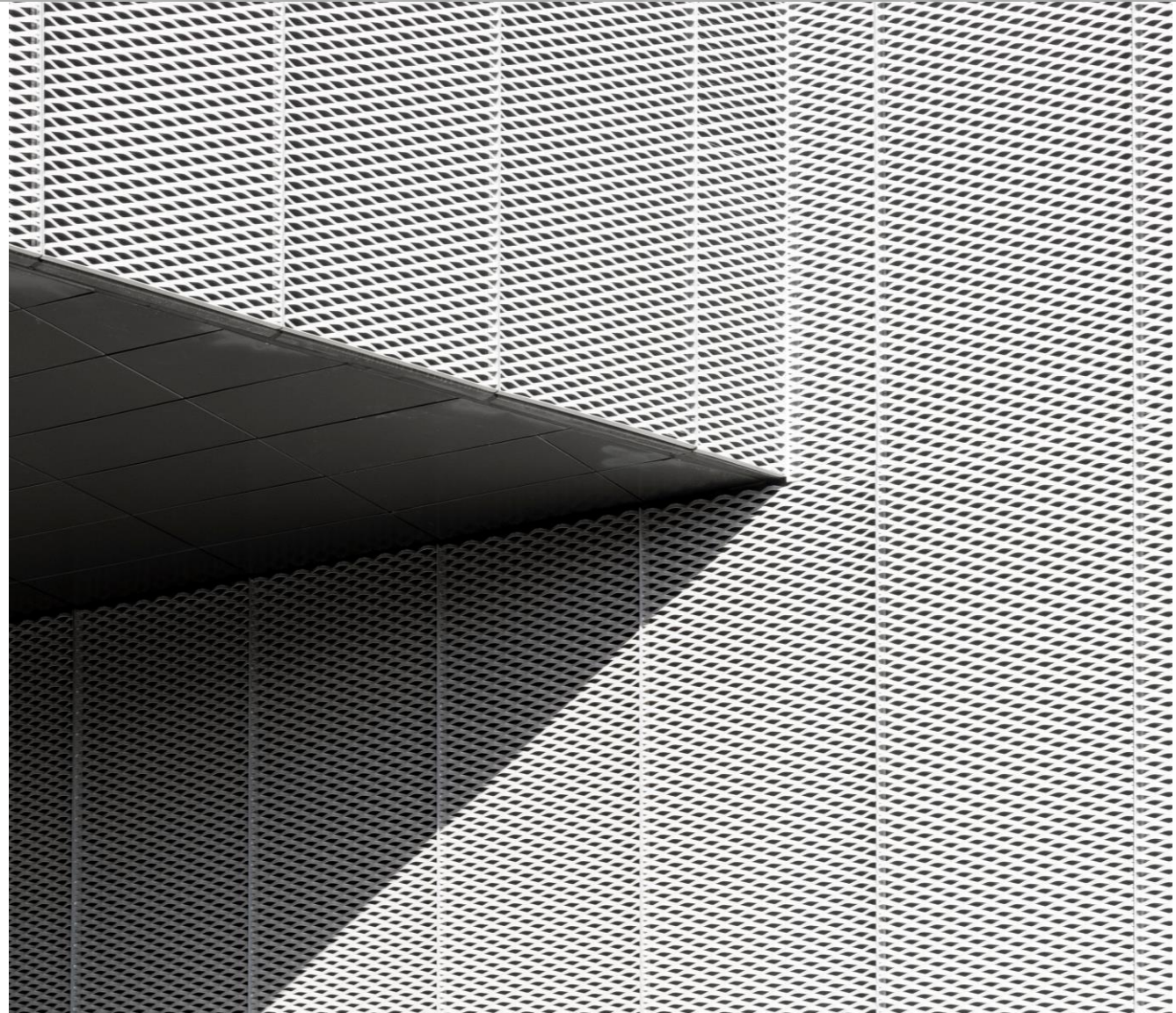


# Chartbook of Dual Eligible Individuals with Behavioral Health Needs

January 2024

Prepared on behalf of Arnold Ventures

**ATI Advisory**



## ABOUT THIS PROJECT

- This **chartbook** is the first deliverable within a broader project to **qualify and quantify the role that integrated Medicare-Medicaid models have in the experiences of dual eligible individuals with behavioral health (BH) needs.**
- This project will culminate in a policy brief that will be informed by this chartbook as well as forthcoming qualitative discussions with key stakeholders and subject matter experts.
- Policy variables to be explored through this project will be inclusive of both Medicare and Medicaid and at a minimum will consider:
  - Managed care carve-ins/-outs of BH
  - Presence of dual eligible special needs plans (D-SNPs) and associated level of integration
  - County-level involvement in BH care delivery
  - Provisions in Medicaid managed care contracts
  - Provisions in State Medicaid Agency Contracts (SMACs)
  - Delegation or sub-delegation arrangements
  - Data collection and reporting
  - Care coordination and management



## ABOUT THIS CHARTBOOK

- ATI Advisory completed a profile of dual eligible individuals\* with BH needs inclusive of this population's demographics, health-related social needs, health status, experiences with providers, and healthcare utilization.
- To understand the unique needs and barriers experienced by dual eligible individuals with BH needs, their characteristics are compared against those of dual eligible individuals without BH needs as well as Medicare-only individuals with BH needs.

### BH NEEDS

The chartbook explores different types of BH needs among dual eligible individuals. BH needs explored include:

- Any mental illness (AMI)
- Serious mental illness (SMI)
- Substance use disorder diagnosis only (SUD)
- Substance use disorder diagnosis & co-occurring mental illness (SUD + AMI)

Individuals with any one of the conditions above are considered to have BH needs. Individuals with different types of BH needs are analyzed separately to see if there are differences by BH types.

### METHODS

ATI Advisory used 2017 – 2020 Medicare Current Beneficiary Survey (MCBS) data and linked fee-for-service (FFS) claims to produce a profile of dual eligible individuals with BH needs. SUD data is limited to individuals with FFS claims, as MCBS does not include questions related to SUD.

Statistical tests with multiple comparison test adjustments were used to identify statistical differences between 1) full benefit dual eligible (FBDE) or partial benefit dual eligible (PBDE) individuals with BH needs and FBDE individuals without BH needs and 2) FBDE or PBDE individuals with BH needs and Medicare-only individuals with BH needs.







\*There were no observable differences between FBDE and PBDE individuals with BH needs, thus, results for FBDE individuals only are reported throughout as “dual eligible” individuals.

- The chartbook shares key findings to highlight:
  - The differences related to having BH needs among dual eligible individuals and;
  - The differences related to dual eligibility compared to Medicare-only among individuals with BH needs.
  
- Each section begins with a summary slide(s) that describes key findings relevant to the topic. Each section then includes more detailed visual charts of dual eligible individuals with BH needs compared against:
  - Dual eligible individuals without BH needs and;
  - Medicare-only individuals with BH needs.

Navigate directly to a chartbook section:

- [Demographics](#)
- [Health & Functional Status](#)
- [Access to Care](#)
- [Relationships With Providers](#)
- [Preventative Care](#)
- [Service Utilization](#)

# CHARTBOOK SUMMARY: DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS ARE...

	 <b><u>Demographics</u></b>	 <b><u>Health &amp; Functional Status</u></b>	 <b><u>Access to Care</u></b>	 <b><u>Relationships with Providers</u></b>	 <b><u>Preventative Care</u></b>	 <b><u>Service Utilization</u></b>
<b>... more likely than dual eligible individuals without BH needs to report:</b>	<ul style="list-style-type: none"> <li>• Being younger (&lt;65 years old)</li> <li>• Being female (except among individuals with SUD-only diagnosis)</li> <li>• Being white</li> <li>• Being currently unmarried</li> <li>• Being food insecure</li> <li>• Being enrolled in FFS</li> </ul>	<ul style="list-style-type: none"> <li>• Their health status as “fair” or “poor” instead of “excellent,” “very good,” or “good”</li> <li>• A higher number of chronic conditions</li> <li>• Receiving help with ADL and IADL difficulties</li> </ul>	<ul style="list-style-type: none"> <li>• Having had a problem that a doctor should have seen, but did not</li> <li>• Having trouble getting care</li> <li>• Having devices capable of telehealth</li> <li>• Using the internet more frequently</li> </ul>	<ul style="list-style-type: none"> <li>• Leaving the doctor’s office with unaddressed concerns</li> </ul>	<ul style="list-style-type: none"> <li>• There is no statistical difference in the reported preventative care services of dual eligible individuals with and without BH needs.</li> </ul>	<ul style="list-style-type: none"> <li>• At least one outpatient visit in the past year</li> <li>• At least one overnight hospital stay in the past year</li> <li>• At least one ER visit in the past year</li> </ul>
<b>... more likely than Medicare-only individuals with BH needs to report:</b>	<ul style="list-style-type: none"> <li>• Being female</li> <li>• Being Black, Hispanic or Asian</li> <li>• Being currently unmarried</li> <li>• Being food insecure</li> <li>• Living in a rural area</li> </ul>	<ul style="list-style-type: none"> <li>• Their health status as “fair” or “poor” instead of “excellent,” “very good,” or “good”</li> <li>• A higher number of ADL and IADL difficulties</li> <li>• Receiving help with ADL and IADL difficulties</li> </ul>	<ul style="list-style-type: none"> <li>• Having trouble getting care due to services not being covered or due to transportation</li> <li>• Traveling to doctor’s office by public transportation or taxi</li> <li>• Not having devices capable of telehealth</li> <li>• Not using the internet frequently</li> </ul>	<ul style="list-style-type: none"> <li>• Leaving the doctor’s office with unaddressed concerns</li> </ul>	<ul style="list-style-type: none"> <li>• Not receiving preventative care services</li> </ul>	<ul style="list-style-type: none"> <li>• No outpatient visit in the past year</li> <li>• At least one overnight hospital stay in the past year</li> <li>• At least one ER visit in the past year</li> </ul>

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# Demographics

# WHO ARE DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS?

## Age



Dual eligible individuals with BH needs are **more likely to be younger than 65 years old** than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

## Gender



Dual eligible individuals with BH needs **are more likely to report being female** than dual eligible individuals without BH needs and Medicare-only individuals with BH needs, except in the case of dual eligible individuals with an SUD-only diagnosis.

## Race



Among individuals with BH needs, Black, Hispanic, or Asian individuals are **more likely to be dual eligible** than those who are white.

## Marital Status



Dual eligible individuals are **less likely to be currently married** than Medicare-only individuals; having a BH need amplifies this difference.

# WHO ARE DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS?

## Lives Alone



There is **no statistical difference** in the proportion of dual eligible individuals with and without BH needs living alone or by dual eligibility status for individuals with BH needs, despite differences in marital status.

## Food Insecurity



Dual eligible individuals are **more likely to report experiencing food insecurity** than Medicare-only individuals; having a BH need amplifies this difference.

## Rurality



Dual eligible individuals with BH needs are **more likely to live in rural areas** than Medicare-only individuals with BH needs. There is no statistical difference among dual eligibles with and without BH needs in living in rural areas.

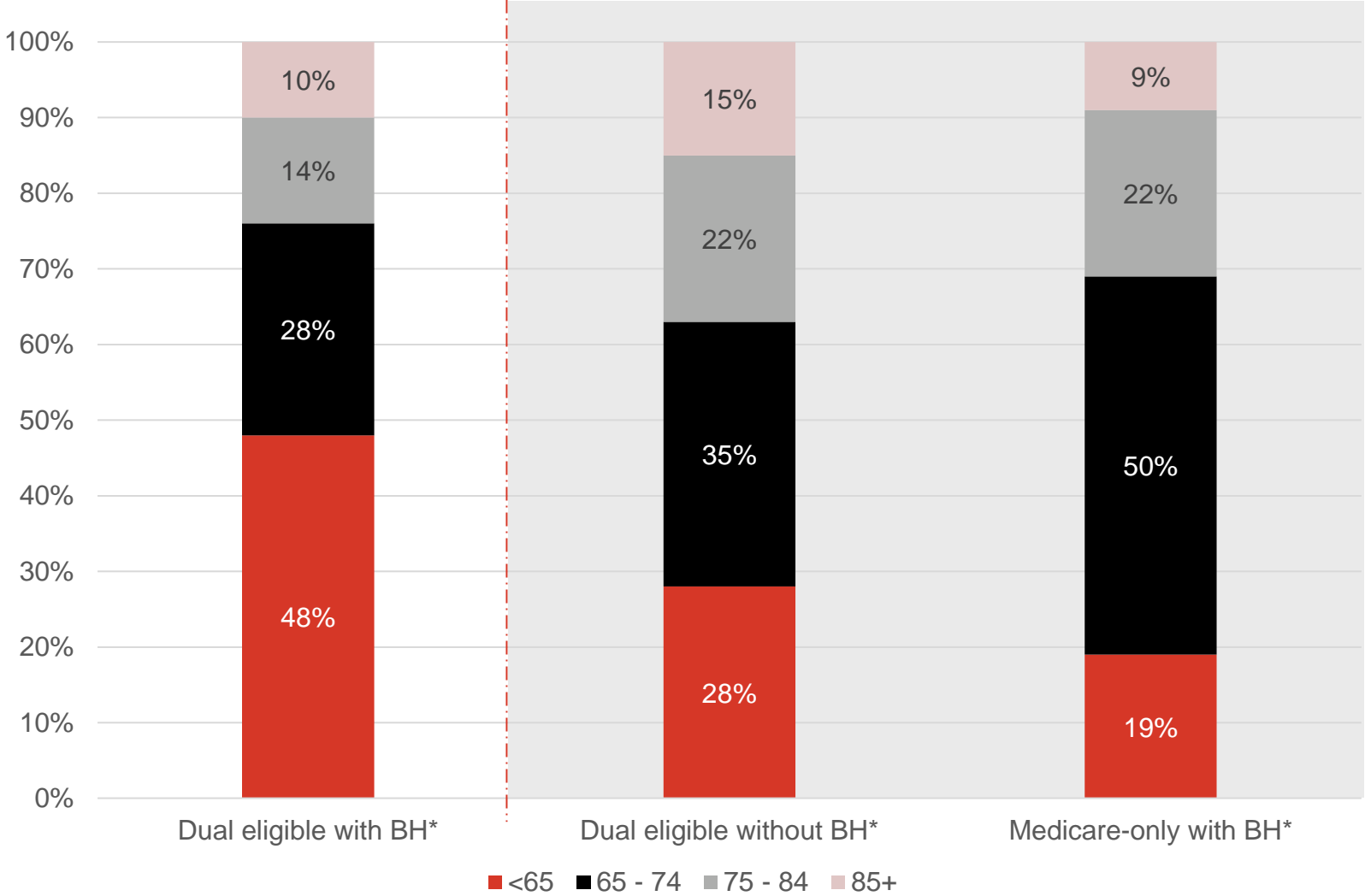
## Managed Care Enrollment



Dual eligible individuals with BH needs are **less likely to be enrolled in managed care and D-SNPs** than dual eligible individuals without BH needs. Dual eligible individuals with BH needs are more likely to be in FFS Medicare than Medicare-only individuals with BH needs.

