

Preventing Overdose from a Hospital Setting

Preventing harm from medications, or adverse drug events, is a patient safety priority not only in hospitals but also across the continuum of care for patients. An overdose is an example of an adverse drug event. People who have a nonfatal drug overdose are at very high risk for another overdose.¹

Over the past 5 years, there were 2,715 deaths from an opioid induced poisoning or overdose in Arizona. Of those, 912 (33.6%) had an opioid related hospital or emergency department encounter during the 5 years prior to their death. The average number of visits was 2.98.

Improving the discharge process from hospitals and integrating overdose education are opportunities for intervention resulting in improved health and preventing deaths.

Hospitals have a unique opportunity to save lives by identifying patients at risk for opioid overdoses, including those who have experienced an overdose as well as those at risk for an overdose. Interventions such as prescribing naloxone for those at risk of an opioid overdose and increasing access to naloxone are examples of how hospitals can address the opioid epidemic and save lives.

In March 2017, the Arizona Department of Health Services convened a summit for healthcare associations, hospital emergency departments, health plans, treatment centers, regional behavioral health authorities, and other stakeholders to begin the development of voluntary, consensus guidelines to promote safer discharge of patients at risk for an opioid overdose.

This document should not be used to establish any standard of care. No legal proceeding, including medical malpractice proceedings or disciplinary hearings, should reference a deviation from any part of this document as constituting a breach of professional conduct. These recommendations are only an educational tool. Clinicians should use their own clinical judgment and not base clinical decisions solely on this document. Some of the following recommendations are not founded in evidence-based research but are based on promising interventions and opinion. Additional research is needed to understand the impact of these interventions.

The following discharge guidelines are not listed in order of importance.



Guidelines

1. Check a patient's history on the Arizona Controlled Substance Monitoring Program to evaluate what medications have been prescribed with a particular focus on coingestants (like opioids and benzodiazepines) that may increase a patient's risk of overdose.

Rationale: The Arizona Controlled Substance Monitoring Program (CSPMP) is a resource that assists prescribing practitioners and pharmacists in providing efficient care for their patients' and customers' usage of controlled substances. The CSPMP allows for an evaluation of a patient's controlled substance utilization based on recent controlled substance prescription history. It provides a quick, confidential online report to the practitioner and the pharmacist. The system is available 24 hours a day, 7 days a week. There is no cost to the practitioner or pharmacist. The information can be used to facilitate medication reconciliation with a focus on medications that increase the risk of overdose. Coingesting opioids, benzodiazepines and other sleep aids increases a patient's risk of overdose and death.

When to use the CSPMP: The CSPMP should be checked for ALL new patients, for ALL patients being treated for a drug overdose or opioid-related issue (exclusions for Hospice or end-of life). While the upcoming CSPMP statute has some exclusions, it is optimal to check the CSPMP prior to writing prescriptions for any controlled substances.

H. Beginning the later of October 1, 2017 or sixty days after the statewide health information exchange has integrated the controlled substances prescription monitoring program data into the exchange, a medical practitioner, before prescribing an opioid analgesic or benzodiazepine controlled substance listed in schedule II, III or IV for a patient, shall obtain a patient utilization report regarding the patient for the preceding twelve months from the controlled substances prescription monitoring program's central database tracking system at the beginning of each new course of treatment and at least quarterly while that prescription remains a part of the treatment. Each medical practitioner regulatory board shall notify the medical practitioners licensed by that board of the applicable date. A medical practitioner may be granted a one-year waiver from the requirement in this subsection due to technological limitations that are not reasonably within the control of the practitioner or other exceptional circumstances demonstrated by the practitioner, pursuant to a process established by rule by the Arizona state board of pharmacy.

ED is not excluded but this part of the statute mostly pertains to ED and Urgent Cares: 6. The medical practitioner is prescribing the controlled substance to the patient for no more than a ten-day period for a patient who has suffered an acute injury or a medical or dental disease

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process that is diagnosed in an emergency department setting and that results in acute pain to the patient. An acute injury or medical disease process does not include back pain.

http://www.azleg.gov/viewDocument/?docName=http://www.azleg.gov/ars/36/02606.htm

2. Ask about present and past substance use, including, but not limited to, use of heroin and prescription opioids

Rationale: Despite the high prevalence of substance use, too many Americans go without treatment — in part because their disorders go undiagnosed. Regular screening for drug use in healthcare settings enables earlier identification of substance use disorders, which translates into earlier care. The emergency department setting may be the only time a patient is being screened for a substance abuse disorder. Patients should be specifically asked about their use of tobacco, alcohol, marijuana and other recreational or illegal drug use. This flows naturally as part of a social history or after reviewing a patient's allergies and use of prescribed medications, over the counter preparations, vitamins and supplements.

