



Evaluation of the Part D Enhanced Medication Therapy Management (MTM) Model: Fifth Evaluation Report

Appendix B: Methodology and Supplemental Findings

Acumen, LLC: Ryan Beringer, Bingyan Fan, Daekun Heo, Josh Oh, Lois Olinger, Kristy Piccinini, Dimitra Politi, Yuchen Qian, Kamila Saldanha, Edward Sung, Anqi Wang, David Wright, Lucy Yao

Westat, Inc.: Willow Burns, Susan Hassell, Angelina Lee, Lauren Mercincavage, Kevin Neipp, Jennifer Nooney, Shannon Reefer, Natalie Teixeira Bailey

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Center for Medicare and Medicaid Innovation (CMMI)
Centers for Medicare & Medicaid Services (CMS)
7500 Security Blvd.
Mail Stop: WB-06-05
Baltimore, MD 21244-1850
Contracting Officer's Representative: Caroline Ly
Contract Number: HHSM-500-2014-000271, HHSM-500-T0005

Submitted by:

Acumen, LLC
500 Airport Blvd., Suite 365
Burlingame, CA 94010-1936
Project Director: Dimitra Politi

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APPENDIX B METHODOLOGY AND SUPPLEMENTAL FINDINGS

This appendix contains detailed information on the methodology and supplemental findings from the analyses presented in the Enhanced Medication Therapy Management (MTM) Fifth Evaluation Report. Section B.1 presents data sources used for all analyses in the report. Section B.2 presents impact analyses methodology. Section B.3 through Section B.4 provide supplementary findings on Model impacts. Section B.5 presents supplemental findings on beneficiary enrollment in Enhanced MTM plans. Section B.6 presents supplemental findings on beneficiary eligibility and service receipt for Enhanced MTM interventions. Finally, Section B.7 presents qualitative methods.

B.1 Data Sources

This appendix provides a summary of the data sources used for the Enhanced MTM Fifth Evaluation Report. Table B.1.1 lists the data sources used for calculating eligibility and service receipt statistics, and for matching and estimation of Model impacts on expenditures and utilization outcomes presented in Section 2 and Section 3, respectively, of the main report.

Table B.1.1: Data Sources Used in Enhanced MTM Fifth Evaluation Report

Data Source	Time Period Covered	Access Date	Use
Common Working File (CWF)	2016-2021	April 2022	Difference-in-differences (DiD) Estimation: Parts A and B expenditures; Parts A and B health service utilization Comparison group matching: Parts A and B expenditures; Parts A and B health service utilization; Frailty measures; Hierarchical Condition Categories (HCC); HCC risk score
Prescription Drug Event (PDE)	2016-2021	March 2022	DiD Estimation: Prescription drug utilization Comparison group matching: Prescription drug utilization
Enrollment Database (EDB)	2016-2021	March 2022	Comparison group matching: Parts A and B enrollment; Original reason for a beneficiary's entitlement to Medicare benefits; Dual status; end-stage renal disease (ESRD) status; Residence information
Common Medicare Environment (CME)	2016-2021	March 2022	Comparison group matching: Part D enrollment; Age; Gender; Race; low-income subsidy (LIS) status Eligibility and service receipt statistics: Part D enrollment
Master Beneficiary Summary File (MBSF)	2016-2020	April 2022	Comparison group matching: Chronic condition information

Data Source	Time Period Covered	Access Date	Use
Minimum Data Set (MDS)	2016-2021	March 2022	Comparison group matching: Long-term Institutional status
Dartmouth Atlas HRR-Zip Code Crosswalk File	2014-2019	December 2021	Comparison group matching: Hospital Referral Region (HRR) of residence
Health Plan Management System (HPMS)	2017-2021	December 2017, 2018, 2019, 2020, and 2021	Comparison group matching: Part D plan information
Prevention Quality Indicators Technical Specifications	N/A	July 2022	Information about diagnoses groups of ambulatory care-sensitive conditions (ACSCs)
Medi-Span Drug Database	N/A	March 2022	DiD estimation: Prescription drug utilization (Prescription drug classes)
Food and Drug Administration (FDA) Drug Crosswalks	N/A	March 2022	DiD estimation: Prescription drug utilization (Prescription drug types)
Enhanced MTM Encounter Data	2017-2021	June 2022	Eligibility and service receipt statistics: Enhanced MTM services Subgroup identification: Significant service
Medicare Advantage and Prescription Drug Plan system (MARx)	2017-2021	June 2022	Eligibility and service receipt statistics: Enhanced MTM eligibility Subgroup identification: Significant service
Intervention-specific eligibility data	2017-2021	June 2022	Eligibility and service receipt statistics: Enhanced MTM eligibility by intervention Subgroup identification: Significant service
Part D Reporting Requirements Data	2016-2021	June 2022	Eligibility and service receipt statistics: Traditional MTM eligibility and services

B.2 Impact Analyses Methodology

This appendix provides additional methodological details on analyses that estimate the impact of the Enhanced MTM Model on expenditures of beneficiaries enrolled in participating Plan Benefit Packages (PBPs).

Section B.2.1 presents the approach used to select the analytic cohort for analyses of Model impacts on beneficiaries enrolled in Model-participating plans (“all-enrollee analyses”), including the treatment group and appropriate comparators. Next, Section B.2.2 describes the sample construction for analyses of Model impacts on the subgroup of beneficiaries who received significant services. Section B.2.3 defines and summarizes the outcome measures included in this report. Section B.2.4 presents the analytic models that produce the impact estimates. Finally, Section B.2.5 describes the algorithm that calculates changes in net expenditures for the Model.

B.2.1 Selection of Analytic Cohort and Covariate Summaries for All-Enrollee Analyses

To select the analytic cohort for all-enrollee analyses, enrollees in Model-participating plans were identified and a propensity score matching approach was used to select appropriate comparators based on their demographic and baseline health characteristics. This process consists of the following three steps:

(1) Identify Treatment Group and Eligible Treatment Beneficiary-months for Matching

The treatment cohort consists of all beneficiaries enrolled in Model-participating plans in 2017, 2018, 2019, 2020, or 2021 who had at least one month of exposure to the Model (i.e., were enrolled in a Model-participating plan after the Model’s launch), and 12 months of continuous Medicare Parts A, B, and D enrollment prior to their exposure to the Model. Beneficiaries were excluded if they received hospice care prior to or in the first month of their exposure to the Model, because beneficiaries in hospice have short life expectancies and are not expected to benefit from Enhanced MTM. These enrollment restrictions ensure data availability for matching and estimation of Model impacts.¹ After exclusions were applied, about 58.7 percent of beneficiaries enrolled in participating plans were included in the treatment cohort.²

Enhanced MTM program start dates (“index dates”) were set to either January 1, 2017 (which is when Model implementation began) for beneficiaries who were enrolled in Enhanced MTM

¹ Previous sensitivity analyses, which relaxed the enrollment criteria to only require 6 months of continuous Medicare Parts A, B, and D enrollment prior to exposure to the Model, found that the results from difference-in-differences (DiD) estimation were similar to the results that utilized 12 months of enrollment.

² Of those who did not satisfy enrollment restrictions, about 11.4 percent were new Medicare enrollees, 15.9 percent had non-continuous Parts A, B, and D enrollment, and another 12.7 percent were enrolled in Medicare Advantage during the 12-month period prior to their exposure to the Model.

plans on or prior to January 2017, or the beneficiary's first date of enrollment in an Enhanced MTM plan for enrollees who joined Enhanced MTM plans after January 2017. Index dates determine the cutoff between the "baseline" (pre-exposure to Enhanced MTM) and "treatment" (post-exposure to Enhanced MTM) periods.

Beneficiary-months that were eligible for inclusion in analyses were identified for the beneficiaries who satisfied the enrollment restrictions outlined above. All baseline months were included in analyses, and post-exposure months were included in analyses conditional on availability of complete fee-for-service claims data (e.g., beneficiaries have not died or switched to Medicare Part C).³ Post-exposure beneficiary-months were censored from analyses after beneficiaries switched to an Enhanced MTM-participating plan of a different sponsor than their original Part D plan, because in that case it is not possible to attribute any estimated impacts to a specific sponsor.

(2) Identify Potential Comparators and Assign Pseudo Index Dates

To select appropriate comparison beneficiaries for the treatment cohort, potential comparators who were not exposed to the Model were identified using similar enrollment restrictions to those placed on the treatment cohort. Potential comparators resided in PDP Regions that do not offer the Model, and were enrolled in plan types that are eligible for participation in the Model (i.e., Defined Standard, Basic Alternative, or Actuarially Equivalent Standard PDPs). Thus, potential comparators were pooled from multiple plans not participating in the Model. Geographic restrictions were applied to the potential comparison group to remove beneficiaries who reside in regions far from the Model's test area (i.e., New England, New York, New Jersey, Hawaii, and Alaska) and those who reside in Maryland (due to a statewide waiver currently in place for hospital payments).

Potential comparators must not be enrolled in plans participating in the Model after the Model launched on January 1, 2017. To determine baseline and treatment periods for analyses, potential comparators were assigned pseudo index dates. The distribution of pseudo index dates mirrored the distribution of index dates in the pre-matching treatment cohort. Similar to the inclusion criteria for the pre-matching treatment cohort, potential comparator beneficiaries were also required to have continuous Parts A, B, and D enrollment for 12 months in the baseline period and for at least one month following their pseudo index date. Beneficiaries who switched into Medicare Advantage plans or other types of enrollment or received hospice care in the baseline period or immediately following their index date were excluded from analyses.

To identify eligible beneficiary-months among potential comparators, restrictions similar to those placed for eligible beneficiary-months in the treatment cohort were imposed. All baseline

³ A supplemental analysis found that death or switching to non-Medicare Parts A, B, and D enrollment is not associated with enrollment in Enhanced MTM plans. The percentage of beneficiaries who were censored from the treatment population was similar to that of the comparison group. Additionally, the length of enrollment during the post-exposure period was very similar between the treatment and comparison groups.

months are included in analyses, and beneficiary-months following the pseudo index date are included in analyses conditional on availability of complete fee-for-service claims data (e.g., beneficiaries have not died or switched to Medicare Part C).

(3) Conduct Matching to Select Comparison Cohort

After identifying eligible beneficiary-months for the treatment cohort and the cohort of potential comparators, propensity score estimation using baseline information was conducted. The propensity score model included both individual characteristics in the 12-month period before Model exposure (e.g., variables related to demographic and clinical characteristics, past medical expenditures, past healthcare and drug utilization) as well as regional variables (e.g., urban/rural status based on zip code information, medical expenditures and healthcare utilization in Hospital Referral Region of residence).

The propensity score was used to match eligible beneficiary-months in the treatment cohort to eligible beneficiary-months in the potential comparison cohort. Matching was conducted separately for each PBP participating in the Model, to ensure that potential comparators were enrolled in plans of the same type (i.e., defined standard, basic alternative, or actuarially equivalent standard PDP), and did not reside geographically far from the PDP region of the relevant Enhanced MTM plan. The matching process used propensity score caliper matching with replacement, combined with exact matching on select variables (e.g., age, race). Each treatment beneficiary-month was matched to up to four comparison beneficiary-months, and weights were applied to account for many-to-many matching.

Matching was performed separately for beneficiaries first enrolled in Enhanced MTM plans in 2017 or 2018, in 2019, in 2020, and in 2021. For beneficiaries first enrolled in Enhanced MTM plans in 2017 or 2018, propensity scores were estimated separately for each sponsor. The matched samples of beneficiaries first enrolled in Enhanced MTM plans in 2017, 2018, 2019, or 2020 and used in prior evaluation report analyses were preserved to the extent possible, conditional on enrollment restrictions (e.g., potential comparators may not have been enrolled in Enhanced MTM PBPs at any point in 2017 or later) that were updated to incorporate information from Model Year 5 (2021). Impact estimates vary across evaluation reports due to data updates and some small differences across the analytic sample (because some beneficiaries used in analyses of prior evaluation reports may have been removed from analyses of subsequent evaluation reports if they no longer satisfied enrollment restrictions).

For beneficiaries who first enrolled in Enhanced MTM plans in 2019, 2020, or 2021, propensity scores were estimated separately by sponsor for beneficiaries enrolled in SilverScript/CVS, UnitedHealth, and Humana plans. For beneficiaries first enrolled in 2019, 2020, or 2021 in Blue Cross Blue Shield Northern Plains Alliance (BCBS NPA), WellCare, and Blue Cross Blue Shield Florida (BCBS FL) plans, a single propensity score model was estimated for the composite cohort of beneficiaries enrolled in plans operated by either of these sponsors. The estimation of a single propensity score model was necessary due to the small sample size considerations for the incoming cohort.

For the Model as a whole and for beneficiaries first enrolled in 2017 or 2018 the match rate was high; 98.6 percent of Enhanced MTM enrollees were matched to comparison beneficiaries. The match rates were similarly high for beneficiaries first enrolled in 2019, in 2020, or in 2021. For beneficiaries first enrolled in 2019, 98.0 percent of Enhanced MTM enrollees were matched to comparison beneficiaries. For beneficiaries first enrolled in 2020, 97.9 percent of Enhanced MTM enrollees were matched to comparison beneficiaries. For beneficiaries first enrolled in 2021, 98.0 percent of Enhanced MTM enrollees were matched to comparison beneficiaries.

Modelwide characteristics are available in Section 3.2 of the report body, and Table B.2.1 through Table B.2.12 present characteristics for each sponsor (e.g., see Table B.2.1 for baseline averages of the SilverScript/CVS sample). These tables show post-matching baseline averages for the treatment and comparison cohort for select beneficiary characteristics. As shown in these tables, there is balance in baseline characteristics between the treatment and the comparison cohort both for the Model as a whole and for each sponsor-specific sample.

Difference-in-differences (DiD) estimation relies on the assumption that the treatment and comparison groups share common trends in the baseline. This assumption was assessed by a visual inspection of trends in quarterly Medicare expenditures for the 12-month baseline period. Modelwide baseline expenditure trends for the treatment cohort and comparators are presented in Section 3.3 of the report body, and baseline expenditure trends for sponsors are shown in Figure B.2.1. A visual inspection of these graphs shows common trends in Medicare Parts A and B expenditures Modelwide and for all sponsors in the baseline, suggesting that the assumption of parallel trends required for valid DiD estimation is satisfied.

Baseline Characteristics by Sponsor

Table B.2.1 through Table B.2.12 present baseline characteristics of treatment and comparison cohorts for each sponsor. There are two tables for each sponsor: one table presents baseline demographic characteristics and the other presents baseline health services utilization, cost, and clinical profile characteristics.

Table B.2.1: SilverScript/CVS: Baseline Demographic Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Age				
% Below 65 Years Old	28.4	45.1	28.0	44.9
% 65-69 Years Old	22.1	41.5	22.2	41.6
% 70-74 Years Old	19.2	39.4	19.4	39.5
% 75-79 Years Old	13.1	33.7	13.1	33.8
% 80+ Years Old	17.2	37.8	17.2	37.8
% Female	57.8	49.4	57.8	49.4
Race				
% White	80.0	40.0	80.2	39.8
% Black	11.6	32.1	11.5	31.9
% Other	8.4	27.7	8.3	27.6
% Urban	80.7	39.5	78.6	41.0
% Dual Eligible	45.2	49.8	44.7	49.7
% with LIS Status	49.9	50.0	49.3	50.0
% Disabled (Original Enrollment Reason)	37.8	48.5	37.4	48.4
% with ESRD (Original Enrollment Reason)	0.4	6.1	0.4	6.1

Sources: CME and EDB.

Notes: Number of treatment beneficiaries: 648,161. Number of comparison beneficiaries: 1,699,173. STD: standard deviation; LIS: low-income subsidy; ESRD: end-stage renal disease. The “% Disabled” and “% with ESRD” are based on beneficiaries’ original reason for Medicare eligibility.

Table B.2.2: SilverScript/CVS: Baseline Health Services Utilization, Cost, and Clinical Profile Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Inpatient (IP) Admissions				
% with 0 IP Admissions	83.5	37.1	83.5	37.1
% with 1 IP Admission	11.3	31.6	11.3	31.7
% with 2+ IP Admissions	5.2	22.2	5.2	22.2
% of Admissions with an Unplanned Readmission	15.0	35.7	14.5	35.2
Skilled Nursing Facility (SNF) Admissions				
% with 0 SNF Admissions	96.3	18.8	96.5	18.4
% with 1 SNF Admission	2.6	15.9	2.5	15.6
% with 2+ SNF Admissions	1.1	10.3	1.0	10.0
Emergency Department (ED) Visits				
% with 0 ED Visits	71.9	45.0	71.0	45.4
% with 1 ED Visit	16.8	37.4	17.1	37.6
% with 2+ ED Visits	11.3	31.7	11.9	32.4
Evaluation and Management (E&M) Visits				
% with 0 E&M Visits	7.7	26.7	7.0	25.6
% with 1-5 E&M Visits	34.7	47.6	35.2	47.8
% with 6-10 E&M Visits	27.6	44.7	27.9	44.8
% with 11-15 E&M Visits	15.2	35.9	15.2	35.9
% with 16+ E&M Visits	14.7	35.4	14.7	35.4
Part D Utilization				
Average Number of Concurrent Medications	3.76	2.99	3.82	2.94
Costs				
Average Total Annual Part D Costs per Beneficiary	\$4,469	\$13,074	\$4,455	\$12,547
Average Total Annual Parts A and B Costs per Beneficiary	\$10,942	\$22,867	\$11,150	\$25,391
Average Annual IP Costs per Beneficiary	\$3,014	\$11,335	\$2,992	\$12,228
Clinical Profile				
Average HCC Risk Score	1.15	1.16	1.15	1.16

Sources: PDE, CWF, MBSF.

Notes: Number of treatment beneficiaries: 648,161. Number of comparison beneficiaries: 1,699,173. STD: standard deviation; HCC: Hierarchical Condition Categories.

Table B.2.3: Humana: Baseline Demographic Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Age				
% Below 65 Years Old	33.2	47.1	32.9	47.0
% 65-69 Years Old	16.9	37.4	17.1	37.6
% 70-74 Years Old	22.1	41.5	22.2	41.5
% 75-79 Years Old	12.0	32.4	12.0	32.5
% 80+ Years Old	15.8	36.5	15.9	36.5
% Female	57.0	49.5	57.0	49.5
Race				
% White	76.8	42.2	77.0	42.1
% Black	12.5	33.1	12.4	33.0
% Other	10.7	30.9	10.6	30.8
% Urban	81.5	38.9	80.0	40.0
% Dual Eligible	53.9	49.8	53.5	49.9
% with LIS Status	59.2	49.1	58.8	49.2
% Disabled (Original Enrollment Reason)	41.2	49.2	41.0	49.2
% with ESRD (Original Enrollment Reason)	0.5	7.3	0.5	7.3

Sources: CME and EDB.

Notes: Number of treatment beneficiaries: 369,349. Number of comparison beneficiaries: 873,351. STD: standard deviation; LIS: low-income subsidy; ESRD: end-stage renal disease. The “% Disabled” and “% with ESRD” are based on beneficiaries’ original reason for Medicare eligibility.

Table B.2.4: Humana: Baseline Health Services Utilization, Cost, and Clinical Profile Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Inpatient (IP) Admissions				
% with 0 IP Admissions	82.5	38.0	82.4	38.1
% with 1 IP Admission	11.6	32.1	11.7	32.1
% with 2+ IP Admissions	5.9	23.5	5.9	23.6
% of Admissions with an Unplanned Readmission	17.1	37.6	15.7	36.4
Skilled Nursing Facility (SNF) Admissions				
% with 0 SNF Admissions	96.3	18.9	96.5	18.3
% with 1 SNF Admission	2.6	16.0	2.4	15.4
% with 2+ SNF Admissions	1.1	10.3	1.0	10.1
Emergency Department (ED) Visits				
% with 0 ED Visits	70.2	45.7	69.1	46.2
% with 1 ED Visit	17.1	37.6	17.5	38.0
% with 2+ ED Visits	12.7	33.3	13.4	34.1
Evaluation and Management (E&M) Visits				
% with 0 E&M Visits	10.6	30.7	9.0	28.6
% with 1-5 E&M Visits	35.4	47.8	35.3	47.8
% with 6-10 E&M Visits	25.6	43.6	25.9	43.8
% with 11-15 E&M Visits	14.0	34.7	14.7	35.4
% with 16+ E&M Visits	14.4	35.1	15.2	35.9
Part D Utilization				
Average Number of Concurrent Medications	3.62	3.11	3.75	3.11
Costs				
Average Total Annual Part D Costs per Beneficiary	\$4,076	\$13,013	\$4,252	\$13,454
Average Total Annual Parts A and B Costs per Beneficiary	\$11,405	\$25,686	\$11,816	\$24,985
Average Annual IP Costs per Beneficiary	\$3,309	\$12,027	\$3,290	\$11,590
Clinical Profile				
Average HCC Risk Score	1.19	1.24	1.21	1.26

Sources: PDE, CWF, MBSF.

Notes: Number of treatment beneficiaries: 369,349. Number of comparison beneficiaries: 873,351. STD: standard deviation; HCC: Hierarchical Condition Categories.

Table B.2.5: BCBS NPA: Baseline Demographic Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	Mean
Age				
% Below 65 Years Old	3.2	17.6	3.3	17.7
% 65-69 Years Old	20.1	40.0	20.1	40.1
% 70-74 Years Old	24.3	42.9	24.3	42.9
% 75-79 Years Old	21.4	41.0	21.4	41.0
% 80+ Years Old	31.0	46.3	30.9	46.2
% Female	60.0	49.0	60.0	49.0
Race				
% White	97.5	15.8	97.4	15.8
% Black	0.3	5.4	0.3	5.4
% Other	2.3	14.8	2.3	14.9
% Urban	65.5	47.5	66.8	47.1
% Dual Eligible	2.8	16.6	2.8	16.6
% with LIS Status	3.9	19.3	3.9	19.3
% Disabled (Original Enrollment Reason)	7.4	26.1	7.4	26.2
% with ESRD (Original Enrollment Reason)	0.1	3.4	0.1	3.4

Sources: CME and EDB.

Notes: Number of treatment beneficiaries: 176,175. Number of comparison beneficiaries: 295,167. STD: standard deviation; LIS: low-income subsidy; ESRD: end-stage renal disease. The “% Disabled” and “% with ESRD” are based on beneficiaries’ original reason for Medicare eligibility.

Table B.2.6: BCBS NPA: Baseline Health Services Utilization, Cost, and Clinical Profile Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Inpatient (IP) Admissions				
% with 0 IP Admissions	86.4	34.2	86.2	34.5
% with 1 IP Admission	10.5	30.7	10.4	30.5
% with 2+ IP Admissions	3.0	17.1	3.4	18.0
% of Admissions with an Unplanned Readmission	9.5	29.3	10.6	30.7
Skilled Nursing Facility (SNF) Admissions				
% with 0 SNF Admissions	96.4	18.7	96.1	19.5
% with 1 SNF Admission	2.8	16.5	3.1	17.4
% with 2+ SNF Admissions	0.9	9.2	0.8	9.0
Emergency Department (ED) Visits				
% with 0 ED Visits	78.6	41.0	77.1	42.0
% with 1 ED Visit	15.1	35.8	15.8	36.5
% with 2+ ED Visits	6.3	24.3	7.1	25.6
Evaluation and Management (E&M) Visits				
% with 0 E&M Visits	4.8	21.3	4.8	21.3
% with 1-5 E&M Visits	44.6	49.7	40.4	49.1
% with 6-10 E&M Visits	29.3	45.5	30.3	46.0
% with 11-15 E&M Visits	12.4	33.0	14.1	34.8
% with 16+ E&M Visits	8.9	28.5	10.4	30.6
Part D Utilization				
Average Number of Concurrent Medications	3.35	2.44	3.54	2.53
Costs				
Average Total Annual Part D Costs per Beneficiary	\$2,300	\$8,687	\$2,506	\$9,430
Average Total Annual Parts A and B Costs per Beneficiary	\$8,546	\$17,370	\$9,366	\$18,389
Average Annual IP Costs per Beneficiary	\$2,178	\$8,114	\$2,299	\$8,402
Clinical Profile				
Average HCC Risk Score	0.97	0.84	1.01	0.87

Sources: PDE, CWF, MBSF.

Notes: Number of treatment beneficiaries: 176,175. Number of comparison beneficiaries: 295,167. STD: standard deviation; HCC: Hierarchical Condition Categories.

Table B.2.7: UnitedHealth: Baseline Demographic Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Age				
% Below 65 Years Old	17.1	37.6	19.5	39.6
% 65-69 Years Old	33.8	47.3	32.4	46.8
% 70-74 Years Old	21.8	41.3	21.1	40.8
% 75-79 Years Old	12.4	32.9	12.1	32.7
% 80+ Years Old	15.0	35.7	14.8	35.5
% Female	58.3	49.3	58.1	49.3
Race				
% White	84.6	36.1	83.5	37.2
% Black	7.9	27.0	8.7	28.2
% Other	7.5	26.4	7.8	26.9
% Urban	86.1	34.6	81.6	38.7
% Dual Eligible	26.3	44.0	29.9	45.8
% with LIS Status	30.4	46.0	34.4	47.5
% Disabled (Original Enrollment Reason)	24.2	42.8	26.8	44.3
% with ESRD (Original Enrollment Reason)	0.3	5.2	0.3	5.5

Sources: CME and EDB.

Notes: Number of treatment beneficiaries: 210,205. Number of comparison beneficiaries: 580,656. STD: standard deviation; LIS: low-income subsidy; ESRD: end-stage renal disease. The “% Disabled” and “% with ESRD” are based on beneficiaries’ original reason for Medicare eligibility.

Table B.2.8: UnitedHealth: Baseline Health Services Utilization, Cost, and Clinical Profile Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Inpatient (IP) Admissions				
% with 0 IP Admissions	84.3	36.4	83.9	36.8
% with 1 IP Admission	10.9	31.1	11.3	31.6
% with 2+ IP Admissions	4.8	21.4	4.8	21.5
% of Admissions with an Unplanned Readmission	14.5	35.2	14.2	34.9
Skilled Nursing Facility (SNF) Admissions				
% with 0 SNF Admissions	96.8	17.5	97.1	16.8
% with 1 SNF Admission	2.3	15.1	2.1	14.5
% with 2+ SNF Admissions	0.8	9.0	0.8	8.7
Emergency Department (ED) Visits				
% with 0 ED Visits	74.6	43.5	72.7	44.5
% with 1 ED Visit	15.9	36.6	16.4	37.0
% with 2+ ED Visits	9.5	29.3	10.9	31.1
Evaluation and Management (E&M) Visits				
% with 0 E&M Visits	6.6	24.8	6.1	23.9
% with 1-5 E&M Visits	32.3	46.8	33.5	47.2
% with 6-10 E&M Visits	27.6	44.7	27.1	44.5
% with 11-15 E&M Visits	16.1	36.8	15.6	36.3
% with 16+ E&M Visits	17.4	37.9	17.7	38.1
Part D Utilization				
Average Number of Concurrent Medications	3.52	2.92	3.74	2.90
Costs				
Average Total Annual Part D Costs per Beneficiary	\$3,923	\$13,473	\$4,353	\$18,074
Average Total Annual Parts A and B Costs per Beneficiary	\$11,098	\$22,729	\$11,680	\$26,014
Average Annual IP Costs per Beneficiary	\$2,901	\$10,966	\$2,941	\$10,865
Clinical Profile				
Average HCC Risk Score	1.11	1.13	1.14	1.16

Sources: PDE, CWF, MBSF.

Notes: Number of treatment beneficiaries: 210,205. Number of comparison beneficiaries: 580,656. STD: standard deviation; HCC: Hierarchical Condition Categories.

Table B.2.9: WellCare: Baseline Demographic Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Age				
% Below 65 Years Old	28.5	45.1	28.4	45.1
% 65-69 Years Old	21.2	40.9	21.2	40.9
% 70-74 Years Old	18.6	38.9	18.6	38.9
% 75-79 Years Old	13.2	33.9	13.3	33.9
% 80+ Years Old	18.5	38.8	18.5	38.8
% Female	58.8	49.2	58.8	49.2
% White	75.0	43.3	75.1	43.3
% Black	16.8	37.4	16.7	37.3
% Other	8.2	27.4	8.2	27.4
% Urban	79.1	40.7	77.4	41.8
% Dual Eligible	46.8	49.9	46.7	49.9
% with LIS Status	54.7	49.8	54.5	49.8
% Disabled (Original Enrollment Reason)	38.0	48.5	37.9	48.5
% with ESRD (Original Enrollment Reason)	0.5	7.2	0.5	7.2

Sources: CME and EDB.

Notes: Number of treatment beneficiaries: 137,686. Number of comparison beneficiaries: 553,032. STD: standard deviation; LIS: low-income subsidy; ESRD: end-stage renal disease. The “% Disabled” and “% with ESRD” are based on beneficiaries’ original reason for Medicare eligibility.

Table B.2.10: WellCare: Baseline Health Services Utilization, Cost, and Clinical Profile Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Inpatient (IP) Admissions				
% with 0 IP Admissions	82.8	37.7	83.0	37.6
% with 1 IP Admission	11.6	32.1	11.6	32.1
% with 2+ IP Admissions	5.6	22.9	5.4	22.6
% of Admissions with an Unplanned Readmission	15.5	36.2	14.8	35.6
Skilled Nursing Facility (SNF) Admissions				
% with 0 SNF Admissions	96.2	19.0	96.4	18.6
% with 1 SNF Admission	2.7	16.3	2.6	16.0
% with 2+ SNF Admissions	1.0	10.1	1.0	9.8
Emergency Department (ED) Visits				
% with 0 ED Visits	69.7	46.0	69.3	46.1
% with 1 ED Visit	17.6	38.1	17.6	38.1
% with 2+ ED Visits	12.8	33.4	13.0	33.7
Evaluation and Management (E&M) Visits				
% with 0 E&M Visits	7.3	26.1	6.8	25.2
% with 1-5 E&M Visits	35.5	47.9	35.3	47.8
% with 6-10 E&M Visits	27.7	44.7	28.3	45.0
% with 11-15 E&M Visits	15.3	36.0	15.4	36.1
% with 16+ E&M Visits	14.2	34.9	14.2	34.9
Part D Utilization				
Average Number of Concurrent Medications	3.96	2.93	4.01	2.97
Costs				
Average Total Annual Part D Costs per Beneficiary	\$3,943	\$12,358	\$4,142	\$13,505
Average Total Annual Parts A and B Costs per Beneficiary	\$11,419	\$24,094	\$11,314	\$23,242
Average Annual IP Costs per Beneficiary	\$3,169	\$10,999	\$3,108	\$11,074
Clinical Profile				
Average HCC Risk Score	1.18	1.20	1.17	1.18

Sources: PDE, CWF, MBSF.

Notes: Number of treatment beneficiaries: 137,686. Number of comparison beneficiaries: 553,032. STD: standard deviation; HCC: Hierarchical Condition Categories.

Table B.2.11: BCBS FL: Baseline Demographic Characteristics of Treatment and Comparison Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Age				
% Below 65 Years Old	2.3	14.9	2.3	15.0
% 65-69 Years Old	26.0	43.9	26.2	44.0
% 70-74 Years Old	28.8	45.3	28.8	45.3
% 75-79 Years Old	20.3	40.2	20.3	40.2
% 80+ Years Old	22.6	41.8	22.5	41.7
% Female	58.2	49.3	58.0	49.4
Race				
% White	93.6	24.4	93.6	24.5
% Black	2.5	15.7	2.5	15.6
% Other	3.8	19.2	3.9	19.3
% Urban	94.7	22.5	93.5	24.7
% Dual Eligible	2.2	14.8	2.2	14.8
% with LIS Status	3.1	17.4	3.1	17.4
% Disabled (Original Enrollment Reason)	5.9	23.6	6.0	23.7
% with ESRD (Original Enrollment Reason)	0.1	2.2	0.1	2.3

Sources: CME and EDB.

Notes: Number of treatment beneficiaries: 59,806. Number of comparison beneficiaries: 109,594. STD: standard deviation; LIS: low-income subsidy; ESRD: end-stage renal disease. The “% Disabled” and “% with ESRD” are based on beneficiaries’ original reason for Medicare eligibility.

Table B.2.12: BCBS FL: Baseline Health Services Utilization, Cost, and Clinical Profile Characteristics of Treatment and Comparison Cohorts

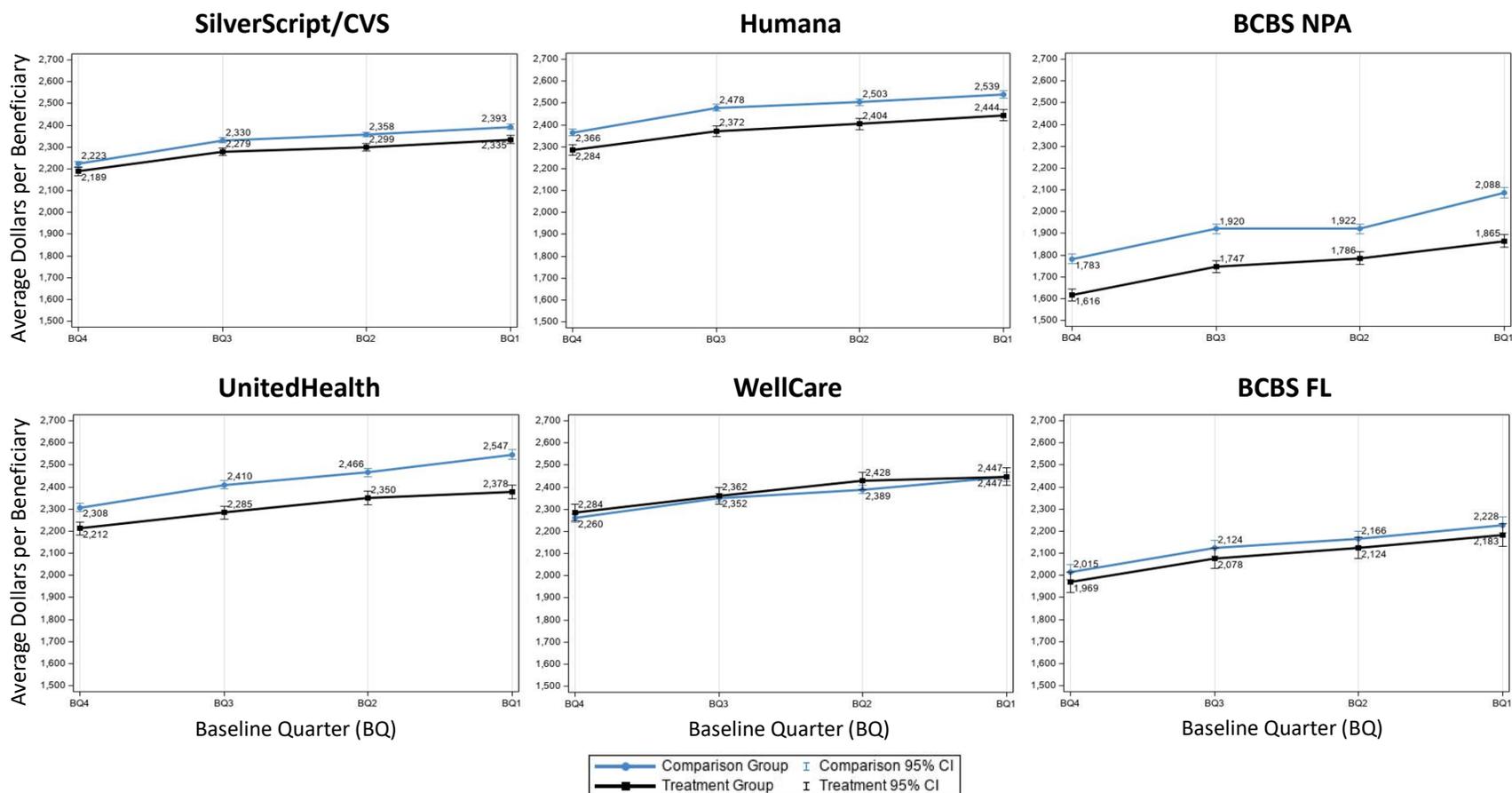
Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	Treatment		Comparison	
	Mean	STD	Mean	STD
Inpatient (IP) Admissions				
% with 0 IP Admissions	85.7	35.0	85.8	34.9
% with 1 IP Admission	10.7	30.9	10.8	31.0
% with 2+ IP Admissions	3.6	18.5	3.5	18.3
% of Admissions with an Unplanned Readmission	11.8	32.3	10.2	30.2
Skilled Nursing Facility (SNF) Admissions				
% with 0 SNF Admissions	97.2	16.6	97.4	15.8
% with 1 SNF Admission	2.3	14.9	2.0	13.9
% with 2+ SNF Admissions	0.6	7.5	0.6	7.6
Emergency Department (ED) Visits				
% with 0 ED Visits	79.5	40.4	79.4	40.4
% with 1 ED Visit	14.9	35.6	14.6	35.4
% with 2+ ED Visits	5.7	23.1	5.9	23.6
Evaluation and Management (E&M) Visits				
% with 0 E&M Visits	2.8	16.5	2.7	16.3
% with 1-5 E&M Visits	27.5	44.7	29.4	45.6
% with 6-10 E&M Visits	30.2	45.9	30.1	45.9
% with 11-15 E&M Visits	18.6	38.9	18.1	38.5
% with 16+ E&M Visits	20.9	40.7	19.7	39.7
Part D Utilization				
Average Number of Concurrent Medications	3.35	2.34	3.43	2.35
Costs				
Average Total Annual Part D Costs per Beneficiary	\$3,111	\$10,283	\$3,145	\$10,341
Average Total Annual Parts A and B Costs per Beneficiary	\$10,065	\$18,645	\$10,287	\$18,343
Average Annual IP Costs per Beneficiary	\$2,354	\$8,862	\$2,212	\$8,144
Clinical Profile				
Average HCC Risk Score	1.04	0.92	1.04	0.91

Sources: PDE, CWF, MBSF.

Notes: Number of treatment beneficiaries: 59,806. Number of comparison beneficiaries: 109,594. STD: standard deviation; HCC: Hierarchical Condition Categories.

Figure B.2.1 presents baseline expenditure trends by sponsor. As noted earlier, a visual inspection of these graphs shows common trends in Medicare Parts A and B expenditures for all sponsors at the baseline. This suggests that the assumption of parallel trends required for valid DiD estimation is not violated.

Figure B.2.1: Average Baseline Medicare Parts A and B Expenditures per Beneficiary for All Sponsors



B.2.2 Significant Service Receipt (SSR) Subgroup Definition and Baseline Characteristics

This Fifth Evaluation Report includes analyses of the subgroup of beneficiaries who received a significant service (SSR subgroup) during implementation of the Enhanced MTM Model.⁴ The cohorts used for the estimation of Model impacts on the SSR subgroup are subsets of the larger cohorts used in all-enrollee analyses. As for all-enrollee analyses, index dates were defined based on the first date of enrollment in Enhanced MTM plans.⁵ Beneficiaries included in the SSR subgroup were selected using information from the period after their exposure to the Model (“treatment period”). Treatment period information was used to construct indicators of significant service receipt for all beneficiaries in the treatment group of the matched analytic sample used in all-enrollee analyses. Specifically, an indicator for the SSR subgroup was constructed to identify treatment beneficiaries who received at least one significant service during the treatment period. The matched comparators of these beneficiaries were then also identified and used in analyses of Model impacts for the SSR subgroup. Matching weights were adjusted to account for any differences in matched sets of beneficiaries identified for SSR subgroup analyses and those identified for all-enrollee analyses.

Baseline Characteristics

Baseline characteristics for the SSR subgroup and the all-enrollee cohort are presented side-by-side in Table B.2.13 and Table B.2.14. Relative to the all-enrollee cohort, beneficiaries in the SSR subgroup had a similar racial composition, but tended to be older and less likely to qualify for the low-income subsidy (LIS) or be dually enrolled in both Medicare and Medicaid. The beneficiaries in the SSR subgroup also had higher rates of healthcare utilization in the baseline period relative to the all-enrollee cohort, mostly reflected in higher numbers of doctor visits. For example, 67.3 percent of beneficiaries in SSR subgroup had six or more evaluation and management visits during the 12-month baseline period prior to their exposure to the Enhanced MTM Model, compared to 57 percent of all enrollees. This difference is reflected in average baseline annual Parts A and B expenditures, which were about \$1,300 higher per beneficiary for beneficiaries included in the SSR subgroup compared to the all-enrollee cohort. Beneficiaries in the SSR subgroup also had higher HCC risk scores, implying higher expected expenditures relative to the average for the entire Medicare population.

⁴ Significant services are tailored services intended to address specific beneficiary needs.

⁵ The evaluation team also conducted supplementary impact analyses for the cohort of beneficiaries who received significant services, where the index date was defined based on the first date of receipt of a significant service. For these analyses, beneficiaries who received services were matched to comparators based on their characteristics in the 12-month period preceding the first month of significant service receipt, and DiD estimation of Model impacts used these matched sets of beneficiaries and the specification described in Section B.2.4. The findings from these analyses are qualitatively similar to the findings reported in Section B.4 and in the Enhanced MTM Fifth Evaluation Report.

Table B.2.13: Baseline Demographic Characteristics of SSR Treatment and All-enrollee Treatment Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	SSR Treatment		All-enrollee Treatment	
	Mean	STD	Mean	Mean
Age				
% Below 65 Years Old	19.5	39.6	23.5	42.4
% 65-69 Years Old	24.2	42.8	22.4	41.7
% 70-74 Years Old	22.3	41.6	21.1	40.8
% 75-79 Years Old	15.4	36.1	14.2	34.9
% 80+ Years Old	18.7	39.0	18.8	39.1
% Female	59.3	49.1	58.1	49.3
Race				
% White	83.6	37.1	82.4	38.1
% Black	9.4	29.2	9.9	29.8
% Other	7.1	25.6	7.7	26.6
% Urban	82.1	38.4	80.0	40.0
% Dually Eligible	31.3	46.4	37.2	48.3
% with LIS Status	35.6	47.9	41.6	49.3
% Disabled (Original Enrollment Reason)	28.0	44.9	31.4	46.4
% with ESRD (Original Enrollment Reason)	0.4	6.1	0.4	6.0

Sources: CME and Enrollment Database (EDB)

Notes: Number of SSR treatment beneficiaries: 753,819. Number of SSR comparison beneficiaries: 1,845,366. Number of all-enrollee treatment beneficiaries: 1,601,382. Number of all-enrollee comparison beneficiaries: 3,528,599. STD: standard deviation; LIS: low-income subsidy; ESRD: end-stage renal disease. The “% Disabled” and “% with ESRD” are based on beneficiaries’ original reason for Medicare eligibility.

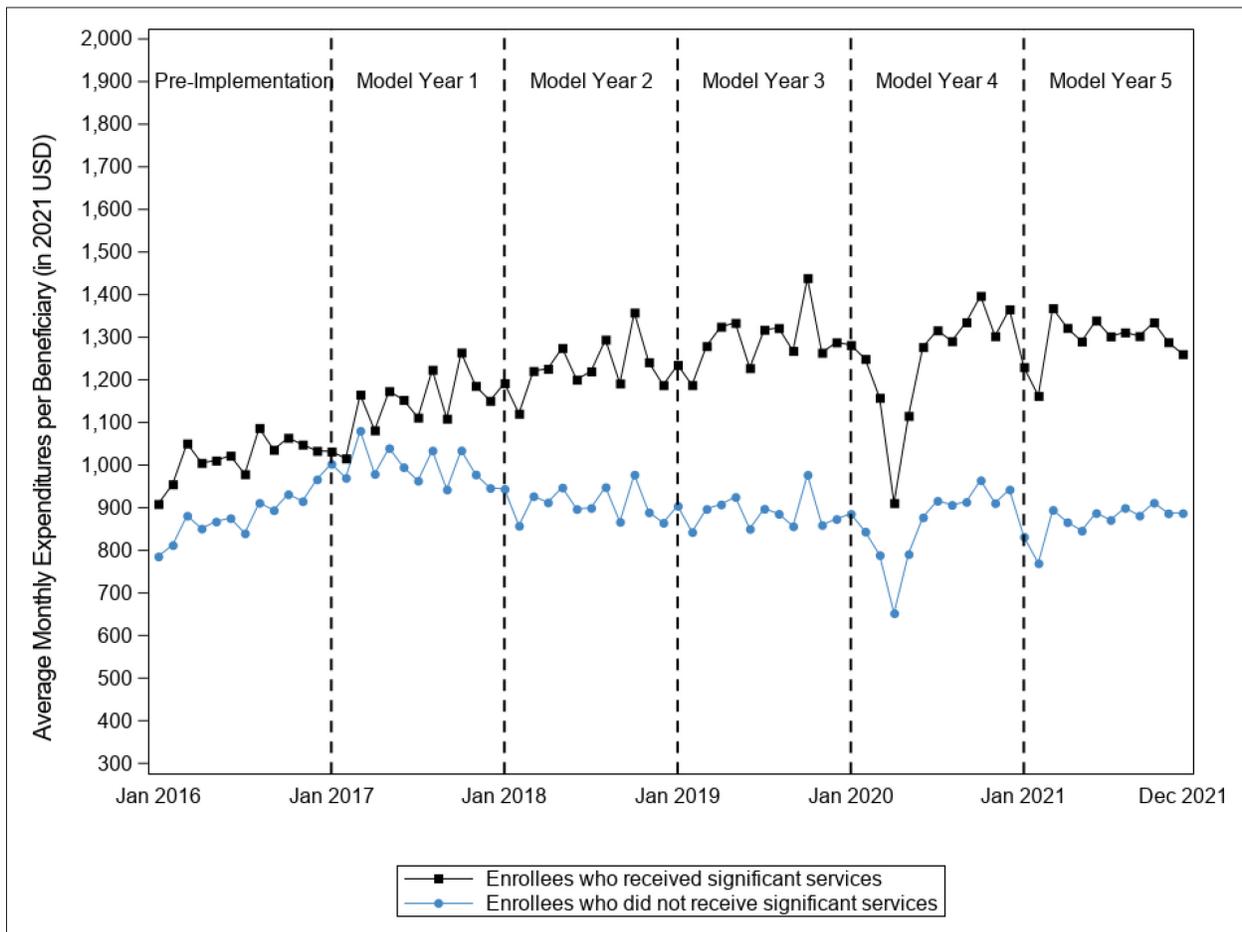
Table B.2.14: Baseline Rates of Healthcare Utilization and Expenditures of SSR Treatment and All-enrollee Treatment Cohorts

Characteristics (12 months before exposure to the Enhanced MTM Model; weighted)	SSR Treatment		All-enrollee Treatment	
	Mean	STD	Mean	STD
IP Stays				
% with 0 IP Stays	82.1	38.3	83.8	36.8
% with 1 IP Stay	12.4	33.0	11.2	31.5
% with 2+ IP Stays	5.4	22.7	5.0	21.7
% of IP Admissions with a Readmission	14.2	34.9	15.0	35.7
SNF Admissions				
% with 0 SNF Admissions	96.5	18.3	96.4	18.6
% with 1 SNF Admission	2.6	15.9	2.6	15.9
% with 2+ SNF Admissions	0.9	9.2	1.0	9.9
ED Visits				
% with 0 ED Visits	71.1	45.3	72.9	44.4
% with 1 ED Visit	17.5	38.0	16.9	37.4
% with 2+ ED Visits	11.3	31.7	10.6	30.8
Evaluation and Management (E&M) Visits				
% with 0 E&M Visits	3.0	17.2	7.5	26.3
% with 1-5 E&M Visits	29.6	45.7	35.6	47.9
% with 6-10 E&M Visits	29.6	45.7	27.6	44.7
% with 11-15 E&M Visits	18.1	38.5	14.9	35.6
% with 16+ E&M Visits	19.6	39.7	14.5	35.2
Part D Utilization				
Average Number of Concurrent Medications	4.28	2.92	3.64	2.92
Expenditures				
Average Total Annual Part D Expenditures per Beneficiary	\$4,685	\$13,639	\$3,939	\$12,476
Average Total Annual Parts A and B Expenditures per Beneficiary	\$12,034	\$23,108	\$10,739	\$22,748
Average Annual IP Expenditures per Beneficiary	\$3,251	\$11,271	\$2,931	\$10,942
Clinical Profile				
Average HCC Risk Score	1.22	1.15	1.13	1.13

Sources: Prescription Drug Event (PDE) data, Common Working File (CWF), Master Beneficiary Summary File (MBSF)
Notes: Number of SSR treatment beneficiaries: 753,819. Number of SSR comparison beneficiaries: 1,845,366. Number of all-enrollee treatment beneficiaries: 1,601,382. Number of all-enrollee comparison beneficiaries: 3,528,599. STD: standard deviation; IP: inpatient; SNF: skilled nursing facility; ED: emergency department; HCC: Hierarchical Condition Category.

Additionally, expenditures for beneficiaries in the SSR subgroup increased faster over time than expenditures of beneficiaries in the all-enrollee cohort who did not receive significant services (see Figure B.2.2). These trends are consistent with sponsors identifying and delivering Enhanced MTM services to beneficiaries who they believed could benefit the most from MTM services, such as those with high costs or experiencing a transition of care (see Section 2 of the main report).

Figure B.2.2: Average Monthly Expenditures per Beneficiary, Beneficiaries Who Received Significant Services vs. Beneficiaries Who Did Not Receive Significant Services



B.2.3 Outcome Measures

Table B.2.15: Expenditures Outcome Measure Definitions

Measure	Definition	Part A	Part B
Parts A and B Expenditures for All Services	Standardized Medicare payment amount in a month for total fee-for-service claims across all Common Working File (CWF) settings.	✓	✓
Expenditures of Hospital Inpatient (IP) Services	Standardized Medicare payment amount in a month for IP hospital services and physician services during hospitalization.	✓	✓
Expenditures of Institutional Post-Acute Care Services	Standardized Medicare payment amount in a month for post-acute care that includes services in the following settings: SNF and IP rehabilitation or long-term care hospital.	✓	
Expenditures of Emergency Department (ED) Services	Standardized Medicare payment amount in a month for emergency services that did not result in a hospital admission. Emergency services are defined by outpatient revenue center line code is 0450-0459 or 0981, or physician/carrier (PB) claim occurring with place of service=23, and include the following types: emergency evaluation & management services; procedures; laboratory, pathology, and other tests; and imaging services.		✓
Expenditures of Outpatient Non-Emergency Services	Standardized Medicare payment amount in a month for the following outpatient services where the place of service is not ED, and the service is not provided during an IP stay: outpatient evaluation & management services; major procedures; ambulatory/minor procedures; outpatient physical, occupational, or speech and language pathology therapy.		✓
Expenditures of Ancillary Services	Standardized Medicare payment amount in a month for the following outpatient services where the place of service is not emergency department, and the services are not provided during an IP stay: laboratory, pathology, and other tests; imaging services; and durable medical equipment (DME) and supplies.		✓
Hospital Inpatient Expenditures Related to Ambulatory Care-Sensitive Conditions (ACSCs)	Standardized Medicare payment amount in a month for the inpatient hospital services and physician services during hospitalization from IP claims with a primary diagnosis of one or more of the conditions of the ACSC chronic composite measure that focuses on diabetes, chronic obstructive pulmonary disease (COPD)/asthma, and heart failure. (Hospital inpatient expenditures related to ACSC diabetes, ACSC COPD/asthma, ACSC heart failure, and ACSC bacterial pneumonia were also assessed separately.)	✓	✓

Notes: The ACSC chronic composite measure calculates risk-adjusted rates at which Medicare beneficiaries are hospitalized for an established set of chronic ACSCs (diabetes, COPD/asthma, and heart failure) that may be preventable given appropriate primary and preventative care. More information about this measure is available at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2016-ACSC-MIF.pdf>. The ICD-10 codes for each ACSC diagnosis group are available at: https://qualityindicators.ahrq.gov/archive/pqi_techspeg/icd10_v2021.

Table B.2.16: Utilization Outcome Measure Definitions

Measure	Definition	Part A	Part B
Inpatient (IP) Admissions	Number of acute IP stays in a month, based on counts of unique admission dates across IP claims with provider types: critical access hospitals, IP psychiatric facilities, and general hospitals.	✓	
Inpatient Length of Stay	Number of days with acute IP stays in a month.	✓	
Skilled Nursing Facility (SNF) Admissions	Number of stays in a SNF in a month, based on counts of unique admission dates across claims in the SNF file.	✓	
SNF Length of Stay	Number of days covered by SNF stays in a month.	✓	
Emergency Department (ED) Visits	Number of visits to the ED in a month, based on counts of unique dates across outpatient claims containing at least one revenue center code indicating ED visits in that month.		✓
Outpatient (OP) Non-Emergency Visits	Number of visits to an Outpatient facility that is not the ED in a month, based on counts of unique combinations of provider and date across claims in the OP file not containing any revenue center code indicating ED visits in that month.		✓
Evaluation and Management Visits	Number of visits in a month to a physician’s office or an OP facility for evaluation and management services, based on counts of unique dates across OP and physician/carrier (PB) claims containing at least one Healthcare Common Procedure Coding System (HCPCS) Code indicating Evaluation & Management office visit.		✓
Readmissions	Follow-up unplanned hospital admissions that occur within 30 days of a hospital discharge (index hospitalization).	✓	
Inpatient Admissions Related to Ambulatory Care-Sensitive Conditions (ACSCs)	Number of acute inpatient stays in a month, based on counts of unique admission dates across IP claims with provider types: critical access hospitals, inpatient psychiatric facilities, or general hospitals, and containing a primary diagnosis of one or more of the conditions of the ACSC chronic composite measure that focuses on diabetes, COPD/asthma, and heart failure. (Inpatient admissions related to ACSC diabetes, ACSC COPD/asthma, ACSC heart failure, and ACSC bacterial pneumonia were also assessed separately.)	✓	

Notes: The ACSC chronic composite measure calculates risk-adjusted rates at which Medicare beneficiaries are hospitalized for an established set of chronic ACSCs (diabetes, COPD/asthma, and heart failure) that may be preventable given appropriate primary and preventative care. More information about this measure is available at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2016-ACSC-MIF.pdf>. The ICD-10 codes for each ACSC diagnosis group are available at: https://qualityindicators.ahrq.gov/archive/pqi_techspec/icd10_v2021.

Table B.2.17: Medication Use and Patient Safety Measure Definitions

Measure	Definition	Numerator	Denominator
Adherence (Proportion of Days Covered) <ul style="list-style-type: none"> • Statins • Renin-angiotensin system antagonists • Oral antidiabetics 	The percentage of beneficiaries who met the Proportion of Days Covered (PDC) threshold of 80% for oral antidiabetics.	Beneficiaries who met the PDC threshold.	Beneficiaries who filled at least two prescriptions of a given drug class on different dates, are not in hospice care, and do not have end-stage renal disease (ESRD). For adherence to renin angiotensin system antagonists, beneficiaries must also not have a fill for sacubitril/valsartan. For adherence to oral antidiabetics, beneficiaries must also not have a fill for insulin.
Statin Use in Persons with Diabetes (SUPD)	The percentage of beneficiaries who were dispensed diabetes and statin medications.	Beneficiaries in the denominator with at least one fill for a statin medication.	Beneficiaries with two or more fills on different dates for any diabetes medication who are not in hospice care and do not have ESRD.
Drug-Drug Interactions (DDI)	The percentage of beneficiaries who have concurrent prescriptions for which adverse effects of interactions are expected based on their pharmacological properties.	Beneficiaries in the denominator who were dispensed a concurrent precipitant medication.	Beneficiaries with a prescription for a target medication during the measurement year.
Use of High-Risk Medications in the Elderly (HRM)	The percentage of beneficiaries who have fills for a medication recommended to avoid in elderly persons.	Beneficiaries in the denominator with two or more fills for medication recommended to avoid in elderly persons on different dates.	Beneficiaries in hospice care are excluded.
Concurrent Use of Opioids with Benzodiazepines	The percentage of beneficiaries with concurrent use of prescription opioids and benzodiazepines.	Beneficiaries in the denominator with two or more fills for benzodiazepines on different dates, who have concurrent use for 30 or more cumulative days.	Beneficiaries with two or more fills for opioid medications on different dates and with 15 or more cumulative days' supply, who are not in hospice care or palliative care, do not have cancer, and do not have sickle cell disease.

Measure	Definition	Numerator	Denominator
Use of Opioids at High Dosage	The percentage of beneficiaries who utilize opioids at a high dosage.	Beneficiaries in the denominator who have an average daily dosage of ≥ 90 morphine milligram equivalents (MME).	Beneficiaries with two or more fills for opioid medications on different dates and with 15 or more cumulative days' supply, who are not in hospice care or palliative care, do not have cancer, and do not have sickle cell disease.
Use of Opioids from Multiple Providers	The percentage of beneficiaries who have opioid prescriptions from multiple providers.	Beneficiaries in the denominator with fills for opioids from four or more prescribers and four or more pharmacies within at least 180 days.	Beneficiaries with two or more fills for opioid medications on different dates and with 15 or more cumulative days' supply, who are not in hospice care or palliative care, do not have cancer, and do not have sickle cell disease.

