CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
OFFICE OF MINORITY HEALTH

DATA HIGHLIGHT
NO.29 | JANUARY 2022

Access to Medications for Opioid Use Disorder (MOUD) Among Medicare Fee-for-Service Beneficiaries:

Influence of CARES Act Implementation (2020)

Key Findings

This study sought to examine access to medications to treat opioid use disorder (MOUD) among Medicare fee-for-service (FFS) beneficiaries with opioid use disorder (OUD) and to understand sociodemographic, clinical, and telehealth use characteristics of beneficiaries with and without MOUD access. We specifically examine the period before and after the March 2020 onset of the COVID-19 pandemic and implementation of the Coronavirus Aid, Relief, and Economic Security (CARES) Act (Public Law No: 116-136, sec 3703) which expanded telehealth services.

- Between April and December 2020, after the start of the pandemic and implementation of the CARES Act, 19% of Medicare FFS beneficiaries with OUD accessed MOUD, up from 14% in the same time period in 2019.
- Given their share of the FFS population with OUD, several groups of beneficiaries were overrepresented among those who accessed MOUD before and after the CARES Act:
    - Those who were under age 65 and disabled, White, dually-eligible for Medicare and Medicaid, living in the Northeast, and living in areas of high social deprivation;
    - Those with no other potentially disabling health conditions or only mental health comorbidities.
- Black/African American beneficiaries, those with more comorbid health conditions, and those living in the South were underrepresented among those with MOUD access.
- Between April and December 2020, telehealth expansion and the easing of opioid treatment regulations under the CARES Act did not appear to exacerbate pre-COVID disparities in MOUD access by sociodemographic or clinical characteristics.
- Nearly all beneficiaries with OUD used outpatient healthcare services before the start of the pandemic; although use of inpatient, outpatient, and emergency department services decreased after the pandemic began, use of telehealth services increased substantially.

Introduction

Medicare beneficiaries account for growing numbers of patients with opioid use disorder (OUD).[1,2] In 2018, 2.8% of Medicare fee-for-service (FFS) beneficiaries—approximately 591,000 individuals—had an OUD.[3] The standard of care for OUD includes treatment with one of three Food and Drug Administration (FDA)-approved medications for treating opioid use disorder (buprenorphine, naltrexone, and methadone) in combination with counseling and other support services as needed.[4] Although fewer than 20% of individuals with OUD receive MOUD,[5] use of these medications in the Medicare population increased between 2017 and 2018.[6] Despite this growth, little is known about heterogeneity in MOUD access among the Medicare population.

Improved understanding of MOUD access patterns among Medicare FFS beneficiaries with OUD is particularly important in the context of recent federal legislation that has aimed to facilitate access to these medications. As of July 1, 2019, section 2001 of the SUPPORT Act (Public Law No: 115-271) removed the geographic limitations for telehealth services furnished to individuals diagnosed with a substance use disorder for the purpose of treating the substance use disorder or a co-occurring mental health disorder, thus allowing telehealth to be furnished in patient's homes and outside of rural areas. In addition, in the CY 2020 Physician Fee Schedule final rule (84 FR 62568), CMS finalized a policy allowing opioid treatment programs to furnish substance use counseling, individual therapy, and group therapy via two-way audio-video telecommunications technology, effective January 2, 2020. The Coronavirus Aid, Relief, and Economic Security (CARES) Act (Public Law No: 116-136), which took effect on March 27, 2020, along with other emergency legislation enacted during the COVID-19 pandemic increased access to MOUD through telehealth. For example, using the 1135 waiver authority from the CARES Act and other authorities, Medicare coverage for audio-only and audiovisual visits was expanded. Further, the Drug enforcement Agency (DEA), in partnership with SAMHSA, activated relaxation of opioid treatment restrictions (e.g., removing prior patient-provider relationship requirements to access MOUD, allowing take-home methadone prescriptions).[7,8] Viewed broadly, the COVID-19 pandemic was accompanied by significant policy changes that facilitated where and how Medicare beneficiaries access MOUD, including access to services through telehealth technologies.

Although an increase in telehealth use among Medicare beneficiaries during the pandemic is a logical result of the CARES Act,[9] it is important to determine if beneficiaries with OUD followed the same pattern. This distinction is salient given MOUD is typically managed in outpatient settings and accompanied by restrictions in medication prescribing. One report indicating increased outpatient buprenorphine dispensing in Texas after the implementation of the CARES Act appears to support a link between telehealth policies and MOUD access.[10]

Despite preliminary evidence that recent legislative efforts increased MOUD access and telehealth use among Medicare beneficiaries, these benefits may not be uniform across key sociodemographic characteristics known to have unfavorable impacts on health (e.g., non-White race and ethnicity). It is possible these new policies may have exacerbated pre-COVID disparities in MOUD access. These possibilities are supported by research among general adult populations showing that disparities in MOUD access were evident by race and ethnicity, with less access among Black/African American individuals relative to Whites,[11,12,13] and were complicated by health status. For example, in commercially-insured and general adult populations, higher rates of opioid

use and opioid-related hospitalizations were associated with pain-related physical conditions and multiple comorbid conditions.[14,15]

Because of the paucity of research in Medicare, less is known about whether Medicare beneficiaries with OUD exhibit these same inequities. Previously, the study team determined that in 2018, Black/African American beneficiaries were overrepresented among FFS beneficiaries with OUD,[4] yet underrepresented among those who access MOUD.[16] However, these analyses occurred prior to the enactment of the CARES Act and disruptions from the COVID-19 pandemic. Assessment of more recent data would allow policy officials to monitor progress and track whether new telehealth and opioid treatment regulations, implemented after 2018, lessened or exacerbated prior disparities. By focusing on April to December 2019 and on April to December 2020—timeframes that cover the period before and after enactment of CARES Act and other legislation facilitating both MOUD access and telehealth use among FFS beneficiaries with OUD—this study fills knowledge gaps at the intersection of these two factors.

This data highlight aims to:

- Describe sociodemographic and health condition characteristics among Medicare FFS beneficiaries with OUD overall and by MOUD access, before and after onset of the COVID-19 pandemic and implementation of the CARES Act.
- Describe healthcare utilization – including use of telehealth, overall and by MOUD access – before and after onset of the pandemic and implementation of the CARES Act.
- Characterize any change in disparities in MOUD access, by sociodemographic and health condition characteristics, following the pandemic and implementation of the CARES Act.
- Offer policy-relevant recommendations concerning the impact on MOUD access among FFS beneficiaries with OUD, following the pandemic and implementation of the CARES Act.

Methods

Data Sources, Study Sample, and Time Periods of Interest

Table 1 summarizes the data sets that were used in this study, the time periods covered by each data set, and the variables that each contributed to the study. All Medicare data were from the CMS Chronic Conditions Data Warehouse (CCW),[17] and this information was merged with social deprivation measures from the American Community Survey (ACS).[18,19]

Table 1: Description of Data Sources

Data Set	Dates	Key Variables
Master Beneficiary Summary File	2018-2020	• Continuous Medicare enrollment (2018-20) • OUD indicator (2018-20) • Sociodemographic characteristics (2019-20) • Chronic condition indicators (2019-20)
Medicare Parts A and B Claims	2018-2020	• Outpatient telehealth use • Other healthcare utilization • MOUD access indicator (for MOUD administered in an office-based setting)
Part D Prescription Drug Records	2018-2020	• MOUD access indicator (for MOUD dispensed in a pharmacy)
American Community Survey (ACS)	2012-2016	• Social Deprivation Index (SDI)

The study sample consisted of non-institutionalized, community-dwelling Medicare FFS beneficiaries, 18 years or older, with OUD who were enrolled in both Medicare medical (Parts A and B) and prescription drug (Part D) benefits during two specific time periods: (1) the *pre-COVID period* referring to the interval between April and December 2019 and (2) the *COVID pandemic period* referring to the interval between April and December 2020. These time periods facilitate comparison of MOUD access before and after CARES Act legislation resulting in expansion of Medicare coverage for opioid treatment and telehealth services.