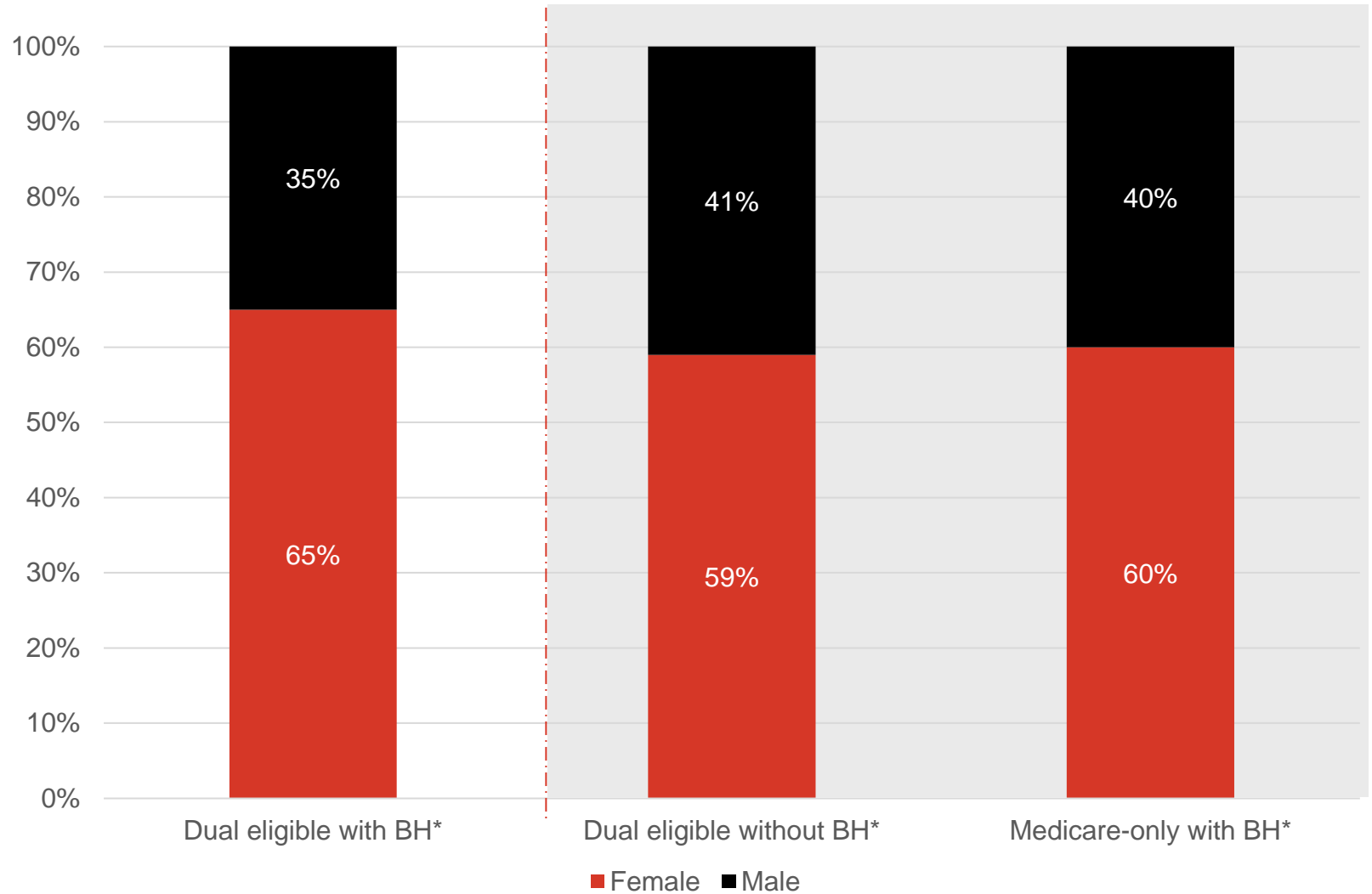


# ALMOST HALF OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS ARE YOUNGER THAN 65 YEARS OLD



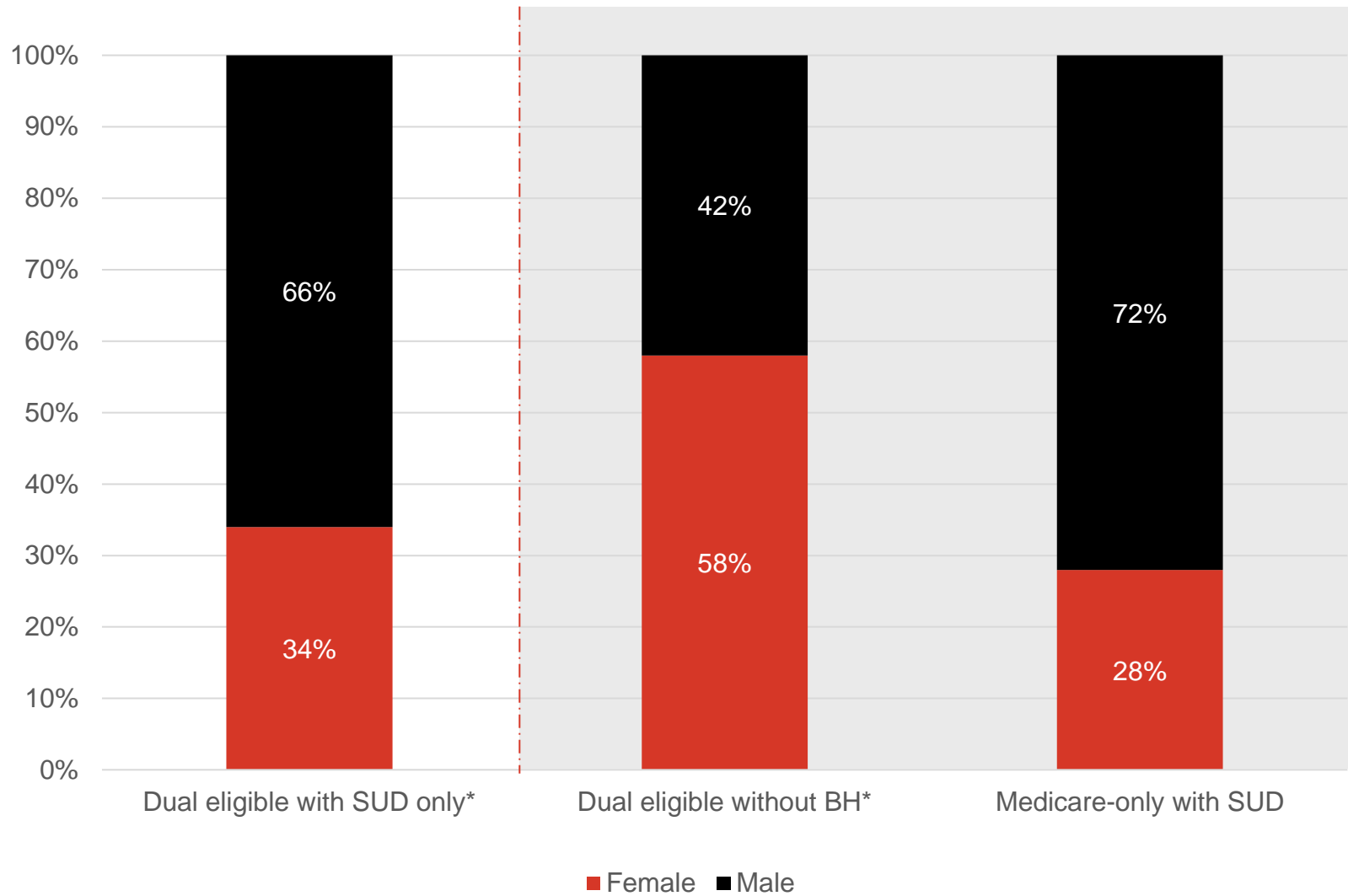
48% of dual eligible individuals with BH needs are younger than 65 years old, compared to 28% of dual eligible individuals without BH needs and 19% of Medicare-only individuals with BH needs.

# MORE THAN TWO-THIRDS OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT BEING FEMALE



65% of dual eligible individuals with BH needs report being female – six percentage points higher than dual eligible individuals without BH needs and five percentage points higher than Medicare-only individuals with BH needs.

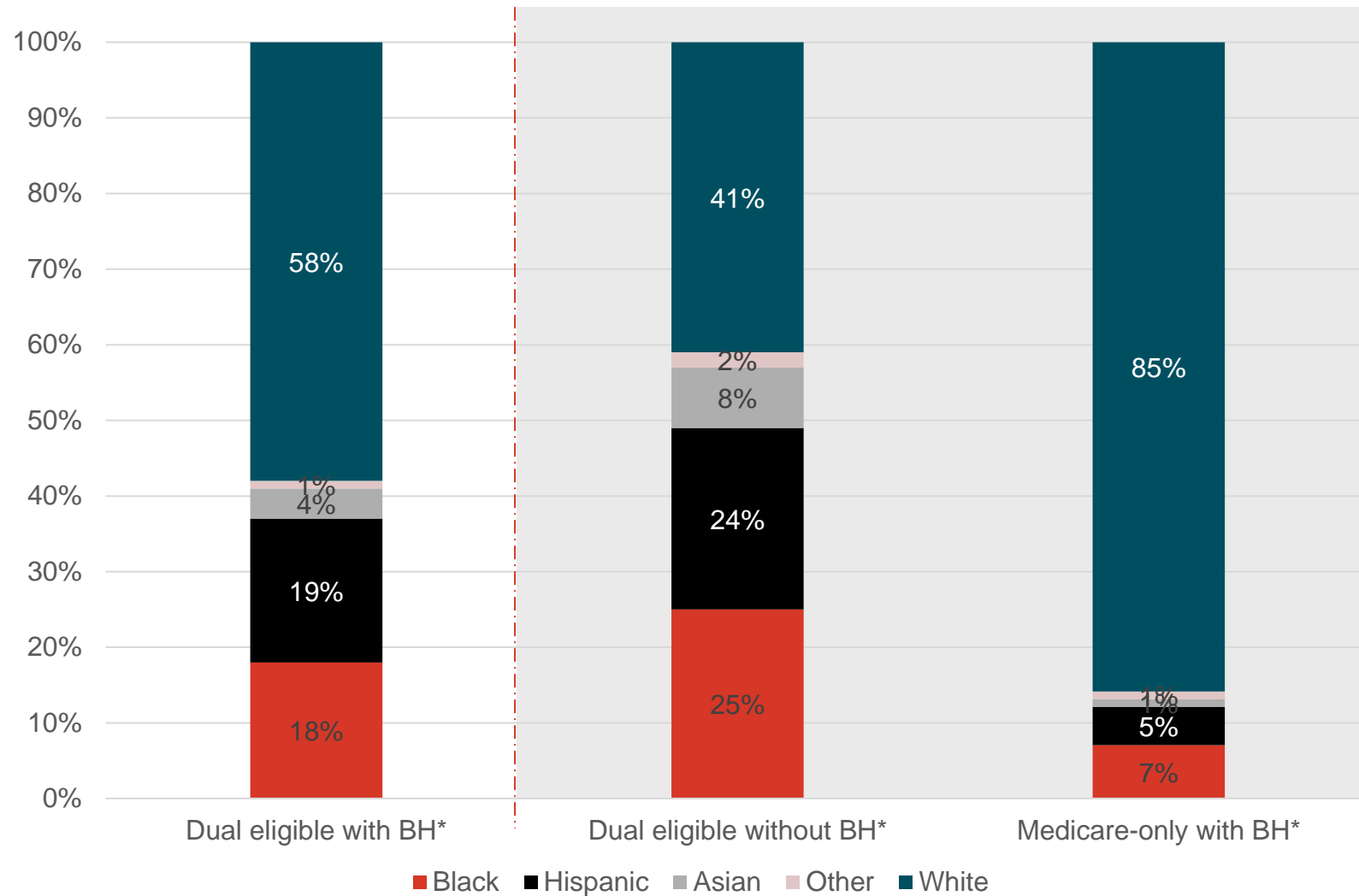
# MAJORITY OF DUAL ELIGIBLE INDIVIDUALS WITH SUD-ONLY DIAGNOSIS ARE MALE



Dual eligible individuals with an SUD-only diagnosis are more likely to report being male than female.

This differs from the finding that dual eligible individuals with BH needs are more likely to report being female than male.

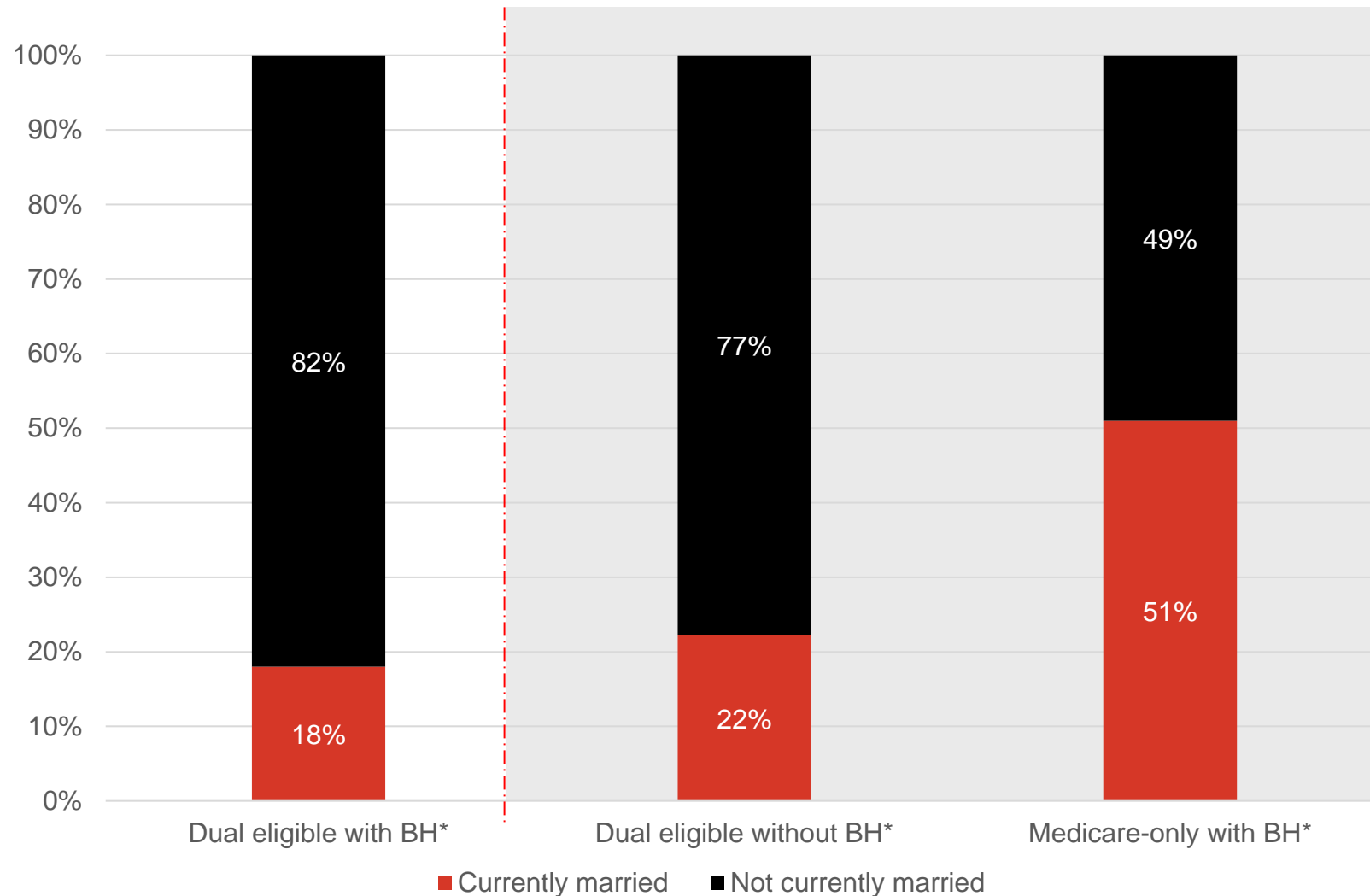
# THE MAJORITY OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS ARE WHITE



58% of dual eligible individuals with BH needs are white, compared to 41% of dual eligible individuals without BH needs.

