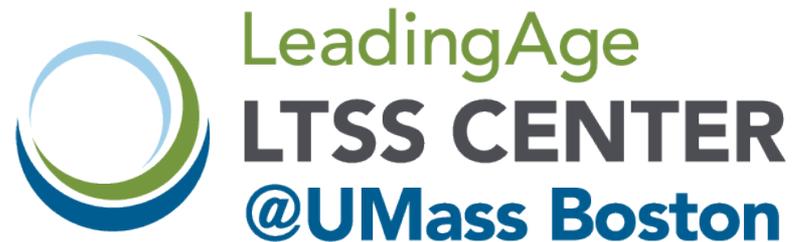




Tracking Progress on Person-Centered Care: What Does it Really Cost Us to Ignore Patient Preferences?

*Results from
Health and Retirement Study*

June 2025



Research bridging policy and practice

Purpose of Research



Using the Health and Retirement Study we will answer the following research questions for individuals:

- What is the relationship between care preferences being taken into account and service utilization and costs including:
 - ✓ Inpatient care
 - ✓ Hospital outpatient care
 - ✓ Physician outpatient care
 - ✓ Emergency Department
- How has this changed over time between 2014 -2020?
- How does having a usual source of care influence service utilization and costs?
- How do results vary by racial and ethnic groups, socioeconomic factors, and by whether someone is dually eligible for Medicare and Medicaid?

Method

- Using the Health and Retirement Study (HRS) draw a sample of Medicare beneficiaries age 65+ and collect socio-demographic, attitudinal, and experience information (2014-2020).
- Link Medicare and Medicaid claims data to these individuals and develop comprehensive analytic database for use in analysis.
- Conduct descriptive and multivariate analysis to uncover the relationship between the primary person-centered care measure and claims costs.
 - ✓ Key person centered care question:
 - When thinking about your experiences with the health care system over the past year, how often were your preferences for care taken into account – never, sometimes, usually or always?



