPP vs reference MA-PDs (top panel) and UHC vs reference PDPs (bottom panel) were similar during 2019-2021

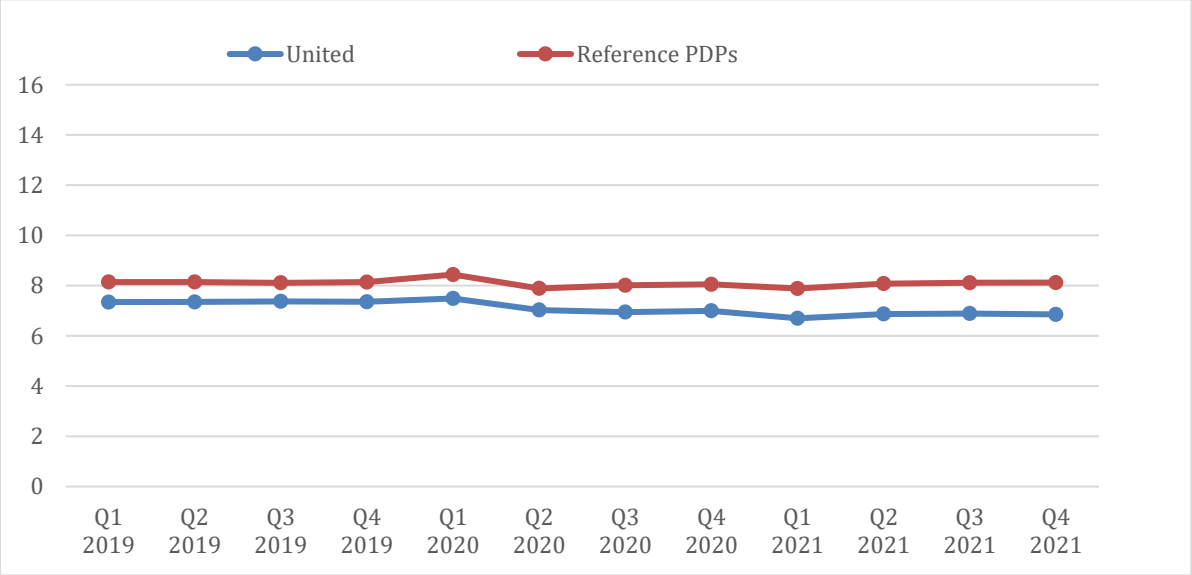




For both HPP and United, the patterns in total fill counts per beneficiary were similar over time when compared to their reference plans as seen in Figure 7 (please see Appendix Tables 4 and 5 for the complete set of results).

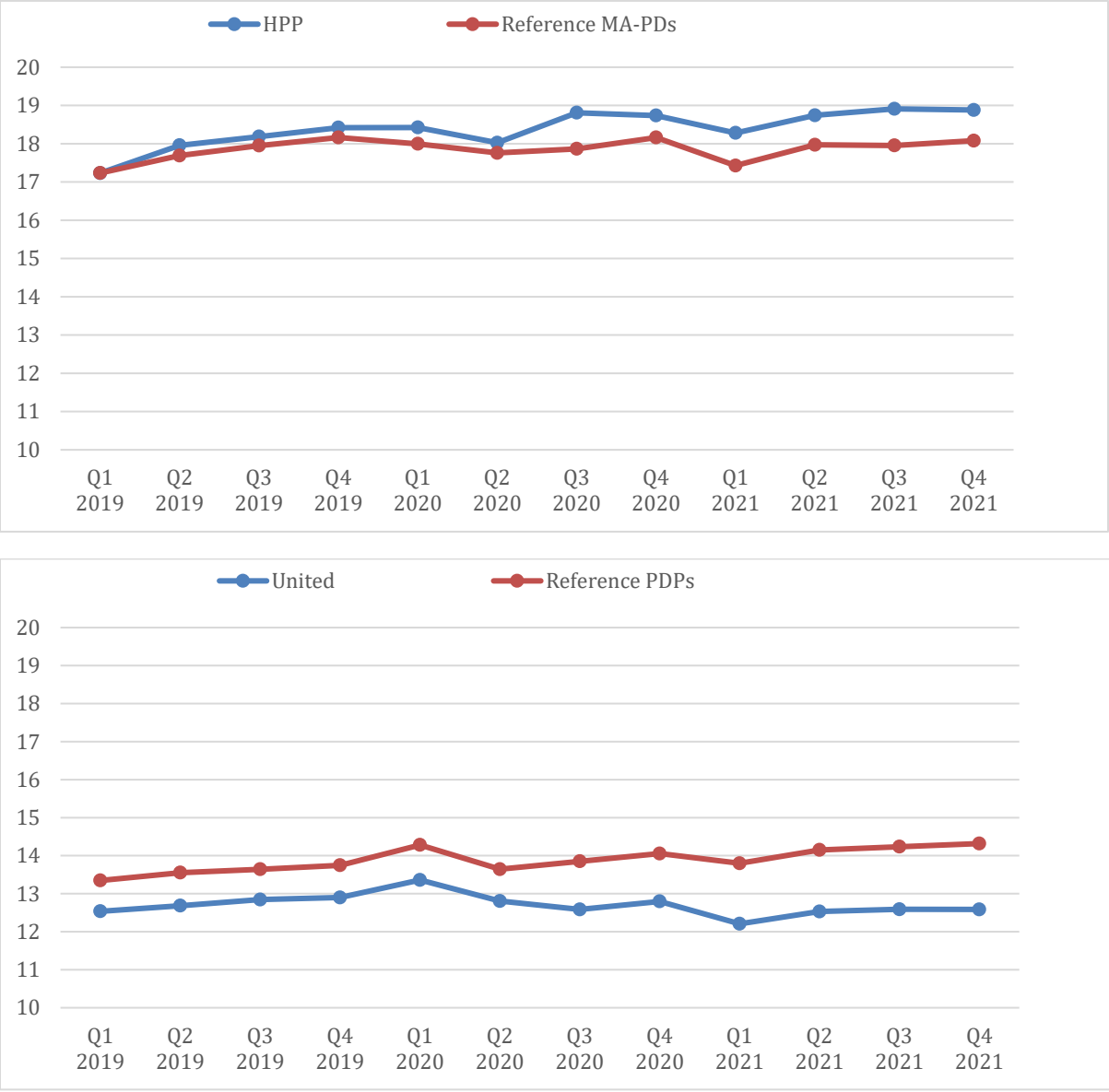
Figure 7: Total fill count per beneficiary remained constant during 2019-2021 for HPP vs reference MA-PDs (top panel) and UHC vs reference PDPs (bottom panel)





