AAMC Data Snapshot

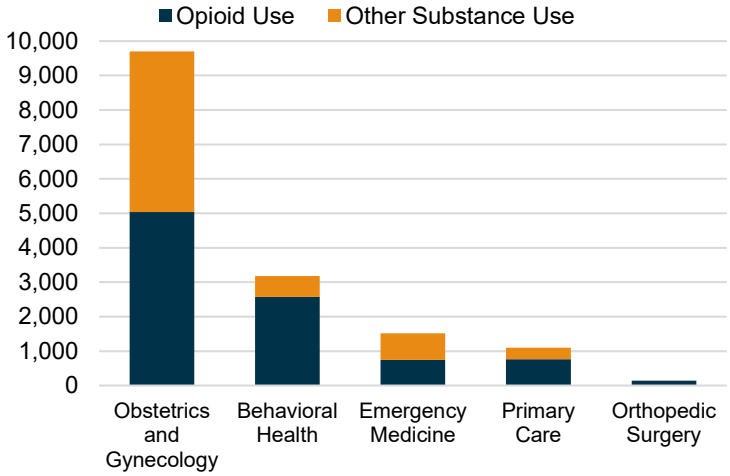
January 2025

Mapping Substance Use Disorder: 2023 Analysis on Clinically Documented Diagnosis Patterns

Substance use disorders (SUDs) are significant concerns in the United States, affecting over 20 million people annually and having profound effects on the health of individuals, families, and communities.[1] Outpatient SUD treatment is vital to support recovery, especially for communities with limited health care resources. By analyzing the frequency and pattern of clinically documented SUD diagnoses, health systems can improve access to effective and equitable care. Inspired by the Veterans Health Administration's study on SUD diagnosis rates versus survey-reported prevalence, we explored similar patterns in the AAMC's analysis of more than 220,000 SUD entries from the Clinical Practice Solutions Center's 2023 provider billing data. This analysis, which includes comparing opioid use disorder (OUD) with overall SUD services across specialties, payers, diagnosis positions, and demographics, is crucial for understanding documented diagnoses and guiding policy decisions, to enhance access to effective SUD treatment.

The majority of documented OUD and SUD diagnoses are in obstetrics and gynecology; substance use disorders are rarely first-listed diagnoses.

Top Five Service Lines With the Highest Counts of Clinically Documented OUD Diagnoses and Other SUDs



Key Findings:

- The obstetrics and gynecology service line has over double the SUD diagnoses than the next highest service line.
- Across the top five service lines, OUD is more common than other SUDs.

Percentage of Listed Diagnosis Position by SUD Group

	First Listed	Second Listed	Third Listed	Fourth Listed
Alcohol Use Disorder	11.46%	31.25%	25.69%	31.60%
Opioid Use Disorder	3.42%	56.04%	25.47%	15.07%
Other Substance Use Disorders	1.42%	30.96%	36.79%	30.83%

Key Findings:

- Across all SUD categories, the rates at which SUDs are listed as first diagnoses are consistently low.
- Across SUDs, alcohol use disorder is most frequently identified as the first-listed diagnosis and OUD is the most frequent second-listed diagnosis.

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The majority of clinically documented diagnoses of OUD and SUD are among the Medicaid population, females, and those aged 21-40.

		OUD Demographic Summary		SUD Demographic Summary	
Demographic	Category	Total OUD Services	OUD %	Total SUD Services	SUD %
Primary Payer	Commercial	1921	15.52	3988	17.06
Primary Payer	Medicaid	9644	77.93	17509	74.92
Primary Payer	Medicare	336	2.71	621	2.66
Primary Payer	Other	475	3.84	1253	5.36
Gender	Female	11572	93.50	21580	92.30
Gender	Male	803	6.50	1788	7.70
Gender	Unknown	1	0.00	3	0.00
Age	11-20	136	1.10	1361	5.80
Age	21-30	5890	47.60	11724	50.20
Age	31-40	5882	47.50	9255	39.60
Age	41-50	288	2.30	567	2.40
Age	51-60	94	0.80	237	1.00
Age	61-70	70	0.60	200	0.90
Age	71-80	16	0.10	27	0.10
Race and ethnicity	White or Caucasian	9033	73.00	14875	63.60
Race and ethnicity	Black or African American	1237	10.00	4276	18.30
Race and ethnicity	Hispanic	929	7.50	1796	7.70
Race and ethnicity	Other	790	6.40	1743	7.50
Race and ethnicity	Native American or Alaska Native	232	1.90	420	1.80
Race and ethnicity	Asian and Pacific Islander	122	1.00	199	0.90
Race and ethnicity	Multiracial	33	0.30	62	0.30