Notes: Adherence measures use the Proportion of Days Covered (PDC) metric. The PDC metric is defined as the proportion of days in the measurement period "covered" by the prescription claims for the same medication or another in its therapeutic category. These measures are Pharmacist Quality Alliance (PQA) measures used in Medicare Part D star ratings or Medicare Part D display measures. For the Drug-Drug Interactions (DDI) measure, tables of medications categorized as target or precipitant medications are provided and maintained by PQA.

B.2.4 Difference-in-Differences (DiD) Estimation

DiD Specification for Expenditures and Utilization Outcomes

Model impacts on expenditure and utilization outcomes were estimated using a difference-in-differences (DiD) model on the matched samples of beneficiary-month observations. For all-enrollee analyses and SSR subgroup analyses, the DiD model was estimated for the Model as a whole (by pooling together all sponsor-specific analytic cohorts and adjusting matching weights accordingly), as well as separately for each sponsor.

The DiD specification produced cumulative estimates of the overall impact of the Model on per-beneficiary-per-month expenditures over the four years of Model implementation. The same specification was used to estimate impacts separately by Model Year. This specification, presented below, estimated the post-exposure difference from baseline in the outcome of interest (e.g., total Medicare Parts A and B expenditures) for treatment beneficiaries relative to controls, separately by exposure (i.e., enrollment) year, and allowed this difference to vary by Model Year. The DiD specification included month fixed effects to control for Medicare-wide shocks and trends that affect the treatment and the comparison group similarly, but vary across exposure years. Standard errors were clustered at the beneficiary level. Table B.2.18 provides descriptions of variables and coefficients.

[Specification 1]

$$\begin{aligned} y_{it} = & \alpha + \sum_{j=1}^{71} \beta_{2017j} [(month_t = j) \cdot (exposure\ year_i = 2017)] \\ & + \sum_{j=1}^{60} \beta_{2018j} [(month_t = j) \cdot (exposure\ year_i = 2018)] \\ & + \sum_{j=1}^{48} \beta_{2019j} [(month_t = j) \cdot (exposure\ year_i = 2019)] \\ & + \sum_{j=1}^{36} \beta_{2020j} [(month_t = j) \cdot (exposure\ year_i = 2020)] \\ & + \sum_{j=1}^{24} \beta_{2021j} [(month_t = j) \cdot (exposure\ year_i = 2021)] \\ & + \sum_{k=2017}^{2021} \gamma_k [(EMTM_i = 1) \cdot (exposure\ year_i = k)] \\ & + \sum_{k=2017}^{2021} \sum_{m \geq k}^{2021} \delta_{km} [(post_{it} = 1) \cdot (EMTM_i = 1) \cdot (exposure\ year_i = k) \cdot (year_t = m)]_i \\ & + \epsilon_{it} \end{aligned}$$

Table B.2.18: Variable and Coefficient Descriptions for the DiD Specification for Expenditures and Utilization Outcomes

Variable/Coefficient	Description
Y_{it}	Outcome of interest (e.g., total Medicare Parts A and B expenditures) for beneficiary i in month t
$(\text{month}_t = j)$	An indicator (dummy) variable for calendar month j
$(\text{exposure year}_i = 2017)$	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2017 (i.e., were first enrolled in Enhanced MTM plans in 2017, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2017)
$(\text{exposure year}_i = 2018)$	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2018 (i.e., were first enrolled in Enhanced MTM plans in 2018, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2018)
$(\text{exposure year}_i = 2019)$	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2019 (i.e., were first enrolled in Enhanced MTM plans in 2019, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2019)
$(\text{exposure year}_i = 2020)$	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2020 (i.e., were first enrolled in Enhanced MTM plans in 2020, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2020)
$(\text{exposure year}_i = 2021)$	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2021 (i.e., were first enrolled in Enhanced MTM plans in 2021, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2021)
$(\text{EMTM}_i = 1)$	An indicator variable for beneficiaries in the treatment cohort
$(\text{post}_{it} = 1)$	An indicator variable for observations corresponding to the post-exposure period
$(\text{year}_t = 2017)$	An indicator variable for observations corresponding to Model Year 1 (2017)
$(\text{year}_t = 2018)$	An indicator variable for observations corresponding to Model Year 2 (2018)
$(\text{year}_t = 2019)$	An indicator variable for observations corresponding to Model Year 3 (2019)
$(\text{year}_t = 2020)$	An indicator variable for observations corresponding to Model Year 4 (2020)
$(\text{year}_t = 2021)$	An indicator variable for observations corresponding to Model Year 5 (2021)
ϵ_{it}	An error term
α coefficient	Estimates an intercept
β coefficients	Correspond to the calendar month fixed effects and are allowed to vary across exposure years
γ coefficients	Estimate a separate intercept for treatment cohort observations, by exposure (or pseudo-exposure) year
δ coefficients	Produce DiD estimates of cumulative Model impacts on the outcome of interest relative to the baseline period, for each exposure year k and Model Year m combination. The weighted average of these coefficients produces the cumulative DiD estimate for the treatment cohort.

To produce a cumulative DiD estimate, all δ estimates (for all Model Years and each exposure years) were combined into a weighted average using the relevant count of treatment cohort post-exposure observations of each Model Year–exposure cohort combination (corresponding to each δ estimate) as numerators for the weights. The denominator of the weights was the total count of post-exposure Enhanced MTM observations.

To produce a DiD estimate for each Model Year, the estimates for that Model Year and for each exposure year were combined into a weighted average, using the relevant observation count for each exposure cohort to calculate the weights. For example, for Model Year 2, the DiD estimate was a weighted average of the δ_{1718} and δ_{1818} estimates from the specification listed above. The numerator for the weight assigned to the δ_{1718} estimate was the count of post-exposure observations in 2018 corresponding to beneficiaries with exposure year 2017 who were treated. The numerator for the weight assigned to the δ_{1818} estimate was the count of post-exposure observations in 2018 corresponding to beneficiaries with exposure year 2018 who were treated. The denominator for these weights was the count of post-exposure observations in 2018 corresponding to beneficiaries who were treated.

DiD Specification for Readmissions, Medication Use, and Patient Safety Measures

Readmissions are defined as unplanned follow-up admissions to any acute care hospital (general acute or critical access hospital) within 30 days of initial discharge (the “index admission”) from another acute care hospital. The Model’s impact on the rate of readmissions (per 1,000 index admissions) was estimated with a linear probability model and a DiD specification. The unit of observation in readmissions models was an index hospital admission. Analyses of the Model’s impact on readmissions used the sample of index admissions (and readmissions) from the cohort of treatment beneficiaries and their matched comparators.

The same DiD model specification that produced cumulative DiD estimates also produced estimates by Model Year. The specification for the DiD readmissions estimate, presented below, provided the post-exposure change (from baseline) in the probability that an index admission resulted in a 30-day unplanned readmission for treatment beneficiaries relative to controls, separately by exposure year, and allowed this change to differ by Model Year. Calendar-year-specific fixed effects were included to control for shocks and national trends that affected both treatment and comparison beneficiaries similarly. These calendar-year fixed effects were allowed to vary by year of exposure (or pseudo-exposure, for the comparison group). The DiD model also included covariates to control for baseline imbalances in the characteristics of beneficiaries who contributed index admissions to the sample. These covariates are indicator variables for age under 65, low-income subsidy (LIS) or dual-eligible status, and original Medicare entitlement category (disabled, end-stage renal disease [ESRD]).

Table B.2.19 provides descriptions of variables and coefficients. Standard errors were clustered at the beneficiary level.

Cumulative estimates of Model impacts on readmissions and estimates by Model Year were derived by producing weighted averages of the δ coefficients, where the weights were based on the relevant number of treatment cohort post-exposure observations, similar to the methodology used to produce the cumulative and by Model Year expenditures and utilization estimates, discussed above. The DiD specification used to estimate Model impacts on readmissions is listed below.

[Specification 2]

$$\begin{aligned}
 y_{it} = & \alpha + \sum_{j=2017}^{2021} \beta_{2017j} [(year = j) \cdot (exposure\ year_i = 2017)] \\
 & + \sum_{j=2017}^{2021} \beta_{2018j} [(year = j) \cdot (exposure\ year_i = 2018)] \\
 & + \sum_{j=2018}^{2021} \beta_{2019j} [(year = j) \cdot (exposure\ year_i = 2019)] \\
 & + \sum_{j=2019}^{2021} \beta_{2020j} [(year = j) \cdot (exposure\ year_i = 2020)] \\
 & + \sum_{j=2020}^{2021} \beta_{2021j} [(year = j) \cdot (exposure\ year_i = 2021)] \\
 & + \sum_{k=2017}^{2021} \gamma_k [(EMTM_i = 1) \cdot (exposure\ year_i = k)] \\
 & + \sum_{k=2017}^{2021} \sum_{m \geq k}^{2021} \delta_{km} [(post_{it} = 1) \cdot (EMTM_i = 1) \cdot (exposure\ year_i = k) \cdot (year_t = m)]_{it} \\
 & + \mathbf{X}_{it} + \epsilon_{it}
 \end{aligned}$$

Table B.2.19: Variable and Coefficient Descriptions for the DiD Specification for Readmissions

Variable/Coefficient	Description
Y_{it}	An indicator variable equal to 1 if the index admission has a 30-day unplanned readmission, and equal to 0 otherwise
(exposure year _i = 2017)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2017 (i.e., were first enrolled in Enhanced MTM plans in 2017, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2017)
(exposure year _i = 2018)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2018 (i.e., were first enrolled in Enhanced MTM plans in 2018, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2018)
(exposure year _i = 2019)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2019 (i.e., were first enrolled in Enhanced MTM plans in 2019, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2019)
(exposure year _i = 2020)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2020 (i.e., were first enrolled in Enhanced MTM plans in 2020, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2020)
(exposure year _i = 2021)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2021 (i.e., were first enrolled in Enhanced MTM plans in 2021, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2021)
(EMTM _i = 1)	An indicator variable for beneficiaries in the treatment cohort
(post _{it} = 1)	An indicator variable for observations corresponding to the post-exposure period
(year _t = 2017)	An indicator variable for observations corresponding to Model Year 1 (2017)
(year _t = 2018)	An indicator variable for observations corresponding to Model Year 2 (2018)
(year _t = 2019)	An indicator variable for observations corresponding to Model Year 3 (2019)
(year _t = 2020)	An indicator variable for observations corresponding to Model Year 4 (2020)
(year _t = 2021)	An indicator variable for observations corresponding to Model Year 5 (2021)
X_{it}	Vector of covariates including indicator variables for age under 65, LIS or dual-eligible status, and original Medicare entitlement category (disabled, ESRD)
ϵ_{it}	An error term
α coefficient	Estimates an intercept
β coefficients	Estimate calendar-year fixed effects that are allowed to vary across exposure (or pseudo-exposure) years
γ coefficients	Estimate a separate intercept for treatment cohort observations, by exposure year
δ coefficients	Produce DiD estimates of cumulative Model impacts on the readmissions rate relative to the baseline period, for each Model Year m and exposure year k combination. Weighted averages of these coefficients produce the cumulative DiD estimate for the treatment cohort, and DiD estimates for each Model Year.

The specification that estimates Model impacts on medication use and patient safety measures is the same as the one that estimates Model impacts on the rate of readmissions, shown above. However, for these measures the unit of observation is a beneficiary-year.⁶ Beneficiary-years were included in analyses of a given measure if they satisfied that measure's inclusion criteria, and if there was at least one matched treatment or comparison beneficiary-year that also satisfied that measure's inclusion criteria for that given year (see Table B.2.17).⁷

For all outcomes, the DiD estimate is produced using a linear probability model. The DiD specification estimates the percentage point change in the rate of a measure (e.g., adherence to oral antidiabetics) over a given time period (cumulatively from Model start, or by Model Year). The dependent variable is an indicator variable equal to 1 if the inclusion criteria for the numerator of a measure are met, and equal to 0 otherwise (e.g., the dependent variable is equal to 1 if the beneficiary is adherent to oral antidiabetics in a given year, with adherence defined as having PDC of at least 80 percent). All DiD models include covariates that control for LIS or dual-eligible status, original Medicare entitlement category, age, and race. The DiD models were estimated separately for each sponsor and for the Model as a whole. Matching weights were applied, and standard errors were clustered at the beneficiary level. Table B.2.20 provides descriptions of variables and coefficients.

⁶ These analyses use beneficiary-years rather than beneficiary-months because medication use outcomes generally require a longer period for accurate measurement.

⁷ Based on the matches assigned to the beneficiaries on their index (or pseudo-index) month. As a robustness check, an alternative sample that additionally required beneficiaries to contribute observations both in the baseline and in the post-exposure period was also used with the same DiD specification, and produced similar findings.

Table B.2.20: Variable and Coefficient Descriptions for the DiD Specification for Medication Use and Patient Safety Measures

Variable/Coefficient	Description
Y_{it}	An indicator variable equal to 1 if the inclusion criteria for the numerator of a medication use or patient safety measure are met, and equal to 0 otherwise
(exposure year _i = 2017)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2017 (i.e., were first enrolled in Enhanced MTM plans in 2017, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2017)
(exposure year _i = 2018)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2018 (i.e., were first enrolled in Enhanced MTM plans in 2018, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2018)
(exposure year _i = 2019)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2019 (i.e., were first enrolled in Enhanced MTM plans in 2019, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2019)
(exposure year _i = 2020)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2020 (i.e., were first enrolled in Enhanced MTM plans in 2020, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2020)
(exposure year _i = 2021)	An indicator variable for beneficiaries who first became exposed to Enhanced MTM in 2021 (i.e., were first enrolled in Enhanced MTM plans in 2021, or were in the comparison group of beneficiaries who first enrolled in Enhanced MTM plans in 2021)
(EMTM _i = 1)	An indicator variable for beneficiaries in the treatment cohort
(post _{it} = 1)	An indicator variable for observations corresponding to the post-exposure period
(year _t = 2017)	An indicator variable for observations corresponding to Model Year 1 (2017)
(year _t = 2018)	An indicator variable for observations corresponding to Model Year 2 (2018)
(year _t = 2019)	An indicator variable for observations corresponding to Model Year 3 (2019)
(year _t = 2020)	An indicator variable for observations corresponding to Model Year 4 (2020)
(year _t = 2021)	An indicator variable for observations corresponding to Model Year 5 (2021)
X_{it}	Vector of covariates including indicator variables for age and race categories, LIS or dual-eligible status, and original Medicare entitlement category (disabled, ESRD)
ϵ_{it}	An error term
α coefficient	Estimates an intercept
β coefficients	Estimate calendar-year fixed effects that are allowed to vary across exposure (or pseudo-exposure) years
γ coefficients	Estimate a separate intercept for treatment cohort observations, by exposure year
δ coefficients	Produce DiD estimates of cumulative Model impacts on the medication use or patient safety measure relative to the baseline period, for each Model Year m and exposure year k combination. Weighted averages of these coefficients produce the cumulative DiD estimate for the treatment cohort, and DiD estimates for each Model Year.

B.2.5 Net Expenditures Calculation

Model impacts on net Medicare expenditures take into account two components. The first is estimated changes in gross Medicare expenditures for Parts A and B on behalf of beneficiaries enrolled in Model-participating plans, generated using the methods described in the preceding sections. The second is costs incurred by Medicare for (i) per-beneficiary per-month (PBPM) prospective payments to sponsors to cover Model implementation costs and (ii) performance-based payments. This Fifth Evaluation Report presents changes in net expenditures for the Model as a whole, calculated separately for each Model Year. Because the calculation of performance-based payments required enrollment projections for June 2022 through December 2022 and all of 2023, the estimates of changes in net expenditures presented in this report are preliminary and will be updated as enrollment data become available.

The algorithm for calculating Model impacts on net Medicare expenditures includes five steps:

- (1) Produce the Modelwide PBPM estimates of changes in Medicare Parts A and B expenditures for each Model Year and cumulatively across all five years of the Model.** These are the Modelwide gross Medicare Parts A and B expenditures estimates presented in Section 3.3.1.
- (2) Produce the Modelwide average PBPM prospective payment in each Model Year and cumulatively across all five years.** For each sponsor, the monthly authorized prospective payments are summed across the 12 months of each Model Year.⁸ The Modelwide prospective payment is produced by summing across all sponsors for a given Model Year. The cumulative prospective payment is produced by summing across all five years of the Model. The yearly or cumulative prospective payment is then divided by the total number of beneficiary-months in the time period of interest to produce the average PBPM prospective payment. Prospective payments for November and December 2018 for WellCare were not allocated until January 2019. Consequently, prospective payment information for 2019 is used to impute prospective payments for November and December 2018 for WellCare.⁹ Similarly, for all sponsors, prospective payments for October 2020 were imputed because prospective payments for October 2020 were not allocated until November 2020.¹⁰ Acumen used the prospective payment rates and plan enrollment information to impute these values.
- (3) Produce the Modelwide PBPM performance payment in each Model Year.** Performance-based payments are allocated to participating plans conditional on plan

⁸ Information on prospective payments was provided to Acumen by CMS.

⁹ January 2019 prospective payments were assumed to be at the average PBPM rate of February-June 2019, and the excess remainder was attributed to November and December of 2018 rather than January 2019.

¹⁰ November 2020 prospective payments were assumed to be at the average PBPM rate of January-September and December 2020, and the excess remainder was attributed to October 2020.

savings in enrollees' Medicare Parts A and B expenditures relative to a benchmark.¹¹ Performance-based payments are fixed at \$2 PBPM, and take the form of an increase in Medicare's direct subsidy component of Part D payment, resulting in a corresponding decrease in the plan premium paid by beneficiaries. Performance-based payments are awarded with a two-year delay. For example, performance results in Model Year 1 (2017) determine eligibility for performance-based payments that are awarded in Model Year 3 (2019). For plans that qualified for performance payments based on Model Year 1 (2017), Model Year 2 (2018), Model Year 3 (2019), Model Year 4 (2020), and Model Year 5 (2021) performance, the total expected amount of performance payments awarded in 2019, 2020, 2021, 2022, and 2023 is calculated, using enrollment projections.¹² The total performance payments awarded in 2019, 2020, 2021, 2022, and 2023 are then translated into a PBPM amount for Model Year 1 based on total 2017 plan enrollment, Model Year 2 based on total 2018 plan enrollment, for Model Year 3 based on total 2019 plan enrollment, Model Year 4 based on total 2020 plan enrollment, and for Model Year 5 based on total 2021 plan enrollment, respectively.

- (4) Sum the values produced in Step 1, Step 2, and Step 3.** Changes in net expenditures are calculated as the sum of the estimated change in total Medicare expenditures and costs incurred by Medicare for prospective and performance-based payments to sponsors. If estimates are negative, net Medicare expenditures have decreased and the estimates represent net savings. Positive estimates represent net losses.
- (5) Produce change in net expenditures for each Model Year.** The value in Step 4 is multiplied by the number of total beneficiary-months in the time period of interest to produce the change in net expenditures for each year and cumulatively across the five years of Model implementation.

¹¹ A minimum savings rate of 2 percent relative to a benchmark is required to qualify for performance-based payments. The benchmark is determined based on expected Medicare expenditures (in the absence of the Model).

¹² Monthly enrollment is projected for plans that qualified for these payments for months where data were not yet available when this report was drafted (June 2022 through December 2022 and all of 2023). For all plans, enrollment is projected using a linear trend in plan enrollment based on prior months' trend.

B.3 Supplementary Findings on Model Impacts: All Enrollees

This section presents additional information and findings on the estimated impacts of Enhanced MTM presented in Section 3.3, including findings not reported in the main report.

- Appendix Section B.3.1 presents Model impacts on gross Medicare Parts A and B expenditures.
- Appendix Sections B.3.2 through B.3.3 present setting-specific Medicare expenditures and health service utilization.
- Appendix Section B.3.4 presents inpatient expenditures and admissions related to the ACSC Chronic Composite Measure.
- Appendix Section B.3.5 presents Model impacts on medication use and patient safety outcomes.

B.3.1 Gross Medicare Parts A and B Expenditures

This subsection presents estimates of the Model impacts on gross Medicare Parts A and B expenditures (Section 3.3.1 of the main report) for the Model as whole and by individual sponsor, both cumulative and for each Model Year. There is a total of seven tables in this subsection, one Modelwide and one for each of the six sponsors.

The Model did not have cumulative impacts on gross Medicare Parts A and B expenditures for most individual sponsors, with the exception of BCBS FL. In each Model Year, estimated changes in gross expenditures varied by sponsor. Notably, in Model Year 5, total Parts A and B expenditures decreased relative to baseline for both Humana and BCBS FL. For Humana, there were statistically significant decreases in gross expenditures in Model Year 3 through Model Year 5. For BCBS FL, there were expenditure decreases in Model Year 1 and in Model Year 5. For WellCare and SilverScript/CVS, statistically significant changes in expenditures in Model Year 4 did not persist in Model Year 5. For BCBS NPA and UnitedHealth, there were no significant changes in any Model Year.

Table B.3.1: Modelwide: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$1.52	- \$4.49	- \$0.64	- \$0.53	\$0.75	- \$1.96
P-value	0.594	0.192	0.868	0.893	0.860	0.658
95% Confidence Interval	(-7.12 , 4.07)	(-11.24 , 2.26)	(-8.16 , 6.88)	(-8.24 , 7.18)	(-7.57 , 9.07)	(-10.66 , 6.73)
Relative Difference	-0.16%	-0.48%	-0.07%	-0.06%	0.08%	-0.21%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$947.89	\$942.56	\$943.01	\$949.25	\$952.52	\$955.21
Intervention Period Enhanced MTM Mean	\$1,080.92	\$1,070.93	\$1,078.42	\$1,102.53	\$1,065.84	\$1,089.78
Baseline Comparison MTM Mean	\$977.14	\$975.80	\$970.17	\$976.25	\$980.50	\$985.35
Intervention Period Comparison MTM Mean	\$1,111.70	\$1,108.66	\$1,106.22	\$1,130.06	\$1,093.07	\$1,121.88

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.2: SilverScript/CVS: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.13	-\$2.47	-\$1.81	\$1.75	\$9.61*	\$5.76
P-value	0.543	0.543	0.696	0.726	0.068	0.300
95% Confidence Interval	(-4.73 , 8.99)	(-10.42 , 5.48)	(-10.88 , 7.26)	(-8.03 , 11.54)	(-0.72 , 19.94)	(-5.12 , 16.63)
Relative Difference	0.22%	-0.26%	-0.19%	0.18%	1.00%	0.60%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$958.52	\$960.74	\$956.38	\$958.14	\$957.83	\$959.52
Intervention Period Enhanced MTM Mean	\$1,105.94	\$1,087.34	\$1,109.57	\$1,129.37	\$1,098.53	\$1,106.28
Baseline Comparison MTM Mean	\$981.12	\$987.89	\$976.03	\$978.46	\$979.72	\$983.36
Intervention Period Comparison MTM Mean	\$1,126.41	\$1,116.96	\$1,131.03	\$1,147.94	\$1,110.81	\$1,124.36

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.3: Humana: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	-\$9.83	-\$4.66	\$1.63	-\$14.92*	-\$17.45*	-\$23.77***
P-value	0.103	0.494	0.843	0.084	0.052	0.010
95% Confidence Interval	(-21.64 , 1.98)	(-18.01 , 8.70)	(-14.45 , 17.71)	(-31.83 , 2.00)	(-35.02 , 0.13)	(-41.78 , -5.76)
Relative Difference	-0.96%	-0.46%	0.16%	-1.46%	-1.70%	-2.31%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$1,021.86	\$1,015.30	\$1,019.62	\$1,024.08	\$1,029.01	\$1,030.10
Intervention Period Enhanced MTM Mean	\$1,103.80	\$1,145.56	\$1,092.59	\$1,100.07	\$1,064.92	\$1,067.03
Baseline Comparison MTM Mean	\$1,057.39	\$1,053.56	\$1,050.77	\$1,057.57	\$1,064.13	\$1,068.35
Intervention Period Comparison MTM Mean	\$1,149.17	\$1,188.48	\$1,122.10	\$1,148.48	\$1,117.48	\$1,129.05

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.4: BCBS NPA: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$8.60	\$4.15	\$0.14	\$9.39	\$21.80	\$9.99
P-value	0.439	0.776	0.992	0.522	0.195	0.536
95% Confidence Interval	(-13.18 , 30.37)	(-24.40 , 32.71)	(-26.93 , 27.22)	(-19.32 , 38.09)	(-11.20 , 54.81)	(-21.62 , 41.59)
Relative Difference	1.17%	0.56%	0.02%	1.27%	2.95%	1.35%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$737.71	\$735.44	\$737.91	\$738.66	\$738.49	\$738.58
Intervention Period Enhanced MTM Mean	\$931.60	\$876.74	\$919.59	\$958.28	\$923.80	\$1,000.09
Baseline Comparison MTM Mean	\$802.35	\$801.91	\$801.16	\$803.02	\$802.85	\$803.16
Intervention Period Comparison MTM Mean	\$987.65	\$939.06	\$982.70	\$1,013.25	\$966.36	\$1,054.68

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.5: UnitedHealth: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.30	-\$11.77	-\$0.06	\$2.71	-\$0.84	\$11.85
P-value	0.968	0.211	0.996	0.775	0.934	0.270
95% Confidence Interval	(-14.36 , 14.95)	(-30.24 , 6.69)	(-22.44 , 22.32)	(-15.91 , 21.34)	(-20.72 , 19.04)	(-9.18 , 32.87)
Relative Difference	0.03%	-1.25%	-0.01%	0.28%	-0.09%	1.22%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$962.65	\$945.24	\$946.92	\$971.37	\$972.89	\$973.74
Intervention Period Enhanced MTM Mean	\$1,078.86	\$1,054.90	\$1,071.53	\$1,110.42	\$1,060.43	\$1,093.20
Baseline Comparison MTM Mean	\$999.38	\$986.62	\$988.98	\$1,002.70	\$1,006.14	\$1,011.08
Intervention Period Comparison MTM Mean	\$1,115.30	\$1,108.05	\$1,113.65	\$1,139.03	\$1,094.52	\$1,118.69

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.6: WellCare: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	-\$3.40	\$5.90	-\$3.75	-\$1.66	-\$18.48*	-\$0.86
P-value	0.616	0.453	0.684	0.874	0.078	0.938
95% Confidence Interval	(-16.66, 9.87)	(-9.51, 21.30)	(-21.82, 14.32)	(-22.12, 18.80)	(-39.05, 2.09)	(-22.57, 20.84)
Relative Difference	-0.34%	0.60%	-0.38%	-0.17%	-1.85%	-0.09%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$989.60	\$976.56	\$981.15	\$984.84	\$1,000.74	\$1,011.12
Intervention Period Enhanced MTM Mean	\$1,150.23	\$1,117.30	\$1,151.62	\$1,182.53	\$1,146.02	\$1,163.68
Baseline Comparison MTM Mean	\$978.11	\$966.22	\$962.90	\$967.29	\$993.60	\$1,008.34
Intervention Period Comparison MTM Mean	\$1,142.14	\$1,101.06	\$1,137.12	\$1,166.64	\$1,157.36	\$1,161.76

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.7: BCBS FL: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	-\$27.16*	-\$45.65***	\$5.19	-\$5.50	-\$32.60	-\$60.97**
P-value	0.073	0.009	0.797	0.777	0.149	0.030
95% Confidence Interval	(-56.85, 2.54)	(-79.86, -11.44)	(-34.29, 44.67)	(-43.61, 32.60)	(-76.85, 11.65)	(-116.19, -5.74)
Relative Difference	-3.09%	-5.20%	0.59%	-0.63%	-3.70%	-6.93%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$879.50	\$878.21	\$879.06	\$878.99	\$881.43	\$880.22
Intervention Period Enhanced MTM Mean	\$1,083.96	\$1,019.21	\$1,093.37	\$1,130.99	\$1,058.06	\$1,131.54
Baseline Comparison MTM Mean	\$899.85	\$903.04	\$901.55	\$900.69	\$895.63	\$897.21
Intervention Period Comparison MTM Mean	\$1,131.46	\$1,089.70	\$1,110.66	\$1,158.20	\$1,104.86	\$1,209.50

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

B.3.2 Setting-specific Medicare Expenditures

This subsection presents the Model impacts on Medicare expenditures by five service delivery settings (supplementing Section 3.3.2 of the main report), for the Model as a whole and by individual sponsor. There is a total of 35 tables in this subsection. Findings, both cumulative and by Model Year, for five service delivery settings are presented in the following sequential subsections:

- Inpatient services
- Institutional post-acute care (IPAC)
- Emergency department (ED)
- Outpatient services excluding ED
- Ancillary services

Cumulatively, there were moderate, statistically significant decreases in expenditures for hospital inpatient services and IPAC, partially offset by increases in expenditures for ED, outpatient non-emergency, and ancillary services. These findings leverage data through the fifth year of the Model, and were qualitatively similar to those reported in prior evaluation reports.¹³ Sponsor-level estimates were consistent with the Modelwide findings.

¹³ See, for example: Acumen, LLC and Westat, Inc., “Evaluation of the Part D Enhanced Medication Therapy Management (MTM) Model: Fourth Evaluation Report,” April 2022, <https://innovation.cms.gov/data-and-reports/2022/mtm-fourth-evalrept>.

Inpatient Services

Table B.3.8: Modelwide: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$6.10***	- \$3.25*	- \$6.06***	- \$7.15***	- \$4.84**	- \$10.61***
P-value	<0.001	0.089	0.003	<0.001	0.019	<0.001
95% Confidence Interval	(-8.95 , -3.26)	(-7.00 , 0.50)	(-10.06 , -2.06)	(-11.14 , -3.15)	(-8.87 , -0.80)	(-14.88 , -6.34)
Relative Difference	-2.13%	-1.13%	-2.12%	-2.49%	-1.68%	-3.69%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$286.96	\$286.93	\$285.89	\$287.15	\$287.63	\$287.36
Intervention Period Enhanced MTM Mean	\$326.90	\$350.96	\$330.52	\$330.13	\$312.38	\$298.57
Baseline Comparison MTM Mean	\$284.36	\$284.25	\$282.08	\$284.22	\$285.58	\$286.20
Intervention Period Comparison MTM Mean	\$330.40	\$351.53	\$332.77	\$334.35	\$315.17	\$308.02

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.9: SilverScript/CVS: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$3.48*	- \$2.13	- \$3.35	- \$6.32**	- \$0.01	- \$5.95**
P-value	0.068	0.387	0.203	0.022	0.997	0.044
95% Confidence Interval	(-7.22 , 0.25)	(-6.96 , 2.70)	(-8.52 , 1.81)	(-11.73 , -0.92)	(-5.52 , 5.50)	(-11.74 , -0.16)
Relative Difference	-1.20%	-0.72%	-1.15%	-2.18%	0.00%	-2.06%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$291.40	\$296.08	\$292.10	\$290.37	\$288.77	\$288.24
Intervention Period Enhanced MTM Mean	\$338.59	\$359.59	\$348.32	\$341.72	\$325.51	\$307.39
Baseline Comparison MTM Mean	\$289.98	\$294.19	\$289.30	\$288.76	\$288.20	\$288.54
Intervention Period Comparison MTM Mean	\$340.64	\$359.83	\$348.86	\$346.44	\$324.96	\$313.64

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.10: Humana: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$9.81***	- \$0.97	- \$7.74*	- \$14.56***	- \$13.92***	- \$23.78***
P-value	0.002	0.815	0.079	0.001	0.003	<0.001
95% Confidence Interval	(-16.07 , -3.56)	(-9.07 , 7.14)	(-16.38 , 0.90)	(-23.40 , -5.72)	(-23.15 , -4.68)	(-33.01 , -14.56)
Relative Difference	-2.99%	-0.29%	-2.36%	-4.43%	-4.24%	-7.27%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$328.27	\$328.41	\$328.70	\$328.49	\$328.04	\$327.28
Intervention Period Enhanced MTM Mean	\$354.66	\$399.59	\$350.03	\$342.27	\$324.40	\$301.59
Baseline Comparison MTM Mean	\$322.05	\$322.22	\$321.03	\$322.01	\$322.29	\$322.89
Intervention Period Comparison MTM Mean	\$358.25	\$394.36	\$350.10	\$350.35	\$332.56	\$320.98

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.11: BCBS NPA: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$0.50	- \$0.28	- \$2.91	\$0.56	\$7.22	- \$7.62
P-value	0.921	0.963	0.666	0.931	0.263	0.300
95% Confidence Interval	(-10.36 , 9.36)	(-12.18 , 11.62)	(-16.14 , 10.32)	(-12.14 , 13.25)	(-5.42 , 19.86)	(-22.03 , 6.79)
Relative Difference	-0.24%	-0.14%	-1.42%	0.27%	3.51%	-3.71%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$205.59	\$204.78	\$205.72	\$206.04	\$205.84	\$205.69
Intervention Period Enhanced MTM Mean	\$257.82	\$262.94	\$260.44	\$266.35	\$246.63	\$249.54
Baseline Comparison MTM Mean	\$215.93	\$215.86	\$215.59	\$215.98	\$216.11	\$216.19
Intervention Period Comparison MTM Mean	\$268.66	\$274.31	\$273.22	\$275.73	\$249.68	\$267.66

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.12: UnitedHealth: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$12.58***	- \$13.98**	- \$17.73***	- \$8.73	- \$12.81**	- \$10.79**
P-value	0.002	0.016	0.004	0.108	0.017	0.047
95% Confidence Interval	(-20.40 , -4.76)	(-25.35 , -2.60)	(-29.86 , -5.60)	(-19.40 , 1.93)	(-23.31 , -2.31)	(-21.44 , -0.15)
Relative Difference	-4.54%	-5.24%	-6.64%	-3.07%	-4.51%	-3.82%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$277.44	\$266.49	\$266.95	\$284.71	\$284.32	\$282.28
Intervention Period Enhanced MTM Mean	\$312.37	\$320.69	\$303.43	\$331.96	\$306.60	\$294.24
Baseline Comparison MTM Mean	\$271.15	\$258.62	\$259.35	\$278.39	\$278.56	\$278.36
Intervention Period Comparison MTM Mean	\$318.67	\$326.79	\$313.56	\$334.37	\$313.65	\$301.12

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.13: WellCare: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$3.61	\$7.76	\$2.78	\$5.26	-\$3.09	\$4.57
P-value	0.321	0.105	0.592	0.350	0.593	0.447
95% Confidence Interval	(-3.52 , 10.74)	(-1.64 , 17.16)	(-7.37 , 12.92)	(-5.76 , 16.28)	(-14.40 , 8.23)	(-7.20 , 16.35)
Relative Difference	1.20%	2.61%	0.93%	1.76%	-1.00%	1.49%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$301.90	\$297.09	\$298.83	\$299.66	\$308.55	\$307.49
Intervention Period Enhanced MTM Mean	\$359.96	\$368.18	\$362.26	\$366.47	\$354.97	\$344.08
Baseline Comparison MTM Mean	\$295.55	\$291.30	\$289.91	\$291.14	\$304.38	\$303.50
Intervention Period Comparison MTM Mean	\$350.00	\$354.63	\$350.56	\$352.69	\$353.88	\$335.52

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.14: BCBS FL: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$23.75***	- \$28.35***	-\$13.11	- \$21.35**	- \$23.92**	- \$33.21***
P-value	0.001	0.003	0.193	0.024	0.021	0.002
95% Confidence Interval	(-37.27 , -10.23)	(-47.37 , -9.33)	(-32.86 , 6.64)	(-39.90 , -2.80)	(-44.17 , -3.68)	(-54.34 , -12.08)
Relative Difference	-10.55%	-12.59%	-5.81%	-9.47%	-10.61%	-14.78%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$225.24	\$225.11	\$225.44	\$225.40	\$225.51	\$224.69
Intervention Period Enhanced MTM Mean	\$294.16	\$291.73	\$303.25	\$303.06	\$286.27	\$284.75
Baseline Comparison MTM Mean	\$213.03	\$213.69	\$213.38	\$213.07	\$212.20	\$212.56
Intervention Period Comparison MTM Mean	\$305.70	\$308.66	\$304.30	\$312.07	\$296.89	\$305.83

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Institutional Post-acute Care

Table B.3.15: Modelwide: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$5.47***	- \$4.89***	- \$4.40***	- \$2.87**	- \$7.85***	- \$8.23***
P-value	<0.001	0.004	0.005	0.049	<0.001	<0.001
95% Confidence Interval	(-7.77 , -3.18)	(-8.19 , -1.58)	(-7.49 , -1.31)	(-5.73 , -0.02)	(-11.61 , -4.09)	(-11.78 , -4.67)
Relative Difference	-4.47%	-3.98%	-3.60%	-2.34%	-6.43%	-6.70%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$122.46	\$122.62	\$122.34	\$122.51	\$122.08	\$122.72
Intervention Period Enhanced MTM Mean	\$142.47	\$145.52	\$138.20	\$138.50	\$151.19	\$138.29
Baseline Comparison MTM Mean	\$130.21	\$131.42	\$130.05	\$129.67	\$129.42	\$130.13
Intervention Period Comparison MTM Mean	\$155.69	\$159.21	\$150.31	\$148.53	\$166.38	\$153.93

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.16: SilverScript/CVS: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$4.69***	- \$4.12**	- \$5.52***	- \$2.90	- \$3.79*	- \$7.63***
P-value	0.001	0.018	0.002	0.121	0.061	<0.001
95% Confidence Interval	(-7.34 , -2.04)	(-7.53 , -0.72)	(-9.07 , -1.96)	(-6.55 , 0.76)	(-7.76 , 0.18)	(-11.57 , -3.69)
Relative Difference	-3.57%	-3.10%	-4.19%	-2.21%	-2.91%	-5.84%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$131.46	\$132.92	\$131.65	\$131.16	\$130.40	\$130.74
Intervention Period Enhanced MTM Mean	\$153.07	\$154.07	\$148.59	\$148.49	\$168.07	\$146.30
Baseline Comparison MTM Mean	\$138.27	\$140.92	\$138.18	\$137.26	\$136.93	\$137.51
Intervention Period Comparison MTM Mean	\$164.57	\$166.19	\$160.64	\$157.47	\$178.38	\$160.71

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.17: Humana: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$8.35***	- \$5.02*	- \$5.03*	- \$8.96***	- \$16.13***	- \$11.56***
P-value	<0.001	0.082	0.087	0.003	<0.001	<0.001
95% Confidence Interval	(-12.82 , -3.89)	(-10.68 , 0.64)	(-10.79 , 0.74)	(-14.87 , -3.05)	(-22.42 , -9.84)	(-17.85 , -5.28)
Relative Difference	-6.24%	-3.74%	-3.75%	-6.70%	-12.16%	-8.68%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$133.79	\$134.43	\$133.99	\$133.83	\$132.66	\$133.22
Intervention Period Enhanced MTM Mean	\$141.83	\$158.93	\$132.55	\$129.95	\$140.91	\$129.34
Baseline Comparison MTM Mean	\$143.33	\$144.62	\$143.37	\$143.02	\$141.76	\$142.28
Intervention Period Comparison MTM Mean	\$159.72	\$174.14	\$146.96	\$148.10	\$166.15	\$149.97

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.18: BCBS NPA: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$7.22	\$3.14	\$9.20	\$15.06**	\$4.81	\$3.49
P-value	0.198	0.732	0.178	0.016	0.641	0.666
95% Confidence Interval	(-3.78 , 18.22)	(-14.84 , 21.11)	(-4.20 , 22.61)	(2.86 , 27.26)	(-15.40 , 25.02)	(-12.38 , 19.36)
Relative Difference	7.70%	3.34%	9.80%	16.03%	5.15%	3.74%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$93.75	\$93.88	\$93.93	\$93.93	\$93.46	\$93.45
Intervention Period Enhanced MTM Mean	\$129.82	\$121.73	\$126.47	\$130.84	\$137.44	\$135.65
Baseline Comparison MTM Mean	\$105.30	\$105.50	\$104.86	\$105.57	\$105.28	\$105.29
Intervention Period Comparison MTM Mean	\$134.15	\$130.21	\$128.20	\$127.41	\$144.45	\$143.99

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.19: UnitedHealth: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$11.54***	- \$9.69***	- \$12.14***	- \$9.86***	- \$16.72***	- \$9.29***
P-value	<0.001	0.008	0.005	0.002	<0.001	0.007
95% Confidence Interval	(-16.49 , -6.60)	(-16.85 , -2.52)	(-20.68 , -3.60)	(-16.02 , -3.70)	(-23.17 , -10.28)	(-16.04 , -2.54)
Relative Difference	-11.07%	-9.71%	-12.18%	-9.19%	-15.66%	-8.69%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$104.29	\$99.76	\$99.68	\$107.27	\$106.82	\$106.93
Intervention Period Enhanced MTM Mean	\$120.72	\$119.51	\$115.29	\$121.53	\$125.23	\$121.04
Baseline Comparison MTM Mean	\$111.78	\$109.72	\$109.58	\$113.37	\$112.76	\$112.99
Intervention Period Comparison MTM Mean	\$139.76	\$139.17	\$137.32	\$137.49	\$147.90	\$136.39

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.20: WellCare: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4
Per-Beneficiary Per-Month Estimate (in \$)					
Difference-in-Differences	- \$4.25*	- \$1.37	- \$4.32	- \$2.69	- \$9.26**
P-value	0.092	0.661	0.207	0.457	0.014
95% Confidence Interval	(-9.19 , 0.69)	(-7.52 , 4.77)	(-11.02 , 2.38)	(-9.79 , 4.41)	(-16.66 , -1.87)
Relative Difference	-3.44%	-1.13%	-3.51%	-2.16%	-7.41%
Means (beneficiary-month, regression-adjusted)					
Baseline Enhanced MTM Mean	\$123.54	\$122.11	\$123.05	\$124.44	\$124.98
Intervention Period Enhanced MTM Mean	\$152.95	\$146.95	\$148.23	\$151.32	\$167.25
Baseline Comparison MTM Mean	\$120.86	\$119.75	\$119.30	\$121.25	\$123.60
Intervention Period Comparison MTM Mean	\$154.52	\$145.97	\$148.80	\$150.81	\$175.13

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.21: BCBS FL: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$22.04***	- \$28.57***	- \$15.52**	- \$11.68*	- \$23.57***	- \$31.51**
P-value	<0.001	<0.001	0.046	0.086	0.008	0.030
95% Confidence Interval	(-34.02 , -10.06)	(-41.75 , -15.39)	(-30.80 , -0.25)	(-25.01 , 1.65)	(-40.85 , -6.28)	(-60.02 , -3.00)
Relative Difference	-26.54%	-34.15%	-18.61%	-14.03%	-28.60%	-38.39%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$83.03	\$83.67	\$83.44	\$83.25	\$82.42	\$82.08
Intervention Period Enhanced MTM Mean	\$109.86	\$105.25	\$114.51	\$115.42	\$101.73	\$112.67
Baseline Comparison MTM Mean	\$101.55	\$102.51	\$102.09	\$101.90	\$100.51	\$100.36
Intervention Period Comparison MTM Mean	\$150.42	\$152.66	\$148.69	\$145.75	\$143.39	\$162.46

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Emergency Department

Table B.3.22: Modelwide: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.30***	\$0.87***	\$1.09***	\$1.22***	\$1.73***	\$1.84***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.08 , 1.53)	(0.58 , 1.16)	(0.79 , 1.40)	(0.91 , 1.53)	(1.44 , 2.03)	(1.53 , 2.15)
Relative Difference	4.12%	2.76%	3.50%	3.83%	5.43%	5.80%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$31.64	\$31.50	\$31.29	\$31.79	\$31.93	\$31.77
Intervention Period Enhanced MTM Mean	\$31.33	\$34.52	\$33.13	\$33.31	\$26.35	\$27.43
Baseline Comparison MTM Mean	\$33.47	\$33.49	\$33.10	\$33.56	\$33.71	\$33.55
Intervention Period Comparison MTM Mean	\$31.86	\$35.65	\$33.85	\$33.86	\$26.39	\$27.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.23: SilverScript/CVS: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.52***	\$1.05***	\$1.20***	\$1.34***	\$2.08***	\$2.19***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.23 , 1.81)	(0.72 , 1.38)	(0.82 , 1.58)	(0.94 , 1.75)	(1.68 , 2.47)	(1.78 , 2.59)
Relative Difference	4.64%	3.13%	3.64%	4.12%	6.42%	6.81%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$32.78	\$33.61	\$32.95	\$32.62	\$32.33	\$32.10
Intervention Period Enhanced MTM Mean	\$33.08	\$36.63	\$35.97	\$35.14	\$27.44	\$28.16
Baseline Comparison MTM Mean	\$34.67	\$35.67	\$34.82	\$34.46	\$34.16	\$33.95
Intervention Period Comparison MTM Mean	\$33.46	\$37.64	\$36.64	\$35.63	\$27.19	\$27.82

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.24: Humana: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.49***	\$0.73*	\$1.61***	\$1.24***	\$2.12***	\$2.75***
P-value	<0.001	0.070	<0.001	0.002	<0.001	<0.001
95% Confidence Interval	(0.91 , 2.07)	(-0.06 , 1.52)	(0.85 , 2.38)	(0.45 , 2.03)	(1.36 , 2.89)	(1.95 , 3.54)
Relative Difference	3.98%	1.95%	4.32%	3.31%	5.69%	7.39%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$37.35	\$37.42	\$37.36	\$37.40	\$37.29	\$37.18
Intervention Period Enhanced MTM Mean	\$35.04	\$40.26	\$36.11	\$35.09	\$27.77	\$28.98
Baseline Comparison MTM Mean	\$39.94	\$40.18	\$39.84	\$39.92	\$39.81	\$39.72
Intervention Period Comparison MTM Mean	\$36.14	\$42.29	\$36.98	\$36.36	\$28.17	\$28.76

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.25: BCBS NPA: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.64**	\$0.62*	\$0.05	\$0.37	\$1.63***	\$0.64
P-value	0.044	0.090	0.914	0.418	<0.001	0.175
95% Confidence Interval	(0.02 , 1.26)	(-0.10 , 1.34)	(-0.78 , 0.88)	(-0.52 , 1.26)	(0.83 , 2.42)	(-0.29 , 1.57)
Relative Difference	3.48%	3.39%	0.25%	2.01%	8.88%	3.52%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$18.29	\$18.25	\$18.29	\$18.31	\$18.30	\$18.31
Intervention Period Enhanced MTM Mean	\$22.77	\$22.05	\$23.20	\$24.44	\$20.91	\$23.30
Baseline Comparison MTM Mean	\$21.37	\$21.33	\$21.32	\$21.40	\$21.42	\$21.41
Intervention Period Comparison MTM Mean	\$25.21	\$24.51	\$26.18	\$27.16	\$22.39	\$25.76

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.26: UnitedHealth: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.16***	\$0.85**	\$1.23***	\$1.43***	\$0.92***	\$1.36***
P-value	<0.001	0.025	0.003	<0.001	0.007	<0.001
95% Confidence Interval	(0.62 , 1.70)	(0.11 , 1.59)	(0.41 , 2.05)	(0.75 , 2.10)	(0.25 , 1.60)	(0.64 , 2.07)
Relative Difference	3.94%	3.26%	4.70%	4.49%	2.94%	4.40%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$29.40	\$26.11	\$26.12	\$31.72	\$31.47	\$30.85
Intervention Period Enhanced MTM Mean	\$28.64	\$28.76	\$27.98	\$33.61	\$25.55	\$26.51
Baseline Comparison MTM Mean	\$30.53	\$27.42	\$27.40	\$32.72	\$32.49	\$31.93
Intervention Period Comparison MTM Mean	\$28.62	\$29.22	\$28.04	\$33.19	\$25.64	\$26.24

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.27: WellCare: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.10***	\$1.31***	\$1.00**	\$0.85*	\$1.02**	\$1.33***
P-value	<0.001	<0.001	0.015	0.070	0.018	0.003
95% Confidence Interval	(0.49 , 1.72)	(0.63 , 1.99)	(0.19 , 1.80)	(-0.07 , 1.76)	(0.17 , 1.87)	(0.46 , 2.19)
Relative Difference	3.02%	3.66%	2.78%	2.34%	2.67%	3.56%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$36.60	\$35.79	\$35.90	\$36.25	\$38.17	\$37.25
Intervention Period Enhanced MTM Mean	\$36.37	\$39.13	\$39.03	\$38.62	\$31.78	\$31.87
Baseline Comparison MTM Mean	\$36.02	\$35.27	\$35.06	\$35.36	\$37.86	\$36.95
Intervention Period Comparison MTM Mean	\$34.69	\$37.30	\$37.19	\$36.88	\$30.46	\$30.24

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.28: BCBS FL: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.58	\$0.59	\$0.57	\$0.78	\$0.13	\$0.83
P-value	0.228	0.308	0.325	0.249	0.836	0.228
95% Confidence Interval	(-0.36 , 1.52)	(-0.55 , 1.73)	(-0.56 , 1.70)	(-0.55 , 2.11)	(-1.13 , 1.40)	(-0.36 , 1.52)
Relative Difference	2.87%	2.94%	2.81%	3.87%	0.66%	2.87%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$20.21	\$20.14	\$20.20	\$20.19	\$20.29	\$20.26
Intervention Period Enhanced MTM Mean	\$24.03	\$23.99	\$25.83	\$26.58	\$20.34	\$23.02
Baseline Comparison MTM Mean	\$20.31	\$20.36	\$20.34	\$20.33	\$20.26	\$20.25
Intervention Period Comparison MTM Mean	\$23.55	\$23.62	\$25.40	\$25.93	\$20.17	\$22.18

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Outpatient Services Excluding Emergency Department (ED)

Table B.3.29: Modelwide: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$3.76***	\$2.14***	\$3.83***	\$3.39***	\$3.77***	\$6.55***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.71 , 4.80)	(0.94 , 3.33)	(2.49 , 5.17)	(1.94 , 4.84)	(2.35 , 5.20)	(4.98 , 8.11)
Relative Difference	1.76%	1.02%	1.81%	1.58%	1.75%	3.02%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$213.34	\$209.45	\$211.92	\$214.46	\$215.72	\$216.92
Intervention Period Enhanced MTM Mean	\$229.11	\$216.24	\$230.39	\$238.54	\$214.78	\$251.49
Baseline Comparison MTM Mean	\$211.68	\$208.95	\$209.75	\$212.21	\$213.66	\$215.32
Intervention Period Comparison MTM Mean	\$223.69	\$213.60	\$224.40	\$232.91	\$208.94	\$243.34

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.30: SilverScript/CVS: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$4.59***	\$2.46***	\$3.82***	\$5.16***	\$4.29***	\$8.19***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(3.40 , 5.77)	(1.08 , 3.84)	(2.26 , 5.38)	(3.46 , 6.86)	(2.54 , 6.03)	(6.26 , 10.11)
Relative Difference	2.14%	1.18%	1.81%	2.40%	1.97%	3.75%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$213.90	\$208.52	\$211.60	\$215.44	\$217.40	\$218.58
Intervention Period Enhanced MTM Mean	\$228.26	\$215.59	\$227.34	\$238.15	\$214.60	\$250.32
Baseline Comparison MTM Mean	\$209.12	\$205.01	\$206.15	\$210.16	\$212.31	\$213.85
Intervention Period Comparison MTM Mean	\$218.89	\$209.62	\$218.07	\$227.71	\$205.22	\$237.41

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (636,560 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.31: Humana: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.99***	\$1.39	\$4.15***	\$2.68*	\$3.44**	\$5.12***
P-value	0.002	0.196	0.001	0.051	0.016	0.001
95% Confidence Interval	(1.10 , 4.88)	(-0.72 , 3.49)	(1.61 , 6.69)	(-0.01 , 5.38)	(0.65 , 6.24)	(2.06 , 8.17)
Relative Difference	1.47%	0.70%	2.05%	1.31%	1.64%	2.43%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$203.90	\$198.53	\$202.32	\$205.56	\$209.65	\$210.59
Intervention Period Enhanced MTM Mean	\$219.13	\$203.43	\$224.01	\$231.38	\$211.00	\$244.61
Baseline Comparison MTM Mean	\$203.16	\$198.77	\$200.24	\$204.11	\$208.85	\$210.37
Intervention Period Comparison MTM Mean	\$215.40	\$202.28	\$217.78	\$227.24	\$206.75	\$239.27

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.32: BCBS NPA: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.78	\$1.97	- \$0.93	- \$1.81	\$0.61	\$4.73
P-value	0.733	0.409	0.716	0.569	0.833	0.153
95% Confidence Interval	(-3.72 , 5.28)	(-2.70 , 6.64)	(-5.94 , 4.08)	(-8.05 , 4.42)	(-5.08 , 6.31)	(-1.76 , 11.21)
Relative Difference	0.40%	1.01%	-0.48%	-0.93%	0.31%	2.41%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$195.56	\$194.66	\$195.55	\$195.77	\$196.01	\$196.10
Intervention Period Enhanced MTM Mean	\$217.33	\$206.08	\$217.20	\$224.98	\$200.26	\$243.16
Baseline Comparison MTM Mean	\$207.49	\$207.15	\$207.21	\$207.61	\$207.76	\$207.86
Intervention Period Comparison MTM Mean	\$228.47	\$216.61	\$229.79	\$238.63	\$211.39	\$250.19

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.33: UnitedHealth: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$8.64***	\$3.72*	\$9.69***	\$7.17***	\$11.15***	\$11.92***
P-value	<0.001	0.086	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(5.42 , 11.86)	(-0.52 , 7.96)	(4.89 , 14.48)	(3.36 , 10.98)	(7.36 , 14.94)	(7.79 , 16.05)
Relative Difference	3.64%	1.55%	4.01%	3.07%	4.74%	5.03%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$237.32	\$240.53	\$241.61	\$233.34	\$235.26	\$237.05
Intervention Period Enhanced MTM Mean	\$248.07	\$244.01	\$256.79	\$249.15	\$228.17	\$265.13
Baseline Comparison MTM Mean	\$237.67	\$241.32	\$242.24	\$232.88	\$235.26	\$238.07
Intervention Period Comparison MTM Mean	\$239.78	\$241.08	\$247.73	\$241.51	\$217.02	\$254.24

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.34: WellCare: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.58	\$1.89	\$1.79	\$1.31	-\$2.28	-\$0.34
P-value	0.616	0.183	0.260	0.461	0.170	0.851
95% Confidence Interval	(-1.70 , 2.87)	(-0.89 , 4.68)	(-1.32 , 4.91)	(-2.18 , 4.80)	(-5.54 , 0.98)	(-3.95 , 3.26)
Relative Difference	0.28%	0.90%	0.84%	0.62%	-1.09%	-0.16%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$211.89	\$209.85	\$212.26	\$213.13	\$209.61	\$215.48
Intervention Period Enhanced MTM Mean	\$223.57	\$218.25	\$227.15	\$235.09	\$202.59	\$237.46
Baseline Comparison MTM Mean	\$204.24	\$202.47	\$203.35	\$204.04	\$202.83	\$209.65
Intervention Period Comparison MTM Mean	\$215.34	\$208.97	\$216.44	\$224.69	\$198.09	\$231.97

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.35: BCBS FL: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$6.32*	\$1.61	\$8.90**	\$6.49	\$7.92*	\$7.41*
P-value	0.058	0.677	0.026	0.114	0.083	0.100
95% Confidence Interval	(-0.21 , 12.85)	(-5.98 , 9.21)	(1.06 , 16.74)	(-1.57 , 14.54)	(-1.02 , 16.86)	(-1.41 , 16.24)
Relative Difference	2.50%	0.64%	3.52%	2.56%	3.12%	2.93%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$252.90	\$252.23	\$252.81	\$252.89	\$253.44	\$253.30
Intervention Period Enhanced MTM Mean	\$269.98	\$257.80	\$271.00	\$280.59	\$253.26	\$290.59
Baseline Comparison MTM Mean	\$246.82	\$247.06	\$246.99	\$246.97	\$246.12	\$246.90
Intervention Period Comparison MTM Mean	\$257.58	\$251.01	\$256.29	\$268.19	\$238.02	\$276.78

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Ancillary Services

Table B.3.36: Modelwide: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.10***	\$0.47*	\$1.38***	\$1.58***	\$3.30***	\$4.74***
P-value	<0.001	0.066	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.62 , 2.57)	(-0.03 , 0.97)	(0.77 , 1.98)	(0.92 , 2.24)	(2.59 , 4.00)	(3.97 , 5.51)
Relative Difference	2.14%	0.49%	1.41%	1.60%	3.33%	4.77%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$98.17	\$96.93	\$97.65	\$98.50	\$98.93	\$99.41
Intervention Period Enhanced MTM Mean	\$103.92	\$97.93	\$103.42	\$106.31	\$102.64	\$112.11
Baseline Comparison MTM Mean	\$100.88	\$100.34	\$100.24	\$100.93	\$101.37	\$101.91
Intervention Period Comparison MTM Mean	\$104.54	\$100.86	\$104.64	\$107.16	\$101.78	\$109.87

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.37: SilverScript/CVS: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.57***	\$0.25	\$0.92**	\$1.93***	\$4.35***	\$6.75***
P-value	<0.001	0.418	0.010	<0.001	<0.001	<0.001
95% Confidence Interval	(2.01 , 3.13)	(-0.36 , 0.87)	(0.22 , 1.63)	(1.11 , 2.75)	(3.50 , 5.21)	(5.79 , 7.72)
Relative Difference	2.62%	0.26%	0.95%	1.95%	4.39%	6.78%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$98.26	\$96.82	\$97.57	\$98.65	\$99.19	\$99.64
Intervention Period Enhanced MTM Mean	\$104.90	\$98.05	\$103.64	\$107.60	\$104.05	\$113.73
Baseline Comparison MTM Mean	\$100.36	\$99.89	\$99.55	\$100.45	\$100.89	\$101.36
Intervention Period Comparison MTM Mean	\$104.43	\$100.86	\$104.69	\$107.47	\$101.40	\$108.69

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.38: Humana: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.26	- \$0.86*	\$0.16	\$0.21	\$1.74**	\$1.50*
P-value	0.600	0.098	0.807	0.776	0.023	0.071
95% Confidence Interval	(-0.71 , 1.23)	(-1.87 , 0.16)	(-1.14 , 1.46)	(-1.23 , 1.65)	(0.24 , 3.24)	(-0.13 , 3.14)
Relative Difference	0.27%	-0.90%	0.17%	0.21%	1.76%	1.51%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$96.99	\$95.16	\$96.49	\$97.58	\$98.94	\$99.21
Intervention Period Enhanced MTM Mean	\$100.47	\$95.39	\$101.50	\$103.60	\$100.34	\$107.70
Baseline Comparison MTM Mean	\$101.17	\$99.93	\$100.19	\$101.38	\$102.85	\$103.38
Intervention Period Comparison MTM Mean	\$104.39	\$101.02	\$105.04	\$107.19	\$102.52	\$110.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.39: BCBS NPA: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.95**	\$3.90***	\$2.21**	\$1.17	\$0.54	\$1.43
P-value	0.032	<0.001	0.044	0.331	0.699	0.300
95% Confidence Interval	(0.16 , 3.74)	(2.14 , 5.66)	(0.06 , 4.36)	(-1.19 , 3.54)	(-2.21 , 3.29)	(-1.28 , 4.13)
Relative Difference	2.25%	4.52%	2.55%	1.35%	0.63%	1.65%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$86.56	\$86.30	\$86.57	\$86.62	\$86.66	\$86.70
Intervention Period Enhanced MTM Mean	\$95.33	\$89.77	\$94.45	\$96.14	\$94.14	\$104.56
Baseline Comparison MTM Mean	\$91.44	\$91.34	\$91.42	\$91.49	\$91.47	\$91.49
Intervention Period Comparison MTM Mean	\$98.26	\$90.91	\$97.09	\$99.84	\$98.41	\$107.92

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.40: UnitedHealth: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$3.73***	\$1.43	\$3.84***	\$2.83***	\$4.85***	\$5.96***
P-value	<0.001	0.122	<0.001	0.002	<0.001	<0.001
95% Confidence Interval	(2.29 , 5.18)	(-0.38 , 3.25)	(1.70 , 5.97)	(1.06 , 4.60)	(2.99 , 6.70)	(3.74 , 8.19)
Relative Difference	3.45%	1.31%	3.49%	2.65%	4.52%	5.53%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$108.15	\$109.44	\$109.82	\$106.81	\$107.22	\$107.90
Intervention Period Enhanced MTM Mean	\$111.04	\$108.82	\$112.04	\$111.18	\$106.82	\$117.02
Baseline Comparison MTM Mean	\$111.92	\$113.81	\$113.98	\$110.19	\$110.71	\$111.43
Intervention Period Comparison MTM Mean	\$111.08	\$111.77	\$112.37	\$111.72	\$105.46	\$114.59

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.41: WellCare: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.80	- \$0.45	\$0.23	\$0.31	\$1.45*	\$3.08***
P-value	0.144	0.444	0.759	0.723	0.093	0.001
95% Confidence Interval	(-0.27 , 1.87)	(-1.61 , 0.70)	(-1.22 , 1.67)	(-1.40 , 2.02)	(-0.24 , 3.14)	(1.32 , 4.84)
Relative Difference	0.82%	-0.47%	0.23%	0.32%	1.49%	3.10%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$97.20	\$95.92	\$96.84	\$97.26	\$97.18	\$99.41
Intervention Period Enhanced MTM Mean	\$102.49	\$96.89	\$103.28	\$105.31	\$99.80	\$109.25
Baseline Comparison MTM Mean	\$98.58	\$97.67	\$97.75	\$98.07	\$98.95	\$101.04
Intervention Period Comparison MTM Mean	\$103.07	\$99.09	\$103.97	\$105.81	\$100.12	\$107.80

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.42: BCBS FL: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.56	- \$0.59	\$1.48	\$1.16	\$3.41**	\$2.92
P-value	0.180	0.631	0.292	0.479	0.045	0.111
95% Confidence Interval	(-0.72 , 3.85)	(-2.99 , 1.82)	(-1.27 , 4.23)	(-2.05 , 4.37)	(0.08 , 6.75)	(-0.67 , 6.52)
Relative Difference	1.39%	-0.52%	1.32%	1.03%	3.04%	2.61%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$112.19	\$112.09	\$112.18	\$112.18	\$112.30	\$112.21
Intervention Period Enhanced MTM Mean	\$117.25	\$112.15	\$116.93	\$120.44	\$114.70	\$123.41
Baseline Comparison MTM Mean	\$106.15	\$106.45	\$106.36	\$106.29	\$105.70	\$105.81
Intervention Period Comparison MTM Mean	\$109.64	\$107.09	\$109.63	\$113.39	\$104.70	\$114.08

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

B.3.3 Health Service Utilization

This subsection presents the Model impacts on eight health service utilization measures (supplementing Section 3.3.2 of the main report) first for the Model as a whole, and then by individual sponsor. There is a total of 56 tables in this subsection. Findings, both cumulative and by Model Year, are presented following sequential subsections:

- Inpatient Admissions
- Inpatient Length of Stay
- Hospital Readmissions
- Skilled Nursing Facility Admissions
- Skilled Nursing Facility Length of Stay
- Emergency Department Visits
- Outpatient Non-Emergency Department Visits
- Evaluation and Management Visits

For the Model as whole, the estimated impacts on utilization of related health services were mostly aligned with the impacts on gross Medicare Parts A and B expenditures, and showed decreases in utilization of some services related to inpatient or institutional post-acute care. Sponsor-level estimates were consistent with the Modelwide findings.

