

# Preliminary Medicare COVID-19 Data Snapshot

Medicare Claims and Encounter Data: January 1, 2020 to August 21, 2021, Received by September 17, 2021

## Medicare COVID-19 Data Snapshot Overview

Our Medicare COVID-19 Data Snapshot is about people with Medicare who are diagnosed with COVID-19. The data sources for the Snapshot are Medicare Fee-for-Service (FFS) claims data, Medicare Advantage (MA) encounter data, and Medicare enrollment information.

### Medicare COVID-19 Cases and Hospitalizations

Medicare COVID-19 Case: A count of beneficiaries with a diagnosis of COVID-19 on a claim or encounter record for any healthcare setting (e.g., physician's office, inpatient hospital, laboratory).

We use the following International Classification of Diseases (ICD), Tenth Revision (ICD-10), diagnosis codes to identify COVID-19 cases on claims and encounters:

- B97.29 (other coronavirus as the cause of diseases classified elsewhere) - before April 1, 2020
- U07.1 (2019 Novel Coronavirus, COVID-19) – from April 1, 2020 onward.

We find COVID-19 cases using ICD-10 diagnosis codes on claims and encounters. The Centers for Disease Control and Prevention (CDC) has issued [COVID-19 ICD-10 coding guidance](#). Diagnosis code accuracy depends on: (1) how clinicians document (e.g., omitting information or using synonyms or abbreviations to describe a patient's condition) and (2) medical coder experience and training. As a result, we consider diagnosis information from claims and encounters less reliable than clinical information collected other ways (e.g., chart reviews). Since we don't need this type of clinical information to run our programs, we only collect it in limited circumstances (e.g., for program integrity purposes).

Medicare COVID-19 Hospitalization: A count of beneficiaries with a diagnosis of COVID-19 on a claim or encounter record for an inpatient hospital setting. These beneficiaries are a subset of the Medicare COVID-19 Cases described above.

For snapshots with data received by March 19, 2021 and after, we use average monthly enrollment when calculating rates per 100,000 beneficiaries. See the [methodology document](#) for more details. These changes will impact case and hospitalization rates and must be considered when comparing rates to previously released snapshots.

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## Medicare Enrollee Facts

As of early 2021, around 63.1 million Americans are enrolled in Medicare: 57% in Medicare Fee-for-Service (FFS), also known as Original Medicare, and 43% in Medicare Advantage (MA) plans.

## Race/Ethnicity Data

A person's race/ethnicity is identified using data collected by the Social Security Administration (SSA) with adjustments to improve the race/ethnicity classification for Hispanic and Asian/Pacific Islander populations. Specifically, CMS worked with the Research Triangle Institute (RTI) to develop an algorithm that uses Census surname lists for likely Hispanic and Asian/Pacific Islander origin and simple geography (residence in Puerto Rico or Hawaii) to improve the SSA race/ethnicity data. The variable developed using this algorithm is often referred to as the RTI Race Code. The race/ethnicity classifications are: American Indian/Alaska Native, White, Black/African American, Asian/Pacific Islander, Hispanic, and Other/Unknown.

Note: Even with the application of the RTI algorithm, comparisons to self-reported data show that race/ethnicity is still misclassified for some people (self-reported data is only available through survey and assessment data for a small subset of the Medicare population). The RTI algorithm improves the accuracy of Medicare race/ethnicity data, but continues to undercount people with a race/ethnicity of Asian/Pacific Islander and American Indian/Alaska Native, and to a lesser extent Hispanic, in the Medicare population.

## Medicare Entitlement

Medicare entitlement is available to three basic groups of "insured individuals" – people age 65 and older (*aged*), younger people with disabilities (*disabled*), and people with end stage renal disease (*ESRD*). How a person qualifies for Medicare can change over time (e.g., when a person turns 65 his/her entitlement reason changes to *aged*). For purposes of this snapshot, people who have ESRD, regardless of whether they are also aged or disabled, are classified as *ESRD*. In all other cases, we use a person's current reason for entitlement (*aged* or *disabled*).

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## What You Should Know When Using Our Data (Disclaimer)

You should use caution when interpreting our data. We collect Medicare claims and encounter data for payment and other program purposes, but not for public health surveillance. There will always be a delay or “claims lag” between when a service occurs and when the claim or encounter for that service is in our database. The length of the lag depends on the service type and program. There may also be longer claims lag due to the pandemic, but we’re not sure of the impact.

Historically, 90% of FFS claims across all claim types are submitted within 3 months, while 90% of MA encounters across all claim types are submitted within 12 months. We expect timely FFS claims submissions because providers submit claims directly to us for payment. A longer claims lag is expected for Medicare Advantage encounters because Medicare Advantage Organizations: (1) collect encounters before submitting them to us and (2) have more time to submit encounters because there are different programmatic uses for the data, like risk adjustment.

### Percent of Medicare FFS Claims Received by Time after Date of Service

Claim Type	1 Month†	2 Months	3 Months	6 Months	9 Months	12 Months
Inpatient	43%	91%	96%	99%	99%	100%
SNF	2%	81%	94%	98%	99%	100%
Hospice	3%	81%	92%	98%	99%	100%
Home Health	22%	74%	90%	97%	99%	100%
Outpatient	37%	90%	95%	98%	99%	100%
Carrier	43%	87%	93%	98%	99%	100%
DME	57%	84%	90%	96%	98%	100%

### Percent of Medicare Advantage Claims Received by Time after Date of Service

Claim Type	1 Month	2 Months	3 Months	6 Months	9 Months	12 Months
Inpatient	11%	52%	61%	80%	88%	92%
SNF	5%	46%	66%	81%	87%	92%
Home Health	11%	52%	65%	83%	89%	93%
Outpatient	17%	63%	73%	87%	92%	95%
Professional	21%	62%	73%	87%	93%	95%
DME	23%	61%	72%	86%	91%	94%

Month 1 is the service month (i.e., month for the claim through date); FFS claims analysis based on data for July 2016; MA encounter data shows the % of encounters reported to us by 30 day increments from the through date of the service for January 2018. The data in this table is meant to be descriptive, but shouldn’t be used to adjust data presented in this update due to pandemic-related claims submission uncertainties.

