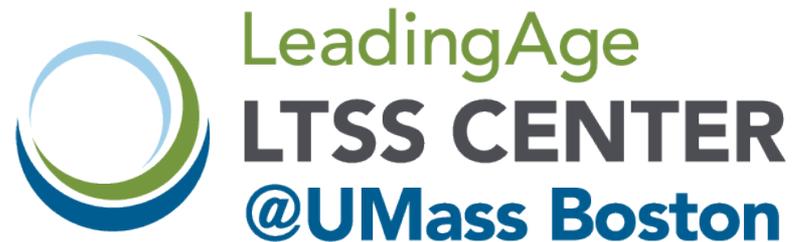




Tracking Progress on Person-Centered Care: What Does It Really Cost Us to Ignore Patient Preferences?

Results from NHATs End-of-Life Claims Analysis

June 2025



Research bridging policy and practice

Purpose of Research



Using the National Health and Aging Trends Survey we will answer the following research questions for individuals age 65 and over who received end-of-life care:

- What is the prevalence of receipt of person-centered care – having one's preferences taken into account – at the end of life and what are key socio-economic characteristics associated with this?
- Are there significant racial/ethnic disparities in receipt of person-centered care at end-of-life?
- What is the relationship between whether someone's preferences are taken into account and claims costs for:
 - ✓ Inpatient care
 - ✓ Hospital outpatient care
 - ✓ Physician outpatient care
 - ✓ Emergency Department

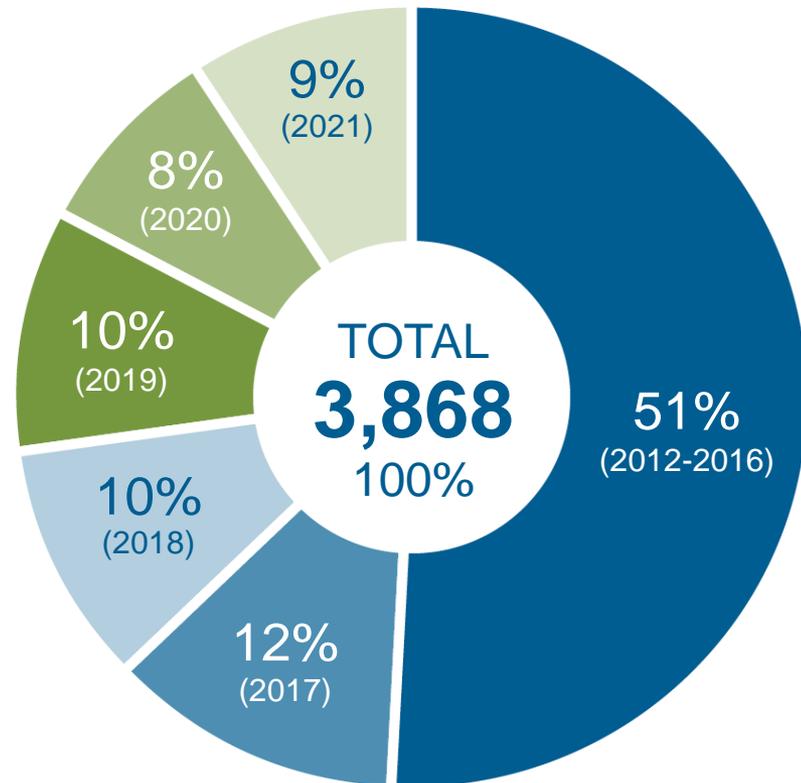
Method

- Using the National Health and Aging Trends Survey (NHATS) draw a sample of Medicare beneficiaries age 65+ and collect socio-demographic information for their last year of life (2012-2021).
- Link Medicare and Medicaid claims data to individuals comprising the end of life sample.
- Conduct descriptive and multivariate analysis to uncover the relationship between person-centered care measures and claims costs.



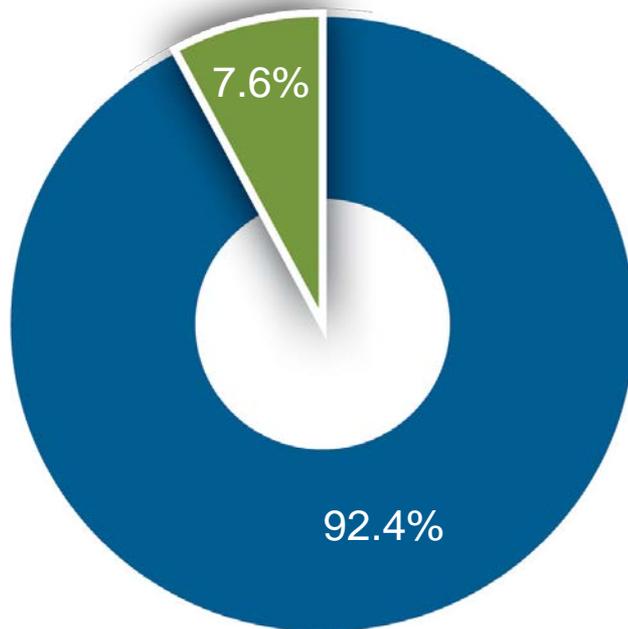
Sample Size with Linked Claims Data by Sample Year

