

Initiation of opioid agonist therapy using buprenorphine in the emergency department or emergency out of hospital setting: a mixed-methods systematic review

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Introduction: People who use substances increasingly access healthcare primarily through emergency medical services and emergency departments. These settings have become access points for medications for opioid use disorder (OUD), frequently buprenorphine. This systematic review aimed to quantify the efficacy of these programs and summarise clinician and patient perspectives on buprenorphine initiation in these settings.

Methods: This review used a convergent, segregated approach to mixed-methods systematic review. A search was conducted of MEDLINE, CINAHL, EMBASE, and the Cochrane Library and considered studies of patients with OUD receiving, and providers initiating, buprenorphine in an emergency setting. Where relevant, meta-analyses were conducted.

Results: In both randomised (OR 5.97, 95%CI 2.52-14.14, I² 16.93%) and observation (OR 4.28, 95%CI 2.45-7.48, I² 66.97%) research, initiation of buprenorphine was associated with increased odds of engagement at 30 days. Retention in treatment varied from 77% (95%CI 74-80%, I² 0.01%) within 24 hours, through to 35% (95%CI 29-40%) at 12 months. A low rate of precipitated withdrawal was reported (0.00%, 95%CI 0.00-1.00%, I² 0.00%) was reported. Clinicians and patients were supportive of ED-initiated buprenorphine, while identifying the initiation of buprenorphine was one component of a longitudinal care path for people with OUD. Patients valued clinicians engaging in shared decision-making, while clinicians found this challenging in an emergency environment.

Discussion and Conclusion: The initiation of buprenorphine in the ED setting is associated with higher odds of short and medium-term treatment engagement. Further research is required into paramedic-initiated buprenorphine, as well as patient perspectives of emergency buprenorphine initiation.

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