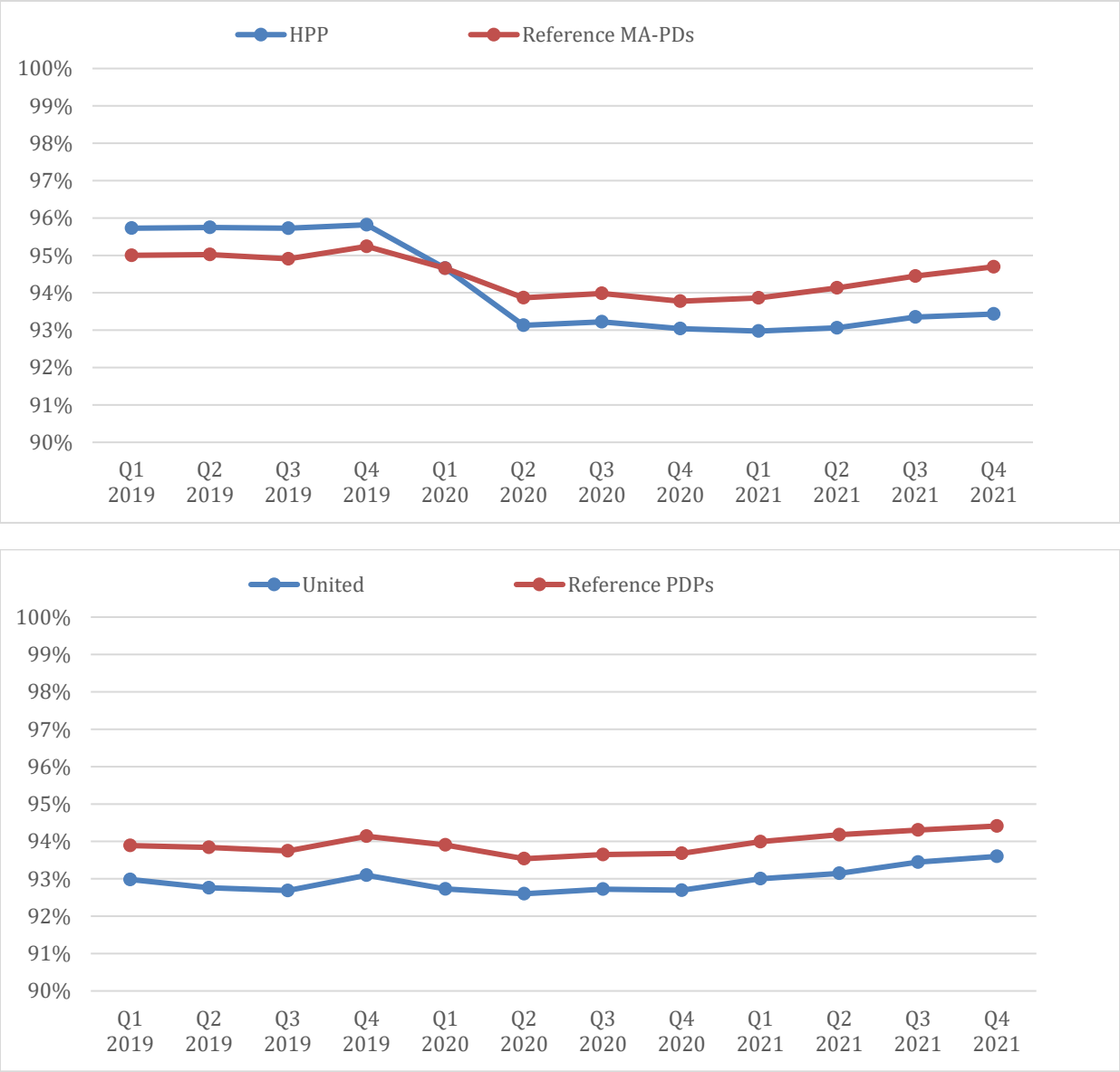
However, different patterns emerged over time when examining total fill counts standardized to 30-day equivalents. As seen in Figure 8, both HPP and UHC deviated from their respective reference plans beginning in 2020. The total number of 30-day equivalent prescription drug fills per enrollee increased over time for HPP relative to its reference MA-PDs, while it decreased for UHC when compared to its reference PDPs. These two results, when put together, suggest that the days supply of fills rather the number of fills changed over time for PDM participating plans when compared to the reference plans. Furthermore, the changes in the number of 30-day equivalent prescription drug fills per enrollee were not consistent for HPP and United, with HPP increasing and UHC decreasing over time.

Figure 8: Total number of 30-day equivalent prescription drug fills per enrollee for HPP (top panel) and UHC (bottom panel) deviated from their respective reference plans during 2019-2021.



Generic drug substitution rates were already high before the PDM Model began and remained consistent during the 2019 to 2021 time period for both participating PDM plans and reference plans (please see Appendix Tables 4 and 5 for the complete set of results). As seen in Figure 9, generic drug substitution rates were already above 90 percent for all groups in 2019, before the PDM Model began. During the PDM Model time period of 2020 and 2021, there were some changes in the generic substitution rates, but the changes were minor, usually at only a percent or two.

Figure 9: The generic drug substitution rate for HPP dropped more than reference MA-PDs (top panel), while UHC and its reference PDPs remained constant during 2019-2021 (bottom panel)



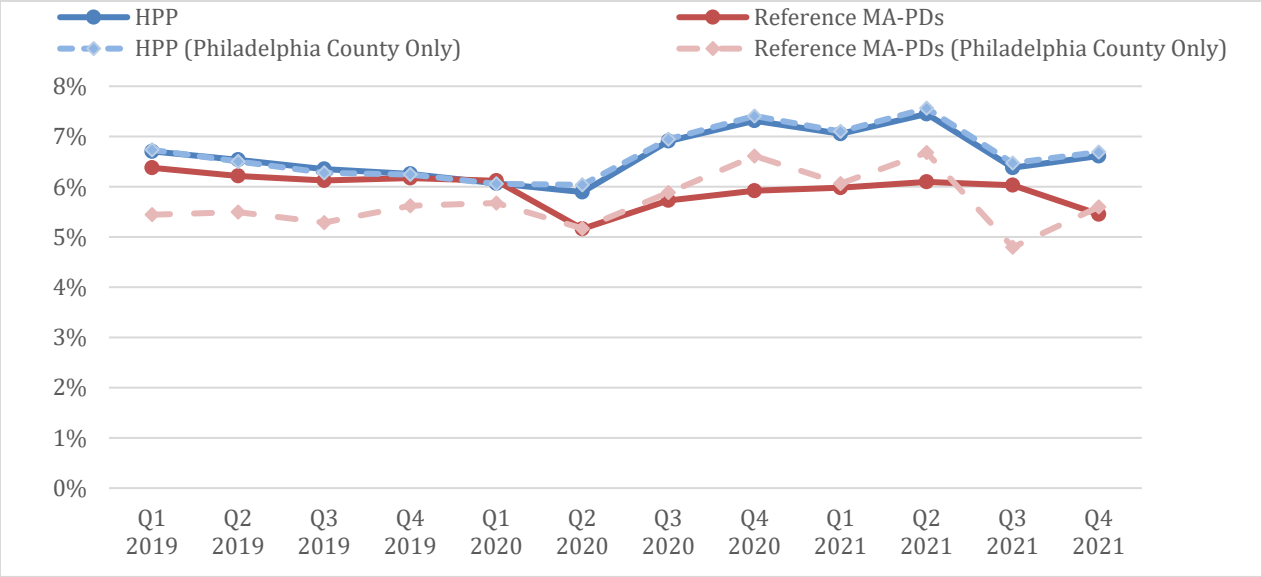
In summary, there were minimal differences between HPP PDM participating plans and their reference MA-PDs in how the selected Part D drug utilization and spending measures changed during 2019-2021. In contrast, UHC PDM participating plans experienced relative decreases over time in the total number of 30-day equivalent prescription drug fills per enrollee, percent of enrollees who reach the catastrophic phase of the Part D benefit, and catastrophic phase spending per enrollee. The relative changes observed for UHC PDM participating plans to its reference PDPs should not be interpreted as due to the PDM Model. Several important unaddressed factors such as the potential differential impact of COVID-19 on UHC PDM plan enrollees and the enrollees of reference PDPs, and remaining differences