SAMPLE YEAR	NHATS END-OF-LIFE SAMPLE WITH LINKED CLAIMS DATA
2012-2016	1968
2017	457
2018	396
2019	373
2020	324
2021	350

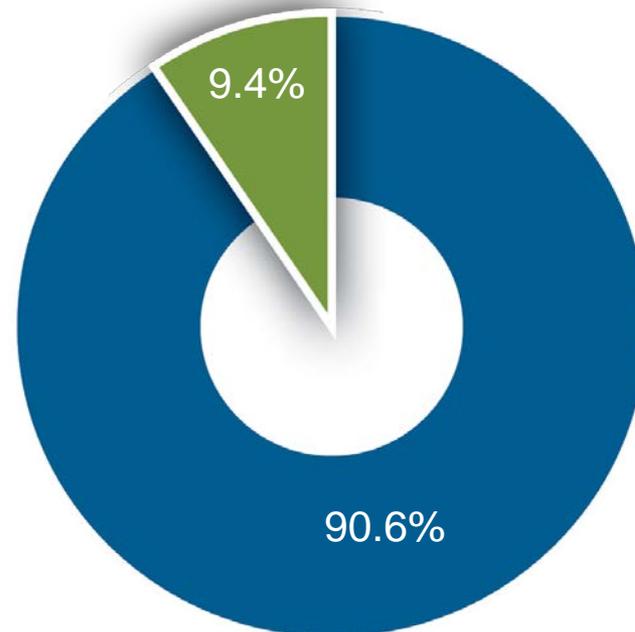


Person Centered Care Measures During Last Month of Life (1)

DECISION MADE ABOUT CARE OR TREATMENT WITHOUT ENOUGH INPUT FROM PERSON OR FAMILY

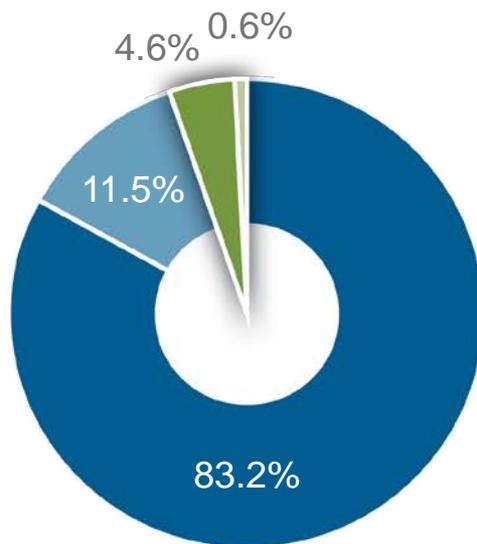


DECISION MADE ABOUT CARE THAT PERSON WOULD NOT HAVE WANTED

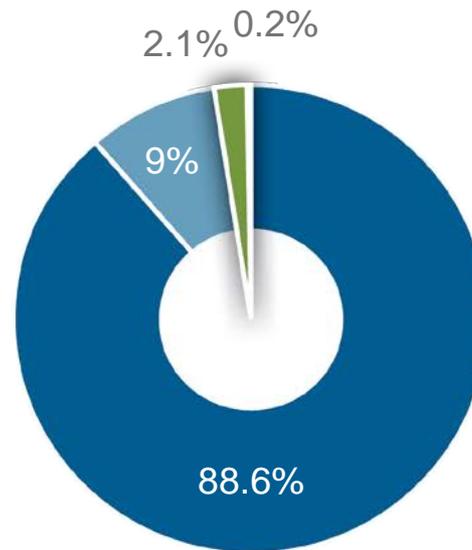


Person Centered Care Measures During Last Month of Life (2)

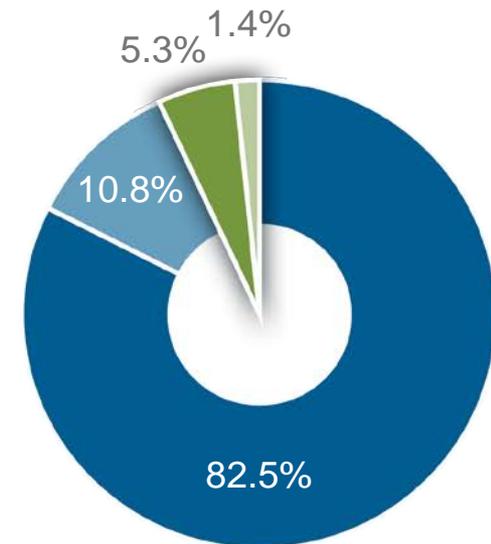
HOW OFTEN WERE PERSONAL CARE NEEDS, SUCH AS BATHING, DRESSING, AND CHANGING BEDDING, TAKE CARE OF AS WELL AS THEY SHOULD HAVE BEEN?



HOW OFTEN WAS HE/SHE TREATED WITH RESPECT BY THOSE WHO WERE TAKING CARE OF HIM/HER?