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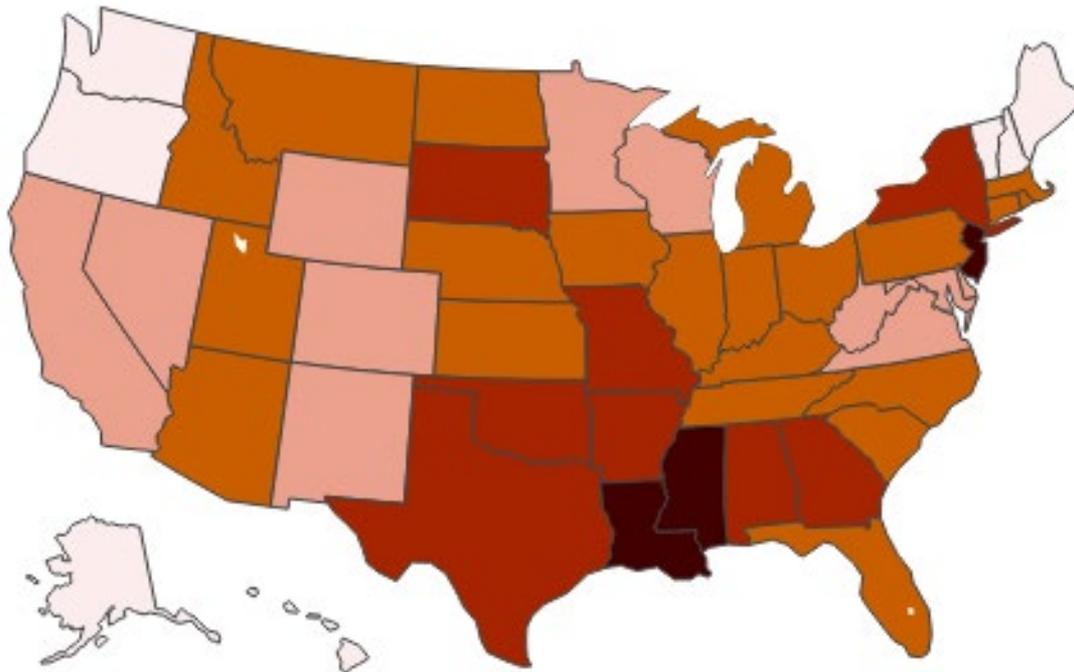
Medicare Claims and Encounter Data: January 1, 2020 to August 21, 2021, Received by September 17, 2021

## COVID-19 Cases

**4,977,203** Total COVID-19 Cases

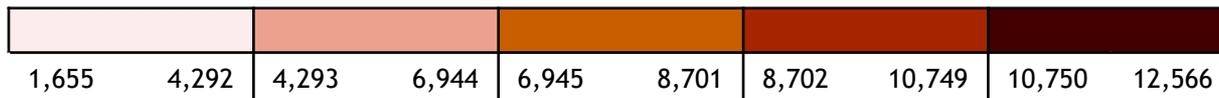
**7,885** COVID-19 Cases per 100k

### COVID-19 Cases per 100K by Geography



Rural Areas: **8,123** per 100K  
Urban Areas: **7,905** per 100K

Map Scale: per 100K



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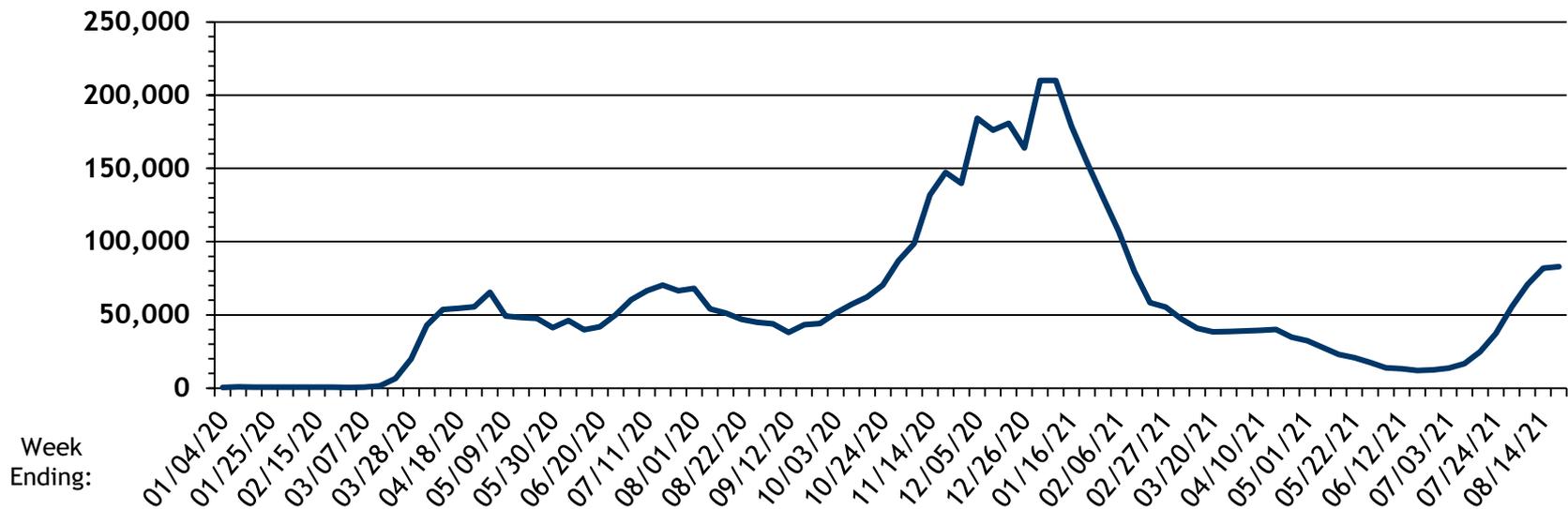
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## COVID-19 Cases

**4,977,203** Total COVID-19 Cases

**7,885** COVID-19 Cases per 100k

### COVID-19 Case Trend



Note: Data for recent weeks is likely to be adjusted upward due to claims lag; see page 2 of this data update for additional details on claims lag. The downward trend that appears in early 2021 is likely due to a number of factors, including continued use of masks, social distancing and the availability of multiple vaccines to protect against COVID-19. For data on COVID-19 vaccinations, visit the CDC COVID-19 Data Tracker here: <https://covid.cdc.gov/covid-data-tracker/#vaccinations>.



