

The Importance of Emphasizing Addiction Medicine During Medical Toxicology Fellowship Training: A Case Study of Tertiary Care Hospital System Toxicology Consultation Service

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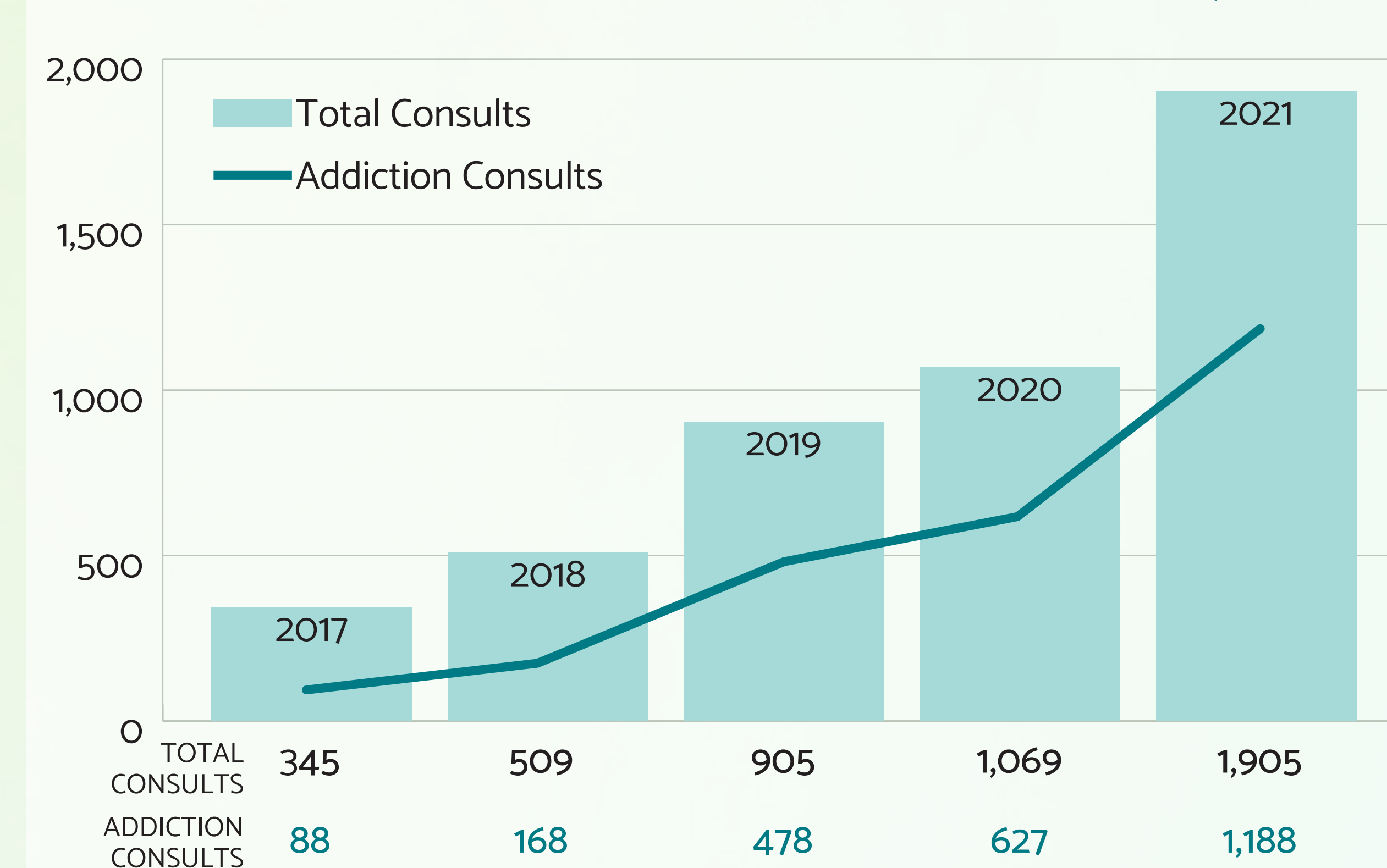
Background

As we continue to treat patients during the ongoing opioid overdose epidemic, it is ever more important that providers have adequate experience in understanding and treating patients with addiction, substance use disorder and withdrawal states. Additionally, throughout the COVID-19 pandemic, there have been numerous reports demonstrating that substance use is exponentially increasing. This increases the likelihood that addiction medicine will occupy a more prominent position in our medical field. Until recently, addiction medicine education was not an ACGME program requirement for medical toxicology fellowship programs. We aimed to evaluate the percentage of bedside medical toxicology consultations addressing addiction-related issues, over time, at a tertiary care hospital system.

Methods

We reviewed bedside toxicology consults performed by a tertiary care hospital system's Division of Medical Toxicology consultation service between January 2017 and December 2021 for addiction, substance use, and withdrawal-related cases. Consultation data is entered by bedside toxicologists and maintained in a secure database. Descriptive statistics were analyzed for various variables and were compared between years, utilizing SPSS28.

ADDICTION MEDICINE CONSULTS COMPARED TO TOTAL TOXICOLOGY CONSULTS FROM 2017-2021



Results

Over the five-year period, the toxicology service was consulted on a total of 4,733 patients, of which, 2,549 were addiction-related (53.9%). The majority of consults were male (65.6%), with 1 transgender (male-to-female) patient treated during this time. The proportion of addiction medicine consults increased steadily over the five-year time period. In 2017, there were 345 total consults, with 88 addiction-related (25.5%). In 2018, the service was consulted on 509 patients, of which 168 were addiction related (33%). In 2019, this trend continued to increase, with addiction medicine consults accounting for 52.8% of the total consults (478 of 905 consults). 58.7% of the toxicology services' consults were addiction related in 2020 (627 of 1069). As of this past year, of the 1905 total consults, 1188 were for addiction or substance-use complaints (62.4%). The most common primary reason for a medical toxicologist consult, was alcohol withdrawal (803 cases, 31.5%). In 2021, alcohol withdrawal accounted for 44.2% of the total consults, which was a 25.7% increase from pre-pandemic levels. Opioid withdrawal as the primary reason for

consultation accounted for 9.1% of total consults across the time-period. In 2017, opioid withdrawal accounted for 2.3% of consults, but increased to 13.0% of the consultations by 2021. Opioid agonist therapy (buprenorphine, methadone) was initiated in 12.7% of total consults. In 2017, there were no cases where opioid agonist therapy was a topic of consultation, but this increased to 12.0% of consults throughout 2021.

Conclusion

At a tertiary care hospital system, addiction medicine consults by bedside medical toxicologists have continued to increase disproportionately compared to other consults. As of this past year, addiction related complaints made up roughly two-thirds of all medical toxicology consults, increasing almost 40% over five-years. This single center phenomenon could represent a national trend; however, larger-scale studies would need to assess this pattern. This data further supports the recent ACGME medical toxicology program requirement changes, emphasizing the importance of addiction medicine and its relationship to medical toxicology.