

Naloxone Based Harm Reduction: Implementation in the State of Kentucky

Introduction

The purpose of this document is to develop a guideline for prescribing and dispensing naloxone in the state of Kentucky in order to prevent opioid overdose deaths. This document contains guidance for prescribers and pharmacists wishing to incorporate naloxone into their practices, including legal considerations, prescription templates, specific setting applications, billing, and working interprofessionally to identify high-risk individuals. An important aspect of this guideline is educating patients and their family and/or friends about overdose prevention, recognition, and response.

With recently passed state legislature (HB 366) and growing government support of prescribing naloxone for opioid overdose prevention, Kentucky practitioners are primed and ready to prevent opioid overdose deaths. Kentucky not only has the second highest rate of accidental prescription painkiller overdose, but is also facing a growing heroin problem resulting in part from 2012's House Bill 1, which limited access to prescription opioids. Kentucky has a need for harm reduction via naloxone to improve its citizens' health and safety and prevent countless opioid overdose deaths

Naloxone Background

- **Naloxone (Narcan®)**^{1,2}
 - **Mechanism:** Pure mu opioid receptor antagonist and opioid overdose antidote. It is extremely fast acting and has a duration of 30-120 minutes.¹
 - **Dose:**
 - Adult dose for opioid overdose reversal is 0.4-2 mg IV/IM/SQ.
 - May be repeated as needed up to a maximum dose of 10 mg.
 - It is currently available in two solution strengths: 0.4 mg/mL and 1 mg/mL.
 - **Administration**
 - Can be administered intravenously, intramuscularly, subcutaneously, or off-label intranasally.
 - Intranasal used by first responders to prevent potential needlestick injuries and accidental disease transmission.
 - Delivery via the intranasal route as opposed to the intramuscular or intravascular routes has been identified as a simple and feasible public health intervention to prevent opioid overdose deaths and protect third parties who administer naloxone.³
 - **Safety:**
 - There is a low incidence of serious adverse effects and death following naloxone reversal of opioid overdose

- There is no tolerance build up, dependence, or abuse potential associated with naloxone use.
- Common adverse reactions to naloxone are minimal and include flushing, tachycardia, agitation, hot flashes, and shivering.¹ These effects are consistent with and most likely caused by acute opioid withdrawal rather than the naloxone itself.
- Naloxone can cause rare but serious side effects including violent behavior and aggressiveness, pulmonary edema, seizures, tremor, tachycardia, and ventricular fibrillation.¹

- **Opioid Overdose and Prevention**

- **Opioid:** refers to all opioid receptor agonists, including prescription medications and illicit drugs. Common opioid substances associated with frequent overdoses are:
 - Natural: morphine, codeine
 - Semi-synthetic: hydromorphone, hydrocodone, oxycodone, buprenorphine, and heroin
 - Synthetic: meperidine, tramadol, propoxyphene, methadone, fentanyl, sufentanyl, and alfentanil

- **Opioid Overdose**

- Chronic users of opioid substances develop a tolerance to their analgesic and euphoric effects. Many people accidentally overdose in an attempt to achieve consistent effects despite increased tolerance. Overshooting is easy because opioid substances are very potent and their effects can be augmented by combining them with other central nervous system depressants, such as alcohol, benzodiazepines, and barbiturates.
- Signs and Symptoms: **respiratory depression (<12 bpm), miosis, stupor**, blue lips/fingertips, bradycardia, skin flushing, cold and clammy skin, sweating, nausea and vomiting, hypotension, hypothermia, choking or gurgling sounds, coma, and not responsive to stimulation.

- **Overdose Risk Factors:** these factors either make it more likely that a person will overdose or that they will have greater difficulty being reached by emergency responders if an overdose were to occur. Risk factors include the following:

- Concurrent use of opioids with other depressant substances including:
 - Alcohol
 - Antidepressants: selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs)
 - Sedative/hypnotics: barbiturates (phenobarbital), benzodiazepines (Xanax®, Valium®, Klonopin®, Ativan®), and non-benzodiazepine hypnotics (Ambien®, Sonata®, Lunesta®)
 - Stimulants (cocaine, amphetamines)