Inpatient Admissions

Table B.3.43: Modelwide: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.06	0.23*	-0.16	- 0.23*	0.04	- 0.28*
P-value	0.540	0.064	0.242	0.084	0.783	0.054
95% Confidence Interval	(-0.26 , 0.14)	(-0.01 , 0.47)	(-0.43 , 0.11)	(-0.50 , 0.03)	(-0.23 , 0.30)	(-0.55 , 0.00)
Relative Difference	-0.24%	0.90%	-0.64%	-0.92%	0.15%	-1.08%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	25.47	25.51	25.39	25.50	25.51	25.42
Intervention Period Enhanced MTM Mean	27.22	30.08	28.17	27.93	24.45	23.96
Baseline Comparison MTM Mean	25.16	25.22	24.99	25.16	25.25	25.22
Intervention Period Comparison MTM Mean	26.98	29.56	27.93	27.82	24.15	24.03

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.44: SilverScript/CVS: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.09	0.24	0.02	-0.14	0.25	0.09
P-value	0.448	0.112	0.889	0.430	0.150	0.605
95% Confidence Interval	(-0.15 , 0.33)	(-0.06 , 0.53)	(-0.30 , 0.35)	(-0.47 , 0.20)	(-0.09 , 0.59)	(-0.26 , 0.44)
Relative Difference	0.36%	0.89%	0.09%	-0.53%	0.97%	0.36%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	25.89	26.35	25.97	25.82	25.64	25.53
Intervention Period Enhanced MTM Mean	28.32	30.99	29.89	29.14	25.49	24.74
Baseline Comparison MTM Mean	25.56	26.03	25.55	25.46	25.35	25.31
Intervention Period Comparison MTM Mean	27.90	30.43	29.45	28.91	24.95	24.42

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.45: Humana: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.08	0.88***	-0.19	- 0.72**	- 0.54*	- 0.93***
P-value	0.732	0.001	0.538	0.025	0.092	0.004
95% Confidence Interval	(-0.54 , 0.38)	(0.35 , 1.41)	(-0.81 , 0.42)	(-1.36 , -0.09)	(-1.16 , 0.09)	(-1.57 , -0.29)
Relative Difference	-0.27%	2.93%	-0.64%	-2.42%	-1.81%	-3.15%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	29.84	29.94	29.90	29.88	29.72	29.60
Intervention Period Enhanced MTM Mean	29.59	34.53	29.51	28.65	25.00	24.04
Baseline Comparison MTM Mean	29.52	29.64	29.45	29.51	29.45	29.42
Intervention Period Comparison MTM Mean	29.35	33.35	29.26	29.00	25.27	24.79

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.46: BCBS NPA: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.22	-0.40	-0.05	-0.46	0.52	-0.74
P-value	0.560	0.386	0.910	0.326	0.289	0.135
95% Confidence Interval	(-0.95 , 0.52)	(-1.29 , 0.50)	(-0.93 , 0.83)	(-1.37 , 0.46)	(-0.44 , 1.49)	(-1.71 , 0.23)
Relative Difference	-1.26%	-2.28%	-0.29%	-2.62%	3.00%	-4.24%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	17.42	17.37	17.43	17.45	17.42	17.41
Intervention Period Enhanced MTM Mean	21.66	22.30	22.47	22.58	20.00	20.46
Baseline Comparison MTM Mean	18.11	18.09	18.07	18.12	18.13	18.13
Intervention Period Comparison MTM Mean	22.57	23.42	23.16	23.70	20.19	21.92

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.47: UnitedHealth: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.30	-0.33	- 0.64*	-0.10	-0.28	-0.19
P-value	0.210	0.338	0.083	0.743	0.356	0.578
95% Confidence Interval	(-0.76 , 0.17)	(-1.01 , 0.35)	(-1.37 , 0.08)	(-0.70 , 0.50)	(-0.87 , 0.31)	(-0.88 , 0.49)
Relative Difference	-1.23%	-1.44%	-2.78%	-0.40%	-1.13%	-0.80%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	24.07	23.07	23.08	24.82	24.72	24.42
Intervention Period Enhanced MTM Mean	25.43	26.87	25.58	27.51	23.58	23.26
Baseline Comparison MTM Mean	23.44	22.29	22.33	24.20	24.17	23.97
Intervention Period Comparison MTM Mean	25.10	26.42	25.47	26.99	23.31	23.01

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.48: WellCare: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.23	0.35	-0.15	0.70*	0.21	0.07
P-value	0.334	0.237	0.655	0.057	0.558	0.848
95% Confidence Interval	(-0.24 , 0.71)	(-0.23 , 0.93)	(-0.81 , 0.51)	(-0.02 , 1.42)	(-0.48 , 0.90)	(-0.65 , 0.79)
Relative Difference	0.87%	1.33%	-0.57%	2.63%	0.75%	0.26%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	26.80	26.37	26.49	26.60	27.50	27.26
Intervention Period Enhanced MTM Mean	29.82	31.31	30.69	31.23	27.99	27.18
Baseline Comparison MTM Mean	25.90	25.44	25.32	25.50	26.88	26.58
Intervention Period Comparison MTM Mean	28.68	30.04	29.67	29.43	27.17	26.43

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.49: BCBS FL: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.48	-0.31	-0.60	-0.63	-0.40	-0.48
P-value	0.347	0.638	0.498	0.381	0.534	0.542
95% Confidence Interval	(-1.48 , 0.52)	(-1.61 , 0.98)	(-2.32 , 1.13)	(-2.03 , 0.78)	(-1.67 , 0.87)	(-2.01 , 1.05)
Relative Difference	-2.48%	-1.60%	-3.07%	-3.23%	-2.08%	-2.47%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	19.38	19.39	19.42	19.41	19.38	19.31
Intervention Period Enhanced MTM Mean	24.28	24.47	25.23	25.76	22.39	23.22
Baseline Comparison MTM Mean	18.76	18.84	18.80	18.77	18.66	18.68
Intervention Period Comparison MTM Mean	24.13	24.24	25.21	25.75	22.07	23.07

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Inpatient Length of Stay

Table B.3.50: Modelwide: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.12	2.17**	-0.40	0.04	1.93	- 4.26***
P-value	0.891	0.038	0.734	0.970	0.103	0.001
95% Confidence Interval	(-1.56 , 1.80)	(0.12 , 4.22)	(-2.69 , 1.89)	(-2.23 , 2.32)	(-0.39 , 4.25)	(-6.69 , -1.84)
Relative Difference	0.07%	1.27%	-0.24%	0.03%	1.14%	-2.52%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	169.70	170.45	168.99	169.75	169.74	169.37
Intervention Period Enhanced MTM Mean	186.29	205.88	189.30	186.52	172.77	168.02
Baseline Comparison MTM Mean	168.21	168.99	166.73	168.18	168.69	168.44
Intervention Period Comparison MTM Mean	184.69	202.25	187.44	184.90	169.79	171.35

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.51: SilverScript/CVS: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.73	2.16	0.37	-0.32	4.34***	- 3.61**
P-value	0.536	0.131	0.815	0.844	0.010	0.037
95% Confidence Interval	(-1.57 , 3.03)	(-0.65 , 4.97)	(-2.75 , 3.49)	(-3.52 , 2.88)	(1.06 , 7.63)	(-7.00 , -0.21)
Relative Difference	0.41%	1.19%	0.21%	-0.18%	2.49%	-2.08%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	176.98	181.95	177.98	175.87	174.15	173.31
Intervention Period Enhanced MTM Mean	199.48	217.92	207.90	199.76	186.16	177.40
Baseline Comparison MTM Mean	174.78	180.05	175.43	173.51	171.96	171.36
Intervention Period Comparison MTM Mean	196.56	213.85	204.98	197.72	179.64	179.05

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.52: Humana: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.03	6.33***	2.45	-0.04	-2.37	- 8.80***
P-value	0.630	0.009	0.389	0.990	0.422	0.003
95% Confidence Interval	(-3.14 , 5.19)	(1.59 , 11.07)	(-3.14 , 8.04)	(-5.83 , 5.76)	(-8.17 , 3.42)	(-14.63 , -2.97)
Relative Difference	0.50%	3.05%	1.19%	-0.02%	-1.16%	-4.33%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	205.72	207.41	206.26	205.59	203.77	203.25
Intervention Period Enhanced MTM Mean	208.92	245.32	204.58	198.32	180.23	172.32
Baseline Comparison MTM Mean	203.87	205.88	203.86	203.28	201.97	201.89
Intervention Period Comparison MTM Mean	206.04	237.47	199.73	196.05	180.80	179.76

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.53: BCBS NPA: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-2.48	-2.93	-2.95	- 4.94*	2.99	-4.41
P-value	0.257	0.293	0.301	0.085	0.327	0.155
95% Confidence Interval	(-6.76 , 1.80)	(-8.38 , 2.52)	(-8.53 , 2.64)	(-10.55 , 0.67)	(-2.99 , 8.97)	(-10.50 , 1.68)
Relative Difference	-2.61%	-3.09%	-3.10%	-5.19%	3.15%	-4.65%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	94.94	94.67	95.03	95.15	94.98	94.92
Intervention Period Enhanced MTM Mean	125.86	126.88	127.32	127.40	120.96	126.18
Baseline Comparison MTM Mean	100.02	100.06	99.78	100.04	100.09	100.14
Intervention Period Comparison MTM Mean	133.41	135.21	135.02	137.23	123.08	135.81

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.54: UnitedHealth: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.60	1.01	-3.73	4.53*	0.29	-0.31
P-value	0.768	0.720	0.225	0.095	0.919	0.922
95% Confidence Interval	(-3.36 , 4.55)	(-4.50 , 6.52)	(-9.75 , 2.29)	(-0.78 , 9.84)	(-5.22 , 5.79)	(-6.49 , 5.87)
Relative Difference	0.38%	0.69%	-2.55%	2.77%	0.18%	-0.19%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	156.07	146.10	146.04	163.30	162.21	160.32
Intervention Period Enhanced MTM Mean	172.34	177.39	164.10	185.65	166.27	165.07
Baseline Comparison MTM Mean	153.54	140.95	140.98	162.37	161.19	159.31
Intervention Period Comparison MTM Mean	169.22	171.23	162.76	180.19	164.97	164.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.55: WellCare: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.70	1.79	-0.15	3.19	1.42	-3.30
P-value	0.758	0.514	0.962	0.346	0.675	0.345
95% Confidence Interval	(-3.76 , 5.16)	(-3.58 , 7.16)	(-6.44 , 6.13)	(-3.45 , 9.83)	(-5.23 , 8.07)	(-10.13 , 3.54)
Relative Difference	0.39%	1.02%	-0.09%	1.79%	0.76%	-1.79%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	179.96	176.00	177.10	178.06	185.89	184.52
Intervention Period Enhanced MTM Mean	208.42	214.14	212.04	211.60	203.26	198.19
Baseline Comparison MTM Mean	173.96	170.05	168.82	169.95	182.88	180.23
Intervention Period Comparison MTM Mean	201.72	206.40	203.92	200.30	198.83	197.19

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.56: BCBS FL: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-1.38	-0.11	1.35	-0.47	-2.04	-6.64
P-value	0.700	0.981	0.809	0.927	0.683	0.263
95% Confidence Interval	(-8.38 , 5.62)	(-9.28 , 9.05)	(-9.57 , 12.28)	(-10.56 , 9.62)	(-11.81 , 7.73)	(-18.26 , 4.98)
Relative Difference	-1.23%	-0.10%	1.20%	-0.42%	-1.82%	-5.94%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	112.17	112.24	112.27	112.17	112.28	111.85
Intervention Period Enhanced MTM Mean	151.56	153.03	156.77	157.60	141.68	147.11
Baseline Comparison MTM Mean	112.86	113.53	113.19	112.99	112.16	112.21
Intervention Period Comparison MTM Mean	153.62	154.43	156.34	158.88	143.60	154.11

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Hospital Readmissions

Table B.3.57: Modelwide: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	- 5.55***	- 2.96**	- 6.56***	- 6.45***	- 6.11***	- 6.93***
P-value	<0.001	0.017	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(-7.54 , -3.56)	(-5.38 , -0.53)	(-9.26 , -3.87)	(-9.17 , -3.73)	(-8.97 , -3.25)	(-9.89 , -3.97)
Relative Difference	-3.80%	-2.02%	-4.49%	-4.43%	-4.19%	-4.76%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	145.98	146.62	146.14	145.61	145.60	145.51
Intervention Period Enhanced MTM Rate	169.74	172.48	168.82	169.24	168.88	167.74
Baseline Comparison MTM Rate	139.73	139.44	139.41	139.66	140.10	140.39
Intervention Period Comparison MTM Rate	169.04	168.25	168.65	169.74	169.49	169.55

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 1,897,506 (730,622 beneficiaries). Number of comparison observations: 3,731,731 (1,477,249 beneficiaries).

Table B.3.58: SilverScript/CVS: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	- 4.76***	-2.66	- 4.82**	- 7.32***	- 4.96**	- 4.25*
P-value	0.002	0.156	0.017	<0.001	0.025	0.063
95% Confidence Interval	(-7.80 , -1.71)	(-6.34 , 1.02)	(-8.78 , -0.86)	(-11.41 , -3.23)	(-9.29 , -0.63)	(-8.74 , 0.24)
Relative Difference	-3.24%	-1.80%	-3.28%	-4.99%	-3.38%	-2.90%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	146.92	147.66	146.94	146.60	146.53	146.57
Intervention Period Enhanced MTM Rate	171.85	173.66	172.62	169.84	171.75	170.59
Baseline Comparison MTM Rate	141.43	141.36	140.98	141.49	141.58	142.04
Intervention Period Comparison MTM Rate	171.12	170.03	171.47	172.04	171.76	170.32

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 825,974 (304,272 beneficiaries). Number of comparison observations: 1,875,485 (730,268 beneficiaries).

Table B.3.59: Humana: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	- 6.19***	-1.37	- 6.74**	- 9.38***	- 9.91***	- 12.57***
P-value	0.004	0.579	0.027	0.004	0.004	0.001
95% Confidence Interval	(-10.36 , -2.01)	(-6.20 , 3.46)	(-12.73 , -0.75)	(-15.70 , -3.06)	(-16.59 , -3.23)	(-19.67 , -5.46)
Relative Difference	-3.85%	-0.85%	-4.20%	-5.84%	-6.19%	-7.86%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	160.57	160.99	160.57	160.50	160.07	159.84
Intervention Period Enhanced MTM Rate	180.66	186.91	178.82	177.80	175.73	172.58
Baseline Comparison MTM Rate	151.55	150.62	151.25	151.83	152.87	153.29
Intervention Period Comparison MTM Rate	177.83	177.91	176.24	178.50	178.44	178.60

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 397,086 (152,280 beneficiaries). Number of comparison observations: 915,168 (357,831 beneficiaries).

Table B.3.60: BCBS NPA: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	-4.07	- 7.30**	- 6.53*	-0.19	-2.21	-2.89
P-value	0.123	0.027	0.056	0.957	0.551	0.457
95% Confidence Interval	(-9.25 , 1.10)	(-13.78 , -0.83)	(-13.22 , 0.16)	(-7.15 , 6.77)	(-9.49 , 5.07)	(-10.52 , 4.73)
Relative Difference	-4.26%	-7.63%	-6.81%	-0.20%	-2.32%	-3.03%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	95.72	95.75	95.88	95.79	95.58	95.52
Intervention Period Enhanced MTM Rate	124.38	122.21	121.78	127.57	123.73	127.88
Baseline Comparison MTM Rate	101.32	101.16	101.15	101.35	101.49	101.59
Intervention Period Comparison MTM Rate	134.06	134.93	133.58	133.32	131.86	136.84

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 204,132 (90,349 beneficiaries). Number of comparison observations: 306,305 (133,882 beneficiaries).

Table B.3.61: UnitedHealth: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	- 6.35**	-1.03	- 11.78***	- 7.41**	-6.09	-6.06
P-value	0.017	0.786	0.004	0.032	0.105	0.117
95% Confidence Interval	(-11.54 , -1.16)	(-8.46 , 6.40)	(-19.88 , -3.69)	(-14.19 , -0.63)	(-13.44 , 1.26)	(-13.63 , 1.51)
Relative Difference	-4.47%	-0.71%	-8.11%	-5.28%	-4.35%	-4.36%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	141.95	145.31	145.24	140.28	139.94	139.03
Intervention Period Enhanced MTM Rate	167.47	173.23	164.19	167.05	166.29	165.64
Baseline Comparison MTM Rate	134.54	135.85	136.38	133.18	133.73	133.87
Intervention Period Comparison MTM Rate	166.41	164.80	167.12	167.37	166.17	166.54

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 226,005 (90,277 beneficiaries). Number of comparison observations: 528,551 (223,029 beneficiaries).

Table B.3.62: WellCare: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	-3.51	-5.49	-2.56	2.23	-7.34	-4.61
P-value	0.283	0.173	0.559	0.628	0.117	0.337
95% Confidence Interval	(-9.91 , 2.89)	(-13.40 , 2.41)	(-11.16 , 6.04)	(-6.79 , 11.25)	(-16.53 , 1.85)	(-14.01 , 4.79)
Relative Difference	-2.36%	-3.69%	-1.73%	1.51%	-4.91%	-3.08%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	148.74	148.74	148.10	147.93	149.54	149.78
Intervention Period Enhanced MTM Rate	175.20	172.82	174.79	179.62	175.20	173.95
Baseline Comparison MTM Rate	143.84	143.65	142.79	142.89	145.23	145.30
Intervention Period Comparison MTM Rate	173.81	173.22	172.05	172.34	178.23	174.08

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 167,104 (62,691 beneficiaries). Number of comparison observations: 549,560 (222,648 beneficiaries).

Table B.3.63: BCBS FL: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	- 13.38***	- 9.87*	- 13.84**	-9.06	- 14.32**	- 22.06***
P-value	0.004	0.086	0.023	0.158	0.030	0.001
95% Confidence Interval	(-22.50 , -4.25)	(-21.14 , 1.40)	(-25.78 , -1.90)	(-21.64 , 3.52)	(-27.23 , -1.40)	(-34.97 , -9.15)
Relative Difference	-11.44%	-8.46%	-11.86%	-7.77%	-12.18%	-18.81%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	116.91	116.70	116.66	116.60	117.51	117.29
Intervention Period Enhanced MTM Rate	147.67	142.87	148.26	152.32	152.82	142.20
Baseline Comparison MTM Rate	97.89	98.14	98.09	97.86	97.56	97.67
Intervention Period Comparison MTM Rate	142.03	134.19	143.53	142.65	147.18	144.65

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 77,205 (30,753 beneficiaries). Number of comparison observations: 117,776 (49,988 beneficiaries).

Skilled Nursing Facility (SNF) Admissions

Table B.3.64: Modelwide: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.13***	0.04	-0.09	- 0.14**	- 0.30***	- 0.26***
P-value	0.003	0.503	0.170	0.024	<0.001	<0.001
95% Confidence Interval	(-0.22 , -0.04)	(-0.08 , 0.16)	(-0.21 , 0.04)	(-0.25 , -0.02)	(-0.43 , -0.17)	(-0.39 , -0.13)
Relative Difference	-2.39%	0.71%	-1.56%	-2.45%	-5.35%	-4.69%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.55	5.56	5.55	5.56	5.55	5.56
Intervention Period Enhanced MTM Mean	6.63	7.03	6.71	6.51	6.65	6.08
Baseline Comparison MTM Mean	5.28	5.29	5.25	5.28	5.28	5.30
Intervention Period Comparison MTM Mean	6.49	6.73	6.50	6.37	6.67	6.08

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.65: SilverScript/CVS: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.14***	-0.06	-0.10	- 0.14*	- 0.15*	- 0.32***
P-value	0.009	0.362	0.192	0.081	0.069	<0.001
95% Confidence Interval	(-0.25 , -0.04)	(-0.20 , 0.07)	(-0.25 , 0.05)	(-0.29 , 0.02)	(-0.32 , 0.01)	(-0.48 , -0.15)
Relative Difference	-2.51%	-1.13%	-1.73%	-2.37%	-2.66%	-5.52%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.73	5.76	5.72	5.72	5.71	5.73
Intervention Period Enhanced MTM Mean	6.85	7.14	6.90	6.64	7.24	6.17
Baseline Comparison MTM Mean	5.55	5.62	5.53	5.52	5.52	5.55
Intervention Period Comparison MTM Mean	6.81	7.06	6.81	6.58	7.20	6.30

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.66: Humana: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.57***	-0.15	- 0.56***	- 0.76***	- 1.09***	- 0.82***
P-value	<0.001	0.205	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(-0.75 , -0.40)	(-0.37 , 0.08)	(-0.79 , -0.33)	(-1.00 , -0.52)	(-1.34 , -0.84)	(-1.07 , -0.57)
Relative Difference	-9.53%	-2.41%	-9.28%	-12.54%	-18.12%	-13.73%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	6.02	6.03	6.03	6.03	5.99	5.98
Intervention Period Enhanced MTM Mean	6.58	7.47	6.40	6.11	6.18	5.69
Baseline Comparison MTM Mean	5.44	5.43	5.41	5.45	5.44	5.46
Intervention Period Comparison MTM Mean	6.57	7.02	6.34	6.28	6.71	5.99

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.67: BCBS NPA: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.88***	0.95***	0.94***	0.83***	0.86***	0.77**
P-value	<0.001	<0.001	0.001	0.002	0.005	0.010
95% Confidence Interval	(0.47 , 1.28)	(0.45 , 1.45)	(0.41 , 1.47)	(0.31 , 1.34)	(0.26 , 1.46)	(0.18 , 1.35)
Relative Difference	16.61%	17.98%	17.75%	15.68%	16.40%	14.59%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.28	5.29	5.29	5.29	5.26	5.26
Intervention Period Enhanced MTM Mean	7.09	7.25	7.35	7.19	6.72	6.84
Baseline Comparison MTM Mean	5.54	5.56	5.53	5.55	5.53	5.52
Intervention Period Comparison MTM Mean	6.48	6.57	6.65	6.62	6.12	6.34

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.68: UnitedHealth: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.37***	-0.15	-0.25	- 0.26**	- 0.79***	- 0.36***
P-value	<0.001	0.334	0.122	0.041	<0.001	0.006
95% Confidence Interval	(-0.56 , -0.17)	(-0.45 , 0.15)	(-0.56 , 0.07)	(-0.51 , -0.01)	(-1.05 , -0.53)	(-0.63 , -0.10)
Relative Difference	-7.64%	-3.19%	-5.37%	-5.33%	-16.13%	-7.49%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	4.79	4.61	4.61	4.91	4.90	4.86
Intervention Period Enhanced MTM Mean	5.60	5.86	5.65	5.77	5.41	5.30
Baseline Comparison MTM Mean	4.21	3.93	3.94	4.39	4.37	4.36
Intervention Period Comparison MTM Mean	5.39	5.32	5.22	5.51	5.67	5.17

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.69: WellCare: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.09	-0.04	-0.11	0.09	- 0.27*	-0.12
P-value	0.401	0.783	0.466	0.591	0.097	0.449
95% Confidence Interval	(-0.30 , 0.12)	(-0.31 , 0.23)	(-0.41 , 0.19)	(-0.23 , 0.41)	(-0.59 , 0.05)	(-0.45 , 0.20)
Relative Difference	-1.60%	-0.70%	-2.03%	1.58%	-4.75%	-2.17%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.56	5.43	5.49	5.55	5.64	5.74
Intervention Period Enhanced MTM Mean	7.13	7.03	7.11	7.17	7.51	6.82
Baseline Comparison MTM Mean	5.35	5.25	5.24	5.33	5.44	5.54
Intervention Period Comparison MTM Mean	7.00	6.88	6.97	6.87	7.57	6.73

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.70: BCBS FL: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.03	0.02	-0.08	0.04	-0.14	0.00
P-value	0.873	0.933	0.795	0.876	0.579	0.987
95% Confidence Interval	(-0.40 , 0.34)	(-0.46 , 0.50)	(-0.64 , 0.49)	(-0.48 , 0.56)	(-0.63 , 0.35)	(-0.60 , 0.59)
Relative Difference	-0.76%	0.51%	-1.88%	1.03%	-3.50%	-0.12%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	3.99	4.01	4.00	3.99	3.96	3.95
Intervention Period Enhanced MTM Mean	5.43	5.52	5.69	5.84	4.65	5.41
Baseline Comparison MTM Mean	3.85	3.88	3.87	3.86	3.81	3.80
Intervention Period Comparison MTM Mean	5.33	5.37	5.63	5.67	4.64	5.27

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Skilled Nursing Facility (SNF) Length of Stay

Table B.3.71: Modelwide: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 21.80***	-2.20	- 8.72**	- 16.70***	- 46.74***	- 45.98***
P-value	<0.001	0.430	0.017	<0.001	<0.001	<0.001
95% Confidence Interval	(-26.82 , -16.78)	(-7.67 , 3.26)	(-15.90 , -1.54)	(-23.53 , -9.87)	(-53.73 , -39.74)	(-53.41 , -38.54)
Relative Difference	-6.69%	-0.67%	-2.67%	-5.12%	-14.50%	-14.31%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	325.93	330.75	326.70	326.36	322.26	321.32
Intervention Period Enhanced MTM Mean	312.14	366.44	330.47	299.23	277.45	262.15
Baseline Comparison MTM Mean	275.75	278.95	275.54	275.52	273.81	273.71
Intervention Period Comparison MTM Mean	283.76	316.83	288.03	265.10	275.74	260.51

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.72: SilverScript/CVS: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 26.32***	-1.44	- 11.84**	- 20.33***	- 51.13***	- 59.45***
P-value	<0.001	0.693	0.010	<0.001	<0.001	<0.001
95% Confidence Interval	(-33.42 , -19.22)	(-8.58 , 5.70)	(-20.87 , -2.81)	(-29.82 , -10.83)	(-60.96 , -41.31)	(-69.64 , -49.27)
Relative Difference	-7.00%	-0.37%	-3.11%	-5.44%	-13.91%	-16.28%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	376.19	389.64	380.26	373.57	367.54	365.11
Intervention Period Enhanced MTM Mean	348.44	418.99	375.01	331.05	313.04	276.74
Baseline Comparison MTM Mean	318.14	329.44	321.50	315.21	310.90	309.81
Intervention Period Comparison MTM Mean	316.71	360.23	328.09	293.01	307.53	280.89

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.73: Humana: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 37.96***	- 15.52***	- 24.49***	- 41.88***	- 74.17***	- 65.65***
P-value	<0.001	0.003	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(-47.73 , -28.19)	(-25.90 , -5.13)	(-37.81 , -11.16)	(-55.63 , -28.14)	(-88.18 , -60.16)	(-80.24 , -51.06)
Relative Difference	-10.99%	-4.42%	-7.07%	-12.13%	-21.88%	-19.42%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	345.53	351.36	346.40	345.19	338.91	338.00
Intervention Period Enhanced MTM Mean	307.42	378.67	309.23	271.02	250.44	241.84
Baseline Comparison MTM Mean	290.75	295.49	291.74	289.88	285.26	285.09
Intervention Period Comparison MTM Mean	290.60	338.31	279.05	257.59	270.96	254.58

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.74: BCBS NPA: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	20.06*	30.20**	27.52	27.70*	1.67	7.63
P-value	0.077	0.019	0.101	0.072	0.916	0.658
95% Confidence Interval	(-2.14 , 42.27)	(5.01 , 55.39)	(-5.39 , 60.43)	(-2.45 , 57.86)	(-29.52 , 32.86)	(-26.16 , 41.42)
Relative Difference	7.26%	10.85%	9.95%	10.03%	0.61%	2.78%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	276.16	278.40	276.47	276.30	274.48	274.35
Intervention Period Enhanced MTM Mean	318.55	350.72	340.40	312.35	276.84	299.75
Baseline Comparison MTM Mean	234.22	235.73	234.08	234.57	233.23	232.98
Intervention Period Comparison MTM Mean	256.55	277.85	270.48	242.93	233.91	250.75

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.75: UnitedHealth: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 28.01***	-6.52	- 20.11***	- 23.37***	- 49.42***	- 40.16***
P-value	<0.001	0.246	0.004	<0.001	<0.001	<0.001
95% Confidence Interval	(-37.17 , -18.85)	(-17.54 , 4.50)	(-33.81 , -6.42)	(-34.87 , -11.87)	(-62.34 , -36.50)	(-54.90 , -25.41)
Relative Difference	-12.05%	-3.18%	-9.87%	-9.19%	-19.87%	-16.48%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	232.43	204.82	203.72	254.30	248.72	243.68
Intervention Period Enhanced MTM Mean	223.41	234.97	208.29	239.68	217.72	211.45
Baseline Comparison MTM Mean	192.10	165.78	164.91	211.23	207.75	204.59
Intervention Period Comparison MTM Mean	211.08	202.45	189.59	219.98	226.18	212.52

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.76: WellCare: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 13.51**	-3.75	6.06	2.43	- 40.28***	- 39.19***
P-value	0.042	0.583	0.496	0.805	<0.001	<0.001
95% Confidence Interval	(-26.54 , -0.48)	(-17.14 , 9.65)	(-11.38 , 23.50)	(-16.84 , 21.71)	(-58.58 , -21.97)	(-58.94 , -19.43)
Relative Difference	-4.26%	-1.18%	1.91%	0.76%	-12.75%	-12.27%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	317.46	317.26	316.53	318.59	315.97	319.36
Intervention Period Enhanced MTM Mean	339.30	359.58	357.06	340.78	320.44	308.21
Baseline Comparison MTM Mean	272.77	267.48	266.22	270.87	280.29	281.99
Intervention Period Comparison MTM Mean	308.11	313.55	300.69	290.62	325.04	310.03

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.77: BCBS FL: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 26.27***	-10.95	- 18.07*	- 30.21***	- 47.35***	- 29.00**
P-value	<0.001	0.180	0.069	0.004	<0.001	0.014
95% Confidence Interval	(-40.49 , -12.05)	(-26.96 , 5.06)	(-37.57 , 1.43)	(-50.95 , -9.48)	(-70.08 , -24.62)	(-52.23 , -5.77)
Relative Difference	-21.02%	-8.66%	-14.36%	-24.08%	-38.31%	-23.58%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	124.98	126.48	125.82	125.45	123.58	122.98
Intervention Period Enhanced MTM Mean	162.61	172.77	169.55	167.36	140.80	159.06
Baseline Comparison MTM Mean	118.30	119.53	118.84	118.55	117.24	116.91
Intervention Period Comparison MTM Mean	182.20	176.77	180.64	190.67	181.81	181.99

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Emergency Department (ED) Visits

Table B.3.78: Modelwide: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.84***	0.64***	1.55***	1.90***	2.76***	2.87***
P-value	<0.001	0.003	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.49 , 2.18)	(0.22 , 1.06)	(1.11 , 1.99)	(1.45 , 2.36)	(2.32 , 3.21)	(2.40 , 3.34)
Relative Difference	3.62%	1.26%	3.10%	3.74%	5.41%	5.66%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	50.68	50.60	50.15	50.96	51.05	50.71
Intervention Period Enhanced MTM Mean	46.14	52.15	48.44	48.21	38.18	40.62
Baseline Comparison MTM Mean	53.58	53.76	52.98	53.76	53.87	53.53
Intervention Period Comparison MTM Mean	47.20	54.66	49.72	49.12	38.24	40.56

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.79: SilverScript/CVS: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.92***	1.08***	1.43***	1.74***	2.80***	2.97***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.48 , 2.36)	(0.60 , 1.57)	(0.88 , 1.97)	(1.15 , 2.32)	(2.20 , 3.39)	(2.34 , 3.59)
Relative Difference	3.60%	1.97%	2.65%	3.28%	5.35%	5.73%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	53.34	55.17	53.85	53.00	52.28	51.75
Intervention Period Enhanced MTM Mean	49.27	56.64	53.36	51.15	39.89	41.87
Baseline Comparison MTM Mean	56.03	58.19	56.53	55.56	54.82	54.32
Intervention Period Comparison MTM Mean	50.04	58.58	54.61	51.97	39.64	41.48

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.80: Humana: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	2.90***	0.31	3.76***	3.44***	4.57***	5.41***
P-value	<0.001	0.603	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.98 , 3.82)	(-0.87 , 1.50)	(2.59 , 4.93)	(2.23 , 4.65)	(3.39 , 5.75)	(4.17 , 6.64)
Relative Difference	4.84%	0.52%	6.27%	5.74%	7.66%	9.09%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	59.95	60.21	60.00	59.99	59.68	59.48
Intervention Period Enhanced MTM Mean	52.71	60.87	54.46	52.27	41.22	43.97
Baseline Comparison MTM Mean	64.95	65.56	64.87	64.83	64.46	64.26
Intervention Period Comparison MTM Mean	54.81	65.91	55.57	53.66	41.44	43.34

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.81: BCBS NPA: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.25	-0.60	- 1.34**	-0.72	1.37**	0.43
P-value	0.600	0.259	0.021	0.308	0.023	0.540
95% Confidence Interval	(-1.17 , 0.68)	(-1.63 , 0.44)	(-2.48 , -0.20)	(-2.10 , 0.66)	(0.18 , 2.55)	(-0.94 , 1.80)
Relative Difference	-0.83%	-2.01%	-4.49%	-2.41%	4.58%	1.43%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	29.83	29.77	29.83	29.86	29.84	29.84
Intervention Period Enhanced MTM Mean	33.28	33.44	33.71	34.83	29.79	34.58
Baseline Comparison MTM Mean	32.58	32.50	32.52	32.63	32.65	32.63
Intervention Period Comparison MTM Mean	36.29	36.77	37.74	38.33	31.23	36.94

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.82: UnitedHealth: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.67***	0.88*	1.30**	2.35***	1.73***	1.98***
P-value	<0.001	0.065	0.014	<0.001	0.001	<0.001
95% Confidence Interval	(0.94 , 2.41)	(-0.06 , 1.81)	(0.26 , 2.34)	(1.41 , 3.30)	(0.76 , 2.71)	(0.95 , 3.01)
Relative Difference	3.75%	2.30%	3.42%	4.77%	3.56%	4.17%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	44.61	38.03	38.03	49.31	48.65	47.51
Intervention Period Enhanced MTM Mean	40.51	39.48	37.12	48.62	36.76	38.98
Baseline Comparison MTM Mean	47.13	40.70	40.63	51.76	51.09	49.97
Intervention Period Comparison MTM Mean	41.35	41.27	38.41	48.72	37.47	39.45

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.83: WellCare: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.55***	1.73***	1.52**	0.77	1.90***	1.81***
P-value	0.001	0.001	0.010	0.255	0.004	0.007
95% Confidence Interval	(0.63 , 2.47)	(0.74 , 2.72)	(0.36 , 2.68)	(-0.55 , 2.08)	(0.61 , 3.18)	(0.48 , 3.13)
Relative Difference	2.61%	2.97%	2.60%	1.30%	3.06%	3.00%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	59.42	58.35	58.32	58.76	61.95	60.19
Intervention Period Enhanced MTM Mean	54.27	60.26	57.88	55.92	47.32	47.38
Baseline Comparison MTM Mean	58.80	57.83	57.34	57.76	61.70	59.89
Intervention Period Comparison MTM Mean	52.10	58.00	55.39	54.16	45.16	45.28

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.84: BCBS FL: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.47	0.44	0.60	0.47	0.02	0.81
P-value	0.434	0.528	0.405	0.553	0.977	0.275
95% Confidence Interval	(-0.70 , 1.64)	(-0.93 , 1.81)	(-0.81 , 2.01)	(-1.09 , 2.04)	(-1.49 , 1.54)	(-0.65 , 2.27)
Relative Difference	1.72%	1.63%	2.21%	1.75%	0.08%	2.99%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	27.13	27.04	27.12	27.12	27.22	27.18
Intervention Period Enhanced MTM Mean	29.96	30.67	31.77	32.29	25.02	29.51
Baseline Comparison MTM Mean	27.99	28.05	28.03	28.02	27.91	27.90
Intervention Period Comparison MTM Mean	30.34	31.23	32.07	32.71	25.69	29.42

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 109,594 (beneficiaries).

Outpatient Non-Emergency Department (ED) Visits

Table B.3.85: Modelwide: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	10.23***	2.76***	12.73***	12.71***	9.95***	15.55***
P-value	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(8.50 , 11.95)	(1.09 , 4.42)	(10.53 , 14.92)	(10.40 , 15.01)	(7.59 , 12.32)	(13.06 , 18.03)
Relative Difference	2.50%	0.68%	3.13%	3.08%	2.41%	3.76%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	409.31	404.17	406.13	412.32	412.73	413.55
Intervention Period Enhanced MTM Mean	442.53	422.33	446.51	462.10	417.21	472.55
Baseline Comparison MTM Mean	410.24	406.64	405.70	411.58	414.09	415.46
Intervention Period Comparison MTM Mean	433.24	422.04	433.36	448.65	408.62	458.92

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.86: SilverScript/CVS: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	2.94***	3.69***	3.49***	3.48***	-1.52	5.53***
P-value	0.001	<0.001	0.001	0.004	0.241	<0.001
95% Confidence Interval	(1.20 , 4.67)	(2.04 , 5.34)	(1.42 , 5.56)	(1.11 , 5.85)	(-4.06 , 1.02)	(2.67 , 8.38)
Relative Difference	0.71%	0.89%	0.84%	0.84%	-0.37%	1.34%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	413.45	414.03	413.83	413.60	412.63	412.90
Intervention Period Enhanced MTM Mean	434.30	432.08	438.43	447.90	401.99	451.64
Baseline Comparison MTM Mean	400.90	401.41	399.19	400.61	401.37	402.32
Intervention Period Comparison MTM Mean	418.81	415.77	420.29	431.43	392.25	435.53

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.87: Humana: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	22.47***	- 5.38***	39.35***	36.26***	31.72***	38.38***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(19.71 , 25.22)	(-7.80 , -2.97)	(35.67 , 43.03)	(32.20 , 40.32)	(27.51 , 35.93)	(33.60 , 43.16)
Relative Difference	5.94%	-1.46%	10.50%	9.51%	8.16%	9.79%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	378.14	367.84	374.92	381.15	388.77	391.99
Intervention Period Enhanced MTM Mean	425.84	379.86	447.12	459.09	418.86	474.10
Baseline Comparison MTM Mean	388.89	382.24	383.21	389.43	398.24	401.93
Intervention Period Comparison MTM Mean	414.12	399.64	416.06	431.11	396.61	445.66

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.88: BCBS NPA: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	53.41***	38.01***	44.22***	53.05***	60.95***	78.83***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(43.51 , 63.32)	(28.35 , 47.67)	(32.58 , 55.87)	(40.52 , 65.58)	(48.12 , 73.78)	(66.23 , 91.44)
Relative Difference	9.65%	6.88%	7.98%	9.57%	11.00%	14.23%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	553.65	552.30	554.05	554.26	553.94	553.97
Intervention Period Enhanced MTM Mean	610.46	588.11	606.59	623.05	574.24	672.23
Baseline Comparison MTM Mean	582.13	582.93	582.81	582.43	581.19	580.79
Intervention Period Comparison MTM Mean	585.52	580.74	591.12	598.18	540.54	620.22

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.89: UnitedHealth: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 7.94***	- 13.03***	- 12.25***	- 5.03**	- 4.67*	- 5.71**
P-value	<0.001	<0.001	<0.001	0.023	0.052	0.032
95% Confidence Interval	(-11.53 , -4.36)	(-16.81 , -9.25)	(-17.58 , -6.93)	(-9.37 , -0.69)	(-9.38 , 0.04)	(-10.93 , -0.49)
Relative Difference	-2.21%	-4.06%	-3.81%	-1.31%	-1.22%	-1.50%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	360.02	320.97	321.53	384.62	382.88	381.88
Intervention Period Enhanced MTM Mean	373.10	331.15	336.93	409.45	367.90	412.74
Baseline Comparison MTM Mean	361.07	325.14	325.30	381.31	382.72	383.75
Intervention Period Comparison MTM Mean	382.09	348.35	352.95	411.17	372.42	420.32

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.90: WellCare: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 4.70***	1.49	-1.77	-2.02	- 13.16***	- 10.47***
P-value	0.007	0.370	0.419	0.431	<0.001	<0.001
95% Confidence Interval	(-8.08 , -1.31)	(-1.77 , 4.76)	(-6.07 , 2.53)	(-7.04 , 3.00)	(-17.97 , -8.34)	(-15.99 , -4.94)
Relative Difference	-1.12%	0.36%	-0.42%	-0.48%	-3.14%	-2.48%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	419.91	417.80	420.07	421.91	418.96	421.54
Intervention Period Enhanced MTM Mean	437.39	435.62	444.74	458.36	402.46	446.83
Baseline Comparison MTM Mean	404.49	397.82	397.88	400.01	413.25	417.21
Intervention Period Comparison MTM Mean	426.67	414.14	424.32	438.49	409.91	452.98

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.91: BCBS FL: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 32.27***	- 25.43***	- 30.52***	- 40.06***	- 27.72***	- 39.38***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(-40.26 , -24.27)	(-33.07 , -17.78)	(-39.43 , -21.60)	(-50.21 , -29.91)	(-38.27 , -17.17)	(-51.37 , -27.38)
Relative Difference	-12.28%	-9.74%	-11.63%	-15.25%	-10.51%	-14.90%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	262.76	261.17	262.40	262.63	263.83	264.29
Intervention Period Enhanced MTM Mean	283.01	272.08	281.38	294.09	263.83	307.36
Baseline Comparison MTM Mean	290.17	289.27	289.24	289.50	291.04	292.31
Intervention Period Comparison MTM Mean	342.69	325.61	338.74	361.01	318.75	374.75

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Evaluation and Management (E&M) Visits

Table B.3.92: Modelwide: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	9.83***	1.87**	9.57***	6.65***	14.08***	21.21***
P-value	<0.001	0.013	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(8.25 , 11.41)	(0.40 , 3.35)	(7.60 , 11.55)	(4.56 , 8.74)	(11.88 , 16.27)	(18.91 , 23.52)
Relative Difference	1.40%	0.27%	1.36%	0.94%	1.99%	2.99%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	703.34	694.01	702.02	706.37	708.65	709.33
Intervention Period Enhanced MTM Mean	709.42	706.07	729.48	740.44	643.21	725.81
Baseline Comparison MTM Mean	714.75	711.54	713.01	715.08	717.34	718.43
Intervention Period Comparison MTM Mean	711.00	721.73	730.89	742.51	637.82	713.70

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.93: SilverScript/CVS: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	13.35***	3.38***	9.75***	12.19***	18.10***	28.05***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(11.65 , 15.05)	(1.77 , 5.00)	(7.72 , 11.77)	(9.88 , 14.50)	(15.63 , 20.57)	(25.28 , 30.82)
Relative Difference	1.89%	0.49%	1.39%	1.71%	2.53%	3.91%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	707.87	693.89	703.57	712.71	716.58	717.10
Intervention Period Enhanced MTM Mean	714.48	706.75	726.81	747.44	654.43	736.03
Baseline Comparison MTM Mean	709.80	703.79	705.29	712.08	714.91	715.54
Intervention Period Comparison MTM Mean	703.07	713.26	718.78	734.61	634.67	706.41

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.94: Humana: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	7.86***	- 3.72***	12.70***	8.19***	15.37***	20.23***
P-value	<0.001	0.006	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(4.83 , 10.89)	(-6.37 , -1.07)	(8.68 , 16.71)	(3.84 , 12.54)	(10.95 , 19.80)	(15.37 , 25.09)
Relative Difference	1.17%	-0.57%	1.90%	1.21%	2.23%	2.93%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	673.21	657.33	669.95	679.30	689.67	690.13
Intervention Period Enhanced MTM Mean	681.29	662.57	706.64	719.23	628.72	703.47
Baseline Comparison MTM Mean	696.74	686.04	689.93	699.76	711.30	712.14
Intervention Period Comparison MTM Mean	696.96	694.99	713.93	731.50	634.98	705.24

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.95: BCBS NPA: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 27.14***	- 13.00***	- 25.77***	- 38.12***	- 31.02***	- 30.86***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(-32.50 , -21.77)	(-18.32 , -7.68)	(-32.40 , -19.14)	(-45.72 , -30.53)	(-38.15 , -23.90)	(-38.52 , -23.20)
Relative Difference	-4.45%	-2.14%	-4.23%	-6.25%	-5.09%	-5.06%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	609.24	606.85	609.80	610.08	609.99	609.94
Intervention Period Enhanced MTM Mean	612.21	633.02	635.95	637.07	527.93	617.05
Baseline Comparison MTM Mean	643.01	642.08	642.48	643.27	643.75	643.86
Intervention Period Comparison MTM Mean	673.12	681.25	694.40	708.39	592.71	681.82

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.96: UnitedHealth: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	34.77***	21.14***	36.35***	26.94***	40.93***	50.57***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(29.23 , 40.31)	(15.80 , 26.48)	(28.38 , 44.32)	(20.97 , 32.91)	(34.14 , 47.71)	(43.63 , 57.50)
Relative Difference	4.44%	2.62%	4.49%	3.53%	5.32%	6.56%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	782.74	806.14	809.71	764.00	768.97	771.00
Intervention Period Enhanced MTM Mean	778.30	815.22	828.15	785.52	693.76	777.91
Baseline Comparison MTM Mean	801.50	830.82	832.64	778.47	784.55	788.34
Intervention Period Comparison MTM Mean	762.29	818.75	814.73	773.05	668.42	744.68

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.97: WellCare: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 4.19**	- 2.87*	- 4.83**	- 9.29***	- 7.04***	3.62
P-value	0.012	0.078	0.021	<0.001	0.003	0.173
95% Confidence Interval	(-7.45 , -0.92)	(-6.06 , 0.33)	(-8.92 , -0.74)	(-14.08 , -4.51)	(-11.66 , -2.42)	(-1.59 , 8.82)
Relative Difference	-0.59%	-0.41%	-0.68%	-1.30%	-1.01%	0.51%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	707.03	703.64	711.73	713.36	699.66	707.21
Intervention Period Enhanced MTM Mean	696.90	713.76	722.65	729.94	613.72	698.17
Baseline Comparison MTM Mean	705.64	705.25	707.10	707.69	700.46	707.90
Intervention Period Comparison MTM Mean	699.69	718.24	722.86	733.56	621.57	695.24

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.98: BCBS FL: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	46.26***	29.58***	49.79***	48.07***	58.69***	48.22***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(34.86 , 57.65)	(17.16 , 41.99)	(37.16 , 62.42)	(34.15 , 62.00)	(41.30 , 76.09)	(33.25 , 63.20)
Relative Difference	5.21%	3.33%	5.61%	5.41%	6.61%	5.44%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	887.53	886.90	888.22	888.36	887.61	886.48
Intervention Period Enhanced MTM Mean	898.06	899.65	917.46	935.06	827.76	906.31
Baseline Comparison MTM Mean	868.29	870.89	870.93	870.33	864.14	863.85
Intervention Period Comparison MTM Mean	832.56	854.06	850.38	868.96	745.60	835.45

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

B.3.4 Inpatient Expenditures and Admissions Related to Ambulatory Care-Sensitive Conditions (ACSCs)

This subsection presents findings of the Model impacts on inpatient expenditures and admissions related to the ACSC Chronic Composite Measure. (Hospital inpatient expenditures and admissions related to ACSC diabetes, ACSC COPD/asthma, ACSC heart failure, and ACSC bacterial pneumonia were also assessed separately, but findings are not presented in this Appendix.) There is a total of 14 tables in this subsection. Findings are presented for each measure in turn, first for the Model as a whole and then by individual sponsor, both cumulative and for each Model Year.

There were statistically significant cumulative decreases in inpatient expenditures and inpatient admissions related to ACSCs. Estimated impacts for most individual sponsors were consistent with these Modelwide findings, though the magnitude of impacts varied by sponsor. These findings were qualitatively similar to those reported in the Fourth Evaluation Report.¹⁴

¹⁴ Acumen, LLC and Westat, Inc., “Evaluation of the Part D Enhanced Medication Therapy Management (MTM) Model: Fourth Evaluation Report,” April 2022, <https://innovation.cms.gov/data-and-reports/2022/mtm-fourth-evalrept>.