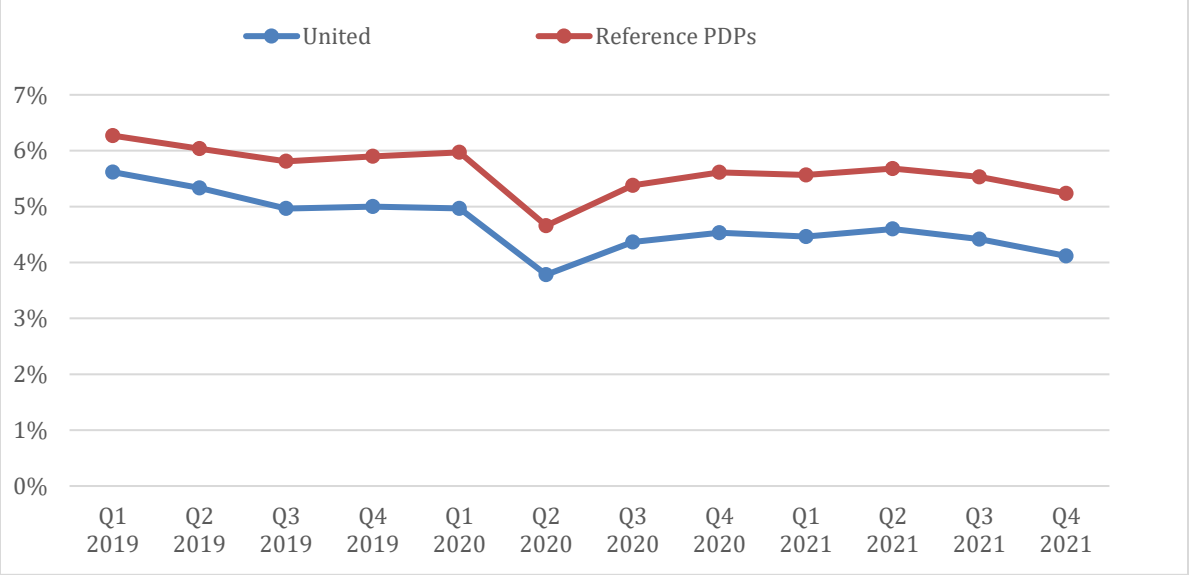
in enrollee and plan characteristics between UHC PDM plan participants and their reference PDPs could explain the difference in the observed patterns.

Healthcare service utilization

Inpatient hospitalization rates increased for HPP PDM participating plans relative to their reference MA-PDs, while UHC PDM participating plans and their reference PDPs followed a similar pattern during 2019 to 2021 (please see Appendix Tables 4 and 5 for the complete set of results). Figure 10 shows that HPP participating PDM plans exhibited an increase in the inpatient hospitalization rate starting around the second quarter of 2020 which coincides with the beginning of the COVID-19 PHE, while the rate for reference MA-PDs declined somewhat. When we subset to the Philadelphia county HPP and reference MA-PDs (green and purple lines, respectively), the inpatient hospitalization rate pattern looks more similar. The results using the subset of Philadelphia county reference MA-PDs suggests that the results using the original set of reference MA-PDs were confounded by the COVID-19 PHE. For UHC's PDM participating plans, the pattern of the inpatient hospitalization rates is strikingly similar to that of their reference PDPs.

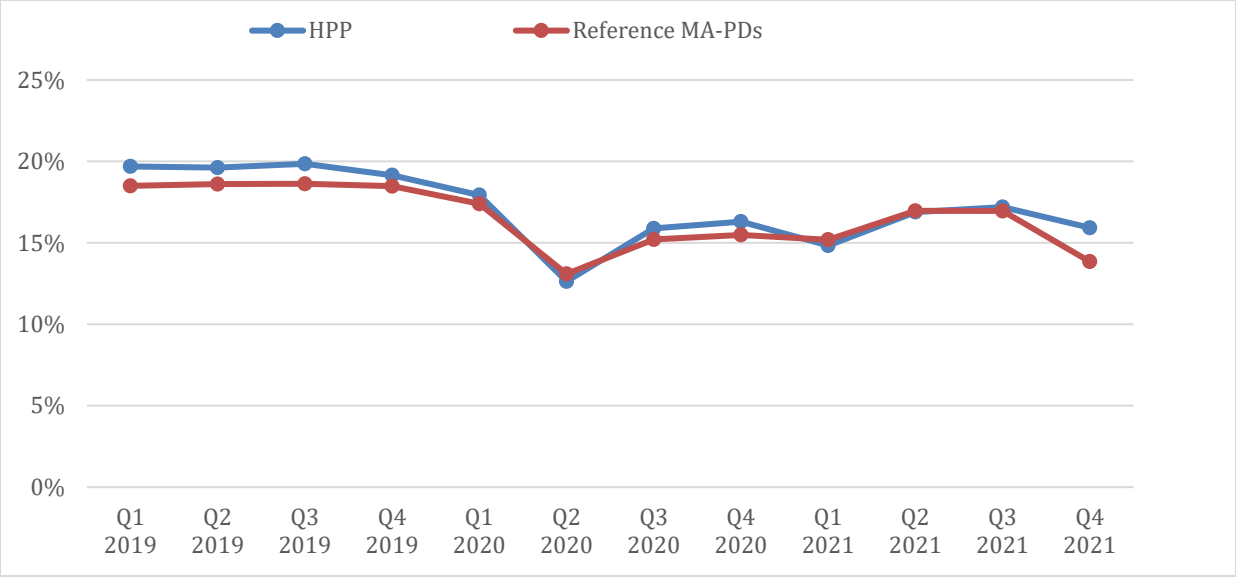
Figure 10: Inpatient hospitalization (IP) rate for HPP and reference MA-PDs (top panel) were more similar when restricting to Philadelphia county plans, while rates were consistent for UHC vs reference PDPs (bottom panel) during 2019-2021