- Opioid Strength/Dose
 - High dose prescription (>100 mg/day morphine equivalence)
 - Methadone prescription (accounts for 1 in 3 opioid related overdose deaths)⁵
 - Buprenorphine prescription (often used for opioid maintenance/to treat opioid dependence, suggests increased risk due to history)
 - Change in opioid dose or type
- Loss of Tolerance: taking opioids after a period of abstinence, including:
 - Incarceration
 - Hospitalization
 - Discharge from an opioid detoxification or abstinence-based program
- Physical Health: concurrent disease states that affect opioid use or metabolism
 - Respiratory dysfunction: smoking, COPD, emphysema, asthma, sleep apnea, or respiratory infections
 - Immunocompromised states: HIV/AIDS
 - Renal or hepatic disease
- History of Substance Use/Abuse
 - Suspected or confirmed history of prescription opioid or injection drug abuse
 - Recent medical care required for opioid poisoning/intoxication/overdose
- Limited access to emergency medical services (remote location)
- **Overdose Prevention**⁶: preventative measures for people taking prescription or illicit opioid substances.
 - Licit: prescription opioids
 - Do not mix opioids with other medications or alcohol
 - Only take medications that your doctor has prescribed or deemed ok to take
 - Keep careful track of your opioid daily consumption
 - Do not take more than instructed by your provider
 - Do not take larger or more frequent doses in an attempt to get better pain control
 - Know the difference between “immediate release” and “extended release” formulations
 - Be in the presence of a friend or family member if you are opioid naïve, starting a new opioid prescription, or have a lowered tolerance
 - Create an overdose plan and share with family, friends. This includes having naloxone on hand and making sure that friends and family know how to use it in case of an overdose
 - Store opioids in a secure place and dispose of them properly when they expire or are no longer needed.

- Only see one doctor and fill your prescriptions at one pharmacy for painkiller prescriptions
 - Illicit: heroin
 - Do not mix heroin with medications or alcohol
 - Be in the presence of a friend, family member, or other people if using opioids
 - Create an overdose plan and share with family, friends. This includes having naloxone on hand and making sure that friends and family know how to use it in case of an overdose
- **Overdose recognition**⁶
 - Person is unresponsive and has respiratory depression, stupor, flushing of skin, clammy skin, nausea and vomiting, slowed heart rate, choking or gurgling noises, hypothermia, blue lips and fingertips, pinpoint pupils, or coma.
- **Overdose Response**⁶:
 - **Stimulation**: check for responsiveness by giving a light pinch or shake, call their name, tell them you're going to give them naloxone.
 - **Give naloxone**
 - Intranasal: remove prefilled naloxone syringe cap and mucosal atomizer device cap, screw them together. Insert atomizer tip in to nostril, spray half of the syringe in to each nostril. If this is not effective, give a repeat administration 2-5 minutes later.
 - Intramuscular: remove the cap from the naloxone vial. Uncover the needle on the syringe and push through the rubber plug of the vial. Turn the vial upside down and pull back on the syringe plunger in order to draw up 1 mL. Inject 1 mL of naloxone at a 90 degree angle into a large muscle, such as the upper arm (deltoid), upper thigh, or outer buttocks.
 - **If breathing resumes**, inform the person what happened, comfort them, and stay with them until paramedics arrive. Help them to not use more opioids right away and be prepared to administer an additional dose of naloxone in 30-90 minutes because it can wear off and the overdose can return.
 - **Call 911**
 - **Check for breathing**:
 - **Airway**: open their mouth and make sure their airway is clear. Remove any visible obstructions, make sure nothing is in mouth (pills, cheek patches, syringe cap, etc).
 - **Rescue breathing**: place person on their back, tilt their head back, perform head tilt-chin lift (with one hand, tilt head back, with two fingers of your other hand, lift chin up), pinch nose closed, make a tight seal over mouth and give two rescue breaths. Chest should rise, not stomach (if the chest does not rise, tilt the head back more and ensure that you

are plugging their nose closed). If still not breathing, give 1 rescue breath about every 5 seconds. Continue rescue breathing until paramedics arrive.

- **Put in recovery position** if breathing will prevent from choking if they vomit.

- **Naloxone prescribing for third-party administration**

- **Background: KRS 217.186 Provider prescribing or dispensing naloxone -- Administration by third party** (effective June 24th, 2013)

(1) A licensed health-care provider who, acting in good faith, directly or by standing order, prescribes or dispenses the drug naloxone to a patient who, in the judgment of the health-care provider, is capable of administering the drug for an emergency opioid overdose, shall not, as a result of his or her acts or omissions, be subject to disciplinary or other adverse action under KRS Chapter 311, 311A, 314, or 315 or any other professional licensing statute.