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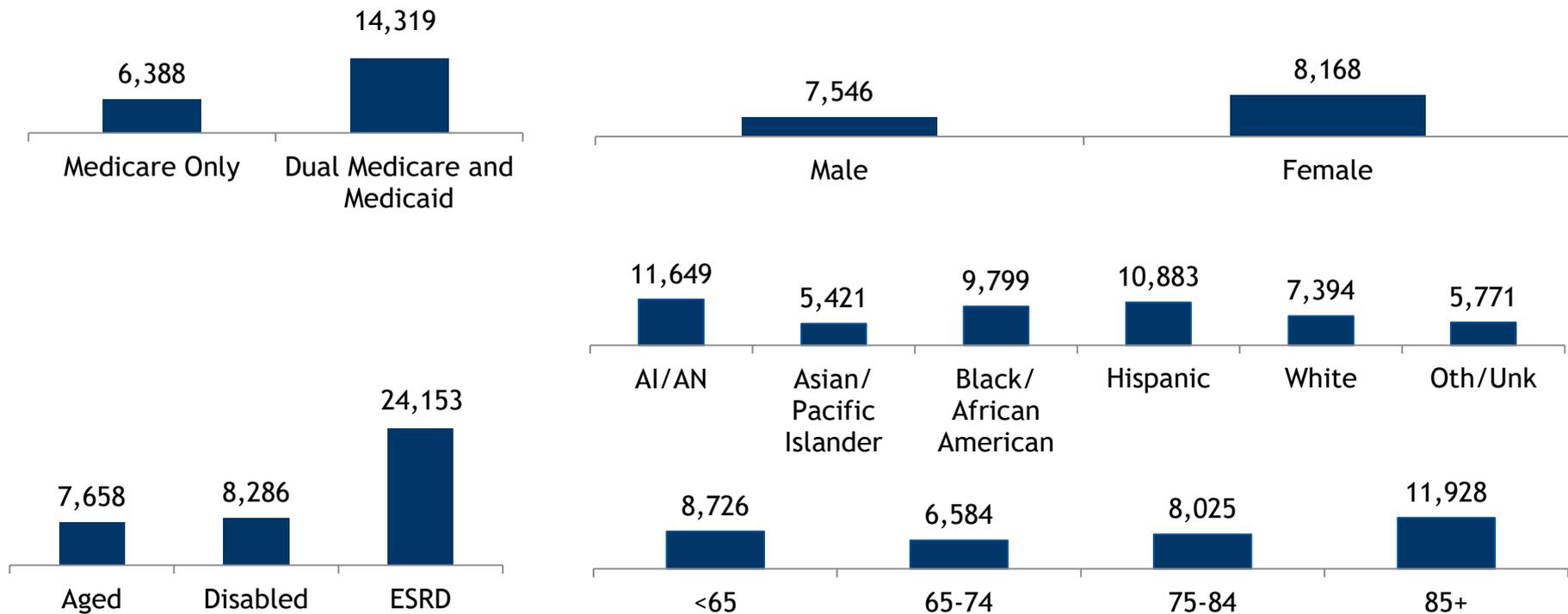
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## COVID-19 Cases

**4,977,203** Total COVID-19 Cases

**7,885** COVID-19 Cases per 100k

### COVID-19 Cases per 100K by Beneficiary Characteristics



Note: AI/AN = American Indian/Alaska Native

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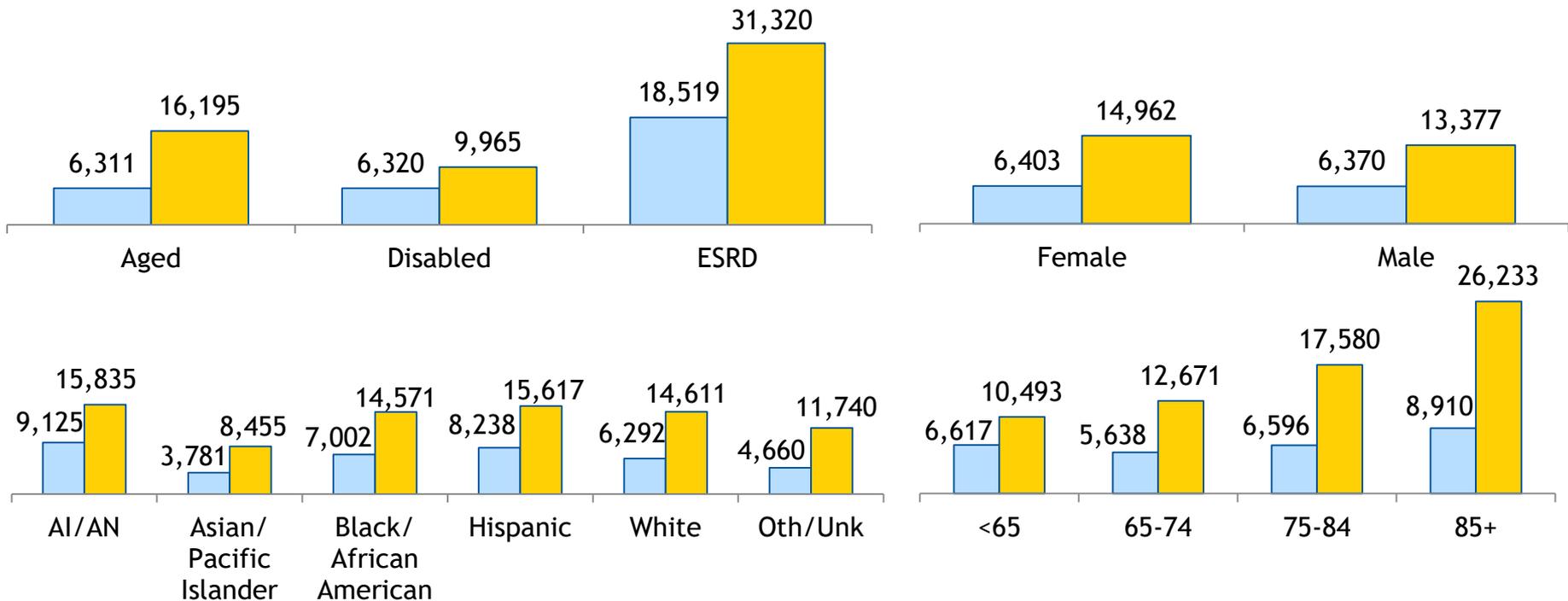
**4,977,203** Total COVID-19 Cases

