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Emergency physicians and the opioid overdose action: a call to aid

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Despite encouraging news, our country remains amidst an opioid overdose epidemic, and emergency physicians have a front line view and opportunity to continue progress in reducing overdoses. Although recent data in the United States indicate a slowing in overdose fatalities[1], decreased opioid prescribing and opioid misuse[23], and a decreased number of people initiating heroin use[3], it is too early to declare success. Although initially linked to prescription opioids, the opioid overdose epidemic now is largely fueled by highly potent illicit agents such as illicitly manufactured fentanyl and various fentanyl analogs; alongside of this are increases in psychostimulant and cocaine overdoses[4]. What does all of this mean for emergency physicians? We seek to highlight successes achieved in recent years, but also call for more ongoing action by emergency physicians with specific patient-centered actions.

First, we applaud emergency physicians and their emergency departments (EDs) as they seek to relieve pain using appropriate prescribing and pain management practices. However, prescription opioids continue to be involved in many deaths nationally, estimated to be more than 17,000 of the 47,600 opioid-involved overdoses in 2017. Furthermore, the amount of opioids prescribed in morphine milligram equivalents per person in the U.S. is still nearly three times what it was in 1999[2]. We support ED changes that seek to decrease prescribing for conditions that opioids are not well suited for (e.g. fibromyalgia, migraines) and to reduce both co-prescribing opioids with benzodiazepines and high dose/longer term opioid prescribing from the ED[5]. The latter are well known riskier opioid uses and something easily altered in daily emergency care. Although opioid prescribing among emergency physicians accounts for a small amount of the overall opioid prescribing pool in the U.S., wide variation in prescribing among emergency physicians exists and shows opportunity for improvement is ongoing[6]. Gleber et al[7] highlight the successes being made in local emergency departments to reduce opioid prescribing; over a 6 year period, opioid prescriptions decreased from 38% to 13% coupled with an increase in non-opioid medications from 6% to 11% in pain-related ED visits. This shows we can become more knowledgeable about alternative pain management modalities and use them in the emergency department. The

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American College of Emergency Physicians (ACEP) through its E-QUAL Opioid Initiative portal (https://www.acep.org/administration/quality/equal/e-qual-opioid-initiative/) has resources available to assist including “Alternatives to Opioids” (ALTO) protocols. These protocols describe non-opioid medications and procedures for first line treatments for pain management in select conditions. During an ALTO deployment in a Colorado ED, they found a more than 20% reduction in the use of intravenous opioids, with no decrease in patient satisfaction scores[8]. By scaling up ALTO protocols to more hospitals, utilizing tools such as state prescription drug monitoring programs when prescribing opioids or other controlled substances, and using the lowest dose possible for the shortest duration when prescribing opioids as recommended in the CDC Guideline for Prescribing Opioids for Chronic Pain[5], further progress can be made.

Second, given the growing number of Americans that need access to life-saving addiction treatment, we believe all emergency medicine training programs should ensure their graduating residents are trained and equipped to treat patients with opioid use disorder (OUD). This includes identification of candidates and initiation of medications for opioid use disorder treatment (MOUD). Providing this additional training will create a large and well trained care provider pool on the front line of care to treat this chronic disease. ACEP similarly offered MOUD trainings at their meetings and in fifteen states to also enhance this opportunity, a measure we applaud. We encourage emergency physicians and trainees to undergo DATA 2000 waiver training to prescribe buprenorphine for OUD treatment. Even in the absence of a DATA 2000 waiver or a separate registration as an Opioid Treatment Program, any physician may emergently administer buprenorphine or other medications for up to 72 hours (not more than one day of medication administered to a patient at one time) to relieve acute withdrawal symptom. In accordance with the concept of a warm handoff (transfer of care between two members of the care team), arrangements must be made for referral to ongoing treatment[9] At the Grady Memorial Hospital in Atlanta, Georgia, patients with moderate or severe OUD and an interest in MOUD are transferred to the observation unit for induction. Their experiences showed that 12 out of 19 patients (63.2%) went to their initial follow-up appointment in clinic; nine were still in clinic at 30 days and 4 at 6 months[10]. Others noted that ED-initiated buprenorphine compared to brief intervention and referral to treatment increased treatment engagement and reduced self-reported illicit opioid use[11]. Importantly, in part due to issues of stigma and past negative experiences with the health system, the emergency department encounter may be one of the few touchpoints patients with OUD have with the health system, underscoring the importance of utilizing this encounter to start individuals on the path to recovery. We must broaden our recognition of patients in need of treatment for OUD to include not just those presenting after an overdose, but also those with cellulitis or endocarditis from intravenous drug use, or those with other illicit drug use co-morbid conditions like viral hepatitis.