The CCW uses a 24-month lookback period, anchored in the last day (December 31) of a given calendar year, to determine who has OUD. Therefore, to align with this approach, the sample for the *pre-COVID period* (April to December 2019) included beneficiaries Medicare-enrolled for a 24-month period ending in December 31, 2019. The *COVID pandemic period* (April to December 2020) included beneficiaries Medicare-enrolled for a 24-month period ending on December 31, 2020. Beneficiaries who were in hospice at any point during these time periods were excluded.

Opioid Use Disorder (OUD)

The CCW OUD indicator used in this study identifies beneficiaries with an OUD diagnosis or aberrant opioid-related event. The algorithm for this indicator classifies beneficiaries as having OUD based on specific combinations of ICD-10 diagnosis or procedure codes, Healthcare Common Procedure Coding System (HCPCS), or National Drug Codes (NDCs) with inpatient, outpatient, pharmacy, or emergency department settings.[15]

Access to Medication for Opioid Use Disorder (MOUD)

MOUD access was defined as having a claim for an FDA-approved MOUD and was examined as a binary variable reflecting use of any of the three MOUD medications. Consistent with CMS guidance, this was defined as one or more Part D drug claims or administrative claims for buprenorphine, naltrexone, or methadone. Part D drug data on OUD treatment with buprenorphine and naltrexone products administered in an office-based setting (using HCPCS codes) or dispensed through pharmacies or other dispensers (using NDCs), were captured. In each time period, beneficiaries were categorized as accessing MOUD if they had ≥1-day supply of a prescription fill or ≥1 day covered by a MOUD injection or implant. Importantly, buprenorphine and methadone drug codes used in this study were specifically for OUD treatment, not pain. Methadone coverage in Medicare began on January 1, 2020, and access to this medication, which is provided via opioid treatment programs, was identified using HCPCS codes.

Sociodemographic Characteristics

Several sociodemographic characteristics were of interest in this study. These included race and ethnicity, dual eligibility for both Medicare and Medicaid, and census region (i.e., Northeast, West, Midwest, South). Because Medicare entitlement can be based on age, a variable combining age and the original reason for entitlement was examined in four categories: (1) old age and survivor's insurance (OASI) and age >65 years; (2) disability insurance benefits (DIB) and age <65 years; (3) DIB and age >65 years, and (4) end-stage renal disease (ESRD). The Social Deprivation Index (SDI) is a summary measure that encompasses sociodemographic factors that can impact health access and outcomes. Using data from the American Community Survey (ACS), SDI was examined by linking beneficiary data with zip code-level data on poverty, education, family structure, housing, and employment.[17] This variable was examined by quartile with Q1 reflecting the least-deprived areas (with the most favorable SDI), and Q4 reflecting the most-deprived areas (with the least favorable SDI).

Physical and Mental Health Conditions

In Medicare, opioid use must be considered in the context of chronic disease management, given the higher degree of comorbid conditions among Medicare beneficiaries relative to the general adult population. Accordingly, 18 chronic and potentially disabling physical and mental health conditions relevant to opioid use were identified using established CCW algorithms.[15] Physical health conditions included hypertension; rheumatoid arthritis or osteoarthritis; diabetes (type 1 or 2); chronic kidney disease; chronic obstructive pulmonary disease; asthma; heart failure; cancer; migraine or chronic headache; and fibromyalgia, chronic pain, or fatigue. Mental health conditions included: schizophrenia and other psychotic disorders, anxiety disorders, depressive disorders, bipolar disorder, post-traumatic stress disorder, alcohol use disorders, other drug use disorders, and Alzheimer's disease.

These health conditions were examined in two ways. First, beneficiaries were categorized into five groups according to number of health conditions: no condition, 1, 2-3, 4-5, or 6-18 conditions. Second, they were categorized by their health condition type(s)—all of which have been associated with opioid prescribing and opioid-related outcomes (e.g., hospitalizations): physical conditions only; mental health conditions only; both physical and mental health conditions; or none of the 18 health conditions.[13,20,21]

Health Care Utilization

Utilization of outpatient telehealth services was identified during each time period, using HCPCS and Current Procedural Terminology (CPT) codes, as well as telehealth-specific HCPCS modifier codes. To broadly capture all claims related to telehealth services, we included outpatient services using any of three key types (modalities): synchronous audiovisual, synchronous audio-only, or asynchronous service delivery – inclusive of e-visit and virtual check in services (note: asynchronous claims made up 5% of all telehealth-related claims). Synchronous services reflect bidirectional, real time (live) interactions, whereas asynchronous services are not in real time and often involve use of secure portals. Furthermore, although OUD treatment with MOUD occurs primarily in the outpatient setting, it is important to understand how those with OUD interact with the health care system, and how MOUD access and telehealth use may fit within wider utilization patterns relevant to opioid prescribing. Thus, any utilization of three categories of health care services was also assessed, using relevant HCPCS, CPT and emergency department (ED) revenue center codes: inpatient hospital visits, ED visits, and non-telehealth outpatient visits. All health care utilization was coded at the claim level.

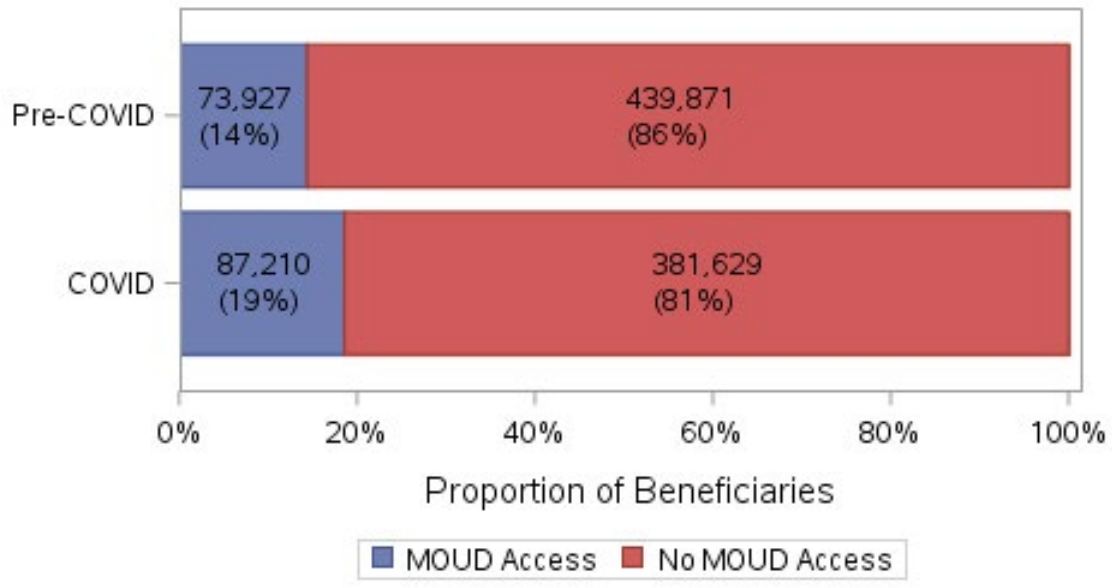
Statistical Analysis

All analyses were descriptive, consisting of univariate and bivariate analyses, and conducted on the beneficiary level. Characteristics of beneficiaries with OUD as well as contextual factors were described for the pre-COVID and COVID periods, and according to whether beneficiaries with OUD had MOUD access. All analyses were conducted using SAS Enterprise Guide 7.12.