**7,885** COVID-19 Cases per 100k

### COVID-19 Cases per 100K by Beneficiary Characteristics

-Medicare Only vs. Dual Medicare and Medicaid Eligibility-

■ Medicare Only
 ■ Dual Medicare and Medicaid



Note: AI/AN = American Indian/Alaska Native

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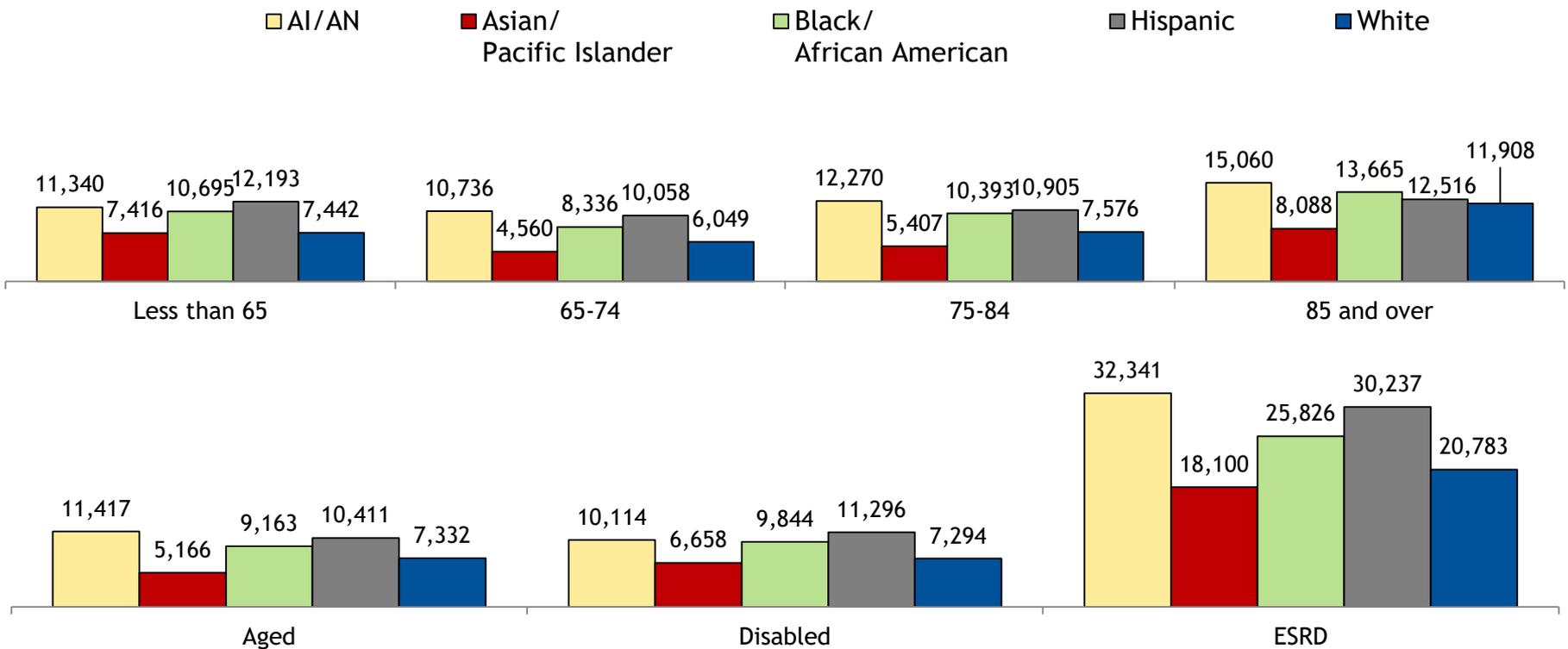
## COVID-19 Cases

**4,977,203** Total COVID-19 Cases

**7,885** COVID-19 Cases per 100k

### COVID-19 Cases per 100K by Beneficiary Characteristics

- By Race/Ethnicity -



Note: AI/AN = American Indian/Alaska Native

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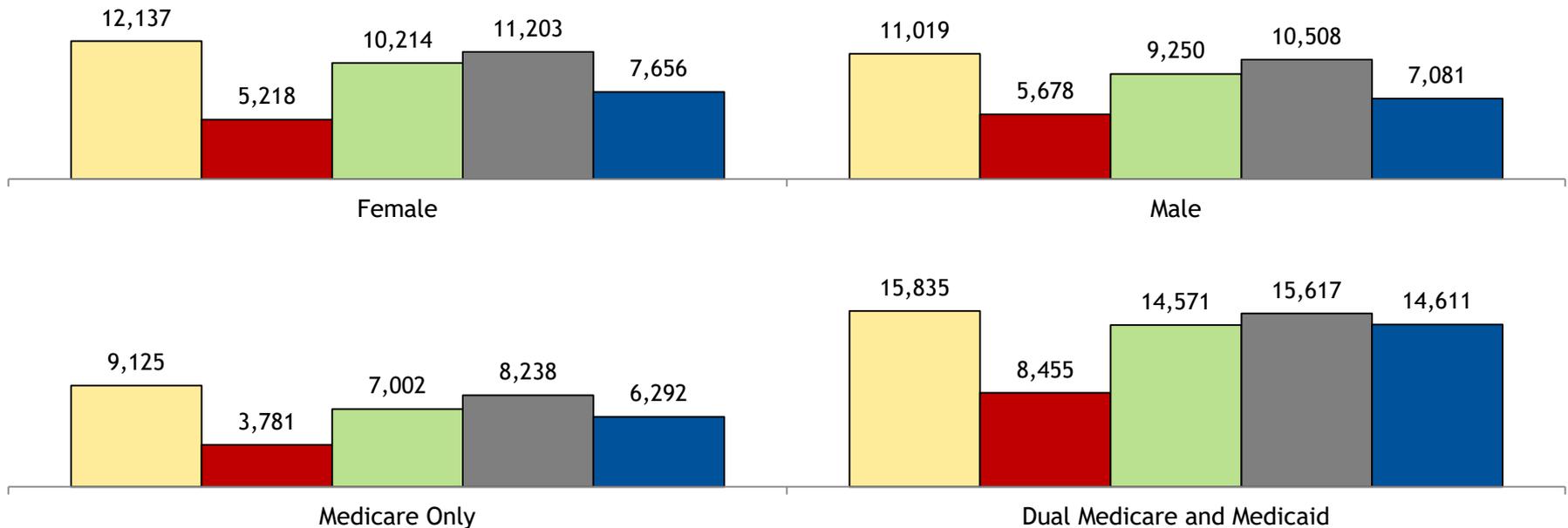
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**7,885** COVID-19 Cases per 100k

### COVID-19 Cases per 100K by Beneficiary Characteristics

- By Race/Ethnicity -

■ AI/AN     
 ■ Asian/  
Pacific Islander     
 ■ Black/  
African American     
 ■ Hispanic     
 ■ White