Longitudinal HRS Sample with Linked Claims Data by Year

2014

14,823

HRS SAMPLE AGE 65+
WITH LINKED CLAIMS
DATA

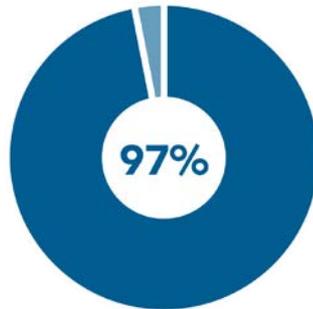


PERCENT OF SAMPLE
REMAINING FROM 2014
BASELINE

2016

14,348

HRS SAMPLE AGE 65+
WITH LINKED CLAIMS
DATA

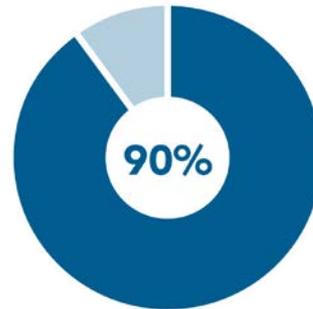


PERCENT OF SAMPLE
REMAINING FROM 2014
BASELINE

2018

13,368

HRS SAMPLE AGE 65+
WITH LINKED CLAIMS
DATA

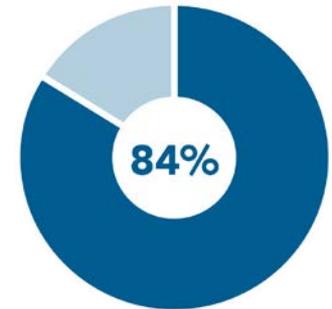


PERCENT OF SAMPLE
REMAINING FROM 2014
BASELINE

2020

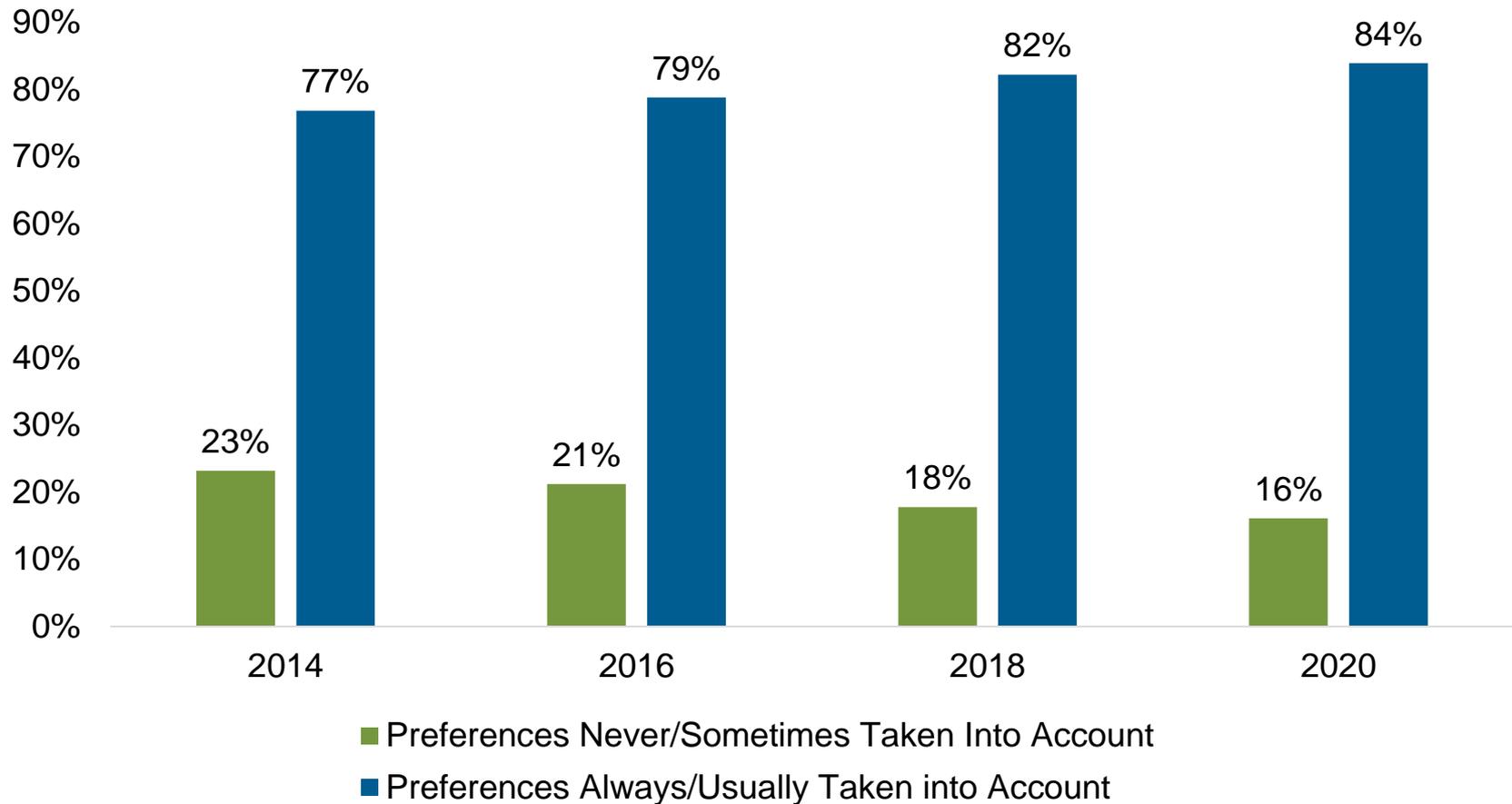
12,445

HRS SAMPLE AGE 65+
WITH LINKED CLAIMS
DATA

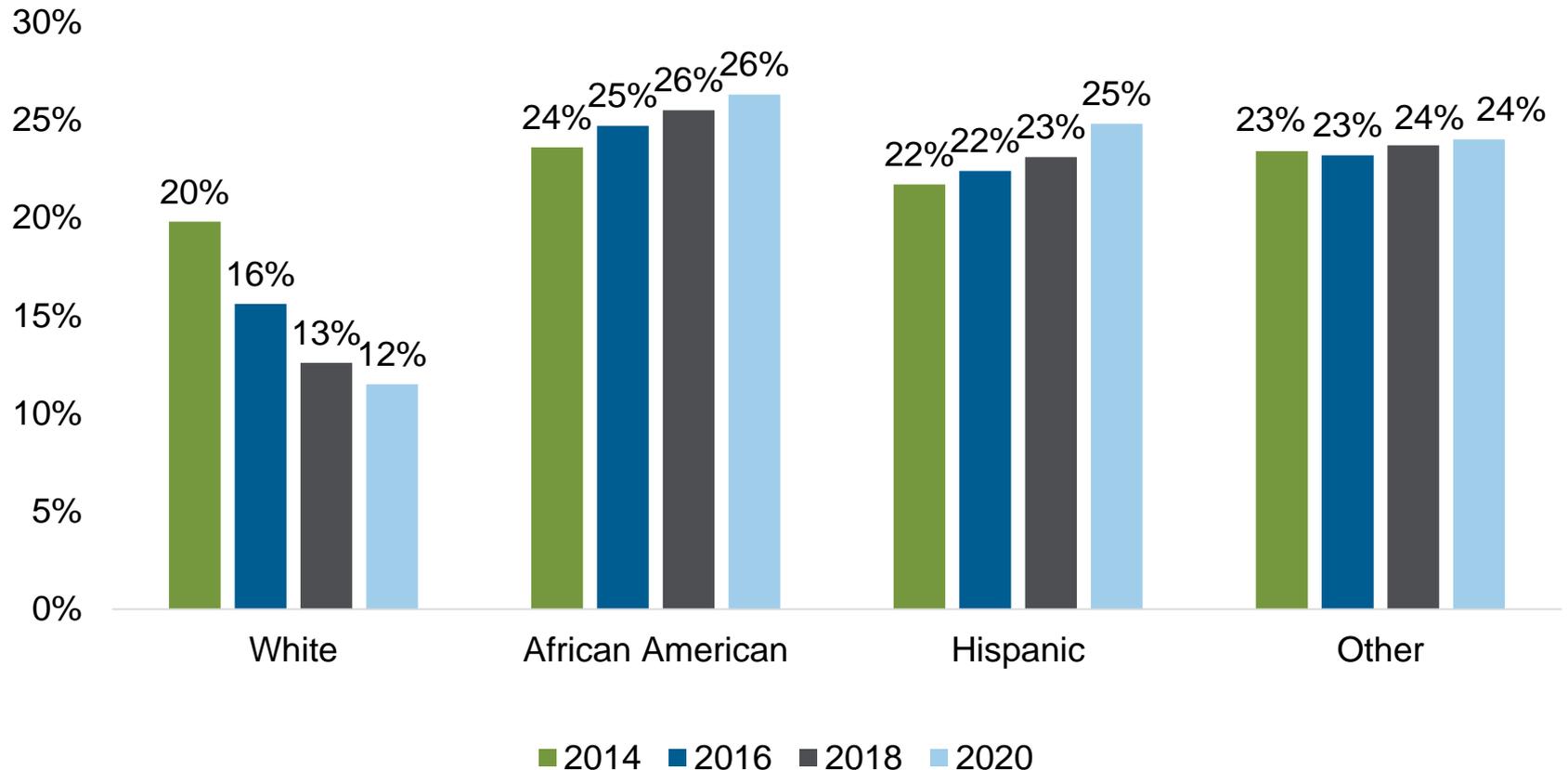


PERCENT OF SAMPLE
REMAINING FROM 2014
BASELINE

The Percentage of Population Age 65+ by Extent to Which Care Preferences are Taken into Account (2014-2020)



The Percentage of Population Age 65+ with Care Preferences Never/Sometimes Taken into Account Race/Ethnicity (2014-2020)



Distribution of Sample by Whether Care Preferences are Taken into Account by Socio-demographic Characteristics (1)

CHARACTERISTIC	CARE PREFERENCES TAKEN INTO ACCOUNT NEVER/SOMETIMES	CARE PREFERENCES TAKEN INTO ACCOUNT USUALLY/ALWAYS
Age (Mean)	73.8	72.9
50 to 64	26.2%	73.8%
65 to 74	19.5%	80.5%
75 to 84	19.6%	80.4%
85+	18.5%	81.5%
Gender		
Female	15.1%	84.9%
Male	17.5%	82.5%
Marital Status		
Married/Partnered	20.0%	80.0%
Not Married/Partnered	27.6%	72.4%

