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MOUD saves lives, especially after 60 days, and the longer the better

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Abstract

Scaling interventions and treatment services to reduce mortality stemming from OUD is critical for turning back the opioid epidemic, yet empiric data are lacking regarding how risk changes over the course of care. Burns et al show substantial reductions in hazards of overdose accrue after 60 continuous days on medication.

Keywords

MOUD; OUD; health services research

While opioid-involved overdose death counts in the US have garnered great media and political attention in recent years, there remains an under appreciation of just how lethal opioid addiction remains for millions of affected individuals. Opioid use disorder (OUD) is one of the most deadly diagnoses in the DSM-5. For instance, drug injectors with opioid use have an estimated all cause standardized mortality ratio that is 10 to 25 fold higher than that of the age-matched general population, varying across myriad causes of death in addition to overdose¹.

Hence, scaling interventions and treatment services to reduce mortality stemming from OUD is critical for turning back the epidemic. The gold standard treatment for OUD includes maintenance treatment with methadone or buprenorphine, otherwise known as medication for OUD (MOUD). Burns and colleagues contribute new empiric evidence demonstrating the protective association of varying MOUD treatment durations with preventing overdose².

They report a 60% risk reduction in medically treated overdose among patients with 60+ continuous days on MOUD and a further 10% relative risk reduction for every additional 60 days while remaining in care, showing that the magnitude of risk reduction increased over a full year of successful retention². Importantly, the study period was during 2016–2018 as fentanyl emerged throughout the US drug supply, driving a dramatic increase in the volume

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of opioid-involved overdose deaths. The authors' findings have important implications for quality measure development, systems of care, state and federal policy, evaluations under the OUD Cascade of Care framework³ and specifying cascade stage definitions⁴, such as retention in 60-day intervals. Yet in much of the US, the standard of care among providers and payers is to limit time on MOUD due to ill-informed concerns about replacing one addiction with another⁵.

Consistent with prior multi-state, multi-site studies of buprenorphine maintenance patients^{6,7}, the patient sample (primarily on buprenorphine) was mostly men, in their 30s-40s, and ~80% non-Hispanic white. Given that the opioid crisis is increasingly engulfing communities of color, these disparities in treated v. affected populations have critical implications for better identifying and connecting racial minorities with MOUD to improve equity in clinical outcomes.

There are a few limitations to their study using observational data. The follow up period was limited to only 12 months and required the presence of an OUD diagnosis in Medicaid claims, though many patients require multi-year, if not indefinite, MOUD, and prior studies have shown that upwards of 20–30% of patients may not have a documented OUD diagnosis in claims, likely due to stigma and variation in provider practices. Also, data limitations across states meant that the authors could not disaggregate findings by type of MOUD. However, the consistency of hazards estimates across states underscores that MOUD works incredibly well with effect sizes eclipsing those associated with demographics, state-level policies, or environmental exposures (e.g. fentanyl in drug supply) at the population level.

There is a need therefore for system redesign to improve long-term retention on MOUD, especially by removing payer- and provider-level impediments such as out of pocket costs, prior authorizations, pharmacy resistance, and punitive administrative discharges for other drug use while in care⁵. As we have trauma-informed care and LGBT-inclusive care settings which require a transformation of care delivery spanning all aspects of the patient experience, OUD treatment settings should promote long-term retention in every way possible and thwart agendas and ideologies that suggest otherwise.

The authors tout novel methods with landmark survival analysis to address the impact of immortal time bias, reflecting the need for more sophisticated surveillance systems in the US for large clinical databases linked to death records to track mortality over time among patients with OUD who remain in care versus those who discontinue treatment. While the authors are also trying to limit concerns about unmeasured confounds, and e-values suggest very large effect sizes (hazards of 0.22) would be necessary to change their findings, this still leads to questions about what is currently, versus what *could be* systematically, measured and reported to improve population-level monitoring. Social determinants of health are now widely understood to moderate care outcomes and the US Centers for Medicare and Medicaid Studies recently debuted corresponding Z-codes for risk stratification purposes, yet they have been little used. While populations may be easier to study under sweeping labels of housing insecurity or health illiteracy, individuals tend to have vibrant and vexing personalities that confound the most rigorous attempts at standardized measurement.

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