Inpatient Expenditures Related to ACSCs

Table B.3.99: Modelwide: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$1.07***	- \$0.28	- \$1.01***	- \$1.57***	- \$1.16***	- \$1.64***
P-value	<0.001	0.478	0.009	<0.001	0.004	<0.001
95% Confidence Interval	(-1.60, -0.54)	(-1.05, 0.49)	(-1.77, -0.25)	(-2.32, -0.83)	(-1.93, -0.38)	(-2.41, -0.87)
Relative Difference	-5.20%	-1.36%	-4.96%	-7.63%	-5.55%	-7.89%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$20.62	\$20.55	\$20.37	\$20.62	\$20.86	\$20.75
Intervention Period Enhanced MTM Mean	\$24.68	\$30.33	\$25.98	\$24.92	\$20.26	\$19.25
Baseline Comparison MTM Mean	\$20.31	\$20.10	\$19.89	\$20.41	\$20.68	\$20.63
Intervention Period Comparison MTM Mean	\$25.45	\$30.16	\$26.50	\$26.29	\$21.24	\$20.77

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.100: SilverScript/CVS: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$0.82**	\$0.02	- \$1.00*	- \$1.42***	- \$0.78	- \$1.03*
P-value	0.028	0.965	0.068	0.008	0.150	0.054
95% Confidence Interval	(-1.54 , -0.09)	(-0.98 , 1.02)	(-2.07 , 0.07)	(-2.47 , -0.37)	(-1.83 , 0.28)	(-2.08 , 0.02)
Relative Difference	-3.88%	0.11%	-4.73%	-6.82%	-3.75%	-5.01%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$20.99	\$21.56	\$21.07	\$20.82	\$20.74	\$20.62
Intervention Period Enhanced MTM Mean	\$25.88	\$31.32	\$28.16	\$26.48	\$21.12	\$19.91
Baseline Comparison MTM Mean	\$21.14	\$21.68	\$21.13	\$21.01	\$20.91	\$20.85
Intervention Period Comparison MTM Mean	\$26.84	\$31.43	\$29.22	\$28.09	\$22.07	\$21.18

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.101: Humana: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$1.50**	\$0.81	- \$1.44	- \$3.42***	- \$3.20***	- \$2.82***
P-value	0.032	0.402	0.138	<0.001	0.008	0.002
95% Confidence Interval	(-2.87 , -0.13)	(-1.08 , 2.70)	(-3.35 , 0.46)	(-5.28 , -1.55)	(-5.59 , -0.82)	(-4.58 , -1.06)
Relative Difference	-5.62%	3.01%	-5.39%	-12.85%	-12.16%	-10.74%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$26.62	\$26.88	\$26.72	\$26.57	\$26.34	\$26.25
Intervention Period Enhanced MTM Mean	\$29.70	\$38.83	\$29.76	\$26.90	\$21.78	\$19.87
Baseline Comparison MTM Mean	\$25.22	\$25.28	\$25.15	\$25.20	\$25.24	\$25.17
Intervention Period Comparison MTM Mean	\$29.79	\$36.42	\$29.63	\$28.95	\$23.89	\$21.61

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.102: BCBS NPA: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$1.85***	- \$1.57*	- \$1.50*	- \$2.39***	- \$1.61*	- \$2.32**
P-value	0.002	0.090	0.056	0.008	0.077	0.026
95% Confidence Interval	(-3.01 , -0.70)	(-3.39 , 0.24)	(-3.05 , 0.04)	(-4.16 , -0.62)	(-3.39 , 0.17)	(-4.36 , -0.27)
Relative Difference	-20.09%	-17.09%	-16.28%	-25.82%	-17.46%	-25.23%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$9.22	\$9.19	\$9.23	\$9.26	\$9.21	\$9.19
Intervention Period Enhanced MTM Mean	\$14.60	\$16.03	\$15.04	\$15.19	\$12.68	\$13.46
Baseline Comparison MTM Mean	\$9.30	\$9.26	\$9.27	\$9.32	\$9.35	\$9.34
Intervention Period Comparison MTM Mean	\$16.53	\$17.67	\$16.58	\$17.64	\$14.42	\$15.93

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.103: UnitedHealth: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	- \$0.66	- \$1.38	- \$0.66	- \$0.11	\$0.44	- \$1.77
P-value	0.322	0.199	0.535	0.913	0.631	0.112
95% Confidence Interval	(-1.96 , 0.64)	(-3.48 , 0.73)	(-2.77 , 1.44)	(-2.08 , 1.86)	(-1.35 , 2.23)	(-3.94 , 0.41)
Relative Difference	-3.48%	-8.26%	-3.96%	-0.54%	2.17%	-8.95%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$18.86	\$16.68	\$16.79	\$20.38	\$20.20	\$19.73
Intervention Period Enhanced MTM Mean	\$22.73	\$25.83	\$22.48	\$25.35	\$20.45	\$18.98
Baseline Comparison MTM Mean	\$19.09	\$16.29	\$16.35	\$20.96	\$20.82	\$20.41
Intervention Period Comparison MTM Mean	\$23.62	\$26.81	\$22.71	\$26.04	\$20.63	\$21.43

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656 beneficiaries).

Table B.3.104: WellCare: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.02	-\$0.28	\$0.78	\$0.47	-\$0.73	-\$0.16
P-value	0.976	0.794	0.510	0.698	0.554	0.902
95% Confidence Interval	(-1.51 , 1.55)	(-2.34 , 1.79)	(-1.55 , 3.11)	(-1.91 , 2.84)	(-3.14 , 1.68)	(-2.73 , 2.41)
Relative Difference	0.10%	-1.22%	3.45%	2.07%	-2.85%	-0.65%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$23.55	\$22.56	\$22.65	\$22.64	\$25.51	\$24.85
Intervention Period Enhanced MTM Mean	\$30.45	\$33.08	\$33.10	\$31.80	\$27.17	\$25.62
Baseline Comparison MTM Mean	\$22.83	\$21.92	\$21.88	\$21.97	\$24.67	\$24.16
Intervention Period Comparison MTM Mean	\$29.70	\$32.71	\$31.55	\$30.66	\$27.06	\$25.10

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.105: BCBS FL: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	-\$0.88	-\$2.64	\$0.79	-\$0.58	-\$0.29	-\$1.56
P-value	0.402	0.177	0.571	0.686	0.862	0.316
95% Confidence Interval	(-2.92 , 1.17)	(-6.47 , 1.19)	(-1.95 , 3.53)	(-3.42 , 2.25)	(-3.50 , 2.93)	(-4.62 , 1.49)
Relative Difference	-7.12%	-21.64%	6.43%	-4.76%	-2.30%	-12.67%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$12.30	\$12.21	\$12.29	\$12.27	\$12.40	\$12.34
Intervention Period Enhanced MTM Mean	\$18.82	\$20.07	\$19.40	\$19.71	\$16.68	\$17.77
Baseline Comparison MTM Mean	\$11.97	\$11.98	\$11.97	\$11.95	\$11.97	\$11.99
Intervention Period Comparison MTM Mean	\$19.37	\$22.48	\$18.29	\$19.97	\$16.54	\$18.99

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

Inpatient Admissions Related to ACSCs

Table B.3.106: Modelwide: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.12***	-0.04	- 0.17***	- 0.19***	- 0.10***	- 0.14***
P-value	<0.001	0.266	<0.001	<0.001	0.006	<0.001
95% Confidence Interval	(-0.17 , -0.07)	(-0.11 , 0.03)	(-0.24 , -0.09)	(-0.26 , -0.12)	(-0.17 , -0.03)	(-0.21 , -0.06)
Relative Difference	-4.76%	-1.54%	-6.50%	-7.41%	-3.80%	-5.26%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	2.57	2.57	2.55	2.57	2.59	2.57
Intervention Period Enhanced MTM Mean	2.84	3.50	2.98	2.92	2.26	2.23
Baseline Comparison MTM Mean	2.52	2.50	2.48	2.53	2.56	2.55
Intervention Period Comparison MTM Mean	2.91	3.47	3.08	3.07	2.32	2.34

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 82,862,541 (1,601,382 beneficiaries). Number of comparison observations: 163,089,207 (3,528,599 beneficiaries).

Table B.3.107: SilverScript/CVS: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.10***	-0.02	- 0.15***	- 0.19***	-0.08	-0.06
P-value	0.004	0.595	0.002	<0.001	0.125	0.206
95% Confidence Interval	(-0.17 , -0.03)	(-0.11 , 0.07)	(-0.25 , -0.05)	(-0.29 , -0.09)	(-0.17 , 0.02)	(-0.16 , 0.04)
Relative Difference	-3.90%	-0.91%	-5.72%	-7.40%	-2.91%	-2.48%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	2.62	2.69	2.63	2.61	2.59	2.62
Intervention Period Enhanced MTM Mean	2.97	3.61	3.23	3.08	2.34	2.97
Baseline Comparison MTM Mean	2.62	2.69	2.62	2.61	2.59	2.62
Intervention Period Comparison MTM Mean	3.07	3.64	3.37	3.27	2.42	3.07

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 35,262,065 (648,161 beneficiaries). Number of comparison observations: 80,640,676 (1,699,173 beneficiaries).

Table B.3.108: Humana: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.14**	0.10	- 0.24***	- 0.35***	- 0.20**	- 0.27***
P-value	0.024	0.228	0.005	<0.001	0.016	0.002
95% Confidence Interval	(-0.27 , -0.02)	(-0.06 , 0.26)	(-0.41 , -0.07)	(-0.52 , -0.17)	(-0.37 , -0.04)	(-0.43 , -0.10)
Relative Difference	-4.39%	3.01%	-7.43%	-10.63%	-6.29%	-8.28%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	3.26	3.29	3.27	3.25	3.24	3.22
Intervention Period Enhanced MTM Mean	3.34	4.36	3.29	3.10	2.42	2.26
Baseline Comparison MTM Mean	3.10	3.11	3.09	3.10	3.11	3.10
Intervention Period Comparison MTM Mean	3.32	4.08	3.36	3.30	2.50	2.41

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 16,000,055 (369,349 beneficiaries). Number of comparison observations: 38,399,245 (873,351 beneficiaries).

Table B.3.109: BCBS NPA: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.20***	- 0.17**	- 0.17*	- 0.26**	-0.16	- 0.25**
P-value	0.002	0.049	0.067	0.015	0.102	0.012
95% Confidence Interval	(-0.33 , -0.07)	(-0.35 , 0.00)	(-0.35 , 0.01)	(-0.47 , -0.05)	(-0.35 , 0.03)	(-0.45 , -0.06)
Relative Difference	-15.58%	-13.60%	-13.07%	-20.08%	-12.36%	-19.74%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	1.28	1.28	1.28	1.29	1.28	1.28
Intervention Period Enhanced MTM Mean	1.89	2.07	1.97	2.03	1.59	1.73
Baseline Comparison MTM Mean	1.23	1.23	1.23	1.24	1.24	1.24
Intervention Period Comparison MTM Mean	2.05	2.20	2.09	2.23	1.70	1.94

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,807,836 (176,175 beneficiaries). Number of comparison observations: 16,439,431 (295,167 beneficiaries).

Table B.3.110: UnitedHealth: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.05	-0.12	-0.07	0.00	0.02	-0.11
P-value	0.434	0.266	0.519	0.972	0.793	0.342
95% Confidence Interval	(-0.18 , 0.08)	(-0.33 , 0.09)	(-0.27 , 0.14)	(-0.17 , 0.17)	(-0.14 , 0.19)	(-0.32 , 0.11)
Relative Difference	-2.20%	-5.69%	-3.12%	-0.12%	0.89%	-4.35%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	2.34	2.12	2.13	2.50	2.48	2.42
Intervention Period Enhanced MTM Mean	2.58	3.00	2.58	2.88	2.20	2.17
Baseline Comparison MTM Mean	2.36	2.09	2.10	2.54	2.53	2.48
Intervention Period Comparison MTM Mean	2.64	3.09	2.62	2.91	2.22	2.32

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 10,396,136 (210,205 beneficiaries). Number of comparison observations: 24,481,695 (580,656).

Table B.3.111: WellCare: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.02	-0.07	-0.08	0.07	0.02	0.01
P-value	0.838	0.436	0.458	0.557	0.831	0.923
95% Confidence Interval	(-0.16 , 0.13)	(-0.26 , 0.11)	(-0.28 , 0.13)	(-0.16 , 0.29)	(-0.19 , 0.23)	(-0.21 , 0.23)
Relative Difference	-0.52%	-2.60%	-2.74%	2.38%	0.74%	0.36%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	2.90	2.81	2.82	2.83	3.08	2.99
Intervention Period Enhanced MTM Mean	3.42	3.79	3.65	3.68	3.00	2.83
Baseline Comparison MTM Mean	2.82	2.72	2.72	2.74	3.03	2.96
Intervention Period Comparison MTM Mean	3.36	3.78	3.63	3.52	2.93	2.78

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 6,748,160 (137,686 beneficiaries). Number of comparison observations: 23,054,824 (553,032 beneficiaries).

Table B.3.112: BCBS FL: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	- 0.22*	-0.30	-0.13	-0.28	-0.20	-0.20
P-value	0.069	0.129	0.430	0.219	0.364	0.190
95% Confidence Interval	(-0.47 , 0.02)	(-0.68 , 0.09)	(-0.46 , 0.20)	(-0.72 , 0.17)	(-0.64 , 0.24)	(-0.51 , 0.10)
Relative Difference	-13.96%	-18.51%	-8.26%	-17.34%	-12.54%	-12.67%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	1.61	1.61	1.61	1.61	1.62	1.61
Intervention Period Enhanced MTM Mean	2.22	2.36	2.27	2.42	1.90	2.09
Baseline Comparison MTM Mean	1.49	1.49	1.49	1.49	1.49	1.49
Intervention Period Comparison MTM Mean	2.32	2.54	2.28	2.57	1.98	2.18

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,648,289 (59,806 beneficiaries). Number of comparison observations: 5,894,373 (109,594 beneficiaries).

B.3.5 Medication Use and Patient Safety

This subsection presents additional information and findings on the Model impacts on medication use and patient safety (supplementing Section 3.3.3 of the main report). Sample information and findings are presented first for the Model as a whole, and then by individual sponsor. There is a total of 70 tables in this subsection. Findings, both cumulative and by Model Year, are presented in the following sequential subsections:

- Sample Information for Measures of Medication Use and Patient Safety
- Adherence to Statins, Renin Angiotensin System Antagonists (RASAs), and Oral Antidiabetics (OADs)
- Statin Use in Persons with Diabetes (SUPD)
- Drug-drug Interactions (DDI) and Use of High-risk Medications (HRM)
- Opioid Utilization

There was no evidence that the Model led to improvements in measures of medication optimization and measures of potentially unsafe medication use among Enhanced MTM enrollees relative to comparators. Modelwide rates of high adherence to statins decreased and there were no impacts on adherence to OADs or on SUPD. The rate of DDI increased during the cumulative time period and, for measures of opioid use, estimates were generally positive, indicating higher opioid utilization.

Sample Information for Measures of Medication Use and Patient Safety

Table B.3.113: Modelwide: Number and Proportion of Beneficiaries Meeting Measure Inclusion Criteria

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
<i>Total Number of Beneficiaries Included in Analyses</i>	1,601,382	1,367,391	1,222,633	1,224,187	1,195,295	1,133,855	3,528,599	2,812,986	2,753,696	2,888,403	2,902,699	2,817,101
Adherence to Statins (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	571,155	474,653	448,738	455,282	451,161	434,699	727,400	573,728	552,435	572,338	575,240	557,922
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	35.67%	34.71%	36.70%	37.19%	37.74%	38.34%	20.61%	20.40%	20.06%	19.82%	19.82%	19.80%
Adherence to RASA (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	541,117	441,830	404,187	393,397	372,740	347,731	699,085	542,114	502,511	491,594	464,979	432,673
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	33.79%	32.31%	33.06%	32.14%	31.18%	30.67%	19.81%	19.27%	18.25%	17.02%	16.02%	15.36%
Adherence to Oral Antidiabetics (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	86,644	71,370	63,527	63,184	61,933	59,107	91,628	74,385	67,694	67,792	66,418	63,789
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	5.41%	5.22%	5.20%	5.16%	5.18%	5.21%	2.60%	2.64%	2.46%	2.35%	2.29%	2.26%

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Drug-drug Interactions												
Number of Beneficiaries Meeting Measure Inclusion Criteria	289,318	235,972	194,367	173,766	148,374	126,389	313,373	247,973	205,255	184,575	157,570	134,293
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	18.07%	17.26%	15.90%	14.19%	12.41%	11.15%	8.88%	8.82%	7.45%	6.39%	5.43%	4.77%
Use of High-risk Medications												
Number of Beneficiaries Meeting Measure Inclusion Criteria	1,171,918	965,315	887,137	880,726	858,386	814,005	2,237,825	1,666,833	1,525,102	1,548,818	1,519,243	1,434,832
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	73.18%	70.60%	72.56%	71.94%	71.81%	71.79%	63.42%	59.25%	55.38%	53.62%	52.34%	50.93%
Statin Use in Persons with Diabetes												
Number of Beneficiaries Meeting Measure Inclusion Criteria	103,707	84,163	76,277	72,257	67,206	60,506	117,932	94,327	87,427	83,086	77,758	70,589
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	6.48%	6.16%	6.24%	5.90%	5.62%	5.34%	3.34%	3.35%	3.17%	2.88%	2.68%	2.51%
Concurrent Use of Opioids with Benzodiazepines												
Number of Beneficiaries Meeting Measure Inclusion Criteria	149,156	114,336	90,615	75,192	63,336	53,762	185,599	136,832	110,659	90,639	75,697	63,546
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	9.31%	8.36%	7.41%	6.14%	5.30%	4.74%	5.26%	4.86%	4.02%	3.14%	2.61%	2.26%

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
High Dosage of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	126,855	95,795	76,846	63,919	53,732	45,360	156,254	113,745	93,182	76,491	63,737	53,308
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	7.92%	7.01%	6.29%	5.22%	4.50%	4.00%	4.43%	4.04%	3.38%	2.65%	2.20%	1.89%
Multiple Providers of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	126,855	95,795	76,846	63,919	53,732	45,360	156,254	113,745	93,182	76,491	63,737	53,308
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	7.92%	7.01%	6.29%	5.22%	4.50%	4.00%	4.43%	4.04%	3.38%	2.65%	2.20%	1.89%

Note: MY: Model Year; PDC: Proportion of Days Covered.

Table B.3.114: SilverScript/CVS: Number and Proportion of Beneficiaries Meeting Measure Inclusion Criteria

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
<i>Total Number of Beneficiaries Included in Analyses</i>	648,161	550,102	552,534	543,468	527,989	500,608	1,699,173	1,442,373	1,423,461	1,416,326	1,393,135	1,338,526
Adherence to Statins (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	231,273	186,384	194,516	196,905	194,244	186,814	341,108	274,205	274,867	277,549	273,780	262,560
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	35.68%	33.88%	35.20%	36.23%	36.79%	37.32%	20.07%	19.01%	19.31%	19.60%	19.65%	19.62%
Adherence to RASA (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	219,656	174,827	176,858	170,654	161,049	149,962	330,979	260,010	251,244	238,675	221,792	204,374
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	33.89%	31.78%	32.01%	31.40%	30.50%	29.96%	19.48%	18.03%	17.65%	16.85%	15.92%	15.27%
Adherence to Oral Antidiabetics (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	37,244	30,175	30,202	29,733	29,127	27,794	42,671	34,848	34,040	33,393	32,449	31,041
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	5.75%	5.49%	5.47%	5.47%	5.52%	5.55%	2.51%	2.42%	2.39%	2.36%	2.33%	2.32%
Drug-drug Interactions												
Number of Beneficiaries Meeting Measure Inclusion Criteria	111,533	88,628	81,375	72,618	61,693	52,979	138,821	110,879	96,776	85,055	71,381	60,711

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	17.21%	16.11%	14.73%	13.36%	11.68%	10.58%	8.17%	7.69%	6.80%	6.01%	5.12%	4.54%
Use of High-risk Medications												
Number of Beneficiaries Meeting Measure Inclusion Criteria	455,900	357,766	365,033	363,982	356,017	338,539	1,058,787	803,084	756,803	743,348	718,419	671,746
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	70.34%	65.04%	66.07%	66.97%	67.43%	67.63%	62.31%	55.68%	53.17%	52.48%	51.57%	50.19%
Statin Use in Persons with Diabetes												
Number of Beneficiaries Meeting Measure Inclusion Criteria	46,993	38,466	38,783	35,977	33,143	29,936	57,167	47,113	46,583	42,513	39,087	35,398
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	7.25%	6.99%	7.02%	6.62%	6.28%	5.98%	3.36%	3.27%	3.27%	3.00%	2.81%	2.64%
Concurrent Use of Opioids with Benzodiazepines												
Number of Beneficiaries Meeting Measure Inclusion Criteria	66,351	52,717	46,902	36,855	30,495	25,684	88,168	68,828	59,568	45,371	36,958	30,637
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	10.24%	9.58%	8.49%	6.78%	5.78%	5.13%	5.19%	4.77%	4.18%	3.20%	2.65%	2.29%
High Dosage of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	56,751	44,564	40,079	31,617	25,947	21,765	74,390	57,307	50,279	38,505	31,076	25,755

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	8.76%	8.10%	7.25%	5.82%	4.91%	4.35%	4.38%	3.97%	3.53%	2.72%	2.23%	1.92%
Multiple Providers of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	56,751	44,564	40,079	31,617	25,947	21,765	74,390	57,307	50,279	38,505	31,076	25,755
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	8.76%	8.10%	7.25%	5.82%	4.91%	4.35%	4.38%	3.97%	3.53%	2.72%	2.23%	1.92%

Note: MY: Model Year; PDC: Proportion of Days Covered.

Table B.3.115: Humana: Number and Proportion of Beneficiaries Meeting Measure Inclusion Criteria

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
<i>Total Number of Beneficiaries Included in Analyses</i>	369,349	343,948	224,441	209,261	201,989	189,996	873,351	782,760	760,123	730,980	715,982	682,394
Adherence to Statins (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	109,560	97,571	71,545	70,022	69,917	67,682	147,227	125,405	108,776	107,354	108,310	104,542
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	29.66%	28.37%	31.88%	33.46%	34.61%	35.62%	16.86%	16.02%	14.31%	14.69%	15.13%	15.32%
Adherence to RASA (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	110,122	95,633	65,980	61,388	58,396	54,206	145,150	120,771	98,856	90,969	86,095	79,227
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	29.82%	27.80%	29.40%	29.34%	28.91%	28.53%	16.62%	15.43%	13.01%	12.44%	12.02%	11.61%
Adherence to Oral Antidiabetics (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	18,714	16,780	10,886	10,202	9,940	9,545	18,942	16,805	12,392	11,732	11,403	11,012
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	5.07%	4.88%	4.85%	4.88%	4.92%	5.02%	2.17%	2.15%	1.63%	1.60%	1.59%	1.61%
Drug-drug Interactions												
Number of Beneficiaries Meeting Measure Inclusion Criteria	60,491	51,790	32,102	27,201	23,551	19,153	68,884	57,153	40,195	33,725	28,957	23,321

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	16.38%	15.06%	14.30%	13.00%	11.66%	10.08%	7.89%	7.30%	5.29%	4.61%	4.04%	3.42%
Use of High-risk Medications												
Number of Beneficiaries Meeting Measure Inclusion Criteria	229,782	203,028	143,108	134,401	130,711	122,897	500,774	414,818	350,313	323,517	310,334	284,236
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	62.21%	59.03%	63.76%	64.23%	64.71%	64.68%	57.34%	52.99%	46.09%	44.26%	43.34%	41.65%
Statin Use in Persons with Diabetes												
Number of Beneficiaries Meeting Measure Inclusion Criteria	23,813	21,306	14,534	13,107	12,232	10,987	26,376	23,440	18,052	16,134	14,997	13,542
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	6.45%	6.19%	6.48%	6.26%	6.06%	5.78%	3.02%	2.99%	2.37%	2.21%	2.09%	1.98%
Concurrent Use of Opioids with Benzodiazepines												
Number of Beneficiaries Meeting Measure Inclusion Criteria	40,184	32,539	19,022	15,117	13,008	11,076	49,985	38,481	25,379	19,648	16,714	14,026
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	10.88%	9.46%	8.48%	7.22%	6.44%	5.83%	5.72%	4.92%	3.34%	2.69%	2.33%	2.06%
High Dosage of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	34,546	27,527	16,299	13,001	11,216	9,562	42,417	32,214	21,402	16,691	14,259	11,982

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	9.35%	8.00%	7.26%	6.21%	5.55%	5.03%	4.86%	4.12%	2.82%	2.28%	1.99%	1.76%
Multiple Providers of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	34,546	27,527	16,299	13,001	11,216	9,562	42,417	32,214	21,402	16,691	14,259	11,982
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	9.35%	8.00%	7.26%	6.21%	5.55%	5.03%	4.86%	4.12%	2.82%	2.28%	1.99%	1.76%

Note: MY: Model Year; PDC: Proportion of Days Covered.

Table B.3.116: BCBS NPA: Number and Proportion of Beneficiaries Meeting Measure Inclusion Criteria

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
<i>Total Number of Beneficiaries Included in Analyses</i>	176,175	170,771	163,040	153,169	144,625	132,069	295,167	278,329	269,455	258,318	248,496	233,924
Adherence to Statins (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	75,596	72,247	69,287	65,190	61,694	56,526	80,506	75,641	73,446	69,838	67,100	62,244
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	42.91%	42.31%	42.50%	42.56%	42.66%	42.80%	27.27%	27.18%	27.26%	27.04%	27.00%	26.61%
Adherence to RASA (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	69,518	65,160	62,030	57,039	52,484	47,146	73,413	66,915	63,656	58,757	54,250	48,966
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	39.46%	38.16%	38.05%	37.24%	36.29%	35.70%	24.87%	24.04%	23.62%	22.75%	21.83%	20.93%
Adherence to Oral Antidiabetics (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	7,998	7,585	7,079	6,642	6,082	5,472	7,316	6,892	6,537	6,049	5,606	5,134
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	4.54%	4.44%	4.34%	4.34%	4.21%	4.14%	2.48%	2.48%	2.43%	2.34%	2.26%	2.19%
Drug-drug Interactions												
Number of Beneficiaries Meeting Measure Inclusion Criteria	42,267	39,194	33,463	28,142	23,247	19,126	37,635	34,218	29,386	24,702	20,623	17,029

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	23.99%	22.95%	20.52%	18.37%	16.07%	14.48%	12.75%	12.29%	10.91%	9.56%	8.30%	7.28%
Use of High-risk Medications												
Number of Beneficiaries Meeting Measure Inclusion Criteria	169,528	160,061	151,542	141,663	132,931	120,894	258,142	233,208	216,887	201,512	189,144	171,903
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	96.23%	93.73%	92.95%	92.49%	91.91%	91.54%	87.46%	83.79%	80.49%	78.01%	76.12%	73.49%
Statin Use in Persons with Diabetes												
Number of Beneficiaries Meeting Measure Inclusion Criteria	7,342	6,749	6,462	5,097	4,078	3,268	7,068	6,409	6,179	4,947	4,011	3,322
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	4.17%	3.95%	3.96%	3.33%	2.82%	2.47%	2.39%	2.30%	2.29%	1.92%	1.61%	1.42%
Concurrent Use of Opioids with Benzodiazepines												
Number of Beneficiaries Meeting Measure Inclusion Criteria	7,192	6,253	5,124	3,781	2,985	2,428	7,504	6,342	5,221	3,855	3,048	2,536
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	4.08%	3.66%	3.14%	2.47%	2.06%	1.84%	2.54%	2.28%	1.94%	1.49%	1.23%	1.08%
High Dosage of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	5,520	4,744	3,918	2,877	2,280	1,859	5,832	4,856	4,047	2,979	2,364	1,929

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	3.13%	2.78%	2.40%	1.88%	1.58%	1.41%	1.98%	1.74%	1.50%	1.15%	0.95%	0.82%
Multiple Providers of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	5,520	4,744	3,918	2,877	2,280	1,859	5,832	4,856	4,047	2,979	2,364	1,929
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	3.13%	2.78%	2.40%	1.88%	1.58%	1.41%	1.98%	1.74%	1.50%	1.15%	0.95%	0.82%

Note: MY: Model Year; PDC: Proportion of Days Covered.

Table B.3.117: UnitedHealth: Number and Proportion of Beneficiaries Meeting Measure Inclusion Criteria

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
<i>Total Number of Beneficiaries Included in Analyses</i>	210,205	138,904	125,879	171,046	166,372	160,733	580,656	326,382	314,276	490,048	490,444	484,645
Adherence to Statins (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	73,008	50,205	47,444	60,720	60,860	60,864	103,473	63,041	59,738	83,441	84,564	85,005
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	34.73%	36.14%	37.69%	35.50%	36.58%	37.87%	17.82%	19.32%	19.01%	17.03%	17.24%	17.54%
Adherence to RASA (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	64,757	43,055	39,648	50,063	47,686	45,921	93,099	56,254	51,187	68,497	65,184	62,303
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	30.81%	31.00%	31.50%	29.27%	28.66%	28.57%	16.03%	17.24%	16.29%	13.98%	13.29%	12.86%
Adherence to Oral Antidiabetics (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	9,457	6,107	5,356	7,426	7,268	7,131	10,627	6,431	5,759	8,309	8,101	8,019
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	4.50%	4.40%	4.25%	4.34%	4.37%	4.44%	1.83%	1.97%	1.83%	1.70%	1.65%	1.65%
Drug-drug Interactions												
Number of Beneficiaries Meeting Measure Inclusion Criteria	35,291	23,760	19,265	22,323	18,981	16,833	41,703	26,088	20,707	25,335	21,352	18,940

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	16.79%	17.11%	15.30%	13.05%	11.41%	10.47%	7.18%	7.99%	6.59%	5.17%	4.35%	3.91%
Use of High-risk Medications												
Number of Beneficiaries Meeting Measure Inclusion Criteria	164,101	117,677	107,408	128,196	125,058	121,087	390,796	234,648	207,050	278,550	268,969	257,546
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	78.07%	84.72%	85.33%	74.95%	75.17%	75.33%	67.30%	71.89%	65.88%	56.84%	54.84%	53.14%
Statin Use in Persons with Diabetes												
Number of Beneficiaries Meeting Measure Inclusion Criteria	11,771	6,601	6,002	8,971	8,635	7,936	14,385	7,530	6,894	10,854	10,445	9,626
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	5.60%	4.75%	4.77%	5.24%	5.19%	4.94%	2.48%	2.31%	2.19%	2.21%	2.13%	1.99%
Concurrent Use of Opioids with Benzodiazepines												
Number of Beneficiaries Meeting Measure Inclusion Criteria	17,533	9,609	7,928	10,458	8,630	7,344	23,006	11,617	9,502	13,043	10,653	8,980
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	8.34%	6.92%	6.30%	6.11%	5.19%	4.57%	3.96%	3.56%	3.02%	2.66%	2.17%	1.85%
High Dosage of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	14,890	7,940	6,665	8,801	7,308	6,146	19,244	9,544	7,934	10,877	8,904	7,456

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	7.08%	5.72%	5.29%	5.15%	4.39%	3.82%	3.31%	2.92%	2.52%	2.22%	1.82%	1.54%
Multiple Providers of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	14,890	7,940	6,665	8,801	7,308	6,146	19,244	9,544	7,934	10,877	8,904	7,456
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	7.08%	5.72%	5.29%	5.15%	4.39%	3.82%	3.31%	2.92%	2.52%	2.22%	1.82%	1.54%

Note: MY: Model Year; PDC: Proportion of Days Covered.

Table B.3.118: WellCare: Number and Proportion of Beneficiaries Meeting Measure Inclusion Criteria

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
<i>Total Number of Beneficiaries Included in Analyses</i>	137,686	106,846	102,565	95,952	104,479	103,028	553,032	436,978	431,570	413,630	447,053	441,469
Adherence to Statins (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	54,225	42,424	41,027	38,712	41,062	40,412	106,901	83,449	78,772	73,084	75,646	73,553
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	39.38%	39.71%	40.00%	40.35%	39.30%	39.22%	19.33%	19.10%	18.25%	17.67%	16.92%	16.66%
Adherence to RASA (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	52,940	40,949	38,616	34,976	34,913	33,427	105,603	80,988	73,656	64,376	61,481	57,510
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	38.45%	38.33%	37.65%	36.45%	33.42%	32.44%	19.10%	18.53%	17.07%	15.56%	13.75%	13.03%
Adherence to Oral Antidiabetics (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	10,198	7,932	7,359	6,719	7,060	6,863	13,207	10,384	9,459	8,567	8,859	8,513
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	7.41%	7.42%	7.17%	7.00%	6.76%	6.66%	2.39%	2.38%	2.19%	2.07%	1.98%	1.93%
Drug-drug Interactions												
Number of Beneficiaries Meeting Measure Inclusion Criteria	27,732	21,626	18,608	15,438	14,032	12,411	41,898	32,416	26,539	21,329	18,708	16,293

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	20.14%	20.24%	18.14%	16.09%	13.43%	12.05%	7.58%	7.42%	6.15%	5.16%	4.18%	3.69%
Use of High-risk Medications												
Number of Beneficiaries Meeting Measure Inclusion Criteria	94,468	72,982	69,142	64,531	67,214	66,764	330,950	250,371	222,444	197,413	197,773	190,086
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	68.61%	68.31%	67.41%	67.25%	64.33%	64.80%	59.84%	57.30%	51.54%	47.73%	44.24%	43.06%
Statin Use in Persons with Diabetes												
Number of Beneficiaries Meeting Measure Inclusion Criteria	11,072	8,568	8,157	7,202	7,488	7,005	15,390	12,026	11,325	9,693	9,967	9,235
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	8.04%	8.02%	7.95%	7.51%	7.17%	6.80%	2.78%	2.75%	2.62%	2.34%	2.23%	2.09%
Concurrent Use of Opioids with Benzodiazepines												
Number of Beneficiaries Meeting Measure Inclusion Criteria	14,995	10,731	9,466	7,421	6,897	6,132	22,199	15,443	13,283	10,020	9,115	7,897
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	10.89%	10.04%	9.23%	7.73%	6.60%	5.95%	4.01%	3.53%	3.08%	2.42%	2.04%	1.79%
High Dosage of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	12,841	9,066	8,147	6,364	5,937	5,174	18,538	12,721	11,243	8,429	7,713	6,574

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	9.33%	8.49%	7.94%	6.63%	5.68%	5.02%	3.35%	2.91%	2.61%	2.04%	1.73%	1.49%
Multiple Providers of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	12,841	9,066	8,147	6,364	5,937	5,174	18,538	12,721	11,243	8,429	7,713	6,574
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	9.33%	8.49%	7.94%	6.63%	5.68%	5.02%	3.35%	2.91%	2.61%	2.04%	1.73%	1.49%

Note: MY: Model Year; PDC: Proportion of Days Covered.

Table B.3.119: BCBS FL: Number and Proportion of Beneficiaries Meeting Measure Inclusion Criteria

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
<i>Total Number of Beneficiaries Included in Analyses</i>	59,806	56,820	54,174	51,291	49,841	47,421	109,594	98,682	95,958	92,122	93,435	89,820
Adherence to Statins (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	27,493	25,822	24,919	23,733	23,384	22,401	31,136	27,909	26,975	25,633	25,759	24,450
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	45.97%	45.45%	46.00%	46.27%	46.92%	47.24%	28.41%	28.28%	28.11%	27.83%	27.57%	27.22%
Adherence to RASA (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	24,124	22,206	21,055	19,277	18,212	17,069	28,141	24,754	23,574	21,544	20,510	18,897
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	40.34%	39.08%	38.87%	37.58%	36.54%	35.99%	25.68%	25.08%	24.57%	23.39%	21.95%	21.04%
Adherence to Oral Antidiabetics (PDC ≥ 80%)												
Number of Beneficiaries Meeting Measure Inclusion Criteria	3,033	2,791	2,645	2,462	2,456	2,302	3,145	2,836	2,643	2,471	2,480	2,284
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	5.07%	4.91%	4.88%	4.80%	4.93%	4.85%	2.87%	2.87%	2.75%	2.68%	2.65%	2.54%
Drug-drug Interactions												
Number of Beneficiaries Meeting Measure Inclusion Criteria	12,004	10,974	9,554	8,044	6,870	5,887	11,464	10,253	8,878	7,468	6,411	5,534

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	20.07%	19.31%	17.64%	15.68%	13.78%	12.41%	10.46%	10.39%	9.25%	8.11%	6.86%	6.16%
Use of High-risk Medications												
Number of Beneficiaries Meeting Measure Inclusion Criteria	58,139	53,801	50,904	47,953	46,455	43,824	97,789	84,058	77,925	72,037	71,370	66,779
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	97.21%	94.69%	93.96%	93.49%	93.21%	92.41%	89.23%	85.18%	81.21%	78.20%	76.38%	74.35%
Statin Use in Persons with Diabetes												
Number of Beneficiaries Meeting Measure Inclusion Criteria	2,716	2,473	2,339	1,903	1,630	1,374	2,906	2,602	2,474	2,032	1,770	1,503
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	4.54%	4.35%	4.32%	3.71%	3.27%	2.90%	2.65%	2.64%	2.58%	2.21%	1.89%	1.67%
Concurrent Use of Opioids with Benzodiazepines												
Number of Beneficiaries Meeting Measure Inclusion Criteria	2,901	2,487	2,173	1,560	1,321	1,098	3,104	2,621	2,324	1,630	1,373	1,113
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	4.85%	4.38%	4.01%	3.04%	2.65%	2.32%	2.83%	2.66%	2.42%	1.77%	1.47%	1.24%
High Dosage of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	2,307	1,954	1,738	1,259	1,044	854	2,464	2,079	1,864	1,310	1,098	874

	Treatment						Comparison					
	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5	Baseline	MY 1	MY 2	MY 3	MY 4	MY 5
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	3.86%	3.44%	3.21%	2.45%	2.09%	1.80%	2.25%	2.11%	1.94%	1.42%	1.18%	0.97%
Multiple Providers of Opioids												
Number of Beneficiaries Meeting Measure Inclusion Criteria	2,307	1,954	1,738	1,259	1,044	854	2,464	2,079	1,864	1,310	1,098	874
Proportion of Beneficiaries Meeting Measure Inclusion Criteria	3.86%	3.44%	3.21%	2.45%	2.09%	1.80%	2.25%	2.11%	1.94%	1.42%	1.18%	0.97%

Note: MY: Model Year; PDC: Proportion of Days Covered.

Adherence

Table B.3.120: Modelwide: Adherence to Statins, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	- 0.19*	-0.12	-0.07	- 0.21*	- 0.32***	- 0.24**
P-value	0.054	0.371	0.579	0.090	0.008	0.045
95% Confidence Interval	(-0.39 , 0.00)	(-0.37 , 0.14)	(-0.32 , 0.18)	(-0.45 , 0.03)	(-0.56 , -0.08)	(-0.48 , 0.00)
Relative Difference	-0.24%	-0.15%	-0.09%	-0.27%	-0.40%	-0.31%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	79.07	78.55	78.84	79.07	79.35	79.58
Intervention Period Enhanced MTM Rate	84.78	81.35	83.82	84.94	86.99	87.06
Baseline Comparison MTM Rate	77.92	77.45	77.68	77.93	78.17	78.40
Intervention Period Comparison MTM Rate	83.82	80.37	82.73	84.01	86.13	86.11

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 2,838,366 (786,620 beneficiaries). Number of comparison observations: 3,562,441 (1,088,802 beneficiaries).

Table B.3.121: Modelwide: Adherence to Renin Angiotensin System Antagonists, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.15	-0.15	-0.05	-0.19	-0.14	- 0.23*
P-value	0.126	0.254	0.713	0.133	0.263	0.061
95% Confidence Interval	(-0.34 , 0.04)	(-0.39 , 0.10)	(-0.29 , 0.20)	(-0.43 , 0.06)	(-0.38 , 0.10)	(-0.48 , 0.01)
Relative Difference	-0.18%	-0.18%	-0.06%	-0.23%	-0.17%	-0.28%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	81.82	81.42	81.71	81.84	82.03	82.21
Intervention Period Enhanced MTM Rate	86.15	83.70	85.70	85.98	87.76	88.25
Baseline Comparison MTM Rate	80.46	80.11	80.35	80.48	80.64	80.79
Intervention Period Comparison MTM Rate	84.93	82.53	84.38	84.81	86.51	87.07

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 2,503,453 (716,413 beneficiaries). Number of comparison observations: 3,136,042 (978,602 beneficiaries).

Table B.3.122: Modelwide: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.07	0.92***	0.26	-0.05	- 0.69**	-0.24
P-value	0.760	0.001	0.387	0.851	0.014	0.411
95% Confidence Interval	(-0.37 , 0.50)	(0.36 , 1.49)	(-0.32 , 0.83)	(-0.62 , 0.51)	(-1.24 , -0.14)	(-0.81 , 0.33)
Relative Difference	0.09%	1.17%	0.32%	-0.07%	-0.87%	-0.30%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	79.26	78.76	79.13	79.25	79.50	79.75
Intervention Period Enhanced MTM Rate	84.32	81.64	83.34	84.45	86.35	86.36
Baseline Comparison MTM Rate	78.03	77.61	77.84	78.05	78.25	78.51
Intervention Period Comparison MTM Rate	83.03	79.56	81.79	83.30	85.79	85.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 406,115 (140,579 beneficiaries). Number of comparison observations: 140,579 (153,394 beneficiaries).

Table B.3.123: SilverScript/CVS: Adherence to Statins, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	- 0.48***	- 0.53***	- 0.56***	- 0.50***	- 0.65***	-0.15
P-value	<0.001	0.001	0.001	0.003	<0.001	0.348
95% Confidence Interval	(-0.73 , -0.23)	(-0.85 , -0.21)	(-0.88 , -0.23)	(-0.82 , -0.18)	(-0.97 , -0.33)	(-0.48 , 0.17)
Relative Difference	-0.61%	-0.68%	-0.71%	-0.63%	-0.82%	-0.19%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	78.74	77.93	78.39	78.80	79.15	79.40
Intervention Period Enhanced MTM Rate	83.83	80.53	82.35	83.85	85.94	86.43
Baseline Comparison MTM Rate	77.78	77.09	77.47	77.84	78.13	78.37
Intervention Period Comparison MTM Rate	83.35	80.21	81.99	83.39	85.58	85.55

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 1,191,636 (323,956 beneficiaries). Number of comparison observations: 1,705,892 (520,002 beneficiaries).

Table B.3.124: SilverScript/CVS: Adherence to Renin Angiotensin System Antagonists, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	- 0.63***	- 0.74***	- 0.65***	- 0.64***	- 0.61***	- 0.48***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	0.005
95% Confidence Interval	(-0.87 , -0.38)	(-1.06 , -0.43)	(-0.97 , -0.32)	(-0.97 , -0.31)	(-0.94 , -0.28)	(-0.81 , -0.15)
Relative Difference	-0.77%	-0.92%	-0.80%	-0.78%	-0.74%	-0.58%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	81.42	80.67	81.15	81.53	81.82	82.04
Intervention Period Enhanced MTM Rate	85.10	82.71	84.21	84.76	86.75	87.56
Baseline Comparison MTM Rate	80.11	79.50	79.90	80.20	80.44	80.61
Intervention Period Comparison MTM Rate	84.42	82.28	83.60	84.07	85.97	86.62

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 1,054,375 (294,298 beneficiaries). Number of comparison observations: 1,508,770 (469,371 beneficiaries).

Table B.3.125: SilverScript/CVS: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.02	0.68*	-0.02	-0.22	-0.61	0.08
P-value	0.962	0.088	0.964	0.589	0.132	0.851
95% Confidence Interval	(-0.64 , 0.60)	(-0.10 , 1.47)	(-0.83 , 0.79)	(-1.03 , 0.59)	(-1.41 , 0.18)	(-0.73 , 0.88)
Relative Difference	-0.02%	0.87%	-0.02%	-0.28%	-0.77%	0.10%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	79.04	78.19	78.76	79.15	79.47	79.70
Intervention Period Enhanced MTM Rate	83.73	80.95	82.38	83.43	85.93	86.23
Baseline Comparison MTM Rate	78.29	77.74	78.05	78.35	78.59	78.79
Intervention Period Comparison MTM Rate	83.00	79.82	81.69	82.86	85.66	85.25

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 184,470 (61,997 beneficiaries). Number of comparison observations: 208,658 (73,265 beneficiaries).

Table B.3.126: Humana: Adherence to Statins, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.12	0.59**	0.55*	-0.10	- 0.47*	-0.19
P-value	0.598	0.037	0.051	0.714	0.087	0.490
95% Confidence Interval	(-0.32 , 0.56)	(0.03 , 1.15)	(0.00 , 1.11)	(-0.66 , 0.45)	(-1.00 , 0.07)	(-0.73 , 0.35)
Relative Difference	0.16%	0.79%	0.74%	-0.14%	-0.61%	-0.25%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	75.34	74.57	75.04	75.42	75.93	76.09
Intervention Period Enhanced MTM Rate	83.21	78.14	82.92	84.13	86.36	86.62
Baseline Comparison MTM Rate	73.77	73.06	73.38	73.80	74.35	74.56
Intervention Period Comparison MTM Rate	81.52	76.04	80.71	82.61	85.25	85.28

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 486,620 (153,807 beneficiaries). Number of comparison observations: 702,065 (229,362 beneficiaries).

Table B.3.127: Humana: Adherence to Renin Angiotensin System Antagonists, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.30	0.56**	0.72**	0.27	-0.04	-0.28
P-value	0.180	0.048	0.011	0.352	0.894	0.330
95% Confidence Interval	(-0.14 , 0.74)	(0.01 , 1.12)	(0.17 , 1.28)	(-0.30 , 0.83)	(-0.59 , 0.52)	(-0.83 , 0.28)
Relative Difference	0.39%	0.73%	0.93%	0.34%	-0.05%	-0.35%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	77.97	77.34	77.76	78.05	78.49	78.66
Intervention Period Enhanced MTM Rate	84.40	80.46	84.44	85.10	87.12	87.57
Baseline Comparison MTM Rate	76.37	75.76	76.14	76.46	76.89	77.07
Intervention Period Comparison MTM Rate	82.50	78.32	82.09	83.24	85.55	86.26

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 446,018 (145,440 beneficiaries). Number of comparison observations: 621,453 (208,570 beneficiaries).

Table B.3.128: Humana: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.30	0.45	0.27	-0.16	- 1.17*	- 1.52**
P-value	0.560	0.479	0.704	0.816	0.088	0.029
95% Confidence Interval	(-1.32 , 0.71)	(-0.80 , 1.7)	(-1.10 , 1.63)	(-1.54 , 1.21)	(-2.51 , 0.17)	(-2.89 , -0.16)
Relative Difference	-0.40%	0.60%	0.35%	-0.21%	-1.52%	-1.98%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	76.20	75.52	76.02	76.32	76.70	76.92
Intervention Period Enhanced MTM Rate	82.40	78.58	81.59	83.78	85.75	85.09
Baseline Comparison MTM Rate	73.71	73.01	73.42	73.84	74.26	74.54
Intervention Period Comparison MTM Rate	80.22	75.62	78.72	81.46	84.49	84.24

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 76,116 (29,676 beneficiaries). Number of comparison observations: 82,335 (31,809 beneficiaries).

Table B.3.129: BCBS NPA: Adherence to Statins, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.15	1.51	0.20	-0.09	-1.34	0.17
P-value	0.822	0.123	0.819	0.915	0.105	0.863
95% Confidence Interval	(-1.18 , 1.48)	(-0.41 , 3.43)	(-1.47 , 1.86)	(-1.75 , 1.57)	(-2.97 , 0.28)	(-1.75 , 2.09)
Relative Difference	0.17%	1.72%	0.22%	-0.10%	-1.53%	0.19%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	88.01	87.96	87.96	87.99	88.07	88.10
Intervention Period Enhanced MTM Rate	89.77	89.45	89.32	89.66	90.28	90.33
Baseline Comparison MTM Rate	86.02	85.94	86.04	86.05	86.06	86.06
Intervention Period Comparison MTM Rate	87.63	85.92	87.20	87.81	89.62	88.12

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 40,865 (12,685 beneficiaries). Number of comparison observations: 37,542 (11,845 beneficiaries).

Table B.3.130: BCBS NPA: Adherence to Renin Angiotensin System Antagonists, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.44	-0.60	-0.23	-0.47	-0.55	-0.33
P-value	0.167	0.157	0.546	0.218	0.168	0.440
95% Confidence Interval	(-1.06 , 0.18)	(-1.42 , 0.23)	(-0.96 , 0.51)	(-1.23 , 0.28)	(-1.33 , 0.23)	(-1.15 , 0.50)
Relative Difference	-0.49%	-0.67%	-0.25%	-0.53%	-0.62%	-0.37%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	88.97	88.97	88.96	88.95	88.99	88.99
Intervention Period Enhanced MTM Rate	90.85	89.84	90.69	90.73	91.60	91.80
Baseline Comparison MTM Rate	86.51	86.47	86.51	86.52	86.52	86.52
Intervention Period Comparison MTM Rate	88.83	87.94	88.47	88.76	89.68	89.65

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 353,419 (90,173 beneficiaries). Number of comparison observations: 366,012 (100,728 beneficiaries).

Table B.3.131: BCBS NPA: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.24	-0.21	0.49	-0.19	-0.43	- 1.00***
P-value	0.417	0.584	0.167	0.603	0.235	0.006
95% Confidence Interval	(-0.81 , 0.34)	(-0.97 , 0.55)	(-0.20 , 1.18)	(-0.92 , 0.53)	(-1.15 , 0.28)	(-1.72 , -0.28)
Relative Difference	-0.28%	-0.25%	0.57%	-0.22%	-0.50%	-1.16%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	86.03	85.99	86.02	86.02	86.06	86.06
Intervention Period Enhanced MTM Rate	89.55	88.04	89.21	89.54	91.06	90.28
Baseline Comparison MTM Rate	84.19	84.13	84.19	84.20	84.23	84.23
Intervention Period Comparison MTM Rate	87.96	86.40	86.89	87.92	89.66	89.45

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 400,589 (97,702 beneficiaries). Number of comparison observations: 428,841 (113,165 beneficiaries).

Table B.3.132: UnitedHealth: Adherence to Statins, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.07	0.36	-0.28	0.17	0.22	-0.14
P-value	0.795	0.389	0.495	0.609	0.516	0.675
95% Confidence Interval	(-0.48 , 0.63)	(-0.46 , 1.18)	(-1.07 , 0.52)	(-0.48 , 0.83)	(-0.45 , 0.89)	(-0.78 , 0.51)
Relative Difference	0.09%	0.47%	-0.36%	0.22%	0.28%	-0.18%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	77.78	77.27	77.35	77.69	78.03	78.38
Intervention Period Enhanced MTM Rate	84.20	80.29	82.76	83.96	86.49	86.51
Baseline Comparison MTM Rate	77.14	76.59	76.66	77.10	77.40	77.73
Intervention Period Comparison MTM Rate	83.49	79.25	82.35	83.20	85.64	86.00

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 353,454 (102,356 beneficiaries). Number of comparison observations: 479,738 (158,131 beneficiaries).

Table B.3.133: UnitedHealth: Adherence to Renin Angiotensin System Antagonists, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.42	0.52	0.91**	0.11	0.70**	-0.05
P-value	0.117	0.187	0.019	0.746	0.035	0.880
95% Confidence Interval	(-0.11 , 0.95)	(-0.25 , 1.29)	(0.15 , 1.68)	(-0.56 , 0.79)	(0.05 , 1.35)	(-0.68 , 0.58)
Relative Difference	0.52%	0.64%	1.13%	0.14%	0.87%	-0.06%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	81.06	81.15	81.27	80.74	80.95	81.24
Intervention Period Enhanced MTM Rate	85.98	83.82	85.97	84.87	87.52	87.61
Baseline Comparison MTM Rate	80.37	80.38	80.47	80.12	80.33	80.56
Intervention Period Comparison MTM Rate	84.87	82.53	84.26	84.14	86.21	86.97

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 291,416 (87,796 beneficiaries). Number of comparison observations: 396,908 (133,898 beneficiaries).

Table B.3.134: UnitedHealth: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.30*	2.76***	1.86*	1.06	1.06	0.11
P-value	0.058	0.008	0.082	0.210	0.207	0.897
95% Confidence Interval	(-0.04 , 2.64)	(0.73 , 4.79)	(-0.24 , 3.96)	(-0.60 , 2.72)	(-0.59 , 2.70)	(-1.54 , 1.76)
Relative Difference	1.68%	3.58%	2.41%	1.38%	1.37%	0.14%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	77.17	77.20	77.24	76.85	77.15	77.46
Intervention Period Enhanced MTM Rate	83.91	81.92	83.36	83.32	85.59	84.94
Baseline Comparison MTM Rate	77.24	76.82	76.83	77.17	77.42	77.80
Intervention Period Comparison MTM Rate	82.68	78.78	81.09	82.58	84.80	85.18

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 42,773 (15,702 beneficiaries). Number of comparison observations: 47,279 (18,076 beneficiaries).

Table B.3.135: WellCare: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.13	0.27	0.35	0.39	0.06	-0.42
P-value	0.578	0.370	0.262	0.221	0.841	0.169
95% Confidence Interval	(-0.33 , 0.59)	(-0.32 , 0.87)	(-0.26 , 0.96)	(-0.23 , 1.01)	(-0.53 , 0.65)	(-1.01 , 0.18)
Relative Difference	0.16%	0.34%	0.44%	0.49%	0.08%	-0.52%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	79.37	78.84	79.12	79.25	79.55	80.11
Intervention Period Enhanced MTM Rate	84.62	81.99	83.73	84.87	86.59	86.05
Baseline Comparison MTM Rate	78.28	77.88	78.09	78.22	78.37	78.88
Intervention Period Comparison MTM Rate	83.40	80.76	82.35	83.45	85.35	85.23

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 258,227 (72,340 beneficiaries). Number of comparison observations: 491,899 (158,133 beneficiaries).

Table B.3.136: WellCare: Adherence to Renin Angiotensin System Antagonists, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.41*	0.53*	0.19	0.95***	0.38	0.02
P-value	0.068	0.068	0.532	0.002	0.223	0.959
95% Confidence Interval	(-0.03 , 0.86)	(-0.04 , 1.10)	(-0.40 , 0.78)	(0.34 , 1.56)	(-0.23 , 0.98)	(-0.59 , 0.62)
Relative Difference	0.51%	0.65%	0.23%	1.16%	0.46%	0.02%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	81.71	81.33	81.64	81.74	81.77	82.17
Intervention Period Enhanced MTM Rate	85.86	84.05	85.00	86.29	87.06	87.36
Baseline Comparison MTM Rate	80.92	80.76	80.92	80.99	80.81	81.16
Intervention Period Comparison MTM Rate	84.65	82.95	84.09	84.59	85.72	86.34

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 236,209 (67,164 beneficiaries). Number of comparison observations: 444,136 (144,530 beneficiaries).

Table B.3.137: WellCare: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.12	1.19	0.52	0.16	- 1.51**	0.09
P-value	0.836	0.102	0.500	0.835	0.047	0.907
95% Confidence Interval	(-1.01 , 1.25)	(-0.23 , 2.61)	(-0.99 , 2.04)	(-1.39 , 1.72)	(-3.00 , -0.02)	(-1.41 , 1.59)
Relative Difference	0.15%	1.50%	0.66%	0.21%	-1.89%	0.11%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	79.63	79.29	79.44	79.52	79.74	80.22
Intervention Period Enhanced MTM Rate	84.52	82.61	83.46	84.89	85.54	86.45
Baseline Comparison MTM Rate	78.61	78.45	78.50	78.54	78.52	79.10
Intervention Period Comparison MTM Rate	83.38	80.59	82.00	83.75	85.83	85.23

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 46,187 (15,497 beneficiaries). Number of comparison observations: 59,048 (21,181 beneficiaries).

Table B.3.138: BCBS FL: Adherence to Statins, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.59	-1.16	0.50	0.66	1.67**	1.47*
P-value	0.362	0.117	0.515	0.362	0.024	0.053
95% Confidence Interval	(-0.67 , 1.84)	(-2.60 , 0.29)	(-1.01 , 2.02)	(-0.75 , 2.07)	(0.22 , 3.12)	(-0.02 , 2.97)
Relative Difference	0.74%	-1.46%	0.63%	0.83%	2.10%	1.84%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	79.57	79.35	79.47	79.51	79.73	79.87
Intervention Period Enhanced MTM Rate	86.03	81.74	84.97	86.40	88.85	88.81
Baseline Comparison MTM Rate	79.13	78.99	79.03	79.07	79.24	79.34
Intervention Period Comparison MTM Rate	85.00	82.55	84.03	85.31	86.68	86.81

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 147,840 (36,459 beneficiaries). Number of comparison observations: 161,987 (44,627 beneficiaries).

Table B.3.139: BCBS FL: Adherence to Renin Angiotensin System Antagonists, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.13**	0.28	1.11*	0.86	1.95***	1.69**
P-value	0.021	0.642	0.065	0.211	0.006	0.014
95% Confidence Interval	(0.17 , 2.09)	(-0.92 , 1.49)	(-0.07 , 2.28)	(-0.49 , 2.21)	(0.56 , 3.33)	(0.34 , 3.03)
Relative Difference	1.34%	0.34%	1.32%	1.02%	2.31%	2.00%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	84.12	84.00	84.07	84.10	84.20	84.26
Intervention Period Enhanced MTM Rate	88.34	86.48	88.21	87.78	89.62	90.16
Baseline Comparison MTM Rate	83.84	83.75	83.77	83.80	83.92	83.99
Intervention Period Comparison MTM Rate	86.93	85.94	86.80	86.62	87.40	88.20

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 122,016 (31,542 beneficiaries). Number of comparison observations: 137,522 (38,840 beneficiaries).