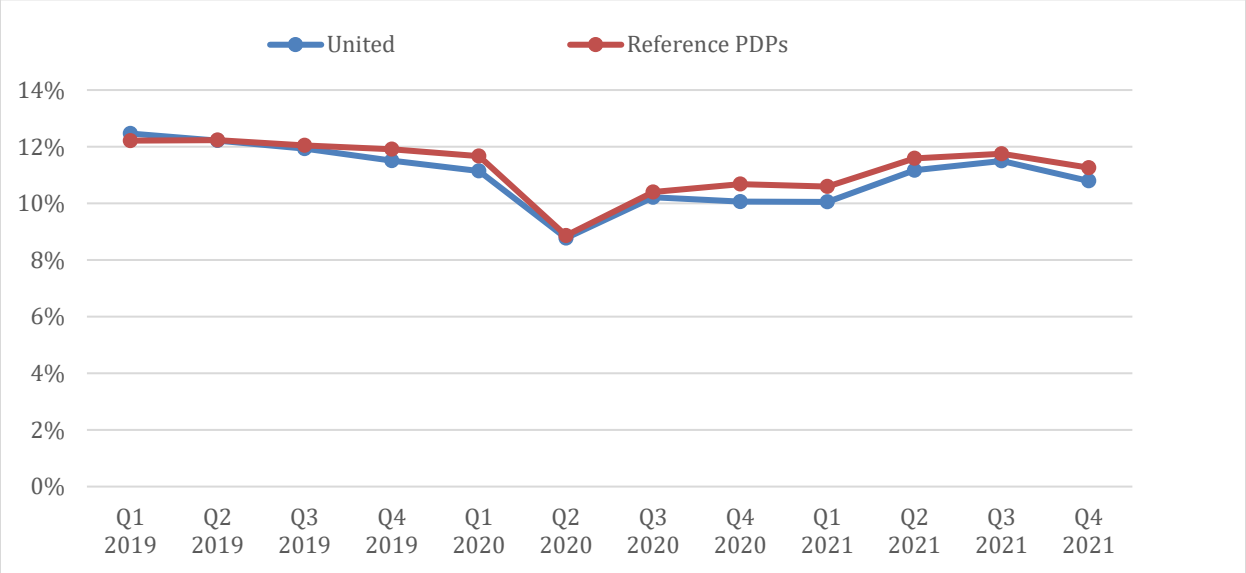




The results for emergency department visit rates found in Figure 11 show that both HPP's and UHC's PDM participating plans had similar patterns as their respective reference plans (please see Appendix Tables 4 and 5 for the complete set of results). The impact of the COVID-19 PHE is again present, like in the figures for inpatient admission rates, but unlike the inpatient admission rate results, there does not seem to be a differential COVID-19 PHE impact between HPP's PDM participating plans and their reference MA-PDs.

Figure 11: Similar emergency department (ED) visit rates for HPP vs Reference MA-PDs (top panel) and UHC vs reference PDPs (bottom panel) during 2019-2021





Programmatic Flexibilities Selected By PDM Participants

HPP offered a Rewards and Incentives (RI) program, which was the only programmatic flexibility of the six offered in the Model that was selected by PDM participants. Table 2 describes the five components of HPP's RI program in 2021. Enrollees eligible for the HPP's traditional MTM program was a common targeting criterion across the five components, with additional criteria based on the presence of drug fills that treat certain diseases (high cholesterol, diabetes, and hypertension). In addition to the reward activity to complete a comprehensive medication review, the other four rewards activities related to filling a prescription drug medication. Reward amounts ranged from a one-time

$10 amount for diabetics who filled a 30-day supply of a statin medication to a repeatable $10 amount for each 30-day supply fill of the other medications, up to $120 annually.

Table 1: HPP's CY 2021 Rewards & Incentives

Reward Activity	Reward Amount	Targeting Criteria
Complete a Comprehensive Medication Review (CMR)	$25; max $25 a year	Members eligible for the plan's MTM service [a]
Fill at least 1 Cholesterol Medication	$10 for every 30-day fill of a prescribed cholesterol medication; max $120 a year	Members ages 18+ eligible for and receiving the plan's MTM service and with a fill for a drug indicated for high cholesterol [b]
Fill at least 1 Diabetes Medication	$10 for every 30-day fill of a prescribed diabetes medication; max $120 a year	Members ages 18+ eligible for and receiving the plan's MTM service and with a fill for a drug indicated for diabetes management [b]
Fill at least 1 Hypertension Medication	$10 for every 30-day fill of a prescribed blood pressure medication; max $120 a year	Members ages 18+ eligible for and receiving the plan's MTM service and with a fill for a drug indicated for hypertension [b]
Fill at least 1 Statin Therapy Medication (for Patients with Diabetes)	$10 annually for one 30-day fill of a statin medication; max $10 a year	Members ages 40-75 eligible for and receiving the plan's MTM service with diabetes and a fill for a statin therapy medication [b]

Source: HPP's 2021 Benefit Crosswalk *(CMMI_2021_Benefit_Crosswalk_HPP_P015_Updated15Apr2021.xlsx)*

[a] According to HPP's 2021 benefit crosswalk, a beneficiary qualifies as being targeted for the CMR RI if the beneficiary is eligible for a CMR under the plan's MTM service. Based on the MTM program requirements submitted to HPMS, eligibility for HPP's MTM services is based on the following criteria: beneficiary should i) have at least 3 chronic conditions from a predetermined list of chronic conditions, ii) at least 7 chronic, Part D covered medications, and iii) expect to spend at least $4,376 a year on medications. HPP determines MTM eligibility based on Part D claims data and MTM eligibility is determined quarterly.

[b] HPP identifies targeted beneficiaries for their medication fill-based RIs based on beneficiaries included in the denominator of the corresponding 2021 Star Ratings medication adherence measures. As such, the targeted beneficiaries are subject to the same inclusion/exclusion criteria as those used for the respective denominators of the Star Ratings medication adherence measures. Additionally, to be targeted for medication-fill based RIs, a beneficiary needs to be eligible for and receiving the plan's MTM service, which is defined as completing a CMR in 2021.

Table 2 shows the targeting and engagement rates for HPP's RI Program in 2021. The percentage of HPP enrollees targeted for each of the program activities ranged from 8.9 percent (for fill at least 1 diabetes medication) to 36.6 percent (for complete a CMR). The percentage of receiving the RI among those targeted was very high across the activities (range of 71.5 percent to 97.3 percent)

Table 2: HPP's Part D Rewards and Incentives Program Targeting and Engagement Rates in 2021

Reward Activity	No. of enrollees (A)	No. of Enrollees Targeted (B)	% of Enrollees Targeted of Total Enrollment (B/A)	No. of Enrollees Receiving RI (Engagement) (C)	% of Enrollees Receiving RI of Total Targeted Enrollees (C/B)
Complete a CMR	15,194	5561	36.6%	3,976	71.5%
Fill at least 1 Cholesterol Medication	15,194	3163	20.8%	3,069	97.0%
Fill at least 1 Diabetes Medication	15,194	1353	8.9%	1,307	96.6%
Fill at least 1 Hypertension Medication	15,194	2666	17.6%	2,593	97.3%
Fill at least 1 Statin Therapy Medication (for Patients with Diabetes)	15,194	1674	11.0%	1,407	84.1%

*Note: The total enrollment for 2021 YTD includes beneficiaries who switched between participating plans during this period.

