

**Assessment of emergency medicine providers' knowledge, utilization and prescribing of naloxone in the emergency department**

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Background: With the growing volume of opioid-related poisonings treated in the emergency department (ED), it is valuable to understand ED providers' knowledge and experience with naloxone prior to implementing a naloxone dispensing program. Previous studies have examined primary physicians' opinions on naloxone distribution and ED-based naloxone administration. However, few studies have examined ED providers' experience prescribing naloxone from the ED for outpatient use.

Research questions: Do ED physicians prescribe naloxone from the ED? Are ED providers knowledgeable about extra-hospital naloxone? What knowledge gaps can be targeted to enhance additional harm-reduction strategies for these patients?

Methods: A 4-point Likert scale 16-question survey was iteratively developed and piloted; it was subsequently distributed via email and in-person to a convenience sample of ED providers in a single, academic, urban ED in Fall 2016. ED providers included attending physicians, ED residents, and nurses. Standard summary statistics and chi square test were performed.

Results: Survey response rate was 57% (86/150). Respondents were 50% male, 31% attendings, 22% ED residents and 47% nurses. 99% of providers had administered naloxone in the ED. Of 46 physicians, 43 were willing to prescribe naloxone to patients or family members at discharge, but only 3 physicians had previously prescribed naloxone. ED providers never or rarely asked patients about access to clean needles (62%), or witnessing drug overdoses (74%). Conversely, providers frequently asked about origins of their addiction (62%), or past rehabilitation admissions (85%). ED nurses were more likely than the physicians to always query patients about addiction history (31% vs 4%,  $p = 0.008$ ) and past drug overdoses (60% vs 39%,  $p = .03$ ).

Discussion: ED providers have experience using naloxone in the ED but are more limited in naloxone prescribing at discharge and bedside harm-reduction education. Provider knowledge gaps identified can augment harm reduction efforts by providing enhanced naloxone prescribing with resource information, and by encouraging ED bedside provider-patient dialogue about risk behavior.

Conclusion: In the process of implementing an ED-based naloxone dispensing program, our survey of ED providers highlights opportunities to improve dialogue, resources and naloxone information for patients with opioid addiction.