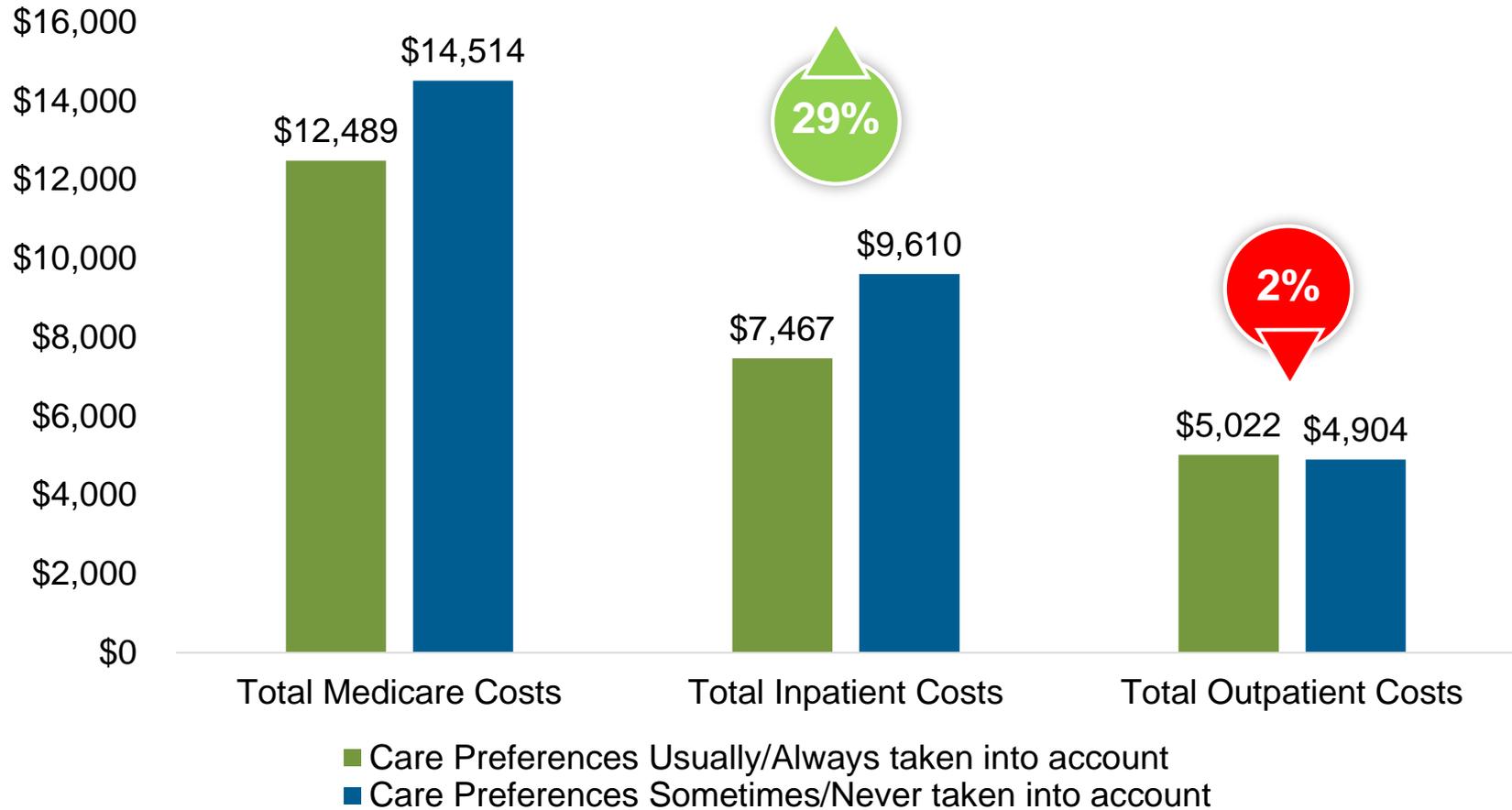
Distribution of Sample by Whether Care Preferences are Taken into Account by Socio-demographic Characteristics (2)

CHARACTERISTIC	CARE PREFERENCES TAKEN INTO ACCOUNT NEVER/SOMETIMES	CARE PREFERENCES TAKEN INTO ACCOUNT USUALLY/ALWAYS
Race/Ethnicity		
Non-Hispanic White	11.5%	88.5%
Non-Hispanic Black	26.3%	73.7%
Non-Hispanic Other	24.0%	76.0%
Hispanic	24.8%	75.2%
Financial Characteristics		
Household Income (Mean)	\$42,910	\$68,781
\$0 to \$ 29.9K	30.6%	69.4%
\$30k to \$74.9K	21.5%	78.5%
\$75k and over	13.3%	86.7%
Net Wealth Mean	\$346,627	\$707,410
Below FPL	34.8%	65.2%
Retired	23.0%	77.0%