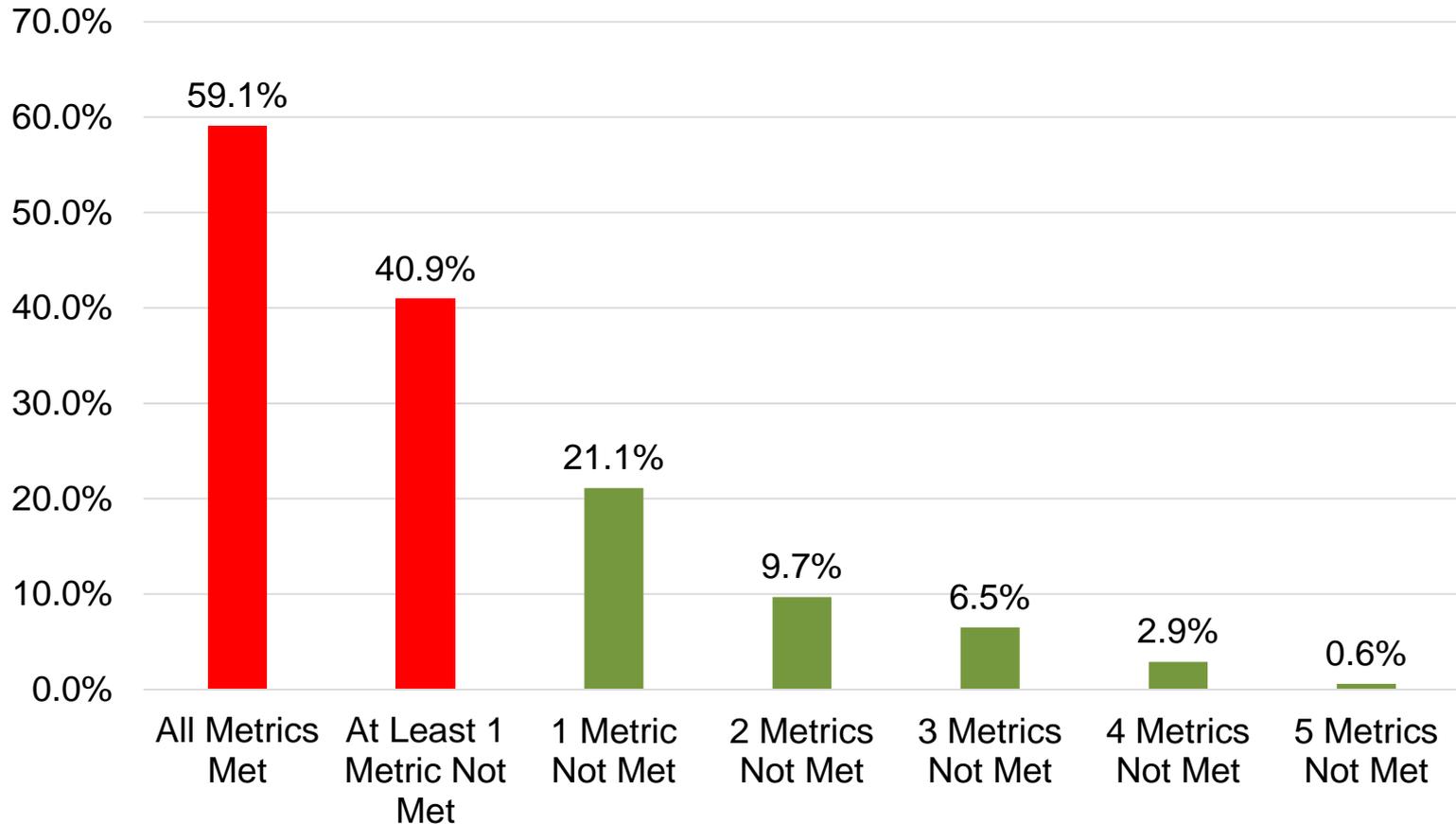
HOW OFTEN WERE YOU OR OTHER FAMILY MEMBERS KEPT INFORMED ABOUT HIS/HER CONDITION?



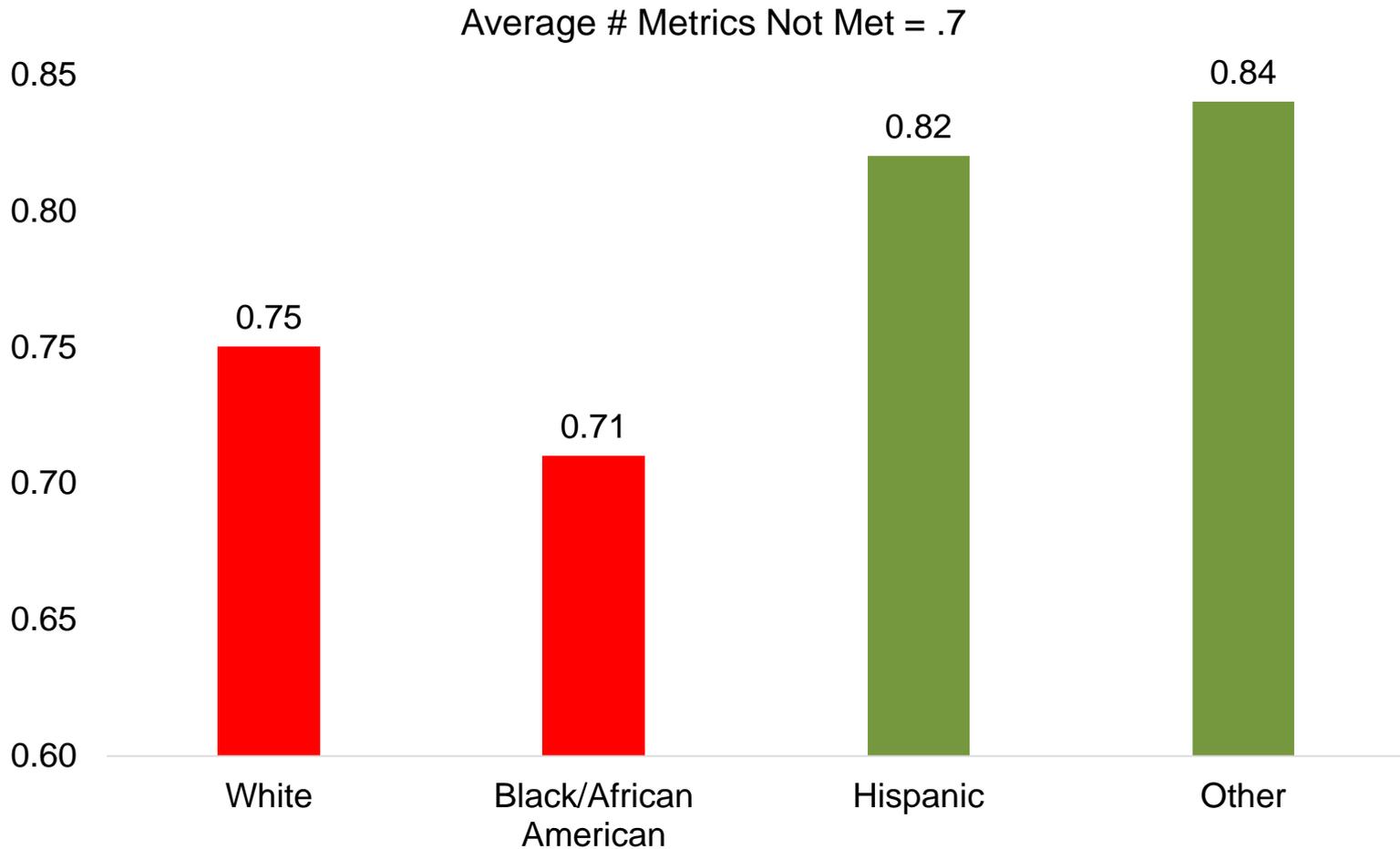
Always Usually Sometimes Never

Distribution of Sample by Number of Person Care Centered Care Metrics Not Met (0-5)

