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Title

Using Mapping to Identify Priority Areas for Combating the Opioid Epidemic in the State of Virginia

Priority 1 (Research Category)

Behavioral, psychosocial, and mental illness

Presenters

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Abstract

Context: Over the last two years the U.S. has experienced its largest number of drug overdose deaths, with Virginia having an increase of almost 50% from 2019 to 2020. These deaths are largely a result of opioid overdoses, particularly related to the use of fentanyl. Medication-assisted treatment (MAT) improves outcomes for people with opioid use disorder, though access to treatment is still uneven across the U.S. Objective: To identify priority areas for withdrawal management (detox) and medicationassisted treatment (MAT) in the state of Virginia. Study Design and Analysis: Cross sectional approach includes geographic information systems (GIS) and co-location mapping. First, we identify opioid treatment deserts (OTDs) as areas with no DATA-waived providers, opioid treatment programs (OTPs), or Substance Abuse and Mental Health Services Administration (SAMHSA) substance abuse facilities. Next, we use co-location mapping to identify priority areas that are both high opioid overdose mortality areas and OTDs. Setting/Dataset: Virginia All-Payer Claims Database, HealthLandscape Virginia; ZIP Code Tabulation Areas (ZCTAs); OTPs and SAMHSA substance abuse facilities, SAMHSA behavioral health services locator. Outcome Measures: Opioid overdose mortality; OTDs. Results: We identified 616 ZCTAs (69.7% of all ZCTAs in Virginia) as OTDs; almost 6 in 10 of OTDs were located in metropolitan areas, while about 1 in 5 were located in the most rural areas. We also identified 183 priority areas – ZCTAs that were OTDs and in the highest quartile for opioid overdose mortality. Priority areas were scattered throughout the state and follow similar patterns for urban and rural areas as OTDs in general. Conclusions: Increasing access to evidence-based withdrawal management and medication-assisted treatment has the potential to reduce the rising number of opioid overdose deaths across the state of Virginia. Increasing access to innovative data sources such as the All-Payer Claims Database allows for combining multiple data sources to address important public health issues such as the opioid epidemic.