Results

Description of the Study Sample

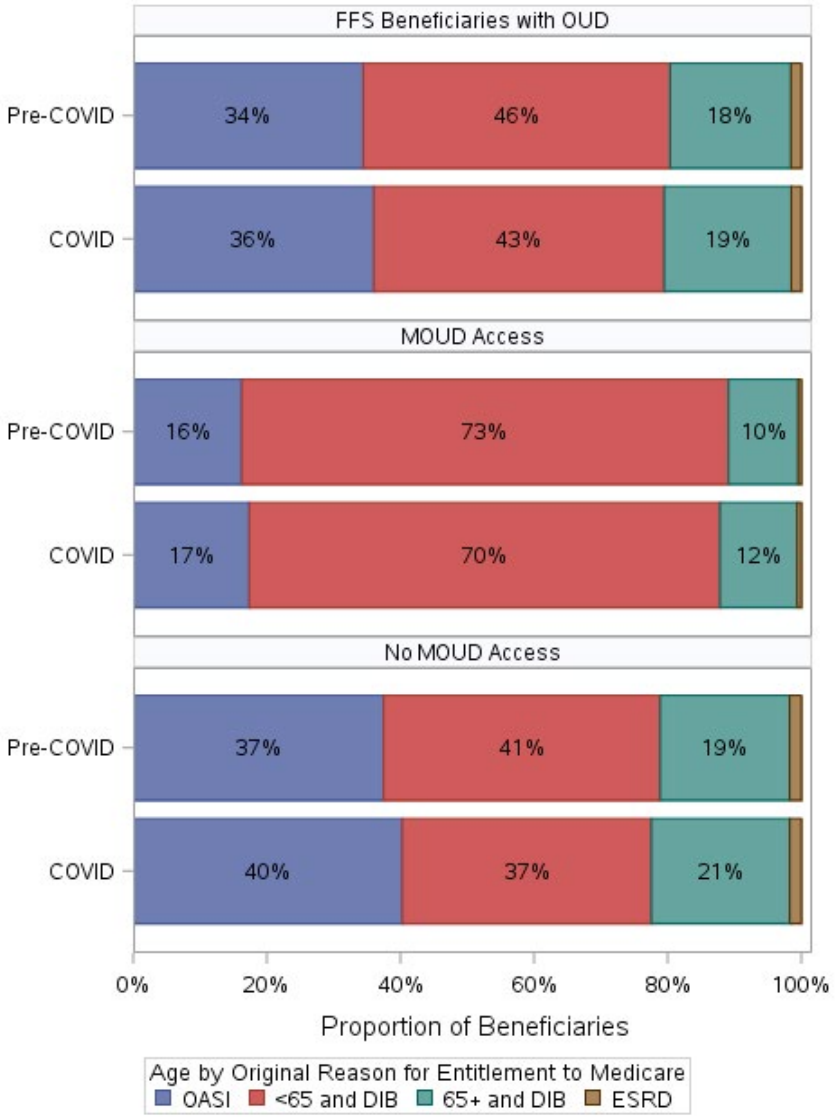
Figure 1: Number and percent of Medicare fee-for-service beneficiaries with OUD, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)



The study sample consisted of *N*=513,798 non-hospice Medicare FFS beneficiaries with OUD in the pre-COVID period and 468,839 beneficiaries who had OUD after the pandemic began. Of beneficiaries with OUD, 14% had access to MOUD in the pre-COVID period, and this share increased to 19% after the pandemic began. Additionally, there was a marked increase in MOUD access in January 2020, the month in which Medicare coverage for methadone began under the SUPPORT Act (data not shown).

MOUD Access by Medicare Eligibility Category

Figure 2: Medicare eligibility among Medicare fee-for-service beneficiaries with opioid use disorder, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)

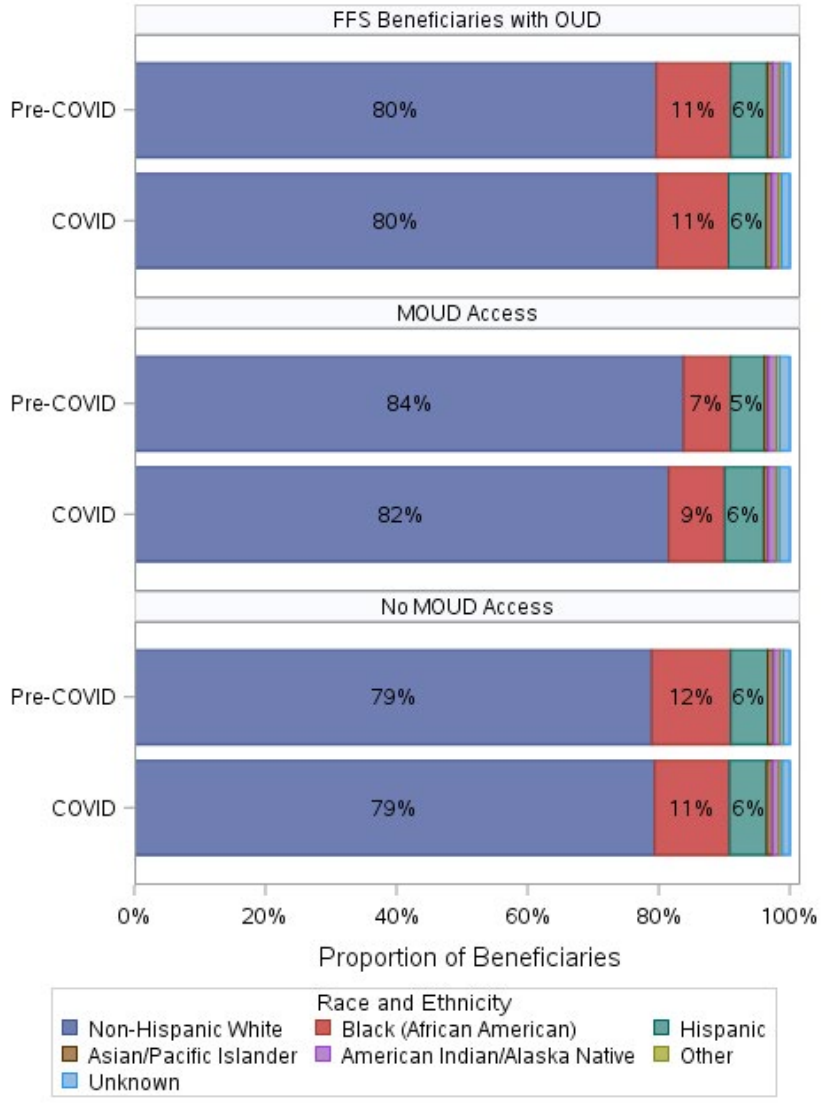


- The largest share of the study sample consisted of beneficiaries under the age of 65 who were eligible for Medicare because they had a qualifying disability.
    - In the pre-COVID period, these beneficiaries accounted for 46% of all beneficiaries with OUD in the sample, and this share decreased to 43% during the pandemic period.

- Relative to their share of the overall sample, beneficiaries <65 years and eligible for Medicare because of a disability accounted for a substantially larger share of those with MOUD access, both before (73%) and after (70%) the pandemic began and the CARES Act was implemented.
- Beneficiaries with OUD who were originally eligible for Medicare because of their older age (≥65 years) were overrepresented among those who did not have MOUD access before (37%) and after (40%) onset of the pandemic and CARES Act implementation.

MOUD Access by Race and Ethnicity

Figure 3: Race and ethnicity among Medicare fee-for-service beneficiaries with opioid use disorder, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)

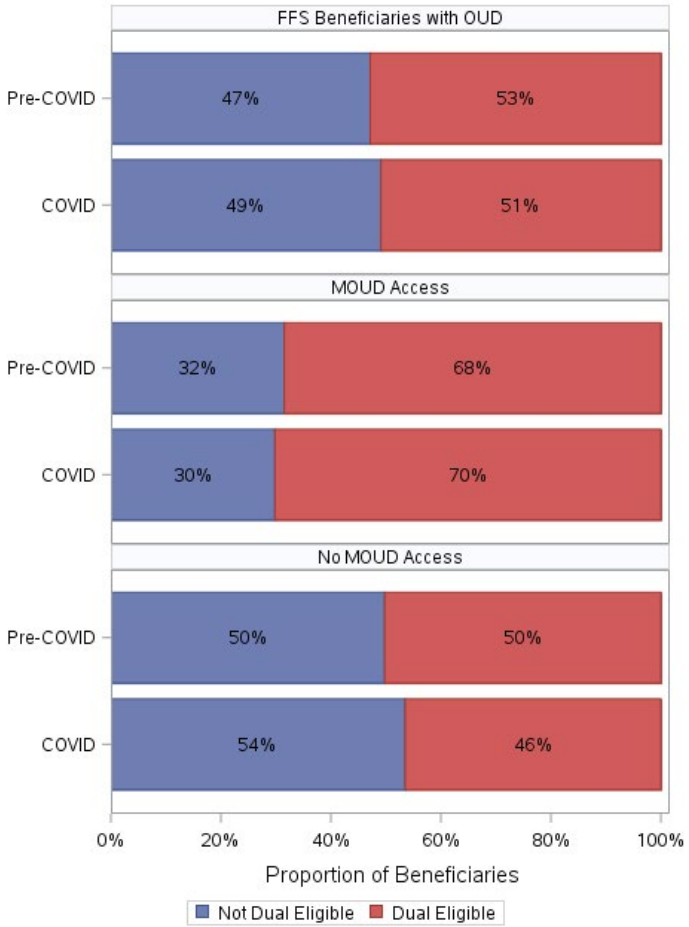


- Prior work[3] found that 2.8% of Medicare FFS beneficiaries had an OUD, with key racial and ethnic groups over-represented compared to the overall FFS population. These over-represented groups included beneficiaries who identified as Black/African American, American Indian or Alaska Native or Asian/Pacific Islander.