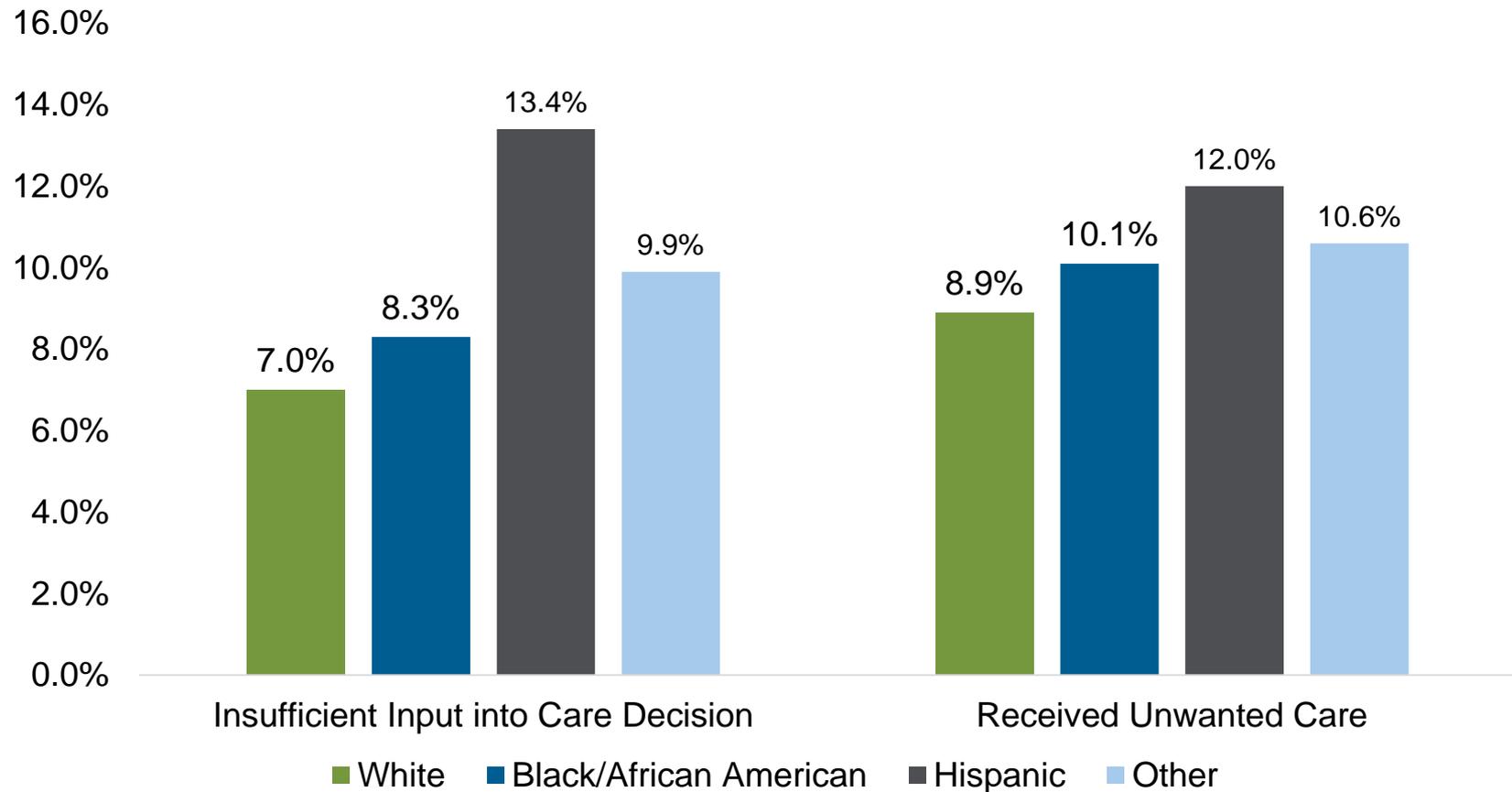
Average # Metrics Not Met = .7



Distribution of Sample by Number of Person Care Centered Care Metrics Not Met by Race/Ethnicity (0-5)



Distribution of Sample by Those Reporting They Had Insufficient Input into Care Decisions or Received Unwanted Care By Race/Ethnicity



Person Centered Care Variables During Last Month of Life by Socio-demographic Characteristics (1)

LAST MONTH OF LIFE	HAD SUFFICIENT INPUT INTO CARE DECISION AND RECEIVED CARE THAT WAS WANTED	DID NOT HAVE SUFFICIENT INPUT INTO CARE DECISION OR RECEIVED CARE THAT WAS NOT WANTED
Gender		
Male	87.5%	12.5%
Female	83.5%	16.5%
Race		
White	86.8%	13.2%
Black/African American	84.5%	15.5%
Hispanic	78.8%	21.2%
Other	86.1%	13.9%
Marital Status		
Married/Partnered	82.0%	18.0%
Not Married/Partnered	85.5%	14.5%

Note: Numbers in bold signify statistically significant differences.