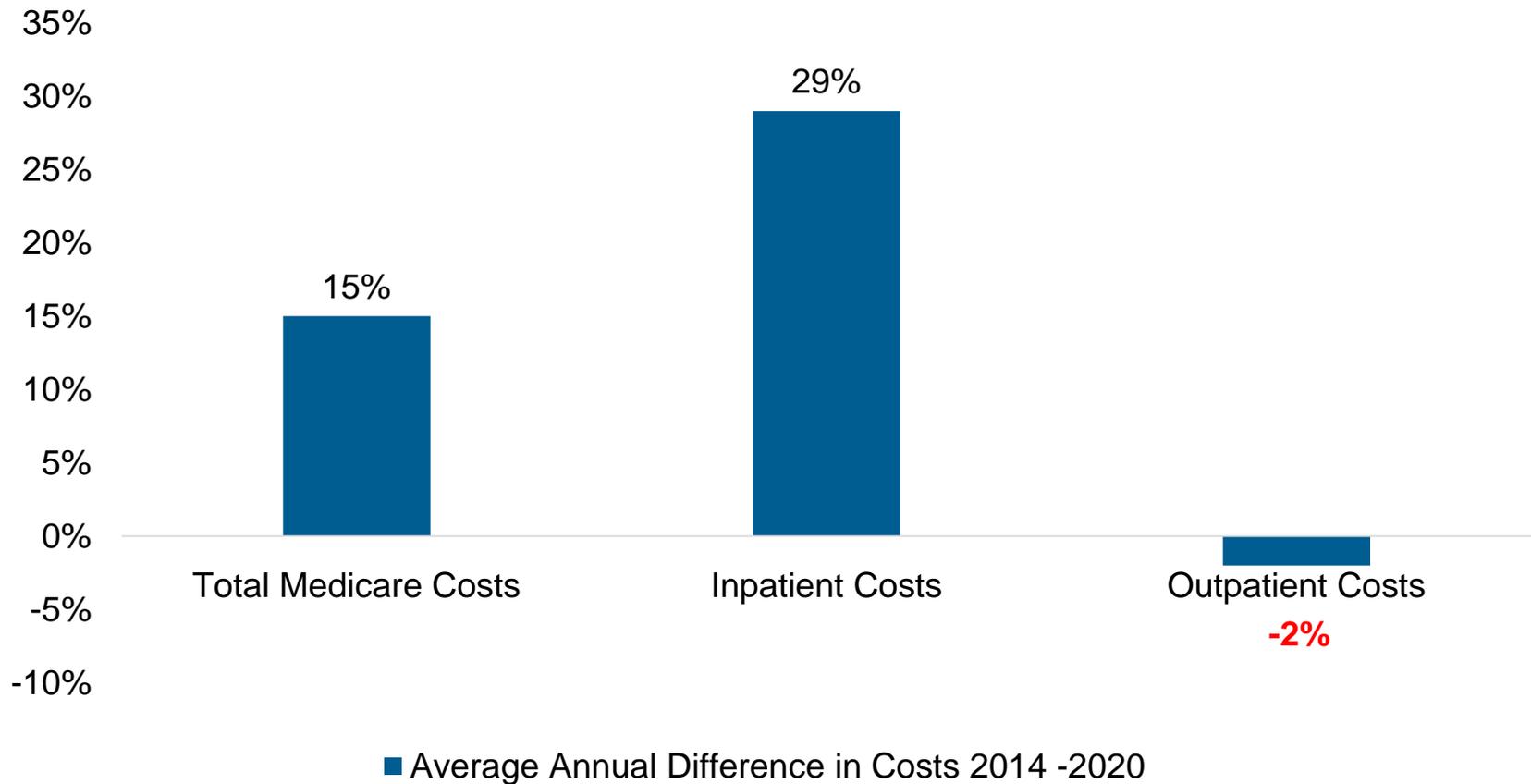
Distribution of Sample by Whether Care Preferences are Taken into Account by Socio-demographic Characteristics (3)

CHARACTERISTIC	CARE PREFERENCES TAKEN INTO ACCOUNT NEVER/SOMETIMES	CARE PREFERENCES TAKEN INTO ACCOUNT USUALLY/ALWAYS
Health Characteristics		
Poor/Fair Health	30.2%	69.8%
Depression	32.5%	67.5%
Chronic Conditions (Mean)	3.0	2.3
Impaired Cognition	20.2%	79.8%
Current Smoker	31.7%	68.3%
Has Usual Source of Care	8.7%	91.3%
Dual Eligible	30.6%	69.4%
Census Region		
Northeast	23.4%	76.6%
Midwest	20.5%	79.5%
South	27.1%	72.9%
West	20.5%	79.5%

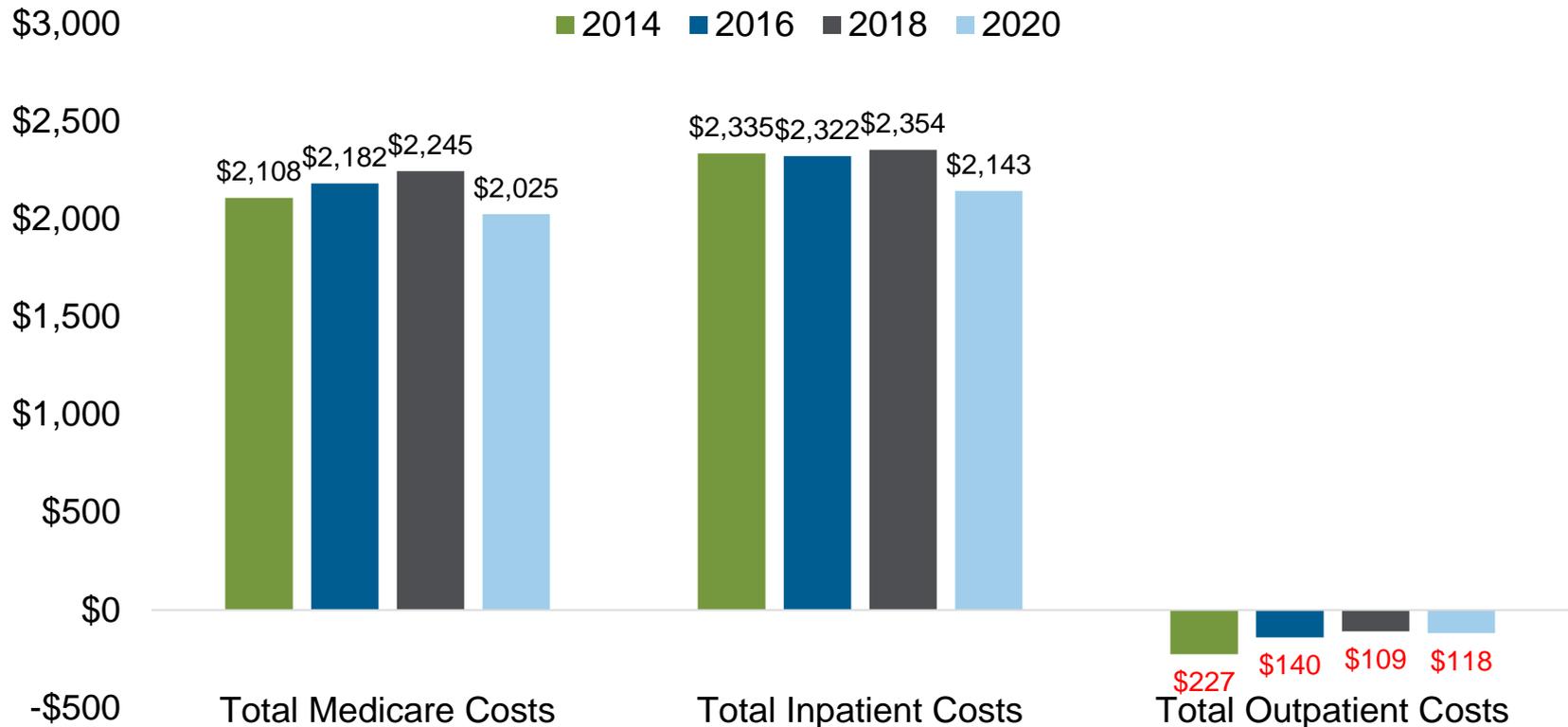
Total Medicare Costs by Whether Preferences Have Been Taken into Account (2020)