Figures 12a-c show percent of enrollees with at least one diabetes drug fill, at least one statin fill, and at least one RAS-acting fill. The percentages remained largely consistent across the three drug classes for HPP and reference MA-PDs during the 2019 to 2021 time period. However, there was some divergence in percent of enrollees with at least one diabetes drug fill, with the percentage increasing for HPP while remaining relatively stable for the reference MA-PDs. It is unclear to what extent, if any, this observed increase in the percent of enrollees with at least one diabetes drug fill for HPP is due to their MTM+ program.

Figure 12a: Percent of enrollees with at least one diabetes drug fill for HPP and reference MA-PDs were consistent during 2019-2021

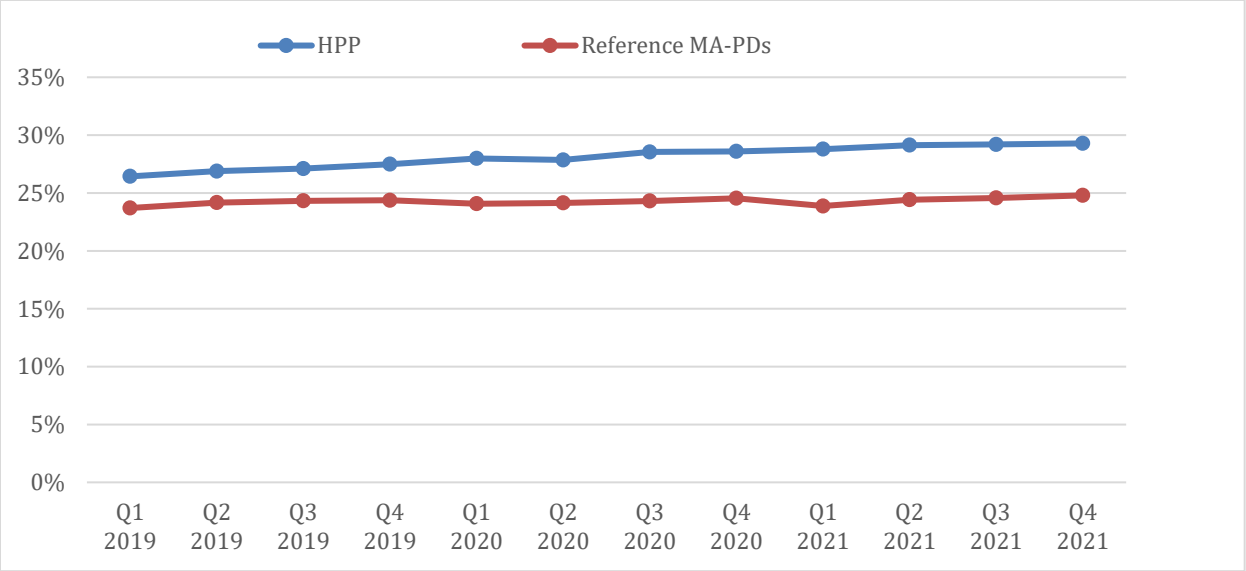


Figure 12b: Percent of enrollees with at least one statin fill for HPP and reference MA-PDs were also consistent during 2019-2021

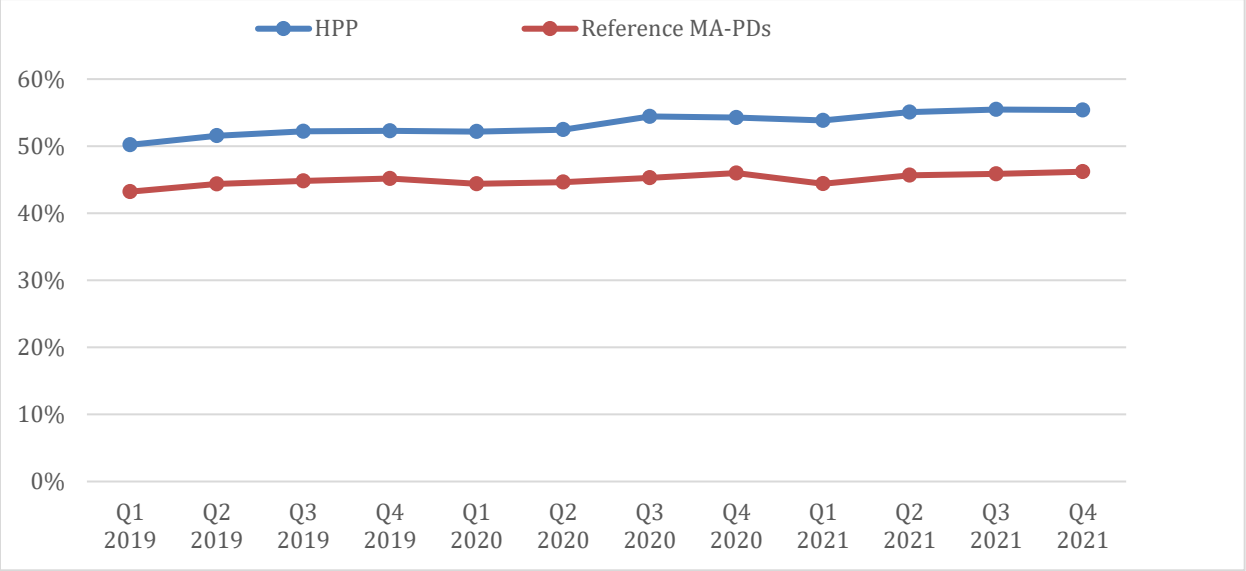
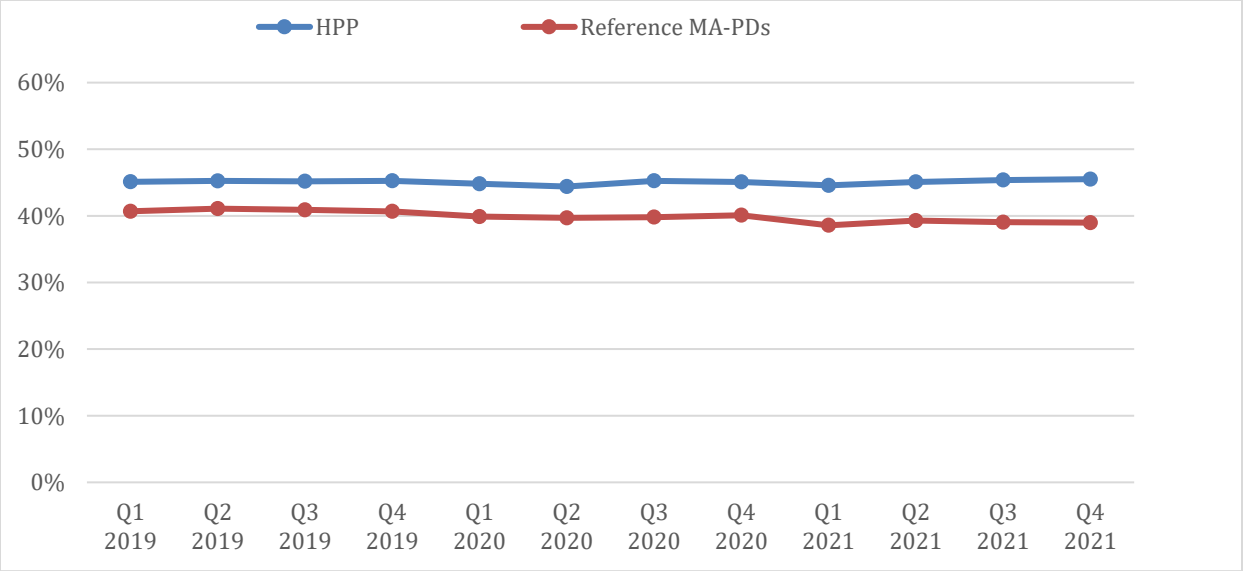