Key Findings:

- Documented diagnoses of OUD and SUD in Medicaid populations are disproportionate.
- Over 92% of documented OUD and SUD diagnoses are in females.
- Individuals aged 21-40 represent nearly 90% of OUD and SUD diagnoses.
- When comparing across race and ethnicity, White or Caucasian individuals have the highest percentages of both SUD and OUD diagnoses.

Discussion

This analysis of SUDs reveals critical trends that underscore the complexities and disparities in diagnosing them. In our analysis, we chose to analyze OUD separate from the broader SUD data, because OUD is more prevalent and has distinct clinical characteristics and treatment needs. The significant concentration of OUD and other substance use cases within the obstetrics and gynecology (OB/GYN) and behavioral health service lines highlights the need for increased resources and specialized interventions in these areas.

We observed a notable concentration of SUD and OUD diagnoses within the OB/GYN health service line, possibly due to more frequent screening in this specialty. This raises questions about whether OB/GYN providers are more inclined to document these diagnoses, as pregnant and postpartum individuals may face unique risks related to SUDs. Additionally, SUDs are often documented as secondary to other conditions. This finding points to an important trend: Substance use may not be adequately recognized or prioritized in clinical settings, potentially leading to gaps in care and treatment planning. We also hypothesize that Medicare patients might face additional barriers to treatment, such as cost-sharing and referral requirements, which could contribute to their underrepresentation in our data. This underrepresentation, along with the observed gender and age disparities, suggest that further investigation into screening practices and help-seeking behaviors is necessary.

These trends and disproportionate rates of clinical diagnoses of SUDs raise important questions around access to care, stigma, and potential barriers faced by individuals with SUDs. Looking forward, we need to study the impact of clinical documentation on SUD care: Does a documented diagnosis influence the interventions provided? How is the treatment of patients without formal diagnoses being managed? Additionally, exploring better guidelines for clinical documentation is essential, considering concerns around patient stigma and physician responsibility. Lastly, we must acknowledge the limitations of our analysis, including the lack of baseline data, its limited scope, and potential underreporting due to the nature of physician billing data. These factors highlight the need for a more comprehensive approach to understanding and addressing SUDs in our health care system. By aligning clinical documentation with actual prevalence, we can better inform policy decisions and ultimately create a more equitable health care system that acknowledges and addresses the complexities of substance use disorders.

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Data Notes

These data come from analysis by the AAMC of physician and non-physician claims that were billed by Faculty Practice Plan members of the Clinical Practice Solutions Center® (CPSC™). The CPSC, a product of the AAMC and Vizient, collects billing data from member practice plans to provide benchmarks and help them improve performance.

At the time of this analysis (July 2024), 88 CPSC members had shared their billing data through December 2023. SUD claims include all claims for which SUD ICD-10 codes were included as listed diagnoses for patients aged 11 years and older. All Current Procedural Terminology (CPT) codes are included except: Anesthesia, Homegrown, Pathology & Laboratory, and Radiology CPT families. Claims are across all payers, specialties, and places of service sites except: Inpatient Hospital, Inpatient Psychiatric Facility, Ambulance-Land, and Psychiatric Facility-Partial Hospitalization. “Other” payer includes payers such as Department of Veterans Affairs, self-pay, and international payers.

Reference

1. Substance Abuse and Mental Health Services Administration (SAMHSA). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*. SAMHSA; 2021. Accessed November 26, 2024. https://www.samhsa.gov/data/sites/default/files/reports/rpt35325/NSDUHFFRPDFWHTMLFiles2020/2020NSDUHFFR102121.htm