Medicare-only individuals with BH needs have the lowest percentage of Black, Hispanic or Asian individuals, compared to dual eligible individuals.

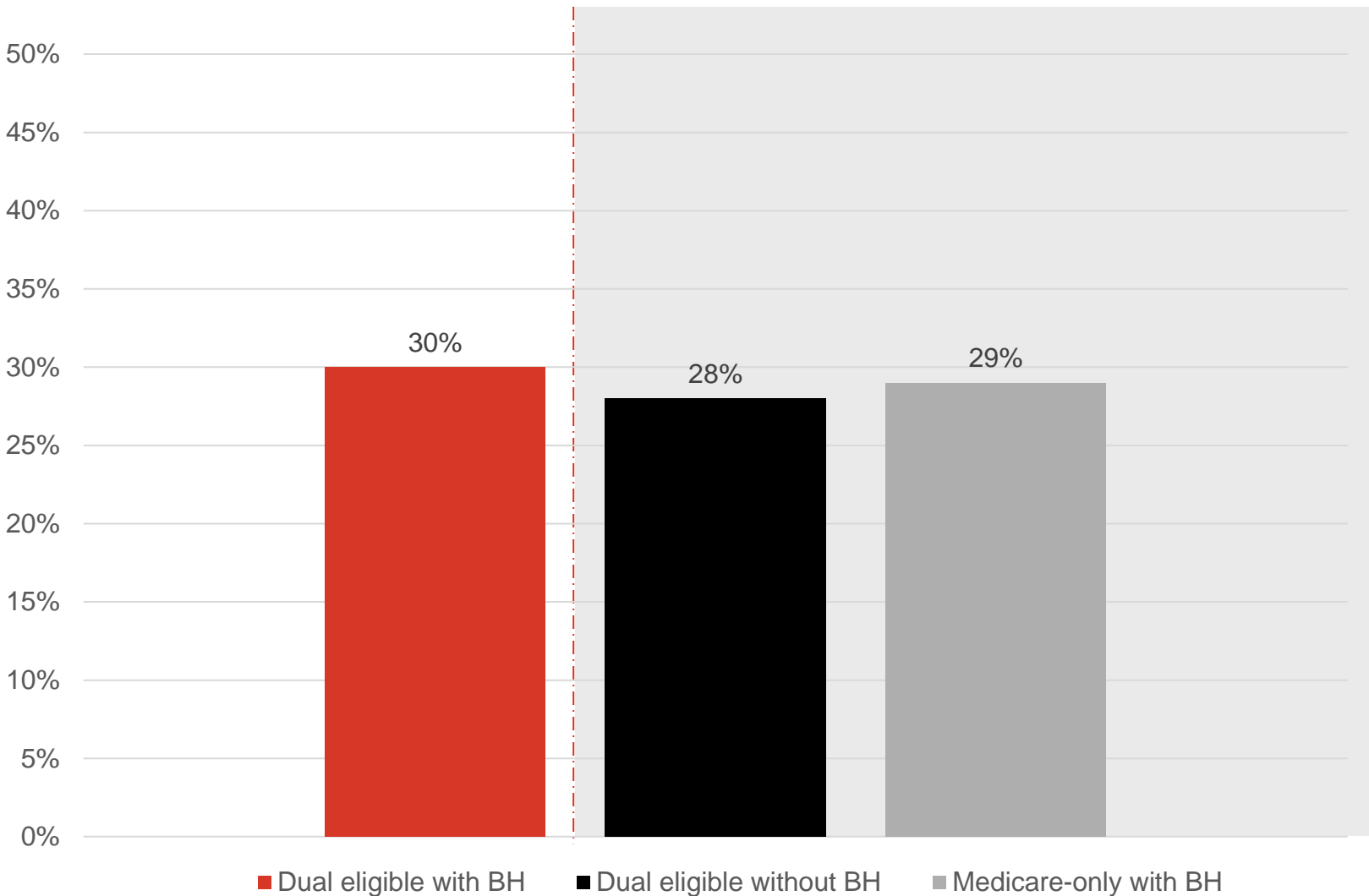
# MORE THAN HALF OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT NOT BEING CURRENTLY MARRIED



Only 18% of dual eligible individuals with BH needs are currently married, compared to 51% of Medicare-only individuals with BH needs.

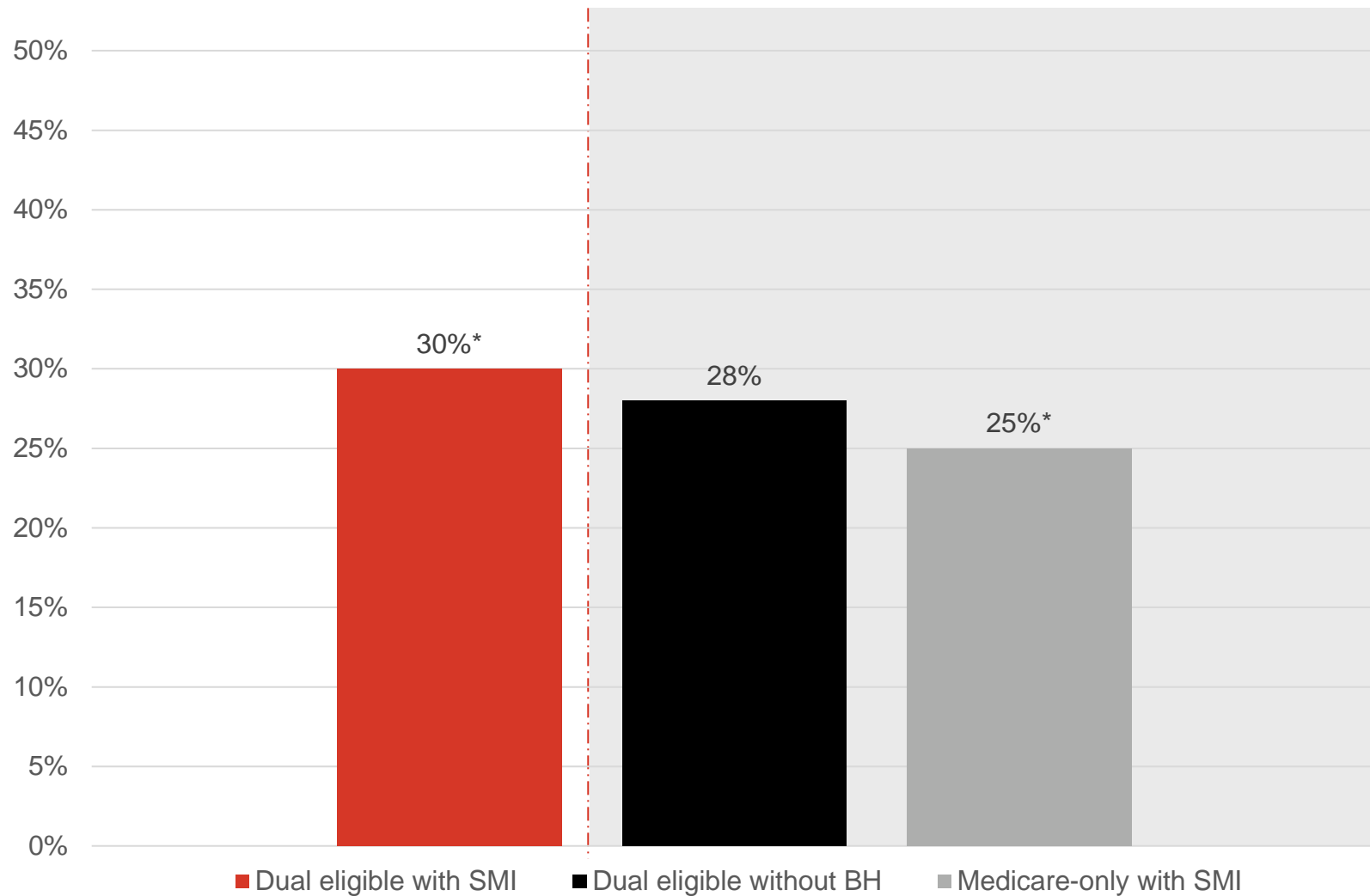
Dual eligible individuals with BH needs are also less likely to be currently married compared to dual eligible individuals without BH needs.

# LESS THAN A THIRD OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT LIVING ALONE



Despite lower likelihood of being currently married for dual eligible individuals with BH needs, similar proportions of dual eligible individuals with BH needs and Medicare-only individuals with BH needs report living alone.

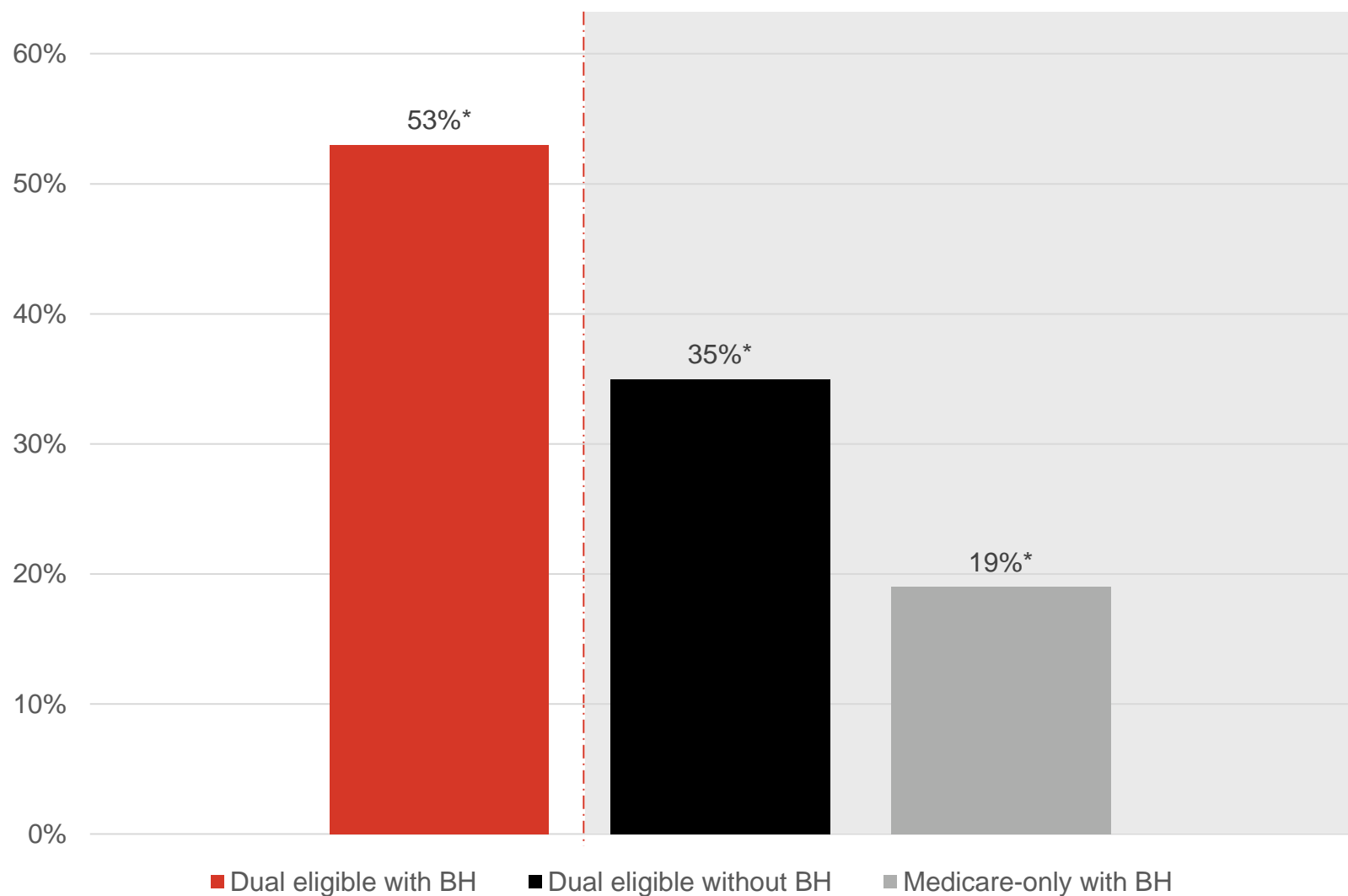
## LESS THAN A THIRD OF DUAL ELIGIBLE INDIVIDUALS WITH SMI REPORT LIVING ALONE



30% of dual eligible individuals with SMI report living alone, five percentage points higher than Medicare-only individuals with SMI.

There is no statistical difference in living alone between dual eligible individuals with SMI and dual eligible individuals without BH needs.

# MORE THAN HALF OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT EXPERIENCING FOOD INSECURITY

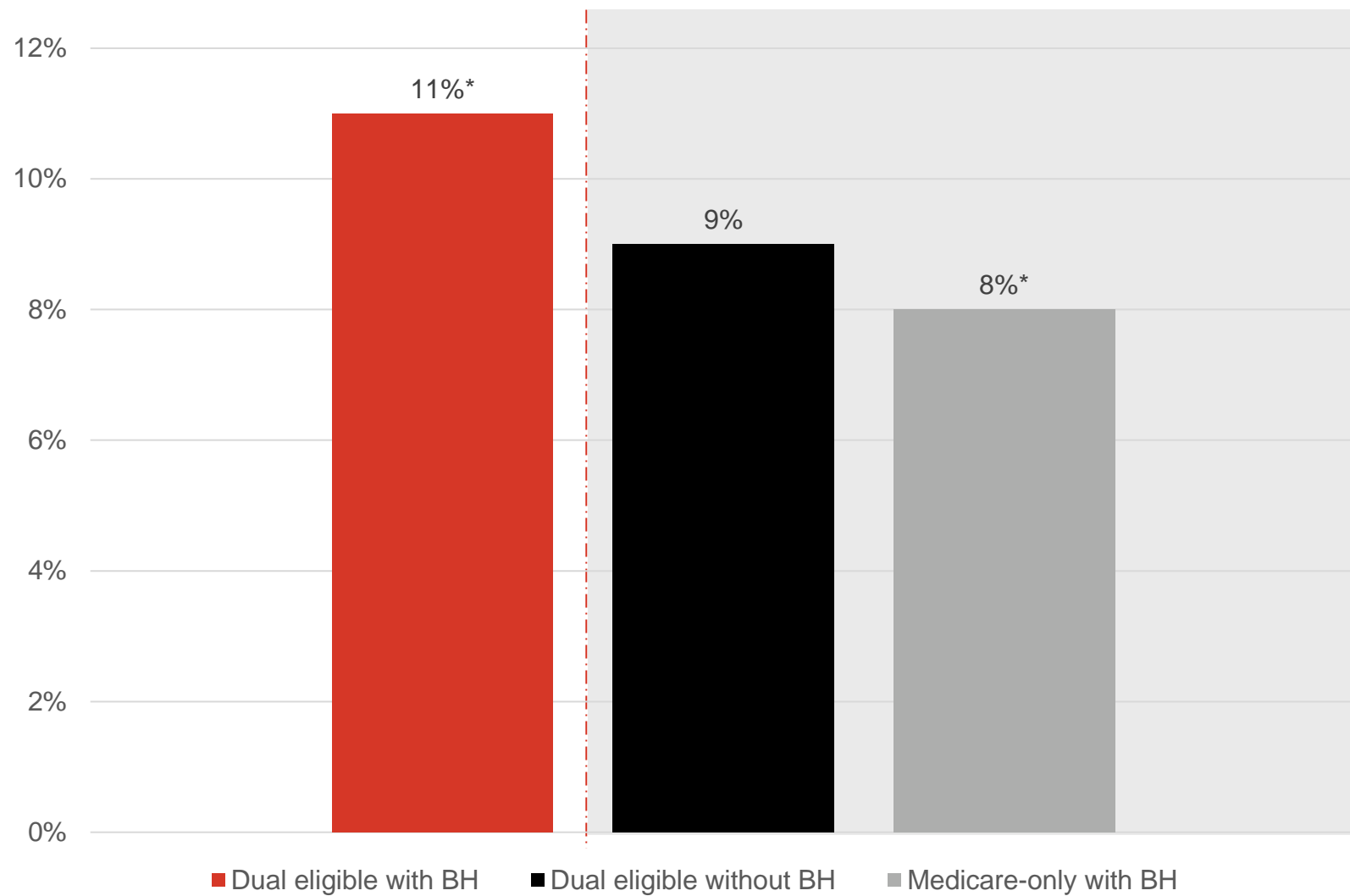


Dual eligible individuals with BH needs are more than twice as likely to report experiencing food insecurity compared to Medicare-only individuals with BH needs.