Table B.3.140: BCBS FL: Adherence to Oral Antidiabetics, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.31	-0.16	1.97	1.77	1.91	1.18
P-value	0.244	0.905	0.193	0.244	0.179	0.472
95% Confidence Interval	(-0.89 , 3.50)	(-2.82 , 2.50)	(-1.00 , 4.94)	(-1.21 , 4.75)	(-0.87 , 4.69)	(-2.04 , 4.40)
Relative Difference	1.60%	-0.20%	2.42%	2.17%	2.34%	1.44%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	81.67	81.47	81.65	81.70	81.66	81.91
Intervention Period Enhanced MTM Rate	86.28	82.87	84.99	87.65	88.60	87.97
Baseline Comparison MTM Rate	80.67	80.43	80.52	80.56	80.87	81.06
Intervention Period Comparison MTM Rate	83.98	81.99	81.89	84.73	85.90	85.94

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 15,704 (5,022 beneficiaries). Number of comparison observations: 15,875 (5,159 beneficiaries).

Statin Use in Persons with Diabetes

Table B.3.141: Modelwide: Statin Use in Persons with Diabetes, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.03	0.36*	0.43*	-0.28	- 0.45*	-0.39
P-value	0.872	0.089	0.079	0.259	0.090	0.154
95% Confidence Interval	(-0.41 , 0.35)	(-0.06 , 0.78)	(-0.05 , 0.91)	(-0.78 , 0.21)	(-0.97 , 0.07)	(-0.93 , 0.15)
Relative Difference	-0.04%	0.48%	0.57%	-0.38%	-0.59%	-0.52%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	75.22	74.82	74.95	75.26	75.54	75.68
Intervention Period Enhanced MTM Rate	79.81	76.67	79.29	80.63	81.35	82.14
Baseline Comparison MTM Rate	74.62	74.45	74.46	74.55	74.79	74.95
Intervention Period Comparison MTM Rate	79.25	75.94	78.37	80.20	81.05	81.81

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 464,559 (155,361 beneficiaries). Number of comparison observations: 531,621 (184,035 beneficiaries).

Table B.3.142: SilverScript/CVS: Statin Use in Persons with Diabetes, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.41	0.01	0.01	- 0.62*	- 0.91**	- 0.65*
P-value	0.131	0.971	0.985	0.074	0.013	0.088
95% Confidence Interval	(-0.93 , 0.12)	(-0.57 , 0.59)	(-0.64 , 0.65)	(-1.31 , 0.06)	(-1.63 , -0.20)	(-1.40 , 0.10)
Relative Difference	-0.54%	0.01%	0.01%	-0.83%	-1.21%	-0.86%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	75.27	74.96	75.11	75.30	75.48	75.58
Intervention Period Enhanced MTM Rate	79.61	76.63	79.12	80.30	80.88	81.82
Baseline Comparison MTM Rate	74.44	74.29	74.28	74.40	74.59	74.74
Intervention Period Comparison MTM Rate	79.19	75.95	78.29	80.02	80.90	81.63

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 223,551 (71,115 beneficiaries). Number of comparison observations: 268,144 (90,195 beneficiaries).

Table B.3.143: Humana: Statin Use in Persons with Diabetes, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.41***	1.24***	1.92***	1.49**	1.30**	1.07*
P-value	0.001	0.006	<0.001	0.010	0.030	0.085
95% Confidence Interval	(0.58 , 2.24)	(0.36 , 2.12)	(0.84 , 3.00)	(0.35 , 2.63)	(0.13 , 2.48)	(-0.15 , 2.28)
Relative Difference	1.91%	1.70%	2.62%	2.03%	1.77%	1.44%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	73.47	73.18	73.28	73.48	73.78	73.90
Intervention Period Enhanced MTM Rate	79.04	75.38	78.50	80.53	81.58	82.25
Baseline Comparison MTM Rate	74.02	73.84	73.88	73.96	74.21	74.39
Intervention Period Comparison MTM Rate	78.19	74.80	77.18	79.52	80.71	81.68

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 96,042 (35,414 beneficiaries). Number of comparison observations: 112,614 (41,529 beneficiaries).

Table B.3.144: BCBS NPA: Statin Use in Persons with Diabetes, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.91	-0.49	-1.29	- 1.80*	-0.68	0.06
P-value	0.265	0.524	0.161	0.084	0.616	0.966
95% Confidence Interval	(-2.52 , 0.69)	(-2.01 , 1.03)	(-3.10 , 0.51)	(-3.84 , 0.24)	(-3.33 , 1.97)	(-2.84 , 2.97)
Relative Difference	-1.17%	-0.63%	-1.66%	-2.31%	-0.87%	0.08%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	77.89	77.86	77.95	77.87	77.85	77.88
Intervention Period Enhanced MTM Rate	81.49	79.58	80.86	82.32	82.69	83.90
Baseline Comparison MTM Rate	76.62	76.57	76.60	76.60	76.65	76.74
Intervention Period Comparison MTM Rate	81.14	78.79	80.80	82.85	82.17	82.71

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 33,004 (10,500 beneficiaries). Number of comparison observations: 31,945 (10,406 beneficiaries).

Table B.3.145: UnitedHealth: Statin Use in Persons with Diabetes, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.48	0.63	0.81	-0.68	- 1.20*	- 1.38*
P-value	0.387	0.411	0.355	0.318	0.085	0.060
95% Confidence Interval	(-1.57 , 0.61)	(-0.87 , 2.13)	(-0.91 , 2.53)	(-2.02 , 0.66)	(-2.56 , 0.16)	(-2.82 , 0.06)
Relative Difference	-0.64%	0.85%	1.09%	-0.90%	-1.57%	-1.81%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	75.46	73.99	74.10	75.88	76.24	76.39
Intervention Period Enhanced MTM Rate	79.39	75.76	78.16	79.58	80.86	81.53
Baseline Comparison MTM Rate	74.28	73.83	73.92	74.29	74.50	74.66
Intervention Period Comparison MTM Rate	78.69	74.97	77.17	78.67	80.31	81.18

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 49,942 (17,921 beneficiaries). Number of comparison observations: 59,766 (22,636 beneficiaries).

Table B.3.146: WellCare: Statin Use in Persons with Diabetes, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.50	0.18	-0.07	-0.72	-0.67	- 1.42*
P-value	0.344	0.755	0.911	0.323	0.343	0.052
95% Confidence Interval	(-1.53 , 0.54)	(-0.97 , 1.34)	(-1.39 , 1.24)	(-2.14 , 0.71)	(-2.06 , 0.72)	(-2.86 , 0.01)
Relative Difference	-0.65%	0.24%	-0.10%	-0.94%	-0.87%	-1.84%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	76.50	76.09	76.24	76.29	76.84	77.15
Intervention Period Enhanced MTM Rate	80.94	77.84	80.48	81.89	82.25	82.88
Baseline Comparison MTM Rate	75.36	75.15	75.12	75.07	75.65	75.85
Intervention Period Comparison MTM Rate	80.30	76.72	79.45	81.40	81.74	83.01

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 49,574 (16,324 beneficiaries). Number of comparison observations: 67,731 (24,196 beneficiaries).

Table B.3.147: BCBS FL: Statin Use in Persons with Diabetes, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.45	0.68	1.29	-0.68	-0.59	1.44
P-value	0.700	0.586	0.365	0.654	0.712	0.419
95% Confidence Interval	(-1.86 , 2.76)	(-1.77 , 3.12)	(-1.50 , 4.07)	(-3.68 , 2.31)	(-3.70 , 2.53)	(-2.05 , 4.94)
Relative Difference	0.60%	0.89%	1.69%	-0.90%	-0.77%	1.88%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	76.25	76.06	76.13	76.17	76.48	76.63
Intervention Period Enhanced MTM Rate	81.86	78.77	81.32	83.08	84.17	83.92
Baseline Comparison MTM Rate	75.94	75.66	75.84	75.93	76.26	76.24
Intervention Period Comparison MTM Rate	81.10	77.69	79.75	83.52	84.54	82.08

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 12,446 (4,087 beneficiaries). Number of comparison observations: 13,300 (4,437 beneficiaries).

Drug-drug Interactions and Use of High-risk Medications

Table B.3.148: Modelwide: Drug-drug Interactions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.38***	0.29***	0.37***	0.43***	0.42***	0.43***
P-value	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(0.23 , 0.52)	(0.11 , 0.47)	(0.18 , 0.57)	(0.23 , 0.63)	(0.21 , 0.64)	(0.22 , 0.63)
Relative Difference	9.20%	7.04%	9.06%	10.37%	10.32%	10.50%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	4.11	4.11	4.11	4.12	4.11	4.09
Intervention Period Enhanced MTM Rate	3.93	4.39	4.11	3.84	3.52	3.38
Baseline Comparison MTM Rate	4.62	4.65	4.64	4.61	4.60	4.59
Intervention Period Comparison MTM Rate	4.06	4.64	4.27	3.90	3.58	3.45

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 1,171,184 (427,937 beneficiaries). Number of comparison observations: 1,246,560 (488,852 beneficiaries).

Table B.3.149: Modelwide: Use of High-risk Medications, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.03	0.22***	-0.10	-0.01	- 0.14**	- 0.17**
P-value	0.490	<0.001	0.105	0.809	0.026	0.012
95% Confidence Interval	(-0.12 , 0.06)	(0.12 , 0.32)	(-0.21 , 0.02)	(-0.13 , 0.10)	(-0.26 , -0.02)	(-0.30 , -0.04)
Relative Difference	-0.24%	1.63%	-0.71%	-0.10%	-1.03%	-1.22%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	13.63	13.49	13.58	13.70	13.71	13.69
Intervention Period Enhanced MTM Rate	13.54	13.95	13.53	13.49	13.46	13.18
Baseline Comparison MTM Rate	14.23	14.18	14.16	14.25	14.29	14.29
Intervention Period Comparison MTM Rate	14.17	14.42	14.21	14.05	14.18	13.95

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 5,611,926 (1,200,438 beneficiaries). Number of comparison observations: 10,014,424 (2,271,294 beneficiaries).

Table B.3.150: SilverScript/CVS: Drug-drug Interactions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.29***	0.18	0.40***	0.22	0.41***	0.29**
P-value	0.003	0.152	0.002	0.106	0.003	0.041
95% Confidence Interval	(0.10 , 0.48)	(-0.07 , 0.42)	(0.14 , 0.65)	(-0.05 , 0.48)	(0.14 , 0.68)	(0.01 , 0.56)
Relative Difference	6.61%	3.94%	8.94%	4.96%	9.41%	6.64%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	4.42	4.52	4.46	4.40	4.35	4.30
Intervention Period Enhanced MTM Rate	4.13	4.75	4.47	4.01	3.68	3.28
Baseline Comparison MTM Rate	4.78	4.88	4.81	4.75	4.72	4.70
Intervention Period Comparison MTM Rate	4.21	4.93	4.43	4.15	3.64	3.40

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 470,371 (172,141 beneficiaries). Number of comparison observations: 565,393 (225,258 beneficiaries).

Table B.3.151: SilverScript/CVS: Use of High-risk Medications, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.08	0.42***	0.25***	-0.05	- 0.44***	- 0.65***
P-value	0.155	<0.001	0.001	0.561	<0.001	0.155
95% Confidence Interval	(-0.20 , 0.03)	(0.30 , 0.55)	(0.10 , 0.39)	(-0.20 , 0.11)	(-0.60 , -0.28)	(-0.20 , 0.03)
Relative Difference	-0.61%	3.08%	1.79%	-0.33%	-3.21%	-0.61%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	13.65	13.74	13.72	13.67	13.60	13.52
Intervention Period Enhanced MTM Rate	13.68	14.36	14.14	13.68	13.33	12.83
Baseline Comparison MTM Rate	13.96	14.08	13.98	13.95	13.93	13.87
Intervention Period Comparison MTM Rate	14.07	14.27	14.15	14.01	14.10	13.82

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 2,256,672 (470,836 beneficiaries). Number of comparison observations: 4,795,094 (1,076,624 beneficiaries).

Table B.3.152: Humana: Drug-drug Interactions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.39***	0.12	0.28	0.48**	0.62***	0.91***
P-value	0.006	0.503	0.141	0.017	0.003	<0.001
95% Confidence Interval	(0.11 , 0.67)	(-0.22 , 0.45)	(-0.09 , 0.66)	(0.09 , 0.88)	(0.21 , 1.02)	(0.47 , 1.36)
Relative Difference	10.20%	3.09%	7.43%	12.42%	15.66%	23.18%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	3.84	3.75	3.80	3.90	3.94	3.93
Intervention Period Enhanced MTM Rate	3.50	3.72	3.38	3.35	3.25	3.62
Baseline Comparison MTM Rate	4.88	4.84	4.85	4.91	4.93	4.92
Intervention Period Comparison MTM Rate	4.14	4.69	4.14	3.88	3.62	3.70

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 214,708 (87,647 beneficiaries). Number of comparison observations: 252,763 (106,655 beneficiaries).

Table B.3.153: Humana: Use of High-risk Medications, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.65***	1.26***	0.55***	0.35**	0.45***	0.30**
P-value	<0.001	<0.001	<0.001	0.011	0.002	0.046
95% Confidence Interval	(0.45 , 0.85)	(1.05 , 1.47)	(0.29 , 0.80)	(0.08 , 0.62)	(0.17 , 0.73)	(0.01 , 0.59)
Relative Difference	4.31%	8.64%	3.64%	2.32%	2.91%	1.93%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	15.09	14.62	14.99	15.19	15.45	15.47
Intervention Period Enhanced MTM Rate	15.70	16.18	15.47	15.37	15.72	15.50
Baseline Comparison MTM Rate	15.33	15.06	15.15	15.37	15.63	15.65
Intervention Period Comparison MTM Rate	15.29	15.36	15.09	15.19	15.45	15.38

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 967,863 (235,682 beneficiaries). Number of comparison observations: 2,194,772 (507,949 beneficiaries).

Table B.3.154: BCBS NPA: Drug-drug Interactions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.49*	0.58*	0.10	0.82**	0.41	0.59
P-value	0.076	0.062	0.766	0.027	0.363	0.133
95% Confidence Interval	(-0.05 , 1.03)	(-0.03 , 1.18)	(-0.55 , 0.75)	(0.10 , 1.55)	(-0.47 , 1.28)	(-0.18 , 1.35)
Relative Difference	12.96%	15.34%	2.64%	21.86%	10.84%	15.68%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	3.76	3.76	3.77	3.76	3.75	3.75
Intervention Period Enhanced MTM Rate	3.70	4.20	3.80	3.62	3.26	3.13
Baseline Comparison MTM Rate	4.29	4.30	4.30	4.29	4.28	4.29
Intervention Period Comparison MTM Rate	3.75	4.17	4.24	3.33	3.38	3.08

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 185,523 (57,142 beneficiaries). Number of comparison observations: 163,708 (54,246 beneficiaries).

Table B.3.155: BCBS NPA: Use of High-risk Medications, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.02	- 0.27*	- 0.39**	0.38**	0.16	0.34*
P-value	0.897	0.067	0.023	0.019	0.376	0.094
95% Confidence Interval	(-0.25 , 0.28)	(-0.56 , 0.02)	(-0.74 , -0.05)	(0.06 , 0.70)	(-0.19 , 0.51)	(-0.06 , 0.73)
Relative Difference	0.18%	-2.76%	-3.98%	3.87%	1.59%	3.39%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	9.90	9.87	9.91	9.91	9.91	9.91
Intervention Period Enhanced MTM Rate	9.54	9.54	9.36	9.74	9.63	9.44
Baseline Comparison MTM Rate	12.18	12.19	12.18	12.19	12.17	12.17
Intervention Period Comparison MTM Rate	11.80	12.13	12.03	11.63	11.73	11.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 877,415 (171,005 beneficiaries). Number of comparison observations: 1,273,177 (259,985 beneficiaries).

Table B.3.156: UnitedHealth: Drug-drug Interactions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.21	0.54**	0.38	0.14	0.01	-0.10
P-value	0.263	0.038	0.193	0.580	0.982	0.697
95% Confidence Interval	(-0.16 , 0.59)	(0.03 , 1.05)	(-0.19 , 0.96)	(-0.35 , 0.62)	(-0.50 , 0.51)	(-0.62 , 0.41)
Relative Difference	4.83%	12.32%	8.75%	3.05%	0.13%	-2.32%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	4.41	4.37	4.37	4.48	4.44	4.41
Intervention Period Enhanced MTM Rate	4.25	4.87	4.50	4.20	3.82	3.64
Baseline Comparison MTM Rate	4.33	4.36	4.36	4.31	4.30	4.31
Intervention Period Comparison MTM Rate	3.96	4.32	4.11	3.90	3.68	3.64

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 136,886 (52,875 beneficiaries). Number of comparison observations: 154,652 (65,119 beneficiaries).

Table B.3.157: UnitedHealth: Use of High-risk Medications, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	- 0.49***	- 0.44**	- 0.52**	- 0.39**	- 0.53***	- 0.55***
P-value	<0.001	0.015	0.011	0.016	0.001	0.002
95% Confidence Interval	(-0.76 , -0.21)	(-0.80 , -0.09)	(-0.93 , -0.12)	(-0.71 , -0.07)	(-0.86 , -0.21)	(-0.89 , -0.21)
Relative Difference	-3.04%	-2.77%	-3.29%	-2.42%	-3.31%	-3.44%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	16.06	15.97	15.96	16.21	16.12	15.99
Intervention Period Enhanced MTM Rate	15.49	16.12	15.69	15.54	15.27	14.88
Baseline Comparison MTM Rate	15.93	15.97	15.93	15.96	15.93	15.88
Intervention Period Comparison MTM Rate	15.86	16.56	16.18	15.68	15.61	15.32

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 768,835 (166,761 beneficiaries). Number of comparison observations: 1,652,853 (393,974 beneficiaries).

Table B.3.158: WellCare: Drug-drug Interactions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.39**	0.21	0.40	0.76***	0.33	0.30
P-value	0.029	0.352	0.106	0.004	0.198	0.267
95% Confidence Interval	(0.04 , 0.74)	(-0.24 , 0.66)	(-0.08 , 0.88)	(0.25 , 1.27)	(-0.18 , 0.84)	(-0.23 , 0.83)
Relative Difference	9.48%	5.16%	9.60%	18.51%	8.11%	7.26%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	4.13	4.14	4.14	4.10	4.13	4.14
Intervention Period Enhanced MTM Rate	4.07	4.56	4.22	4.04	3.59	3.56
Baseline Comparison MTM Rate	4.61	4.61	4.62	4.64	4.58	4.59
Intervention Period Comparison MTM Rate	4.16	4.82	4.31	3.82	3.71	3.71

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 110,286 (39,987 beneficiaries). Number of comparison observations: 157,729 (64,735 beneficiaries).

Table B.3.159: WellCare: Use of High-risk Medications, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.18	- 0.80***	- 0.84***	0.03	0.24	0.58***
P-value	0.124	<0.001	<0.001	0.873	0.149	0.001
95% Confidence Interval	(-0.40 , 0.05)	(-1.02 , -0.57)	(-1.11 , -0.57)	(-0.29 , 0.34)	(-0.08 , 0.55)	(0.25 , 0.91)
Relative Difference	-1.27%	-5.78%	-6.02%	0.18%	1.70%	4.16%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	13.91	13.79	13.97	13.93	13.87	14.00
Intervention Period Enhanced MTM Rate	13.97	13.20	13.39	14.22	14.46	14.69
Baseline Comparison MTM Rate	14.61	14.48	14.53	14.53	14.64	14.87
Intervention Period Comparison MTM Rate	14.85	14.69	14.80	14.80	14.99	14.98

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 439,033 (97,755 beneficiaries). Number of comparison observations: 1,400,563 (335,328 beneficiaries).

Table B.3.160: BCBS FL: Drug-drug Interactions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.54	0.65	0.66	0.15	0.60	0.64
P-value	0.191	0.115	0.225	0.819	0.264	0.256
95% Confidence Interval	(-0.27 , 1.36)	(-0.16 , 1.45)	(-0.41 , 1.72)	(-1.11 , 1.40)	(-0.46 , 1.67)	(-0.46 , 1.74)
Relative Difference	17.27%	20.59%	21.02%	4.68%	18.96%	20.11%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	3.15	3.14	3.14	3.13	3.19	3.17
Intervention Period Enhanced MTM Rate	3.47	3.91	3.60	3.29	2.98	3.24
Baseline Comparison MTM Rate	3.92	3.91	3.95	3.95	3.89	3.87
Intervention Period Comparison MTM Rate	3.70	4.03	3.76	3.97	3.08	3.31

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 53,410 (18,145 beneficiaries). Number of comparison observations: 50,106 (18,213 beneficiaries).

Table B.3.161: BCBS FL: Use of High-risk Medications, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	- 0.56**	- 0.81***	- 1.35***	- 1.09***	0.07	0.56
P-value	0.015	0.001	<0.001	<0.001	0.861	0.175
95% Confidence Interval	(-1.02 , -0.11)	(-1.27 , -0.35)	(-1.89 , -0.82)	(-1.67 , -0.51)	(-0.68 , 0.81)	(-0.25 , 1.37)
Relative Difference	-4.55%	-6.52%	-10.88%	-8.76%	0.54%	4.54%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	12.41	12.44	12.44	12.43	12.38	12.35
Intervention Period Enhanced MTM Rate	12.14	12.22	11.73	11.37	12.76	12.74
Baseline Comparison MTM Rate	13.05	13.08	13.08	13.06	13.03	12.99
Intervention Period Comparison MTM Rate	13.35	13.67	13.72	13.09	13.34	12.82

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-year. Number of Enhanced MTM observations: 302,108 (58,399 beneficiaries). Number of comparison observations: 473,107 (98,129 beneficiaries).

Opioid Utilization

Table B.3.162: Modelwide: Concurrent Use of Opioids with Benzodiazepines, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.69***	1.54***	1.74***	1.76***	1.79***	1.73***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.35 , 2.03)	(1.16 , 1.92)	(1.29 , 2.19)	(1.28 , 2.23)	(1.28 , 2.30)	(1.19 , 2.27)
Relative Difference	6.71%	6.07%	6.88%	6.97%	7.13%	6.92%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	25.22	25.36	25.29	25.20	25.10	24.98
Intervention Period Enhanced MTM Rate	25.40	27.32	27.08	24.90	23.30	21.65
Baseline Comparison MTM Rate	25.64	25.79	25.72	25.59	25.51	25.43
Intervention Period Comparison MTM Rate	24.13	26.21	25.77	23.54	21.92	20.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 547,639 (245,011 beneficiaries). Number of comparison observations: 664,448 (313,434 beneficiaries).

Table B.3.163: Modelwide: Use of Opioids at High Dosage, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.93***	0.48***	0.97***	1.05***	1.33***	1.21***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(0.69 , 1.18)	(0.22 , 0.73)	(0.65 , 1.29)	(0.70 , 1.39)	(0.95 , 1.70)	(0.80 , 1.61)
Relative Difference	7.54%	3.83%	7.80%	8.47%	10.77%	9.85%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	12.39	12.46	12.47	12.35	12.32	12.27
Intervention Period Enhanced MTM Rate	11.92	12.53	12.15	11.64	11.59	11.04
Baseline Comparison MTM Rate	11.10	11.28	11.26	11.05	10.89	10.79
Intervention Period Comparison MTM Rate	9.69	10.87	9.96	9.29	8.82	8.35

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 463,062 (202,229 beneficiaries). Number of comparison observations: 557,406 (256,724 beneficiaries).

Table B.3.164: Modelwide: Use of Opioids from Multiple Providers, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.02	0.07	0.01	0.03	-0.05	-0.02
P-value	0.729	0.283	0.875	0.604	0.392	0.699
95% Confidence Interval	(-0.08 , 0.11)	(-0.06 , 0.19)	(-0.12 , 0.14)	(-0.10 , 0.16)	(-0.17 , 0.07)	(-0.14 , 0.09)
Relative Difference	1.26%	4.95%	0.77%	2.53%	-3.81%	-1.74%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	1.36	1.38	1.36	1.36	1.35	1.33
Intervention Period Enhanced MTM Rate	0.88	1.12	1.00	0.92	0.53	0.48
Baseline Comparison MTM Rate	1.16	1.21	1.17	1.15	1.12	1.10
Intervention Period Comparison MTM Rate	0.66	0.89	0.81	0.67	0.36	0.28

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 463,062 (202,229 beneficiaries). Number of comparison observations: 557,406 (256,724 beneficiaries).

Table B.3.165: SilverScript/CVS: Concurrent Use of Opioids with Benzodiazepines, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.35***	0.82***	1.30***	1.80***	1.66***	1.50***
P-value	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(0.87 , 1.83)	(0.31 , 1.34)	(0.70 , 1.90)	(1.12 , 2.47)	(0.94 , 2.39)	(0.72 , 2.27)
Relative Difference	5.33%	3.24%	5.15%	7.11%	6.60%	5.97%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	25.28	25.45	25.28	25.26	25.16	25.07
Intervention Period Enhanced MTM Rate	25.58	27.17	27.21	25.39	23.55	22.02
Baseline Comparison MTM Rate	25.85	26.02	25.90	25.79	25.73	25.63
Intervention Period Comparison MTM Rate	24.80	26.91	26.53	24.12	22.46	21.09

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 259,555 (109,615 beneficiaries). Number of comparison observations: 330,173 (151,519 beneficiaries).

Table B.3.166: SilverScript/CVS: Use of Opioids at High Dosage, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.12***	0.31*	1.23***	1.39***	1.69***	1.52***
P-value	<0.001	0.092	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(0.77 , 1.48)	(-0.05 , 0.68)	(0.80 , 1.66)	(0.90 , 1.89)	(1.15 , 2.24)	(0.93 , 2.11)
Relative Difference	8.86%	2.45%	9.67%	11.00%	13.38%	12.09%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	12.69	12.75	12.70	12.67	12.66	12.69
Intervention Period Enhanced MTM Rate	12.41	12.82	12.74	12.17	12.22	12.41
Baseline Comparison MTM Rate	11.40	11.56	11.47	11.36	11.25	11.40
Intervention Period Comparison MTM Rate	10.00	11.32	10.29	9.46	9.12	10.00

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 220,964 (91,396 beneficiaries). Number of comparison observations: 277,612 (124,518 beneficiaries).

Table B.3.167: SilverScript/CVS: Use of Opioids from Multiple Providers, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.00	0.11	-0.09	-0.04	-0.08	0.05
P-value	0.953	0.223	0.335	0.703	0.342	0.536
95% Confidence Interval	(-0.15 , 0.14)	(-0.07 , 0.29)	(-0.27 , 0.09)	(-0.22 , 0.15)	(-0.25 , 0.09)	(-0.12 , 0.22)
Relative Difference	-0.31%	7.96%	-6.46%	-2.61%	-5.95%	3.97%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	1.39	1.41	1.39	1.38	1.37	1.35
Intervention Period Enhanced MTM Rate	0.86	1.17	0.96	0.86	0.49	0.49
Baseline Comparison MTM Rate	1.20	1.25	1.21	1.19	1.17	1.15
Intervention Period Comparison MTM Rate	0.68	0.90	0.87	0.70	0.37	0.24

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 220,964 (91,396 beneficiaries). Number of comparison observations: 277,612 (124,518 beneficiaries).

Table B.3.168: Humana: Concurrent Use of Opioids with Benzodiazepines, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	2.41***	2.84***	2.09***	2.07***	2.64***	1.88***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
95% Confidence Interval	(1.73 , 3.09)	(2.12 , 3.55)	(1.14 , 3.04)	(1.02 , 3.11)	(1.55 , 3.72)	(0.74 , 3.02)
Relative Difference	8.83%	10.41%	7.65%	7.55%	9.70%	6.95%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	27.23	27.23	27.27	27.35	27.17	27.08
Intervention Period Enhanced MTM Rate	26.97	29.65	28.19	25.85	24.12	21.89
Baseline Comparison MTM Rate	27.74	27.72	27.70	27.85	27.77	27.69
Intervention Period Comparison MTM Rate	25.07	27.30	26.53	24.29	22.09	20.62

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 131,211 (61,631 beneficiaries). Number of comparison observations: 164,557 (80,395 beneficiaries).

Table B.3.169: Humana: Use of Opioids at High Dosage, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.67***	0.53**	0.52	0.77*	0.72*	1.15***
P-value	0.009	0.040	0.139	0.052	0.085	0.009
95% Confidence Interval	(0.17 , 1.18)	(0.03 , 1.04)	(-0.17 , 1.22)	(-0.01 , 1.54)	(-0.10 , 1.53)	(0.28 , 2.02)
Relative Difference	5.24%	4.17%	4.06%	5.92%	5.55%	9.01%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	12.83	12.72	12.90	12.96	12.92	12.79
Intervention Period Enhanced MTM Rate	11.93	12.81	11.84	11.58	11.14	10.98
Baseline Comparison MTM Rate	11.77	11.80	11.84	11.86	11.69	11.55
Intervention Period Comparison MTM Rate	10.20	11.35	10.25	9.71	9.20	8.60

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 112,269 (51,964 beneficiaries). Number of comparison observations: 139,117 (66,837 beneficiaries).

Table B.3.170: Humana: Use of Opioids from Multiple Providers, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.12	0.09	0.29**	0.17	0.01	-0.02
P-value	0.244	0.506	0.043	0.241	0.956	0.889
95% Confidence Interval	(-0.08 , 0.32)	(-0.17 , 0.34)	(0.01 , 0.58)	(-0.12 , 0.47)	(-0.26 , 0.27)	(-0.27 , 0.24)
Relative Difference	8.04%	5.57%	19.58%	11.93%	0.51%	-1.28%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	1.49	1.53	1.49	1.47	1.46	1.43
Intervention Period Enhanced MTM Rate	1.06	1.30	1.29	1.05	0.60	0.50
Baseline Comparison MTM Rate	1.35	1.41	1.36	1.33	1.29	1.27
Intervention Period Comparison MTM Rate	0.79	1.09	0.86	0.74	0.42	0.35

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 112,269 (51,964 beneficiaries). Number of comparison observations: 139,117 (66,837 beneficiaries).

Table B.3.171: BCBS NPA: Concurrent Use of Opioids with Benzodiazepines, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.74	-0.09	1.35	0.72	0.44	1.94
P-value	0.409	0.933	0.185	0.534	0.729	0.144
95% Confidence Interval	(-1.01 , 2.48)	(-2.08 , 1.91)	(-0.65 , 3.35)	(-1.55 , 2.99)	(-2.04 , 2.91)	(-0.66 , 4.55)
Relative Difference	5.18%	-0.61%	9.49%	5.04%	3.07%	13.65%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	14.20	14.08	14.25	14.29	14.26	14.23
Intervention Period Enhanced MTM Rate	14.71	14.82	15.91	14.26	14.04	13.43
Baseline Comparison MTM Rate	17.52	17.48	17.48	17.51	17.60	17.62
Intervention Period Comparison MTM Rate	17.29	18.31	17.79	16.76	16.94	14.87

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 27,783 (14,801 beneficiaries). Number of comparison observations: 28,528 (15,333 beneficiaries).

Table B.3.172: BCBS NPA: Use of Opioids at High Dosage, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.44	-0.03	0.73	0.13	1.13	0.70
P-value	0.396	0.952	0.289	0.850	0.162	0.441
95% Confidence Interval	(-0.58 , 1.47)	(-1.02 , 0.96)	(-0.62 , 2.09)	(-1.22 , 1.48)	(-0.45 , 2.70)	(-1.08 , 2.47)
Relative Difference	6.43%	-0.44%	10.68%	1.89%	16.19%	10.00%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	6.91	6.90	6.88	6.91	6.95	6.96
Intervention Period Enhanced MTM Rate	5.86	6.22	6.07	5.49	5.75	5.22
Baseline Comparison MTM Rate	8.06	8.07	8.09	8.05	8.02	8.08
Intervention Period Comparison MTM Rate	6.57	7.42	6.55	6.50	5.69	5.64

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 21,206 (10,537 beneficiaries). Number of comparison observations: 22,016 (11,109 beneficiaries).

Table B.3.173: BCBS NPA: Use of Opioids from Multiple Providers, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.10	0.07	0.02	0.40**	0.05	-0.04
P-value	0.383	0.651	0.909	0.029	0.788	0.822
95% Confidence Interval	(-0.13 , 0.34)	(-0.24 , 0.38)	(-0.29 , 0.32)	(0.04 , 0.76)	(-0.34 , 0.45)	(-0.37 , 0.29)
Relative Difference	29.78%	20.17%	5.09%	117.37%	15.98%	-11.28%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	0.35	0.36	0.35	0.34	0.34	0.34
Intervention Period Enhanced MTM Rate	0.40	0.44	0.33	0.63	0.35	0.16
Baseline Comparison MTM Rate	0.29	0.28	0.27	0.30	0.30	0.30
Intervention Period Comparison MTM Rate	0.24	0.29	0.24	0.18	0.26	0.16

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 21,206 (10,537 beneficiaries). Number of comparison observations: 22,016 (11,109 beneficiaries).

Table B.3.174: UnitedHealth: Concurrent Use of Opioids with Benzodiazepines, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.30**	1.73**	2.66***	0.62	0.79	0.81
P-value	0.011	0.011	0.001	0.329	0.252	0.269
95% Confidence Interval	(0.29 , 2.30)	(0.39 , 3.07)	(1.08 , 4.25)	(-0.62 , 1.86)	(-0.56 , 2.14)	(-0.63 , 2.25)
Relative Difference	4.71%	5.95%	9.19%	2.32%	2.98%	3.10%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	27.50	29.03	29.00	26.63	26.56	26.21
Intervention Period Enhanced MTM Rate	27.08	30.37	31.36	25.89	24.81	22.51
Baseline Comparison MTM Rate	25.42	26.11	26.00	25.09	24.99	24.84
Intervention Period Comparison MTM Rate	23.70	25.72	25.69	23.74	22.45	20.33

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 61,650 (28,879 beneficiaries). Number of comparison observations: 76,977 (38,564 beneficiaries).

Table B.3.175: UnitedHealth: Use of Opioids at High Dosage, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.13***	1.40***	1.49**	0.99**	1.19**	0.52
P-value	0.003	0.003	0.011	0.034	0.019	0.346
95% Confidence Interval	(0.40 , 1.86)	(0.47 , 2.32)	(0.34 , 2.64)	(0.08 , 1.90)	(0.19 , 2.18)	(-0.56 , 1.61)
Relative Difference	8.34%	9.49%	10.14%	7.74%	9.31%	4.09%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	13.54	14.74	14.71	12.79	12.75	12.77
Intervention Period Enhanced MTM Rate	13.29	15.05	14.78	12.67	12.40	11.37
Baseline Comparison MTM Rate	11.12	11.98	12.01	10.65	10.53	10.41
Intervention Period Comparison MTM Rate	9.74	10.89	10.59	9.54	8.99	8.50

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 51,823 (23,639 beneficiaries). Number of comparison observations: 64,045 (31,248 beneficiaries).

Table B.3.176: UnitedHealth: Use of Opioids from Multiple Providers, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.16	-0.14	-0.10	-0.08	-0.16	- 0.37**
P-value	0.226	0.475	0.657	0.634	0.313	0.023
95% Confidence Interval	(-0.42 , 0.10)	(-0.51 , 0.24)	(-0.53 , 0.34)	(-0.43 , 0.26)	(-0.48 , 0.15)	(-0.69 , -0.05)
Relative Difference	-11.89%	-10.75%	-7.73%	-5.87%	-11.65%	-26.64%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	1.36	1.27	1.28	1.44	1.41	1.39
Intervention Period Enhanced MTM Rate	0.79	0.77	0.96	1.03	0.63	0.47
Baseline Comparison MTM Rate	0.92	0.93	0.92	0.93	0.93	0.91
Intervention Period Comparison MTM Rate	0.51	0.57	0.70	0.61	0.31	0.36

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 51,823 (23,639 beneficiaries). Number of comparison observations: 64,045 (31,248 beneficiaries).

Table B.3.177: WellCare: Concurrent Use of Opioids with Benzodiazepines, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.78	0.01	0.66	1.09	0.90	1.79**
P-value	0.116	0.982	0.307	0.135	0.214	0.018
95% Confidence Interval	(-0.19 , 1.75)	(-1.08 , 1.10)	(-0.61 , 1.93)	(-0.34 , 2.51)	(-0.52 , 2.31)	(0.30 , 3.28)
Relative Difference	3.06%	0.05%	2.59%	4.24%	3.56%	7.16%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	25.46	25.62	25.60	25.60	25.26	25.02
Intervention Period Enhanced MTM Rate	24.91	26.67	26.98	24.59	22.58	21.67
Baseline Comparison MTM Rate	25.22	25.33	25.30	25.34	24.98	24.99
Intervention Period Comparison MTM Rate	23.89	26.37	26.03	23.24	21.39	19.85

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 55,895 (24,246 beneficiaries). Number of comparison observations: 78,285 (38,094 beneficiaries).

Table B.3.178: WellCare: Use of Opioids at High Dosage, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.48	0.59	0.03	0.45	0.79	0.72
P-value	0.174	0.115	0.954	0.388	0.136	0.209
95% Confidence Interval	(-0.21 , 1.18)	(-0.14 , 1.32)	(-0.86 , 0.91)	(-0.57 , 1.47)	(-0.25 , 1.82)	(-0.40 , 1.83)
Relative Difference	4.36%	5.37%	0.23%	4.02%	7.05%	6.43%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	11.10	10.96	11.10	11.18	11.17	11.14
Intervention Period Enhanced MTM Rate	10.58	11.14	10.40	10.26	10.54	10.30
Baseline Comparison MTM Rate	10.13	10.29	10.34	10.31	9.85	9.60
Intervention Period Comparison MTM Rate	9.12	9.88	9.61	8.94	8.44	8.05

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 47,642 (20,281 beneficiaries). Number of comparison observations: 65,369 (30,974 beneficiaries).

Table B.3.179: WellCare: Use of Opioids from Multiple Providers, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	-0.04	-0.10	-0.05	0.00	0.04	-0.03
P-value	0.817	0.606	0.816	0.995	0.823	0.884
95% Confidence Interval	(-0.33 , 0.26)	(-0.50 , 0.29)	(-0.45 , 0.35)	(-0.41 , 0.42)	(-0.31 , 0.39)	(-0.37 , 0.32)
Relative Difference	-2.35%	-6.69%	-3.13%	0.08%	2.77%	-1.86%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	1.49	1.55	1.52	1.49	1.45	1.38
Intervention Period Enhanced MTM Rate	0.95	1.13	1.17	1.01	0.66	0.54
Baseline Comparison MTM Rate	1.20	1.28	1.23	1.21	1.15	1.09
Intervention Period Comparison MTM Rate	0.69	0.95	0.92	0.73	0.32	0.27

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 47,642 (20,281 beneficiaries). Number of comparison observations: 65,369 (30,974 beneficiaries).

Table B.3.180: BCBS FL: Concurrent Use of Opioids with Benzodiazepines, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	10.74***	10.08***	10.34***	11.74***	10.80***	11.55***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(8.42 , 13.07)	(7.69 , 12.47)	(7.38 , 13.30)	(8.28 , 15.19)	(7.11 , 14.48)	(7.63 , 15.48)
Relative Difference	96.28%	93.22%	93.29%	106.22%	91.90%	100.31%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	11.16	10.81	11.08	11.05	11.75	11.52
Intervention Period Enhanced MTM Rate	24.01	22.48	25.63	24.94	24.07	22.86
Baseline Comparison MTM Rate	16.61	16.55	16.52	16.60	16.81	16.69
Intervention Period Comparison MTM Rate	18.72	18.14	20.74	18.75	18.34	16.48

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 11,545 (5,839 beneficiaries). Number of comparison observations: 12,173 (6,289 beneficiaries).

Table B.3.181: BCBS FL: Use of Opioids at High Dosage, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	1.04	0.46	0.84	0.40	2.29*	2.22
P-value	0.200	0.567	0.404	0.728	0.075	0.122
95% Confidence Interval	(-0.55 , 2.64)	(-1.12 , 2.04)	(-1.13 , 2.80)	(-1.87 , 2.68)	(-0.23 , 4.80)	(-0.59 , 5.03)
Relative Difference	8.00%	3.56%	6.41%	3.08%	17.51%	16.91%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	13.04	12.96	13.04	13.10	13.05	13.12
Intervention Period Enhanced MTM Rate	13.37	13.41	13.52	12.71	13.60	13.70
Baseline Comparison MTM Rate	7.03	6.99	7.06	7.04	7.05	7.04
Intervention Period Comparison MTM Rate	6.33	6.98	6.71	6.24	5.31	5.41

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 9,158 (4,412 beneficiaries). Number of comparison observations: 9,692 (4,739 beneficiaries).

Table B.3.182: BCBS FL: Use of Opioids from Multiple Providers, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Percentage Point Change in Rate						
Difference-in-Differences	0.34	0.50*	0.26	0.40	-0.01	0.46
P-value	0.111	0.058	0.315	0.168	0.985	0.130
95% Confidence Interval	(-0.08, 0.75)	(-0.02, 1.01)	(-0.25, 0.76)	(-0.17, 0.97)	(-0.53, 0.52)	(-0.13, 1.05)
Relative Difference	96.07%	138.20%	73.24%	113.83%	-1.51%	133.34%
Rates (regression-adjusted)						
Baseline Enhanced MTM Rate	0.35	0.36	0.35	0.35	0.34	0.34
Intervention Period Enhanced MTM Rate	0.35	0.46	0.35	0.40	0.10	0.35
Baseline Comparison MTM Rate	0.58	0.59	0.58	0.58	0.56	0.56
Intervention Period Comparison MTM Rate	0.24	0.20	0.32	0.23	0.32	0.12

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 9,158 (4,412 beneficiaries). Number of comparison observations: 9,692 (4,739 beneficiaries).

B.4 Supplementary Findings on Model Impacts: Significant Service Receipt (SSR) Subgroup

This section presents additional information and findings on the estimated impacts of Enhanced MTM for the significant service receipt (SSR) subgroup presented in Section 3.3.3, including findings not reported in the main report.

- Appendix Section B.4.1 presents Model impacts on gross Medicare Parts A and B expenditures.
- Appendix Sections B.4.2 through B.4.3 present setting-specific Medicare expenditures and health service utilization.
- Appendix Section B.4.4 presents inpatient expenditures and admissions related to the ACSC Chronic Composite Measure.

B.4.1 Gross Medicare Parts A and B Expenditures

This subsection presents estimates of the Model impacts on gross Medicare Parts A and B expenditures for the SSR subgroup. Findings, both cumulative and by Model Year, are presented first for the Model as a whole, and then by individual sponsor. There is a total of 7 tables in this subsection.

Total Medicare Parts A and B expenditures for the SSR subgroup increased, both cumulatively and in all Model Years except in Model Year 1 where there was a significant decrease in expenditures both Modelwide and for two sponsors: SilverScript/CVS and Humana.

Table B.4.1: SSR Subgroup, Modelwide: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$56.28***	-\$15.41***	\$56.29***	\$84.27***	\$84.13***	\$90.00***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(49.25, 63.31)	(-23.70, -7.12)	(46.86, 65.71)	(74.35, 94.19)	(73.15, 95.10)	(78.50, 101.49)
Relative Difference	5.50%	-1.52%	5.56%	8.22%	8.16%	8.71%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$1,023.17	\$1,016.79	\$1,012.85	\$1,025.74	\$1,030.34	\$1,033.83
Intervention Period Enhanced MTM Mean	\$1,235.82	\$1,149.29	\$1,233.78	\$1,293.25	\$1,242.89	\$1,279.95
Baseline Comparison MTM Mean	\$961.26	\$958.35	\$950.73	\$962.16	\$966.79	\$971.35
Intervention Period Comparison MTM Mean	\$1,117.64	\$1,106.27	\$1,115.38	\$1,145.39	\$1,095.21	\$1,127.47

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.2: SSR Subgroup, SilverScript/CVS: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$38.29***	-\$29.05***	\$25.90***	\$53.29***	\$71.10***	\$81.64***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(29.68, 46.91)	(-38.94, -19.15)	(14.42, 37.39)	(40.81, 65.78)	(57.78, 84.41)	(67.34, 95.95)
Relative Difference	4.20%	-3.18%	2.85%	5.85%	7.80%	8.94%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$911.55	\$914.20	\$908.76	\$910.89	\$911.19	\$913.04
Intervention Period Enhanced MTM Mean	\$1,125.73	\$1,031.31	\$1,123.84	\$1,174.46	\$1,133.91	\$1,175.88
Baseline Comparison MTM Mean	\$900.95	\$903.38	\$892.42	\$899.61	\$903.50	\$907.55
Intervention Period Comparison MTM Mean	\$1,076.84	\$1,049.53	\$1,081.60	\$1,109.89	\$1,055.12	\$1,088.75

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.3: SSR Subgroup, Humana: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$113.86***	-\$23.40**	\$164.53***	\$200.62***	\$195.78***	\$197.75***
P-value	<0.001	0.018	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(95.26, 132.47)	(-42.75, -4.06)	(137.63, 191.43)	(170.63, 230.62)	(163.75, 227.81)	(163.09, 232.42)
Relative Difference	9.24%	-1.91%	13.40%	16.26%	15.73%	15.87%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$1,232.94	\$1,225.86	\$1,228.23	\$1,233.51	\$1,244.27	\$1,245.83
Intervention Period Enhanced MTM Mean	\$1,472.30	\$1,356.29	\$1,509.25	\$1,580.29	\$1,528.98	\$1,518.99
Baseline Comparison MTM Mean	\$1,105.26	\$1,103.85	\$1,097.59	\$1,106.51	\$1,110.64	\$1,113.15
Intervention Period Comparison MTM Mean	\$1,230.75	\$1,257.68	\$1,214.08	\$1,252.68	\$1,199.57	\$1,188.55

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.4: SSR Subgroup, BCBS NPA: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$122.20***	-\$3.65	\$133.76***	\$185.26***	\$169.27***	\$146.17***
P-value	<0.001	0.842	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(93.88, 150.52)	(-39.50, 32.20)	(100.27, 167.25)	(147.92, 222.60)	(121.56, 216.98)	(102.46, 189.89)
Relative Difference	13.53%	-0.41%	14.81%	20.48%	18.71%	16.16%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$903.09	\$899.49	\$902.95	\$904.43	\$904.78	\$904.62
Intervention Period Enhanced MTM Mean	\$1,230.41	\$1,042.28	\$1,239.99	\$1,319.99	\$1,258.88	\$1,332.16
Baseline Comparison MTM Mean	\$828.44	\$827.82	\$827.03	\$829.00	\$829.29	\$829.52
Intervention Period Comparison MTM Mean	\$1,033.56	\$974.26	\$1,030.30	\$1,059.30	\$1,014.13	\$1,110.89

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.5: SSR Subgroup, UnitedHealth: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$35.03***	\$7.10	\$35.51***	\$38.87***	\$39.85***	\$55.49***
P-value	<0.001	0.512	0.006	0.001	0.001	<0.001
95% Confidence Interval	(18.16, 51.90)	(-14.12, 28.32)	(10.16, 60.87)	(16.32, 61.42)	(16.31, 63.39)	(30.29, 80.69)
Relative Difference	3.22%	0.68%	3.38%	3.51%	3.60%	4.99%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$1,086.19	\$1,049.38	\$1,050.45	\$1,105.91	\$1,108.48	\$1,112.51
Intervention Period Enhanced MTM Mean	\$1,243.48	\$1,188.81	\$1,227.36	\$1,291.30	\$1,236.05	\$1,269.14
Baseline Comparison MTM Mean	\$1,027.79	\$1,011.06	\$1,012.98	\$1,033.11	\$1,037.59	\$1,043.27
Intervention Period Comparison MTM Mean	\$1,150.05	\$1,143.40	\$1,154.37	\$1,179.63	\$1,125.31	\$1,144.41

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.6: SSR Subgroup, WellCare: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$50.00***	\$9.84	\$52.71***	\$78.95***	\$56.07***	\$66.20***
P-value	<0.001	0.382	<0.001	<0.001	0.001	<0.001
95% Confidence Interval	(30.05, 69.95)	(-12.21, 31.89)	(26.61, 78.80)	(48.52, 109.37)	(22.76, 89.39)	(30.85, 101.55)
Relative Difference	4.28%	0.86%	4.57%	6.82%	4.71%	5.51%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$1,167.39	\$1,150.93	\$1,153.15	\$1,157.95	\$1,189.73	\$1,202.45
Intervention Period Enhanced MTM Mean	\$1,404.21	\$1,309.42	\$1,406.44	\$1,465.64	\$1,435.23	\$1,438.05
Baseline Comparison MTM Mean	\$1,011.92	\$1,006.29	\$999.62	\$1,002.76	\$1,024.01	\$1,038.02
Intervention Period Comparison MTM Mean	\$1,198.74	\$1,154.94	\$1,200.20	\$1,231.50	\$1,213.44	\$1,207.42

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.7: SSR Subgroup, BCBS FL: Parts A and B Expenditures, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$112.52***	-\$19.34	\$93.05***	\$201.66***	\$140.46***	\$178.84***
P-value	<0.001	0.364	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(76.73, 148.32)	(-61.07, 22.40)	(46.30, 139.80)	(153.15, 250.18)	(83.56, 197.35)	(111.02, 246.66)
Relative Difference	10.81%	-1.86%	8.95%	19.40%	13.46%	17.13%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$1,041.09	\$1,039.84	\$1,039.57	\$1,039.72	\$1,043.42	\$1,043.81
Intervention Period Enhanced MTM Mean	\$1,404.15	\$1,230.80	\$1,354.12	\$1,514.86	\$1,426.55	\$1,546.67
Baseline Comparison MTM Mean	\$920.81	\$922.53	\$921.78	\$921.10	\$918.60	\$919.32
Intervention Period Comparison MTM Mean	\$1,171.35	\$1,132.82	\$1,143.29	\$1,194.57	\$1,161.26	\$1,243.35

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

B.4.2 Setting-specific Medicare Expenditures

This subsection presents the Model impacts on Medicare expenditures by service delivery setting for the SSR subgroup. There is a total of 35 tables in this subsection. Findings for the Model as a whole and by individual sponsor are presented both cumulative and by Model Year for five service delivery settings in the following sequential subsections:

- Inpatient services
- Institutional post-acute care
- Emergency department (ED)
- Outpatient services excluding ED
- Ancillary services

Modelwide, there were increases in expenditures across most health service settings cumulatively and in each Model Year for the SSR subgroup, except for Model Year 1. Sponsor-level estimates were generally consistent with the Modelwide findings.