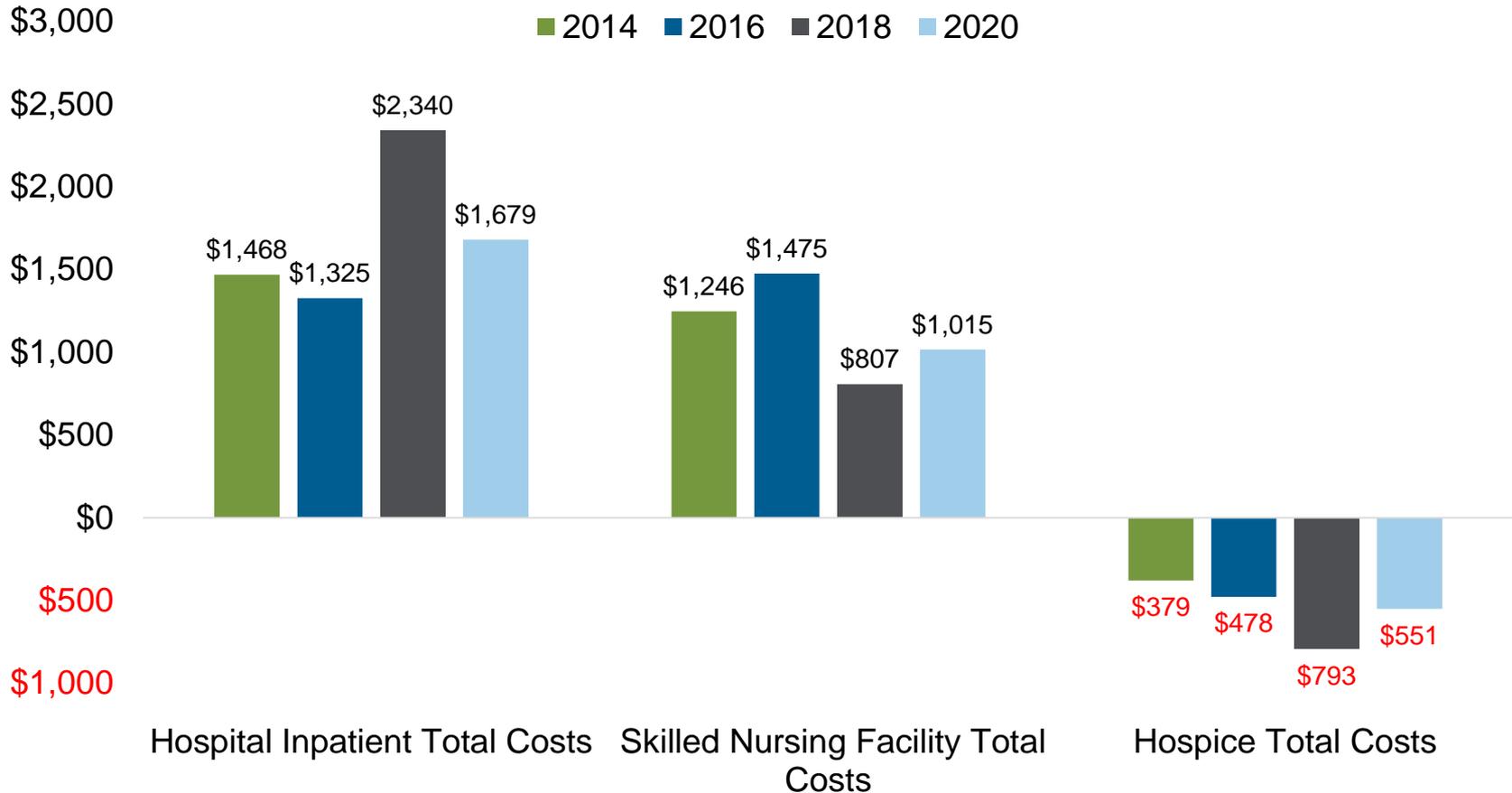
Average Percentage Annual Change in Claims Costs of Ignoring Patient Preferences Over Time by Service Category (2014-2020)