Note: AI/AN = American Indian/Alaska Native

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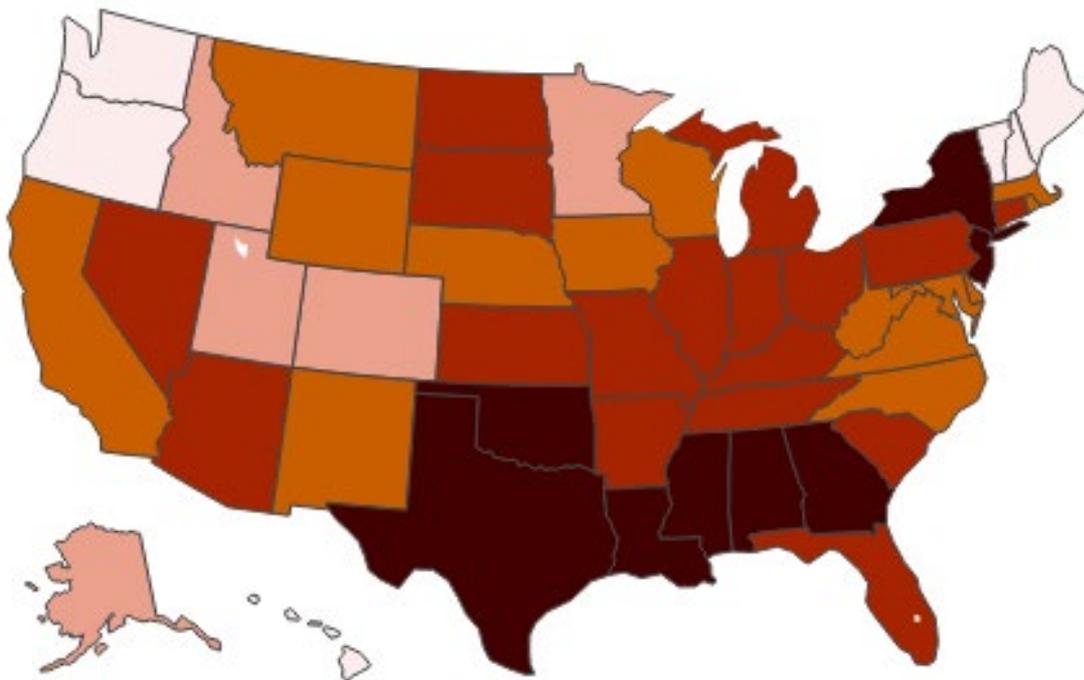
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## COVID-19 Hospitalizations

**1,364,375** Total COVID-19 Hospitalizations    **2,173** COVID-19 Hospitalizations per 100k

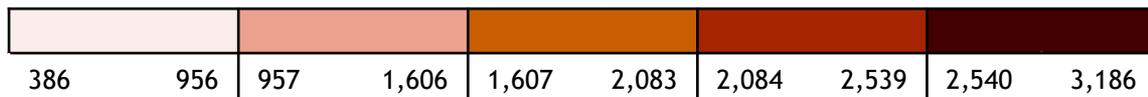
### COVID-19 Hospitalizations per 100K by Geography



Rural Areas: **2,135** per 100K

Urban Areas: **2,204** per 100K

Map Scale: per 100K



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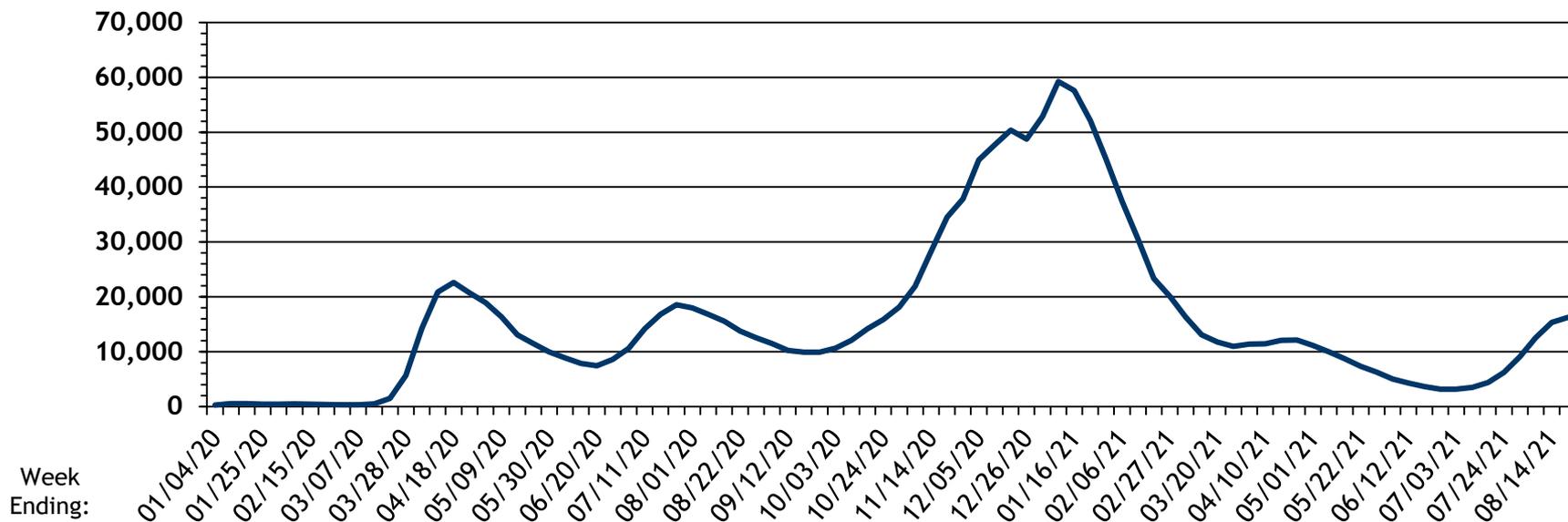
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### COVID-19 Hospitalizations Trend