Figure 12c: Percent of enrollees with at least one RAS-acting fill (Bottom Panel) for HPP and reference MA-PDs were consistent during 2019-2021



Discussion

Whether the PDM Model as designed would have reduced federal reinsurance spending while maintaining or improving quality of care — had participation been more substantial — remains uncertain. The patterns of the percent of enrollees who reached the catastrophic phase and spending per enrollee in the catastrophic phase were similar for HPP and its reference MA-PDs. CMS evaluators observed a reduced percent of enrollees reaching the catastrophic phase and lower spending per enrollee in the catastrophic phase, along with a relative reduction in total 30-day equivalent prescription drug fills for UHC compared to its reference PDPs. However, these comparisons are descriptive, and the two sets of reference Part D plans were constructed only to attain similar proportions of LIS beneficiaries. Many other differences between HPP and UHC PDM Part D plans and their respective reference Part D plans may be driving the observed patterns, as opposed to any effect of the PDM Model. Furthermore, CMS evaluators did not observe any meaningful differences between PDM participating plans and reference Part D plans on the healthcare service utilization measures of inpatient hospitalization rates and emergency department visit rates. The key lesson from the PDM Model is the magnitude of the challenge inherent in designing a voluntary model that creates a persuasive business case for Part D plan sponsors to accept additional financial risk in the Part D program, as evidenced by the low participation rate.

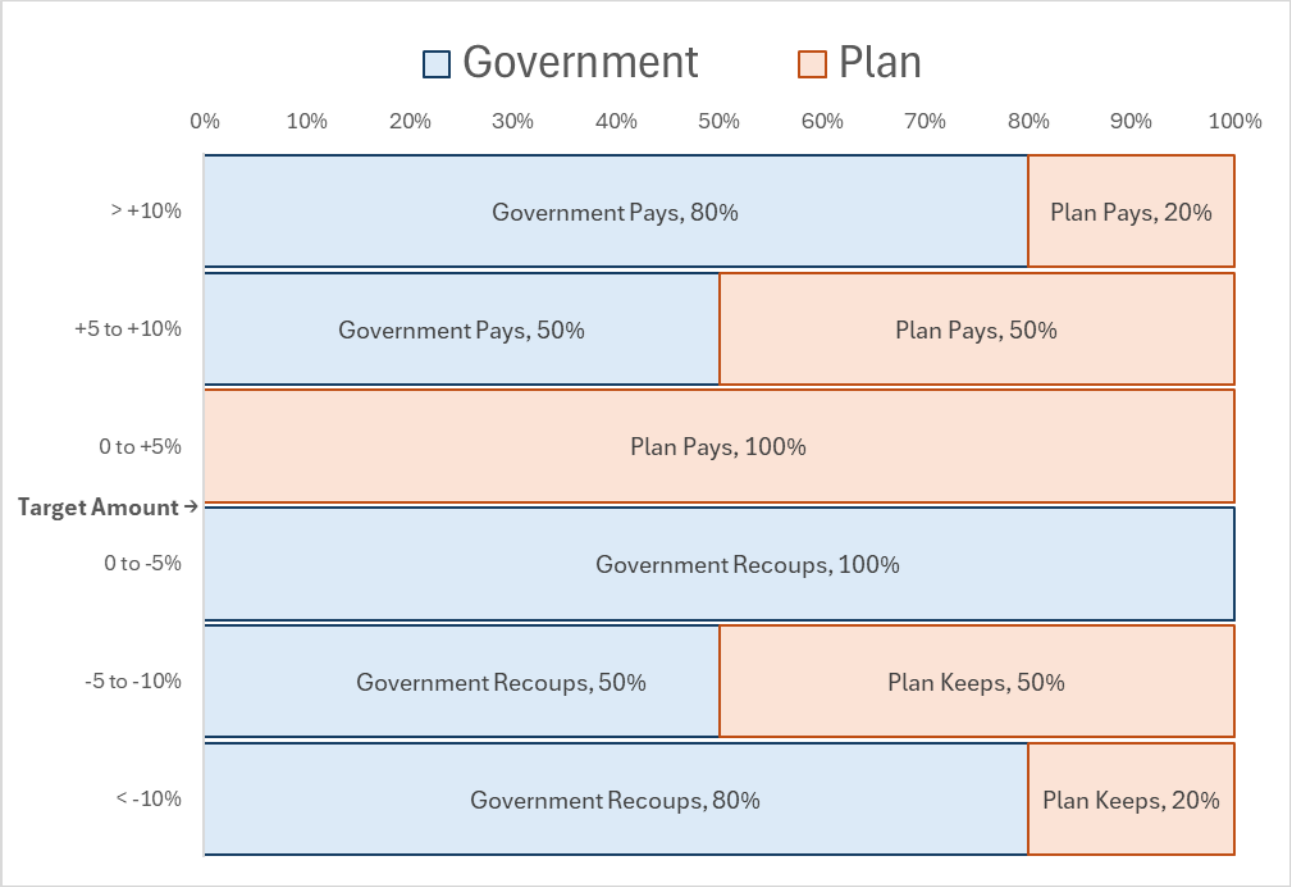
Despite the availability of numerous optional programmatic flexibilities and the opportunity to share in federal reinsurance savings, only two Part D plan sponsors participated in the PDM Model. Although the PDM Model was terminated on December 31, 2021 due to low participation, the principle of reducing federal liability in the catastrophic

coverage phase was subsequently reflected in the Part D benefit redesign provisions of the Inflation Reduction Act of 2022 (IRA).

Under the IRA's Part D benefit redesign provisions, which took effect in 2025, the coverage gap phase is eliminated and Part D beneficiaries face a maximum $2,000 annual out-of-pocket cap, after which they enter a redesigned catastrophic phase. In the redesigned catastrophic phase, liability is shared as follows: 60 percent Part D plans, 20 percent drug manufacturers, and 20 percent federal government. This represents a substantial shift from the prior Part D benefit design, under which the federal government bore 80 percent of catastrophic phase costs through reinsurance. The impact of the redesigned Part D benefit on premiums, drug costs, and utilization remains to be determined.

Appendix

Appendix Figure 1: Medicare Part D Program Risk Corridors [a,b]



[a] Target amount equals the sum of direct subsidy payments and basic premiums minus administrative costs and profits as reported in Part D plan bids.