Inpatient Services

Table B.4.8: SSR Subgroup, Modelwide: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$14.45***	-\$14.15***	\$16.08***	\$27.15***	\$26.35***	\$22.96***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(10.78, 18.12)	(-18.95, -9.36)	(10.90, 21.25)	(21.80, 32.50)	(20.89, 31.81)	(17.15, 28.76)
Relative Difference	4.78%	-4.69%	5.37%	8.96%	8.68%	7.55%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$302.13	\$301.57	\$299.19	\$302.88	\$303.67	\$303.98
Intervention Period Enhanced MTM Mean	\$369.71	\$358.69	\$374.90	\$389.80	\$367.61	\$355.62
Baseline Comparison MTM Mean	\$275.70	\$275.09	\$272.31	\$276.21	\$277.37	\$278.33
Intervention Period Comparison MTM Mean	\$328.83	\$346.36	\$331.95	\$335.98	\$314.96	\$307.02

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.9: SSR Subgroup, SilverScript/CVS: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$11.19***	-\$17.66***	\$8.01**	\$16.51***	\$26.45***	\$27.00***
P-value	<0.001	<0.001	0.018	<0.001	<0.001	<0.001
95% Confidence Interval	(6.44, 15.93)	(-23.76, -11.56)	(1.38, 14.64)	(9.49, 23.54)	(19.34, 33.56)	(19.34, 34.66)
Relative Difference	4.22%	-6.55%	3.02%	6.26%	10.08%	10.30%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$264.85	\$269.71	\$265.55	\$263.84	\$262.27	\$262.09
Intervention Period Enhanced MTM Mean	\$333.67	\$319.36	\$341.83	\$348.19	\$332.80	\$324.09
Baseline Comparison MTM Mean	\$262.65	\$265.41	\$260.76	\$261.82	\$262.20	\$263.15
Intervention Period Comparison MTM Mean	\$320.28	\$332.72	\$329.02	\$329.66	\$306.29	\$298.14

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.10: SSR Subgroup, Humana: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$33.74***	-\$19.12***	\$56.77***	\$73.38***	\$67.99***	\$48.12***
P-value	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(23.78, 43.70)	(-31.19, -7.05)	(42.04, 71.51)	(57.24, 89.53)	(50.97, 85.02)	(29.90, 66.35)
Relative Difference	8.71%	-4.93%	14.67%	18.98%	17.54%	12.44%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$387.25	\$387.69	\$387.10	\$386.56	\$387.62	\$386.74
Intervention Period Enhanced MTM Mean	\$470.20	\$447.88	\$486.07	\$506.68	\$480.93	\$442.89
Baseline Comparison MTM Mean	\$336.98	\$338.04	\$335.68	\$337.22	\$336.43	\$336.39
Intervention Period Comparison MTM Mean	\$386.19	\$417.36	\$377.88	\$383.96	\$361.75	\$344.41

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.11: SSR Subgroup, BCBS NPA: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$30.95***	-\$14.42*	\$44.76***	\$59.66***	\$44.99***	\$22.09**
P-value	<0.001	0.075	<0.001	<0.001	<0.001	0.034
95% Confidence Interval	(17.68, 44.22)	(-30.31, 1.48)	(27.24, 62.28)	(42.41, 76.91)	(27.38, 62.59)	(1.70, 42.48)
Relative Difference	12.12%	-5.68%	17.53%	23.30%	17.59%	8.64%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$255.32	\$254.00	\$255.36	\$256.01	\$255.80	\$255.69
Intervention Period Enhanced MTM Mean	\$344.58	\$301.71	\$362.12	\$380.36	\$340.79	\$338.93
Baseline Comparison MTM Mean	\$223.26	\$223.26	\$222.94	\$223.29	\$223.42	\$223.46
Intervention Period Comparison MTM Mean	\$281.56	\$285.39	\$284.94	\$287.98	\$263.43	\$284.62

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.12: SSR Subgroup, UnitedHealth: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	-\$1.83	-\$10.14	-\$6.24	\$2.68	\$1.67	\$2.17
P-value	0.692	0.129	0.375	0.688	0.795	0.744
95% Confidence Interval	(-10.90, 7.24)	(-23.24, 2.97)	(-20.03, 7.55)	(-10.39, 15.74)	(-10.95, 14.30)	(-10.84, 15.18)
Relative Difference	-0.58%	-3.40%	-2.09%	0.82%	0.51%	0.67%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$314.97	\$298.52	\$298.82	\$324.95	\$325.54	\$324.77
Intervention Period Enhanced MTM Mean	\$365.11	\$361.68	\$354.17	\$389.14	\$364.24	\$350.63
Baseline Comparison MTM Mean	\$276.37	\$264.39	\$264.75	\$282.76	\$283.95	\$284.59
Intervention Period Comparison MTM Mean	\$328.34	\$337.69	\$326.34	\$344.27	\$320.98	\$308.28

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.13: SSR Subgroup, WellCare: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$25.73***	\$5.04	\$29.00***	\$39.93***	\$27.31***	\$34.03***
P-value	<0.001	0.466	<0.001	<0.001	0.004	<0.001
95% Confidence Interval	(14.89, 36.57)	(-8.53, 18.61)	(14.10, 43.90)	(23.38, 56.48)	(8.52, 46.09)	(15.13, 52.93)
Relative Difference	7.12%	1.42%	8.13%	11.15%	7.38%	9.16%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$361.30	\$355.84	\$356.70	\$358.00	\$369.83	\$371.62
Intervention Period Enhanced MTM Mean	\$448.65	\$428.19	\$454.07	\$468.51	\$455.39	\$439.44
Baseline Comparison MTM Mean	\$304.25	\$303.34	\$300.33	\$301.10	\$309.05	\$310.26
Intervention Period Comparison MTM Mean	\$365.87	\$370.64	\$368.69	\$371.67	\$367.30	\$344.05

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.14: SSR Subgroup, BCBS FL: Expenditures for Inpatient Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$34.69***	- \$14.39	\$19.33	\$72.36***	\$44.85***	\$64.69***
P-value	<0.001	0.237	0.118	<0.001	0.002	<0.001
95% Confidence Interval	(17.47, 51.92)	(-38.23, 9.44)	(-4.91, 43.57)	(47.94, 96.79)	(16.36, 73.34)	(37.03, 92.34)
Relative Difference	12.72%	-5.29%	7.10%	26.60%	16.38%	23.60%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$272.81	\$272.25	\$272.18	\$272.02	\$273.90	\$274.11
Intervention Period Enhanced MTM Mean	\$407.04	\$361.48	\$388.57	\$445.59	\$418.41	\$433.85
Baseline Comparison MTM Mean	\$219.54	\$219.89	\$219.84	\$219.64	\$219.02	\$219.16
Intervention Period Comparison MTM Mean	\$319.09	\$323.51	\$316.90	\$320.84	\$318.68	\$314.21

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Institutional Post-acute Care

Table B.4.15: SSR Subgroup, Modelwide: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$5.00***	-\$10.88***	\$6.30***	\$13.43***	\$9.22***	\$10.21***
P-value	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.34, 7.65)	(-14.60, -7.15)	(2.72, 9.89)	(9.91, 16.95)	(4.46, 13.97)	(5.83, 14.59)
Relative Difference	4.90%	-10.70%	6.27%	13.04%	8.97%	9.94%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$102.06	\$101.65	\$100.51	\$102.95	\$102.77	\$102.66
Intervention Period Enhanced MTM Mean	\$147.10	\$129.64	\$145.32	\$153.48	\$158.87	\$152.39
Baseline Comparison MTM Mean	\$107.90	\$108.00	\$106.54	\$108.20	\$108.29	\$108.65
Intervention Period Comparison MTM Mean	\$147.95	\$146.87	\$145.04	\$145.30	\$155.17	\$148.17

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.16: SSR Subgroup, SilverScript/CVS: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	-\$0.48	-\$17.33***	-\$2.83	\$5.58**	\$7.43***	\$6.90***
P-value	0.746	<0.001	0.179	0.010	0.002	0.005
95% Confidence Interval	(-3.39, 2.43)	(-21.14, -13.53)	(-6.95, 1.30)	(1.31, 9.84)	(2.78, 12.08)	(2.10, 11.71)
Relative Difference	-0.61%	-21.46%	-3.56%	7.09%	9.53%	8.92%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$78.91	\$80.78	\$79.37	\$78.68	\$77.97	\$77.38
Intervention Period Enhanced MTM Mean	\$123.98	\$104.15	\$121.63	\$129.86	\$136.19	\$130.34
Baseline Comparison MTM Mean	\$93.26	\$94.09	\$92.42	\$92.94	\$93.33	\$93.65
Intervention Period Comparison MTM Mean	\$138.81	\$134.79	\$137.51	\$138.54	\$144.12	\$139.71

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.17: SSR Subgroup, Humana: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$12.69***	-\$11.28***	\$22.77***	\$26.01***	\$23.99***	\$31.74***
P-value	<0.001	0.004	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(6.16, 19.23)	(-19.06, -3.50)	(13.37, 32.17)	(16.01, 36.00)	(12.94, 35.03)	(20.09, 43.40)
Relative Difference	10.05%	-8.91%	18.04%	20.56%	19.03%	25.22%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$126.35	\$126.66	\$126.21	\$126.46	\$126.04	\$125.88
Intervention Period Enhanced MTM Mean	\$176.50	\$157.61	\$179.86	\$186.53	\$196.59	\$185.60
Baseline Comparison MTM Mean	\$130.15	\$131.22	\$129.86	\$130.07	\$129.14	\$128.93
Intervention Period Comparison MTM Mean	\$167.60	\$173.45	\$160.73	\$164.13	\$175.70	\$156.91

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.18: SSR Subgroup, BCBS NPA: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$34.66***	\$4.87	\$42.42***	\$55.79***	\$39.03**	\$33.40***
P-value	<0.001	0.657	<0.001	<0.001	0.011	0.003
95% Confidence Interval	(20.80, 48.51)	(-16.59, 26.32)	(27.37, 57.46)	(39.73, 71.84)	(8.79, 69.27)	(11.65, 55.14)
Relative Difference	32.67%	4.60%	39.99%	52.47%	36.78%	31.48%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$106.06	\$105.76	\$106.07	\$106.32	\$106.11	\$106.07
Intervention Period Enhanced MTM Mean	\$181.52	\$140.24	\$182.72	\$195.32	\$202.80	\$194.94
Baseline Comparison MTM Mean	\$106.66	\$106.66	\$106.04	\$106.89	\$106.88	\$106.92
Intervention Period Comparison MTM Mean	\$147.46	\$136.27	\$140.27	\$140.11	\$164.55	\$162.39

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.19: SSR Subgroup, UnitedHealth: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	-\$4.97*	-\$6.13	-\$6.34	-\$4.41	-\$8.39**	\$0.89
P-value	0.092	0.144	0.195	0.255	0.039	0.831
95% Confidence Interval	(-10.75, 0.81)	(-14.37, 2.10)	(-15.92, 3.25)	(-12.00, 3.19)	(-16.35, -0.43)	(-7.33, 9.12)
Relative Difference	-4.19%	-5.53%	-5.72%	-3.57%	-6.82%	0.73%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$118.54	\$111.00	\$110.73	\$123.57	\$123.10	\$123.16
Intervention Period Enhanced MTM Mean	\$144.25	\$138.76	\$138.30	\$146.39	\$151.02	\$145.82
Baseline Comparison MTM Mean	\$116.16	\$113.13	\$112.93	\$118.15	\$117.87	\$118.27
Intervention Period Comparison MTM Mean	\$146.83	\$147.02	\$146.84	\$145.39	\$154.18	\$140.04

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.20: SSR Subgroup, WellCare: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$7.44**	- \$0.17	\$10.26**	\$15.28***	\$8.62	\$3.73
P-value	0.049	0.972	0.047	0.006	0.167	0.555
95% Confidence Interval	(0.04, 14.84)	(-9.33, 9.00)	(0.16, 20.35)	(4.42, 26.15)	(-3.61, 20.86)	(-8.64, 16.10)
Relative Difference	5.38%	-0.12%	7.47%	11.01%	6.14%	2.66%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$138.34	\$136.22	\$137.21	\$138.77	\$140.54	\$140.35
Intervention Period Enhanced MTM Mean	\$190.17	\$170.07	\$188.70	\$196.33	\$210.88	\$192.54
Baseline Comparison MTM Mean	\$122.77	\$121.57	\$121.10	\$122.79	\$124.11	\$125.72
Intervention Period Comparison MTM Mean	\$167.16	\$155.58	\$162.33	\$165.07	\$185.82	\$174.18

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.21: SSR Subgroup, BCBS FL: Expenditures for Institutional Post-acute Care, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$8.21	-\$25.79***	\$7.40	\$38.19***	\$11.02	\$16.34
P-value	0.237	0.001	0.414	<0.001	0.286	0.332
95% Confidence Interval	(-5.39, 21.80)	(-41.70, -9.88)	(-10.35, 25.14)	(21.28, 55.11)	(-9.22, 31.25)	(-16.65, 49.32)
Relative Difference	9.63%	-30.26%	8.69%	44.97%	12.91%	19.11%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$85.20	\$85.23	\$85.13	\$84.93	\$85.31	\$85.47
Intervention Period Enhanced MTM Mean	\$150.74	\$118.61	\$145.91	\$173.10	\$149.38	\$175.34
Baseline Comparison MTM Mean	\$102.51	\$103.03	\$102.69	\$102.60	\$101.91	\$102.12
Intervention Period Comparison MTM Mean	\$159.84	\$162.20	\$156.08	\$152.58	\$154.97	\$175.66

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Emergency Department

Table B.4.22: SSR Subgroup, Modelwide: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.66***	\$1.44***	\$2.77***	\$3.55***	\$2.76***	\$2.99***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.38, 2.94)	(1.11, 1.77)	(2.38, 3.15)	(3.17, 3.94)	(2.39, 3.14)	(2.59, 3.39)
Relative Difference	7.86%	4.28%	8.32%	10.42%	8.08%	8.78%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$33.80	\$33.61	\$33.22	\$34.08	\$34.19	\$34.03
Intervention Period Enhanced MTM Mean	\$35.48	\$37.50	\$37.51	\$38.84	\$30.46	\$31.58
Baseline Comparison MTM Mean	\$32.09	\$32.06	\$31.60	\$32.28	\$32.33	\$32.22
Intervention Period Comparison MTM Mean	\$31.10	\$34.50	\$33.14	\$33.49	\$25.84	\$26.78

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.23: SSR Subgroup, SilverScript/CVS: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.76***	\$1.46***	\$2.70***	\$3.26***	\$3.21***	\$3.31***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.40, 3.12)	(1.03, 1.88)	(2.22, 3.19)	(2.76, 3.76)	(2.72, 3.69)	(2.80, 3.83)
Relative Difference	8.93%	4.57%	8.70%	10.61%	10.53%	10.96%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$30.92	\$31.90	\$31.10	\$30.74	\$30.46	\$30.21
Intervention Period Enhanced MTM Mean	\$33.23	\$35.63	\$36.29	\$36.07	\$27.99	\$28.85
Baseline Comparison MTM Mean	\$31.21	\$32.12	\$31.26	\$31.02	\$30.82	\$30.67
Intervention Period Comparison MTM Mean	\$30.76	\$34.39	\$33.75	\$33.09	\$25.15	\$26.00

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.24: SSR Subgroup, Humana: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$4.71***	\$1.84***	\$6.05***	\$6.98***	\$5.38***	\$6.62***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(3.85, 5.56)	(0.89, 2.79)	(4.83, 7.27)	(5.64, 8.32)	(4.10, 6.66)	(5.18, 8.06)
Relative Difference	10.24%	3.99%	13.19%	15.20%	11.74%	14.49%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$45.95	\$46.15	\$45.88	\$45.92	\$45.86	\$45.68
Intervention Period Enhanced MTM Mean	\$47.67	\$50.25	\$50.24	\$50.77	\$39.99	\$41.33
Baseline Comparison MTM Mean	\$41.98	\$42.36	\$41.79	\$41.93	\$41.72	\$41.60
Intervention Period Comparison MTM Mean	\$39.00	\$44.63	\$40.10	\$39.80	\$30.48	\$30.64

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.25: SSR Subgroup, BCBS NPA: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$3.36***	\$0.62	\$2.62***	\$5.07***	\$4.97***	\$4.14***
P-value	<0.001	0.191	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.58, 4.15)	(-0.31, 1.55)	(1.54, 3.70)	(3.96, 6.18)	(3.86, 6.08)	(2.84, 5.43)
Relative Difference	14.92%	2.76%	11.62%	22.48%	22.02%	18.34%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$22.53	\$22.46	\$22.53	\$22.55	\$22.58	\$22.56
Intervention Period Enhanced MTM Mean	\$30.38	\$26.49	\$30.85	\$34.06	\$29.13	\$31.91
Baseline Comparison MTM Mean	\$22.32	\$22.27	\$22.26	\$22.34	\$22.37	\$22.37
Intervention Period Comparison MTM Mean	\$26.79	\$25.68	\$27.95	\$28.77	\$23.95	\$27.58

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.26: SSR Subgroup, UnitedHealth: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.53***	\$1.35***	\$1.77***	\$2.17***	\$0.92**	\$1.43***
P-value	<0.001	0.002	<0.001	<0.001	0.027	0.001
95% Confidence Interval	(0.89, 2.18)	(0.48, 2.22)	(0.81, 2.72)	(1.34, 2.99)	(0.11, 1.73)	(0.56, 2.30)
Relative Difference	4.66%	4.64%	6.09%	6.09%	2.59%	4.08%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$32.94	\$29.04	\$29.01	\$35.54	\$35.50	\$35.00
Intervention Period Enhanced MTM Mean	\$32.98	\$32.63	\$32.11	\$38.82	\$29.68	\$30.66
Baseline Comparison MTM Mean	\$30.59	\$27.78	\$27.75	\$32.50	\$32.45	\$32.03
Intervention Period Comparison MTM Mean	\$29.09	\$30.02	\$29.09	\$33.62	\$25.71	\$26.26

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.27: SSR Subgroup, WellCare: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.26***	\$1.89***	\$3.13***	\$3.07***	\$0.89	\$2.09***
P-value	<0.001	<0.001	<0.001	<0.001	0.182	0.003
95% Confidence Interval	(1.34, 3.18)	(0.89, 2.88)	(1.95, 4.31)	(1.70, 4.44)	(-0.42, 2.20)	(0.69, 3.48)
Relative Difference	5.17%	4.38%	7.27%	7.08%	1.97%	4.68%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$43.74	\$43.15	\$43.04	\$43.41	\$45.18	\$44.55
Intervention Period Enhanced MTM Mean	\$45.15	\$47.33	\$48.48	\$48.49	\$38.95	\$39.40
Baseline Comparison MTM Mean	\$36.61	\$36.37	\$36.06	\$36.36	\$37.53	\$37.11
Intervention Period Comparison MTM Mean	\$35.76	\$38.66	\$38.37	\$38.36	\$30.42	\$29.87

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.28: SSR Subgroup, BCBS FL: Expenditures for Emergency Department, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$3.81***	\$1.46**	\$3.12***	\$5.80***	\$4.02***	\$5.29***
P-value	<0.001	0.032	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.70, 4.93)	(0.12, 2.80)	(1.69, 4.56)	(4.16, 7.43)	(2.49, 5.56)	(3.73, 6.86)
Relative Difference	16.19%	6.23%	13.30%	24.67%	16.96%	22.29%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$23.57	\$23.45	\$23.50	\$23.50	\$23.72	\$23.75
Intervention Period Enhanced MTM Mean	\$31.21	\$28.62	\$32.52	\$35.74	\$27.89	\$31.33
Baseline Comparison MTM Mean	\$20.51	\$20.51	\$20.51	\$20.51	\$20.51	\$20.50
Intervention Period Comparison MTM Mean	\$24.34	\$24.22	\$26.40	\$26.96	\$20.66	\$22.78

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Outpatient Services Excluding Emergency Department (ED)

Table B.4.29: SSR Subgroup, Modelwide: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$10.96***	\$6.38***	\$13.10***	\$12.47***	\$9.71***	\$14.24***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(9.56, 12.35)	(4.76, 8.00)	(11.28, 14.91)	(10.57, 14.36)	(7.80, 11.62)	(12.11, 16.38)
Relative Difference	4.36%	2.58%	5.25%	4.94%	3.82%	5.57%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$251.31	\$247.05	\$249.22	\$252.18	\$254.07	\$255.70
Intervention Period Enhanced MTM Mean	\$273.44	\$257.70	\$276.47	\$284.46	\$256.87	\$297.07
Baseline Comparison MTM Mean	\$218.17	\$215.07	\$215.78	\$218.70	\$220.53	\$222.23
Intervention Period Comparison MTM Mean	\$229.34	\$219.35	\$229.94	\$238.52	\$213.62	\$249.36

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.30: SSR Subgroup, SilverScript/CVS: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$9.85***	\$5.19***	\$10.14***	\$11.18***	\$9.24***	\$14.30***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(8.18, 11.51)	(3.22, 7.16)	(7.94, 12.34)	(8.78, 13.57)	(6.79, 11.69)	(11.59, 17.01)
Relative Difference	4.14%	2.24%	4.31%	4.67%	3.82%	5.88%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$238.04	\$231.92	\$235.29	\$239.53	\$241.66	\$243.17
Intervention Period Enhanced MTM Mean	\$260.02	\$242.28	\$259.67	\$271.00	\$246.04	\$284.99
Baseline Comparison MTM Mean	\$211.94	\$206.89	\$208.23	\$213.05	\$215.63	\$217.33
Intervention Period Comparison MTM Mean	\$224.08	\$212.07	\$222.47	\$233.34	\$210.77	\$244.85

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.31: SSR Subgroup, Humana: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$20.51***	\$6.03***	\$28.73***	\$28.07***	\$23.47***	\$34.03***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(17.37, 23.64)	(2.69, 9.38)	(24.27, 33.20)	(23.19, 32.95)	(18.30, 28.65)	(28.00, 40.05)
Relative Difference	7.88%	2.38%	11.10%	10.69%	8.77%	12.61%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$260.34	\$253.64	\$258.78	\$262.53	\$267.64	\$269.77
Intervention Period Enhanced MTM Mean	\$292.43	\$262.27	\$305.93	\$315.00	\$287.67	\$330.43
Baseline Comparison MTM Mean	\$208.67	\$203.58	\$205.62	\$210.59	\$215.22	\$217.22
Intervention Period Comparison MTM Mean	\$220.25	\$206.17	\$224.03	\$234.99	\$211.78	\$243.85

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.32: SSR Subgroup, BCBS NPA: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$16.73***	\$9.23***	\$22.84***	\$21.35***	\$12.18***	\$18.24***
P-value	<0.001	0.004	<0.001	<0.001	0.001	<0.001
95% Confidence Interval	(10.81, 22.64)	(2.99, 15.47)	(16.06, 29.62)	(13.76, 28.94)	(4.67, 19.69)	(9.62, 26.86)
Relative Difference	6.91%	3.83%	9.43%	8.81%	5.02%	7.52%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$242.14	\$241.15	\$242.21	\$242.47	\$242.57	\$242.50
Intervention Period Enhanced MTM Mean	\$277.37	\$258.78	\$286.74	\$291.84	\$253.16	\$300.44
Baseline Comparison MTM Mean	\$212.06	\$211.75	\$211.74	\$212.15	\$212.35	\$212.47
Intervention Period Comparison MTM Mean	\$230.57	\$220.15	\$233.44	\$240.18	\$210.77	\$252.16

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.33: SSR Subgroup, UnitedHealth: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$12.03***	\$7.70***	\$14.21***	\$11.12***	\$13.09***	\$14.67***
P-value	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(8.25, 15.81)	(2.84, 12.56)	(8.73, 19.69)	(6.58, 15.65)	(8.59, 17.59)	(9.60, 19.74)
Relative Difference	4.50%	2.89%	5.31%	4.18%	4.88%	5.43%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$267.52	\$266.43	\$267.45	\$266.03	\$267.93	\$270.19
Intervention Period Enhanced MTM Mean	\$280.10	\$273.83	\$285.91	\$284.67	\$259.48	\$299.20
Baseline Comparison MTM Mean	\$242.80	\$245.14	\$246.08	\$239.00	\$241.12	\$243.59
Intervention Period Comparison MTM Mean	\$243.34	\$244.84	\$250.33	\$246.52	\$219.58	\$257.94

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.34: SSR Subgroup, WellCare: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$4.59**	\$6.04***	\$7.17***	\$6.24**	- \$0.33	\$1.90
P-value	0.011	0.005	0.002	0.018	0.902	0.534
95% Confidence Interval	(1.07, 8.11)	(1.85, 10.22)	(2.54, 11.80)	(1.05, 11.44)	(-5.62, 4.96)	(-4.09, 7.89)
Relative Difference	1.79%	2.40%	2.82%	2.45%	-0.13%	0.72%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$255.94	\$251.65	\$253.82	\$254.62	\$258.43	\$265.13
Intervention Period Enhanced MTM Mean	\$272.01	\$264.60	\$274.36	\$282.09	\$252.91	\$290.16
Baseline Comparison MTM Mean	\$211.02	\$209.17	\$209.62	\$210.09	\$211.12	\$217.40
Intervention Period Comparison MTM Mean	\$222.51	\$216.09	\$222.99	\$231.32	\$205.94	\$240.54

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.35: SSR Subgroup, BCBS FL: Expenditures for Outpatient Non-ED Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$17.67***	\$7.03	\$17.76***	\$22.36***	\$18.87***	\$25.06***
P-value	<0.001	0.121	<0.001	<0.001	0.001	<0.001
95% Confidence Interval	(10.06, 25.27)	(-1.85, 15.91)	(8.47, 27.05)	(12.49, 32.22)	(7.95, 29.79)	(14.03, 36.09)
Relative Difference	5.92%	2.36%	5.95%	7.49%	6.31%	8.38%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$298.69	\$298.39	\$298.50	\$298.56	\$299.12	\$299.04
Intervention Period Enhanced MTM Mean	\$325.48	\$309.78	\$323.04	\$340.45	\$309.03	\$350.38
Baseline Comparison MTM Mean	\$250.90	\$250.95	\$250.91	\$250.90	\$250.72	\$251.04
Intervention Period Comparison MTM Mean	\$260.03	\$255.31	\$257.69	\$270.44	\$241.75	\$277.33

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Ancillary Services

Table B.4.36: SSR Subgroup, Modelwide: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$5.35***	\$1.96***	\$4.99***	\$5.94***	\$6.74***	\$8.25***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(4.74, 5.95)	(1.31, 2.61)	(4.21, 5.77)	(5.08, 6.80)	(5.83, 7.65)	(7.23, 9.27)
Relative Difference	4.64%	1.72%	4.35%	5.14%	5.80%	7.06%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$115.40	\$114.28	\$114.68	\$115.49	\$116.21	\$116.86
Intervention Period Enhanced MTM Mean	\$123.99	\$116.58	\$123.82	\$127.44	\$122.25	\$132.32
Baseline Comparison MTM Mean	\$102.70	\$102.16	\$101.95	\$102.74	\$103.23	\$103.75
Intervention Period Comparison MTM Mean	\$105.94	\$102.50	\$106.09	\$108.76	\$102.54	\$110.96

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.37: SSR Subgroup, SilverScript/CVS: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$5.30***	\$1.80***	\$4.10***	\$5.66***	\$6.76***	\$9.03***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(4.56, 6.03)	(0.98, 2.62)	(3.18, 5.02)	(4.59, 6.74)	(5.62, 7.90)	(7.75, 10.32)
Relative Difference	4.88%	1.68%	3.80%	5.20%	6.17%	8.21%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$108.59	\$107.17	\$107.75	\$108.83	\$109.50	\$110.06
Intervention Period Enhanced MTM Mean	\$118.25	\$110.03	\$117.56	\$122.29	\$116.33	\$126.58
Baseline Comparison MTM Mean	\$99.49	\$98.72	\$98.40	\$99.63	\$100.25	\$100.77
Intervention Period Comparison MTM Mean	\$103.86	\$99.78	\$104.11	\$107.42	\$100.32	\$108.26

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.38: SSR Subgroup, Humana: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$7.61***	\$0.24	\$9.93***	\$11.00***	\$12.10***	\$14.45***
P-value	<0.001	0.758	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(6.06, 9.15)	(-1.27, 1.74)	(7.81, 12.05)	(8.48, 13.52)	(9.33, 14.87)	(11.32, 17.57)
Relative Difference	5.98%	0.19%	7.85%	8.61%	9.32%	11.07%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$127.22	\$125.09	\$126.44	\$127.82	\$129.79	\$130.52
Intervention Period Enhanced MTM Mean	\$138.41	\$126.14	\$142.27	\$145.94	\$142.13	\$151.81
Baseline Comparison MTM Mean	\$104.31	\$102.93	\$103.24	\$104.82	\$106.18	\$106.89
Intervention Period Comparison MTM Mean	\$107.89	\$103.74	\$109.14	\$111.95	\$106.41	\$113.74

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.39: SSR Subgroup, BCBS NPA: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$9.66***	\$5.48***	\$10.59***	\$12.46***	\$10.15***	\$10.05***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(7.39, 11.93)	(3.21, 7.75)	(7.80, 13.39)	(9.34, 15.57)	(6.70, 13.59)	(6.36, 13.73)
Relative Difference	9.09%	5.17%	9.97%	11.72%	9.54%	9.45%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$106.23	\$105.97	\$106.24	\$106.28	\$106.35	\$106.34
Intervention Period Enhanced MTM Mean	\$122.11	\$110.78	\$122.13	\$126.03	\$121.96	\$133.08
Baseline Comparison MTM Mean	\$94.04	\$93.90	\$94.00	\$94.09	\$94.10	\$94.14
Intervention Period Comparison MTM Mean	\$100.26	\$93.23	\$99.29	\$101.38	\$99.57	\$110.82

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.40: SSR Subgroup, UnitedHealth: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$5.43***	\$2.57**	\$5.54***	\$5.01***	\$6.59***	\$7.75***
P-value	<0.001	0.013	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(3.78, 7.09)	(0.54, 4.59)	(3.17, 7.91)	(2.92, 7.09)	(4.41, 8.77)	(5.19, 10.31)
Relative Difference	4.49%	2.12%	4.57%	4.16%	5.45%	6.36%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$121.01	\$120.81	\$121.17	\$120.45	\$120.91	\$121.88
Intervention Period Enhanced MTM Mean	\$124.95	\$121.37	\$124.68	\$126.29	\$121.24	\$131.80
Baseline Comparison MTM Mean	\$113.88	\$115.61	\$115.75	\$112.30	\$112.72	\$113.39
Intervention Period Comparison MTM Mean	\$112.39	\$113.60	\$113.72	\$113.13	\$106.46	\$115.55

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.41: SSR Subgroup, WellCare: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$3.15***	\$0.98	\$3.09***	\$3.21***	\$4.28***	\$5.37***
P-value	<0.001	0.235	0.003	0.009	0.002	<0.001
95% Confidence Interval	(1.58, 4.71)	(-0.64, 2.61)	(1.05, 5.13)	(0.80, 5.61)	(1.58, 6.98)	(2.56, 8.17)
Relative Difference	2.67%	0.85%	2.66%	2.74%	3.57%	4.38%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$117.67	\$115.18	\$116.28	\$116.96	\$119.76	\$122.40
Intervention Period Enhanced MTM Mean	\$125.74	\$117.71	\$125.84	\$128.20	\$126.14	\$135.14
Baseline Comparison MTM Mean	\$100.97	\$100.27	\$100.26	\$100.55	\$101.44	\$103.24
Intervention Period Comparison MTM Mean	\$105.90	\$101.83	\$106.73	\$108.58	\$103.54	\$110.61

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.42: SSR Subgroup, BCBS FL: Expenditures for Ancillary Services, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$5.93***	\$1.08	\$5.30***	\$7.12***	\$8.26***	\$9.30***
P-value	<0.001	0.491	0.002	0.001	<0.001	<0.001
95% Confidence Interval	(3.05, 8.80)	(-1.99, 4.14)	(1.89, 8.71)	(3.07, 11.17)	(4.03, 12.48)	(4.53, 14.07)
Relative Difference	4.47%	0.81%	4.00%	5.37%	6.23%	7.02%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$132.54	\$132.58	\$132.56	\$132.56	\$132.53	\$132.46
Intervention Period Enhanced MTM Mean	\$141.77	\$134.48	\$140.34	\$146.79	\$140.01	\$149.44
Baseline Comparison MTM Mean	\$107.45	\$107.65	\$107.55	\$107.47	\$107.23	\$107.26
Intervention Period Comparison MTM Mean	\$110.74	\$108.47	\$110.02	\$114.58	\$106.45	\$114.94

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

B.4.3 Health Service Utilization

This subsection presents the Model impacts on eight health service utilization measures for the SSR subgroup, first for the Model as a whole, and then by individual sponsor. There is a total of 56 tables in this subsection. Findings, both cumulative and by Model Year, are presented following sequential subsections:

- Inpatient Admissions
- Inpatient Length of Stay
- Hospital Readmissions
- Skilled Nursing Facility Admissions
- Skilled Nursing Facility Length of Stay
- Emergency Department Visits
- Outpatient Non-Emergency Department Visits
- Evaluation and Management Visits

For the Model as a whole, estimated impacts on utilization of health services were consistent with the impacts on gross Medicare Parts A and B expenditures for the SSR subgroup, and generally showed increases in utilization. By individual sponsor, the estimated impacts on utilization were mixed.

Inpatient Admissions

Table B.4.43: SSR Subgroup, Modelwide: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.78***	-0.07	1.83***	2.70***	2.48***	2.33***
P-value	<0.001	0.663	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.54, 2.02)	(-0.37, 0.24)	(1.50, 2.17)	(2.36, 3.04)	(2.14, 2.82)	(1.97, 2.69)
Relative Difference	6.71%	-0.26%	6.99%	10.17%	9.32%	8.77%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	26.47	26.47	26.22	26.56	26.60	26.55
Intervention Period Enhanced MTM Mean	30.73	31.09	31.82	32.82	28.76	28.43
Baseline Comparison MTM Mean	24.17	24.18	23.90	24.23	24.28	24.29
Intervention Period Comparison MTM Mean	26.65	28.87	27.67	27.79	23.97	23.84

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.44: SSR Subgroup, SilverScript/CVS: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.58***	-0.35*	1.34***	2.04***	2.49***	2.65***
P-value	<0.001	0.060	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.28, 1.87)	(-0.72, 0.01)	(0.93, 1.74)	(1.61, 2.47)	(2.06, 2.92)	(2.19, 3.11)
Relative Difference	6.81%	-1.49%	5.75%	8.86%	10.88%	11.60%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	23.16	23.63	23.23	23.08	22.92	22.84
Intervention Period Enhanced MTM Mean	27.77	27.82	29.14	29.55	25.99	25.79
Baseline Comparison MTM Mean	22.93	23.28	22.82	22.86	22.82	22.84
Intervention Period Comparison MTM Mean	25.96	27.82	27.39	27.28	23.39	23.14

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.45: SSR Subgroup, Humana: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	3.65***	0.49	5.11***	6.17***	5.52***	4.39***
P-value	<0.001	0.222	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.96, 4.34)	(-0.29, 1.27)	(4.12, 6.10)	(5.10, 7.24)	(4.43, 6.60)	(3.26, 5.53)
Relative Difference	10.34%	1.38%	14.48%	17.51%	15.68%	12.52%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	35.30	35.45	35.27	35.24	35.19	35.11
Intervention Period Enhanced MTM Mean	39.77	40.22	41.36	42.23	37.45	35.32
Baseline Comparison MTM Mean	30.72	30.94	30.59	30.71	30.58	30.50
Intervention Period Comparison MTM Mean	31.54	35.21	31.58	31.53	27.33	26.32

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.46: SSR Subgroup, BCBS NPA: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	2.77***	-1.18**	4.04***	4.48***	4.44***	2.42***
P-value	<0.001	0.046	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.85, 3.70)	(-2.34, -0.02)	(2.91, 5.16)	(3.32, 5.64)	(3.12, 5.76)	(1.09, 3.75)
Relative Difference	13.18%	-5.65%	19.19%	21.24%	21.06%	11.48%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	21.03	20.93	21.04	21.07	21.07	21.06
Intervention Period Enhanced MTM Mean	28.91	25.39	30.80	32.00	28.08	28.26
Baseline Comparison MTM Mean	18.79	18.78	18.76	18.80	18.82	18.82
Intervention Period Comparison MTM Mean	23.91	24.42	24.48	25.25	21.39	23.61

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.47: SSR Subgroup, UnitedHealth: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.47*	0.09	0.19	0.72*	0.56	0.74*
P-value	0.093	0.830	0.658	0.055	0.128	0.070
95% Confidence Interval	(-0.08, 1.01)	(-0.71, 0.88)	(-0.65, 1.04)	(-0.02, 1.46)	(-0.16, 1.28)	(-0.06, 1.54)
Relative Difference	1.71%	0.34%	0.74%	2.54%	1.98%	2.63%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	27.35	25.88	25.86	28.34	28.31	28.12
Intervention Period Enhanced MTM Mean	29.80	30.56	29.91	32.33	28.02	27.69
Baseline Comparison MTM Mean	23.84	22.75	22.77	24.51	24.57	24.46
Intervention Period Comparison MTM Mean	25.83	27.35	26.63	27.78	23.72	23.30

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.48: SSR Subgroup, WellCare: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	2.02***	0.59	2.02***	3.74***	1.97***	2.15***
P-value	<0.001	0.162	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.31, 2.73)	(-0.24, 1.42)	(1.07, 2.98)	(2.67, 4.80)	(0.87, 3.06)	(0.98, 3.32)
Relative Difference	6.40%	1.90%	6.50%	11.94%	6.08%	6.65%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	31.57	31.14	31.16	31.29	32.36	32.35
Intervention Period Enhanced MTM Mean	36.93	36.51	38.04	39.42	35.30	34.54
Baseline Comparison MTM Mean	26.44	26.32	26.09	26.23	26.92	26.88
Intervention Period Comparison MTM Mean	29.78	31.11	30.95	30.63	27.89	26.92

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.49: SSR Subgroup, BCBS FL: Inpatient Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	4.72***	1.22	2.78***	7.84***	5.17***	7.70***
P-value	<0.001	0.118	0.003	<0.001	<0.001	<0.001
95% Confidence Interval	(3.53, 5.90)	(-0.31, 2.76)	(0.93, 4.64)	(6.11, 9.57)	(3.51, 6.84)	(5.73, 9.68)
Relative Difference	20.28%	5.26%	11.99%	33.78%	22.19%	33.01%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	23.26	23.24	23.22	23.21	23.32	23.33
Intervention Period Enhanced MTM Mean	33.81	30.39	32.83	38.09	32.79	35.69
Baseline Comparison MTM Mean	19.39	19.43	19.42	19.40	19.34	19.36
Intervention Period Comparison MTM Mean	25.22	25.36	26.24	26.45	23.64	24.01

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Inpatient Length of Stay

Table B.4.50: SSR Subgroup, Modelwide: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	13.65***	-2.47*	12.97***	21.29***	21.64***	18.37***
P-value	<0.001	0.053	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(11.64, 15.65)	(-4.97, 0.03)	(10.17, 15.78)	(18.48, 24.09)	(18.72, 24.56)	(15.19, 21.55)
Relative Difference	8.21%	-1.49%	7.91%	12.75%	12.96%	11.01%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	166.15	166.20	163.99	166.96	167.03	166.80
Intervention Period Enhanced MTM Mean	201.90	199.89	204.82	212.12	196.26	194.59
Baseline Comparison MTM Mean	157.63	158.08	155.45	158.22	158.34	158.21
Intervention Period Comparison MTM Mean	179.73	194.24	183.30	182.09	165.93	167.64

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.51: SSR Subgroup, SilverScript/CVS: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	11.38***	-5.05***	8.08***	15.63***	21.91***	18.72***
P-value	<0.001	0.003	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(8.73, 14.04)	(-8.36, -1.75)	(4.42, 11.74)	(11.88, 19.38)	(18.05, 25.76)	(14.41, 23.03)
Relative Difference	7.85%	-3.37%	5.53%	10.85%	15.36%	13.20%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	145.04	149.81	146.04	144.06	142.61	141.85
Intervention Period Enhanced MTM Mean	183.65	180.18	189.63	190.93	178.61	177.10
Baseline Comparison MTM Mean	150.56	154.91	150.51	149.63	148.73	148.47
Intervention Period Comparison MTM Mean	177.78	190.33	186.01	180.87	162.81	165.00

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.52: SSR Subgroup, Humana: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	27.72***	-1.72	41.37***	49.67***	44.69***	37.23***
P-value	<0.001	0.619	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(21.62, 33.83)	(-8.50, 5.06)	(32.41, 50.34)	(40.21, 59.12)	(34.64, 54.73)	(26.76, 47.70)
Relative Difference	12.09%	-0.74%	18.03%	21.74%	19.66%	16.43%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	229.34	231.58	229.47	228.44	227.25	226.61
Intervention Period Enhanced MTM Mean	268.35	265.78	277.11	282.45	261.76	249.65
Baseline Comparison MTM Mean	210.10	213.22	209.81	209.22	207.26	206.50
Intervention Period Comparison MTM Mean	221.39	249.13	216.07	213.56	197.08	192.32

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.53: SSR Subgroup, BCBS NPA: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	14.48***	-11.42***	17.60***	24.32***	27.56***	18.42***
P-value	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(8.81, 20.14)	(-18.61, -4.22)	(10.21, 24.99)	(16.72, 31.93)	(19.07, 36.05)	(9.71, 27.12)
Relative Difference	12.44%	-9.86%	15.13%	20.87%	23.64%	15.81%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	116.31	115.73	116.33	116.58	116.56	116.48
Intervention Period Enhanced MTM Mean	168.80	142.03	173.73	184.17	171.90	176.14
Baseline Comparison MTM Mean	104.01	104.06	103.76	104.02	104.08	104.17
Intervention Period Comparison MTM Mean	142.02	141.76	143.57	147.29	131.87	145.42

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.54: SSR Subgroup, UnitedHealth: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	7.89***	3.57	4.85	13.12***	9.06***	7.82**
P-value	0.001	0.274	0.174	<0.001	0.007	0.036
95% Confidence Interval	(3.30, 12.48)	(-2.83, 9.98)	(-2.13, 11.83)	(6.72, 19.52)	(2.48, 15.64)	(0.52, 15.12)
Relative Difference	4.51%	2.21%	3.01%	7.14%	4.94%	4.29%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	174.89	161.46	161.24	183.88	183.43	182.37
Intervention Period Enhanced MTM Mean	201.33	199.23	193.01	218.06	197.36	195.43
Baseline Comparison MTM Mean	154.95	143.79	143.58	162.41	162.22	161.00
Intervention Period Comparison MTM Mean	173.50	177.98	170.50	183.47	167.09	166.25

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.55: SSR Subgroup, WellCare: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	16.93***	3.55	18.01***	25.81***	21.84***	19.63***
P-value	<0.001	0.338	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(10.67, 23.20)	(-3.71, 10.81)	(9.22, 26.80)	(16.52, 35.10)	(11.93, 31.75)	(9.04, 30.23)
Relative Difference	8.41%	1.79%	9.05%	12.91%	10.58%	9.53%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	201.43	198.56	198.90	199.89	206.46	206.08
Intervention Period Enhanced MTM Mean	250.67	240.65	257.27	261.44	249.05	244.56
Baseline Comparison MTM Mean	174.59	173.92	171.76	172.72	178.56	177.81
Intervention Period Comparison MTM Mean	206.90	212.46	212.12	208.45	199.31	196.65

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.56: SSR Subgroup, BCBS FL: Inpatient Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	31.57***	7.70	21.71***	51.75***	33.57***	50.27***
P-value	<0.001	0.178	0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(23.02, 40.12)	(-3.49, 18.89)	(8.79, 34.62)	(39.14, 64.36)	(20.68, 46.46)	(35.20, 65.35)
Relative Difference	23.86%	5.83%	16.46%	39.28%	25.24%	37.76%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	132.31	132.05	131.86	131.75	133.00	133.13
Intervention Period Enhanced MTM Mean	208.37	184.81	200.47	230.84	205.67	226.61
Baseline Comparison MTM Mean	116.27	116.58	116.44	116.31	115.88	116.03
Intervention Period Comparison MTM Mean	160.76	161.65	163.33	163.65	154.97	159.23

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Hospital Readmissions

Table B.4.57: SSR Subgroup, Modelwide: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	0.28	-6.86***	-1.05	3.96**	5.03**	4.62**
P-value	0.847	<0.001	0.575	0.044	0.018	0.036
95% Confidence Interval	(-2.59, 3.16)	(-10.15, -3.57)	(-4.72, 2.62)	(0.10, 7.82)	(0.87, 9.19)	(0.30, 8.93)
Relative Difference	0.21%	-4.96%	-0.76%	2.86%	3.64%	3.34%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	138.32	138.32	138.32	138.32	138.32	138.32
Intervention Period Enhanced MTM Rate	168.89	161.10	167.17	173.66	174.11	172.84
Baseline Comparison MTM Rate	137.35	137.35	137.35	137.35	137.35	137.35
Intervention Period Comparison MTM Rate	167.64	166.99	167.26	168.74	168.11	167.26

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 959,480 (340,167 beneficiaries). Number of comparison observations: 1,813,366 (686,616 beneficiaries).

Table B.4.58: SSR Subgroup, SilverScript/CVS: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	3.35	-5.01*	1.51	4.81	9.28***	10.25***
P-value	0.147	0.057	0.602	0.112	0.005	0.003
95% Confidence Interval	(-1.18, 7.87)	(-10.17, 0.15)	(-4.16, 7.17)	(-1.12, 10.74)	(2.86, 15.69)	(3.61, 16.90)
Relative Difference	2.51%	-3.75%	1.13%	3.61%	6.95%	7.68%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	133.45	133.45	133.45	133.45	133.45	133.45
Intervention Period Enhanced MTM Rate	168.90	159.05	167.77	170.95	176.00	174.80
Baseline Comparison MTM Rate	137.45	137.45	137.45	137.45	137.45	137.45
Intervention Period Comparison MTM Rate	169.55	168.06	170.26	170.13	170.72	168.54

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 388,901 (136,836 beneficiaries). Number of comparison observations: 901,889 (339,286 beneficiaries).

Table B.4.59: SSR Subgroup, Humana: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	3.44	-4.18	10.22**	7.20	8.18	4.54
P-value	0.314	0.268	0.033	0.160	0.143	0.438
95% Confidence Interval	(-3.26, 10.14)	(-11.57, 3.21)	(0.80, 19.63)	(-2.85, 17.24)	(-2.77, 19.13)	(-6.93, 16.01)
Relative Difference	2.15%	-2.61%	6.37%	4.49%	5.10%	2.83%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	160.34	160.34	160.34	160.34	160.34	160.34
Intervention Period Enhanced MTM Rate	189.58	182.91	194.03	196.26	193.05	188.42
Baseline Comparison MTM Rate	160.42	160.42	160.42	160.42	160.42	160.42
Intervention Period Comparison MTM Rate	186.22	187.17	183.89	189.14	184.95	183.96

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 165,924 (56,021 beneficiaries). Number of comparison observations: 351,748 (128,387 beneficiaries).

Table B.4.60: SSR Subgroup, BCBS NPA: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	-1.00	-16.46***	-8.28*	11.40**	6.27	3.64
P-value	0.784	<0.001	0.071	0.019	0.218	0.498
95% Confidence Interval	(-8.18, 6.17)	(-25.29, -7.63)	(-17.27, 0.70)	(1.91, 20.89)	(-3.70, 16.25)	(-6.88, 14.16)
Relative Difference	-1.07%	-17.59%	-8.85%	12.18%	6.71%	3.89%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	93.58	93.58	93.58	93.58	93.58	93.58
Intervention Period Enhanced MTM Rate	126.31	109.79	118.03	138.92	131.51	135.99
Baseline Comparison MTM Rate	101.34	101.34	101.34	101.34	101.34	101.34
Intervention Period Comparison MTM Rate	135.08	134.02	134.08	135.28	132.99	140.11

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 111,688 (43,303 beneficiaries). Number of comparison observations: 169,478 (71,789 beneficiaries).

Table B.4.61: SSR Subgroup, UnitedHealth: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	-5.13	-1.38	-10.24**	-6.73	-1.74	-5.36
P-value	0.138	0.742	0.024	0.160	0.737	0.319
95% Confidence Interval	(-11.91, 1.65)	(-9.56, 6.80)	(-19.14, -1.34)	(-16.14, 2.67)	(-11.92, 8.43)	(-15.90, 5.19)
Relative Difference	-3.77%	-1.01%	-7.52%	-4.94%	-1.28%	-3.93%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	136.17	136.17	136.17	136.17	136.17	136.17
Intervention Period Enhanced MTM Rate	162.31	163.35	157.85	163.78	163.72	164.10
Baseline Comparison MTM Rate	126.62	126.62	126.62	126.62	126.62	126.62
Intervention Period Comparison MTM Rate	157.88	155.17	158.54	160.96	155.91	159.90

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 140,540 (51,993 beneficiaries). Number of comparison observations: 257,603 (103,303 beneficiaries).

Table B.4.62: SSR Subgroup, WellCare: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	-0.52	-14.58***	2.01	7.27	1.53	8.21
P-value	0.910	0.005	0.727	0.234	0.824	0.259
95% Confidence Interval	(-9.60, 8.55)	(-24.66, -4.50)	(-9.27, 13.29)	(-4.70, 19.24)	(-12.02, 15.09)	(-6.03, 22.45)
Relative Difference	-0.34%	-9.60%	1.32%	4.79%	1.01%	5.40%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	151.94	151.94	151.94	151.94	151.94	151.94
Intervention Period Enhanced MTM Rate	180.28	166.07	180.62	188.41	188.63	185.11
Baseline Comparison MTM Rate	146.84	146.84	146.84	146.84	146.84	146.84
Intervention Period Comparison MTM Rate	175.70	175.55	173.51	176.03	181.99	171.80

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 98,861 (32,298 beneficiaries). Number of comparison observations: 255,958 (96,768 beneficiaries).

Table B.4.63: SSR Subgroup, BCBS FL: Rate of Hospital Readmissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000 Index Admissions Estimate						
Difference-in-Differences	-9.09	-14.49**	-11.17	-1.09	-12.55	-7.16
P-value	0.127	0.045	0.141	0.891	0.126	0.387
95% Confidence Interval	(-20.75, 2.58)	(-28.66, -0.32)	(-26.04, 3.70)	(-16.72, 14.53)	(-28.61, 3.51)	(-23.38, 9.06)
Relative Difference	-8.01%	-12.78%	-9.85%	-0.96%	-11.07%	-6.32%
Rates of Readmissions per 1,000 Index Admissions (regression-adjusted)						
Baseline Enhanced MTM Rate	113.38	113.38	113.38	113.38	113.38	113.38
Intervention Period Enhanced MTM Rate	146.74	135.64	145.52	155.13	152.30	144.84
Baseline Comparison MTM Rate	99.17	99.17	99.17	99.17	99.17	99.17
Intervention Period Comparison MTM Rate	141.61	135.92	142.47	142.02	150.63	137.79

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is an index admission. Number of Enhanced MTM observations: 53,566 (19,716 beneficiaries). Number of comparison observations: 69,982 (28,651 beneficiaries).

Skilled Nursing Facility (SNF) Admissions

Table B.4.64: SSR Subgroup, Modelwide: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.42***	-0.26***	0.51***	0.79***	0.49***	0.74***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(0.32, 0.53)	(-0.39, -0.12)	(0.36, 0.66)	(0.64, 0.93)	(0.33, 0.65)	(0.57, 0.91)
Relative Difference	9.08%	-5.54%	11.05%	16.75%	10.45%	15.77%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	4.66	4.64	4.59	4.70	4.70	4.69
Intervention Period Enhanced MTM Mean	6.80	6.14	7.01	7.29	6.83	6.80
Baseline Comparison MTM Mean	4.36	4.32	4.28	4.40	4.41	4.41
Intervention Period Comparison MTM Mean	6.07	6.08	6.19	6.20	6.04	5.79

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.65: SSR Subgroup, SilverScript/CVS: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.09	-0.66***	-0.01	0.36***	0.33***	0.55***
P-value	0.127	<0.001	0.918	<0.001	<0.001	<0.001
95% Confidence Interval	(-0.03, 0.21)	(-0.81, -0.50)	(-0.18, 0.16)	(0.18, 0.53)	(0.15, 0.52)	(0.35, 0.74)
Relative Difference	2.66%	-18.57%	-0.25%	10.29%	9.69%	15.92%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	3.48	3.53	3.49	3.48	3.46	3.43
Intervention Period Enhanced MTM Mean	5.50	4.77	5.62	5.93	5.60	5.60
Baseline Comparison MTM Mean	3.71	3.70	3.66	3.71	3.74	3.75
Intervention Period Comparison MTM Mean	5.64	5.60	5.80	5.81	5.55	5.38

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.66: SSR Subgroup, Humana: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.46***	-0.34**	0.90***	1.09***	0.61***	0.94***
P-value	0.001	0.034	<0.001	<0.001	0.008	<0.001
95% Confidence Interval	(0.20, 0.72)	(-0.66, -0.03)	(0.50, 1.29)	(0.66, 1.52)	(0.16, 1.07)	(0.46, 1.41)
Relative Difference	8.04%	-6.00%	15.72%	19.11%	10.70%	16.36%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.71	5.69	5.69	5.73	5.74	5.73
Intervention Period Enhanced MTM Mean	8.09	7.29	8.54	8.83	8.46	8.14
Baseline Comparison MTM Mean	4.86	4.83	4.82	4.89	4.89	4.89
Intervention Period Comparison MTM Mean	6.78	6.77	6.78	6.90	7.00	6.36

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.67: SSR Subgroup, BCBS NPA: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	2.46***	0.75**	2.81***	3.22***	3.00***	2.75***
P-value	<0.001	0.021	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(1.93, 2.98)	(0.11, 1.39)	(2.13, 3.49)	(2.55, 3.89)	(2.16, 3.84)	(1.91, 3.60)
Relative Difference	42.20%	12.91%	48.23%	55.13%	51.53%	47.29%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.83	5.82	5.83	5.84	5.82	5.82
Intervention Period Enhanced MTM Mean	9.64	7.75	10.19	10.58	9.97	9.95
Baseline Comparison MTM Mean	5.71	5.73	5.70	5.71	5.71	5.71
Intervention Period Comparison MTM Mean	7.07	6.91	7.25	7.24	6.86	7.08

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.68: SSR Subgroup, UnitedHealth: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-0.11	0.01	0.04	0.02	-0.54***	-0.05
P-value	0.375	0.964	0.819	0.907	0.001	0.787
95% Confidence Interval	(-0.34, 0.13)	(-0.34, 0.36)	(-0.34, 0.43)	(-0.30, 0.33)	(-0.86, -0.21)	(-0.38, 0.29)
Relative Difference	-1.94%	0.16%	0.87%	0.33%	-9.49%	-0.81%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.45	5.15	5.14	5.66	5.65	5.63
Intervention Period Enhanced MTM Mean	6.65	6.70	6.74	6.93	6.46	6.37
Baseline Comparison MTM Mean	4.36	4.05	4.06	4.56	4.55	4.55
Intervention Period Comparison MTM Mean	5.67	5.60	5.62	5.82	5.90	5.35

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.69: SSR Subgroup, WellCare: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.51***	-0.17	0.78***	1.01***	0.45*	0.64**
P-value	0.001	0.362	<0.001	<0.001	0.067	0.016
95% Confidence Interval	(0.22, 0.81)	(-0.54, 0.20)	(0.36, 1.20)	(0.55, 1.47)	(-0.03, 0.94)	(0.12, 1.16)
Relative Difference	8.94%	-3.08%	13.77%	17.63%	7.70%	10.91%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	5.73	5.61	5.66	5.72	5.89	5.85
Intervention Period Enhanced MTM Mean	8.26	7.32	8.57	8.77	8.64	8.20
Baseline Comparison MTM Mean	5.19	5.13	5.13	5.21	5.25	5.29
Intervention Period Comparison MTM Mean	7.21	7.01	7.25	7.25	7.54	7.00

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.70: SSR Subgroup, BCBS FL: SNF Admissions, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.47***	0.21	1.10***	2.42***	1.46***	2.54***
P-value	<0.001	0.500	0.003	<0.001	<0.001	<0.001
95% Confidence Interval	(0.98, 1.96)	(-0.41, 0.83)	(0.38, 1.83)	(1.70, 3.15)	(0.77, 2.15)	(1.72, 3.35)
Relative Difference	35.20%	5.12%	26.53%	58.30%	34.60%	59.99%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	4.18	4.17	4.16	4.15	4.21	4.23
Intervention Period Enhanced MTM Mean	7.35	6.09	7.22	8.62	6.68	8.42
Baseline Comparison MTM Mean	4.00	4.02	4.01	4.01	3.98	3.98
Intervention Period Comparison MTM Mean	5.69	5.73	5.97	6.05	4.99	5.64

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Skilled Nursing Facility (SNF) Length of Stay

Table B.4.71: SSR Subgroup, Modelwide: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	4.00	-16.62***	11.80***	19.98***	-0.66	8.37**
P-value	0.115	<0.001	0.002	<0.001	0.865	0.050
95% Confidence Interval	(-0.97, 8.97)	(-22.22, -11.02)	(4.45, 19.14)	(13.05, 26.91)	(-8.34, 7.01)	(0.01, 16.73)
Relative Difference	2.02%	-8.47%	6.15%	9.85%	-0.33%	4.18%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	198.39	196.25	191.92	202.95	201.64	200.13
Intervention Period Enhanced MTM Mean	264.65	246.12	275.05	281.63	261.51	259.68
Baseline Comparison MTM Mean	172.92	170.03	167.07	176.47	176.36	176.04
Intervention Period Comparison MTM Mean	235.18	236.52	238.40	235.17	236.89	227.21

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.72: SSR Subgroup, SilverScript/CVS: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-15.02***	-37.19***	-19.10***	-3.36	-8.11*	-4.57
P-value	<0.001	<0.001	<0.001	0.417	0.066	0.328
95% Confidence Interval	(-20.56, -9.47)	(-43.03, -31.35)	(-26.49, -11.72)	(-11.46, 4.74)	(-16.76, 0.53)	(-13.72, 4.59)
Relative Difference	-11.84%	-28.25%	-14.90%	-2.66%	-6.52%	-3.73%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	126.78	131.66	128.20	126.08	124.36	122.55
Intervention Period Enhanced MTM Mean	195.07	166.45	198.11	209.54	204.32	198.31
Baseline Comparison MTM Mean	128.24	131.01	127.94	127.68	127.30	126.97
Intervention Period Comparison MTM Mean	211.55	202.99	216.95	214.49	215.37	207.30

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.73: SSR Subgroup, Humana: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	3.65	-20.13***	38.27***	24.45**	-13.69	7.52
P-value	0.587	0.003	<0.001	0.026	0.234	0.548
95% Confidence Interval	(-9.54, 16.84)	(-33.35, -6.92)	(18.27, 58.27)	(2.94, 45.96)	(-36.26, 8.88)	(-17.05, 32.10)
Relative Difference	1.40%	-7.57%	14.69%	9.43%	-5.36%	2.98%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	260.44	266.05	260.55	259.30	255.24	252.38
Intervention Period Enhanced MTM Mean	329.68	319.81	366.51	342.37	308.27	306.94
Baseline Comparison MTM Mean	215.18	218.37	215.62	215.17	211.78	209.58
Intervention Period Comparison MTM Mean	280.77	292.27	283.32	273.80	278.50	256.61

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.74: SSR Subgroup, BCBS NPA: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	111.45***	32.15**	127.06***	158.40***	118.71***	132.16***
P-value	<0.001	0.033	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(86.96, 135.93)	(2.55, 61.75)	(88.60, 165.52)	(126.00, 190.80)	(80.55, 156.87)	(88.44, 175.89)
Relative Difference	45.10%	13.01%	51.54%	63.99%	48.05%	53.41%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	247.14	247.18	246.55	247.53	247.08	247.44
Intervention Period Enhanced MTM Mean	424.31	343.90	457.78	462.74	416.89	450.41
Baseline Comparison MTM Mean	209.94	210.67	209.56	210.03	209.61	209.74
Intervention Period Comparison MTM Mean	275.68	275.23	293.72	266.84	260.71	280.55

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.75: SSR Subgroup, UnitedHealth: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-15.40***	1.74	-7.71	-12.18*	-38.55***	-19.77**
P-value	0.006	0.795	0.370	0.090	<0.001	0.028
95% Confidence Interval	(-26.44, -4.37)	(-11.36, 14.85)	(-24.57, 9.14)	(-26.26, 1.90)	(-54.92, -22.19)	(-37.43, -2.11)
Relative Difference	-6.11%	0.80%	-3.57%	-4.38%	-14.10%	-7.34%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	252.20	217.66	216.10	278.21	273.53	269.51
Intervention Period Enhanced MTM Mean	261.28	264.10	247.15	281.80	258.28	249.79
Baseline Comparison MTM Mean	195.14	165.51	164.65	215.49	213.70	211.72
Intervention Period Comparison MTM Mean	219.63	210.21	203.41	231.26	237.00	211.76

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.76: SSR Subgroup, WellCare: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	13.41	-6.41	42.19***	32.83**	1.62	-10.06
P-value	0.136	0.476	<0.001	0.014	0.907	0.514
95% Confidence Interval	(-4.21, 31.03)	(-24.05, 11.23)	(18.89, 65.49)	(6.68, 58.97)	(-25.50, 28.74)	(-40.27, 20.16)
Relative Difference	4.45%	-2.13%	14.09%	10.86%	0.53%	-3.35%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	301.50	301.30	299.38	302.34	304.88	299.88
Intervention Period Enhanced MTM Mean	376.66	361.80	408.99	391.15	366.08	344.62
Baseline Comparison MTM Mean	245.86	243.10	242.80	246.38	250.58	248.81
Intervention Period Comparison MTM Mean	307.61	310.01	310.22	302.37	310.15	303.61

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.77: SSR Subgroup, BCBS FL: SNF Length of Stay, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	22.24**	-15.46	18.85	47.64***	14.92	55.57***
P-value	0.013	0.118	0.121	<0.001	0.329	<0.001
95% Confidence Interval	(4.75, 39.73)	(-34.81, 3.90)	(-4.96, 42.67)	(21.47, 73.80)	(-15.05, 44.88)	(25.97, 85.17)
Relative Difference	19.42%	-13.50%	16.48%	41.76%	13.01%	48.28%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	114.53	114.52	114.38	114.09	114.69	115.10
Intervention Period Enhanced MTM Mean	210.75	166.90	203.88	241.65	205.26	248.29
Baseline Comparison MTM Mean	112.35	112.84	112.25	112.12	112.10	112.35
Intervention Period Comparison MTM Mean	186.32	180.67	182.90	192.05	187.75	189.97

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Emergency Department (ED) Visits

Table B.4.78: SSR Subgroup, Modelwide: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	3.18***	1.65***	3.16***	4.25***	3.46***	3.66***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.77, 3.58)	(1.19, 2.11)	(2.64, 3.69)	(3.71, 4.80)	(2.91, 4.00)	(3.06, 4.26)
Relative Difference	6.02%	3.13%	6.10%	7.99%	6.50%	6.93%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	52.72	52.61	51.85	53.19	53.19	52.84
Intervention Period Enhanced MTM Mean	50.61	55.67	53.06	54.24	42.56	45.03
Baseline Comparison MTM Mean	50.66	50.72	49.88	51.05	51.00	50.70
Intervention Period Comparison MTM Mean	45.38	52.14	47.92	47.86	36.91	39.23

