

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

Draft 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 personcentered 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

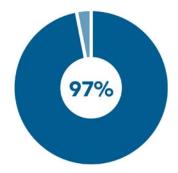
HRS SAMPLE AGE 65+ WITH LINKED CLAIMS DATA



PERCENT OF SAMPLE REMAINING FROM 2014 BASELINE 2016

14,348

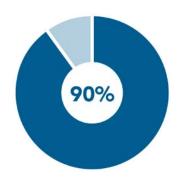
HRS SAMPLE AGE 65+ WITH LINKED CLAIMS DATA



PERCENT OF SAMPLE REMAINING FROM 2014 BASELINE 2018

13,368

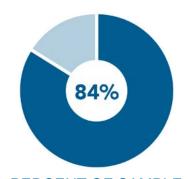
HRS SAMPLE AGE 65+ WITH LINKED CLAIMS DATA



PERCENT OF SAMPLE REMAINING FROM 2014 BASELINE 2020

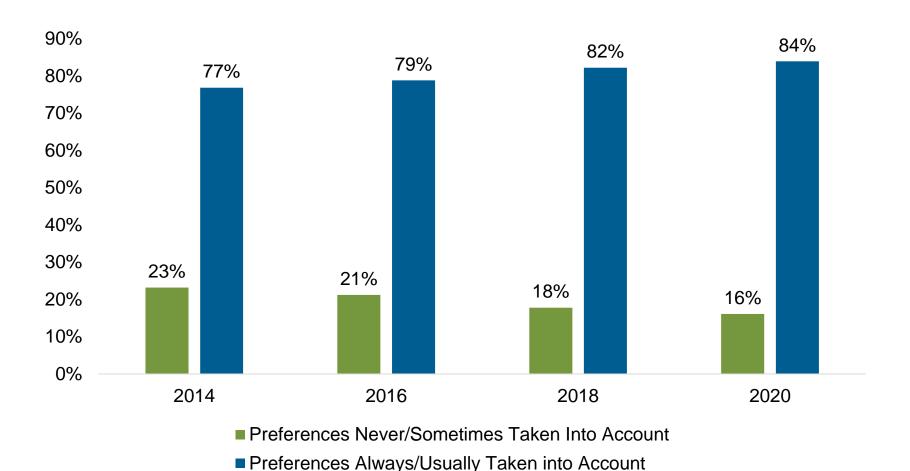
12,445

HRS SAMPLE AGE 65+ WITH LINKED CLAIMS DATA



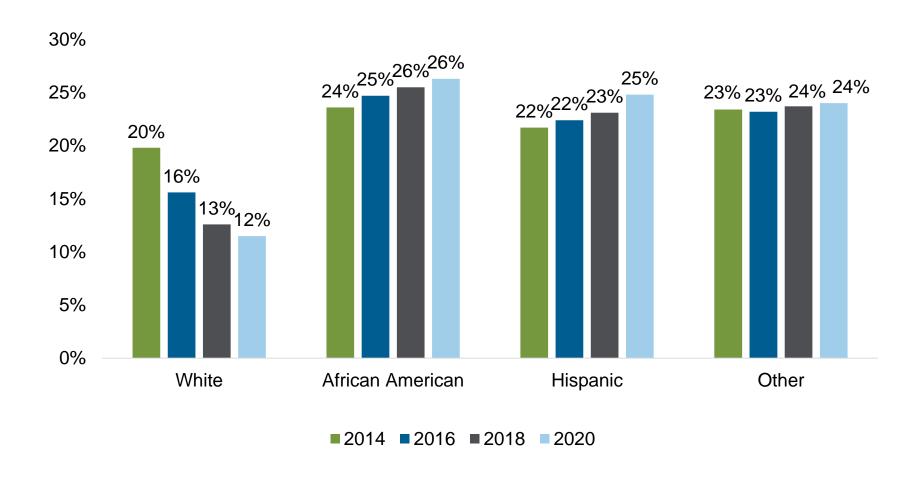
PERCENT OF SAMPLE REMAINING FROM 2014 BASELINE

