

Feasibility and Safety of a Paramedic-Directed Prehospital Buprenorphine Initiation Protocol for Acute Opioid Withdrawal

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Objectives The epidemic of opioid use disorder (OUD) remains pervasive in the United States. In an effort to increase the availability and timeliness of medications for opioid use disorder (MOUD), several agencies in the United States (US) offer buprenorphine by prehospital providers to selected patients, though published data remains limited. We describe the preliminary safety and feasibility of training all paramedics within a single agency to administer buprenorphine in the field without online medical control to simultaneously treat opioid withdrawal and initiate MOUD. **Methods** Using data from an ongoing quality assurance (QA) database, cases were retrospectively reviewed. Inclusion criteria included administration of buprenorphine by paramedics; cases were excluded if administered prior to EMS arrival on scene (i.e., the patient was given buprenorphine by a bystander or took their own). Data were entered into a REDCap database as part of the ongoing QA process. The primary reported outcome was administration of buprenorphine without complications. Complications were defined as any adverse effects from the administration of medication, including but not limited to new or worsening opioid withdrawal symptoms. **Results** In total, 121 patients met inclusion criteria, 82 were treated for naloxone-induced withdrawal and 39 for withdrawal due to opioid cessation. There were no cases of precipitated withdrawal or worsening of patient condition observed. Adverse effects were limited to three cases of nausea and vomiting post-administration, all of which were present prior to buprenorphine administration. No patients met the primary outcome of adverse effects from medication administration. **Conclusions** In a single prehospital system, the use of buprenorphine via a paramedic-driven protocol without online medical control appears to be a feasible and safe strategy for treating patients experiencing acute opioid withdrawal.