Person Centered Care Variables During Last Month of Life by Socio-demographic Characteristics (2)

LAST MONTH OF LIFE	HAD SUFFICIENT INPUT INTO CARE DECISION AND RECEIVED CARE THAT WAS WANTED	DID NOT HAVE SUFFICIENT INPUT INTO CARE DECISION OR RECEIVED CARE THAT WAS NOT WANTED
Health Characteristics		
Had Dementia		
Yes	84.7%	15.3%
No	84.1%	15.9%
2 or more ADL limitations		
Yes	85.6%	14.4%
No	86.9%	13.1%
Go outside using help		
Yes	85.8%	14.2%
No	85.6%	14.4%
Move Inside with help		
Yes	87.0%	13.0%
No	82.5%	17.5%

Note: Numbers in bold signify statistically significant differences.

Person Centered Care Variables During Last Month of Life by Socio-demographic Characteristics (3)

LAST MONTH OF LIFE	HAD SUFFICIENT INPUT INTO CARE DECISION AND RECEIVED CARE THAT WAS WANTED	DID NOT HAVE SUFFICIENT INPUT INTO CARE DECISION OR RECEIVED CARE THAT WAS NOT WANTED
Last Month Care		
Community Residence		
Yes	82.0%	18.0%
No	91.2%	8.8%
Had Hospice Care		
Yes	86.5%	13.5%
No	85.0%	15.0%
Died at Hospice Care Place		
Yes	82.3%	17.7%
No	86.8%	13.2%

Note: Numbers in bold signify statistically significant differences.

Person Centered Care Variables During Last Month of Life by Socio-demographic Characteristics (4)

LAST MONTH OF LIFE	HAD SUFFICIENT INPUT INTO CARE DECISION AND RECEIVED CARE THAT WAS WANTED	DID NOT HAVE SUFFICIENT INPUT INTO CARE DECISION OR RECEIVED CARE THAT WAS NOT WANTED
Always had Personal Care Needs Met		
Yes	88.8%	11.2%
No	73.1%	26.9%
Always Treated with Respect		
Yes	88.4%	11.6%
No	69.8%	30.2%
Always Informed about conditions		
Yes	89.2%	10.8%
No	71.4%	28.6%
Rate Care Excellent		
Yes	92.1%	7.9%
No	80.1%	19.9%

Note: Numbers in bold signify statistically significant differences.

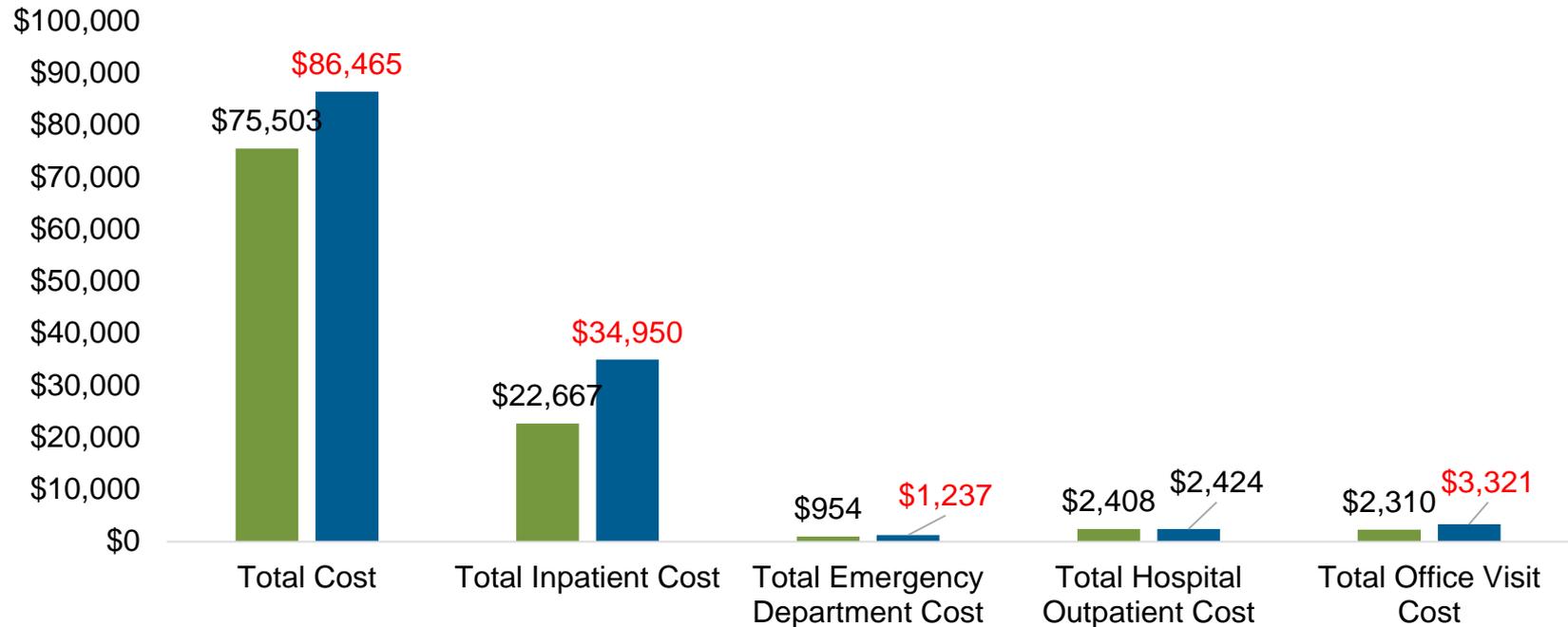
Variables Related to Receiving Care That is Not Wanted or Not Having Sufficient Input into Decision Making

VARIABLE	COEFFICIENT	STANDARD ERROR	Z SCORE	P> Z	ODDS RATIO
Age at Death	-0.020	0.007	-2.794	0.005**	0.980
Being White	-0.201	0.112	-1.783	0.075*	0.818
Male	0.065	0.110	0.593	0.553	1.067
Being Married	0.132	0.119	1.105	0.269	1.141
Having Dementia	0.014	0.109	0.129	0.898	1.014
Having 2 or more ADL Deficiencies	0.594	0.185	3.220	0.001**	1.812
Needing Outside help to get around	0.027	0.164	0.166	0.868	1.028
Needing inside help to get around	-0.366	0.131	-2.801	0.005**	0.693

Being younger, non-White, functionally impaired in at least 2 ADLs, and having indoor mobility issues are associated with less person-centered care at end of life;

Note: **statistically significant at the .05 level; *statistically significant at the .10 level.