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%

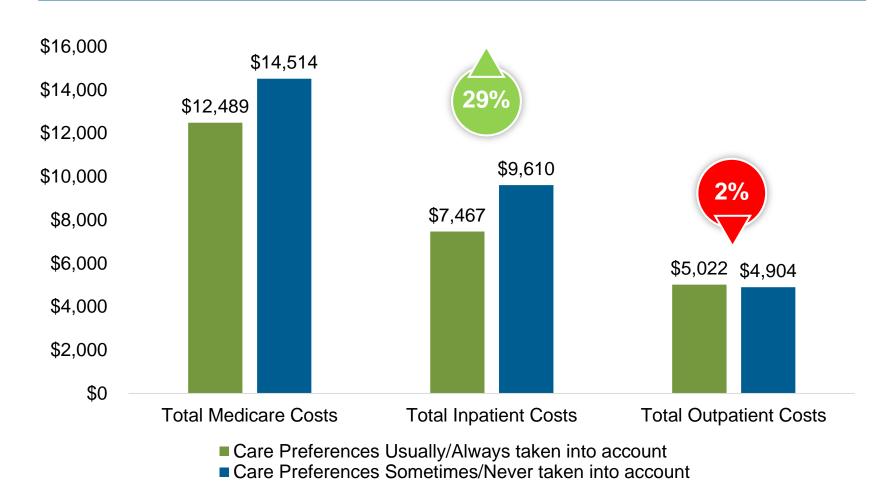


Distribution of Sample by Whether Care Preferences are Taken into Account by Socio-demographic Characteristics (3)

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%	

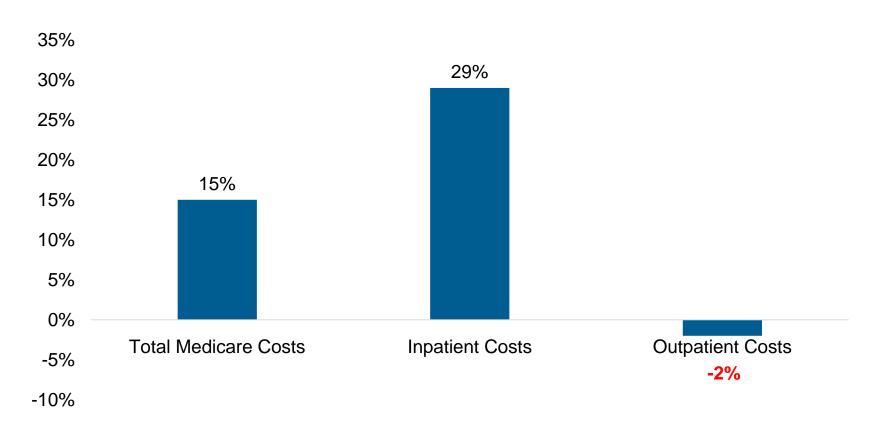


Total Medicare Costs by Whether Preferences Have Been Taken into Account (2020)





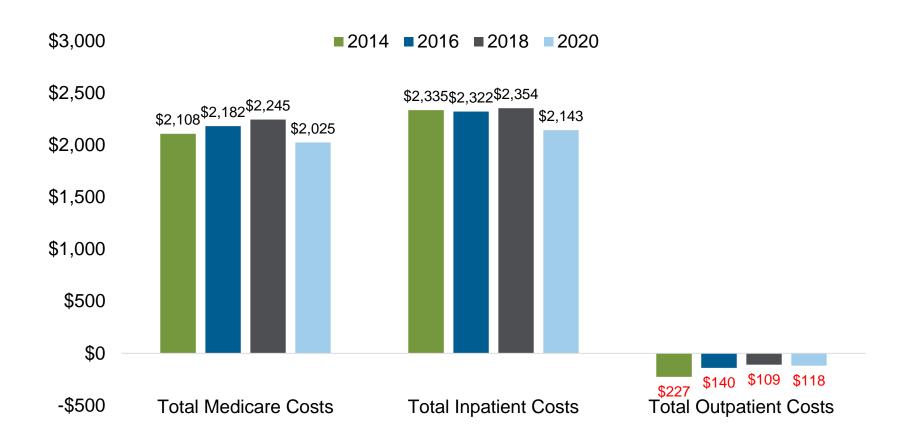
Average Percentage Annual Change in Claims Costs of Ignoring Patient Preferences Over Time by Service Category (2014-2020)