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.79: SSR Subgroup, SilverScript/CVS: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	3.23***	2.05***	3.06***	3.77***	3.66***	3.75***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.71, 3.75)	(1.46, 2.65)	(2.40, 3.72)	(3.07, 4.47)	(2.96, 4.37)	(2.99, 4.52)
Relative Difference	6.54%	3.99%	6.12%	7.69%	7.58%	7.85%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	49.42	51.53	49.97	49.05	48.35	47.81
Intervention Period Enhanced MTM Mean	48.09	54.62	52.38	50.73	39.30	41.30
Baseline Comparison MTM Mean	49.73	51.77	50.12	49.33	48.75	48.34
Intervention Period Comparison MTM Mean	45.16	52.81	49.47	47.23	36.03	38.09

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.80: SSR Subgroup, Humana: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	6.47***	1.68**	8.77***	9.67***	8.19***	9.74***
P-value	<0.001	0.014	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(5.19, 7.76)	(0.33, 3.03)	(6.98, 10.56)	(7.68, 11.65)	(6.28, 10.09)	(7.53, 11.96)
Relative Difference	9.04%	2.33%	12.26%	13.52%	11.51%	13.75%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	71.60	72.14	71.53	71.51	71.17	70.82
Intervention Period Enhanced MTM Mean	69.22	74.37	72.70	72.28	56.85	60.01
Baseline Comparison MTM Mean	67.63	68.48	67.40	67.45	66.96	66.68
Intervention Period Comparison MTM Mean	58.78	69.02	59.79	58.55	44.46	46.12

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.81: SSR Subgroup, BCBS NPA: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	3.10***	0.15	1.78**	4.78***	4.93***	4.72***
P-value	<0.001	0.828	0.025	<0.001	<0.001	<0.001
95% Confidence Interval	(1.92, 4.28)	(-1.18, 1.48)	(0.23, 3.32)	(3.10, 6.46)	(3.27, 6.59)	(2.65, 6.78)
Relative Difference	8.42%	0.40%	4.83%	12.99%	13.39%	12.82%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	36.78	36.70	36.78	36.81	36.83	36.81
Intervention Period Enhanced MTM Mean	44.17	41.27	44.67	47.85	40.92	46.64
Baseline Comparison MTM Mean	34.26	34.18	34.18	34.30	34.34	34.33
Intervention Period Comparison MTM Mean	38.55	38.61	40.29	40.56	33.50	39.44

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.82: SSR Subgroup, UnitedHealth: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.88***	1.30**	1.49**	3.09***	1.65***	1.64***
P-value	<0.001	0.017	0.014	<0.001	0.005	0.010
95% Confidence Interval	(1.02, 2.74)	(0.23, 2.38)	(0.31, 2.68)	(1.95, 4.23)	(0.50, 2.81)	(0.40, 2.89)
Relative Difference	3.88%	3.16%	3.63%	5.79%	3.12%	3.15%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	48.45	41.24	41.20	53.38	53.11	52.19
Intervention Period Enhanced MTM Mean	45.34	43.85	41.61	54.32	41.51	43.81
Baseline Comparison MTM Mean	46.56	40.81	40.73	50.60	50.30	49.39
Intervention Period Comparison MTM Mean	41.56	42.11	39.64	48.45	37.05	39.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.83: SSR Subgroup, WellCare: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	2.42***	2.54***	3.34***	2.46**	0.98	2.47**
P-value	<0.001	0.001	<0.001	0.013	0.326	0.021
95% Confidence Interval	(1.06, 3.77)	(1.11, 3.97)	(1.66, 5.01)	(0.52, 4.40)	(-0.98, 2.94)	(0.38, 4.55)
Relative Difference	3.49%	3.69%	4.88%	3.57%	1.38%	3.53%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	69.26	68.75	68.30	68.70	71.24	69.93
Intervention Period Enhanced MTM Mean	65.24	71.72	69.64	67.98	55.36	55.93
Baseline Comparison MTM Mean	59.46	59.24	58.65	59.10	60.86	59.89
Intervention Period Comparison MTM Mean	53.03	59.67	56.66	55.92	44.00	43.41

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.84: SSR Subgroup, BCBS FL: ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	3.80***	1.38*	3.35***	5.58***	3.88***	5.46***
P-value	<0.001	0.087	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(2.46, 5.15)	(-0.20, 2.95)	(1.64, 5.05)	(3.72, 7.44)	(2.09, 5.68)	(3.60, 7.32)
Relative Difference	12.33%	4.48%	10.87%	18.14%	12.55%	17.64%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	30.82	30.72	30.78	30.77	30.93	30.96
Intervention Period Enhanced MTM Mean	37.60	35.84	39.05	41.83	32.79	38.42
Baseline Comparison MTM Mean	28.13	28.12	28.13	28.14	28.13	28.12
Intervention Period Comparison MTM Mean	31.11	31.86	33.06	33.62	26.11	30.12

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Outpatient Non-Emergency Department (ED) Visits

Table B.4.85: SSR Subgroup, Modelwide: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	20.48***	7.75***	24.80***	27.53***	19.66***	24.99***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(18.45, 22.51)	(5.72, 9.78)	(22.30, 27.30)	(24.88, 30.18)	(16.79, 22.52)	(21.85, 28.14)
Relative Difference	4.67%	1.80%	5.74%	6.22%	4.43%	5.61%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	438.70	431.76	432.24	442.70	444.13	445.45
Intervention Period Enhanced MTM Mean	486.02	457.72	489.56	512.55	461.92	515.88
Baseline Comparison MTM Mean	397.66	392.56	391.10	400.27	402.74	404.10
Intervention Period Comparison MTM Mean	424.50	410.77	423.62	442.59	400.88	449.53

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.86: SSR Subgroup, SilverScript/CVS: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	8.75***	5.59***	10.39***	11.23***	5.74***	10.98***
P-value	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
95% Confidence Interval	(6.56, 10.94)	(3.46, 7.71)	(7.79, 12.99)	(8.23, 14.22)	(2.50, 8.97)	(7.24, 14.73)
Relative Difference	2.23%	1.43%	2.65%	2.86%	1.46%	2.80%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	392.23	392.01	392.12	392.27	392.09	392.78
Intervention Period Enhanced MTM Mean	427.85	415.35	432.30	445.62	398.85	449.02
Baseline Comparison MTM Mean	372.23	371.55	369.53	372.26	373.74	374.77
Intervention Period Comparison MTM Mean	399.10	389.31	399.32	414.38	374.76	420.02

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.87: SSR Subgroup, Humana: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	56.18***	-0.36	88.59***	88.26***	77.97***	92.19***
P-value	<0.001	0.847	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(51.65, 60.71)	(-4.02, 3.30)	(82.30, 94.88)	(81.09, 95.43)	(70.15, 85.79)	(82.91, 101.47)
Relative Difference	12.15%	-0.08%	19.31%	18.90%	16.39%	19.18%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	462.27	449.50	458.73	467.06	475.82	480.68
Intervention Period Enhanced MTM Mean	552.97	469.05	595.56	614.55	563.80	622.21
Baseline Comparison MTM Mean	396.19	388.56	390.00	398.62	407.02	411.01
Intervention Period Comparison MTM Mean	430.71	408.46	438.23	457.85	417.04	460.35

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.88: SSR Subgroup, BCBS NPA: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	109.14***	60.94***	107.85***	127.61***	118.53***	143.63***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(96.73, 121.55)	(48.25, 73.64)	(94.21, 121.50)	(112.79, 142.44)	(102.15, 134.90)	(127.15, 160.10)
Relative Difference	15.88%	8.89%	15.68%	18.55%	17.24%	20.88%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	687.32	685.61	687.77	688.03	687.70	687.72
Intervention Period Enhanced MTM Mean	799.61	744.00	805.71	832.70	762.67	870.06
Baseline Comparison MTM Mean	604.19	604.68	604.46	604.25	603.72	603.59
Intervention Period Comparison MTM Mean	607.34	602.13	614.54	621.31	560.16	642.30

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.89: SSR Subgroup, UnitedHealth: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-3.68*	-8.29***	-7.24**	2.36	-2.91	-3.49
P-value	0.084	<0.001	0.019	0.374	0.313	0.283
95% Confidence Interval	(-7.86, 0.50)	(-12.50, -4.07)	(-13.27, -1.21)	(-2.85, 7.57)	(-8.55, 2.74)	(-9.86, 2.88)
Relative Difference	-0.92%	-2.36%	-2.06%	0.55%	-0.68%	-0.81%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	399.57	351.08	351.49	429.25	429.72	429.66
Intervention Period Enhanced MTM Mean	417.40	367.44	373.81	462.35	416.09	461.52
Baseline Comparison MTM Mean	364.09	327.98	328.07	384.16	387.48	388.17
Intervention Period Comparison MTM Mean	385.60	352.62	357.62	414.90	376.76	423.51

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.90: SSR Subgroup, WellCare: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	1.69	8.59***	6.09**	6.97*	-13.28***	-5.63
P-value	0.504	<0.001	0.046	0.057	0.001	0.221
95% Confidence Interval	(-3.27, 6.65)	(3.95, 13.24)	(0.09, 12.09)	(-0.20, 14.14)	(-20.90, -5.66)	(-14.66, 3.40)
Relative Difference	0.35%	1.78%	1.26%	1.43%	-2.68%	-1.13%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	488.62	482.87	484.12	486.09	495.98	499.64
Intervention Period Enhanced MTM Mean	516.34	510.25	521.30	536.78	484.08	530.17
Baseline Comparison MTM Mean	410.61	406.88	406.04	407.91	416.37	420.56
Intervention Period Comparison MTM Mean	436.65	425.67	437.13	451.64	417.75	456.72

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.91: SSR Subgroup, BCBS FL: Outpatient Non-ED Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-20.78***	-22.02***	-21.94***	-24.79***	-14.76**	-19.50***
P-value	<0.001	<0.001	<0.001	<0.001	0.019	0.006
95% Confidence Interval	(-29.87, -11.70)	(-30.78, -13.26)	(-32.35, -11.53)	(-36.62, -12.95)	(-27.10, -2.42)	(-33.42, -5.58)
Relative Difference	-6.82%	-7.24%	-7.20%	-8.13%	-4.83%	-6.38%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	304.98	304.31	304.87	304.98	305.49	305.48
Intervention Period Enhanced MTM Mean	337.25	320.18	333.96	352.53	318.52	367.26
Baseline Comparison MTM Mean	292.00	291.39	291.45	291.68	292.69	293.20
Intervention Period Comparison MTM Mean	345.06	329.28	342.48	364.02	320.47	374.47

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Evaluation and Management (E&M) Visits

Table B.4.92: SSR Subgroup, Modelwide: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	18.65***	15.18***	23.87***	19.62***	13.09***	22.08***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(16.58, 20.72)	(13.25, 17.10)	(21.33, 26.41)	(16.94, 22.30)	(10.18, 16.00)	(18.96, 25.20)
Relative Difference	2.19%	1.80%	2.81%	2.30%	1.53%	2.57%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	851.50	843.78	850.39	852.30	855.91	857.72
Intervention Period Enhanced MTM Mean	858.99	866.30	885.64	891.86	778.68	866.03
Baseline Comparison MTM Mean	743.92	741.94	742.74	743.03	745.69	747.29
Intervention Period Comparison MTM Mean	732.76	749.28	754.12	762.97	655.37	733.53

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.93: SSR Subgroup, SilverScript/CVS: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	22.63***	14.58***	23.74***	23.95***	21.04***	31.38***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(20.33, 24.93)	(12.34, 16.83)	(21.03, 26.46)	(20.86, 27.05)	(17.69, 24.38)	(27.60, 35.16)
Relative Difference	2.73%	1.79%	2.88%	2.88%	2.52%	3.75%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	828.11	814.57	823.57	832.17	835.71	837.02
Intervention Period Enhanced MTM Mean	842.43	839.55	861.12	878.50	771.94	858.44
Baseline Comparison MTM Mean	733.50	726.77	727.90	735.59	738.98	740.15
Intervention Period Comparison MTM Mean	725.20	737.17	741.71	757.97	654.16	730.20

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.94: SSR Subgroup, Humana: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	35.93***	8.82***	60.07***	52.65***	36.62***	49.52***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(31.21, 40.64)	(4.83, 12.80)	(53.58, 66.55)	(45.42, 59.87)	(28.93, 44.32)	(40.62, 58.42)
Relative Difference	4.00%	1.00%	6.70%	5.81%	3.99%	5.37%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	899.03	880.71	896.12	905.96	918.19	922.28
Intervention Period Enhanced MTM Mean	926.71	894.77	971.20	980.55	864.68	946.49
Baseline Comparison MTM Mean	725.64	713.18	718.06	730.88	742.18	745.37
Intervention Period Comparison MTM Mean	717.40	718.43	733.08	752.82	652.05	720.05

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.95: SSR Subgroup, BCBS NPA: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-10.09***	4.02	6.49	-5.75	-33.98***	-30.16***
P-value	0.005	0.258	0.131	0.227	<0.001	<0.001
95% Confidence Interval	(-17.07, -3.11)	(-2.94, 10.98)	(-1.94, 14.92)	(-15.08, 3.59)	(-43.38, -24.57)	(-40.59, -19.73)
Relative Difference	-1.34%	0.54%	0.86%	-0.76%	-4.52%	-4.01%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	750.93	748.56	751.36	751.72	751.81	751.60
Intervention Period Enhanced MTM Mean	764.98	790.45	805.67	803.49	655.98	752.02
Baseline Comparison MTM Mean	656.06	655.23	655.48	656.32	656.75	656.87
Intervention Period Comparison MTM Mean	680.21	693.11	703.30	713.83	594.89	687.44

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.96: SSR Subgroup, UnitedHealth: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	34.67***	26.61***	39.27***	30.84***	33.51***	45.29***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(28.40, 40.95)	(20.69, 32.53)	(30.55, 47.99)	(23.78, 37.90)	(25.65, 41.38)	(37.13, 53.45)
Relative Difference	3.93%	2.97%	4.36%	3.55%	3.84%	5.16%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	882.77	896.29	899.70	869.88	873.88	877.24
Intervention Period Enhanced MTM Mean	874.67	909.94	917.80	892.03	785.16	873.11
Baseline Comparison MTM Mean	817.05	845.28	847.02	794.97	799.43	803.67
Intervention Period Comparison MTM Mean	774.28	832.32	825.85	786.28	677.20	754.25

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.97: SSR Subgroup, WellCare: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	-3.31	6.45***	2.13	-4.97	-17.43***	-8.64**
P-value	0.176	0.005	0.466	0.153	<0.001	0.045
95% Confidence Interval	(-8.10, 1.48)	(1.93, 10.97)	(-3.59, 7.85)	(-11.78, 1.84)	(-24.72, -10.14)	(-17.09, -0.18)
Relative Difference	-0.39%	0.77%	0.25%	-0.59%	-2.04%	-1.00%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	844.75	832.58	840.51	842.74	852.85	864.45
Intervention Period Enhanced MTM Mean	835.83	850.71	856.50	861.68	754.57	842.39
Baseline Comparison MTM Mean	722.21	719.56	721.21	722.04	721.18	729.61
Intervention Period Comparison MTM Mean	716.59	731.24	735.07	745.95	640.32	716.19

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.98: SSR Subgroup, BCBS FL: E&M Visits, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	69.21***	48.33***	72.66***	79.73***	76.14***	72.81***
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
95% Confidence Interval	(56.47, 81.94)	(34.95, 61.72)	(58.53, 86.79)	(63.82, 95.64)	(56.07, 96.21)	(54.95, 90.67)
Relative Difference	6.69%	4.67%	7.03%	7.71%	7.36%	7.04%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	1034.23	1034.11	1034.17	1034.09	1034.58	1034.26
Intervention Period Enhanced MTM Mean	1060.99	1062.75	1080.50	1106.09	983.76	1065.22
Baseline Comparison MTM Mean	885.79	887.31	887.13	886.59	883.66	883.39
Intervention Period Comparison MTM Mean	843.34	867.61	860.80	878.86	756.71	841.54

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

B.4.4 Inpatient Expenditures and Admissions Related to Ambulatory Care-Sensitive Conditions (ACSCs)

This subsection presents findings on the Model impacts on inpatient expenditures and admissions related to the ACSC Chronic Composite Measure for the SSR subgroup. (Hospital inpatient expenditures and admissions related to ACSC diabetes, ACSC COPD/asthma, ACSC heart failure, and ACSC bacterial pneumonia were also assessed separately, but findings are not presented in this Appendix.) There is a total of 14 tables in this subsection. Findings are presented for each measure in turn, first for the Model as a whole and then by individual sponsor, both cumulative and for each Model Year.

For the Model as a whole, there were statistically significant cumulative increases in inpatient expenditures and inpatient admissions related to ACSCs. Estimated impacts for most individual sponsors were consistent with these Modelwide findings.

Inpatient Expenditures Related to ACSCs

Table B.4.99: SSR Subgroup, Modelwide: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.97***	\$0.40	\$2.52***	\$2.63***	\$2.68***	\$1.85***
P-value	<0.001	0.437	<0.001	<0.001	<0.001	0.001
95% Confidence Interval	(1.27, 2.67)	(-0.60, 1.39)	(1.46, 3.57)	(1.58, 3.67)	(1.62, 3.74)	(0.76, 2.94)
Relative Difference	8.69%	1.75%	11.35%	11.54%	11.64%	8.05%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$22.67	\$22.56	\$22.18	\$22.76	\$23.02	\$22.95
Intervention Period Enhanced MTM Mean	\$30.63	\$33.55	\$32.49	\$32.65	\$27.07	\$25.69
Baseline Comparison MTM Mean	\$19.74	\$19.48	\$19.19	\$19.92	\$20.14	\$20.13
Intervention Period Comparison MTM Mean	\$25.73	\$30.07	\$26.98	\$27.18	\$21.51	\$21.02

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.100: SSR Subgroup, SilverScript/CVS: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$1.98***	-\$0.06	\$1.80**	\$2.35***	\$3.31***	\$2.75***
P-value	<0.001	0.923	0.013	0.001	<0.001	<0.001
95% Confidence Interval	(1.03, 2.92)	(-1.34, 1.22)	(0.38, 3.22)	(0.95, 3.76)	(1.88, 4.74)	(1.31, 4.20)
Relative Difference	10.18%	-0.31%	9.19%	12.24%	17.32%	14.52%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$19.42	\$20.17	\$19.54	\$19.21	\$19.09	\$18.95
Intervention Period Enhanced MTM Mean	\$27.86	\$29.76	\$30.40	\$29.89	\$24.64	\$23.44
Baseline Comparison MTM Mean	\$18.66	\$19.09	\$18.55	\$18.55	\$18.54	\$18.54
Intervention Period Comparison MTM Mean	\$25.13	\$28.74	\$27.62	\$26.88	\$20.78	\$20.27

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.101: SSR Subgroup, Humana: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$4.71***	\$2.76*	\$8.04***	\$6.00***	\$4.65**	\$3.18*
P-value	<0.001	0.075	<0.001	0.002	0.016	0.092
95% Confidence Interval	(2.44, 6.99)	(-0.28, 5.79)	(4.44, 11.65)	(2.26, 9.73)	(0.88, 8.42)	(-0.52, 6.88)
Relative Difference	13.09%	7.53%	22.35%	16.79%	13.05%	8.97%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$36.02	\$36.59	\$35.97	\$35.71	\$35.63	\$35.44
Intervention Period Enhanced MTM Mean	\$47.45	\$52.50	\$50.76	\$48.25	\$40.12	\$35.73
Baseline Comparison MTM Mean	\$27.81	\$28.10	\$27.67	\$27.74	\$27.58	\$27.57
Intervention Period Comparison MTM Mean	\$34.52	\$41.26	\$34.42	\$34.28	\$27.42	\$24.68

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.102: SSR Subgroup, BCBS NPA: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$2.06**	- \$1.69	\$1.95*	\$3.39***	\$3.87***	\$3.62**
P-value	0.011	0.163	0.073	0.010	0.005	0.017
95% Confidence Interval	(0.46, 3.65)	(-4.06, 0.68)	(-0.18, 4.08)	(0.82, 5.95)	(1.18, 6.56)	(0.64, 6.59)
Relative Difference	19.33%	-16.02%	18.36%	31.63%	36.23%	33.89%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$10.64	\$10.55	\$10.63	\$10.70	\$10.69	\$10.67
Intervention Period Enhanced MTM Mean	\$20.76	\$17.79	\$20.70	\$23.70	\$20.52	\$21.48
Baseline Comparison MTM Mean	\$10.00	\$9.95	\$9.97	\$10.02	\$10.05	\$10.05
Intervention Period Comparison MTM Mean	\$18.06	\$18.88	\$18.08	\$19.63	\$16.02	\$17.25

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.103: SSR Subgroup, UnitedHealth: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$0.60	\$0.01	\$1.16	\$0.69	\$1.30	- \$0.22
P-value	0.458	0.993	0.364	0.579	0.265	0.863
95% Confidence Interval	(-0.98, 2.17)	(-2.49, 2.51)	(-1.34, 3.65)	(-1.75, 3.13)	(-0.99, 3.59)	(-2.78, 2.33)
Relative Difference	2.64%	0.06%	5.86%	2.81%	5.33%	-0.93%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$22.60	\$19.70	\$19.72	\$24.58	\$24.45	\$24.08
Intervention Period Enhanced MTM Mean	\$28.30	\$30.95	\$27.92	\$31.54	\$26.02	\$24.25
Baseline Comparison MTM Mean	\$19.49	\$16.93	\$16.93	\$21.11	\$21.20	\$20.87
Intervention Period Comparison MTM Mean	\$24.59	\$28.17	\$23.96	\$27.38	\$21.47	\$21.27

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.104: SSR Subgroup, WellCare: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$4.19***	\$1.81	\$6.23***	\$5.94***	\$3.83*	\$3.09
P-value	0.001	0.237	0.001	0.002	0.065	0.145
95% Confidence Interval	(1.78, 6.60)	(-1.19, 4.80)	(2.47, 9.98)	(2.21, 9.68)	(-0.24, 7.89)	(-1.06, 7.24)
Relative Difference	13.85%	6.16%	21.36%	20.37%	11.76%	9.56%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$30.27	\$29.31	\$29.15	\$29.18	\$32.55	\$32.29
Intervention Period Enhanced MTM Mean	\$42.46	\$41.76	\$46.82	\$45.85	\$38.80	\$36.72
Baseline Comparison MTM Mean	\$24.19	\$23.76	\$23.51	\$23.58	\$25.44	\$25.24
Intervention Period Comparison MTM Mean	\$32.18	\$34.40	\$34.95	\$34.31	\$27.86	\$26.58

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.105: SSR Subgroup, BCBS FL: Inpatient Expenditures for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per-Beneficiary Per-Month Estimate (in \$)						
Difference-in-Differences	\$3.66***	- \$0.94	\$4.80**	\$7.17***	\$3.34	\$4.60**
P-value	0.007	0.676	0.012	<0.001	0.180	0.048
95% Confidence Interval	(0.98, 6.34)	(-5.36, 3.48)	(1.07, 8.54)	(3.28, 11.05)	(-1.54, 8.22)	(0.04, 9.16)
Relative Difference	25.42%	-6.51%	33.41%	50.02%	23.15%	31.80%
Means (beneficiary-month, regression-adjusted)						
Baseline Enhanced MTM Mean	\$14.41	\$14.45	\$14.38	\$14.33	\$14.42	\$14.47
Intervention Period Enhanced MTM Mean	\$26.85	\$24.92	\$26.70	\$30.13	\$25.18	\$27.57
Baseline Comparison MTM Mean	\$12.11	\$12.13	\$12.12	\$12.10	\$12.09	\$12.09
Intervention Period Comparison MTM Mean	\$20.89	\$23.55	\$19.64	\$20.73	\$19.51	\$20.59

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

Inpatient Admissions Related to ACSCs

Table B.4.106: SSR Subgroup, Modelwide: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.18***	0.05	0.20***	0.25***	0.25***	0.16***
P-value	<0.001	0.255	<0.001	<0.001	<0.001	0.002
95% Confidence Interval	(0.11, 0.24)	(-0.04, 0.15)	(0.10, 0.29)	(0.15, 0.35)	(0.15, 0.34)	(0.06, 0.26)
Relative Difference	6.17%	1.86%	6.95%	8.52%	8.49%	5.60%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	2.87	2.87	2.82	2.88	2.90	2.88
Intervention Period Enhanced MTM Mean	3.54	3.96	3.73	3.82	3.01	2.94
Baseline Comparison MTM Mean	2.44	2.42	2.39	2.46	2.48	2.47
Intervention Period Comparison MTM Mean	2.93	3.46	3.10	3.14	2.35	2.37

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 41,170,213 (753,819 beneficiaries). Number of comparison observations: 89,238,777 (1,845,366 beneficiaries).

Table B.4.107: SSR Subgroup, SilverScript/CVS: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.20***	-0.01	0.20***	0.21***	0.33***	0.31***
P-value	<0.001	0.922	0.003	0.002	<0.001	<0.001
95% Confidence Interval	(0.11, 0.29)	(-0.12, 0.11)	(0.07, 0.33)	(0.08, 0.35)	(0.21, 0.46)	(0.18, 0.44)
Relative Difference	8.26%	-0.23%	7.95%	8.71%	13.82%	12.95%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	2.46	2.56	2.48	2.44	2.42	2.40
Intervention Period Enhanced MTM Mean	3.20	3.50	3.51	3.47	2.71	2.67
Baseline Comparison MTM Mean	2.35	2.41	2.34	2.33	2.33	2.33
Intervention Period Comparison MTM Mean	2.88	3.36	3.17	3.14	2.29	2.29

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 18,667,179 (322,174 beneficiaries). Number of comparison observations: 44,391,174 (879,096 beneficiaries).

Table B.4.108: SSR Subgroup, Humana: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.45***	0.37***	0.62***	0.58***	0.50***	0.18
P-value	<0.001	0.005	<0.001	0.001	0.003	0.288
95% Confidence Interval	(0.24, 0.66)	(0.11, 0.63)	(0.30, 0.94)	(0.25, 0.91)	(0.17, 0.83)	(-0.15, 0.51)
Relative Difference	10.12%	8.22%	13.83%	12.97%	11.27%	4.06%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	4.48	4.54	4.48	4.45	4.44	4.42
Intervention Period Enhanced MTM Mean	5.38	6.07	5.60	5.50	4.47	3.99
Baseline Comparison MTM Mean	3.34	3.37	3.33	3.34	3.32	3.31
Intervention Period Comparison MTM Mean	3.78	4.53	3.83	3.81	2.84	2.70

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 5,246,356 (121,421 beneficiaries). Number of comparison observations: 13,706,622 (320,835 beneficiaries).

Table B.4.109: SSR Subgroup, BCBS NPA: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.26***	-0.17	0.24**	0.47***	0.47***	0.37**
P-value	0.004	0.157	0.049	0.002	0.001	0.019
95% Confidence Interval	(0.08, 0.44)	(-0.40, 0.06)	(0.00, 0.49)	(0.17, 0.77)	(0.19, 0.76)	(0.06, 0.67)
Relative Difference	17.09%	-11.03%	16.06%	30.50%	30.90%	23.88%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	1.52	1.51	1.52	1.53	1.53	1.53
Intervention Period Enhanced MTM Mean	2.70	2.38	2.72	3.14	2.55	2.71
Baseline Comparison MTM Mean	1.31	1.31	1.31	1.31	1.32	1.32
Intervention Period Comparison MTM Mean	2.22	2.34	2.26	2.45	1.86	2.14

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 4,472,748 (70,090 beneficiaries). Number of comparison observations: 8,822,754 (153,795 beneficiaries).

Table B.4.110: SSR Subgroup, UnitedHealth: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.04	0.02	0.06	0.05	0.07	-0.02
P-value	0.632	0.848	0.637	0.609	0.515	0.848
95% Confidence Interval	(-0.12, 0.19)	(-0.22, 0.27)	(-0.18, 0.30)	(-0.16, 0.27)	(-0.14, 0.28)	(-0.26, 0.22)
Relative Difference	1.33%	0.94%	2.27%	1.80%	2.27%	-0.78%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	2.84	2.54	2.54	3.05	3.03	2.99
Intervention Period Enhanced MTM Mean	3.21	3.63	3.20	3.59	2.79	2.74
Baseline Comparison MTM Mean	2.41	2.16	2.16	2.57	2.58	2.53
Intervention Period Comparison MTM Mean	2.74	3.23	2.76	3.05	2.27	2.32

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 7,419,212 (144,194 beneficiaries). Number of comparison observations: 17,227,675 (384,279 beneficiaries).

Table B.4.111: SSR Subgroup, WellCare: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.34***	0.14	0.43***	0.62***	0.34*	0.16
P-value	0.003	0.327	0.006	<0.001	0.052	0.387
95% Confidence Interval	(0.12, 0.57)	(-0.14, 0.41)	(0.12, 0.74)	(0.27, 0.98)	(-0.00, 0.69)	(-0.20, 0.52)
Relative Difference	9.09%	3.75%	11.81%	17.02%	8.66%	4.04%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	3.76	3.67	3.65	3.67	3.96	3.93
Intervention Period Enhanced MTM Mean	4.79	4.90	5.12	5.26	4.31	4.03
Baseline Comparison MTM Mean	2.89	2.84	2.83	2.84	3.02	3.00
Intervention Period Comparison MTM Mean	3.58	3.94	3.86	3.81	3.02	2.94

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 3,506,969 (66,323 beneficiaries). Number of comparison observations: 11,242,777 (246,245 beneficiaries).

Table B.4.112: SSR Subgroup, BCBS FL: Inpatient Admissions for ACSC Chronic Composite Measure, Cumulative and by Model Year

	Cumulative	Model Year 1	Model Year 2	Model Year 3	Model Year 4	Model Year 5
Per 1,000-Beneficiaries-per-Month Estimate						
Difference-in-Differences	0.29*	-0.17	0.32	0.66**	0.23	0.51**
P-value	0.064	0.456	0.135	0.018	0.421	0.023
95% Confidence Interval	(-0.02, 0.60)	(-0.62, 0.28)	(-0.10, 0.75)	(0.12, 1.21)	(-0.32, 0.78)	(0.07, 0.95)
Relative Difference	15.07%	-8.70%	16.69%	34.31%	11.64%	26.22%
Means (1,000-beneficiaries-per-month level, regression-adjusted)						
Baseline Enhanced MTM Mean	1.95	1.95	1.94	1.94	1.95	1.95
Intervention Period Enhanced MTM Mean	3.19	2.94	3.13	3.76	2.87	3.26
Baseline Comparison MTM Mean	1.56	1.56	1.56	1.55	1.56	1.56
Intervention Period Comparison MTM Mean	2.50	2.72	2.42	2.71	2.26	2.35

Notes: * p-value < 0.10; ** p-value < 0.05; *** p-value < 0.01. The unit of observation is a beneficiary-month. Number of Enhanced MTM observations: 1,857,749 (29,617 beneficiaries). Number of comparison observations: 3,465,368 (60,792 beneficiaries).

B.5 Beneficiary Enrollment in Enhanced MTM Plan Benefit Packages (PBPs) – Supplemental Findings for Section 1

This section presents additional information regarding the findings presented in the Introduction (Section 1 of the main report) on changes in beneficiary enrollment in Enhanced MTM PBPs over Model Years 1 (2017) through 5 (2021). Specifically, it provides information on sponsors' individual PBP enrollment, and changes in PBP premium, benchmark status, and de minimis program participation throughout the five Model Years.

Changes in benchmark status impact overall PBP enrollment trends, since losing or gaining benchmark status has implications for the enrollment of dual-eligible beneficiaries and beneficiaries who qualify for the low-income subsidy (LIS). The maximum premium that PBPs may charge and still be eligible for automatic enrollment of dual-eligible beneficiaries and LIS recipients by CMS is determined by regional benchmark amounts, which are calculated annually. The PBPs with premiums below the regional benchmark amount are called "benchmark" PBPs. A PBP may effectively retain benchmark status if (i) its monthly premium is within a "de minimis" amount (set at \$2 for 2017-2021) over the regional benchmark, and (ii) it volunteers to waive the de minimis amount for dual-eligible beneficiaries and LIS recipients. For PBPs that elect to waive the de minimis amount, the law prohibits CMS from reassigning LIS beneficiaries who are enrolled with them to other PBPs. However, these PBPs do not qualify for automatic enrollment of newly subsidy-eligible beneficiaries by CMS.

As noted in Section 1 of the main report, total Enhanced MTM PBP enrollment remained fairly constant for the first three years of the Model, followed by decreases in Model Years 4 and 5. At the sponsor level, enrollment varied by sponsor and by year. Enrollment for most individual sponsors decreased in Model Years 4 and 5, with the exception of WellCare.

For Humana, BCBS NPA, and BCBS FL, there were decreases in Enhanced MTM PBP enrollment in each of the five years of the Model. Humana's enrollment decreased substantially (37 percent) from Model Year 1 to Model Year 2, driven by a loss in benchmark status for Humana's Florida PBP (S5884-105) beginning in Model Year 2. For BCBS NPA, there was a sharp decrease in enrollment (24 percent) from Model Year 4 to Model Year 5, likely due to a 58 percent increase in the sponsor's monthly basic premium. The single BCBS FL PBP did not have benchmark status or waive the de minimis amount in any of the five Model Years.

SilverScript/CVS, UnitedHealth, and WellCare experienced fluctuations in enrollment from Model Year 1 through Model Year 5. There was a large increase in SilverScript/CVS's enrollment (26 percent) from Model Year 1 to Model Year 2. SilverScript/CVS PBPs maintained benchmark status during all five Model Years. In Model Year 2, its Florida PBP (S5601-022) received dual-eligible and LIS beneficiaries disenrolled from Humana's Florida PBP that lost benchmark status that year. UnitedHealth's enrollment decreased from Model Year 1 to Model Year 2 due to significant increases in basic and LIS premiums in 2018. UnitedHealth's enrollment then

increased substantially from Model Year 2 to Model Year 3, likely due to consolidation of four non-Enhanced MTM UnitedHealth PBPs into four Enhanced MTM PBPs (S5921-352, S5921-366, S5921-370, and S5921-380) beginning in 2019. Additionally, three of the five UnitedHealth Enhanced MTM PBPs (S5921-352, S5921-366, and S5921-370) gained benchmark status, and a fourth PBP (S5921-380) waived the de minimis amount. All WellCare PBPs either maintained benchmark status or continued to waive the de minimis amounts for all five Model Years. Unlike other sponsors, in Model Year 4, WellCare's enrollment increased by 12 percent. WellCare's Virginia PBP (S4802-069) benefited from automatic enrollment of LIS recipients, after two non-Enhanced MTM PBPs in Virginia lost their benchmark status. WellCare's Model-participating Florida PBP (S4802-083) also gained benchmark status in Model Year 4, making this plan newly eligible for automatic enrollment of dual-eligible beneficiaries and LIS recipients. In Model Year 5, while enrollment for other sponsors decreased, WellCare's enrollment remained relatively stable. Among sponsors with PBPs active in Florida, enrollment decreases in Model Year 5 were partly driven by the entry of a new non-Enhanced MTM PBP.

Table B.5.1 summarizes participating PDPs' regions, benefit types, and enrollment from Model Year 1 (2017) to Model Year 5 (2021). Table B.5.2 summarizes participating PDPs' premiums, benchmark status, and whether they waived de minimis amount over the same time period.

Table B.5.1: Participating PBP’s Region, Benefit Type, and Enrollment from Model Year 1 (2017) to Model Year 5 (2021)

Sponsor and PBP	PDP Region	PDP Benefit Type (2017-2021)	Enrollment				
			2017	2018	2019	2020	2021
SilverScript/CVS							
S5601-014	Virginia	BA	108,025	114,953	111,796	97,596	97,596
S5601-022	Florida	BA	288,332	470,899	479,783	419,755	419,755
S5601-042	Louisiana	BA	98,185	102,134	97,172	85,541	85,541
S5601-050	Northern Plains	BA	237,615	255,184	242,983	201,666	201,666
S5601-056	Arizona	BA	62,644	60,404	55,834	48,747	48,747
<i>All SilverScript/CVS PBPs</i>			794,115	1,002,808	986,725	852,738	986,725
Humana							
S5884-105	Florida	AES	246,013	69,735	52,223	42,133	30,450
S5884-108	Louisiana	AES	26,959	27,971	27,473	25,860	23,700
S5884-132	Virginia	AES	44,724	53,436	49,684	46,143	38,505
S5884-145	Northern Plains	AES	115,115	111,772	100,259	89,177	80,689
S5884-146	Arizona	AES	24,830	24,744	26,052	23,436	21,041
<i>All Humana PBPs</i>			457,388	287,507	255,580	226,670	255,580
BCBS NPA							
S5743-001	Northern Plains	BA	241,495	239,959	219,296	199,220	151,097
UnitedHealth							
S5921-352	Virginia	AES	18,881	14,764	37,939	38,152	34,965
S5921-356	Florida	AES	113,865	87,524	73,055	63,059	54,644
S5921-366	Louisiana	AES	9,605	7,513	22,018	21,029	20,416
S5921-370	Northern Plains	AES	24,669	17,497	55,722	51,953	51,415
S5921-380	Arizona	AES	9,064	7,068	17,568	18,670	18,909
<i>All UnitedHealth PBPs</i>			175,927	134,271	206,147	192,692	206,147
WellCare							
S4802-012	Louisiana	BA (2017-2019) AES (2020-2021)	29,230	25,135	22,075	19,215	17,546
S4802-069	Virginia	BA (2017-2019) AES (2020-2021)	37,448	37,529	33,834	45,404	38,991

Sponsor and PBP	PDP Region	PDP Benefit Type (2017-2021)	Enrollment				
			2017	2018	2019	2020	2021
S4802-083	Florida	BA (2017) AES (2018-2021)	28,646	28,853	26,089	38,163	47,731
S4802-089	Northern Plains	BA (2017-2019) AES (2020-2021)	36,980	37,348	31,085	28,636	30,131
S4802-092	Arizona	BA (2017-2019) AES (2020-2021)	22,903	21,431	19,535	16,745	15,434
<i>All WellCare PBPs</i>			155,072	150,175	132,517	148,074	132,517
BCBS FL							
S5904-001	Florida	BA	64,630	60,857	55,976	55,885	52,446

Sources: 2017 Health Plan Management System (HPMS) Plan Information File, December 2017 file, 2018 HPMS Plan Information File, December 2018 file, 2019 HPMS Plan Information File, December 2019 file, 2020 HPMS Plan Information File, December 2020 file and 2021 HPMS Plan Information File, December 2021 file, accessed in December 2021. 2017 HPMS PDP Plan Service Area File, December 2017 file, 2018 HPMS PDP Plan Service Area File, December 2018 file, 2019 HPMS PDP Plan Service Area File, December 2019 file, 2020 HPMS PDP Plan Service Area File, December 2020 file, and 2021 HPMS PDP Plan Service Area File, December 2021 file, accessed in December 2021. PDP enrollment data in the Common Medicare Environment (CME), accessed in March 2021. PDP enrollment only includes beneficiaries in Enhanced MTM-participating contract-PBPs.

Notes: BA: Basic Alternative; AES: Actuarially Equivalent Standard. The Northern Plains PDP region includes Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wyoming.

Table B.5.2: Participating Part D Plans' Premium, Benchmark Status, and De Minimis Waiver Status from Model Year 1 (2017) to Model Year 5 (2021)

Sponsor and PBP	Monthly Basic Premium (dollars)					Monthly LIS Premium (dollars)					Benchmark Status or De Minimis Waiver Status				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
SilverScript/CVS															
S5601-014	30.80	26.00	29.20	24.70	26.70	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S5601-022	28.90	26.40	28.00	25.20	24.80	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S5601-042	24.20	23.10	31.50	29.00	30.60	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S5601-050	31.30	28.80	32.30	33.00	33.90	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S5601-056	29.70	28.50	31.20	30.50	31.00	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
Humana															
S5884-105	26.10	33.60	38.30	40.00	45.00	0.00	4.53	8.05	11.53	14.24	B	--	--	--	--
S5884-108	27.90	30.50	28.20	30.50	32.30	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S5884-132	28.10	29.70	28.20	27.60	27.90	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S5884-145	26.70	31.90	31.80	32.90	34.90	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S5884-146	28.70	31.50	30.00	29.40	31.90	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
BCBS NPA															
S5743-001	35.10	37.40	37.90	42.00	66.40	1.08	3.41	2.12	6.63	28.44	D	--	--	--	--
UnitedHealth															
S5921-352	46.00	53.30	27.30	26.20	25.20	13.48	23.25	0.00	0.00	0.00	--	--	B	B	B
S5921-356	32.90	42.00	45.20	46.70	54.20	3.77	12.93	14.95	18.23	23.44	--	--	--	--	--
S5921-366	42.40	49.60	28.70	31.30	29.10	9.60	18.68	0.00	0.00	0.00	--	--	B	B	B
S5921-370	47.40	54.60	33.80	32.80	32.10	13.38	20.61	0.00	0.00	0.00	--	--	B	B	B
S5921-380	50.00	62.50	32.90	28.70	31.60	14.89	29.62	0.28	0.00	0.00	--	--	D	B	B
WellCare															
S4802-012	30.10	31.70	30.60	27.30	26.60	0.00	0.78	0.00	0.00	0.00	B	D	B	B	B
S4802-069	27.20	28.60	29.70	26.60	24.50	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B

Sponsor and PBP	Monthly Basic Premium (dollars)					Monthly LIS Premium (dollars)					Benchmark Status or De Minimis Waiver Status				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
S4802-083	30.40	29.50	31.30	25.90	26.60	1.27	0.43	1.05	0.00	0.00	D	D	D	B	B
S4802-089	28.60	31.30	33.80	29.30	28.20	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
S4802-092	22.70	26.90	26.70	24.90	26.50	0.00	0.00	0.00	0.00	0.00	B	B	B	B	B
BCBS FL															
S5904-001	79.40	76.30	66.20	72.20	73.70	50.27	47.23	35.95	43.73	42.94	--	--	--	--	--

Sources: 2017 Health Plan Management System (HPMS) Plan Information File, December 2017 file, 2018 HPMS Plan Information File, December 2018 file, 2019 HPMS Plan Information File, December 2019 file, 2020 HPMS Plan Information File, December 2020 file, and 2021 HPMS Plan Information File, December 2021 file, accessed in December 2021. 2017 HPMS PDP Plan Service Area File, December 2017 file, 2018 HPMS PDP Plan Service Area File, December 2018 file, 2019 HPMS PDP Plan Service Area File, December 2019 file, 2020 HPMS PDP Plan Service Area File, December 2020 file, and 2021 HPMS PDP Plan Service Area File, December 2021 file, accessed in December 2021. Publicly available 2017-2021 Low-income Premium Subsidy (LIPS) Amounts from the CMS website for MY 2017:

<https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/RegionalRatesBenchmarks2017.pdf>, MY 2018:

<https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/RegionalRatesBenchmarks2018.pdf>, MY 2019:

<https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/RegionalRatesBenchmarks2019.pdf>, MY 2020:

<https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/RegionalRatesBenchmarks2020.pdf>, and MY 2021:

<https://www.cms.gov/files/document/regional-rates-and-benchmarks-2021.pdf>.

Notes: B: benchmark status; D: de minimis waiver; LIS: low-income subsidy.

In the PDP Region of Florida, the benchmark levels were set at \$29.13 in 2017, \$29.07 in 2018, \$30.25 in 2019, \$28.47 in 2020, and \$30.76 in 2021. In the Northern Plains region (Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wyoming) the levels were set at \$34.02 in 2017, \$33.99 in 2018, \$35.78 in 2019, \$35.37 in 2020, and \$37.96 in 2021. In Louisiana the levels were set at \$32.80 in 2017, \$30.92 in 2018, \$33.06 in 2019, \$32.21 in 2020, and \$34.27 in 2021. In Virginia the levels were set at \$32.52 in 2017, \$30.05 in 2018, \$30.61 in 2019, \$27.88 in 2020, and \$31.37 in 2021. Finally, in Arizona the levels were set at \$35.11 in 2017, \$32.88 in 2018, \$32.61 in 2019, \$32.09 in 2020, and \$36.07 in 2021. PBPs whose premiums are above the regional benchmark and/or do not waive its de minimis amount in specific Model Years are designated by a "--" in each corresponding column.

B.6 Enhanced MTM Eligibility and Service Receipt – Methodology and Supplementary Findings

This section presents additional information about beneficiary eligibility and service receipt for Enhanced MTM, presented in Section 2 of the main report.

Section B.6.1 outlines the data and methods used to generate the descriptive statistics presented in Section 2 of the main report, as well as in Sections B.6.2 and B.6.3. Section B.6.2 presents supplemental findings on beneficiary eligibility for Enhanced MTM, and Section B.6.3 provides supplemental findings on Enhanced MTM service receipt.

B.6.1 Enhanced MTM Eligibility and Service Receipt: Methods

Beneficiaries were considered eligible for Enhanced MTM if they had at least one record in MARx data (eligible for an intervention) and at least one month of enrollment in the Enhanced MTM plan according to CME in the relevant Model Year (2017, 2018, 2019, 2020, or 2021).¹⁵

General methods for calculating eligibility and service receipt statistics were as follows:

- For eligibility statistics based on MARx and plan enrollment data, the denominator included beneficiaries who were continuously enrolled in Model-participating PDPs in the Model Year. The numerator included beneficiaries with one or more months of Enhanced MTM eligibility in the Model Year in MARx data.
- For eligibility statistics based on intervention-specific eligibility data (Table B.6.3), the denominator included individuals with one or more months of Enhanced MTM eligibility in MARx data and the sponsor-provided intervention-specific eligibility data in the Model Year. The numerator included individuals eligible for a specific intervention in the sponsor-provided intervention-specific eligibility data.
- Due to the design flexibility of the Model, participating sponsors could report service receipt in the Enhanced MTM Encounter Data using a wide array of Systematized Nomenclature of Medicine – Clinical Terms (SNOMED CT) codes. Moreover, a sponsor was able to add, drop, or alter interventions and services as it deemed necessary. To account for these year-to-year fluctuations, an annual review of SNOMED CT codes was conducted and SNOMED CT codes associated with significant services were categorized into 12 intervention categories (Table B.6.9). Service receipt counts and proportions of

¹⁵ The exception is BCBS NPA, where beneficiary eligibility was defined by the presence of a record in Enhanced MTM Encounter Data and at least one month of enrollment in the BCBS NPA Enhanced MTM plan in the relevant Model Year (2017, 2018, 2019, 2020, or 2021). For further information, please refer to Acumen, LLC and Westat, Inc., “Evaluation of the Part D Enhanced Medication Therapy Management (MTM) Model: Second Evaluation Report,” November 2020, <https://innovation.cms.gov/data-and-reports/2020/mtm-second-evalrpt>.

beneficiaries who received services were based on this classification system. Only beneficiaries who were considered eligible for services per the methods described above were counted in service receipt calculations.

- Additionally, sponsors used “decline codes” in Enhanced MTM Encounter Data to indicate cases when a beneficiary declined a specific significant service, opted out of Enhanced MTM services entirely (i.e., declined to be contacted for any future services), or was not responsive to service outreach attempts. Any significant service codes in the Encounter Data that were accompanied by a code that captured decline of service, opt out, or no response to service on the same day were excluded from counts of significant services received.

The eligibility and service receipt statistics presented in evaluation reports were subject to updates in sponsor-submitted data. Sponsors submitted updated MARx data on a monthly basis, updated Enhanced MTM Encounter Data on a quarterly basis, and intervention-specific eligibility data on an annual basis. The statistics presented in Section 2 of the main report and in this appendix were produced using the most current data available at the end of the Model. The statistics generated for Model Years 1 through 4 in this report may differ from previous Evaluation Reports due to sponsors making retroactive updates in data submissions subsequent to previous evaluation reports. To ensure adequate time to analyze data for this report, the evaluation team used updated intervention-specific eligibility files received as of February 2022.

B.6.2 Enhanced MTM Eligibility Supplemental Statistics

This section presents supplemental statistics on beneficiary eligibility for Enhanced MTM to provide more detail for Section 2 of the main report and to highlight sponsor-specific findings. It covers sponsor-level Enhanced MTM eligibility and medication utilization targeting. It also covers traditional MTM eligibility among beneficiaries included in the Enhanced MTM Evaluation comparison group.

Sponsor-level Enhanced and Traditional MTM Eligibility

Modelwide, enrollment in Enhanced MTM participating plans declined over the course of the Model, and although the number of beneficiaries eligible for Enhanced MTM also declined, Enhanced MTM eligibility rates generally increased over time, rising from 66 percent in Model Year 1 to 77 percent in Model Years 4 and 5 (Table B.6.1). In all Model Years, SilverScript/CVS had the highest Enhanced MTM eligibility rates, which were mostly at or above 90 percent. Enhanced MTM eligibility rates for BCBS NPA, which ranged between 21 percent and 43 percent, were the lowest in all Model Years. In all Model Years, eligibility rates for traditional MTM among beneficiaries included in the Enhanced MTM Evaluation comparison group were much lower than Enhanced MTM eligibility rates among beneficiaries enrolled in participating plans, at both the Modelwide and sponsor levels (Table B.6.2). Traditional MTM eligibility rates were highest among the matched comparison group beneficiaries for WellCare and Humana

(around 8 percent) and lowest among the comparison group beneficiaries for BCBS NPA and BCBS FL (around 5 percent).

Some sponsors had notable fluctuations (more than a 10 percent change) in their Enhanced MTM eligibility rates over the course of the Model. Though Humana did not change its intervention offerings, changes that Humana made to its targeting processes led to eligibility rate changes. Humana's eligibility rate increased by almost 30 percent, from 49 percent to 63 percent between Model Years 1 and 2. In Model Year 2, Humana began using health information exchange (HIE) data to identify eligible beneficiaries for its transitions-of-care intervention. In this same Model Year, Humana also started to run its risk stratification algorithm to identify eligible beneficiaries more frequently (monthly instead of quarterly). UnitedHealth also had a notable eligibility rate increase of about 15 percent (from 55 percent to 63 percent) between Model Years 4 and 5 that was not attributable to targeting criteria or intervention offering changes. This increase was primarily due to the eligibility rate for UnitedHealth's Medication Adherence Monitoring intervention more than doubling between Model Years 4 and 5 (Table B.6.3). According to UnitedHealth, the increase in eligibility between Model Years 4 and 5 was due to more beneficiaries qualifying, because they were late to refill their prescriptions.

Two sponsors—BCBS NPA and BCBS FL—made multiple changes to their interventions over the course of the Model. As a result, these sponsors had notable shifts in eligibility rates. The eligibility rate for BCBS NPA increased by about 60 percent (from 21 percent to 33 percent) in Model Year 3 and about 20 percent (from 33 percent to 43 percent) in Model Year 4, with the expansion of existing interventions and addition of new interventions. In Model Year 5, BCBS NPA's eligibility rate decreased by about 20 percent (from 43 percent to 35 percent), a level closer to its Model Year 3 rate. In this case, the decrease was not attributable to intervention or beneficiary targeting criteria changes. BCBS FL also had notable eligibility rate changes over the course of the Model. In Model Year 2, its eligibility rate decreased by about 30 percent (from 54 percent to 37 percent). Though BCBS FL added an intervention in Model Year 2, it adjusted the targeting criteria for its existing interventions, resulting in a lower overall eligibility rate. In Model Year 3, with the addition of a new intervention, the eligibility rate increased by about 40 percent (from 37 percent to 52 percent), returning closer to Model Year 1 levels. In Model Year 5, BCBS FL's eligibility rate increased yet again, by over 10 percent relative to Model Year 4 (from 51 percent to 57 percent) with the addition of two new chronic condition management interventions.

Table B.6.1: Eligibility Rates Generally Increased over Time, While Plan Enrollment and the Number of Enhanced MTM-Eligible Beneficiaries Declined in Later Model Years

	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Participating Plan Enrollment	Beneficiaries Eligible for Enhanced MTM (Proportion)	Participating Plan Enrollment	Beneficiaries Eligible for Enhanced MTM (Proportion)	Participating Plan Enrollment	Beneficiaries Eligible for Enhanced MTM (Proportion)	Participating Plan Enrollment	Beneficiaries Eligible for Enhanced MTM (Proportion)	Participating Plan Enrollment	Beneficiaries Eligible for Enhanced MTM (Proportion)
Sponsors										
All Participating Sponsors	1,877,982	1,237,240 (65.9%)	1,867,356	1,297,895 (69.5%)	1,851,573	1,365,256 (73.7%)	1,672,251	1,292,037 (77.3%)	1,456,009	1,127,189 (77.4%)
SilverScript/CVS	794,115	727,076 (91.6%)	1,002,808	869,207 (86.7%)	986,725	887,075 (89.9%)	852,738	815,163 (95.6%)	731,414	703,846 (96.2%)
Humana	457,388	221,631 (48.5%)	287,507	180,145 (62.7%)	255,580	169,906 (66.5%)	226,670	156,891 (69.2%)	194,300	128,112 (65.9%)
BCBS NPA	241,495	50,461 (20.9%)	239,959	49,105 (20.5%)	219,296	73,353 (33.4%)	199,220	86,196 (43.3%)	151,097	52,700 (34.9%)
UnitedHealth	175,927	95,522 (54.3%)	134,271	73,411 (54.7%)	206,147	109,368 (53.1%)	192,692	106,534 (55.3%)	180,201	113,186 (62.8%)
WellCare	155,072	110,456 (71.2%)	150,175	105,953 (70.6%)	132,517	97,876 (73.9%)	148,074	99,751 (67.4%)	149,703	100,711 (67.3%)
BCBS FL	64,630	35,021 (54.2%)	60,857	22,733 (37.4%)	55,976	29,221 (52.2%)	55,885	28,582 (51.1%)	52,446	29,685 (56.6%)

Sources: CME; MARx; and Enhanced MTM Encounter Data.

Notes: Eligible beneficiaries are those with at least one month of recorded eligibility in the Model year in MARx data. The proportion eligible for Enhanced MTM is calculated as the number of beneficiaries eligible for Enhanced MTM divided by the participating plan enrollment and expressed as a percentage.

Table B.6.2: Traditional MTM Eligibility Rates in the Comparison Group Were Much Lower than Enhanced MTM Eligibility Rates in All Model Years

	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Comparison Beneficiaries Enrolled in Non-Participating Plans	Beneficiaries Eligible for Traditional MTM (Proportion)	Comparison Beneficiaries Enrolled in Non-Participating Plans	Beneficiaries Eligible for Traditional MTM (Proportion)	Comparison Beneficiaries Enrolled in Non-Participating Plans	Beneficiaries Eligible for Traditional MTM (Proportion)	Comparison Beneficiaries Enrolled in Non-Participating Plans	Beneficiaries Eligible for Traditional MTM (Proportion)	Comparison Beneficiaries Enrolled in Non-Participating Plans	Beneficiaries Eligible for Traditional MTM (Proportion)
Sponsors										
All Participating Sponsors	2,686,379	261,536 (9.7%)	2,421,740	197,331 (8.2%)	2,334,775	200,827 (8.6%)	2,128,157	162,432 (7.6%)	1,853,610	110,567 (6.0%)
SilverScript/CVS	1,365,777	147,676 (10.8%)	1,284,252	112,440 (8.8%)	1,156,239	100,597 (8.7%)	1,028,250	77,288 (7.5%)	887,860	51,074 (5.8%)
Humana	743,515	68,709 (9.2%)	603,204	49,128 (8.1%)	510,910	47,134 (9.2%)	450,020	36,619 (8.1%)	381,761	25,380 (6.7%)
BCBS NPA	269,590	15,045 (5.6%)	254,610	11,581 (4.6%)	231,342	11,016 (4.8%)	211,760	9,388 (4.4%)	185,811	6,604 (3.6%)
UnitedHealth	310,968	24,626 (7.9%)	268,345	19,040 (7.1%)	417,876	36,616 (8.8%)	362,911	28,303 (7.8%)	318,071	19,470 (6.1%)
WellCare	405,897	41,278 (10.2%)	368,914	30,948 (8.4%)	302,578	26,241 (8.7%)	301,352	25,958 (8.6%)	259,791	17,368 (6.7%)
BCBS FL	95,042	5,683 (6.0%)	89,238	4,322 (4.8%)	80,309	4,112 (5.1%)	77,436	3,641 (4.7%)	69,924	2,626 (6.7%)

Sources: CME; Part D Reporting Requirements Data.