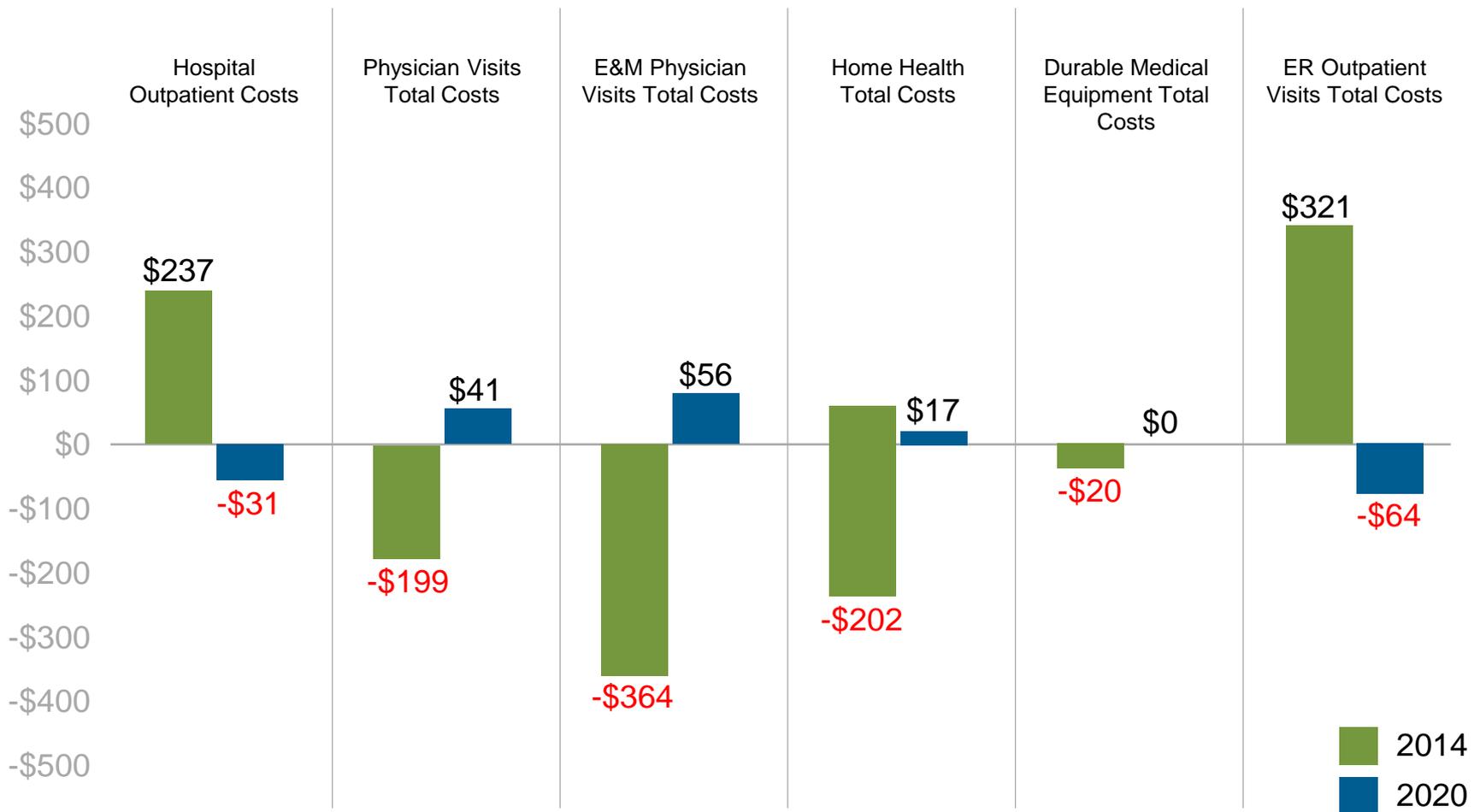
Claims Impact of Having Preferences Only Never/Sometimes Taken into Account by Cost Category (2014-2020)



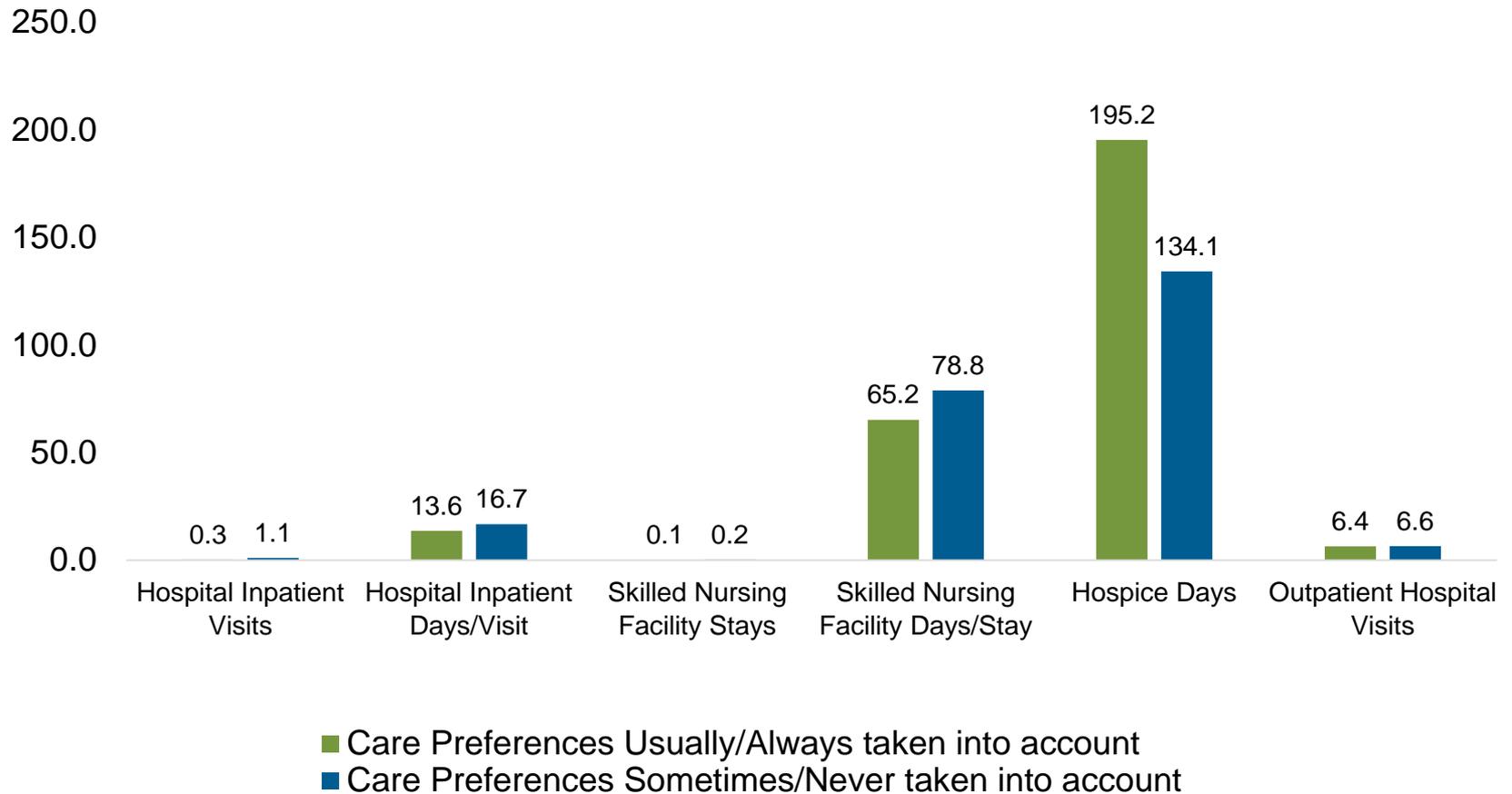
Claims Impact of Having Preferences Only Never/Sometimes Taken into Account by Inpatient Service Category (2014-2020)