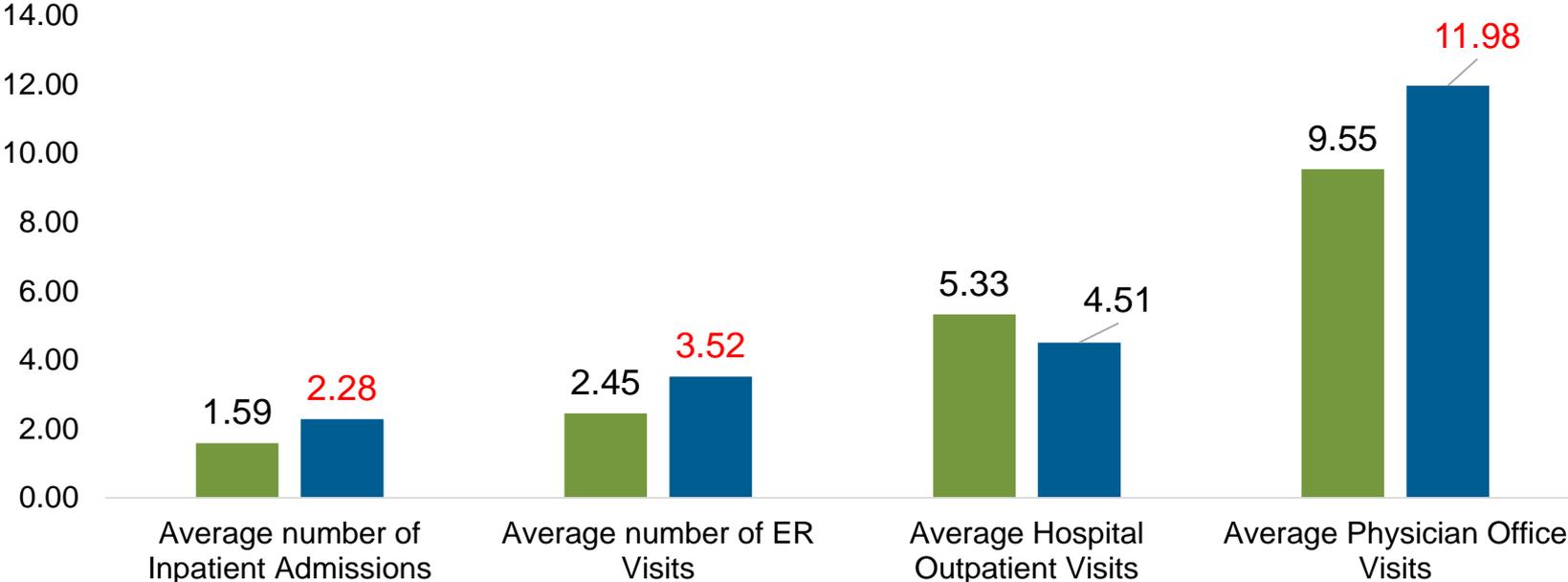
Claims Costs Differences for All Medicare Beneficiaries Age 65 and Over by Person-centered Care Variables (2021 Dollars)



- Had Sufficient Input into Care Decision and Received Care that was Wanted
- Did not have sufficient input into care decision or received care that was not wanted

Note: Numbers in red denote statistically significant differences.

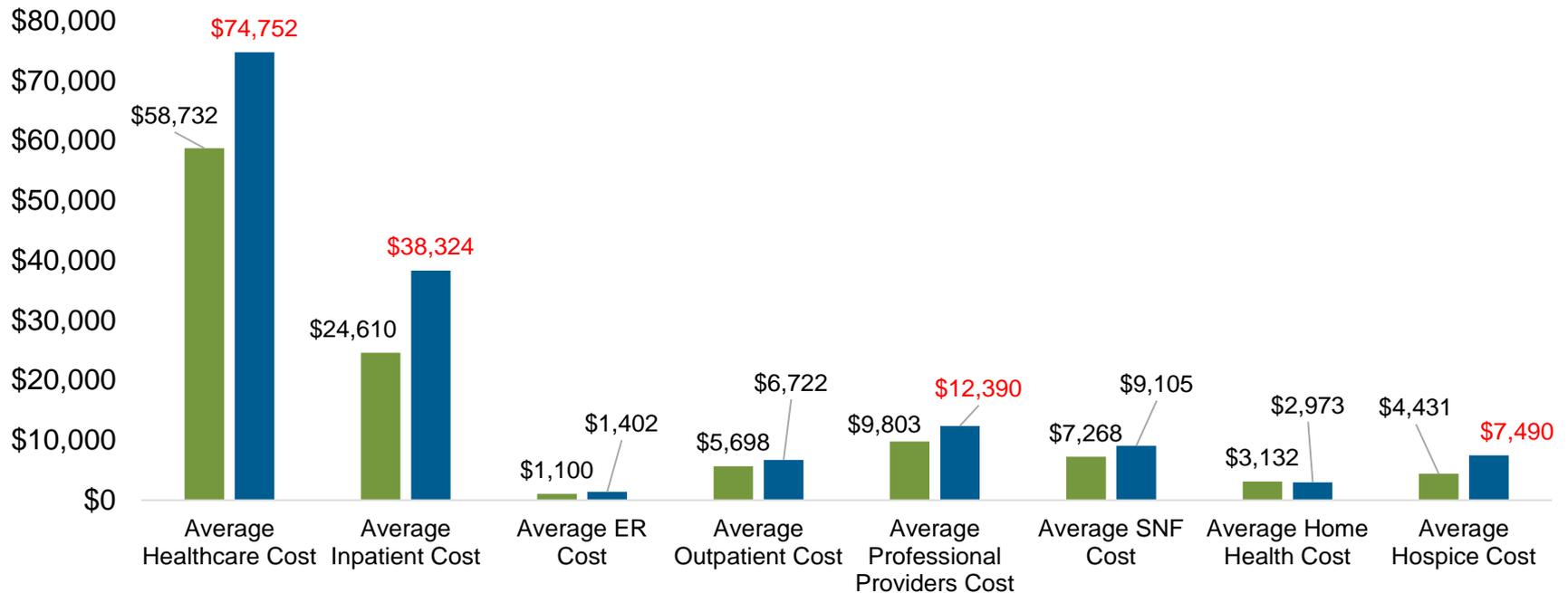
Service Utilization Differences by Person-centered Care Variable for All Medicare Beneficiaries Age 65 and Over