(2) A prescription for naloxone may include authorization for administration of the drug to the person for whom it is prescribed by a third party if the prescribing instructions indicate the need for the third party upon administering the drug to immediately notify a local public safety answering point of the situation necessitating the administration. A person acting in good faith who administers naloxone as the third party under this section shall be immune from criminal and civil liability for the administration, unless personal injury results from the gross negligence or willful or wanton misconduct of the person administering the drug.

- **Costs savings potential**

- According to North Carolina based Project Lazarus, a naloxone kit containing 2 prefilled naloxone syringes and 1 atomizer for intranasal administration costs ~ \$30⁷.
- In 2006, the estimated total cost in the United States of nonmedical use of prescription opioids was \$53.4 billion, of which \$42 billion (79%) was attributable to lost productivity, \$8.2 billion (15%) to criminal justice costs, \$2.2 billion (4%) to drug abuse treatment, and \$944 million to medical complications (2%).⁹ Additionally, The estimated cost of lost productivity due to mortality from prescription opioid poisoning was \$12.4 billion in 2005.⁹
- Naloxone has the potential to cut medical spending on both macroscopic and individual health system and patient levels. Using naloxone to reverse opioid overdoses has the potential to lessen overall damage severity and prevent complications related to prolonged oxygen deprivation, thereby reducing healthcare costs.⁹ These indirect medical costs as well as productivity losses represent a significant portion of the opioid overdose economic burden this country faces, especially in states where opioid abuse is prevalent, such as Kentucky.


- **Applicable settings**
 - **Emergency departments:** give patient a naloxone prescription, and provide educational and materials on opioid overdose prevention, recognition, and reversal following admittance to the ED due to opioid overdose. The ED may also recognize known or suspected opioid abusers, to whom they could also give naloxone and provide education.
 - **Palliative care/pain management programs:** because opioids are commonly prescribed in order to manage severe pain, these programs/settings would be ideal to identify high risk patients (see inclusion criteria), especially those with high dose opioid prescriptions (>100 mg morphine equivalent/day)
 - **Opioid addiction recovery programs:** even though these patients are receiving treatment for their opioid addiction, addiction is a lifelong disease that patients have to deal with on a chronic basis. Even if the patient successfully completes treatment, there is always a chance of relapse.
 - **Any prescriber who prescribes opioids:** patients that meet inclusion criteria (see prescribing section) could be candidates to receive a naloxone prescription and accompanying education and materials.
 - **Current opioid abusers:** this includes people who abuse both prescription and illicit opioid substances. Receiving naloxone not only has life-saving potential, but may also serve as an initial event or stepping stone towards seeking treatment.
 - **Public health programs⁶:** several existing public health programs in other states dispense naloxone opioid overdose reversal kits in exchange for attending a training session on preventing, recognizing, and responding to overdose. The kits are usually dispensed by one specific pharmacy and funded via grants or public health departments or operate as non-profit organizations. These program training sessions provide valuable information, establish a safe place to discuss addiction, and help take away from the stigma surrounding opioid addiction, thus encouraging addicts to seek treatment.

- **Prescribing guidelines**
 - Naloxone shall be prescribed for the purpose of prevention and/or reversal of opioid overdose pursuant to the inclusion and exclusion criteria.
 - **Inclusion criteria⁸**
 - High dose opioid prescription (>50 mg morphine equivalent/day)
 - Previous opioid overdose
 - Opioid naïve patients receiving any opioid prescription
 - Patients receiving rotating opioid medication regimens (due to risk of incomplete cross-tolerance)
 - Patients being prescribed an opioid who also have:
 - Limited access to emergency medical services (remote location)

- Concurrent use of alcohol, benzodiazepines, antidepressants, or other prescription sedatives or central nervous system depressants
 - Concurrent disease states including renal dysfunction, hepatic dysfunction, and pulmonary dysfunction
 - Requested by patient or caregiver
 - Prescribed methadone or buprenorphine for opioid maintenance
 - Known or suspected history of prescription opioid or injection drug abuse
 - Patients with a history of opioid abuse being released from substance abuse treatment program, detox program, jail, or any similar circumstance where they have been kept opioid-free and are now subject to greatly diminished tolerance
- **Exclusion criteria**
 - Known allergy or hypersensitivity to naloxone or any components of the formulation¹
- **Dosing**¹
 - **IV, IM:** Initial dose of 0.4-2 mg. May need to repeat doses every 2-3 minutes if no overdose reversal seen with first administration.
 - Naloxone has a short duration (30-120 minutes) compared to most opioids (3-6 hours). Thus, there may be a need to readminister dose(s) after 3-60 minutes depending on the type/duration of opioid that was overdosed.
 - **Intranasal (unlabeled route):** 2 mg (1 mg per nostril). May repeat dose after 3-60 minutes if respiratory depression persists.
- **Prescription Template:**
 - Naloxone can be prescribed in the state of Kentucky by physicians, doctors of osteopathy, dentists, podiatrists, advanced practice registered nurses, and physicians assistants.¹⁰
 - The following templates can be used by prescribers, depending on naloxone product formulations that the pharmacy carries (see Dispensing, pages 9-10 for options)