- White FFS beneficiaries with OUD accounted for 80% of all beneficiaries before and after onset of the COVID-19 pandemic and were overrepresented among those with MOUD access.
    - White beneficiaries represented 84% of all beneficiaries with MOUD access before onset of the pandemic, but this share decreased to 82% after the pandemic began.
- Black beneficiaries represented 11% of the OUD sample both before and after the pandemic.
    - Relative to their share in the overall OUD sample, Black beneficiaries were underrepresented among beneficiaries with MOUD access both before and after onset of the pandemic, and after CARES Act implementation.
    - Against the backdrop of diminished MOUD access among Black beneficiaries with OUD, their access increased from 7% before the pandemic to 9% after the pandemic and CARES Act implementation.

MOUD Access by Dual Eligibility

Figure 4: Dual-eligibility among Medicare fee-for-service beneficiaries with opioid use disorder, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)

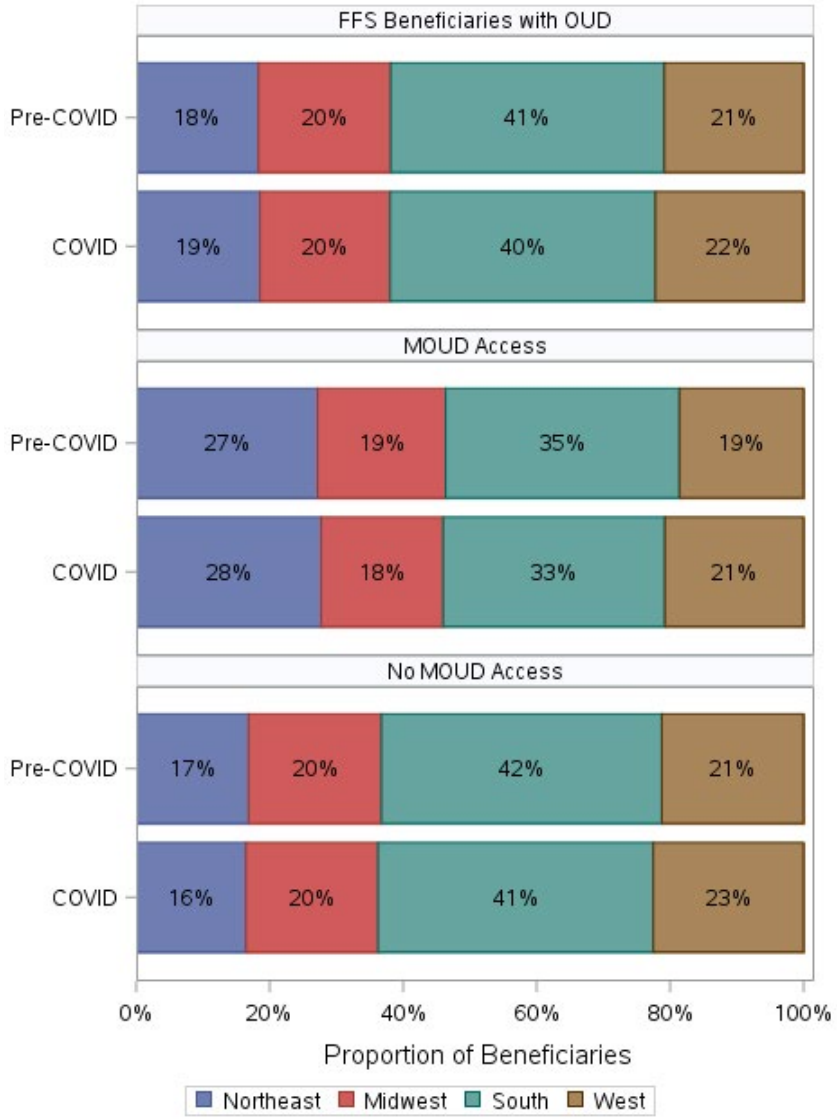


- Medicare FFS beneficiaries with OUD who were dually-eligible for Medicare and Medicaid accounted for 53% of all OUD beneficiaries before onset of the COVID-19 pandemic, and this share decreased slightly to 51% after the pandemic began.

- Dually-eligible beneficiaries were overrepresented among those with MOUD access; their representation in this group increased from 68% before onset of the pandemic to 70% after the pandemic began and the CARES Act was implemented.

MOUD Access by Census Region

Figure 5: Census region[22] among Medicare fee-for-service beneficiaries with opioid use disorder, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)

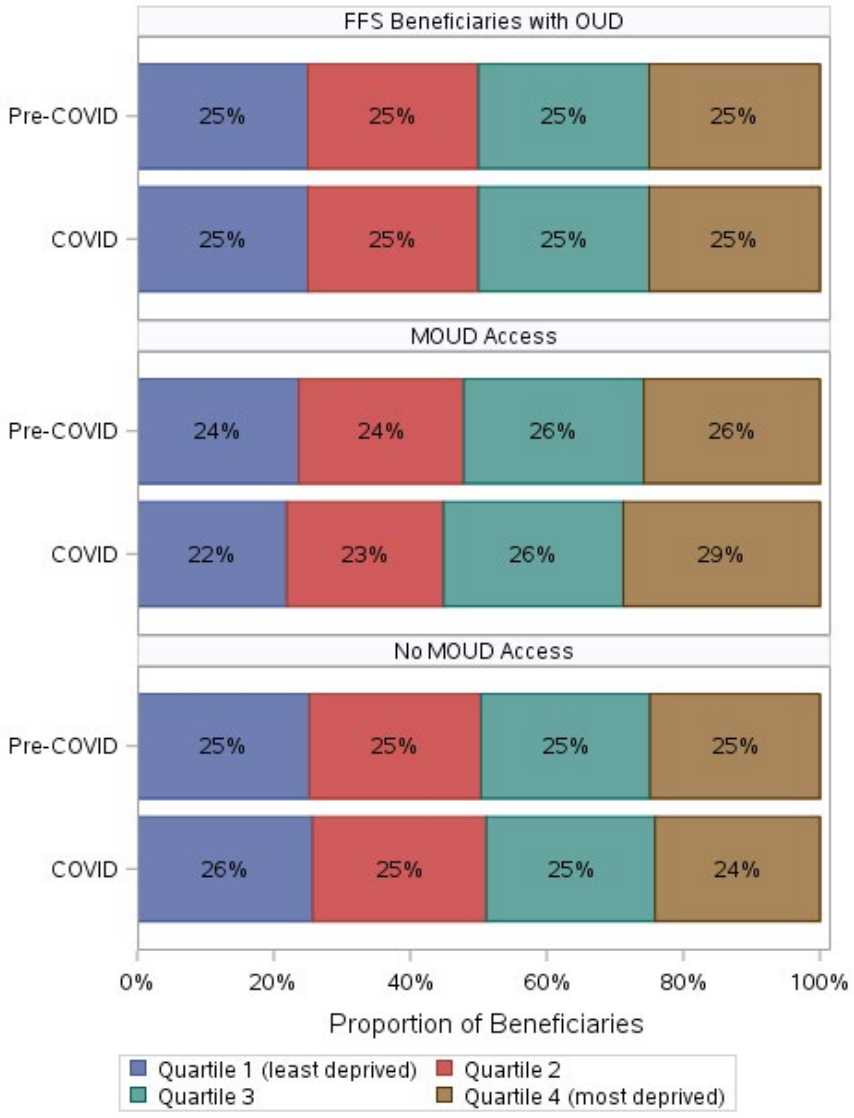


- Before the COVID-19 pandemic, 41% of all FFS beneficiaries with OUD lived in the South, and approximately equal shares of the remaining beneficiaries—between 18% and 21%—lived in the three other Census regions. This distribution did not change appreciably once the pandemic began.
- FFS beneficiaries from the South accounted for 41% of all FFS beneficiaries with OUD, but were underrepresented among those with MOUD access, both before (35%) and after (33%) the pandemic began.