■ Average Annual Difference in Costs 2014 -2020

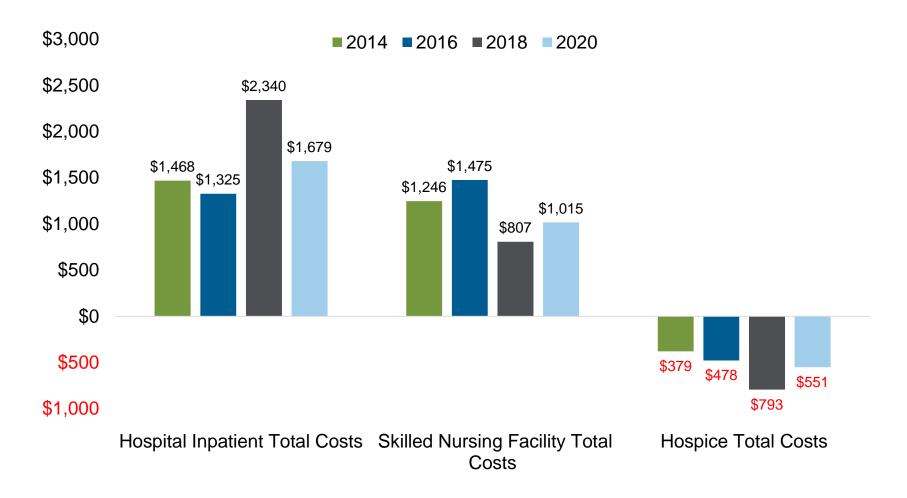


Claims Impact of Having Preferences Only Never/Sometimes Taken into Account by Cost Category (2014-2020)



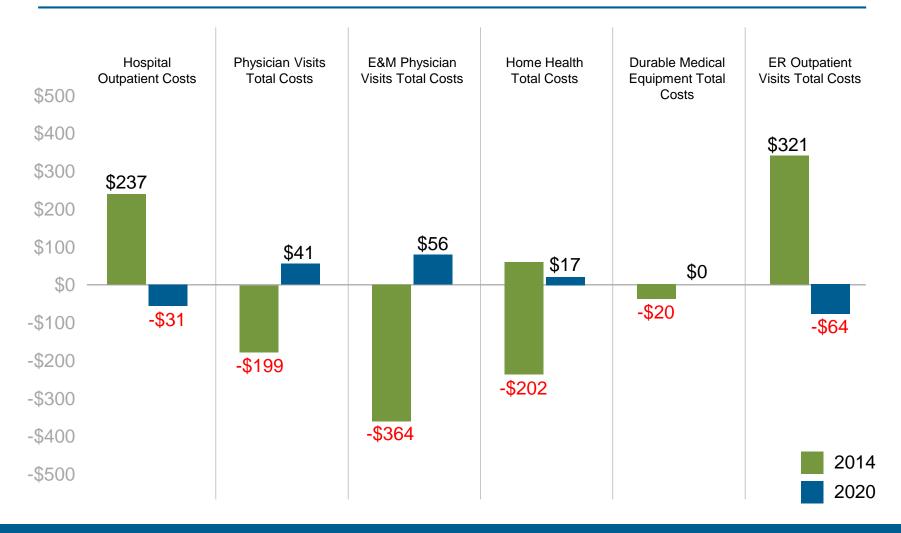


Claims Impact of Having Preferences Only Never/Sometimes Taken into Account by Inpatient Service Category (2014-2020)