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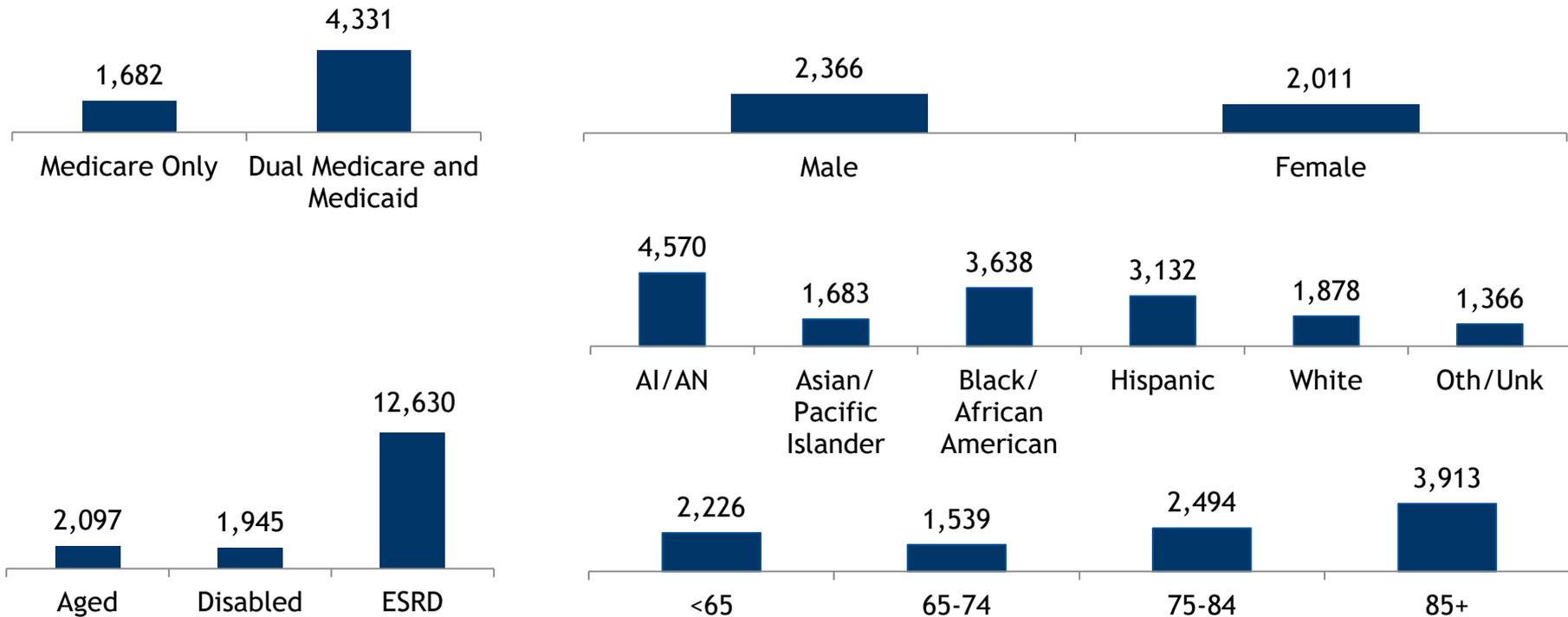
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### COVID-19 Hospitalizations per 100K by Beneficiary Characteristics



Note: AI/AN = American Indian/Alaska Native

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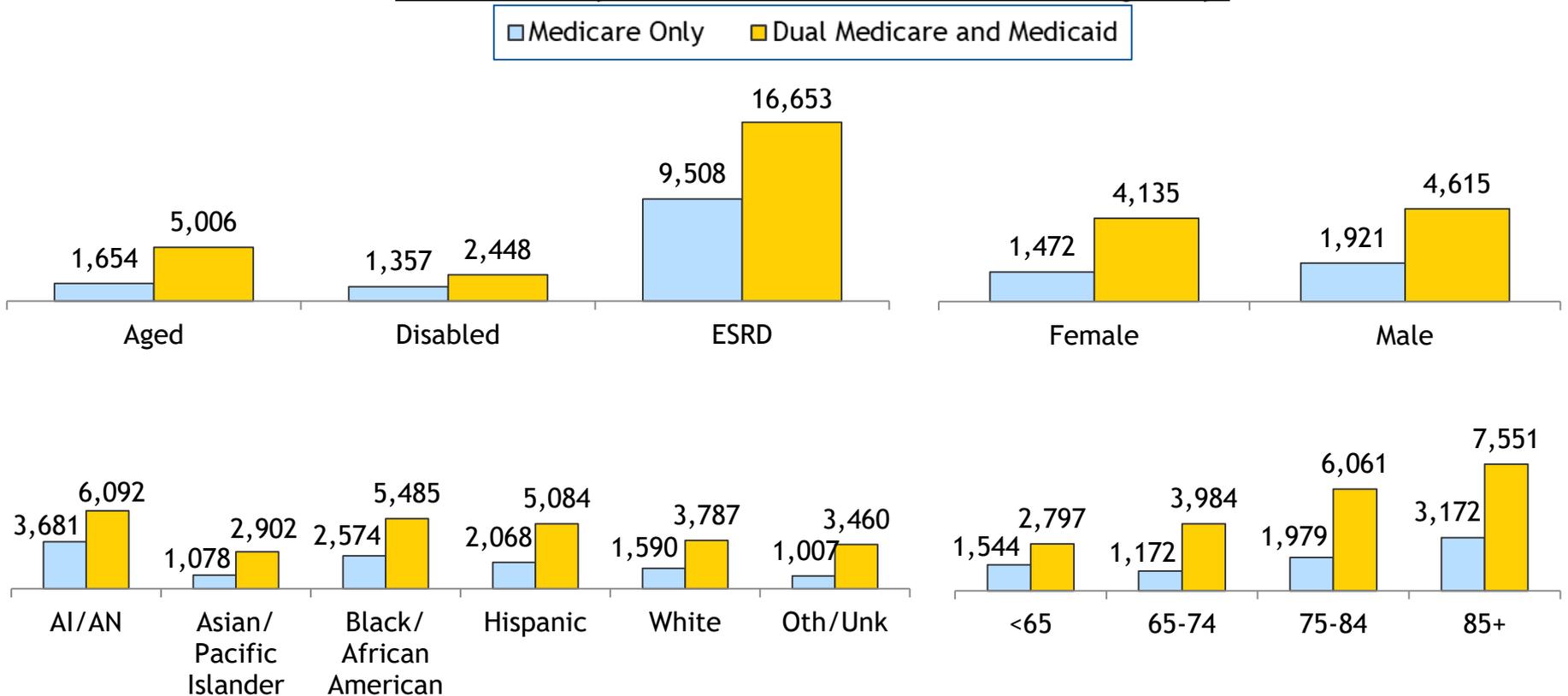
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### COVID-19 Hospitalizations per 100K by Beneficiary Characteristics

