ED-initiated addiction treatment holds promise for enhancing access to treatment for those with opioid use disorder (OUD). We present a literature review summarizing the evidence for buprenorphine induction in the ED including best practices for dosing, follow-up care, and reducing implementation barriers. A literature search of Pubmed, Psychlnfo, and Embase identified articles studying OUD treatment in the ED published after 1980. Twenty-five studies were identified including eleven scientific abstracts. Multiple studies suggest that buprenorphine induction improves engagement in substance treatment up to 30 days after ED treatment. Many different induction protocols were presented, but no particular approach was best supported as criteria for induction and initial dosing vary widely. Similarly, transition of care models focused on either a "hub and spoke" model or "warm hand-offs" model, but no studies compared these approaches. Common barriers to implementing induction programs were provider inexperience, discomfort with addiction treatment, and limited time during the ED visit. No studies described the number of EDs offering induction. While ED buprenorphine induction is safe and enhances adherence to addiction treatment, uncertainty persists in how to best identify patients needing treatment, how to initiate buprenorphine, and how to enhance follow-up after ED-initiated treatment.