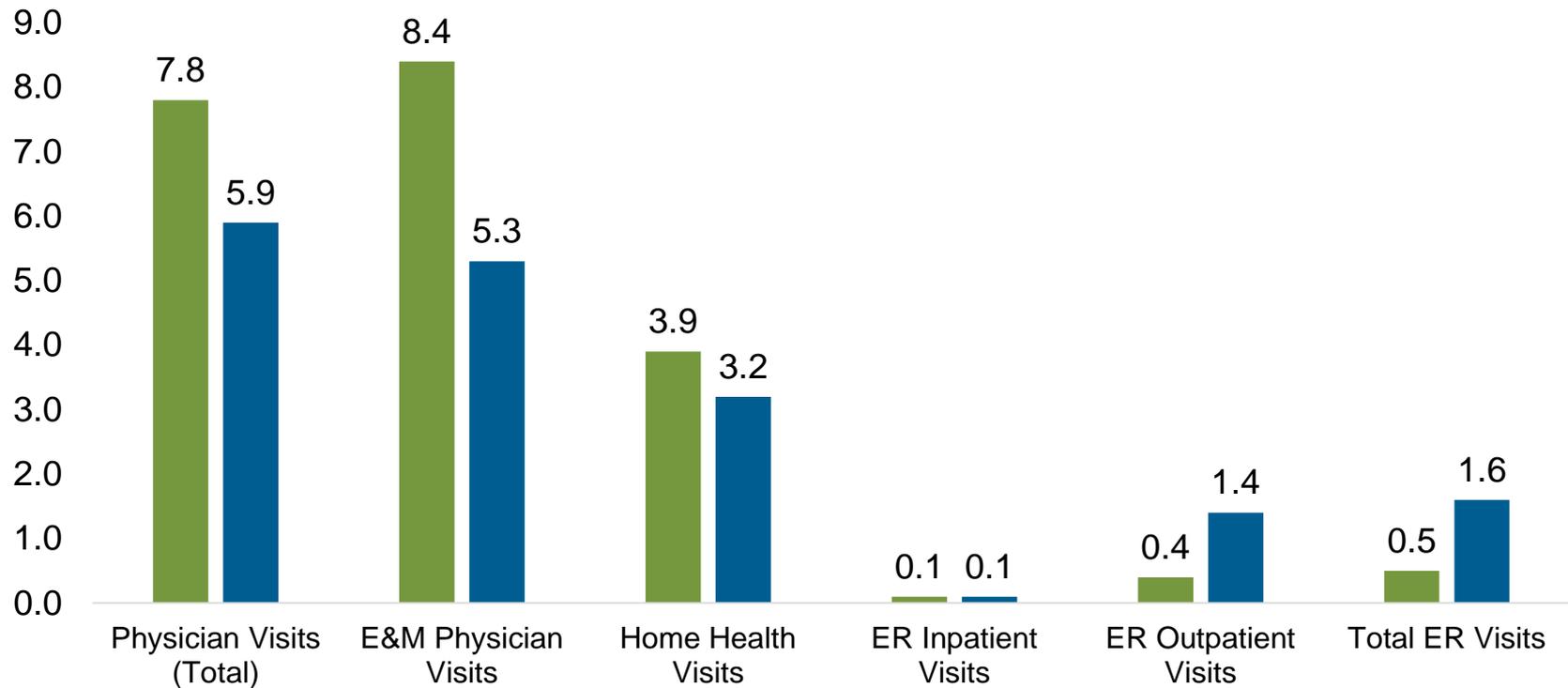
Claims Impact Having Preferences Only Never/Sometimes Taken into Account by Outpatient Category (2014-2020)



Service Utilization by Whether Preferences Have Been Taken into Account (2020) (1)



Service Utilization by Whether Preferences Have Been Taken into Account (2020) (2)



- Care Preferences usually/always taken into account
- Care Preferences sometimes/never taken into account



Significant Factors Related to Having Above Average Total Costs

VARIABLES	ODDS RATIO (ABOVE AVERAGE TOTAL COSTS)	SIGNIFICANCE
Never/Sometimes healthcare preferences taken into account (1=yes, 0=no)	1.34*	0.03
Usual Source of Care	0.62	0.00
Age	1.03	0.00
Non-Hispanic Black	1.22	0.02
Hispanic	1.19	0.03
Married/Partnered	0.89	0.04
HH Income \$0 to\$ 29.9K	1.18	0.01
Dual Eligible	1.54	0.00
Self-Rated Poor/Fair Health	2.45	0.00
Chronic Conditions Count	1.28	0.00

Note: Insignificant variables: being female; non-Hispanic other; education level; household income between \$35k and \$75k; being retired; having depression; being a smoker; or geography.

* **Having your preferences never/sometimes taken into account means that you have 1.3 times (34%) higher odds of having above average health care costs.**



Significant Factors Related to Having Above Average Inpatient Costs

VARIABLES	ODDS RATIO (ABOVE AVERAGE TOTAL COSTS)	SIGNIFICANCE
Never/Sometimes healthcare preferences taken into account (1=yes, 0=no)	1.36	0.02
Usual Source of Care	0.73	0.00
Age	1.04	0.00
Non-Hispanic Black	1.25	0.02
Hispanic	1.33	0.00
Married/Partnered	0.77	0.01
HH Income \$0 to\$ 29.9K	1.19	0.03
Dual Eligible	1.45	0.00
Self-Rated Poor/FairHealth	2.34	0.00
Chronic Conditions Count	1.23	0.00

Note: Insignificant variables: being female; non-Hispanic other; education level; household income between \$35k and \$75k; being retired; having depression; being a smoker; or geography.