- The share of FFS beneficiaries from the Midwest and West who access MOUD were similar to their representation in the sample as a whole; these levels did not change before and after the beginning of the pandemic.
- FFS beneficiaries with OUD from the Northeast represented 18% of all FFS beneficiaries with OUD before and 19% after onset of the pandemic, but these FFS beneficiaries were overrepresented among those with MOUD access, both before (27%) and after (28%) the pandemic began.

MOUD Access by Social Deprivation Index

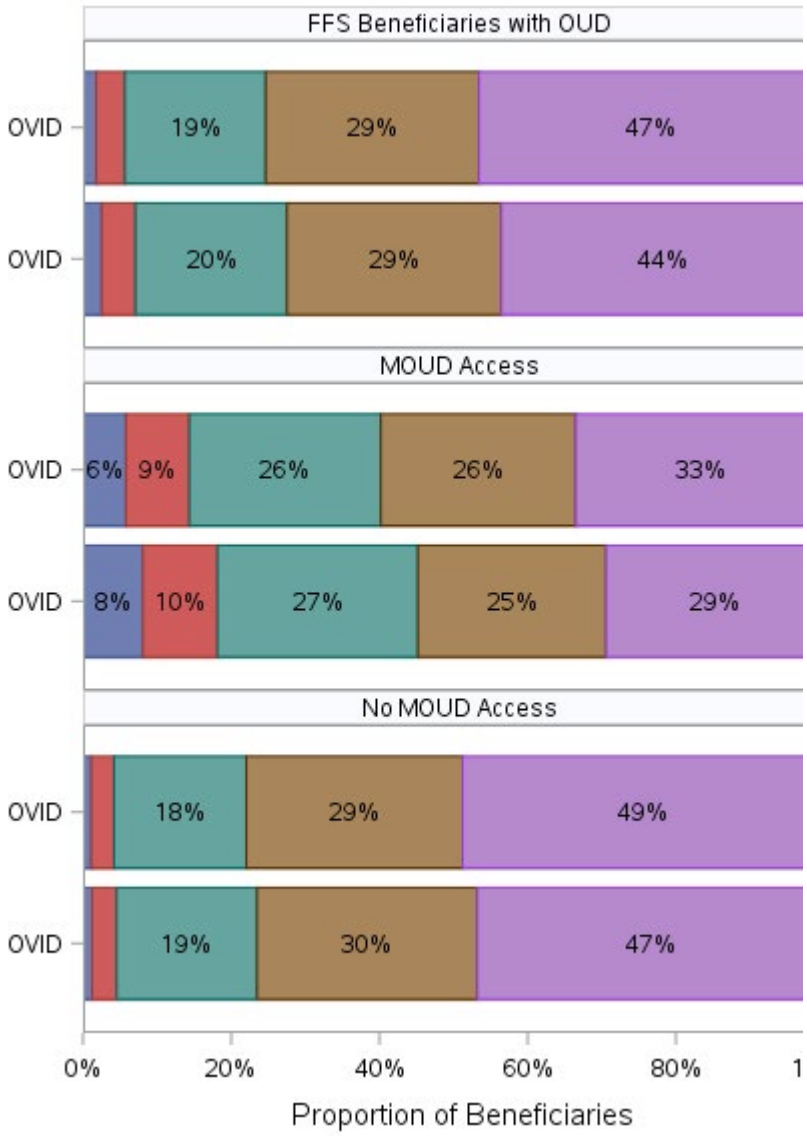
Figure 6: Social deprivation among Medicare fee-for-service beneficiaries with opioid use disorder, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)



- Among FFS beneficiaries with OUD, those residing in areas in the third and fourth (most deprived) quartiles of SDI were slightly overrepresented among those with MOUD access before the pandemic (26% for both groups).
- After the pandemic began and the CARES Act was implemented, FFS beneficiaries in the fourth (most deprived) quartile of SDI continued to be overrepresented among those with MOUD access (29%), while those in the first (least deprived) were underrepresented (22%).

MOUD Access by Number and Type of Health Conditions

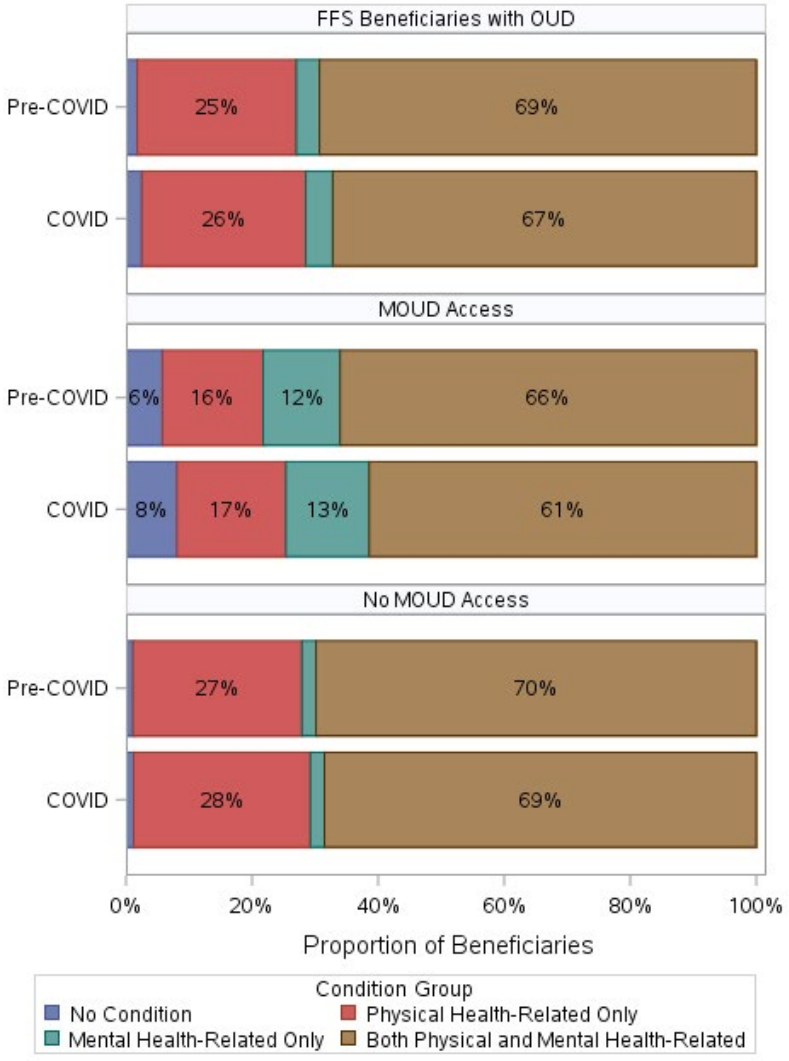
Figure 7: Number of conditions among Medicare fee-for-service beneficiaries with opioid use disorder, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)



- FFS beneficiaries with OUD who had six or more health conditions accounted for 47% of all FFS beneficiaries with OUD before the pandemic, but this share decreased to 44% after it began.