[b] Allowable costs equals actual plan liability under the Part D defined standard benefit that considers DIR. Allowable costs are compared to the Target Amount based on above risk corridor percentages to calculate reconciliation payments.

Appendix Table 1: Quarterly Plan Enrollment of 2021 PDM Participating Plans from 2019 Q1 to 2021 Q4, by Part D Plan Sponsor. Pre-PDM 2019 and PDM Model 2020-2021

Part D plan sponsor	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4
HPP	16,799	16,431	16,185	15,953	15,035	14,677	14,317	14,152	13,949	13,654	13,561	13,464
United	69,076	68,384	67,990	68,074	64,215	63,665	63,359	62,589	62,410	60,448	59,865	59,689

Appendix Table 2: UHC and Reference PDPs Beneficiaries Count and Percent for All Enrollment, Demographics for by Year

Part D Plan Sponsor	Demographic Group	Demographic Sub-Group	2019 Count of beneficiaries	2019 Percent of beneficiaries	2020 Count of beneficiaries	2020 Percent of beneficiaries	2021 Count of beneficiaries	2021 Percent of beneficiaries
United	***ALL***	***ALL***	***74,938***	***100.0%***	***68,665***	***100.0%***	***67,555***	***100.0%***
"	Age	Age 65-74	35,649	47.6%	32,300	47.0%	30,415	45.0%
"	"	Age 75-84	20,739	27.7%	19,961	29.1%	20,241	30.0%
"	"	Age 85+	8,439	11.3%	8,070	11.8%	7,875	11.7%
"	"	Age under 65	10,111	13.5%	8,334	12.1%	9,024	13.4%
"	Dual	Dual	18,087	24.1%	14,960	21.8%	18,035	26.7%
"	"	Not dual	56,851	75.9%	53,705	78.2%	49,520	73.3%
"	LIS	LIS	20,790	27.7%	17,372	25.3%	19,581	29.0%
"	"	Not LIS	54,148	72.3%	51,293	74.7%	47,974	71.0%
"	Race	Black	648	0.9%	551	0.8%	592	0.9%
"	"	Hispanic	9,745	13.0%	8,312	12.1%	9,719	14.4%
"	"	Other race	4,857	6.5%	4,492	6.5%	5,068	7.5%
"	"	White	59,688	79.6%	55,310	80.6%	52,176	77.2%
"	Sex	Female	42,355	56.5%	38,782	56.5%	37,993	56.2%
"	"	Male	32,583	43.5%	29,883	43.5%	29,562	43.8%
Reference PDPs	***ALL***	***ALL***	***16,656,660***	***100.0%***	***14,719,377***	***100.0%***	***12,627,050***	***100.0%***
"	Age	Age 65-74	8,091,021	48.6%	6,881,548	46.8%	5,599,935	44.3%

Part D Plan Sponsor	Demographic Group	Demographic Sub-Group	2019 Count of beneficiaries	2019 Percent of beneficiaries	2020 Count of beneficiaries	2020 Percent of beneficiaries	2021 Count of beneficiaries	2021 Percent of beneficiaries
Reference PDPs	Age	Age 75-84	4,519,832	27.1%	4,111,275	27.9%	3,759,023	29.8%
"	"	Age 85+	1,939,860	11.6%	1,827,495	12.4%	1,645,951	13.0%
"	"	Age under 65	2,105,947	12.6%	1,899,059	12.9%	1,622,141	12.8%
"	Dual	Dual	3,309,603	19.9%	3,151,104	21.4%	2,873,925	22.8%
"	"	Not dual	13,347,057	80.1%	11,568,273	78.6%	9,753,125	77.2%
"	LIS	LIS	3,879,022	23.3%	3,658,357	24.9%	3,240,318	25.7%
"	"	Not LIS	12,777,638	76.7%	11,061,020	75.1%	9,386,732	74.3%
"	Race	Black	1,214,816	7.3%	1,100,094	7.5%	932,523	7.4%
"	"	Hispanic	674,473	4.0%	615,594	4.2%	550,231	4.4%
"	"	Other race	880,692	5.3%	816,021	5.5%	752,186	6.0%
"	"	White	13,886,679	83.4%	12,187,668	82.8%	10,392,110	82.3%
"	Sex	Female	9,547,436	57.3%	8,421,508	57.2%	7,215,441	57.1%
"	"	Male	7,109,222	42.7%	6,297,866	42.8%	5,411,606	42.9%
"	"	Unknown sex	<11	0.0%	<11	0.0%	<11	0.0%

Appendix Table 3: HPP and Reference MA-PDs Beneficiaries Count and Percent for All Enrollment, Demographics for by Year

Part D Plan Sponsor	Group	Sub-Group	2019 Count of Beneficiaries	2019 Percent	2020 Count of Beneficiaries	2020 Percent	2021 Count of Beneficiaries	2021 Percent
HPP	***ALL***	***ALL***	***18,602***	***100.0%***	***16,321***	***100.0%***	***15,194***	***100.0%***
"	Age	Age 65-74	7,790	41.9%	6,778	41.5%	6,271	41.3%
"	"	Age 75-84	3,644	19.6%	3,195	19.6%	3,089	20.3%
"	"	Age 85+	1,033	5.6%	1,000	6.1%	959	6.3%
"	"	Age under 65	6,135	33.0%	5,348	32.8%	4,875	32.1%
"	Dual	Dual	15,250	82.0%	13,582	83.2%	12,702	83.6%
"	"	Not dual	3,352	18.0%	2,739	16.8%	2,492	16.4%
"	LIS	LIS	16,282	87.5%	14,376	88.1%	13,282	87.4%
"	"	Not LIS	2,320	12.5%	1,945	11.9%	1,912	12.6%
"	Race	Black	9,241	49.7%	7,829	48.0%	6,981	45.9%
"	"	Hispanic	5,457	29.3%	5,002	30.6%	4,796	31.6%
"	"	Other race	1,090	5.9%	1,009	6.2%	965	6.4%
"	"	White	2,814	15.1%	2,481	15.2%	2,452	16.1%

Part D Plan Sponsor	Group	Sub-Group	2019 Count of Beneficiaries	2019 Percent	2020 Count of Beneficiaries	2020 Percent	2021 Count of Beneficiaries	2021 Percent
HPP	Sex	Female	11,111	59.7%	9,745	59.7%	9,129	60.1%
"	"	Male	7,491	40.3%	6,576	40.3%	6,065	39.9%
Reference MA-PDs	***ALL***	***ALL***	***3,194,243***	***100.0%***	***3,372,648***	***100.0%***	***3,646,873***	***100.0%***
"	Age	Age 65-74	1,221,607	38.2%	1,312,095	38.9%	1,446,237	39.7%
"	"	Age 75-84	632,231	19.8%	656,937	19.5%	693,536	19.0%
"	"	Age 85+	271,087	8.5%	278,432	8.3%	277,922	7.6%
"	"	Age under 65	1,069,318	33.5%	1,125,184	33.4%	1,229,178	33.7%
"	Dual	Dual	3,108,968	97.3%	3,259,167	96.6%	3,544,589	97.2%
"	"	Not dual	85,275	2.7%	113,481	3.4%	102,284	2.8%
"	LIS	LIS	3,161,418	99.0%	3,323,132	98.5%	3,587,976	98.4%
"	"	Not LIS	32,825	1.0%	49,516	1.5%	58,897	1.6%
"	Race	Black	816,661	25.6%	831,344	24.6%	928,233	25.5%
"	"	Hispanic	782,707	24.5%	802,045	23.8%	780,724	21.4%
	"	Other race	342,292	10.7%	370,926	11.0%	401,849	11.0%