Third, ED care provides an important opportunity to equip individuals at-risk for experiencing or responding to an overdose and getting the reversal agent naloxone in the hands of those who can help. Recent efforts to expand overdose prevention education and naloxone distribution in the community and in pharmacies resulted in many more community-based programs distributing naloxone[12] and in the number of prescriptions for naloxone being dispensed from retail pharmacies[13]. Despite progress, naloxone remains

under-prescribed and underutilized, often in a variable pattern; the recently-released CDC Vital Signs report found that naloxone dispensing ranged 25-fold between the highest naloxone prescribing counties and the lowest[14]. Further, CDC researchers found that only one naloxone prescription was dispensed for every 69 high-dose opioid prescriptions. Clinicians with higher rates of naloxone prescribing relative to high-dose opioid prescribing included addiction medicine, psychiatry, and pediatrics. Despite being the most likely physicians to treat an overdose, emergency physicians only prescribed naloxone at a rate of 2.8 per 100 high dose opioid prescriptions. This is stark evidence of the opportunity in emergency care.

The Surgeon General raised awareness about the role of community members, family members and friends of patients receiving high-dose opioids or at risk for overdose, and the need for health care professionals to know how to use naloxone and to keep it in reach[15]. More recently, HHS released guidance on co-prescribing of naloxone[16] consistent with CDC Guideline[8] recommendations but also included recommendations on prescribing of naloxone to patients with mental health issues, those using other illicit substances, or individuals with excessive alcohol use. Expanding the use of naloxone is important given the continued proliferation of illicitly manufactured fentanyl and fentanyl analogs into the illicit drug supply in communities, and recent data on psychostimulant and cocaine-related overdoses showing that 50% of psychostimulant-related overdose deaths and 73% of cocaine-related overdose deaths involved opioids[4]. To support these efforts, emergency physicians should prescribe naloxone at discharge to patients with risk factors for overdose, and emergency departments should facilitate naloxone dispensing at discharge to at-risk patients or their families and loved-ones.

Recognition, ED care and naloxone distribution are first steps, but these alone are not enough. Using a clear and available “warm handoff” to transition to ongoing treatment is key. For example, in Indianapolis, Project POINT (Planned outreach, Intervention, Naloxone, and Treatment) is a collaboration between local emergency medical services, emergency departments, and the local crisis intervention unit. Project POINT connects trained outreach workers with emergency department patients who have experienced a near fatal overdose[17]. Another innovative community response has EDs in hard hit places like Huntington, West Virginia partnering with public safety and public health to ensure people receive follow up and are linked to treatment after an overdose[18].

Recognizing and addressing the individual, family, and community dynamics that enabled the crisis to take root and grow is essential for solving it in the long-term. Fundamental to this work is recognizing, mitigating, and ideally preventing childhood trauma such as adverse childhood experiences (ACEs) – potentially traumatic events that occur in childhood which can have profound impacts on development, health, well-being and opportunity throughout the lifespan. A study of over 8,000 patients in California found that experiencing ACEs was associated with earlier initiation of drug use and that people with five or more ACEs were seven to ten times more likely to report illicit drug use problems, addiction to illicit drugs, and intravenous drug use[19]. Although addressing this may seem tangential in the emergency department, it is not. For the youth in whom abuse or neglect is suspected, the child with an ear infection who has a parent experiencing violence or using substances in

the home, or the young teen treated after a rape or a physical fight, we must recognize they are all experiencing ACEs. ACEs can be prevented or effects lessened by focusing on safe, stable nurturing relationships and environments; building resiliency in individuals, families, and communities through implementation of programs and policies based on the best available evidence; and using trauma-informed approaches when treating patients to lessen the harms of ACEs.