- Before the pandemic, only 2% of FFS beneficiaries with OUD had none of the health conditions examined in this report, and 4% had one health condition. These shares increased to 3% and 5% after the pandemic began.
- Once the pandemic began and the CARES Act was implemented, FFS beneficiaries with fewer health conditions were overrepresented among those with MOUD access, while FFS beneficiaries with more health conditions were underrepresented.
    - For example, once the pandemic began, 44% of all FFS beneficiaries with OUD had six or more health conditions, but these FFS beneficiaries accounted for only 29% of those with MOUD access.
- FFS beneficiaries with none of the other health conditions examined accounted for 3% of all FFS beneficiaries with OUD after the CARES Act was implemented but 8% of all beneficiaries with MOUD access.

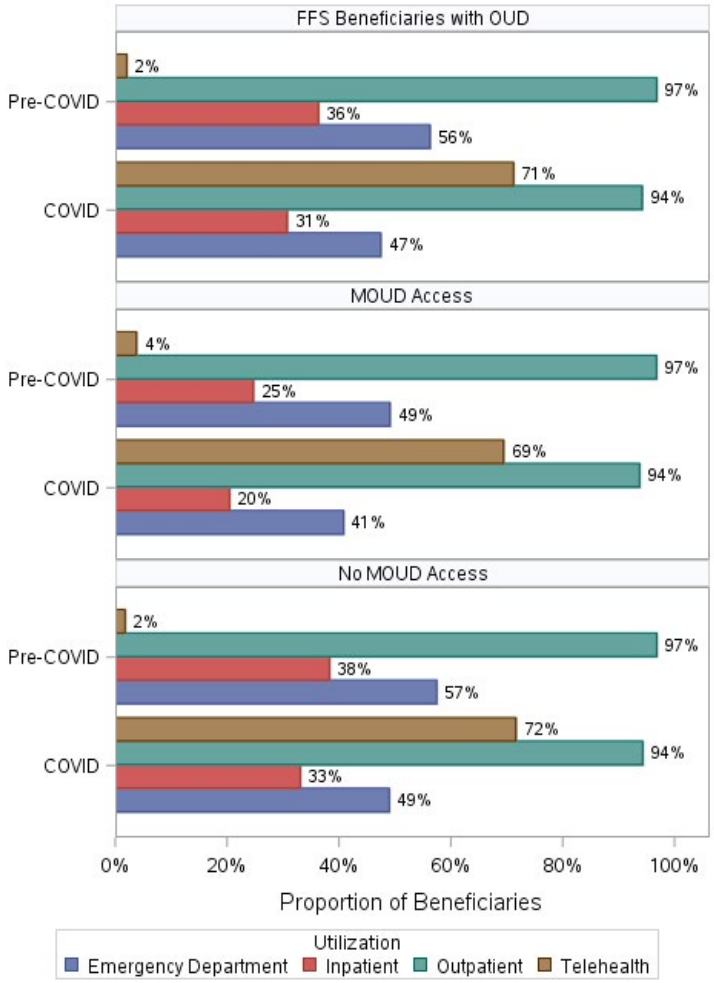
Figure 8: Type(s) of conditions among Medicare fee-for-service beneficiaries with opioid use disorder, by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)



- Before the pandemic, 69% of all FFS beneficiaries with OUD had both physical and mental health comorbidities, but this share dropped slightly to 67% once the pandemic began.
    - FFS beneficiaries whose comorbidities were limited to physical conditions accounted for nearly all remaining FFS beneficiaries with OUD before the pandemic started (25%) and after it began (26%).
- Among FFS beneficiaries with MOUD access, those with no comorbidities and only mental health-related comorbid conditions were overrepresented.
    - Before the pandemic started, 2% of FFS beneficiaries with OUD had no comorbid health conditions, but these FFS beneficiaries accounted for 6% of FFS beneficiaries with access to MOUD before the pandemic and 8% once it began.
    - Before the pandemic started, FFS beneficiaries with only mental health-related comorbidities accounted for 4% of all FFS beneficiaries with OUD, but they were 12% of all FFS beneficiaries with MOUD access, and this share increased to 13% after the pandemic began.

MOUD Access by Type of Health Care Utilization

Figure 9: Type of utilization among Medicare fee-for-service beneficiaries with opioid use disorder by MOUD access and time period (April to December 2019 pre-COVID, April to December 2020 COVID)



- Before the pandemic, 97% of FFS beneficiaries with OUD used outpatient health care services, but this share dropped to 94% once the pandemic began and the CARES Act implemented.
    - There were no substantive differences in use of outpatient services among FFS beneficiaries by MOUD access, either before or after onset of the pandemic.
- Before the pandemic, 36% of FFS beneficiaries with OUD used inpatient services, but this share dropped to 31% once the pandemic started, and there were marked differences in use of inpatient health services according to whether beneficiaries had MOUD access.
    - Among FFS beneficiaries with MOUD access, 25% used inpatient services before the pandemic and 20% used these services once the pandemic began.
    - Corresponding shares of inpatient service use among those without MOUD access were 38% and 33% before and after onset of the pandemic, respectively.
- Use of emergency department services among FFS beneficiaries with OUD decreased from 56% before the pandemic to 47% once the pandemic began, but FFS beneficiaries with MOUD access used these services less often.
    - Among beneficiaries with MOUD access, 49% (before the onset of the pandemic) and 41% (after the onset of the pandemic and CARES Act implementation) used emergency department services before and after onset of the pandemic, compared to 57% (before) and 49% (after) of those without access to these medications.
- Telehealth services were used by only 2% of all OUD beneficiaries in the pre-COVID period but jumped to 71% after the pandemic began and the CARES Act was implemented.
    - Once telehealth expansion was in place, these services were used slightly more often among those without MOUD access (72%) than among those with access to these medications (69%).

Discussion

Our findings indicate that in the nine months after the March 2020 onset of the COVID-19 pandemic and implementation of the CARES Act and other federal policies (April to December 2020), 19% of Medicare FFS beneficiaries with OUD accessed MOUD, up from 14% during the same time period in 2019. Importantly, during the pandemic, telehealth expansion and the easing of opioid treatment regulations under the CARES Act, DEA and SAMHSA emergency guidance (e.g., allowing take-home methadone) did not appear to exacerbate pre-COVID disparities in MOUD access by age and reason for Medicare entitlement, race, ethnicity, dual eligibility, census region, social deprivation or complexity of health needs. From April through December 2020, FFS beneficiaries who were ≥65 years of age, Black/African American, not dually-eligible for Medicare and Medicaid, in the South, and with more complex health needs (i.e., more comorbid conditions, with a comorbid physical condition) continued to be underrepresented among those accessing MOUD. Conversely, beneficiaries <65 years of age and disabled, White, dually-eligible, in the Northeast, in the most socially deprived areas, and with less complex health needs (e.g., with fewer comorbid conditions, with none of the conditions examined in this study or a comorbid mental health condition) were overrepresented among those accessing MOUD.

The increase in MOUD access between 2019 and 2020 coincided with the easing of opioid treatment restrictions under the CARES Act and other federal policies, and the Medicare coverage of opioid use disorder treatment services, including medications for medication-assisted treatment such as methadone, furnished by opioid treatment programs starting January 2020 under the SUPPORT Act. This increase suggests the importance of federal policies aimed at reducing financial, logistic, or administrative impediments to MOUD access.

Given their share of the FFS population with OUD, two populations with sociodemographic disadvantages were underrepresented in their access to MOUD: Black/African Americans and those in the South census region. These findings are consistent with prior studies of racial inequities in opioid treatment among the general adult population with OUD[9,23] and with studies indicating consistently worse quality of care in the South across multiple metrics, which may be associated with local context and conditions in the South that affect care access.[24] This stalled progress against the opioid epidemic highlights several challenges, particularly among Black/African American beneficiaries: (1) the perception that the opioid epidemic is a "White crisis,"[25] (2) a history of racism in response to drug use that criminalizes Black/African American individuals versus White individuals,[22,26] and (3) media coverage and research on the opioid epidemic focused heavily on younger individuals at the expense of older adults or those in Medicare.[27] Efforts to target treatment and understand treatment barriers thus may be especially salient in combating MOUD access inequities for these beneficiaries.