Part D Plan Sponsor	Group	Sub-Group	2019 Count of Beneficiaries	2019 Percent	2020 Count of Beneficiaries	2020 Percent	2021 Count of Beneficiaries	2021 Percent
Reference MA-PDs	Race	White	1,252,583	39.2%	1,368,333	40.6%	1,536,067	42.1%
"	Sex	Female	1,980,893	62.0%	2,078,541	61.6%	2,240,497	61.4%
"	"	Male	1,213,350	38.0%	1,294,107	38.4%	1,406,376	38.6%

Appendix Table 4: HPP and Reference MA-PDs Drug Cost and Utilization, Healthcare Service Utilization, and Appropriate Drug Use Indicator Outcomes

Outcomes by Plan Sponsor	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
# of Beneficiaries Enrolled (in 1,000s)												
HPP	17	16	16	16	15	15	14	14	14	14	14	13
Reference MA-PDs	2,642	2,746	2,857	2,900	2,874	2,926	3,012	3,054	3,067	3,147	3,246	3,259
Catastrophic-Phase Spending (GDCA) per Beneficiary in $												
HPP	$390	$849	$1,053	$1,229	$357	$859	$1,089	$1,272	$362	$913	$1,184	$1,374
Reference MA-PDs	$337	$777	$1,042	$1,223	$352	$794	$1,045	$1,246	$364	$862	$1,150	$1,363
% of Beneficiaries Reached Catastrophic-Phase												
HPP	4%	10%	16%	22%	4%	9%	15%	20%	4%	9%	15%	20%
Reference MA-PDs	4%	10%	16%	22%	3%	9%	14%	19%	3%	9%	15%	20%
Generic Substitution Percentage Rate (GSR)												
HPP	96%	96%	96%	96%	95%	93%	93%	93%	93%	93%	93%	93%
Reference MA-PDs	95%	95%	95%	95%	95%	94%	94%	94%	94%	94%	94%	95%
Total Fill Count per Beneficiary												
HPP	13.5	13.9	14.0	14.0	13.9	13.3	13.8	13.7	13.3	13.6	13.7	13.5
Reference MA-PDs	11.8	12.0	12.1	12.2	12.0	11.6	11.7	11.8	11.3	11.6	11.6	11.6
Total 30-Day Equivalents per Beneficiary												
HPP	17.2	18.0	18.2	18.4	18.4	18.0	18.8	18.7	18.3	18.7	18.9	18.9
Reference MA-PDs	17.2	17.7	17.9	18.2	18.0	17.8	17.9	18.2	17.4	18.0	18.0	18.1

Outcomes by Plan Sponsor	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
% of Beneficiaries with at least diabetes drug fill												
HPP	26%	27%	27%	27%	28%	28%	29%	29%	29%	29%	29%	29%
Reference MA-PDs	24%	24%	24%	24%	24%	24%	24%	25%	24%	24%	25%	25%
% of Beneficiaries with at least statin drug fill												
HPP	50%	52%	52%	52%	52%	52%	54%	54%	54%	55%	55%	55%
Reference MA-PDs	43%	44%	45%	45%	44%	45%	45%	46%	44%	46%	46%	46%
% of Beneficiaries with at least RAS-acting drug fill												
HPP	45%	45%	45%	45%	45%	44%	45%	45%	45%	45%	45%	46%
Reference MA-PDs	41%	41%	41%	41%	40%	40%	40%	40%	39%	39%	39%	39%
Inpatient Hospitalization Rate												
HPP	7%	7%	6%	6%	6%	6%	7%	7%	7%	7%	6%	7%
Reference MA-PDs	6%	6%	6%	6%	6%	5%	6%	6%	6%	6%	6%	5%
HPP (Philadelphia County Only)	7%	7%	6%	6%	6%	6%	7%	7%	7%	8%	6%	7%
Reference MA-PDs (Philadelphia County Only)	5%	5%	5%	6%	6%	5%	6%	7%	6%	7%	5%	6%
Emergency Department Visit Rate												
HPP	20%	20%	20%	19%	18%	13%	16%	16%	15%	17%	17%	16%
Reference MA-PDs	18%	19%	19%	18%	17%	13%	15%	15%	15%	17%	17%	14%

Appendix Table 5: UHC and Reference PDPs Drug Cost and Utilization and Appropriate Drug Use Indicator Outcomes

Part D Plan Sponsor	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
# of Beneficiaries Enrolled (in 1,000s)												
United	69	68	68	68	64	64	63	63	62	60	60	60
Reference PDPs	15,510	15,528	15,582	15,639	13,941	13,844	13,793	13,697	11,986	11,816	11,727	11,626
Catastrophic-Phase Spending (GDCA) per Beneficiary in $												
United	$222	$392	$480	$568	$254	$426	$477	$548	$241	$421	$516	$594
Reference PDPs	$216	$397	$501	$585	$255	$449	$547	$641	$283	$512	$632	$736
% of Beneficiaries Reached Catastrophic-Phase												
United	1%	3%	5%	8%	1%	3%	4%	6%	1%	3%	5%	7%
Reference PDPs	2%	4%	6%	9%	2%	3%	6%	8%	2%	4%	6%	9%
Generic Substitution Percentage Rate (GSR)												
United	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	94%
Reference PDPs	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Total Fill Count per Beneficiary												
United	7.3	7.3	7.4	7.4	7.5	7.0	6.9	7.0	6.7	6.9	6.9	6.9
Reference PDPs	8.1	8.1	8.1	8.1	8.4	7.9	8.0	8.1	7.9	8.1	8.1	8.1
Total 30-Day Equivalents per Beneficiary												
United	12.5	12.7	12.8	12.9	13.4	12.8	12.6	12.8	12.2	12.5	12.6	12.6
Reference PDPs	13.3	13.6	13.6	13.7	14.3	13.6	13.9	14.1	13.8	14.1	14.2	14.3

Part D Plan Sponsor	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
Inpatient Hospitalization Rate												
United	6%	5%	5%	5%	5%	4%	4%	5%	4%	5%	4%	4%
Reference PDPs	6%	6%	6%	6%	6%	5%	5%	6%	6%	6%	6%	5%
Emergency Department Visit Rate												
United	12%	12%	12%	12%	11%	9%	10%	10%	10%	11%	11%	11%
Reference PDPs	12%	12%	12%	12%	12%	9%	10%	11%	11%	12%	12%	11%