| | |
|---|----------------------|
| Prescriber Name: _____ Address: _____ City, State, ZIP code: _____ Phone Number: _____ Patient Name: _____ Date of Birth: _____ Street Address: _____ City, State, ZIP Code: _____ | R_x |
| <p>Naloxone HCl 1 mg/mL 2 x 2 mL as single dose pre-filled Luer-Jet™ –Needleless Syringe (NDC 76329-3369-1) OR Naloxone HCl 0.4 mg/mL 2 x 1 mL Carpuject™ Luer Lock Glass Syringe (NDC 0409-1782-69)</p> <p>2 x Intranasal Mucosal Atomizing Device (MAD 300)</p> <p>Refills: _____</p> <p>For suspected opioid overdose, spray 1 mL in each nostril. Repeat after 3 minutes if no or minimal response.</p> <p>Note to Pharmacist: Call 1-800-788-7999 to order MAD 300.</p> <p>Prescriber Signature: _____ Date: _____</p> | |

| | |
|--|----------------------|
| Prescriber Name: _____ Address: _____ City, State, ZIP code: _____ Phone Number: _____ Patient Name: _____ Date of Birth: _____ Street Address: _____ City, State, ZIP Code: _____ | R_x |
| <p>Naloxone HCl 0.4 mg/mL 2 x 1mL single dose vials (NDC 0409-1215-01) Refills: _____</p> <p>Intramuscular (IM) syringe, 23 G, 3cc, 1 inch Qty: _____ Refills: _____</p> <p>For suspected opioid overdose, inject 1 mL in deltoid or thigh. Repeat after 3 minutes if no or minimal response.</p> <p>Prescriber Signature: _____ Date: _____</p> | |

| | |
|---|---|
| Prescriber Name: _____ Address: _____ City, State, ZIP code: _____ Phone Number: _____ Patient Name: _____ Date of Birth: _____ Street Address: _____ City, State, ZIP Code: _____ |  |
| <p>Naloxone HCl 1 mg/mL 2 x 2 mL Min-I-Jet Prefilled syringe with 21 Gauge and 1 ½” fixed Needle (NDC 76329-1469-1) Refills: _____</p> <p>Use as directed for suspected opioid overdose. Repeat after 3 minutes if no or minimal response.</p> <p>Prescriber Signature: _____ Date: _____</p> | |

- **New prescriptions:** patients must receive educational materials on preventing an opioid overdose, recognizing an opioid overdose, activating the emergency response system, and administering naloxone during an overdose situation. Patient shall also be informed of laws pertaining to naloxone administration to a third party (KRS 217.186)
- **Dispensing guidelines⁸**
 - **Naloxone:** currently available for single-use in 2 strengths: 0.4 mg/mL and 1 mg/mL
 - **0.4 mg/mL naloxone is available in 2 forms from Hospira**
 - **NDC 00409-1215-01:** 1 mL single dose vial, ~\$12.99 each. Available in boxes of 10
 - **NDC 0409-1782-69:** 1 mL Carpuject™ Luer Lock Glass Syringe (no needle), ~\$98 each. Available in boxes of 10.
 - Place an order with Hospira at <http://www.hospira.com> or by calling 1-877-9HOSPIRA (877-946-7747).
 - **1 mg/1 mL naloxone is available in 2 forms from IMS/Amphastar**
 - **NDC 76329-1469-1:** 2 mL Min-I-Jet Prefilled syringe with 21 Gauge and 1½” fixed Needle. Available in cases of 10 or 25.
 - **NDC 76329-3369-1:** 2 mL Luer-Jet™ - Needleless Syringe to be used with mucosal atomizing device MAD300 for intranasal administration. Available in boxes of 10.
 - Place an order with IMS/Amphastar at <http://www.amphastar.com> or by calling 1-800-423-4136.

