Naloxone prescriptions:
Providing a comprehensive program for at-risk opioid abusers identified in the acute care setting

Alicia ZuWallack, PharmD BCPS
Kent Hospital Emergency Department
Opioid overdose epidemic in RI

- Rhode Island is in the midst of a severe prescription and street-drug overdose crisis.
- There have been more than 70 opioid-related deaths since the start of 2014 in communities all over Rhode Island.
- Many of these deaths are directly related to the use of fentanyl and heroin.

Press release, RI Dept of Health, 4/3/14
RI a national leader...in drug abuse

- In the top 5 states for illicit drug use
- In the top 12 for overdose deaths
- Overdose leading cause of accidental death, over MVAs
- Third highest state for illicit use of prescription drugs
- In 2013, 360,000 Rhode Islanders — more than one-third of the entire population — filled prescriptions for controlled substances.

The Providence Journal, 2/8/14
Tightening up prescribing: the unintended consequence

- In 2013, 1400 Rhode Islanders obtained their controlled drugs from ≥ 5 prescribers and ≥ 5 pharmacies suggesting widespread abuse.
- Programs like the PMP and efforts from the DOH have attempted to regulate this type of behavior.
- Less access to RX opioids + ongoing addiction = use of street drugs
- Heroin can be snorted... Not a huge leap for prescription opioid abusers.
Emergency Regulations

“The Department [of Heath] finds that there is imminent peril to the public health, safety and welfare and that these emergency regulations should be adopted to protect the public health.

Due to the sharp increase in overdose deaths in RI on 2014, expanded access to naloxone has become immediately necessary to save lives.”

Rules and regulations pertaining to opioid overdose prevention [R23-1-OPIOID], RI DOH March 2014
Emergency Regulations

- One prescriber is now able to issue a non-patient-specific order to numerous organizations, such as police departments, allowing for increased access to naloxone.
- A prescription for naloxone may be prescribed to persons other than the individual who have the potential for overdosing on opioids.
- These regulations provide protections against any professional disciplinary action resulting from such prescribing.

Rules and regulations pertaining to opioid overdose prevention [R23-1-OPIOID], RI DOH March 2014
Emergency Regulations

- A person who is not otherwise licensed to administer naloxone may in an emergency situation administer naloxone without fee if the person believes in good faith that an individual is experiencing drug overdose.
- A person who administers naloxone shall not be subject to civil liability or criminal prosecution as a result of administering the drug.

Rules and regulations pertaining to opioid overdose prevention [R23-1-OPIOID], RI DOH March 2014
Some common questions:

- Is naloxone safe?
- Can we trust lay people to recognize overdose and give naloxone correctly?
- Will 911 really be called?
- Will people use more heroin because they know they have an antidote if they overdose?
- Will the drug abuser try to “override” the naloxone by shooting up with more heroin?
- Does it save lives, or is it just a theory?
- Is it worth it? Do these people ever stop using heroin or do they just live to overdose again?
Is naloxone safe?

- Naloxone has no real intrinsic toxicity
- Research in spinal cord injury used enormous doses of 5.4mg/kg bolus then 4mg/kg/hr x 23 hrs without complication

  *J Neurosurg* 1992;76:23-31

- Epi-Pen, another antidote we routinely prescribe, has much more intrinsic toxicity.
Can we trust the lay public to give it correctly?

- Well, bystander CPR saves lives...
- Lay persons use AEDs to deliver 300 joules of electricity to the hearts of victims of cardiac arrest...
- Is it such a stretch for a lay person to administer a nasal spray to a victim of respiratory arrest?
Trained lay persons can recognize naloxone indication

- Lay people can recognize overdose and appropriately administer naloxone.
- Programs studied in Baltimore, San Francisco, Chicago, NY and New Mexico.
- Trained respondents were as skilled as medical professionals in recognizing overdose situations ($\kappa = 0.85$) and when naloxone was indicated ($\kappa = 1.0$)

Green et al. *Addiction* 2008; 103;979-89.
Will people call 911?

In a study of the Massachusetts program:

- 911 called in 33% of naloxone rescue attempts
  - 26% if given by another drug user
  - 76% if given by a non-user
- Rescue breathing performed in 38% of cases
  - 37% by another drug user
  - 44% by a non-user
- Rescuer stayed with victim until alert and awake or help arrived in 89% of cases
  - 90% by another drug user
  - 83% by a non-user

Walley et al. BMJ 2013;346;1-12
Will it encourage more risky drug-use practices?

- This has never been shown in the research.
- In a study where patients signed out AMA from a hospital after having being rescued with naloxone, premature reinjection with heroin was not shown to be an issue. (Vilke GM et al. Prehosp Emerg Care. 1999; 3:183-6.)
- Data from the established program in Chicago showed that reinjecting was not an issue, nor was the need for a second dose of naloxone due to the longer half-life of heroin. (Maxwell et al. J Addict Dis 2006;25:89-96.)
Will it save lives?

- Yes, it likely will.
- MMWR reports since 1996, over 10,000 people have been rescued by naloxone given through prevention programs (MMWR vol 61 no 6, 2/17/12)
Experience from our neighbors
Walley et al. BMJ 2013;346;1-12
The Naloxone program at Kent and Butler Hospitals

- Comprehensive
  - Education for patient / family / friends
  - Prescription for naloxone, and actual drug dispensed
  - For patients not being treated for substance abuse, referral for addiction resources if the patient is seeking to stop using
Patient Education

- Well-defined in the state regulations:
  - Information on drug overdose prevention and recognition
  - How to perform rescue breathing and resuscitation
  - Opioid antidote dosage and administration
  - Importance of calling 911
  - Care for the overdose victim after the administration of naloxone
The Naloxone Program at Kent and Butler Hospitals

- Identify at-risk patients in the Kent ER, or at any service point at Butler
- Offer naloxone to take home
- Staff performs patient education
  - Short video demonstrating use
  - Hands-on practice kit and interaction with trained counseling personnel
- Dispensed in accordance with the law by the pharmacy department
- Documented in electronic chart on a standard charting form
Utilization to date

- **Kent**: program started in August 2014
  - 10 kits distributed in the first month

- **Butler**:

<table>
<thead>
<tr>
<th></th>
<th>Drug and Alcohol Partial Hospital Oct 2013-June 2014</th>
<th>Inpatient (All Nursing Units) April-June 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Naloxone Distributed</td>
<td>119</td>
<td>45</td>
</tr>
<tr>
<td># of Individuals with Opiate Dependency</td>
<td>173</td>
<td>382</td>
</tr>
<tr>
<td>Distribution Rate</td>
<td>68.8%</td>
<td>11.7%</td>
</tr>
</tbody>
</table>
Links to the online patient education video:

- http://www.butler.org/substanceabuse/Narcan.cfm