3. Recognize previous overdose as a risk factor for and a predictor of a future opioid overdose.

Rationale: A nonfatal overdose increases the risk of a fatal overdose in the future. This is because people who have overdosed before may have drug use patterns that put them at risk for an overdose in the future. In addition, experiencing a nonfatal overdose can cause damage to the body even if the person survives the overdose. One study found that people who had experienced a non-fatal overdose experienced other harms as a result of an overdose such as injuries sustained when falling at overdose, peripheral neuropathy (nerve damage, numbness/tingling), vomiting, temporary paralysis of limbs, chest infections, and seizures.²

4. Recognize patients at high risk for an opioid overdose.

Rationale: Patients at high risk for opioid overdose include those who:

- Have a history of opioid overdose
- Are evaluated or treated for a possible opioid intoxication
- Are evaluated or treated for opioid inject use related conditions (such as abscess, needle in the arm, endocarditis)
- Use opioids (in any form) for medical or recreational purposes
- Take more than 90 mg morphine equivalents per day (opioid-related overdose risk is dose-dependent, with higher opioid dosages associated with increased overdose)³
- Have a urine drug screen positive for opiates

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- Mix sedating substances (such as benzodiazepines, sleep aids, alcohol)
- Receive rotating opioid medication regimens
- Have had a period of abstinence from opioid use (such as rehabilitation or incarceration)

5. Educate patients about the risks of overdose and how it may be prevented.

Rationale: Providing opioid overdose and naloxone education to persons who use drugs and to persons who might be present at an opioid overdose can help reduce opioid overdose mortality, a growing public health concern. Patients who have a clear understanding of their after-hospital care instructions, including how to take their medicines and when to make follow-up appointments, are 30 percent less likely to be readmitted or visit the emergency department than patients who lack this information, according to a study funded by the Agency for Healthcare Research and Quality (AHRQ) and published in the February 3, 2009, issue of the Annals of Internal Medicine.⁴

6. Notify the primary care provider (PCP) and/or most recent opioid prescriber of about a patient's recent overdose

Rationale: By notifying the PCP or most recent opioid prescribed, this provider can assist coordination of appropriate rehabilitation and behavioral health care services. Managing chronic conditions that are impacted by behavioral health problems requires a "continuum of care" approach that includes an integrated system of care that guides and treats patients through an array of health services. Additionally, the primary prescriber can adjust the patient's medication as appropriate.

7. Prior to being discharged, peer support should be provided to the patient to introduce them to recovery supports and resources.

Rationale: Recovery Coaching is a form of strength-based support for persons in or seeking recovery from alcohol, drug and other addictions. Ideally, a peer support person or "peer recovery coach" would meet with the patient prior to discharge from the hospital. A peer recovery coach could introduce recovery supports and resources, provide overdose education to the patient and the patient's support system (i.e. family and friend) and contact the patient after discharge from the hospital. Peer recovery coaches play an important role in avoiding another overdose and staying engaged in treatment.

8. Provide substance abuse treatment options and referrals.



Rationale: Referral for specialty addiction treatment is recommended for patients with substance dependence disorders.⁵ Access to substance abuse treatment is variable, and decisions about where to refer patients must take into account local resources and patient characteristics. (https://www.findtreatment.samhsa.gov/)

9. When possible, contact a local substance abuse outpatient treatment center and do a warm handoff upon discharge from the hospital.

Rationale: A warm hand off is an approach where the health provider does a face-to-face introduction to a substance abuse specialist and makes a direct referral into substance abuse treatment. Similar to how a patient receives PCP follow up after a hospitalization, opioid use disorder and overdose patients would receive similar treatment.