- Had Sufficient Input into Care Decision and Received Care that was Wanted
- Did not have sufficient input into care decision or received care that was not wanted

Note: Numbers in red denote statistically significant differences.

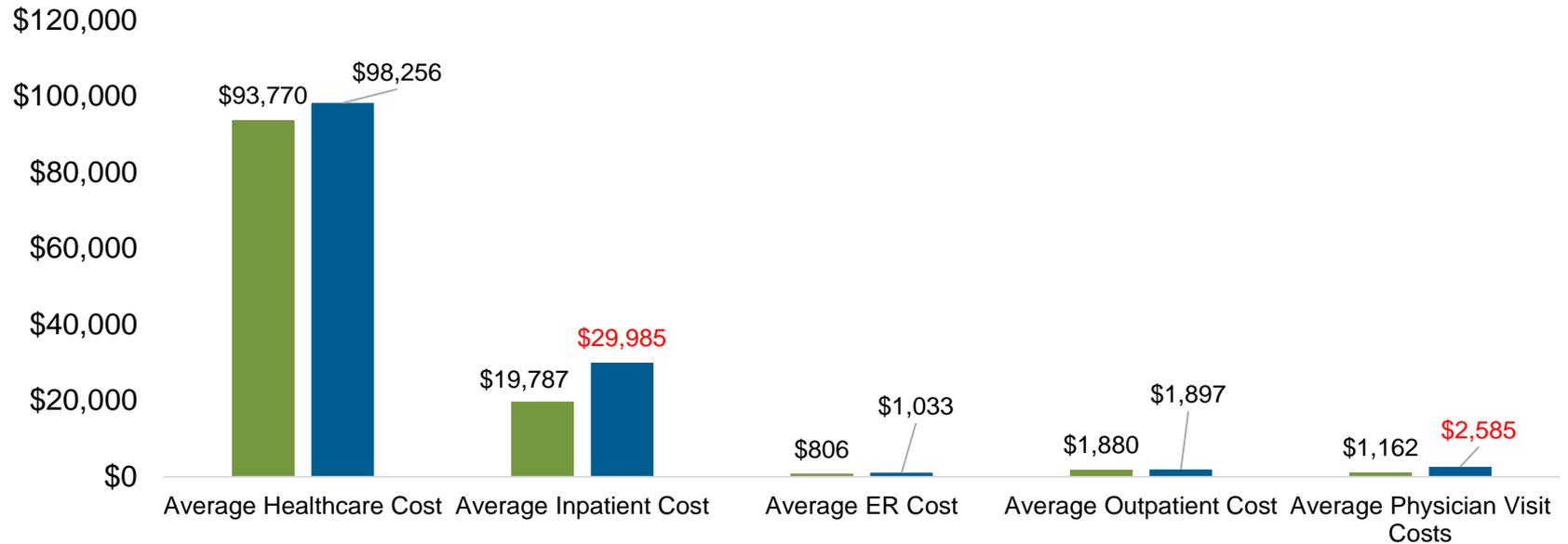
Claims Costs Differences for Fee-for-service Medicare Beneficiaries Age 65 by Person-centered Care Variables (2021 Dollars)



- Had Sufficient Input into Care Decision and Received Care that was Wanted
- Did not have sufficient input into care decision or received care that was not wanted

Note: Numbers in red denote statistically significant differences.