- Store at 20°C to 25°C (68°F to 77°F). Protect from light.¹
- **Dose delivery tools**
 - **Intramuscular (IM) administration:** there are numerous manufacturers for IM syringes (23 Gauge, 3 mL, 1”).
 - **Intranasal (IN) administration:** the mucosal atomization device (MAD300) from LMA North America fits onto the Luer-Jet™ - Needleless Syringe naloxone from IMS/Amphastar. To order visit www.lmana.com or call 1-800-788-7999. It may take 24 hours to set up an account with LMA, and the minimum order size is 25.
- **Naloxone Kits:** many existing naloxone based harm reduction programs and pharmacies across the country dispense naloxone as part of a small kit. These kits contain naloxone and additional supplies needed to respond to an opioid overdose. Here are three suggested kit contents options, depending on naloxone product formulations carried by the pharmacy:
 - **Option 1: IN administration**
 - 2 x naloxone 1 mg/mL 2mL Luer-Jet™ - Needleless Syringe (NDC 76329-3369-1) OR 2 x naloxone 0.4 mg/mL 1 mL Carpuject™ Luer Lock Glass Syringe (NDC 0409-1782-69)
 - 2 x intranasal mucosal atomizing devices
 - Step-by-step instructions for intranasal naloxone administration
 - Additional materials (recognizing and responding to an opioid overdose).⁶
 - **Option 2: IM administration**
 - 1 x naloxone 10 mL multidose vial (NDC 0409-1219-01) OR 2 x naloxone 1 mg/1 mL vials (NDC 00409-1215-01)
 - 2 x IM syringe, 23 Gauge, 3 mL, 1”
 - 1-2 pairs sterile gloves
 - Step-by-step instructions for intranasal naloxone administration
 - Additional materials (recognizing and responding to an opioid overdose).⁶
 - **Option 3: IM administration**
 - 2 x naloxone 2 mg/2 mL Min-I-Jet Prefilled syringe with 21 Gauge and 1½” fixed Needle (NDC 76329-1469-1)
 - -2 pairs sterile gloves
 - Step-by-step instructions for intranasal naloxone administration
 - Additional materials (recognizing and responding to an opioid overdose).⁶
- **Patient or Family Counseling**
 - Persons who are in close contact to a high risk individual will need training on overdose recognition and the steps to follow as outlined

above. Assess, call 911, Give Naloxone, Rescue Breathe, Rescue Position, Stay Until Help Arrives

- The pharmacist will need to counsel the patient and or family member on how to administer naloxone depending on the route of administration chosen by the prescriber. The patient/family member will need training on how to prepare naloxone injection or injection for nasal spray and administration technique.

- **Billing**

- **For Prescribers:** many private health insurance plans, Medicare, and Medicaid cover naloxone for the treatment of opioid overdose, but policies vary by state. Medicaid in Kentucky currently does not provide reimbursement for naloxone.
 - The codes for Screening, Brief Intervention, and Referral to Treatment (SBIRT) can be used to bill time for counseling a patient about how to recognize overdose and how to administer naloxone.¹¹ Billing codes for SBIRT are as follows¹¹:
 - Commercial Insurance: CPT 99408 (15 to 30 minutes)
 - Medicare: G0396 (15 to 30 minutes)
 - Medicaid: H0050 (per 15 minutes)
- **For Pharmacists:** determining how to bill for naloxone kits may be one of the more challenging aspects of implementing naloxone dispensing.
 - Cash pricing
 - Compounding prescription code: no specific code exists for this type of medication kit, thus presenting reimbursement challenges or pharmacists.
- **Public health program funding:** many existing naloxone based harm reduction programs in the United States are funded by grants or public health departments or operate as non-profit organizations (see Applicable settings, page 6).

- **Patient and Family, Peer, Caregiver Education**

- Patients and family members, selected peers, and caregivers should be provided with an overdose plan that contains educational materials on the essential pieces of knowledge needed to respond well to an overdose, including prevention of opioid overdoses, recognition of an overdose, and overdose response strategies

- **Documentation**

- Kit dispensing
- Program enrollment (if applicable)
- Patient training
- Overdose report back and naloxone refill form