-Medicare Only vs. Dual Medicare and Medicaid Eligibility-



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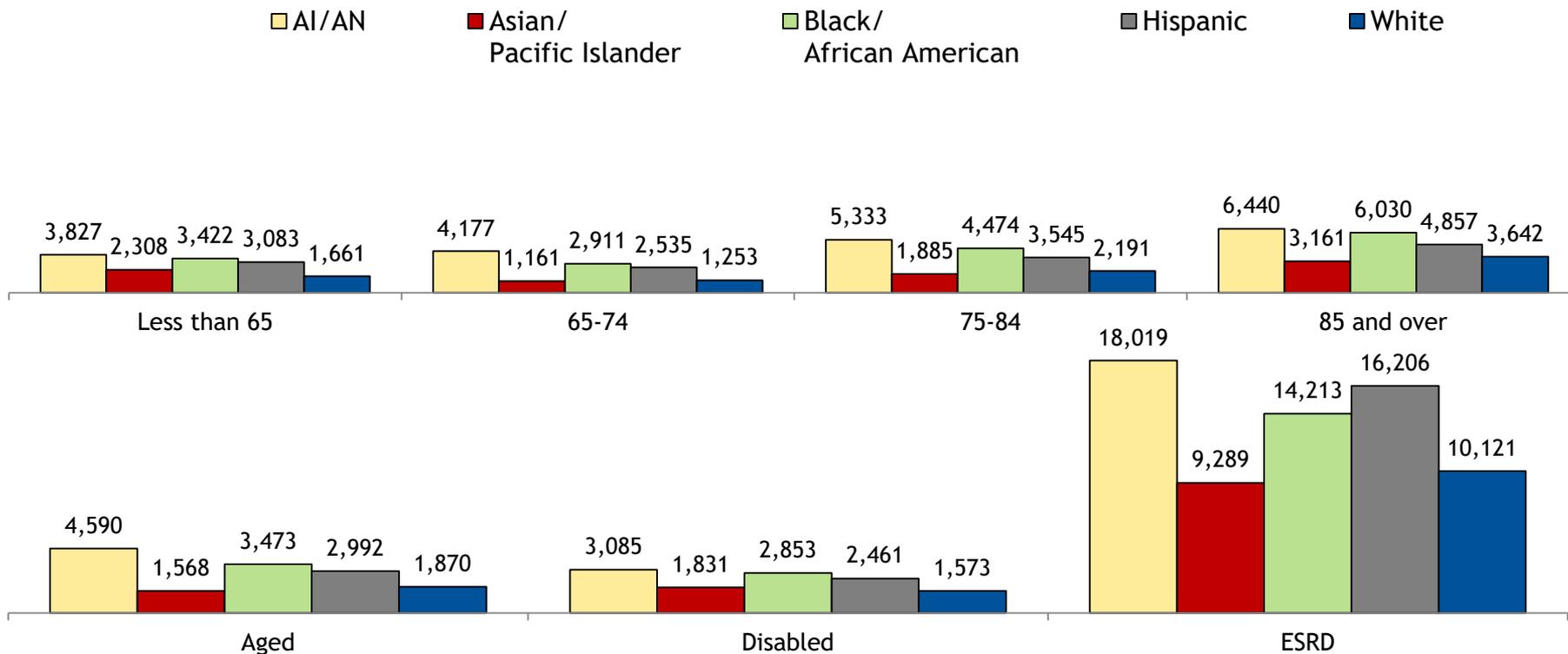
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### COVID-19 Hospitalizations per 100K by Beneficiary Characteristics

- By Race/Ethnicity -



Note: AI/AN = American Indian/Alaska Native

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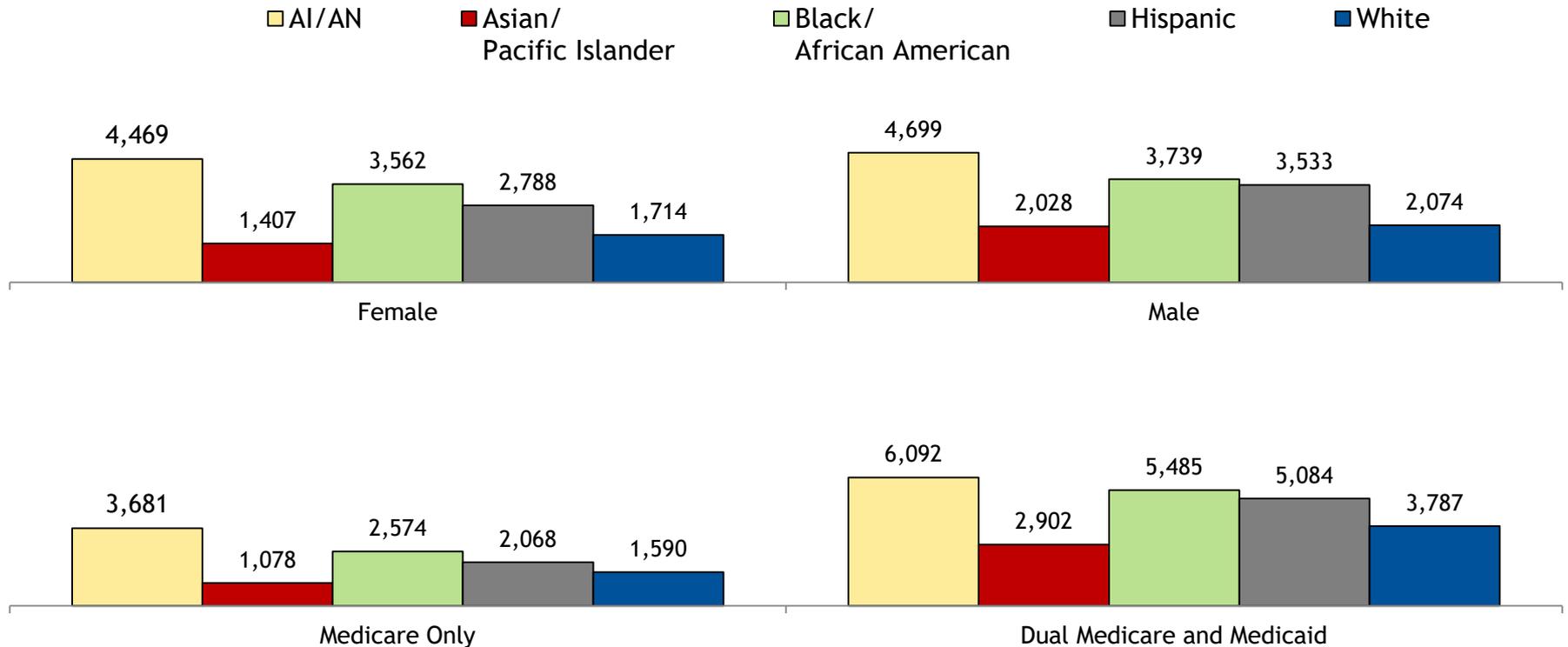
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- By Race/Ethnicity -