10. Provide harm reduction referrals for patients not willing or ready to abstain from substance use.

Rationale: Harm reduction is one treatment approach among many that is necessary to provide the patient with choice. Understanding the realities of poverty, class, racism, social isolation, past trauma, sex-based discrimination, and other social inequalities that affect both people's vulnerability and capacity to effectively deal with substance use, the harm reduction approach provides a holistic perspective for creating change. The main harm prevention group in Arizona is Sonoran Prevention Works.

Sonoran Prevention Work's Hotline: 480-442-7086

11. Instruct patients and their support system (i.e. friends and family) on how to recognize and respond to an overdose, including calling 911, use of rescue breathing and the use of naloxone.

Rationale: Teaching individuals and their support system about risk factors for an overdose, signs of an overdose, and how to respond to an overdose can prevent fatalities. In one study published in the British Medical Journal, communities with overdose prevention education and access to naloxone saw up to a 40 percent reduction in overdose mortality. Supporting respiration is the single most important intervention for opioid overdose and may be life-saving on its own. Ideally, individuals who are experiencing opioid overdose should be ventilated with oxygen before naloxone is administered to reduce the risk of acute lung injury. In situations where oxygen is not available, rescue breathing can be very effective in supporting respiration until naloxone becomes available.⁶

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12. Provide a prescription for naloxone and, if possible, discharge the patient with naloxone in hand.

Rationale: Anyone who has experienced an overdose or is at risk of an overdose should receive a prescription for naloxone. Hospitals should have a mechanism in place to ease access to naloxone.

13. Educate patients about safe use, storage and disposal of prescription opioids. Recommend proper disposal of any remaining opioids.

Rationale: Teaching the patient about the safe use of opioids includes education about dosage, directions of use and importance of not sharing medications with others. Proper storage and disposal of opioids decreases the possibility of use of opioids by others, including family and friends. Arizona locations for disposable of medications are available at dumpthedrugsaz.org.

Administrative Considerations:

14. Consider establishing a program to offer inpatient initiation of Medication Assisted Treatment for patients with opioid use disorders.

Rationale: Opioid dependent patients are hospitalized frequently. Hospitalization may be an opportunity to engage opioid dependent patients and initiate buprenorphine or other medications for treatment.⁷

15. Review and update, as appropriate, existing opioid overdose-related policies and procedures.

Rationale: Formalized, written policies and procedures fulfill a number of important purposes:⁸

- Facilitate adherence with recognized professional practices.
- Promote compliance with regulations, statutes, and accreditation requirements (e.g. HIPAA, EMTALA, CMS Conditions of Participation, DNV/Joint Commission).
- Reduce practice variation. Standardize practices across multiple entities within a single a health system.
- Serve as a resource for staff, particularly new personnel.
- Reduce reliance on memory, which, when overtaxed, has been shown to be a major source of human errors or oversights.



Resources:

- ¹ Warner-Smith M, Darke S, Day C. Morbidity associated with non-fatal heroin overdose. Addiction. 2002 Aug; 97(8):963
- Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1):1–49. DOI: http://dx.doi.org/10.15585/mmwr.rr6501e1.
- ³ Brian W. Jack, MD, Veerappa K. Chetty, PhD, David Anthony, MD, MSc, et al, "A Reengineered Hospital Discharge Program to Decrease Rehospitalization," Annals of Internal Medicine 150(3), Feb. 3, 2009, pp. 178-187, http://www.annals.org/content/150/3/178. Abstract
- ⁴ Shapiro, B, Coffa,D, Mccance-katz, E. A Primary Care Approach to Substance Misuse. Am Fam Physician. 2013 Jul 15;88(2):113-121
- SAMHSA Opioid Overdose Prevention TOOLKIT: Information for Prescribers accessed 4/11/17 http://store.samhsa.gov/shin/content//SMA16-4742/InformationforPrescribers.pdf
- ⁶ Suzuki, J., DeVido, J., Kalra, I., Mittal, L., Shah, S., Zinser, J. and Weiss, R. D. (2015), Initiating buprenorphine treatment for hospitalized patients with opioid dependence: A case series. Am J Addict, 24: 10–14. doi:10.1111/ajad.12161
- ⁷ Irving, A. Policies and Procedures for Healthcare Organizations: A Risk Management Perspective. Oct 2014 PSQH. Retrieved April 11, 2017