* **Having your preferences never/sometimes taken into account means that you have 1.36 times (36%) higher odds of having above average inpatient care costs.**



Significant Factors Related to Having Above Average Emergency Department Costs

VARIABLES	ODDS RATIO (ABOVE AVERAGE EMERGENCY DEPARTMENT COSTS)	SIGNIFICANCE
Never/Sometimes healthcare preferences taken into account (1=yes, 0=no)	1.35	0.04
Usual Source of Care	0.86	0.04
Age	1.02	0.00
Non-Hispanic Black	1.21	0.04
Hispanic	1.34	0.00
Married/Partnered	0.76	0.00
HH Income \$0 to\$ 29.9K	1.12	0.04
Dual Eligible	1.25	0.04
Self-Rated Poor/FairHealth	1.41	0.00
Chronic Conditions Count	1.17	0.00

Note: Insignificant variables: being female; non-Hispanic other; education level; household income between \$35k and \$75k; being retired; having depression; being a smoker; or geography.

***Having your preferences never/sometimes taken into account means that you have 1.35 times (35%) higher odds of having above average Emergency Department costs.**



Significant Factors Related to Having Below Average Evaluation and Management Physician Costs

VARIABLES	ODDS RATIO (BELOW AVERAGE EVALUATION AND MANAGEMENT PHYSICIAN COSTS)	SIGNIFICANCE
Never/Sometimes healthcare preferences taken into account (1=yes, 0=no)	1.32	0.02
Usual Source of Care	0.79	0.03
Age	0.97	0.00
Non-Hispanic Black	1.46	0.00
Hispanic	1.68	0.00
Married/Partnered	0.74	0.01
HH Income \$0 to\$ 29.9K	1.54	0.00
HH Income \$30k to \$74.9K	1.11	0.00
Dual Eligible	0.77	0.01
Self-Rated Poor/FairHealth	0.61	0.00
Chronic Conditions Count	0.86	0.00

Note: Insignificant variables: being female; non-Hispanic other; education level; being retired; having depression; being a smoker; or geography.

* Having your preferences never/sometimes taken into account means that you have 1.35 times (35%) higher odds of having above average Emergency Department costs.

Significant Factors Related to the Change in Total Two-year Costs Between 2014-2020 Among Medicare Beneficiaries



VARIABLES THAT LEAD TO INCREASE IN COSTS

Never/Sometimes healthcare preferences taken into account (1=yes, 0=no)

\$1,189*

Age

\$206

Dual Eligible

\$847

Self-Rated Poor/Fair Health

\$1,169

Chronic Conditions Count

\$789

Smoker

\$3,662

VARIABLES THAT LEAD TO REDUCTIONS IN COSTS

Usual Source of Care

-\$956

Interaction:

Hispanic*Usual Source of Care

-\$517

Interaction:

NH Black*Usual Source of Care

-\$612

Interaction:

Never/Sometimes (# Waves)*Usual Source of Care

-\$764

Insignificant variables: being female; race; age; non-Hispanic Black; education level; marital status; income; being retired; having depression; geography; interaction between being non-Hispanic other and having usual source of care.

Having your preferences never/sometimes taken into account means that your costs of care are \$1,189 higher over a two year period that someone whose preferences are usually/always taken into account, all other variables held constant.

What Happens When Preferences are Only Never/Sometimes Taken into Account Over Time?

COST PARAMETER	ODDS RATIOS COSTS IN 2020 WHEN PREFERENCES NEVER/SOMETIMES TAKEN INTO ACCOUNT IN 2018
 <p>Above Average Total Costs</p>	<p>Odds Ratio = 1.33 </p>
 <p>Above Average Inpatient Costs</p>	<p>Odds Ratio = 1.30 </p>
 <p>Above Average Emergency Department Costs</p>	<p>Odds Ratio = 1.35 </p>
 <p>Above Average Physician Costs (Evaluation & Management)</p>	<p>Odds Ratio = .76 </p>

Impact of Not Meeting Person-Centered Care Metrics on Health Care Spending (2024 dollar value)

YEAR 2023 DOLLARS	PARAMETER
# Medicare Beneficiaries (2020)	61,551,947
% reporting Preferences only Never/Sometimes taken into account	9,909,864 (16.1%)
Per Capita Additional Health care costs among those reporting preferences only Never/Sometimes taken into account (2024 dollars)	\$2,476
 2022-2024 Total Estimated Additional Costs for Medicare Beneficiaries with Never/Sometimes Care Preferences Rating (2 year costs)	\$26,209,457,751
Regression Analysis Results: Independent Impact of Preferences controlling for other variables	
Total Estimated Additional Costs for Medicare Beneficiaries for each wave (2yrs) of reporting a Never/Sometimes Care Preferences Rating	\$17,301,027,920
 2014-2021 Total Estimated Additional Costs for Medicare Beneficiaries with Never/Sometimes Care Preferences Ratings over 8yr Study Period	\$44,818,563,582

Key Summary Points



- Improvements in addressing care preferences between 2014 and 2020 are limited to non-Hispanic Whites.
- Non-Hispanic Blacks and Hispanics report a steady increase in care preferences Never/Sometimes being met.
- Those who only have their care preferences never/sometimes taken into account have significantly higher total Medicare costs, particularly when it comes to inpatient costs, even controlling for other sociodemographic factors.
- Having a usual source of care can lessen/mitigate the effect between having a never/sometimes care preference rating and higher Medicare costs, particularly among older Black and Hispanic individuals.

Key Summary Points (continued)



- Those who have their care preferences never/sometimes taken into account have significantly lower costs and utilization of Evaluation & Management Physicians visits, but higher utilization of Emergency Rooms and Inpatient visits indicating less engagement in routine/preventative health care and greater use of more costly services.
- Based on our 8 year study period data, when care preferences are only sometimes/never taken into account, this leads to \$45 billion of additional Medicare costs from 2014 to 2021.



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