Gaps in MOUD access among beneficiaries who are older and with more complex health needs (i.e., with more comorbid conditions, or with a comorbid physical condition) suggest that other medical needs may be prioritized over OUD treatment. We speculate that beneficiaries with physical comorbidities may be more likely to be treated in primary care settings where there may be less attention to OUD;[28,29] those with higher numbers of comorbid conditions may also have had other medical (and pain-related) needs that complicate prescribing of MOUD.[30] Further, providers may be discouraged from prescribing MOUD as treatment complexity increases with increasing comorbidities. Models of care that promote integrated behavioral and primary care may alleviate these challenges.[31]

Conversely, beneficiaries under age 65 and disabled, dually-eligible for Medicare and Medicaid, and living in the most deprived quartile of the SDI, were overrepresented among those accessing MOUD. Dually-eligible beneficiaries are more likely to be under age 65 and disabled[32] and may be more likely to reside in higher deprivation areas, given the SDI includes a measure of low income.[33] For these beneficiaries, it is possible that Medicaid coverage, which would be secondary insurer to Medicare, removed financial barriers to MOUD treatment, and prompted greater willingness to seek MOUD. Insurance coverage or removal of financial barriers is an effective policy tool that public health and policy officials can wield to influence the propensity to seek treatment and treatment access.

The marked difference in inpatient and ED utilization between those with and without MOUD access suggests that those without MOUD access may find it more onerous to access care in general. These beneficiaries may not have a recent, established relationship with a health care provider or facility, nor a usual source of care. This possible lack of engagement in the health care system may have impeded access to effective and timely care (both for OUD or other conditions)—a key factor associated with utilization of more acute and costly care,

such as ED visits.[34,35] The more common use of inpatient and ED visits among those without MOUD access may reflect this and underscores the significance of better MOUD and primary care access in their potential to reduce acute health care utilization and costs.

While telehealth use during the pandemic did not differ among those with and without MOUD access, the rapid increase in its use suggests that beneficiaries and their providers were able to adapt quickly to this mode of care as a safer alternative to in-person care amidst the pandemic. This finding is particularly salient given a slight decrease in OUD prevalence during the pandemic (and slight increase of beneficiaries without a diagnosis of other conditions): those who did not use telehealth may have had less service use and opportunities for diagnosis, and thus more unmet health needs. Since we were unable to make direct linkages between MOUD access and telehealth use, the causal impact of telehealth on MOUD access could not be assessed. Looking ahead, a more in-depth assessment of who used telehealth, and how this use varied, among Medicare beneficiaries with OUD can highlight challenges and opportunities for leveraging this mode of care to address inequities in MOUD access.

Policy Implications

The expansion of telehealth and easing of opioid treatment restrictions under the March 2020 CARES Act (Public Law No: 116-136), DEA and SAMHSA public health emergency guidance, collectively allowed greater flexibility in care delivery for OUD. Despite the disruptive effects of the COVID-19 pandemic, the resulting expansion of payment and care delivery policies appeared to support MOUD access and did not appear to exacerbate existing disparities among FFS beneficiaries with OUD. The findings from this study point to several potential policy implications:

- Persistent inequities among Black/African American beneficiaries underscore the importance of targeting interventions and understanding care barriers—including those related to racism and perceptions of the opioid epidemic as mainly affecting White individuals—in order to improve MOUD access among these beneficiaries.
- The findings highlight the importance of improving integration of primary care and mental health services. Reimbursement for collaborative care, such as those included in the CY2021 MPFS Final Rule (CMS-1734-F),[36] for example, may potentially address inequities in MOUD access observed among beneficiaries with more complex health needs.
- Policies that remove financial, administrative, or logistic barriers to MOUD access—including expanded MOUD coverage, easing of requirements for treatment, and support for telehealth—are a powerful tool policy officials can use to support OUD treatment access.
- The use of such policies and the continued expansion of coverage and easing of treatment requirements for beneficiaries with OUD may also improve more effective management of OUD generally, which may be beneficial in reducing utilization of more costly inpatient and ED care.
- Both patient and provider education may help address treatment barriers related to stigma, awareness of effective medications for OUD treatment, attitudes and beliefs about OUD that negatively impact treatment management, and lack of knowledge regarding changes in treatment coverage and regulations.

Limitations

The results of this study have several limitations. First, because analyses are descriptive, they do not permit conclusions about cause and effect. Second, there may be misclassification of MOUD, especially prior to January 2020 when Medicare began coverage for opioid use disorder treatment services, including medications for medication-assisted treatment such as methadone, furnished by opioid treatment programs. Results may therefore underestimate the true extent of methadone access among FFS beneficiaries who accessed this treatment through private insurance, self-pay, or by Medicaid alone. Third, the true number of telehealth visits may have been underestimated, particularly at the beginning of the telehealth expansion period. It is possible that some providers and organizations did not know how to accurately code for these services during the early months of the pandemic, a possibility that would have underestimated overall utilization. A fourth limitation involves the potential impact of stigma on OUD ascertainment, both on the part of patients and providers. Although this study's reliance on claims data may underestimate the true number of beneficiaries with OUD, any impact of this issue was likely mitigated by use of the CCW's broadest OUD indicator.

Despite these limitations, this study provides critical information for understanding the impact of evolving policies to improve care for Medicare beneficiaries who are at high risk of poor treatment outcomes due to OUD and COVID-19. Equally important, these findings also suggest that new policies such as telehealth expansion do not appear to inadvertently exacerbate disparities in access to MOUD.

Key Words

Medicare fee-for-service (FFS), opioid use disorder (OUD), medications for opioid use disorder (MOUD), sociodemographic characteristics, telehealth, chronic conditions, health equity, health disparities

References

1 Lembke A & Chen JH. (2016). Use of opioid agonist therapy for Medicare patients in 2013. *JAMA Psychiatry*, *73*(9), 990-992. doi: 10.1001/jamapsychiatry.2016.1390.

2 Roland CL, Ye X, Stevens V, Oderda GM. (2019). The prevalence and cost of Medicare beneficiaries diagnosed and at risk for opioid abuse, dependence, and poisoning. *J Manag Care Spec Pharm*, *25*(1):18-27. doi: 10.18553/jmcp.2019.25.1.018.

3 Niles L, Blaz J, Ng J, Strohmeyer J, Olin S, Maksut J, and Khau M. Medicare Fee-For-Service Beneficiaries with Opioid Use Disorder in 2018: Disparities in Prevalence by Beneficiary Characteristics. CMS OMH Data Highlight No.21. Baltimore, MD: CMS Office of Minority Health. 2020. Retrieved from: https://www.cms.gov/files/document/oud-disparities-prevalence-2018-medicare-ffs-dh-002.pdf.

4 Orgera K, Tolbert J. (2019, May 24). *The Opioid Epidemic and Medicaid's Role in Facilitating Access to Treatment*. Kaiser Family Foundation. https://www.kff.org/medicaid/issue-brief/the-opioid-epidemic-and-medicaids-role-in-facilitating-access-to-treatment/

5 Center for Behavioral Health Statistics and Quality. (2018). Reports and Detailed Tables From the 2017 National Survey on Drug Use and Health (NSDUH). Retrieved from: https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables.

6 U.S. Department of Health and Human Services Office of Inspector General. (July 2019). HHS OIG Data Brief: Opioid Use Decreased in Medicare Part D, While Medication-Assisted Treatment Increased. Retrieved from: https://oig.hhs.gov/oei/reports/OEI-02-19-00390.pdf.

7 U.S. Department of Justice. (n.d.). *COVID-19 Information Page*. https://www.deadiversion.usdoj.gov/coronavirus.html

8 Substance Abuse and Mental Health Services Administration. (2020). FAQs: Provision of methadone and buprenorphine for the treatment of Opioid Use Disorder in the COVID-19 emergency. https://www.samhsa.gov/sites/default/files/faqs-for-oud-prescribing-and-dispensing.pdf

9 Verna S. Early impact of CMS expansion of Medicare telehealth during COVID-19. *Health Affairs Blog*. July 15, 2020. doi: 10.1377/HBLOG20200715.454789.

10 Cance JD & Doyle E. (2020). Changes in outpatient buprenorphine dispensing during the COVID-19 pandemic. *JAMA, 324*: 2442-2444. doi:10.1001/jama.2020.22154.