Dual eligible individuals with BH needs are more likely to experience food insecurity than dual eligible individuals without BH need.



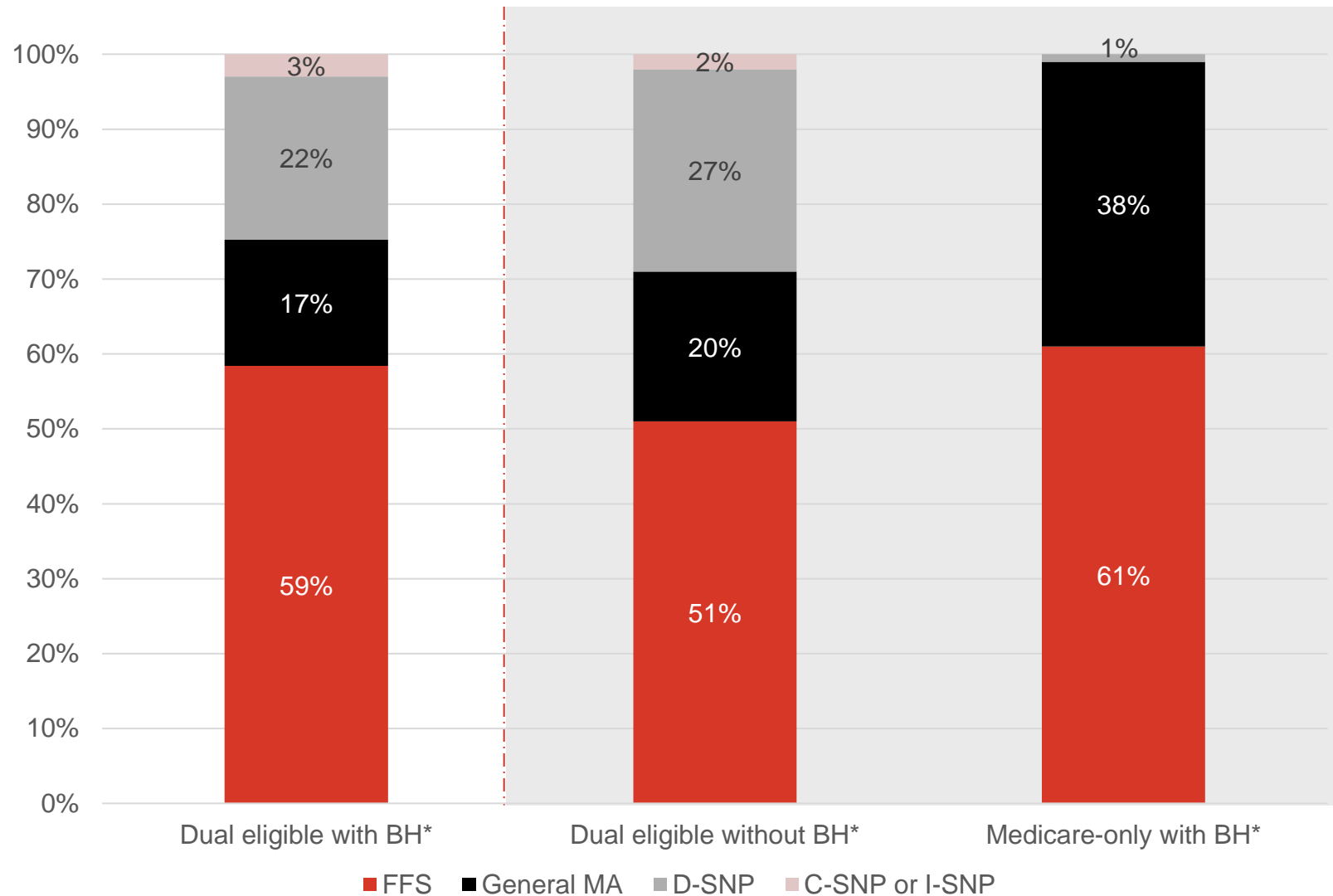
## SOME DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT LIVING IN RURAL AREAS



11% of dual eligible individuals with BH needs live in rural areas compared to 8% of Medicare-only individuals with BH needs.

There are no statistical differences among dual eligible individuals.

# MORE THAN A THIRD OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS ARE IN MANAGED CARE



41% of dual eligible individuals with BH needs are in managed care, compared to 49% of dual eligible individuals without BH needs.

22% of dual eligible individuals with BH needs are enrolled in D-SNPs, compared to 27% of dual eligible individuals without BH needs.



# Health & Functional Status

# WHAT IS THE HEALTH AND FUNCTIONAL STATUS OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS?

## Health Status<sup>1</sup>



Dual eligible individuals with BH needs are more likely to report **worse health status** than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

## Chronic Conditions



Dual eligible individuals with BH needs more likely to report a **higher number of chronic conditions** than dual eligible individuals without BH needs, but lower number of chronic conditions than Medicare-only individuals with BH needs.

## Difficulty with ADLs



Dual eligible individuals with BH needs report **more ADL difficulties** than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

## Difficulty with IADLs



Dual eligible individuals with BH needs report **more IADL difficulties** than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

## Receiving Help with ADLs



Dual eligible individuals with BH needs are **more likely to report that they receive help** with their ADL difficulties than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.<sup>2</sup>

## Receiving Help with IADLs

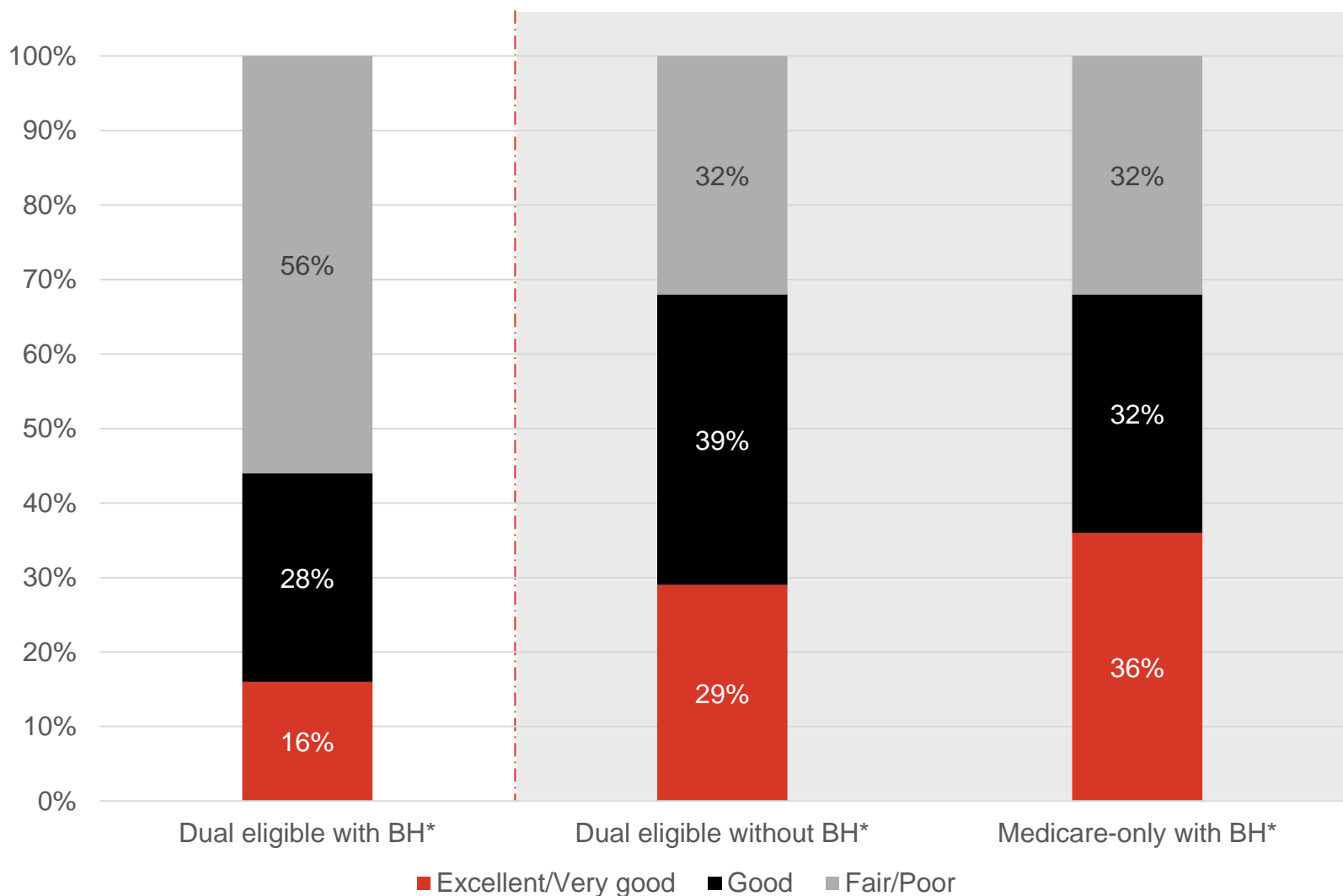


Dual eligible individuals with BH needs are **more likely to report that they receive help** with their IADL difficulties than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

<sup>1</sup>Respondents were asked how their general health compares to others of the same age.

<sup>2</sup>Most (40%) of Medicare-only individuals with BH needs receive help from their spouse, compared to 14% of dual eligible individuals with BH needs and 10% of dual eligible individuals without BH needs. A significant proportion (36%) of dual eligible individuals with BH needs receive help from “others,” which do not include, for example, relatives, friends, neighbors, or roommates. “Others” is not further defined in the MCBS.

# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT WORSE HEALTH STATUS THAN DUAL ELIGIBLE INDIVIDUALS WITHOUT BH NEEDS AND MEDICARE-ONLY INDIVIDUALS WITH BH NEEDS



56% of dual eligible individuals with BH needs report having a “fair” or “poor” health status compared to 32% of dual eligible individuals without BH needs and 32% Medicare-only individuals with BH needs.

## DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS HAVE MULTIPLE CHRONIC CONDITIONS AND ADL AND IADL DIFFICULTIES

	Dual eligible individuals with BH need	Dual eligible individuals without BH need	Medicare-only individuals with BH need
Average number of chronic conditions	3.43*	2.19*	3.99*
Average number of reported difficulties in ADLs	1.58*	1.06*	0.95*
Average number of reported difficulties in IADLs	2.07*	1.43*	1.13*

Dual eligible individuals with BH needs report having more chronic conditions and ADL and IADL limitations than dual eligible individuals without BH needs.

Dual eligible individuals with BH needs report having fewer chronic conditions, but more ADL and IADL limitations than Medicare-only individuals with BH needs.

## DUAL ELIGIBLE INDIVIDUALS WITH ONLY SUD DIAGNOSIS HAVE HIGH NUMBER OF REPORTED IADL DIFFICULTIES

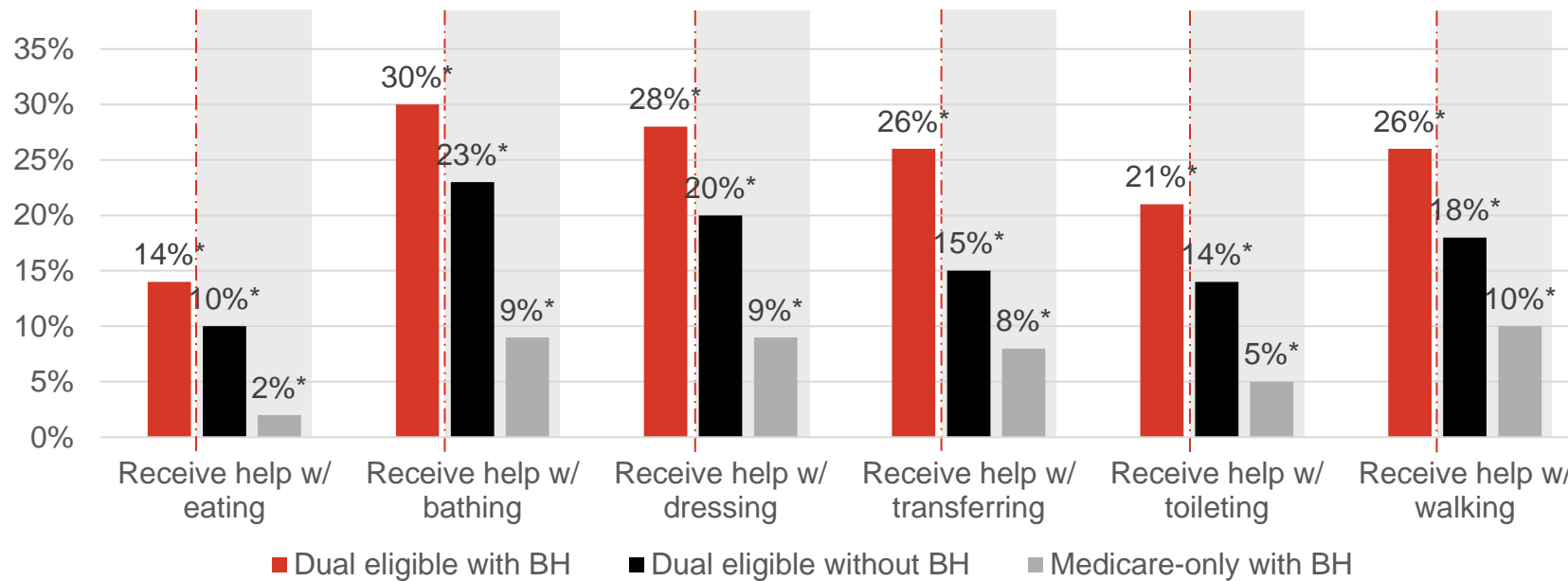
	Dual eligible individuals with SUD only	Dual eligible individuals without BH need	Medicare-only individuals with SUD only
Average number of chronic conditions	1.89	2.02	2.35
Average number of reported difficulties in ADLs	0.97	1.18	0.57
Average number of reported difficulties in IADLs	1.19*	1.59	0.60*

Dual eligible individuals with SUD diagnoses have twice the average number of reported difficulties in IADLs than Medicare-only individuals with SUD diagnosis only.

# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT DIFFICULTIES WITH ADLS AND REPORT RECEIVING HELP FOR THOSE DIFFICULTIES

Reported Difficulties in ADLs	Dual eligible with BH	Dual eligible without BH	Medicare-only with BH
Eating	10%*	6%*	5%*
Bathing	29%*	19%*	14%*
Dressing	24%*	17%*	12%*
Transferring	30%*	18%*	19%*
Toileting	21%*	13%*	13%*
Walking	45%*	33%*	33%*

Dual eligible individuals with BH needs are more likely to report having difficulties across all reported ADLs compared to dual eligible individuals without BH needs and Medicare-only individuals with BH needs.



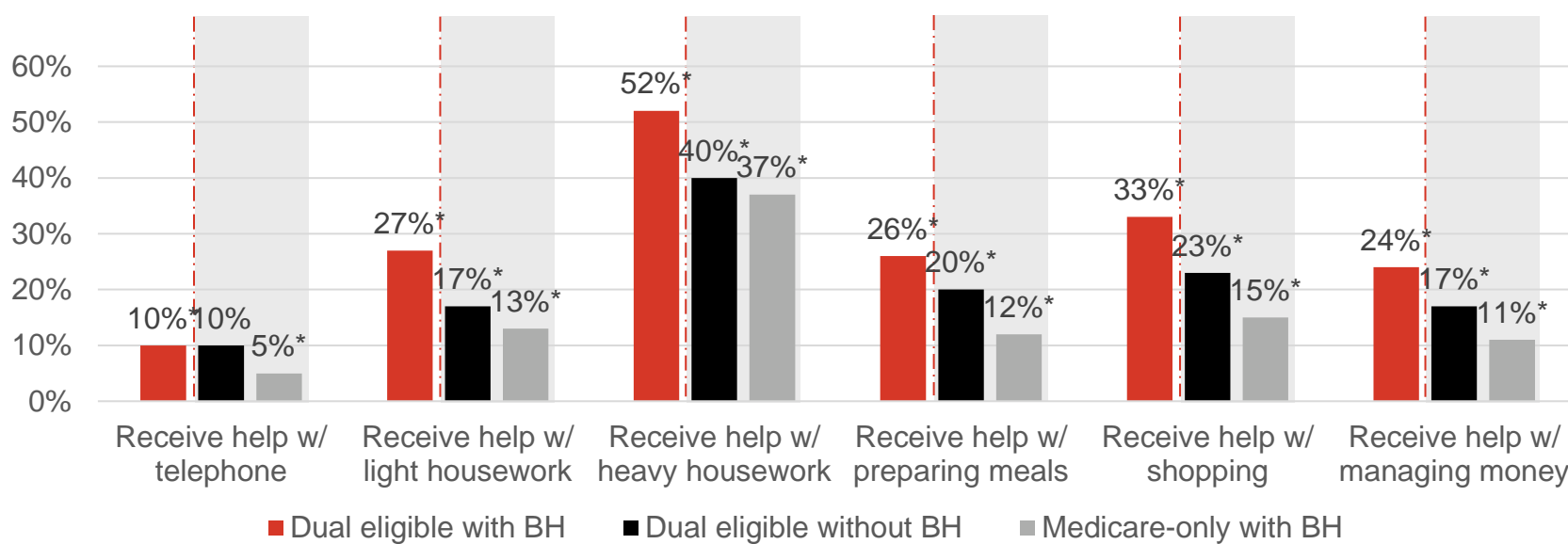
Dual eligible individuals with BH needs are also more likely to report receiving help with each of the reported ADLs compared to individuals without BH needs and Medicare-only individuals with BH needs.



# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT HAVING DIFFICULTIES WITH IADLS

Reported Difficulties in IADLs	Dual eligible with BH	Dual eligible without BH	Medicare-only with BH
Using phone	20%*	17%*	9%*
Light housework	33%*	20%*	16%*
Heavy housework	63%*	46%*	44%*
Preparing meals	30%*	22%*	14%*
Shopping	44%*	31%*	19%*
Managing money	39%*	25%*	15%*

Dual eligible individuals with BH needs are more likely to report having difficulties across all reported IADLs compared to dual eligible individuals without BH needs and Medicare-only individuals with BH needs.



Dual eligible individuals with BH needs are also more likely to report receiving help with each of the reported IADLs (except for receiving help with the telephone) compared to dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

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# Access to Care

# WHAT ACCESS TO CARE BARRIERS EXIST FOR DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS?

## Unaddressed Health Problems



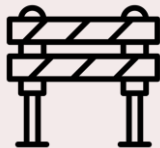
Among dual eligible individuals, those with BH needs are **three times more likely to report that they had a health problem that a doctor should have seen but didn't** than those without BH needs.

## Trouble Getting Care



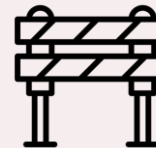
Dual eligible individuals with BH needs are **twice as likely to report having trouble getting care** compared to dual eligible individuals without BH needs and higher rate of trouble getting care than Medicare-only individuals with BH needs.

## Service Coverage Barrier



Dual eligible individuals with BH needs are **more likely to report services not being covered as a barrier** to accessing care than Medicare-only individuals with BH needs. There is no statistical difference by BH need among who are dual eligible.

## Transportation Barrier



Dual eligible individuals with BH needs are **more likely to report transportation as a barrier** to accessing care than Medicare-only individuals with BH needs. There is no statistical difference by BH need among those who are dual eligible.

## WHAT ACCESS TO CARE BARRIERS EXIST FOR DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS?

### Mode of Transportation to Doctor's Office



Dual eligible individuals with BH needs are **less likely to drive or walk** to doctor's office than Medicare-only individuals with BH needs. There is no statistical difference by BH need among those who are dual eligible.

### Has Device for Telehealth



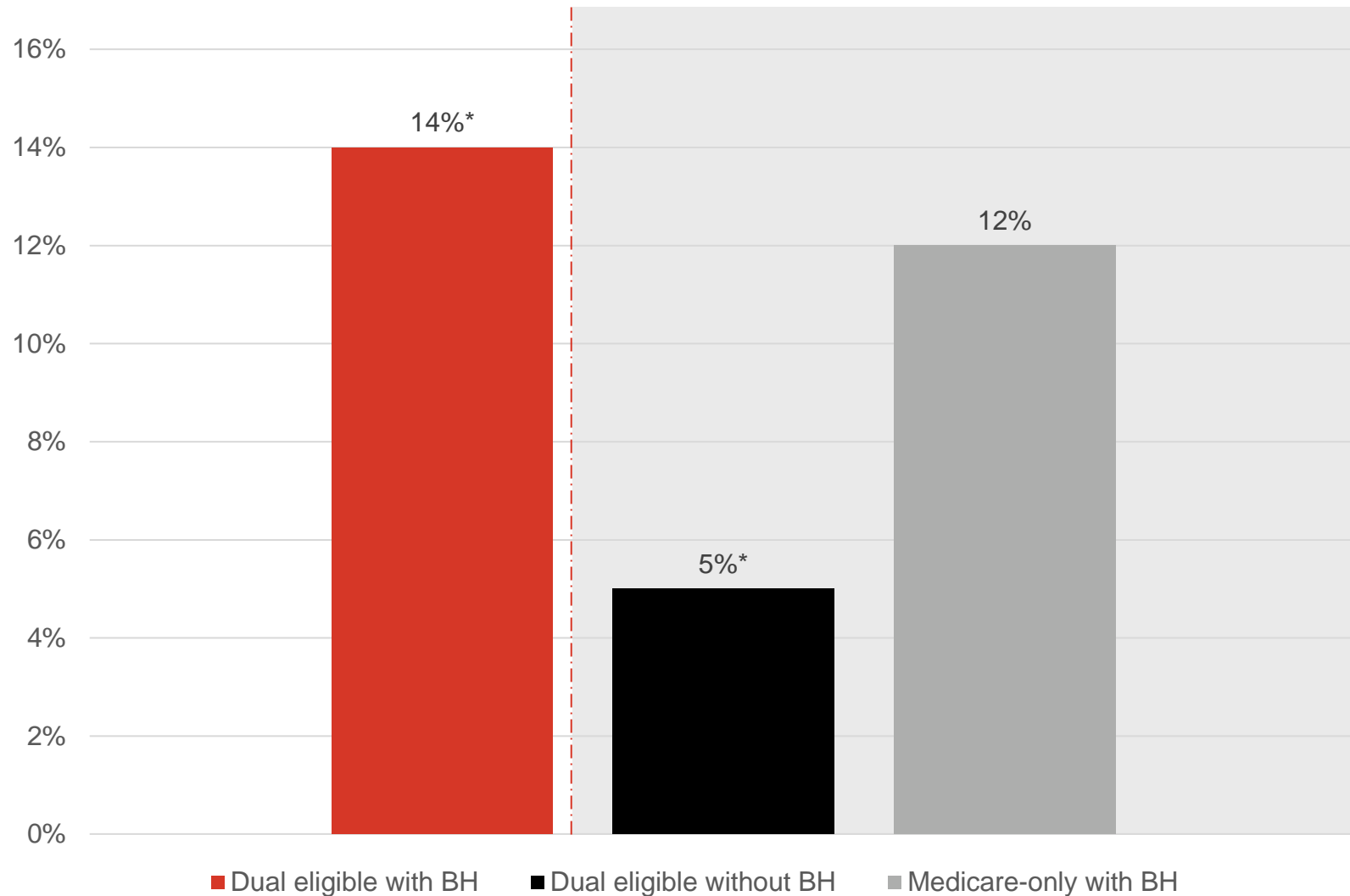
Dual eligible individuals with BH needs are **less likely to have a device for telehealth** than Medicare-only individuals with BH needs. However, dual eligible individuals with BH needs **are more likely to report having a device for telehealth** than dual eligible individuals without BH needs.

### Use Internet Frequently



Dual eligible individuals with BH needs are **less likely to use the internet frequently** than Medicare-only individuals with BH needs. However, dual eligible individuals with BH needs **are more likely to use the internet frequently** than dual eligible individuals without BH needs.

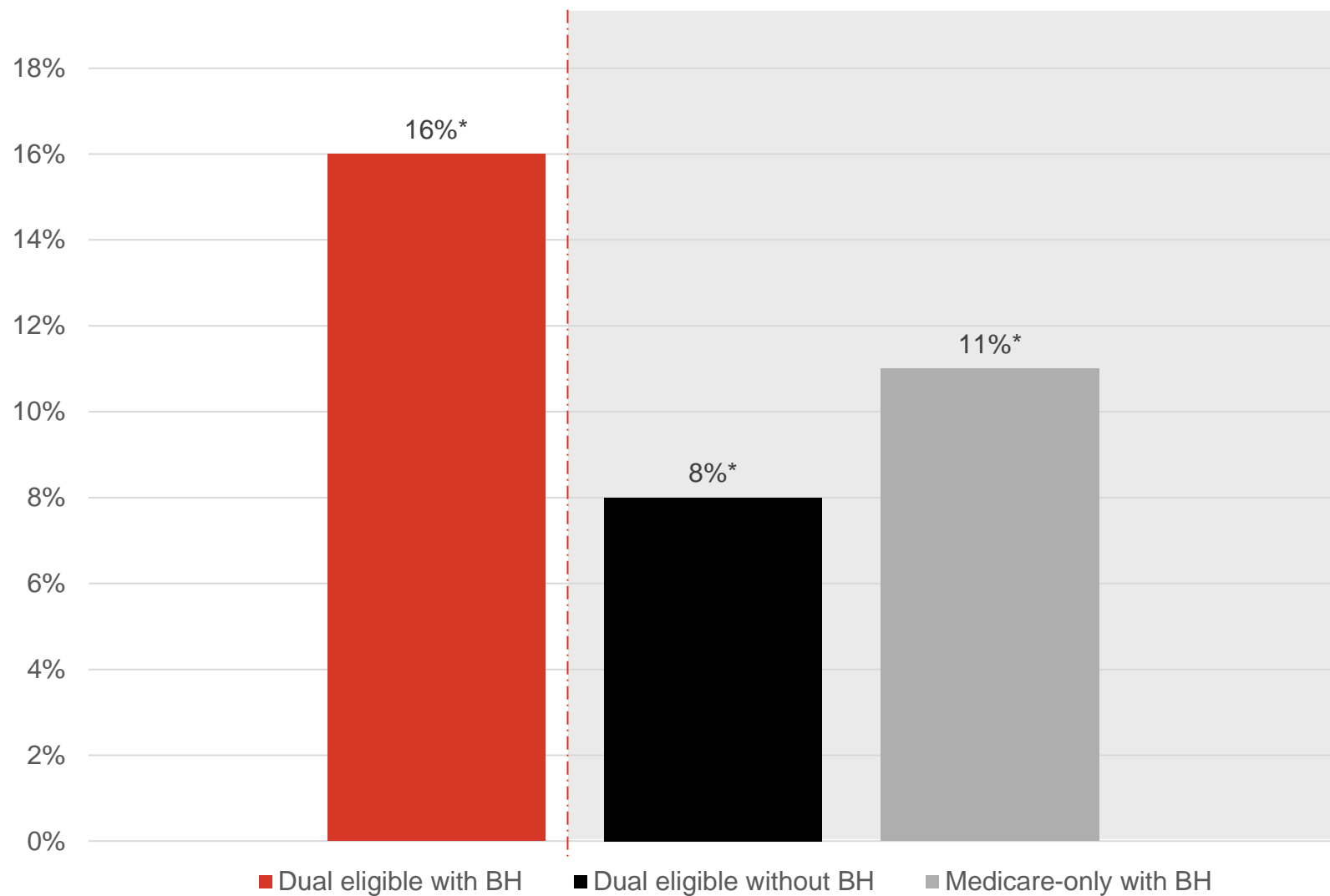
# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT UNADDRESSED HEALTH PROBLEMS



Dual eligible individuals with BH needs are almost three times more likely than dual eligible individuals without BH needs to report having a health problem that a doctor should have seen but did not.

There is no statistical difference between dual eligible individuals with BH needs and Medicare-only individuals with BH needs.