Emergency physicians have been and always will be the all too necessary safety net for many, and an especially important partner in combating the opioid overdose epidemic. Great strides have been made in a short amount of time, but we cannot become complacent in our fight against an evolving enemy. America's patients and communities need emergency physicians to redouble their efforts, challenge their colleagues and institutions to do more, and partner to work upstream, now more than ever.

References:

1. Products - Vital Statistics Rapid Release - Provisional Drug Overdose Data. Centers for Disease Control and Prevention https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm. Accessed July 2, 2019.
2. Guy GP Jr, Zhang K, Schieber LZ, et al. County-Level Opioid Prescribing in the United States, 2015 and 2017. JAMA Intern Med. 2019 2 11.
3. Substance Abuse and Mental Health Services Administration. (2018). Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health (HHS Publication No. SMA 18-5068, NSDUH Series H-53). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
4. Kariisa M, Scholl L, Wilson N, et al. Drug Overdose Deaths Involving Cocaine and Psychostimulants with Abuse Potential — United States, 2003–2017. MMWR Morb Mortal Wkly Rep. 2019; 68:388–395. [PubMed: 31048676]
5. Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, MMWR Recomm Rep. 2016; 65(No. RR-1):1–49.
6. Barnett ML, Olenski AR, Jena AB. Opioid-Prescribing Patterns of Emergency Physicians and Risk of Long-Term Use. New England Journal of Medicine. 2017; 376(7):663–673. [PubMed: 28199807]
7. Gleber R, Vilke GM, Castillo EM, et al. Trends in emergency physician opioid prescribing practices during the United States opioid crisis. Am J Emerg Med. 2019; S0735-6757(19)30388-2.
8. Duncan RW, Smith KL, Maguire M, et al. Alternatives to opioids for pain management in the emergency department decreases opioid usage and maintains patient satisfaction. Am J Emerg Med. 2019; 37(1):38–44 [PubMed: 29709398]
9. Title 21, Code of Federal Regulations, Part 1306.07(b)).
10. Dunkley CA, Carpenter JE, Murray BP, et al. Retrospective Review of a Novel Approach to Buprenorphine Induction in the Emergency Department. J Emerg Med. 2019; S0736-4679(19)30236-7
11. D'Onofrio G, O'Connor PG, Pantalon MV, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. JAMA. 2015; 313(16): 1636–44. [PubMed: 25919527]
12. Wheeler E, Jones TS, Gilbert MK, et al. Opioid Overdose Prevention Programs Providing Naloxone to Laypersons - United States, 2014. MMWR Morb Mortal Wkly Rep. 2015; 64(23): 631–5 [PubMed: 26086633]
13. Sohn M, Talbert JC, Huang Z, et al. Association of Naloxone Coprescription Laws With Naloxone Prescription Dispensing in the United States. JAMA Netw Open. 2019; 2(6)

14. Guy GP, Haegerich TM, Evans ME, et al. Pharmacy-based Naloxone Dispensing in the United States, 2012-2018. MMWR Morb Mortal Wkly Rep. Vital Signs. 2019 Pending
15. HHS Office of the Secretary,Office. U.S. Surgeon General's Advisory on Naloxone and Opioid Overdose. HHS.gov. https://www.hhs.gov/surgeongeneral/priorities/opioids-and-addiction/naloxone-advisory/index.html. 2018.
16. Naloxone: The Opioid Reversal Drug that Saves Lives - hhs.gov. https://www.hhs.gov/opioids/sites/default/files/2018-12/naloxone-coprescribing-guidance.pdf. 2018.
17. Project POINT: Effectiveness and Scalability of an Overdose Survivor Intervention (POINT). ClinicalTrials.gov Identifier: NCT03336268 https://clinicaltrials.gov/ct2/show/NCT03336268
18. Knocking on Doors to get Opioid Overdose Survivors into Treatment: https://www.npr.org/sections/health-shots/2018/10/24/657894138/knocking-on-doors-to-get-opioid-overdose-survivors-into-treatment. 2018
19. Dube SR, Felitti VJ, Dong M, et al. Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the adverse childhood experiences study. Pediatrics. 2003; 111(3):564–72. [PubMed: 12612237]