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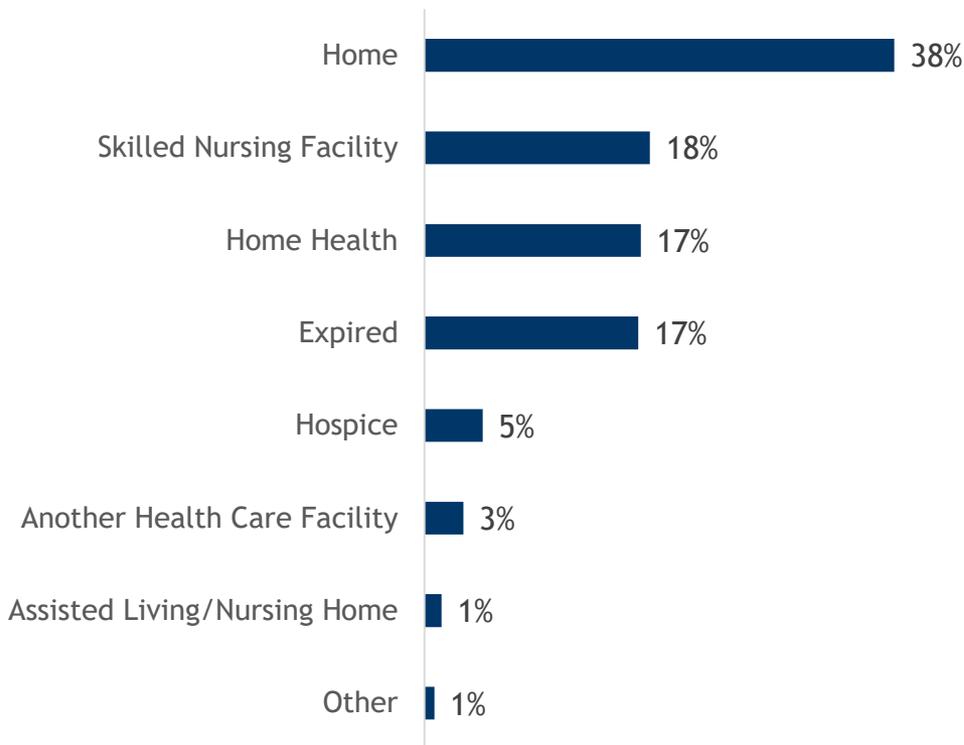
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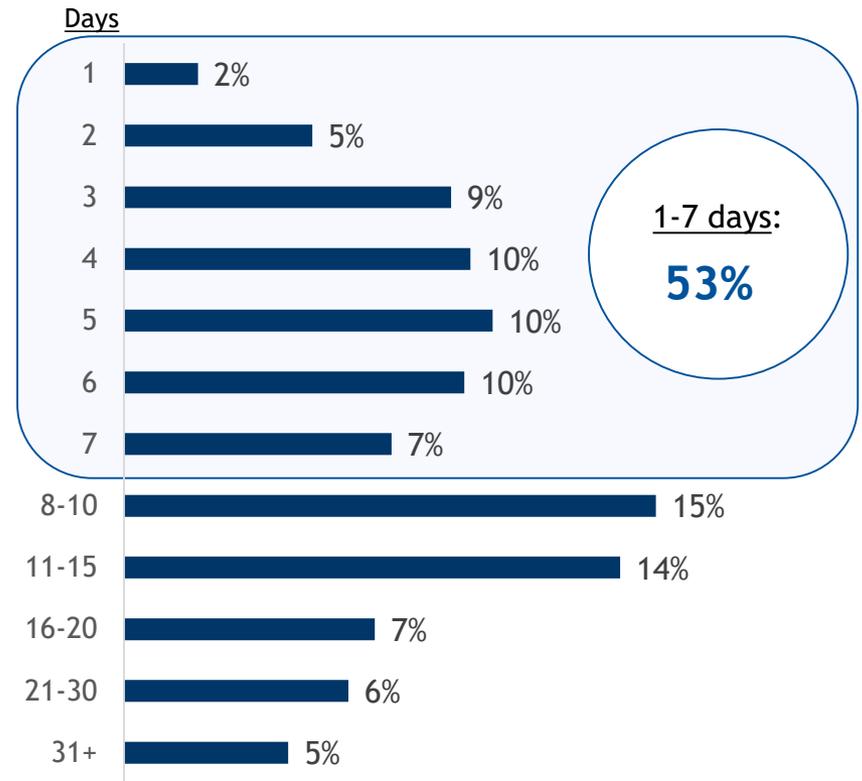
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Percent of COVID-19 Hospitalizations by Discharge Status



Percent of COVID-19 Hospitalizations by Length of Stay



Note: Percentages may not add to 100% because of rounding.



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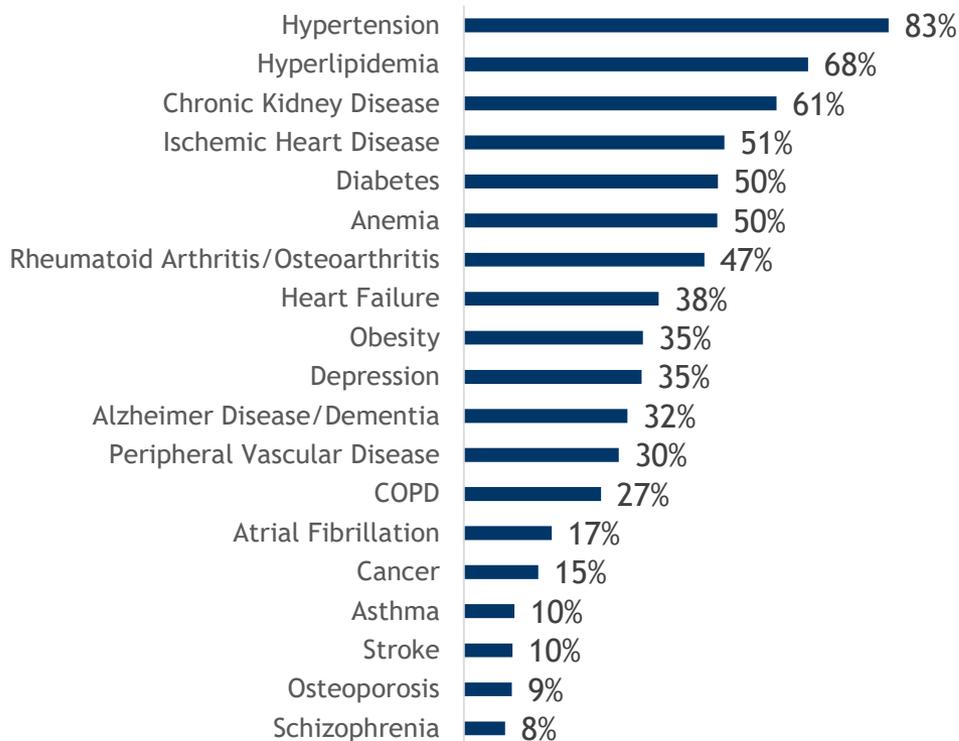
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## COVID-19 Hospitalizations

# 808,946

Total Fee-for-Service COVID-19 Hospitalizations

### Chronic Condition Prevalence Among Fee-for-Service COVID-19 Hospitalized Beneficiaries



### Medicare Payments for Fee-for-Service COVID-19 Hospitalizations

# \$19.6B

Total Medicare payment for fee-for-service COVID-19 hospitalizations

# \$24,274

\$3,733 (5th percentile) - \$67,386 (95th percentile)

Average Medicare payment per fee-for-service COVID-19 hospitalized beneficiary

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