Notes: The proportion eligible for traditional MTM is calculated as the number of beneficiaries eligible for traditional MTM divided by the count of comparison beneficiaries enrolled in non-participating plans and expressed as a percentage. Comparison beneficiaries were selected for each sponsor’s comparison group from multiple non-participating plans offering Traditional MTM, and are not restricted to beneficiaries enrolled in the sponsor’s plans.

Table B.6.3: BCBS NPA and BCBS FL Experienced Larger Proportional Shifts in Intervention-specific Eligibility than Other Sponsors

Sponsor and Enhanced MTM Intervention	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Beneficiaries Eligible	Proportion Eligible (%)								
All Participating Sponsors	1,237,240		1,297,895		1,365,256		1,292,037		1,127,189	
SilverScript/CVS	727,076		869,207		887,075		815,163		703,846	
Medication Therapy Counseling	39,768	5.5	86,519	10.0	107,996	12.2	94,530	11.6	65,782	8.1
Specialty Pharmacy Care Management	46,703	6.4	53,521	6.2	35,799	4.0	35,403	4.3	26,716	3.3
Pharmacy Advisor Counseling	504,703	69.4	634,201	73.0	644,893	72.7	575,600	70.6	503,642	61.8
HealthTag	630,200	86.7	708,178	81.5	755,495	85.2	767,958	94.2	658,978	80.8
Long-Term Care	-	-	134	0.0	3,736	0.4	9,233	1.1	8,756	1.1
Humana	221,631		180,145		169,906		156,891		128,112	
Risk-Based	195,700	88.3	172,156	95.6	164,329	96.7	155,664	99.2	126,808	80.8
Transitions of Care Medication Reconciliation	1,303	0.6	3,343	1.9	7,541	4.4	9,359	6.0	44	0.0
BCBS NPA	50,461		49,105		73,353		86,196		52,700	
High-Risk	50,002	99.1	36,143	73.6	46,462	63.3	42,108	48.9	34,011	39.5
Prescriber Opioid Education	-	-	9,877	20.1	-	-	-	-	-	-
Low-Risk/High-Cost	-	-	9,557	19.5	6,920	9.4	-	-	-	-
Community Pharmacy Smart Recommendations	-	-	890	1.8	17,329	23.6	25,152	29.2	23,362	27.1
Chronic Care Management	-	-	-	-	2,881	3.9	6,607	7.7	6,974	8.1
Transitions of Care	-	-	-	-	1,239	1.7	1,313	1.5	486	0.6
Safe Opioid Use Assessment	-	-	-	-	-	-	27	0.0	631	0.7

Sponsor and Enhanced MTM Intervention	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Beneficiaries Eligible	Proportion Eligible (%)								
UnitedHealth	95,522		73,411		109,368		106,534		113,186	
Risk-Based	94,594	99.0	72,673	99.0	108,284	99.0	106,374	99.8	98,106	92.1
Transitions of Care	3,176	3.3	3,455	4.7	2,904	2.7	2,385	2.2	1,761	1.7
Medication Adherence Monitoring	-	-	27,178	37.0	31,405	28.7	26,471	24.8	55,248	51.9
WellCare	110,456		105,953		97,876		99,751		100,711	
Medication Adherence	93,399	84.6	93,513	88.3	92,874	94.9	97,268	97.5	97,923	98.2
Opioid Utilization	28,739	26.0	23,624	22.3	16,800	17.2	13,552	13.6	11,094	11.1
Select Drug Therapy Problems	51,208	46.4	58,539	55.2	53,610	54.8	-	-	-	-
High Utilizer	13,626	12.3	17,817	16.8	18,794	19.2	20,317	20.4	20,371	20.4
Hospital Discharge	-	-	-	-	4,557	4.7	7,927	7.9	10,950	11
BCBS FL	35,021		22,733		29,221		28,582		29,685	
Hospital Prevention	10,535	30.1	3,072	13.5	2,236	7.7	2,613	9.1	1,037	3.6
Diabetes Plus 3	12,474	35.6	4,913	21.6	4,951	16.9	4,748	16.6	3,253	11.4
Anticoagulant	5,116	14.6	1,863	8.2	3,206	11.0	3,312	11.6	3,677	12.9
Specialty Drug	2,037	5.8	79	0.3	71	0.2	-	-	-	-
Medication Adherence	17,436	49.8	11,034	48.5	10,502	35.9	17,835	62.4	21,315	74.6
Transitions of Care	3,242	9.3	5,188	22.8	8,485	29.0	6,020	21.1	6,054	21.2
Continuity of Care	-	-	5,508	24.2	1,498	5.1	3,224	11.3	1,585	5.5
Statin Use in Persons with Diabetes	-	-	1,027	4.5	1,240	4.2	1,169	4.1	995	3.5
Behavioral Health	-	-	-	-	9,010	30.8	4,123	14.4	4,237	14.8
Congestive Heart Failure	-	-	-	-	-	-	-	-	1,563	5.5
End-stage Renal Disease	-	-	-	-	-	-	-	-	1,540	5.4

Sources: CME; MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: Cells with “-” signify that the sponsor did not offer the intervention in that Model Year. The proportion of beneficiaries eligible for a specific intervention is calculated from the sponsor’s total number of beneficiaries eligible for Enhanced MTM in each Model Year. Beneficiaries are often eligible for more than one intervention, resulting in a sum of eligible beneficiaries by intervention exceeding the actual total.

Targeting Categories

The targeting criteria sponsors used for their Enhanced MTM interventions clustered around five categories of health characteristics: (i) medication utilization; (ii) high Medicare Parts A, B, and D expenditures; (iii) presence of one or more chronic conditions; (iv) recent discharge from the hospital; and (v) vaccine status. In all Model Years, most eligible beneficiaries were targeted based on their medication utilization, though the proportion of eligible beneficiaries who were eligible based on this category decreased over time, from 79 percent in Model Year 1 to 70 percent in Model Year 5 (Table B.6.4). The proportion of eligible beneficiaries who were eligible based on the presence of one or more conditions was relatively consistent over time at around 5 to 6 percent, and the proportion of eligible beneficiaries who were eligible based on high Medicare Parts A, B, and/or D costs more than doubled from Model Years 1 to 5, from 4 percent to 10 percent. The proportion of eligible beneficiaries who were eligible based on a recent hospital discharge (transitions of care) was small relative to other targeting categories. Still, there were large proportional increases in the number and rates of beneficiaries who were eligible for Enhanced MTM interventions based on a recent hospital discharge relative to the other targeting categories in most Model Years, as sponsors added interventions focusing on transitions-of-care and utilized health information exchange (HIE) data over the course of Model implementation.¹⁶

Table B.6.5 provides details on the subcategories within the medication utilization targeting category, the largest beneficiary targeting category Modelwide. Among beneficiaries targeted based on medication utilization, almost all were targeted due to drug therapy problems (DTPs) in all Model Years, and most were targeted based on newly prescribed medications. Table B.6.7 displays primary and secondary targeting categories for each intervention, including the medication utilization subcategories.

¹⁶ The decrease in the number and proportion of beneficiaries who were eligible for transitions-of-care interventions in Model Year 5 was primarily due to Humana, which had an almost 100 percent decrease in the number of beneficiaries eligible for its transitions-of-care intervention between Model Years 4 and 5. In Model Year 5, Humana relied solely on pharmacists to identify eligible beneficiaries, after discontinuing the use of HIE data to target beneficiaries for its transitions-of-care intervention in Model Year 4.

Table B.6.4: In All Model Years, Most Eligible Beneficiaries Were Targeted Based on Their Medication Utilization

Categories	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Interventions		Interventions		Interventions		Interventions		Interventions	
	Using as Primary Targeting Category	Beneficiaries Ever Eligible for Category (Proportion)	Using as Primary Targeting Category	Beneficiaries Ever Eligible for Category (Proportion)	Using as Primary Targeting Category	Beneficiaries Ever Eligible for Category (Proportion)	Using as Primary Targeting Category	Beneficiaries Ever Eligible for Category (Proportion)	Using as Primary Targeting Category	Beneficiaries Ever Eligible for Category (Proportion)
All Categories	19	1,237,240	26	1,297,895	29	1,365,256	27	1,292,037	29	1,127,189
Med Use	10	973,458 (78.7%)	14	1,030,909 (79.4%)	13	1,083,433 (79.4%)	11	857,717 (66.4%)	11	786,954 (69.8%)
Vaccine	1	630,200 (50.9%)	1	708,178 (54.6%)	1	755,495 (55.3%)	1	767,958 (59.4%)	1	658,978 (58.5%)
Conditions	3	72,801 (5.9%)	3	76,244 (5.9%)	5	69,458 (5.1%)	5	69,352 (5.4%)	7	61,750 (5.5%)
High Costs	2	50,289 (4.1%)	5	104,789 (8.1%)	5	122,339 (9.0%)	5	137,226 (10.6%)	5	108,950 (9.7%)
Transitions	3	7,721 (0.6%)	3	11,986 (0.9%)	5	24,726 (1.8%)	5	27,004 (2.1%)	5	19,295 (1.7%)

Sources: CME; MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: Med Use: targeting based on medication utilization; Vaccine: targeting based on the need for a vaccine; Conditions: targeting based on the presence of one or more chronic conditions; High Costs: targeting based on high Medicare Parts A, B, and/or D costs; and Transitions: targeting beneficiaries who experience a recent discharge from the hospital. Beneficiaries may have been eligible for more than one intervention and category.

Table B.6.5: Among Beneficiaries Primarily Targeted Based on Medication Utilization, the Vast Majority Were Targeted Due to DTPs

Medication Utilization Sub-category	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Interventions Using Sub-category	Beneficiaries Ever Eligible for Sub-category (Proportion)	Interventions Using Sub-category	Beneficiaries Ever Eligible for Sub-category (Proportion)	Interventions Using Sub-category	Beneficiaries Ever Eligible for Sub-category (Proportion)	Interventions Using Sub-category	Beneficiaries Ever Eligible for Sub-category (Proportion)	Interventions Using Sub-category	Beneficiaries Ever Eligible for Sub-category (Proportion)
All Sub-categories	10	973,458	14	1,030,909	13	1,083,433	11	857,717	11	786,954
DTP	7	961,108 (98.7%)	11	1,025,516 (99.5%)	10	1,080,738 (99.8%)	8	855,040 (99.7%)	8	784,401 (99.7%)
New Med	3	511,221 (52.5%)	4	637,023 (61.8%)	4	665,488 (61.4%)	3	604,059 (70.4%)	3	530,675 (67.4%)
Number of Meds	1	94,594 (9.7%)	2	73,700 (7.1%)	2	109,524 (10.1%)	2	107,542 (12.5%)	2	99,101 (12.6%)
Opioid	1	28,739 (3.0%)	2	33,501 (3.2%)	1	16,800 (1.6%)	2	13,579 (1.6%)	2	11,725 (1.5%)

Sources: CME; MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: DTP: targeting based on medication adherence issues, adverse drug reactions/interactions, gaps in care, dosage issues, and/or unnecessary or inappropriate drug therapy; New Med: targeting based on newly prescribed medications; Number of Meds: targeting based on a certain number of medications; Opioid: targeting based on opioid use or misuse. Beneficiaries may have been counted for multiple subcategories since some medication utilization interventions address multiple subcategories.

Table B.6.6: Enhanced MTM Interventions by Targeting Category and Availability by Model Year

Sponsor and Enhanced MTM Intervention	Model Year 1 (2017)	Model Year 2 (2018)	Model Year 3 (2019)	Model Year 4 (2020)	Model Year 5 (2021)	Primary Targeting Category	Secondary Targeting Categories
SilverScript/CVS							
Pharmacy Advisor Counseling	✓	✓	✓	✓	✓	Med Use (DTP, New Med)	
Medication Therapy Counseling	✓	✓	✓	✓	✓	High Costs	Conditions
Long-term Care		✓	✓	✓	✓	High Costs	Conditions
Specialty Pharmacy Care Management	✓	✓	✓	✓	✓	Conditions	
HealthTag (vaccine reminder)	✓	✓	✓	✓	✓	Vaccine	
Humana							
Risk-based	✓	✓	✓	✓	✓	High Costs	Conditions, Med Use (DTP)
Transitions of Care Medication Reconciliation	✓	✓	✓	✓	✓	Transitions	
BCBS NPA							
High Risk (for multi-drug interactions)	✓	✓	✓	✓	✓	Med Use (DTP)	
Prescriber Opioid Education		✓				Med Use (DTP, Opioid)	
Community Pharmacy Smart Recommendations		✓	✓	✓	✓	Med Use (DTP, New Med)	Vaccine
Safe Opioid Use Assessment				✓	✓	Med Use (Opioid)	
Low-Risk/High Cost		✓	✓			High Costs	
Transitions of Care			✓	✓	✓	Transitions	
Chronic Care Management Initiative			✓	✓	✓	Conditions	Med Use (Number of Meds)
UnitedHealth							
Risk-based (for DTPs)	✓	✓	✓	✓	✓	Med Use (DTP, Number of Meds)	Conditions
Medication Adherence Monitoring		✓	✓	✓	✓	Med Use (DTP)	
Transitions of Care	✓	✓	✓	✓	✓	Transitions	

Sponsor and Enhanced MTM Intervention	Model Year 1 (2017)	Model Year 2 (2018)	Model Year 3 (2019)	Model Year 4 (2020)	Model Year 5 (2021)	Primary Targeting Category	Secondary Targeting Categories
WellCare							
Medication Adherence	✓	✓	✓	✓	✓	Med Use (DTP)	Conditions
Opioid Utilization	✓	✓	✓	✓	✓	Med Use (Opioid)	
Select Drug Therapy Problems	✓	✓	✓			Med Use (DTP)	
High Utilizer	✓	✓	✓	✓	✓	Conditions	Med Use (Number of Meds)
Hospital Discharge			✓	✓	✓	Transitions	
BCBS FL							
Anticoagulant	✓	✓	✓	✓	✓	Med Use (New Med)	
Specialty Drug	✓	✓	✓			Med Use (New Med)	Conditions
Medication Adherence	✓	✓	✓	✓	✓	Med Use (DTP)	
Statin Use in Persons with Diabetes		✓	✓	✓	✓	Med Use (DTP, Number of Meds)	Conditions
Hospital Prevention	✓	✓	✓	✓	✓	High Costs	Conditions
Continuity of Care		✓	✓	✓	✓	High Costs	Conditions, Med Use (DTP, New Med)
Diabetes Plus 3	✓	✓	✓	✓	✓	Conditions	
Behavioral Health			✓	✓	✓	Conditions	Med Use (Number of Meds)
Transitions of Care	✓	✓	✓	✓	✓	Transitions	
End Stage Renal Disease Prevention					✓	Conditions	
Congestive Heart Failure Exacerbation					✓	Conditions	

Notes: DTP: targeting based on medication adherence issues, adverse drug reactions/interactions, gaps in care, dosage issues, and/or unnecessary or inappropriate drug therapy; New Med: targeting based on newly prescribed medications; Number of Meds: targeting based on a certain number of medications; Opioid: targeting based on opioid use or misuse. Humana’s Risk-based intervention fell under the Medication Use primary targeting category in Model Years 1 through 3; however, in Model Year 4, it shifted to the High Costs category after Humana made changes to the targeting algorithm for this intervention

B.6.3 Enhanced MTM Service Receipt Supplemental Statistics

This section presents supplemental statistics on Enhanced MTM service receipt, providing more detail for Section 2 of the main report and to highlight sponsor-specific findings. Specifically, this section includes sponsor-level information related to receipt of significant Enhanced MTM services, high- and low-intensity services, and receipt of select significant services (including CMRs provided under Enhanced and traditional MTM).

Overall Significant Services and Service Receipt Rates

The number of eligible beneficiaries who received significant services fluctuated each Model Year due to Model implementation and plan enrollment changes (Table B.6.7). Relative to the preceding Model Year, the number of eligible beneficiaries who received a significant service increased in Model Years 2 and 3, after multiple sponsors added interventions. The number of eligible beneficiaries who received a significant service decreased in Model Years 4 and 5 relative to the preceding Model Year due to large enrollment decreases among participating plans. The significant service receipt rate among eligible beneficiaries was lowest in Model Year 1 at about 34 percent but then reached a fairly consistent level at around 39 to 40 percent in subsequent Model Years.

There were some notable sponsor-specific trends in significant service receipt over time. All sponsors had fewer eligible beneficiaries who received significant services in Model Year 4. Throughout the Model, UnitedHealth's significant service receipt rates, which were between 77 percent and 91 percent, were higher than other sponsors. UnitedHealth's high significant service receipt rates were driven substantially by high TMR service receipt rates. Nearly all of UnitedHealth's eligible beneficiaries were eligible to receive a TMR (Table B.6.13), and UnitedHealth primarily offered these eligible beneficiaries prescriber-facing TMRs in most Model Years, leading to high TMR completion rates.¹⁷ Among sponsors, Humana had the lowest significant service receipt rates in all Model Years at between 18 percent and 29 percent. This was partially attributable to low TMR service receipt rates among eligible Humana beneficiaries in all Model Years.

Over the course of the Model, the majority of significant services were delivered by SilverScript/CVS (Table B.6.8). Among beneficiaries who received significant services, the average number of services provided per beneficiary per year increased for most sponsors over the Model's five-year duration. This increase was particularly notable for Humana and BCBS FL, two sponsors that increasingly emphasized chronic condition management services over the course of Model implementation, and offered these services to beneficiaries multiple times during a given Model Year.

¹⁷ Prescriber-facing TMRs do not require beneficiary involvement in or acceptance of the service and instead involve outreach directly to the prescriber. As such, beneficiary-related outreach barriers, such as incorrect contact information and unresponsiveness to outreach, do not affect service completion.

Table B.6.7: The Number and Proportion of Eligible Beneficiaries Receiving Services Declined for Most Sponsors between Model Years 3 and 4

Sponsor	Model Year 1 (2017)			Model Year 2 (2018)			Model Year 3 (2019)			Model Year 4 (2020)			Model Year 5 (2021)		
	Beneficiaries Receiving Significant Services	Proportion Plan		Beneficiaries Receiving Significant Services	Proportion Plan		Beneficiaries Receiving Significant Services	Proportion Plan		Beneficiaries Receiving Significant Services	Proportion Plan		Beneficiaries Receiving Significant Services	Proportion Plan	
		Eligible Receiving Significant Services	Enrollees Receiving Significant Services		Eligible Receiving Significant Services	Enrollees Receiving Significant Services		Eligible Receiving Significant Services	Enrollees Receiving Significant Services		Eligible Receiving Significant Services	Enrollees Receiving Significant Services			
All Participating Sponsors	421,621	34.1%	22.5%	506,755	39.0%	27.1%	550,326	40.3%	29.7%	497,107	38.5%	29.7%	436,999	38.8%	30.0%
SilverScript/CVS	210,716	29.0%	26.5%	292,975	33.7%	29.2%	298,781	33.7%	30.3%	295,248	36.2%	34.6%	253,505	36.0%	34.7%
Humana	49,343	22.3%	10.8%	51,406	28.5%	17.9%	46,605	27.4%	18.2%	28,565	18.2%	12.6%	27,368	21.4%	14.1%
BCBS NPA	15,147	30.0%	6.3%	35,341	72.0%	14.7%	49,314	67.2%	22.5%	44,245	51.3%	22.2%	30,596	58.1%	20.2%
UnitedHealth	86,474	90.5%	49.2%	66,723	90.9%	49.7%	98,561	90.1%	47.8%	91,999	86.4%	47.7%	86,695	76.6%	48.1%
WellCare	48,166	43.6%	31.1%	48,006	45.3%	32.0%	40,765	41.6%	30.8%	24,839	24.9%	16.8%	27,001	26.8%	18.0%
BCBS FL	12,042	34.4%	18.6%	12,565	55.3%	20.6%	16,459	56.3%	29.4%	12,291	43.0%	22.0%	11,935	40.2%	22.8%

Sources: CME, MARx, and Enhanced MTM Encounter Data.

Notes: Eligible beneficiaries are those with at least one month of recorded eligibility in the Model year in MARx data. The proportion eligible for Enhanced MTM is calculated as the number of beneficiaries eligible for Enhanced MTM divided by the participating plan enrollment and expressed as a percentage.

Table B.6.8: The Average Number of Services Provided per Beneficiary Who Received Services Increased for Most Sponsors in Model Year 4

Sponsor	Significant Services Delivered (Average Significant Services per Beneficiary Who Received Significant Services)				
	Model Year 1 (2017)	Model Year 2 (2018)	Model Year 3 (2019)	Model Year 4 (2020)	Model Year 5 (2021)
All Participating Sponsors	1,063,825 (2.5)	1,333,824 (2.6)	1,438,045 (2.6)	1,688,740 (3.4)	1,324,420 (3.0)
SilverScript/CVS	558,028 (2.6)	744,606 (2.5)	728,825 (2.4)	1,012,631 (3.4)	667,730 (2.6)
Humana	104,117 (2.1)	124,781 (2.4)	102,692 (2.2)	104,858 (3.7)	153,171 (5.6)
BCBS NPA	42,180 (2.8)	73,323 (2.1)	147,689 (3.0)	160,775 (3.6)	116,859 (3.8)
UnitedHealth	203,675 (2.4)	162,053 (2.4)	232,343 (2.4)	229,618 (2.5)	227,061 (2.6)
WellCare	118,110 (2.5)	131,315 (2.7)	121,713 (3.0)	103,257 (4.2)	97,641 (3.6)
BCBS FL	37,715 (3.1)	97,746 (7.8)	104,783 (6.4)	77,601 (6.3)	61,958 (5.2)

Sources: CME, MARx, and Enhanced MTM Encounter Data.

Notes: Eligible beneficiaries are those with at least one month of recorded eligibility in the Model year in MARx data. The proportion eligible for Enhanced MTM is calculated as the number of beneficiaries eligible for Enhanced MTM divided by the participating plan enrollment and expressed as a percentage.

High- and Low-intensity Services

Services are classified as “high-intensity” when they involve interactive engagement between beneficiaries and Enhanced MTM providers, and “low-intensity” when they are prescriber-facing or include non-interactive education and reminders to beneficiaries (Table B.6.9). Over the course of Model implementation, high- and low-intensity service rates among beneficiaries who were eligible for each respective service intensity level fluctuated slightly. High-intensity service receipt rates were consistently higher (over 10 percentage points) than low-intensity service receipt rates among eligible beneficiaries in all Model Years (Table B.6.10).

Table B.6.9: The 12 Types of Significant Services Were Either High- or Low-intensity

Significant Service Category	Significant Service Description	Level of Intensity
<i>Comprehensive Medication Review (CMR) Categories</i>		
1 CMR	An interactive, beneficiary-facing service to comprehensively and systematically review a beneficiary’s medication regimen and identify and develop a plan to address medication-related problems	High
2 Transitions of care (CMR)	A similar service to regular CMR but with a focus on identifying and addressing medication-related problems that occur after a beneficiary is discharged from the hospital	High
<i>Medication Reconciliation Categories</i>		
3 Medication reconciliation	An interactive, beneficiary-facing service, separate from a CMR, to ensure the sponsor’s record of beneficiary medications is current	High
4 Transitions of care (medication reconciliation)	A similar service to a regular medication reconciliation but with a focus on capturing medication changes that occurred as a result of a hospitalization	High
<i>Targeted Medication Review (TMR) Categories</i>		
5 TMR (beneficiary)	A focused, beneficiary-facing service to address specific, pre-identified medication issues	High
6 TMR (prescriber)	A focused, provider-facing service to address specific, pre-identified medication issues	Low
7 Transitions of care (prescriber-facing)	A focused, prescriber-facing service to address a specific medication issue or issues that arise after a beneficiary is discharged from the hospital	Low
<i>Medication Adherence Categories</i>		
8 Medication adherence (pharmacist)	An interactive, beneficiary-facing service to investigate and address beneficiary non-adherence or risk for non-adherence to medications	High
9 Medication adherence (automated)	A beneficiary-facing service that involves automated contact, such as refill reminders, through Interactive Voice Response (IVR)	Low
<i>Other Service Categories</i>		
10 Cost-sharing and social support	Beneficiary-facing services to address cost or social issues that affect a beneficiary’s ability to obtain and/or adhere to medications	High
11 Case/disease management	An interactive, beneficiary-facing service to support beneficiaries in controlling their disease state(s) and/or coordinate care across multiple healthcare entities	High
12 Immunization assessment, reminder, and administration	Beneficiary-facing services that involve assessing the need for, providing reminders or information about, and/or administering vaccines	Low

Table B.6.10: High-intensity Service Receipt Rates Were Higher than Low-Intensity Service Receipt Rates for Most Sponsors in All Model Years

Sponsors	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Beneficiaries Receiving Low-Intensity Services (Proportion)	Beneficiaries Receiving High-Intensity Services (Proportion)	Beneficiaries Receiving Low-Intensity Services (Proportion)	Beneficiaries Receiving High-Intensity Services (Proportion)	Beneficiaries Receiving Low-Intensity Services (Proportion)	Beneficiaries Receiving High-Intensity Services (Proportion)	Beneficiaries Receiving Low-Intensity Services (Proportion)	Beneficiaries Receiving High-Intensity Services (Proportion)	Beneficiaries Receiving Low-Intensity Services (Proportion)	Beneficiaries Receiving High-Intensity Services (Proportion)
All Participating Sponsors	195,079 (17.7%)	294,587 (32.3%)	248,027 (20.5%)	362,690 (36.2%)	293,419 (23.4%)	374,478 (36.2%)	292,306 (25.1%)	335,764 (35.4%)	224,714 (22.8%)	320,841 (37.9%)
SilverScript/CVS	116,589 (16.1%)	152,902 (29.0%)	154,489 (17.9%)	220,950 (33.4%)	176,002 (19.9%)	210,937 (31.7%)	185,627 (22.8%)	203,928 (34.3%)	161,172 (22.9%)	162,326 (31.4%)
Humana	5,831 (3.1%)	47,823 (25.2%)	4,500 (2.7%)	50,653 (30.6%)	2,971 (1.9%)	46,086 (29.0%)	4,869 (3.2%)	27,262 (18.1%)	2,741 (2.9%)	27,057 (28.9%)
BCBS NPA	NA	15,147 (30.3%)	20,371 (56.4%)	19,951 (43.3%)	28,870 (56.2%)	32,546 (51.1%)	23,345 (41.4%)	35,581 (63.7%)	18,106 (37.4%)	25,494 (54.8%)
UnitedHealth	46,893 (94.7%)	41,048 (86.4%)	43,253 (70.5%)	31,307 (86.2%)	62,375 (76.3%)	43,422 (84.5%)	60,020 (63.3%)	38,466 (83.9%)	23,874 (25.5%)	74,644 (86.4%)
WellCare	24,014 (28.2%)	26,750 (39.3%)	21,803 (26.4%)	29,181 (39.7%)	16,096 (22.2%)	27,996 (38.1%)	13,272 (31.8%)	19,837 (26.1%)	12,102 (32.2%)	22,287 (29.5%)
BCBS FL	1,790 (55.2%)	11,063 (34.8%)	3,637 (59.5%)	10,804 (52.2%)	7,120 (74.9%)	13,594 (62.3%)	5,188 (73.7%)	10,732 (43.4%)	6,738 (84.1%)	9,092 (33.7%)

Sources: MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: Eligible beneficiaries are those with at least one month of recorded eligibility in the Model year in MARx data and intervention-specific flags in the supplemental eligibility files received from sponsors. The proportion of beneficiaries receiving low-intensity services is calculated as the number of eligible beneficiaries who received a low-intensity service divided by the number of beneficiaries eligible for a low-intensity service and expressed as a percentage. The proportion of beneficiaries receiving high-intensity services is calculated as the number of eligible beneficiaries who received a high-intensity service divided by the number of beneficiaries eligible for a high-intensity service and expressed as a percentage. Cells with “NA” signify that the sponsor did not offer the service intensity type.

Service Receipt Detail for Select Significant Services: CMRs, TMRs, Transitions-of-Care Services, and Adherence Services

In most Model Years, about a third of eligible beneficiaries received a CMR service (Table B.6.11). The CMR receipt rate among eligible beneficiaries was lowest in Model Year 1 at about 29 percent and highest in Model Year 4, the first year of the COVID-19 public health emergency (PHE), at about 40 percent. As previously reported, sponsors indicated that beneficiaries were more likely to respond to outreach and accept CMR services during the PHE.¹⁸ Consistent with sponsor reports, in Model Year 5, the CMR receipt rate among eligible beneficiaries returned to pre-Model Year 4 levels, decreasing 18 percent from about 40 percent to about 33 percent. The CMR receipt rates among comparison group beneficiaries who were eligible for traditional MTM also decreased in Model Year 5 (Table B.6.12) but increased in all other Model Years.

In Model Years 4 and 5, the number of Enhanced MTM beneficiaries eligible for a CMR decreased for most sponsors. The most notable exception was UnitedHealth, which had an 88 percent increase, from 45,858 to 86,359 beneficiaries. This increase was likely attributable to a change in the frequency at which UnitedHealth ran its risk stratification algorithm in Model Year 5. In Model Year 5, UnitedHealth started running its algorithm quarterly in an effort to better capture changes to beneficiary risk levels that occurred throughout the year. This modification resulted in beneficiaries who were previously low risk, and hence ineligible for a CMR, becoming high risk and eligible for a CMR during the Model Year. Prior to Model Year 5, UnitedHealth ran its risk stratification algorithm only once and at the beginning of the Model Year (in January), and beneficiaries remained at their assigned risk level for the entire year.

The TMR receipt rate among eligible beneficiaries increased slightly over the course of the Model from 24 percent in Model Year 1 to 29 percent in Model Year 5, with a spike in the rate to 30 percent in Model Year 4 (Table B.6.13). Among sponsors, TMR receipt rates varied due to differences in intervention design and implementation factors. Both BCBS FL and UnitedHealth primarily offered prescriber-facing TMRs in most Model Years and thus generally had higher rates of TMR receipt among beneficiaries eligible for TMR than other sponsors. Between Model Years 3 and 5, BCBS NPA had a substantial drop in TMR receipt rates among eligible beneficiaries. These decreases align with BCBS NPA's ongoing self-report that community pharmacies, which primarily deliver TMRs, have not been able to focus on delivering Enhanced MTM services due to the PHE. Between Model Years 4 and 5, BCBS FL also had a substantial decline in its TMR receipt rate among eligible beneficiaries, from 99 percent to about 50 percent. The number of eligible beneficiaries who received a TMR in Model Year 5 was actually slightly higher than in Model Year 4 (1,254 vs. 1,239), but the number of beneficiaries who were eligible for a TMR in Model Year 5 nearly doubled from 1,252 to 2,487. However, this was not attributable to intervention or implementation changes.

¹⁸ For additional details, please refer to: Acumen, LLC and Westat, Inc., "Evaluation of the Part D Enhanced Medication Therapy Management (MTM) Model: Fourth Evaluation Report," April 2022, <https://innovation.cms.gov/data-and-reports/2022/mtm-fourth-evalrept>.

As shown in Figure B.6.1, for most sponsors, the proportion of eligible beneficiaries receiving prescriber-facing TMRs was higher than the proportion of eligible beneficiaries receiving beneficiary-facing TMRs in most Model Years. Differences in the proportion of beneficiaries who received prescriber- and beneficiary-facing TMRs were due to differences in intervention design. SilverScript/CVS and Humana provided primarily beneficiary-facing TMRs, while WellCare, UnitedHealth, and BCBS FL provided primarily prescriber-facing TMRs. BCBS NPA historically provided more prescriber-facing than beneficiary-facing TMRs, but this trend reversed in Model Year 4. Notably, in Model Year 5, UnitedHealth provided substantially more beneficiary-facing TMRs than prescriber-facing TMRs, whereas in all other Model Years UnitedHealth provided more prescriber-facing TMRs than beneficiary-facing TMRs. This shift was likely attributable to more beneficiaries identified as high risk in Model Year 5 after UnitedHealth decided to run its risk stratification algorithm more frequently. For UnitedHealth's Risk-Based intervention, high-risk beneficiaries could receive either a beneficiary- or prescriber-facing TMR, while low-risk beneficiaries could receive only a prescriber-facing TMR.

Over the course of the Model, transitions-of-care service receipt rates among eligible beneficiaries were high relative to other select significant service receipt rates among eligible beneficiaries. In four of the five Model Years, the transitions-of-care service receipt rate among eligible beneficiaries was about or above 50 percent (Table B.6.14). Receipt rates for other select significant services were typically between 20 and 40 percent. These findings support beneficiary and sponsor perspectives that transitions of care are clinically meaningful times when there is particular value in receiving an MTM service. In Model Year 5, the transitions-of-care service receipt rate among eligible beneficiaries returned to a level similar to Model Year 3 (about 49 percent vs. 50 percent) following a dip in Model Year 4 (to about 36 percent), the first year of the PHE. The number of beneficiaries eligible for a transitions-of-care service in Model Year 5 was lower than in Model Year 4 for Humana, BCBS NPA, and UnitedHealth. As noted, Humana relied solely on pharmacists to identify eligible beneficiaries in Model Year 5 after discontinuing use of HIE data for beneficiary targeting. The other two sponsors did not report changing their transitions-of-care intervention targeting in Model Year 5.

Adherence service receipt rates among eligible beneficiaries peaked at 43.5 percent in Model Year 3, then declined to their lowest levels in subsequent Model Years (Table B.6.15). As reported previously, the factors contributing to this decrease are unclear and not explained by implementation changes. In Model Year 5, UnitedHealth's adherence service receipt rate decreased by over 50 percent from about 71 percent to 33 percent. As noted in Section B.6.2, UnitedHealth had a large increase in eligibility for its medication adherence intervention without a corresponding increase in adherence service receipt, which led to the lower rate. Multiple sponsors indicated that adherence interventions are promising in terms of impact and costs savings. In contrast, pharmacy industry stakeholders questioned the value of medication adherence interventions since medication adherence is generally high already among Medicare beneficiaries. These perspectives, along with Modelwide adherence service receipt trends, suggest the need for further refinement of adherence interventions and services.

Table B.6.11: About a Third of Beneficiaries Who Were Eligible for a CMR Received the Service in Most Model Years

Sponsor	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Beneficiaries Eligible for CMR	Eligible Beneficiaries Who Received a CMR (Proportion)	Beneficiaries Eligible for CMR	Eligible Beneficiaries Who Received a CMR (Proportion)	Beneficiaries Eligible for CMR	Eligible Beneficiaries Who Received a CMR (Proportion)	Beneficiaries Eligible for CMR	Eligible Beneficiaries Who Received a CMR (Proportion)	Beneficiaries Eligible for CMR	Eligible Beneficiaries Who Received a CMR (Proportion)
All Participating Sponsors	230,101	67,179 (29.2%)	268,265	91,038 (33.9%)	324,586	103,040 (31.7%)	240,605	95,670 (39.8%)	244,003	79,692 (32.7%)
SilverScript/CVS	39,768	9,151 (23.0%)	86,653	21,471 (24.8%)	111,719	20,029 (17.9%)	102,330	38,748 (37.9%)	74,531	32,300 (43.3%)
Humana	43,596	16,417 (37.7%)	54,355	22,689 (41.7%)	56,334	24,811 (44.0%)	NA	NA	NA	NA
BCBS NPA	50,002	14,235 (28.5%)	45,696	18,874 (41.3%)	53,363	23,473 (44.0%)	42,108	23,805 (56.5%)	34,011	15,718 (46.2%)
UnitedHealth	47,507	14,394 (30.3%)	36,309	11,869 (32.7%)	51,408	15,393 (29.9%)	45,858	12,528 (27.3%)	86,359	12,725 (14.7%)
WellCare	25,790	5,218 (20.2%)	29,781	7,848 (26.4%)	32,496	9,632 (29.6%)	35,560	11,956 (33.6%)	36,334	12,451 (34.3%)
BCBS FL	23,438	7,764 (33.1%)	15,471	8,287 (53.6%)	19,266	9,702 (50.4%)	14,749	8,633 (58.5%)	12,768	6,498 (50.9%)

Sources: MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: Beneficiaries could decline specific services, and when possible, counts exclude records associated with a service decline or failed outreach attempt. Eligible beneficiaries were those with program-specific flags in the supplemental data received from sponsors. Cells with NA signify that the sponsor did not offer the service.

Table B.6.12: Receipt Rates for CMRs among Traditional MTM Beneficiaries Increased through Model Year 4 but then Decreased in Model Year 5

Sponsor	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Traditional MTM Comparison Beneficiaries Who Received a CMR	Proportion of Traditional MTM Comparison Beneficiaries Who Received a CMR	Traditional MTM Comparison Beneficiaries Who Received a CMR	Proportion of Traditional MTM Comparison Beneficiaries Who Received a CMR	Traditional MTM Comparison Beneficiaries Who Received a CMR	Proportion of Traditional MTM Comparison Beneficiaries Who Received a CMR	Traditional MTM Comparison Beneficiaries Who Received a CMR	Proportion of Traditional MTM Comparison Beneficiaries Who Received a CMR	Traditional MTM Comparison Beneficiaries Who Received a CMR	Proportion of Traditional MTM Comparison Beneficiaries Who Received a CMR
All Participating Sponsors	66,781	25.5%	63,728	32.3%	76,136	37.9%	66,415	40.9%	39,659	35.9%
SilverScript/CVS	37,728	25.5%	37,211	33.1%	40,775	40.5%	34,250	44.3%	16,177	31.7%
Humana	1,656	29.1%	1,710	39.6%	1,900	46.2%	1,688	46.4%	982	37.4%
BCBS NPA	16,738	24.4%	14,623	29.8%	15,500	32.9%	13,030	35.6%	10,090	39.8%
UnitedHealth	4,725	31.4%	4,396	38.0%	4,908	44.6%	4,256	45.3%	2,501	37.9%
WellCare	6,348	25.8%	5,581	29.3%	12,378	33.8%	10,112	35.7%	8,053	41.4%
BCBS FL	10,684	25.9%	10,401	33.6%	10,708	40.8%	11,046	42.6%	6,248	36.0%

Sources: CME; Part D Reporting Requirements Data.

Notes: Comparison beneficiaries were selected for each sponsor’s comparison group from multiple non-participating plans offering Traditional MTM, and are not restricted to beneficiaries enrolled in the sponsor’s plans.

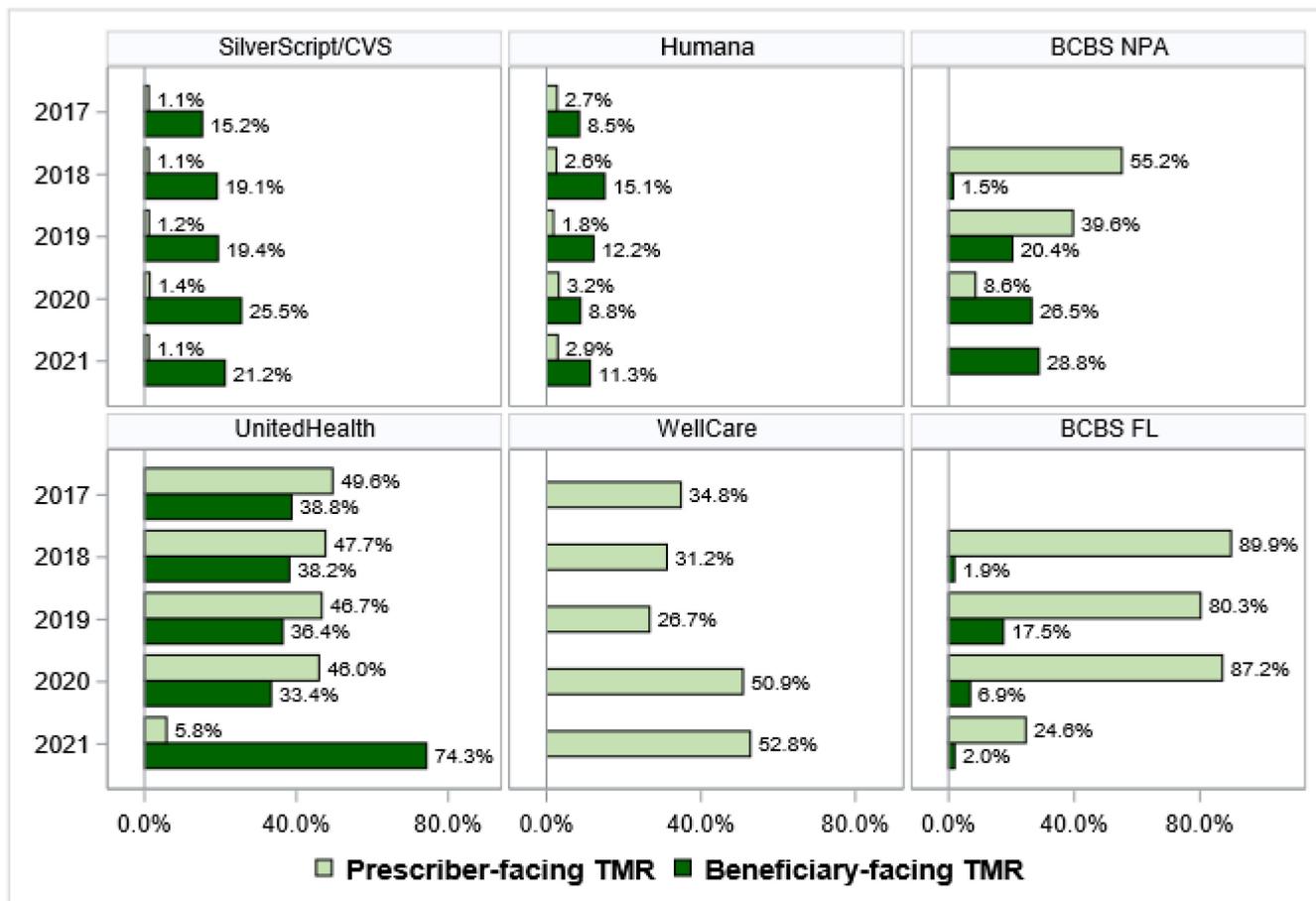
Table B.6.13: Sponsors Varied Widely in TMR Receipt Rates and Changes over the Course of the Model

Sponsor	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Beneficiaries Eligible for TMR	Eligible Beneficiaries Who Received a TMR (Proportion)	Beneficiaries Eligible for TMR	Eligible Beneficiaries Who Received a TMR (Proportion)	Beneficiaries Eligible for TMR	Eligible Beneficiaries Who Received a TMR (Proportion)	Beneficiaries Eligible for TMR	Eligible Beneficiaries Who Received a TMR (Proportion)	Beneficiaries Eligible for TMR	Eligible Beneficiaries Who Received a TMR (Proportion)
All Participating Sponsors	856,714	205,285 (24.0%)	988,181	256,289 (25.9%)	1,037,342	287,730 (27.7%)	908,016	276,340 (30.4%)	757,556	215,602 (28.5%)
SilverScript/CVS	504,703	78,544 (15.6%)	643,839	124,444 (19.3%)	656,977	129,450 (19.7%)	585,881	150,572 (25.7%)	510,328	109,461 (21.4%)
Humana	189,782	19,592 (10.3%)	165,015	26,592 (16.1%)	158,081	20,561 (13.0%)	150,286	15,562 (10.4%)	93,635	11,664 (12.5%)
BCBS NPA	NA	NA	36,312	20,161 (55.5%)	52,786	30,259 (57.3%)	50,671	17,511 (34.6%)	41,906	8,649 (20.6%)
UnitedHealth	94,617	83,587 (88.3%)	72,673	62,497 (86.0%)	108,284	90,038 (83.1%)	106,374	84,468 (79.4%)	98,106	78,597 (80.1%)
WellCare	67,612	23,562 (34.8%)	69,294	21,633 (31.2%)	59,720	15,971 (26.7%)	13,552	6,988 (51.6%)	11,094	5,977 (53.9%)
BCBS FL	NA	NA	1,048	962 (91.8%)	1,494	1,451 (97.1%)	1,252	1,239 (99.0%)	2,487	1,254 (50.4%)

Sources: MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: Beneficiaries could decline specific services, and when possible, counts exclude records associated with a service decline or failed outreach attempt. Eligible beneficiaries are those with program-specific flags in the supplemental data received from sponsors. Cells with “NA” signify that the sponsor did not offer the service.

Figure B.6.1: The Proportion of Eligible Beneficiaries Receiving Prescriber- and Beneficiary-Facing TMRs Varied by Sponsor Due to Intervention Design



Sources: MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: Bars do not appear in Model Year 1 for BCBS FL and BCBS NPA because neither sponsor offered a TMR in Model Year 1.

Table B.6.14: Transitions-of-Care Service Receipt Rates Were High over the Course of Model, Reaching around or above 50 Percent in Most Model Years

Sponsor	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Beneficiaries Eligible for Transitions Services	Eligible Beneficiaries Receiving a Transition Service (Proportion)	Beneficiaries Eligible for Transitions Services	Eligible Beneficiaries Receiving a Transition Service (Proportion)	Beneficiaries Eligible for Transitions Services	Eligible Beneficiaries Receiving a Transition Service (Proportion)	Beneficiaries Eligible for Transitions Services	Eligible Beneficiaries Receiving a Transition Service (Proportion)	Beneficiaries Eligible for Transitions Services	Eligible Beneficiaries Receiving a Transition Service (Proportion)
All Participating Sponsors	7,726	4,789 (62.0%)	12,038	7,293 (60.6%)	24,738	12,377 (50.0%)	27,005	9,791 (36.3%)	19,295	9,369 (48.6%)
Humana	1,303	45 (3.5%)	3,348	1,079 (32.2%)	7,553	1,187 (15.7%)	9,359	1,464 (15.6%)	44	38 (86.4%)
BCBS NPA	NA	NA	NA	NA	1,239	714 (57.6%)	1,313	763 (58.1%)	486	361 (74.3%)
UnitedHealth	3,181	2,282 (71.7%)	3,455	1,955 (56.6%)	2,904	1,782 (61.4%)	2,386	1,252 (52.5%)	1,761	799 (45.4%)
WellCare	NA	NA	NA	NA	4,557	1,509 (33.1%)	7,927	2,656 (33.5%)	10,950	3,576 (32.7%)
BCBS FL	3,242	2,462 (75.9%)	5,235	4,259 (81.4%)	8,485	7,185 (84.7%)	6,020	3,656 (60.7%)	6,054	4,595 (75.9%)

Sources: MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: All counts exclude records associated with a service decline or failed outreach attempt. Eligible beneficiaries are those with program-specific flags in the supplemental data received from sponsors. Cells with “NA” signify that the sponsor did not offer the service in a specific Model Year. SilverScript/CVS did not offer a transitions-of-care service.

Table B.6.15: Adherence Service Receipt Rates Peaked in Model Year 3 and then Declined in Model Years 4 and 5

Sponsor	Model Year 1 (2017)		Model Year 2 (2018)		Model Year 3 (2019)		Model Year 4 (2020)		Model Year 5 (2021)	
	Beneficiaries Eligible for Adherence Services	Eligible Beneficiaries Receiving an Adherence Service (Proportion)	Beneficiaries Eligible for Adherence Services	Eligible Beneficiaries Receiving an Adherence Service (Proportion)	Beneficiaries Eligible for Adherence Services	Eligible Beneficiaries Receiving an Adherence Service (Proportion)	Beneficiaries Eligible for Adherence Services	Eligible Beneficiaries Receiving an Adherence Service (Proportion)	Beneficiaries Eligible for Adherence Services	Eligible Beneficiaries Receiving an Adherence Service (Proportion)
All Participating Sponsors	86,501	29,338 (33.9%)	109,503	46,415 (42.4%)	118,955	51,754 (43.5%)	116,801	37,077 (31.7%)	146,789	38,054 (25.9%)
BCBS NPA	NA	NA	793	347 (43.8%)	8,297	5,090 (61.3%)	3,137	1,333 (42.5%)	1,829	1,262 (69.0%)
UnitedHealth	NA	NA	27,178	16,810 (61.9%)	31,405	19,868 (63.3%)	26,492	18,713 (70.6%)	55,314	18,341 (33.2%)
WellCare	69,065	24,160 (35.0%)	70,498	25,558 (36.3%)	68,751	23,052 (33.5%)	69,337	14,778 (21.3%)	67,688	15,940 (23.5%)
BCBS FL	17,436	5,178 (29.7%)	11,034	3,700 (33.5%)	10,502	3,744 (35.7%)	17,835	2,253 (12.6%)	21,958	2,511 (11.4%)

Sources: MARx; Enhanced MTM Encounter Data; intervention-specific eligibility files.

Notes: Cells with “NA” signify that the sponsor did not offer an adherence intervention in a specific Model Year; only discrete medication adherence interventions for which eligible beneficiaries were identified in the intervention-level eligibility data received from sponsors are included in this table. SilverScript/CVS and Humana did not offer adherence interventions. UnitedHealth reported that 2,307 beneficiaries who received an adherence service in 2018 were not reported as eligible in MARx.

B.7 Qualitative Methods

This section provides an overview of the qualitative data collection and analysis methods used to gather information for this Fifth Evaluation Report. Section B.7 describes the approach used to gather and analyze information from the six participating Part D sponsors and their vendors. Section B.7.2 outlines the approach to pharmacy industry stakeholder interviews, and Section B.7.3 presents the methods used in the beneficiary in-depth interviews. The qualitative information included in this report is based on data collection and analysis conducted between November 2016 and March 2022.

B.7.1 Sponsor and Vendor Interviews and Review of Secondary Information

Qualitative researchers on the evaluation team conducted in-depth telephone or in-person interviews with leadership and key representatives from both participating sponsors and their respective vendors on a quarterly basis beginning in November 2016. In addition, researchers reviewed a number of secondary materials, including the sponsors' Model Years 1-5 applications (including any mid-year application changes), supplemental application materials, and materials from CMS presentations and Internal Learning Systems records submitted by sponsors to CMS. They also reviewed additional information provided by sponsors or sponsors' vendors (e.g., PowerPoint presentations describing Enhanced MTM interventions, beneficiary recruitment and educational material examples, Enhanced MTM intervention policy documents, and targeting specifications). All interviews were conducted using sponsor-tailored interview protocols that were designed to capture information consistently across sponsors. In-person interviews with staff responsible for overseeing or implementing Enhanced MTM were also conducted during site visits to sponsor and/or vendor headquarters between October 2017 and April 2018. One "virtual" site visit was conducted with a sponsor during March and April 2018 via WebEx. Phone calls with each sponsor were generally conducted every quarter. In several cases, multiple phone calls were conducted each quarter.

Interview topics varied across Model Years. Initial calls during the first Model Year focused on sponsors' overall Enhanced MTM interventions and structure. Subsequent calls in Model Year 1 aimed to obtain in-depth information about and documentation of the targeting criteria that sponsors or sponsors' vendors used to determine which beneficiaries were eligible for Enhanced MTM interventions. In some cases, interviews occurred later in the first Model Year due to the time required to execute non-disclosure agreements (NDAs) with the sponsor/vendor prior to detailed conversations about targeting criteria. Subsequent Model Year 1 calls also covered high-level differences between the sponsors' traditional Part D MTM program and Model Year 1 Enhanced MTM interventions; key implementation milestones and processes; Enhanced MTM intervention modifications; implementation lessons learned, challenges, and/or successes; and workforce structure and training. Calls conducted during Model Years 2 (2018) and 3 (2019) focused on ongoing Model implementation and intervention

updates; changes to the sponsors' approaches for using SNOMED CT codes to document Enhanced MTM services and constructing their Medicare Advantage Prescription Drug (MARx) Transaction Code (TC) 91 eligibility data sets; processes related to prescriber outreach and documentation of prescriber-related interactions; and ongoing implementation lessons learned, challenges, and/or successes. Calls conducted during Model Year 4 (2020) covered topics similar to those addressed during previous Model Years, with a particular focus on the effect of the evolving COVID-19 PHE on Model implementation. Model Year 5 (2021) topics focused on ongoing Model implementation and PHE effects, reflections on Model experiences, Model close-out and transition plans, and future plans for the sponsor's Part D MTM programs and lessons from the Model that could be applied to Part D MTM more broadly based on learnings from the Model.

For each interview and site visit, qualitative researchers collaborated with their point of contact for each sponsor to determine which internal or vendor staff representatives should participate in the interview. Respondents included Enhanced MTM intervention leads/managers, overall Part D MTM directors, account managers or directors, pharmacists, clinical systems and reporting representatives, analytics representatives, legal and regulatory affairs representatives, and consultants.

All interviews were audio-recorded and detailed notes were generated for analysis purposes. The qualitative lead, along with other researchers who participated in the interviews, reviewed the interviews and supporting materials for common themes and key points of interest. This group met regularly to discuss key outputs from interviews across all participating sponsors/vendors, reached consensus on the interpretation of the data, and identified themes/patterns, which are summarized and presented in this Fifth Evaluation Report.

B.7.2 Pharmacy Industry Stakeholder Interviews

In early 2022, following the conclusion of the Model, the evaluation team conducted interviews with seven select pharmacy industry stakeholders comprising industry and professional associations and standards organizations. This was the second round of such interviews conducted by the evaluation team. The evaluation team conducted a first round of interviews with pharmacy industry stakeholders in early 2017, the first year of the Model. The first round of interviews focused on stakeholders' early perceptions and expectations of the Model. The second round of interviews focused on pharmacy industry stakeholders' involvement and interest in the Model over time, feedback on Model design and implementation, perceptions of factors that influenced the Model's outcomes, and recommendations for the future direction of MTM.

The evaluation team identified potential pharmacy industry stakeholder organizations based on multiple inputs, including literature review, previous participation in interviews, existing relationships, and CMS recommendations. In collaboration with CMS, the evaluation team identified initial points of contact at each organization and which stakeholder groups to prioritize for outreach. The evaluation team then emailed the points of contact and followed up

with a phone call to explain the objectives of the interview and coordinate which of the organization's representatives would participate in the interview. Prior to each interview, the evaluation team conducted targeted environmental scans to identify publicly available materials related to the stakeholder group and the Enhanced MTM Model. Each interview lasted approximately one hour and was guided by a semi-structured interview protocol. Most interviews included multiple participants. Analysis methods used for the stakeholder interviews were similar to those described for the sponsor and vendor interviews in Section B.7.

B.7.3 Beneficiary In-depth Interviews

The evaluation team conducted a second round of in-depth interviews with beneficiaries in the fifth and final year of the Model (2021). These interviews focused on the factors that influenced beneficiaries' willingness and decisions to participate in Enhanced MTM services, beneficiaries' perceptions of Enhanced MTM services, and whether receiving Enhanced MTM services drove beneficiary behavior. These interviews expanded on learnings from the initial round of beneficiary interviews conducted in Model Year 2 (2018), when the Model was in the early stage of implementation. The Model Year 2 beneficiary interviews provided preliminary insight into aspects of Enhanced MTM service delivery that were viewed favorably by beneficiaries.

As with the Model Year 2 beneficiary interviews, a goal of the Model Year 5 interviews was to identify and interview beneficiaries shortly after they received or declined a service. Sample frames for each sponsor were constructed using Enhanced MTM Encounter Data, MARx eligibility data, and supplementary Encounter Data files from each sponsor. Random samples of beneficiaries eligible for Enhanced MTM were drawn, which included beneficiaries stratified into three groups to assess the experiences of beneficiaries with different levels of exposure to Enhanced MTM, and to explore reasons for declining offered services. The three beneficiary groups were: (i) beneficiaries who received multiple high-intensity services since the beginning of Model Year 3 (2019); (ii) beneficiaries who received a single high-intensity service since the beginning of Model Year 3; and (iii) beneficiaries who declined a high-intensity service.

For each sponsor, sampled beneficiaries were mailed a letter that explained the purpose of the interview and invited beneficiaries to call the evaluation team to schedule an interview.¹⁹ Within a few weeks of mailing the letters, the evaluation team began responding to phone inquiries from beneficiaries and contacting other sampled beneficiaries to assess their interest in participation. Those interested were either interviewed while on the phone or, if not available at the time of the call, were contacted at a convenient time for the beneficiary. Beneficiaries' caregivers were eligible to participate if they confirmed they were the recipient of a service or declined a service on the beneficiaries' behalf. A total of 124 interviews were completed, including three interviews conducted with beneficiaries' caregivers. Two interviews were conducted in Spanish, and the remainder were conducted in English.

¹⁹ In the letter, beneficiaries were also informed that an interviewer may contact them if they did not call the number provided to set up or opt out of the interview.

Interviews were audio-recorded, and interviewers' notes were documented in a data collection template. At the conclusion of the interviews, the data were formatted and imported into NVivo 11 for thematic analysis. The evaluation team explored themes across different demographic characteristics to assess whether any patterns emerged that suggested differences across groups. For validation, two qualitative researchers who conducted a subset of the beneficiary interviews reviewed and contributed to the themes identified.