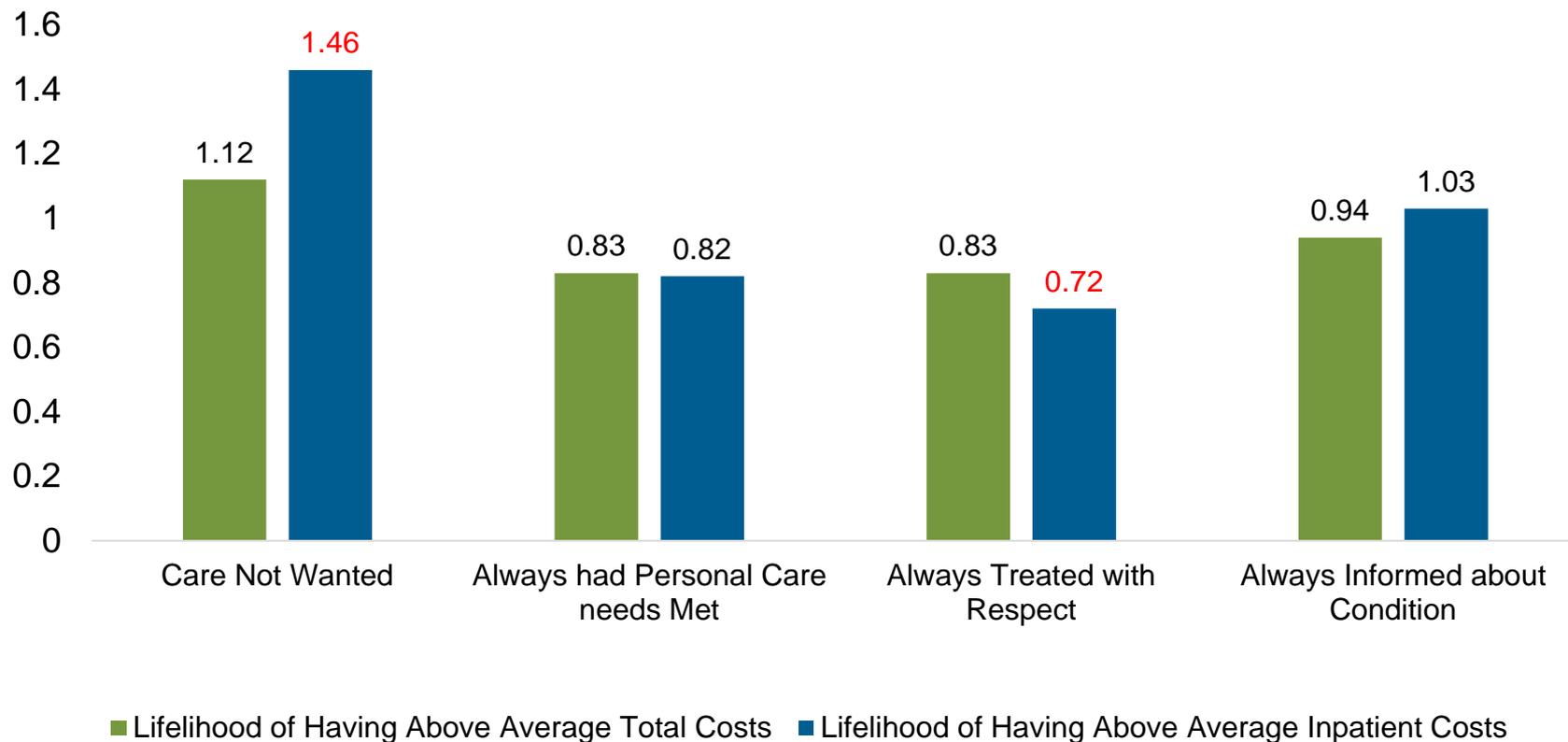
Claims Costs Differences for Individuals Dually Eligible for Medicare and Medicaid by Person-centered Care Variables (2021 Dollars)



- Had Sufficient Input into Care Decision and Received Care that was Wanted
- Did not have sufficient input into care decision or received care that was not wanted

Note: Numbers in red denote statistically significant differences.

Relationship Between Person-centered Care Metrics and Claims Costs for All Medicare Beneficiaries Age 65 and Over (Odds Ratios)



Note: Regression equation holds constant: age, gender, race, marital status, income, dementia status, functional impairments, indoor and outdoor mobility status.

Note: Numbers in red denote statistically significant differences



Factors Related to Having Above Average Inpatient Costs Among All Medicare Beneficiaries Age 65 and Over

VARIABLES	COEFFICIENT	P VALUE	ODDS RATIO
Constant	2.030	0.001	7.616
Insufficient input into care decision or received care not wanted	0.380	0.006	1.463
Being White	-0.124	0.303	0.884
Male	0.255	0.021	1.291
Being Married	0.166	0.174	1.180
Age at Death	-0.038	0.000	0.963
Having Above Average Income	0.074	0.542	1.076
Having Dementia	-0.656	0.000	0.519
Having 2 or more ADL Deficiencies	0.669	0.000	1.952
Needing Outside help to get around	0.279	0.104	1.321
Needing inside help to get around	-0.041	0.761	0.960

Note: Numbers in Bold denote statistically significant differences.

Note: Having insufficient input or receiving unwanted care leads to greater odds of having above average inpatient costs which represent 43% of the total costs

Relationship Between Person-centered Care Metrics and Whether Individuals Has Above Average Total Costs and Inpatient Costs (Fee-for-service Medicare Beneficiaries)

PERSON-CENTERED CARE METRICS (LAST MONTH OF LIFE)	ABOVE AVERAGE TOTAL COSTS	ABOVE AVERAGE INPATIENT COSTS
Personal Care Needs are Always Met	 Odds Ratio=.72	 Odds Ratio=.69
Always Treated with Respect	 Odds Ratio=.70	 Odds Ratio=.63
Have Sufficient Input into Care Decision or Only Receive Care I want	No Impact	 Odds Ratio=.65

Impact of Not Meeting Person-Centered Care Metrics at End of Life on Health Care Spending (2024 dollars)

YEAR 2022	PARAMETER
# Deaths age 65 and over	2,568,917
% reporting unwanted care or insufficient input	13.74% (n=353,038)
Per Capita health care costs last year of life for those who received care they wanted and had sufficient input into care decisions	\$87,957
Per Capita health care costs last year of life for those who received unwanted care or had insufficient input into care decisions	\$100,727
Difference in per Capita Costs (14.5% increase in costs)	\$12,770
Total Cost to Health Care System for ignoring patient preferences (e.g. receiving unwanted care or insufficient input into care decisions)	\$4,508,324

Key Summary Points



- Older adults of color are less likely to feel that they've had the care they wanted and sufficient input on their care in their last year of life.
- Individuals who report unwanted care and insufficient input into their care incur significantly higher healthcare costs in the last year of life (particularly inpatient costs).
- Younger older adults are:
 - ✓ less likely to feel that they've had the care they wanted and sufficient input on their care in the last year of life.
 - ✓ Incurring significantly higher total healthcare costs and inpatient costs in the last year of life.

Key Summary Points (continued)



- Individuals with greater long-term services and supports needs, (i.e. having functional impairment in at least 2 activities of daily living) are:
 - ✓ less likely to feel that they've had the care they wanted and sufficient input on their care in the last year of life.
 - ✓ Incurring significantly higher total healthcare costs and inpatient costs in the last year of life.



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