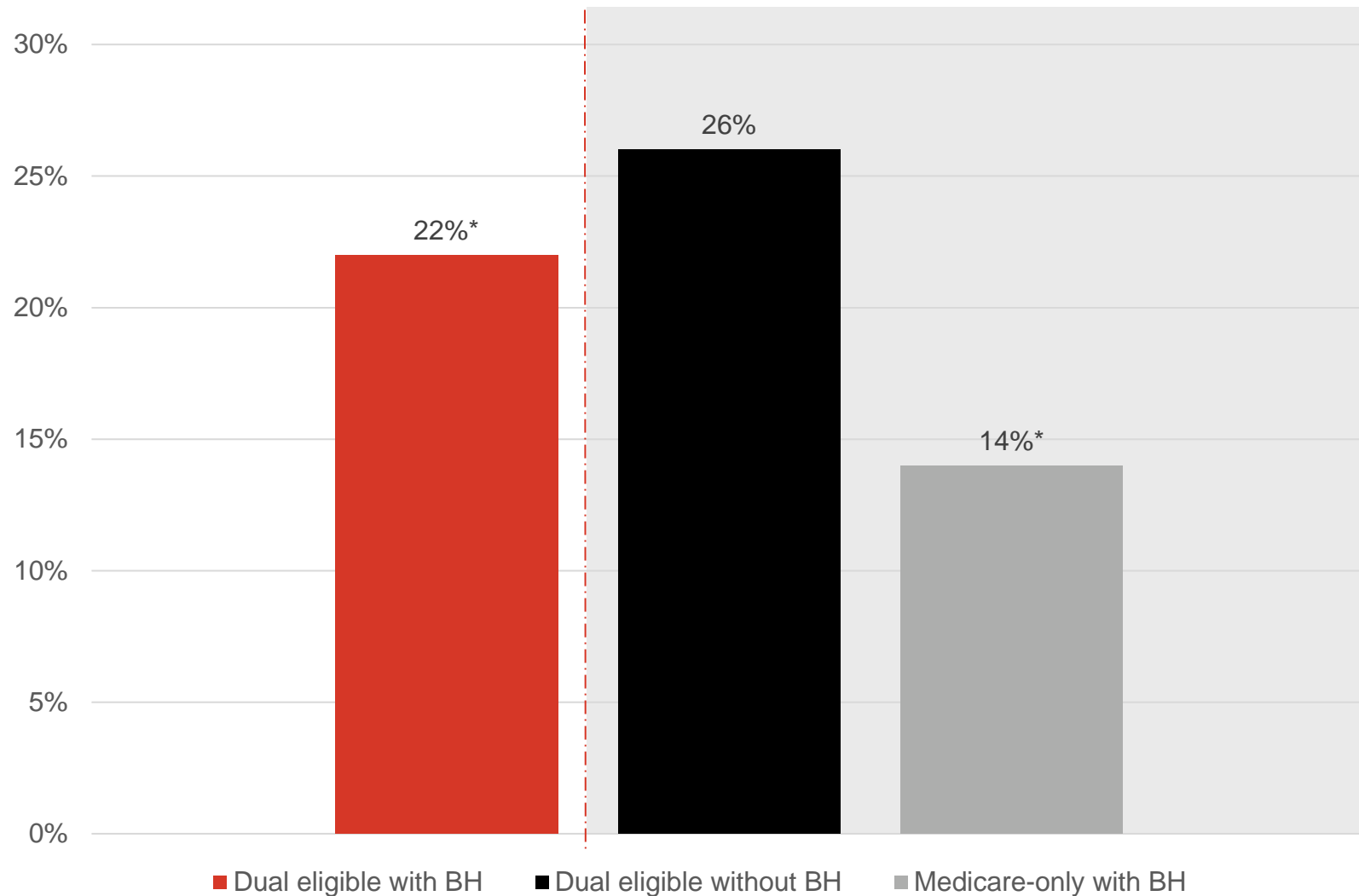
# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT HAVING TROUBLE GETTING CARE



Dual eligible individuals with BH needs are twice as likely to report having trouble getting care than dual eligible individuals without BH needs.

Dual eligible individuals with BH needs are also more likely to report having trouble getting care than Medicare-only individuals with BH needs.

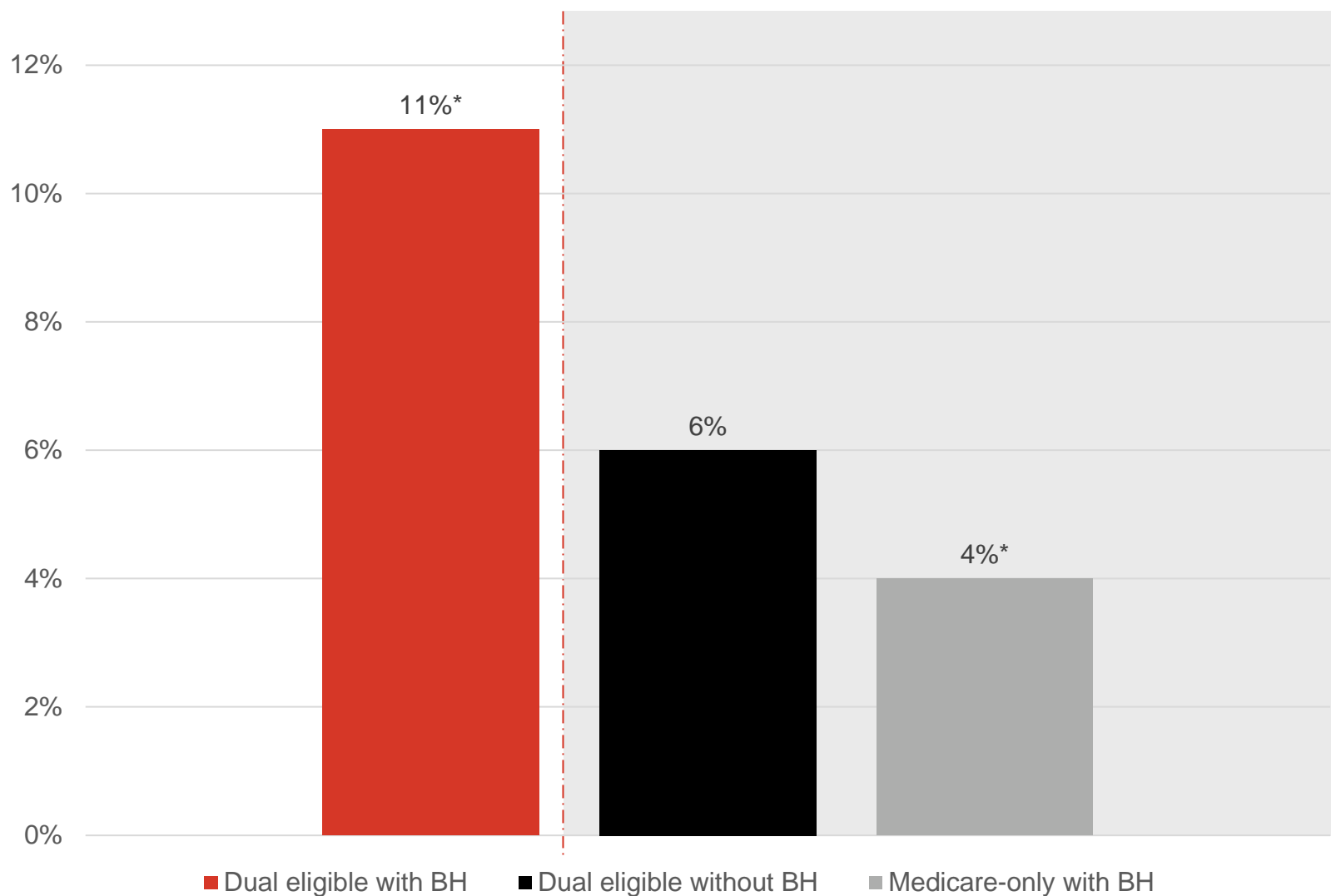
# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT SERVICE COVERAGE AS AN ACCESS BARRIER



22% of dual eligible individuals with BH needs report services not being covered as the reason for trouble getting care compared to 14% of Medicare-only individuals with BH needs.

A lower proportion of dual eligible individuals with BH needs also report having trouble getting care due to services not being covered compared to dual eligible individuals without BH needs.

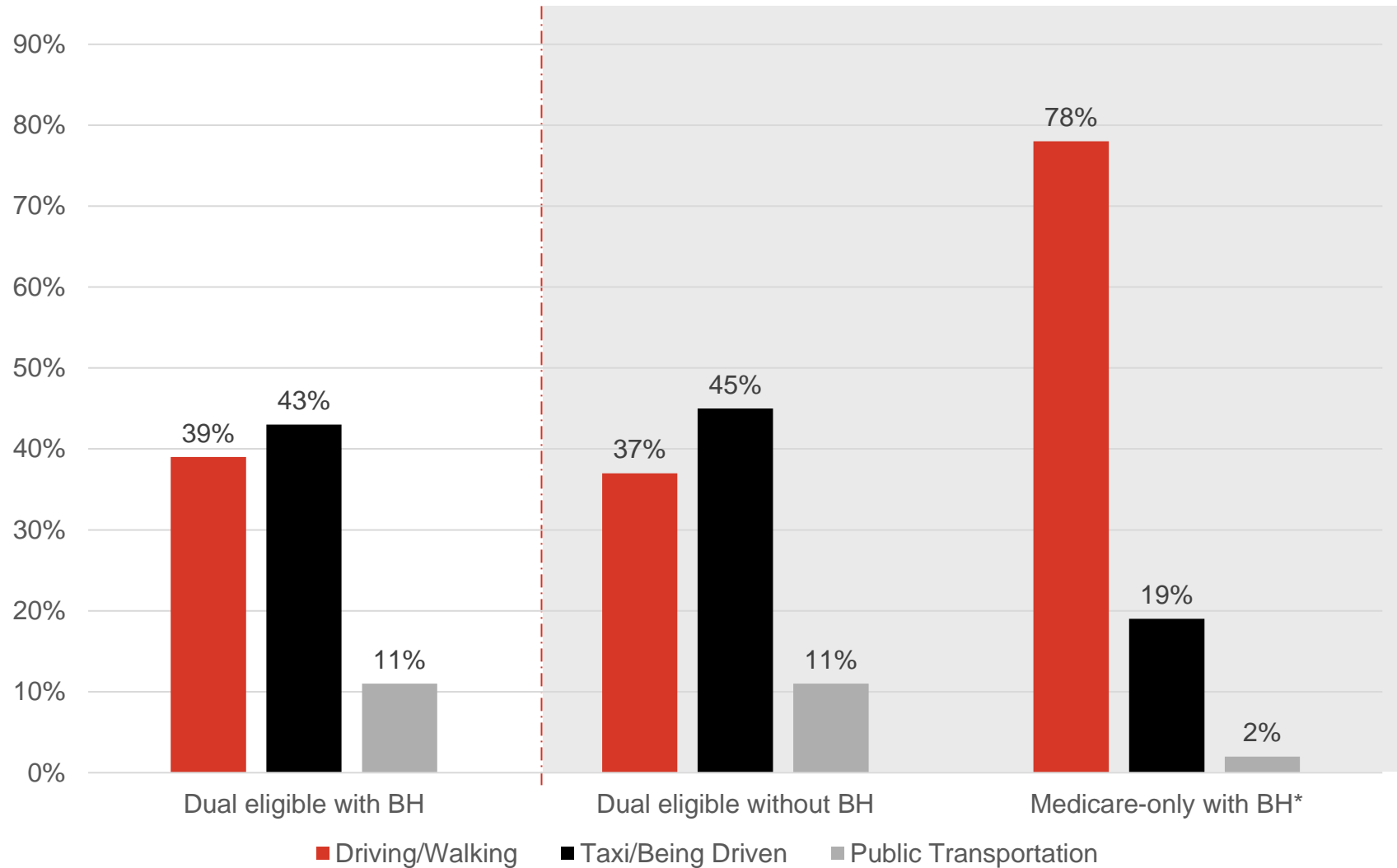
# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT TRANSPORTATION AS A REASON FOR HAVING TROUBLE GETTING CARE



Dual eligible individuals with BH needs are more than twice as likely to report transportation as a reason for having trouble getting care than Medicare-only individuals with BH needs.

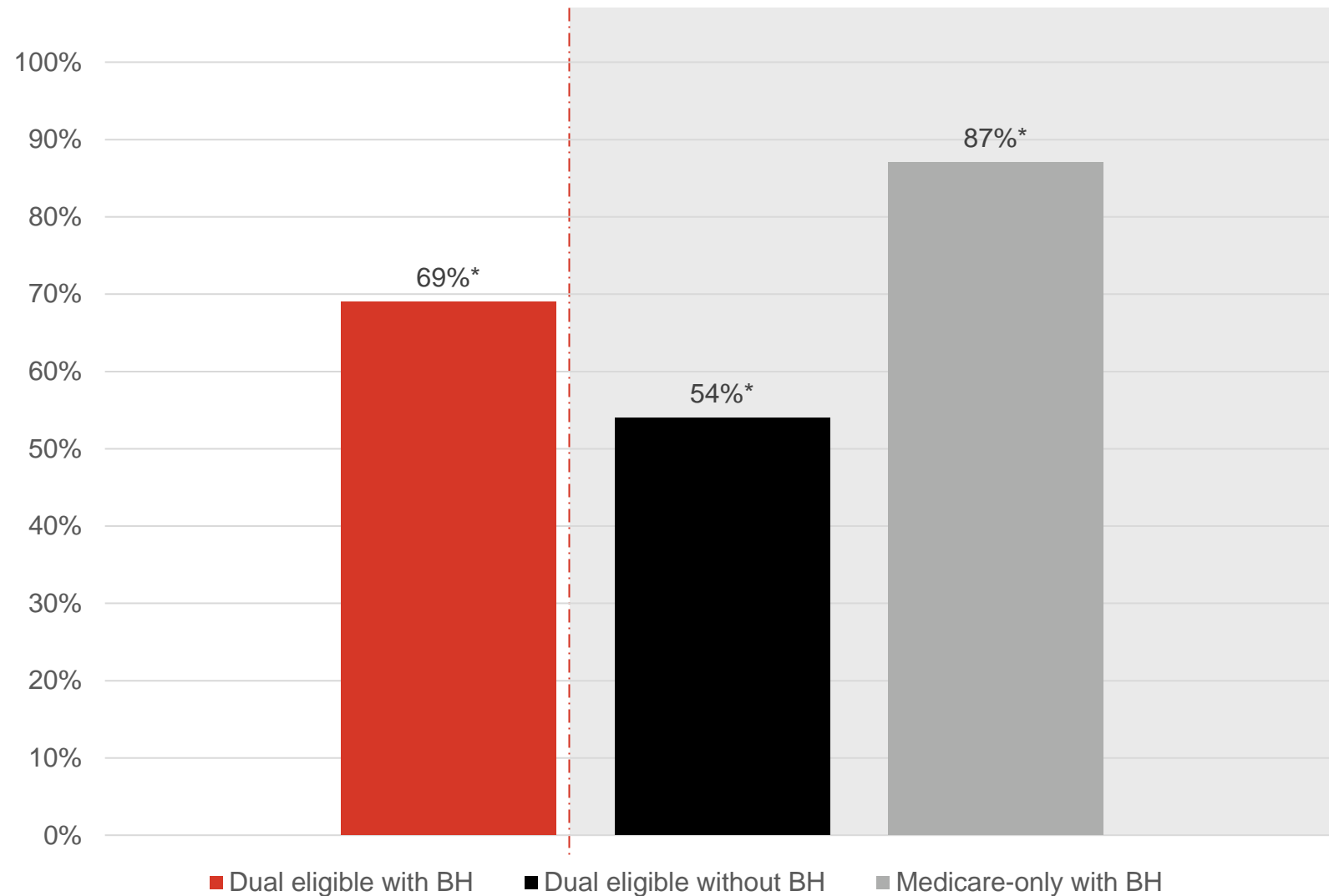


# ABOUT A THIRD OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT TRAVELING TO DOCTOR'S OFFICE INDEPENDENTLY



Dual eligible individuals with BH needs are more than twice as likely to be driven by others or use public transportation to a doctor's office than Medicare-only individuals with BH needs.

