

# STASH, Vol. 19(4) - Providers' use of stigmatizing language in clinical notes for patients with substance-related diagnoses

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Stigma can be particularly harmful to individuals experiencing addiction, including [those with substance use disorders \(SUD\)](#). Unfortunately, healthcare providers [tend to hold negative attitudes](#) towards patients with SUD, which can contribute to poor treatment services for this population. This week, STASH reviews a [study by Scott G. Weiner and colleagues](#) that evaluates the presence of stigmatizing language in clinical notes for patients with substance-related diagnoses.

## **What were the research questions?**

How much is stigmatizing language used in clinical notes for patients with substance-related diagnoses? Does it differ by provider or patient characteristics?

## **What did the researchers do?**

Using electronic health record data, the researchers analyzed clinical notes of patients who had at least one visit (inpatient or outpatient) with a substance-related diagnosis during the one-year timeframe (December 1, 2020 - November 30, 2021). The researchers developed a [Natural Language Processing](#) algorithm to find stigmatizing language in the 546,309 clinical notes. A word or phrase was considered stigmatizing if it appeared as a "Term to avoid" in the National Institute on Drug Abuse's [Words Matter](#) guidance.

## **What did they find?**

Over 18% of clinical notes had stigmatizing language, with almost 62% of patients having at least one note with stigmatizing language. The most commonly used stigmatizing phrases were "abuse" and "substance abuse" (see Figure). "Abuse" is [pejorative](#) because it implies that someone has made a harmful moral choice, and it encourages people to [take a more punitive stance](#) toward people with addiction. Among providers, physician assistants were most likely to use stigmatizing language (47%) and nurses were least likely (4%). Among patients,

being male and having Medicaid or Medicare insurance were each associated with a higher likelihood of stigmatizing language. Younger patients (18-24 years old), Asian patients, and Hispanic patients were less likely to have a note with stigmatizing language compared to older patients (45-54 years old), White patients, and non-Hispanic patients, respectively.

*Stigmatizing key words and phrases found in clinical notes for patients with substance-related diagnoses*



*The size of a word/phrase is relative to the number of times it was used (i.e., larger words/phrases were found more times in clinical notes).*

Figure. Stigmatizing key words and phrases found in clinical notes for patients with substance-related diagnoses. The size of a word/phrase is relative to the number of times it was used (i.e., larger words/phrases were found more times in clinical notes). Click image to enlarge.

### **Why do these findings matter?**

Most patients with a substance-related diagnosis had clinical notes that contained stigmatizing language, suggesting that it is common for healthcare providers to [hold stigmatizing views](#) towards this population. Among patients with substance use disorders, experiencing stigma in healthcare settings is a [barrier for seeking healthcare](#) in the future. To address this barrier to treatment, healthcare settings should [educate their providers](#) about stigma reduction. Raising awareness of [substance use as a treatable health condition](#) can also help reduce stigma among the general public.

### **Every study has limitations. What are the limitations in this study?**

This study analyzed clinical notes from a single health system in Massachusetts and New Hampshire, so the findings may not be [generalizable](#) to other health

systems, states, and countries. Also, though the Natural Language Processing algorithm had adequate test characteristics, it was not perfect at identifying stigmatizing language. For example, there may have been instances where a stigmatizing key word or phrase was used in a non-stigmatizing context, such as a direct quote from a patient.

**For more information:**

The [National Institute on Drug Abuse](#) has resources about addiction-related stigma and health disparities. If you are worried that you or someone you know is experiencing addiction, the [SAMHSA National Helpline](#) is a free treatment and information service available 24/7. For more details about addiction, visit our [Addiction Resources](#) page.

— Caitlyn Matykiewicz, MPH

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