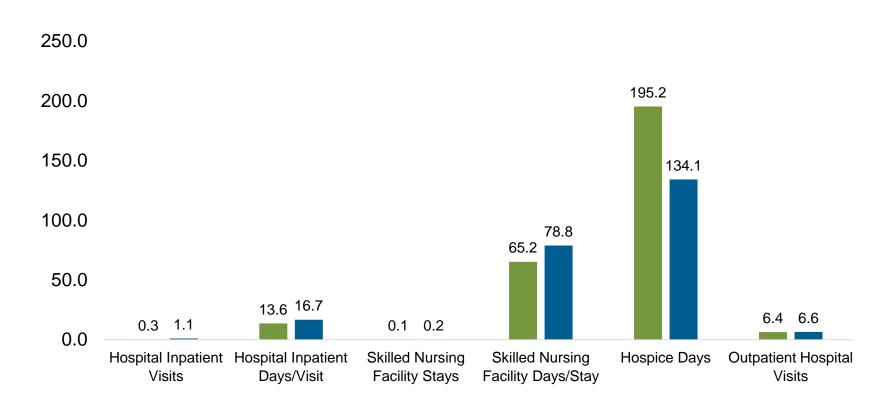


Claims Impact Having Preferences Only Never/Sometimes Taken into Account by Outpatient Category (2014-2020)





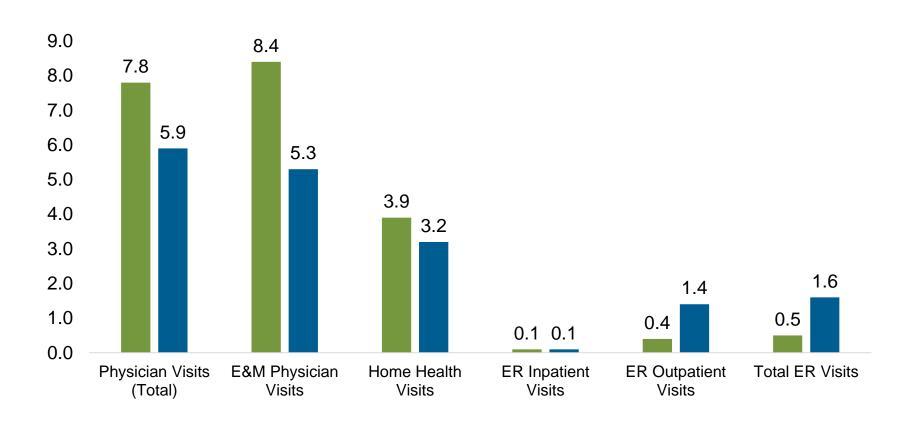
Service Utilization by Whether Preferences Have Been Taken into Account (2020) (1)



- Care Preferences Usually/Always taken into account
- Care Preferences Sometimes/Never taken into account



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/FairHealth	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
Above Average Total Costs	Odds Ratio = 1.33
Above Average Inpatient Costs	Odds Ratio = 1.30
Above Average Emergency Department Costs	Odds Ratio = 1.35
Above Average Physician Costs (Evaluation & Management)	Odds Ratio = .76



Impact of Not Meeting Person-Centered Care Metrics at End of Life 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
ϵ	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	ng 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
\in	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 \$38 billion of additional Medicare costs from 2014 to 2020.





Research bridging policy and practice

CONNECT WITH US

WASHINGTON, DC OFFICE ltsscenter@leading.org 202.508.1208

BOSTON, MA OFFICE ltsscenter@umb.org
617.287.7324

www.ltsscenter.org