11 Lagisetty PA, Ross R, Bohnert A, et al. (2019). Buprenorphine treatment divide by race/ethnicity and payment. *JAMA Psychiatry*, *76*(9): 979-981. doi: 10.1001/jamapsychiatry.2019.0876

12 Hansen H, Siegel C, Wanderling J, et al. (2017). Buprenorphine and methadone treatment for opioid dependence by income, ethnicity and race of neighborhoods in New York City. *Drug Alcohol Depend, 164*: 14-21. doi: 10.1016/j.drugalcdep.2016.03.028

13 Goedel WC, Shapiro A, Cerda M, et al. (2020). Association of racial/ethnic segregation with treatment capacity for opioid use disorder in counties in the United States. *JAMA Netw Open, 3*(4): e203711. doi:10.1001/jamanetworkopen.2020.3711

14 Bernard D, Machlin SR, Fang, Z, Cohen, J. (August 2019). *Average Annual Opioid Use among Adults Treated for Conditions Associated with Chronic Pain versus Other Conditions, 2013-2015. Research Findings #43.* Agency for Healthcare Research and Quality, Rockville, MD. https://meps.ahrq.gov/data_files/publications/rf43/rf43.shtml.

15 Rajbhandari-Thapa J, Zhang D, Padilla HM, Chung SR. (2019). Opioid-related hospitalization and its association with chronic diseases: Findings from the National Inpatient Sample, 2011-2015. *Prev Chronic Dis, 16*: 190169. doi: http://dx.doi.org/10.5888/pcd16.190169external icon.

16 Ng J, Blaz J, Niles L, Maksut J, Khau M, Strohmeyer J, Olin S. Access to Medications for Opioid Use Disorder among Medicare Fee-for-Service Beneficiaries: Where are the Gaps? Poster presented at the AcademyHealth Annual Research Meeting, virtual, June 2021.

17 Centers for Medicare & Medicaid Services Chronic Condition Warehouse (CCW). CCW Condition Algorithms (rev. 02/2021). Retrieved from: https://www2.ccwdata.org/documents/10280/19140001/oth-cond-algo-oud.pdf.

18 Messer LC, Laraia BA, Kaufman JS, Eyster J, Holzman C, Culhane J, Elo I, Burke JG, O'Campo P. (2016). The development of a standardized neighborhood deprivation index. *J Urban Health*, *83*(6):1041-62. doi: 10.1007/s11524-006-9094-x.

19 Butler DC, Petterson S, Phillips RL, Bazemore AW. (2013). Measures of social deprivation that predict health care access and need within a rational area of primary care service delivery. *Health Serv Res.*; *48*(2 Pt 1):539-59. doi: 10.1111/j.1475-6773.2012.01449.x. Epub 2012 Jul 20. PMID: 22816561; PMCID: PMC3626349.

20 Bernard D, Machlin SR, Fang Z, Cohen J. (August 2019). Average Annual Opioid Use among Adults Treated for Conditions Associated with Chronic Pain versus Other Conditions, 2013-2015. Research Findings #43. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from: https://meps.ahrq.gov/data_files/publications/rf43/rf43.shtml.

21 Edlund MJ, Martin BC, Devries A, et al. (2010). Trends in use of opioids for chronic non-cancer pain among individuals with mental health and substance use disorders: the TROUP study. *Clin J Pain, 26*(1):1-8. doi: 10.1097/AJP.0b013e3181b99f35.

22 U.S. Census Bureau. (n.d.). *Census Regions and Divisions of the United States*. [Infographic]. Retrieved November 1, 2021, from https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

23 Stahler G, Mennis J. (2018). Treatment outcome disparities for opioid users: Are there racial and ethnic differences in treatment completion across large US metropolitan areas? *ScienceDirect, 190*: 170-178. https://doi.org/10.1016/j.drugalcdep.2018.06.006

24 Agency for Healthcare Research and Quality (2020, December). 2019 National Healthcare Quality and Disparities Report. https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/2019qdr.pdf

25 White C. (2021, February 8). *Progress Against the Opioid Epidemic Is Not Reaching Black Americans*. Health City. https://www.bmc.org/healthcity/population-health/progress-against-opioid-epidemic-not-reaching-black-americans

26 Netherland J, Hansen H. (2016). The War on Drugs That Wasn't: Wasted Whiteness, "Dirty Doctors," and Race in Media Coverage of Prescription Opioid Misuse. *Cult Med Psychiatry, 40*(4): 664-686. doi: 10.1007/s11013-016-9496-5

27 Agency for Healthcare Research and Quality. (2019, August 16). *Prevention, Diagnosis, and Management of Opioids, Opioid Misuse and Opioid Use Disorder in Older Adults*. https://effectivehealthcare.ahrq.gov/products/opioids-older-adults/protocol

28 Thorpe K, Jain S, Joski P. (2017). Prevalence and Spending Associated With Patients Who Have a Behavioral Health Disorder And Other Conditions. *Health Affairs, 36*(1). doi: 10.1377/hlthaff.2016.0875

29 Boudreau D, Lapham G, Johnson E, et.al. (2020). Documented opioid use disorder and its treatment in primary care patients across six U.S. health systems. *Journal of Substance Abuse Treatment, 11*S: 41-48. doi: 10.1016/j.jsat.2020.02.001

30 Hser, Y. I., Mooney, L. J., Saxon, A. J., Miotto, K., Bell, D. S., & Huang, D. (2017). Chronic pain among patients with opioid use disorder: Results from electronic health records data. Journal of substance abuse treatment, 77, 26–30. doi: 10.1016/j.jsat.2017.03.006

31 Gerrity M. (2016*). Evolving Models of Behavioral Health Integration: Evidence Update 2019-2015*. Milbank Memorial Fund. Retrieved from: https://www.milbank.org/wp-content/uploads/2016/05/Evolving-Models-of-BHI.pdf

32 MedPac (2016). *A Data Book: Health care spending and the Medicare program*. Retrieved from: http://www.medpac.gov/docs/default-source/data-book/june-2016-data-book-section-4-dual-eligible-beneficiaries.pdf?sfvrsn=0

33 Robert Graham Center. (n,d.). Social Deprivation Index (SDI). Retrieved from: https://www.graham-center.org/rgc/maps-data-tools/sdi/social-deprivation-index.html

34 Glass D, Kanter M, Jacobsen S, Minardi P. (2017). The impact of improving access to primary care. *J Eval Clin Pract., 26*(6): 1451-1458. doi: 10.1111/jep.12821

35 Rust G, Ye J, Baltrus P, et al. (2008). Practical Barriers to Timely Primary Care Access. *Arch Intern Med., 168*(15): 1705-1710. doi:10.1001/archinte.168.15.1705

36 Centers for Medicare and Medicaid Services. (2021). *Behavioral Health Integration Services*. https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/BehavioralHealthIntegration.pdf

About the Authors

Dr. Judy Ng, Lauren Niles, Kelsy Kinderknecht, Jennifer Strohmeyer, and Dr. Serene Olin are with the National Committee for Quality Assurance (NCQA).

Dr. Jessica Maksut, Simar Bajaj, and Meagan Khau who also contributed are with the Data and Policy Analytics Group (DPAG) in the Office of Minority Health (OMH).

Copyright Information

Suggested Citation

Ng, J, Niles, L, Kinderknecht, K, Strohmeyer, J, & Olin, S. Access to Medications for Opioid Use Disorder (MOUD) Among Medicare Fee-for-Service Beneficiaries: Influence of CARES Act Implementation (2020). Office of Minority Health (OMH) Data Highlight No. 29. Centers for Medicare & Medicaid Services (CMS), Baltimore, MD, 2022.

Disclaimer

This work was sponsored by the Centers for Medicare & Medicaid Services' Office of Minority Health and was produced, published, and disseminated at US taxpayer expense.

Contact

Mailing Address: CMS Office of Minority Health

7500 Security Boulevard, MS S2-12-17

Baltimore, MD 21244-1850

Email: HealthEquityTA@cms.hhs.gov

Website: go.cms.gov/cms-omh