Title: The Bureau of EMS and Trauma System's Response to Arizona's Opioid Overdose Crisis

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Introduction: On June 5th, 2017, Arizona Governor Doug Ducey declared a Public Health State of Emergency in response to the increase of opioid overdoses and opioid overdose deaths in the state. As part of the emergency declaration and subsequent Executive Orders, Governor Ducey issued two consecutive enhanced surveillance advisories mandating that all Emergency Medical Services (EMS) and Law Enforcement (LE) agencies report out-of-hospital suspected opioid overdoses, out-of-hospital suspected overdose deaths, and naloxone administrations to the Arizona Department of Health Services (ADHS). Additionally, the emergency declaration required ADHS to develop and provide training to LE agencies on the proper protocols for carrying, handling, and administering naloxone in overdose situations.

Objectives: The objective of the Bureau of EMS and Trauma System (BEMSTS) was to (1) establish an electronic portal to capture real-time opioid-related data from EMS and LE agencies, and (2) organize and provide opioid overdose recognition and naloxone administration training to LE personnel.

Methods:

Establishing an Electronic Portal

The Arizona Prehospital Information and EMS Registry System (AZ-PIERS) is a free, largely voluntary database that allows agencies to submit electronic Patient Care Reports (ePCRs) to the state for quality assurance and performance improvement purposes. A web-based Prehospital Opioid/Opiate Overdose Reporting Tool (POORT) was developed within AZ-PIERS to collect additional information specific to suspected opioid overdose cases, including naloxone administration, naloxone dosage, reasons for suspected overdose, and pre-hospital patient outcome/disposition. All EMS and LE agencies are required to report suspected opioid overdoses, suspected opioid overdose deaths and naloxone administrations through POORT.

To gain access to POORT, agencies must submit a data use agreement. By submitting the data use agreement, agencies acknowledge the reporting mandate, acknowledge that the data is considered Protected Health Information (PHI), and establish a single point of contact through which opioid-related communications can be disseminated. The data use agreement establishes a HIPAA-compliant relationship between the agency and Bureau so that a weekly report containing sensitive information on the opioid-related cases submitted through POORT can be distributed to the reporting agencies.

Although electronic reporting is strongly encouraged, a paper POORT form containing all the required data elements has been made available for use when electronic reporting is not feasible.

While the initial reporting was part of enhanced surveillance, emergency rulemaking permanently mandated prehospital opioid/opiate reporting by EMS and LE as of October 9, 2017.

Naloxone Administration Training

BEMSTS provides cognitive and didactic education to LE agencies and other first responders on the proper protocols for carrying, handling, and administering naloxone via a curriculum jointly developed by ADHS and

the Arizona Peace Officers Standards and Training board (AZPOST). The education covers recognition of opioid overdose, intranasal and intramuscular administration of naloxone, and CPR refresher content when indicated .The cognitive lecture portion is led by EMS physicians while the didactic skills portion is led by Emergency Medical Care Technicians (EMCTs) and AZPOST instructors. Naloxone training kits and CPR mannequins are provided by ADHS, regional EMS training centers, and local EMS agencies. At the conclusion of each training event, ADHS is able to provide free naloxone kits to agencies (purchase of kits is made by ADHS with grant funds). While the initial funding for statewide training came from Arizona's own public health emergency dollars, BEMSTS was recently awarded a four-year, \$3.1 million federal grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) to expand the program and add an additional Screening, Brief Intervention, and Referral to Treatment (SBIRT) component.

Results:

During the 60 days of enhanced surveillance (June 2017-August 2017), BEMSTS received and processed 195 Data Use Agreements from 128 EMS agencies and 67 LE agencies. During that time, 1,226 reports of suspected opioid overdoses and suspected opioid overdose deaths were captured through POORT. After removing duplicates, these reports represented 1,053 unique opioid related incidents. Additionally, BEMSTS provided training to 983 first responders in four major Arizona cities.

As of March 31st 2018, over 3,917 suspected opioid overdoses have been reported via POORT, including 291 suspected opioid overdose deaths. More than 1,200 first responders have been trained; and 5,714 naloxone kits have been ordered by 60 law enforcement agencies.

Conclusion:

Existing resources within the State Bureau of EMS were successfully used to help address and track the opioid-overdose epidemic. The data collected through POORT are being used to better define the burden of opioid-overdoses in Arizona and have illustrated the value of prehospital surveillance, leading to the creation of permanent prehospital opioid reporting rules. This data will also facilitate BEMSTS in completing SAMHSA grant deliverables, including identifying high-needs communities, prioritizing first responder trainings, establishing benchmarks and identifying changes in opioid-overdoses subsequent to training implementation. The timely response of BEMSTS in collaboration with Fire, EMS and LE stakeholders demonstrates exceptional coordination across agencies and jurisdictions that may be replicated to address other public health and public safety concerns.