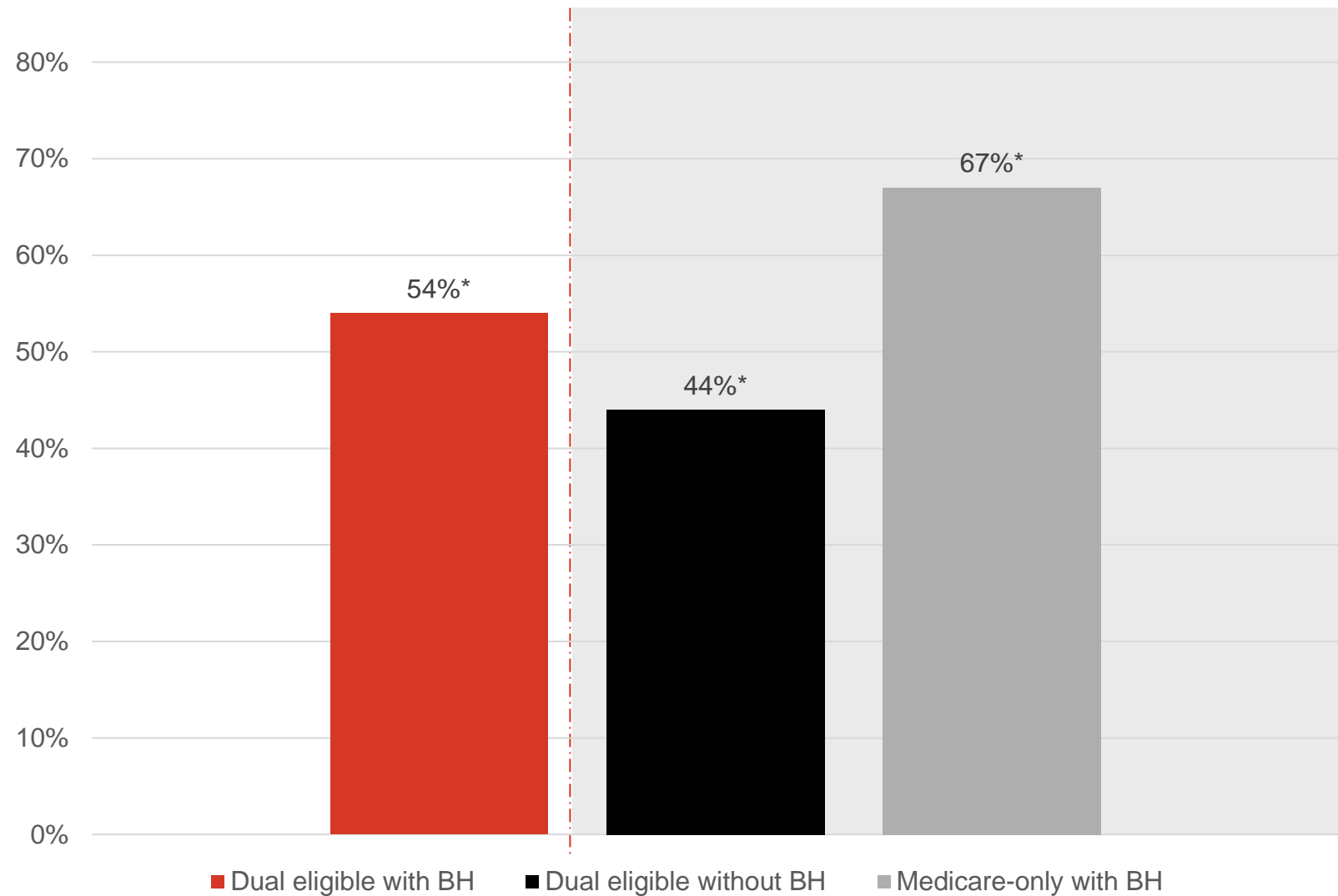
# TWO-THIRDS OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT HAVING A DEVICE FOR TELEHEALTH



Only 69% of dual eligible individuals with BH needs report having a device for telehealth compared to 87% of Medicare-only individuals with BH needs.

However, dual eligible individuals with BH needs are more likely to report having a device for telehealth than dual eligible individuals without BH needs.

# ONLY HALF OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT USING INTERNET FREQUENTLY



About half of dual eligible individuals with BH needs use the internet frequently compared to two-thirds of Medicare-only individuals with BH needs.

Dual eligible individuals with BH needs are more likely to use the internet frequently than dual eligible individuals without BH needs.

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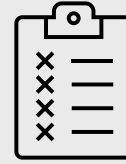
# Relationships with Providers

## HOW ARE THE RELATIONSHIPS BETWEEN DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS AND THEIR PROVIDERS?



### Provider Respect

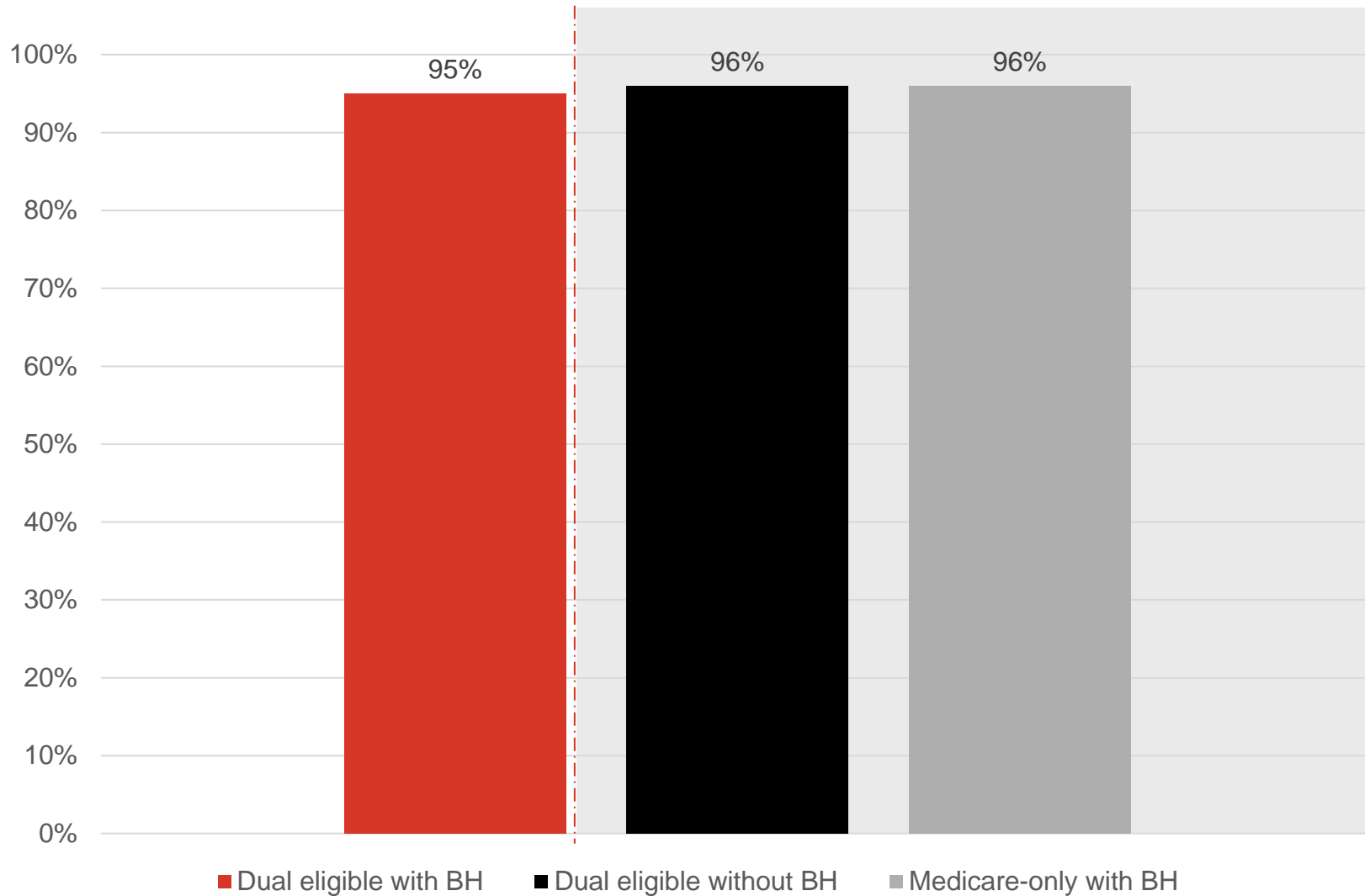
- Dual eligible individuals with BH needs report **feeling respected at a similar rate** as dual eligible individuals without BH needs and Medicare-only individuals with BH needs.



### Leaving Doctor With Unaddressed Concerns

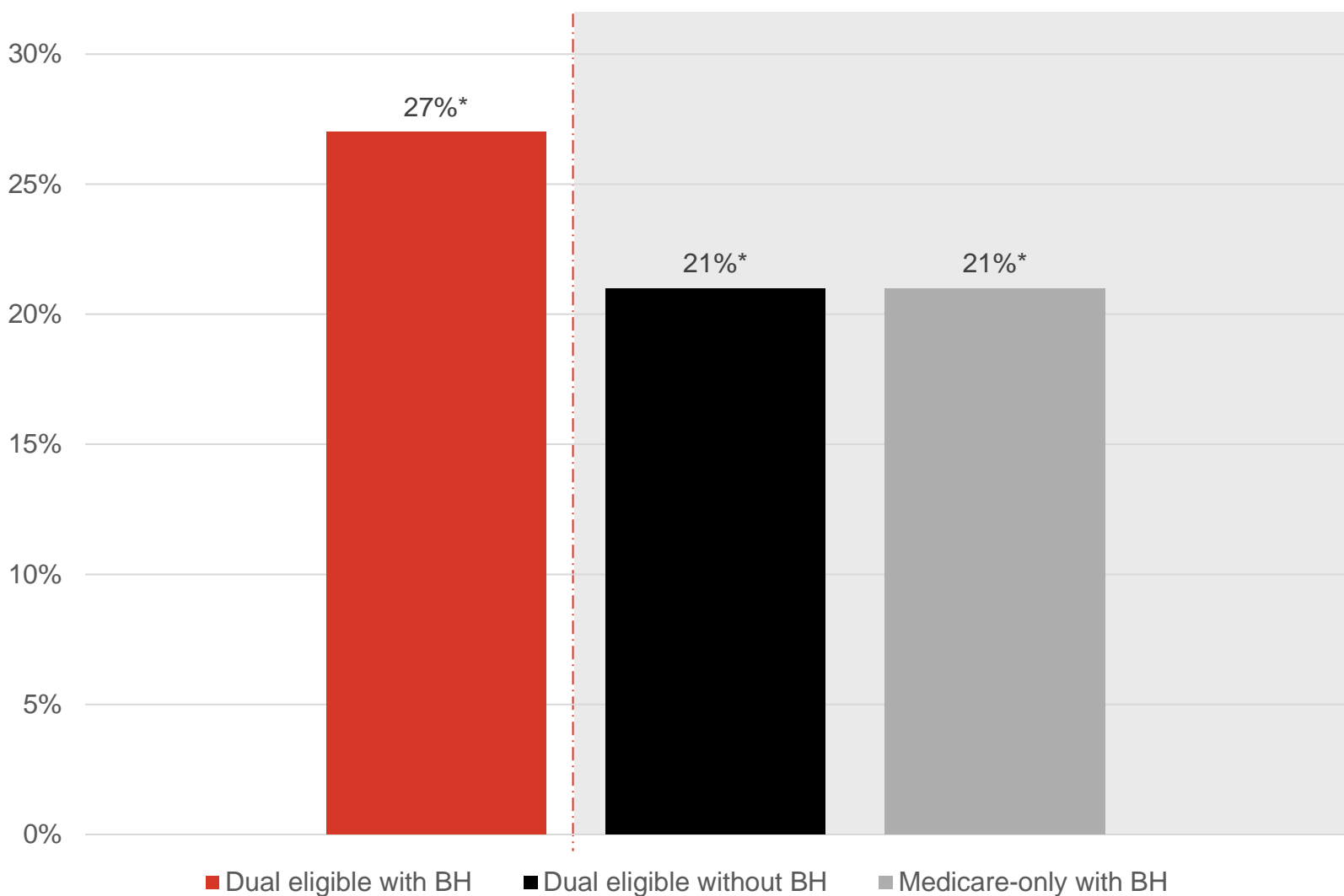
- Dual eligible individuals with BH needs are **more likely to report unaddressed concerns** after a doctor's visit compared to dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT FEELING RESPECTED BY PROVIDERS



Similar proportions of dual eligible individuals with and without BH needs, and Medicare-only individuals with BH needs, report that providers did respect them.

# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT LEAVING THE DOCTOR'S OFFICE WITH UNADDRESSED CONCERNS



27% of dual eligible individuals with BH needs report having unaddressed concerns after doctor's visit, six percentage points higher than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

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# Preventative Care

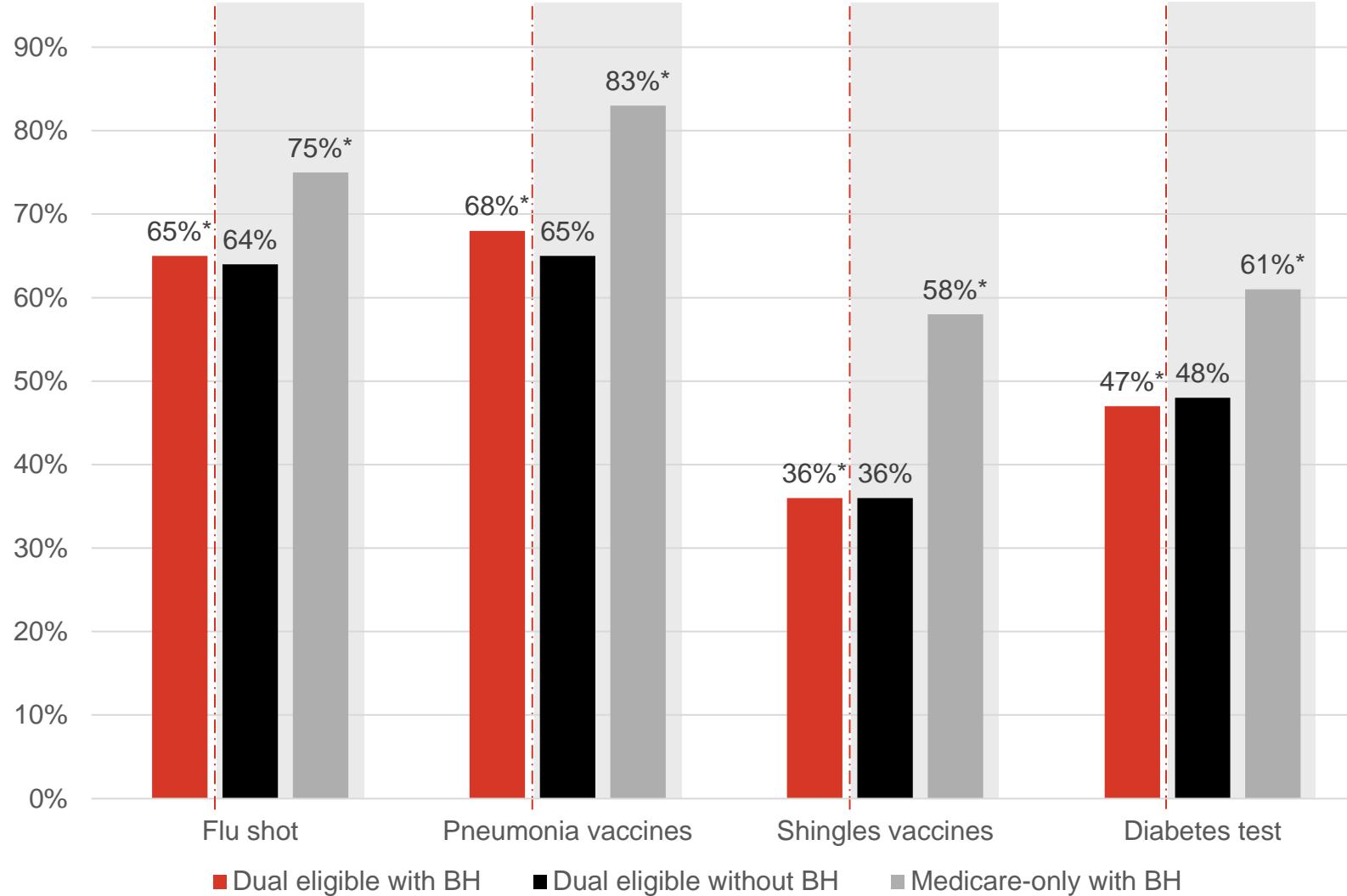




## Preventative Care

- Dual eligible individuals with BH needs are **less likely to report receiving preventative care** than Medicare-only individuals with BH needs. There is no statistical difference by BH need among those who are dual eligible.

# DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS ARE LESS LIKELY TO REPORT RECEIVING PREVENTATIVE CARE



The proportion of dual eligible individuals with BH needs that report receiving preventative care are 10 to 22 percentage points lower than Medicare-only individuals with BH needs, with flu and shingles having the largest variance.

Among dual eligible individuals, there is no statistical difference between individuals with and without BH needs in reporting to receive preventative care.

2017-2020 MCBS. Individuals are asked if they received the flu shot for the past winter and received diabetes test in the past year. Individuals are asked if they ever received pneumonia and shingle vaccines.

\* Indicates statistical significance between dual eligible individuals with BH needs and the comparison groups (dual eligible individuals without BH needs and Medicare-only individuals with BH needs) highlighted in the shaded region. There are no observable differences of preventative care services between different types of BH needs or PBDE individuals.

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# Service Utilization

# ARE THERE DIFFERENCES IN HEALTH CARE SERVICE UTILIZATION BY DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS?



## Outpatient Visits

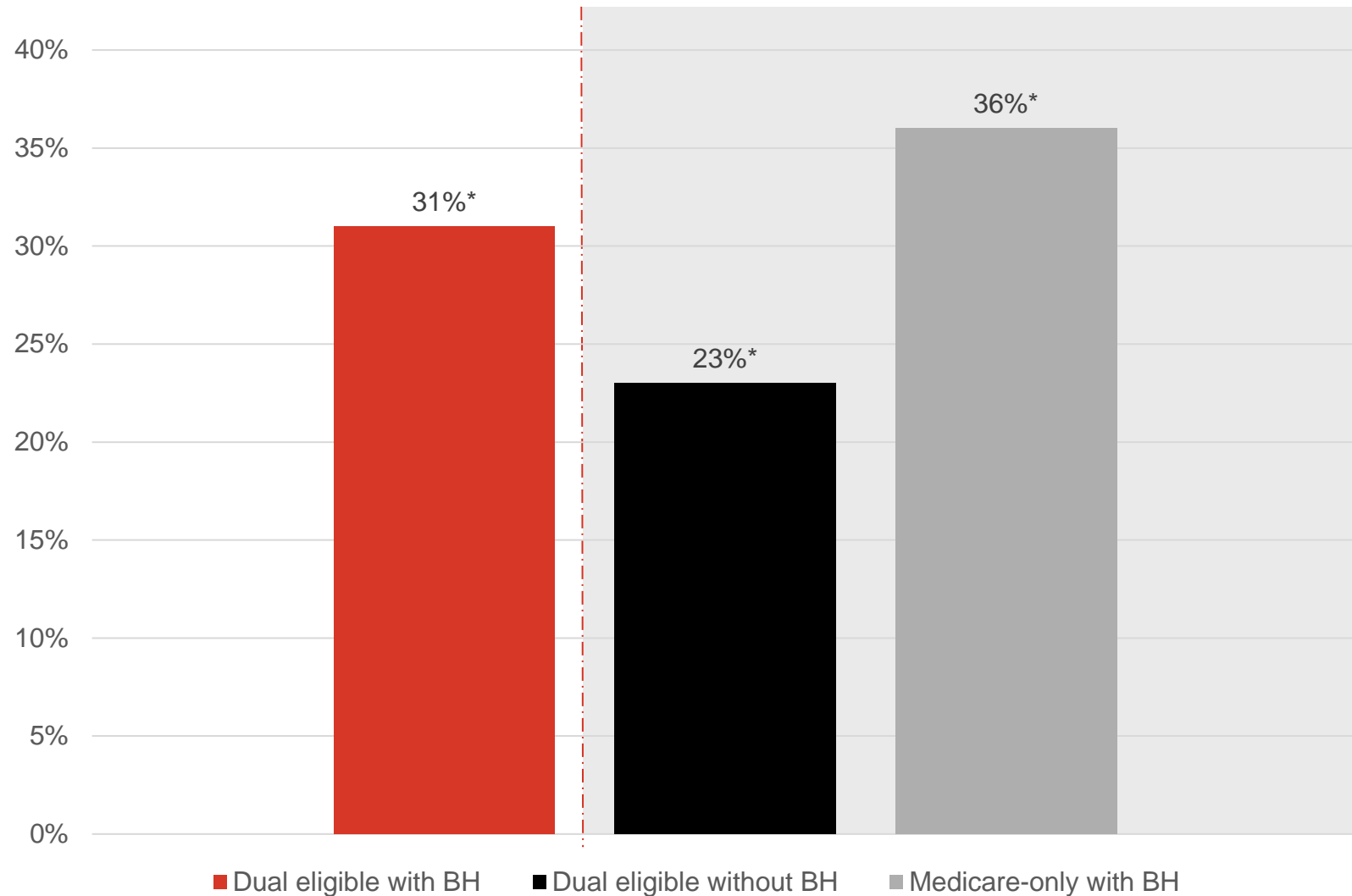
- Dual eligible individuals with BH needs **are more likely to report having an outpatient visit** in the past year than dual eligible individuals without BH needs but are **less likely to report having an outpatient visit** in the past year than Medicare-only individuals with BH needs.



## Acute Events

- Dual eligible individuals with BH needs are **more likely to report having adverse acute events** in the past year than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

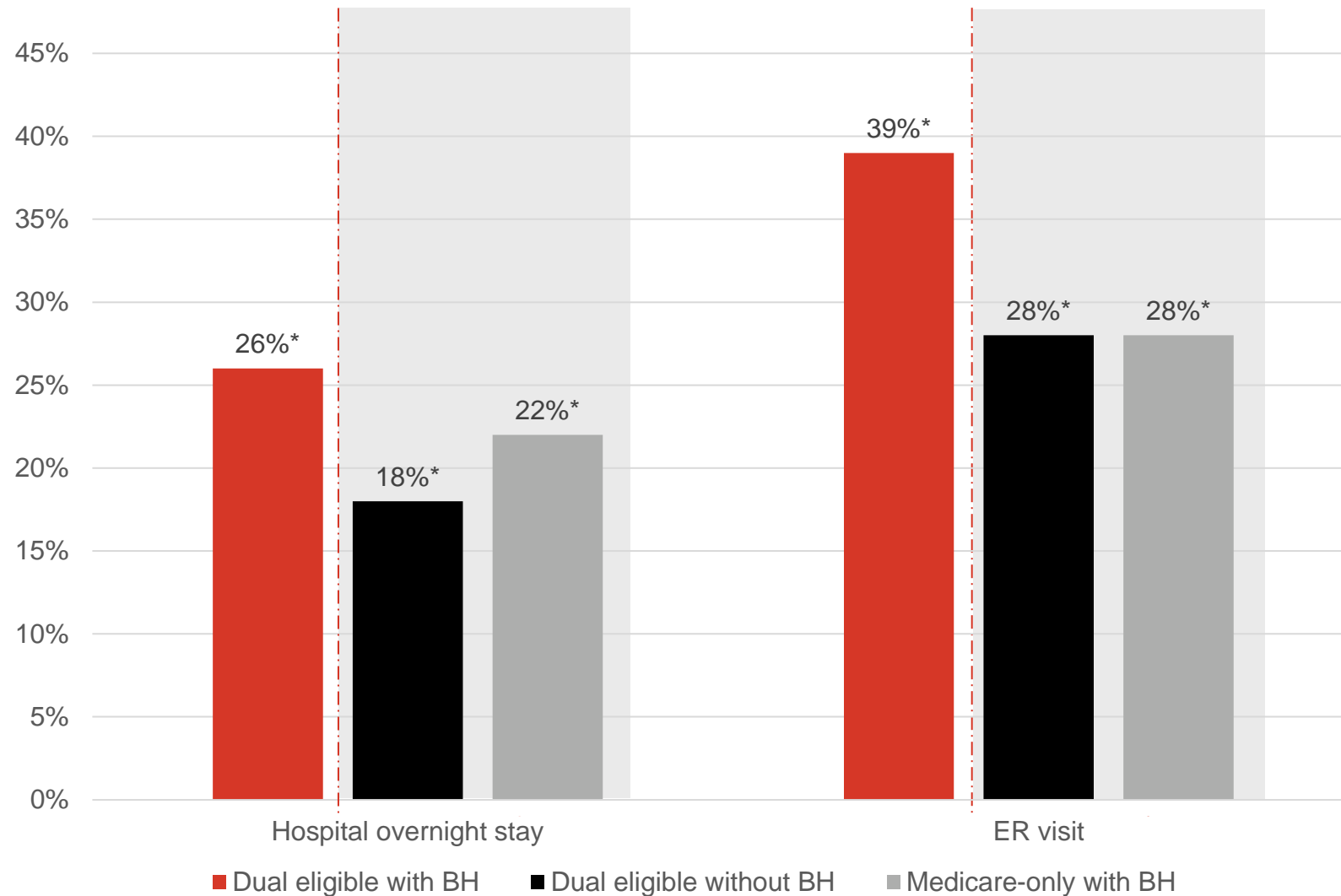
# ALMOST A THIRD OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT HAVING AT LEAST ONE OUTPATIENT VISIT IN THE PAST YEAR



31% of dual eligible individuals with BH needs report having at least one outpatient visit in the past year compared to 36% of Medicare-only individuals with BH needs.

Dual eligible individuals with BH needs are more likely to have had at least one outpatient visit in the past year compared to dual eligible individuals without BH needs.

# A HIGHER PROPORTION OF DUAL ELIGIBLE INDIVIDUALS WITH BH NEEDS REPORT HAVING AN ADVERSE ACUTE EVENT IN THE PAST YEAR THAN COMPARISON GROUPS



Dual eligible individuals with BH needs are 11 percentage points more likely to report having had at least one ER visit in the past year compared to dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

Dual eligible individuals with BH needs are also more likely to report having had at least one hospital overnight stay in the past year than dual eligible individuals without BH needs and Medicare-only individuals with BH needs.

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# Appendix: Methods

# POPULATION ESTIMATES

Demographic	Individuals with BH needs	Individuals with AMI	Individuals with SMI	Individuals with SUD diagnosis only	Individuals with SUD and co-occurring mental illness	Individuals without BH needs
<b>Unweighted</b>						
<b>FBDE</b>	6,628	6,096	2,751	113	419	5,029
<b>Medicare-only</b>	12,375	11,631	2,414	344	400	--
<b>Weighted</b>						
<b>FBDE</b>	17.5M	15.8M	6.7M	0.4M	1.3M	15.1M
<b>Medicare-only</b>	53.7M	50.2M	10.1M	1.6M	1.9M	--



## COHORT DEFINITIONS

Cohort	Acronym	Inclusion Criteria
<b>Behavioral health need</b>	BH	Individuals with any mental illness or substance use disorder diagnosis
<b>Any mental illness</b>	AMI	Individuals who report having: <ul style="list-style-type: none"> <li>• Depression</li> <li>• Mental disorder other than depression</li> <li>• Depression as original reason for entitlement</li> <li>• Mental disorder as original reason for entitlement</li> <li>• PHQ2 &gt; 2</li> <li>• Anxiety, depression, manic depression, psychotic, PTSD or schizophrenia flagged as a facility resident</li> </ul>
<b>Serious mental illness</b>	SMI	Individuals who report having: <ul style="list-style-type: none"> <li>• Depression as original reason for entitlement</li> <li>• Mental disorder as original reason for entitlement</li> <li>• PHQ8 &gt; 14</li> <li>• Mental disorder other than depression AND at least one reported difficulty in instrumental activities of daily life</li> <li>• Manic depression, psychotic, PTSD or schizophrenia flagged as a facility resident</li> </ul>
<b>Substance use disorder</b>	SUD	Individuals with ICD10 diagnosis codes with F1* except F17 (nicotine dependence)
<b>Substance use disorder with co-occurring mental illness</b>	SUD + AMI	Individuals with SUD and co-occurring mental illness (AMI)

# VARIABLE DEFINITIONS

Variables	Definitions
<p><b>Food insecurity</b></p>	<p>A person has food insecurity if they:</p> <ol style="list-style-type: none"> <li>1) Report their food didn't last and they had no money to buy more</li> <li>2) Report they couldn't afford balanced meals</li> <li>3) Report they cut size of meals or skip meals</li> <li>4) Report they eat less because they do not have enough money for food.</li> </ol>
<p><b>Full Benefit Dual Eligible (FBDE) vs. Partial Benefit Dual Eligible (PBDE)</b></p>	<p>Individuals are FBDE if they had at least one month of full Medicaid coverage during the calendar year. If not, individuals with at least one month of partial Medicaid coverage are considered PBDE. If not, they are Medicare-only individuals.</p>
<p><b>Special Need Plans (C, D &amp; I-SNP)</b></p>	<p>Contract and plan ID number of Medicare advantage plan for each calendar year are used to identify different type of special need plan. If an individual are enrolled in more than one Medicare advantage plans within a calendar year, the plan with the longest enrollment is used.</p>
<p><b>Activities of daily life (ADL)</b></p>	<p>A person is "having difficulty with" an ADL if they responded "Yes" to having any difficulty or "doesn't do because of health" to each type of ADL. Only respondents who reported difficulties or reported that they don't do the activity because of their health are asked if they received help with their ADL.</p>
<p><b>Instrumental activities of daily life (IADL)</b></p>	<p>A person is "having difficulty with" if they responded "Yes" to having any difficulty or "doesn't do because of health" to each type of IADL. Only respondents who reported difficulties or doesn't do because of health are asked if they received help with their IADL.</p>
<p><b>Chronic conditions</b></p>	<p>Self-reported responses to questions on 12 chronic conditions are used to calculate average counts: hypertension, hyperlipidemia, COPD/asthma/emphysema, heart failure, cancer, diabetes, Alzheimer's/ dementia, osteoporosis, depression, arthritis, stroke, other heart condition</p>

- Full or partial benefit dual eligible individuals with different behavioral health needs are compared against:
  - Full or partial benefit dual eligible individuals with no behavioral health needs
  - Medicare-only individuals with similar BH needs
- Statistical significance is tested using variance estimated by Fay's method using a shrinkage factor of 0.30, in line with recommendations.<sup>1</sup>
- Chi-square tests and t-tests were performed for categorical and numerical variables, respectively.
- Benjamini-Hochberg method was applied for multiple test correction where p-value threshold is adjusted to 0.028945.

# ATI Advisory