- **Prescriber and Pharmacy Roles and Relationship**

- **Prescriber Role**

- The initial role of the prescriber is to assess patients to identify those who are at risk for opioid overdose (see inclusion criteria). This will involve taking a thorough and specific patient history. Prescribers can use various drug abuse screening tools, such as the DAST-10, to identify patients who abuse opioids and, therefore, are at risk.¹¹
- The prescriber will provide the patient with education about what naloxone is, what it does, general measures towards preventing an overdose, overdose recognition, and how to respond to an overdose situation. The prescriber will work with the patient to develop an individualized “overdose plan” that can be shared with family members, peers, or caregivers.¹¹ It will be important for these people to be educated so that they will be able to recognize overdose and administer naloxone to the patient in an overdose situation.
- The prescriber should explain to the patient and his or her selected family, peers, or caregivers the legality of third party naloxone administration so that there is no confusion. It could be helpful to draw comparisons to EpiPen® prescriptions for patients with peanut allergies. An EpiPen® can be prescribed to a child to be used if he or she were to suffer an anaphylactic reaction. Even though the EpiPen® is prescribed to the child, it can be legally administered to the child by someone else in the event that the child suffers a severe allergic reaction. Similarly, naloxone can be prescribed to patient John Doe so that if he were to experience an opioid overdose, then his friend, family member, or peer could administer it to him without facing charges. Additionally, if John Doe were to witness someone else experiencing an opioid overdose, then he would be able to administer it to that individual and not face charges.
- Naloxone based harm reduction programs help to build and patient-provider relationships and promote the patient’s role in managing their own health.
- Naloxone prescribing concurrently with every opioid prescription could be considered to protect the patient and his or her family members, roommates, or pets who may accidentally ingest the medication.
- The prescriber should regularly reassess patients with chronic opioid prescriptions for signs and symptoms of addiction or dependence. If suspected, the prescriber should provide a referral to an addiction specialist for assessment or placement in a formal addiction treatment program.¹¹

- **Pharmacist Role**

- The role of the pharmacist is not only to stock naloxone and the appropriate drug delivery materials for opioid overdose reversal, but to also to provide education

about naloxone, the process of preventing, recognizing, and responding to an overdose

- If a patient is receiving naloxone concurrently with an opioid prescription, pharmacists can also educate on safe opioid use practices. Even if the patient has already received this information from their prescriber, it is beneficial for the pharmacist to reiterate and give his or her input as well, as they may have a different way of explaining things or fill in educational gaps.
- The pharmacist's role also extends to identifying previously unrecognized patients who abuse illicit drugs and/or may be at risk for an opioid overdose. According to the 2013 Gallup survey, pharmacists are the second most trusted healthcare professionals in the United States, second only to nurses. This unique trusting relationship along with access to medical information puts pharmacists in good position to identify people who may be abusing opioid substances.
- After recognizing a patient who is at risk for opioid overdose for any reason, the pharmacist could contact the patient's current prescriber, refer the patient to a naloxone prescriber, or refer the patient to a free naloxone public health program (if one exists).

- **Prescriber and Pharmacist relationship¹¹**

- Due to the unique nature of naloxone prescribing, patient education, and the delivery methods of naloxone for overdose reversal, it would be wise for prescribers and pharmacists/pharmacies to establish relationships with the goal of implementing naloxone based harm reduction. If a prescriber is caring for a large patient population that is likely to benefit from naloxone and plans on prescribing it as routine practice, it would be especially wise for the prescriber and a pharmacy to form a relationship so that there can have adequate inventory. This will allow for the pharmacy to stock naloxone and administration supplies without as much concern for having a low product turnover rate or letting it sit on the shelf and expire, generating waste.
- An established relationship between a prescriber and a pharmacy would provide patients with convenience, as they would not have to special order supplies and they would only need to go to one pharmacy to find what they were looking for. The patient may also feel more comfortable picking up their supplies at a pharmacy that regularly fills naloxone prescriptions and has an established understanding of the goal of harm reduction, as there is a certain stigma in our society surrounding opioid abuse and even legitimate opioid use.
- Collaborative practice protocol agreements currently exist in many states including California, Washington, and Rhode Island. These agreements exist between a single patient, prescriber, and pharmacist and allow the pharmacist to prescribe

and dispense naloxone. Although this type of collaborative care agreement for prescribing and dispensing naloxone does not currently exist in Kentucky, perhaps it will in the future.

Conclusion Statement

According to Jill Harris, the Managing Director of Strategic Initiatives for the Drug Policy Alliance, “Tens of thousands of lives could be saved if naloxone were more widely available and more people (including doctors, pharmacists and other health care professionals, as well as law enforcement professionals, many of whom are currently unfamiliar with naloxone), were trained in its use. Providing take-home naloxone to opioid users, along with instructions in its use, could significantly reduce the number of accidental overdose deaths.”¹²

Overall, prescribing take home naloxone for third-party administration can help numerous patients, ranging from patients with pain, to those recovering from opioid addiction, to IV drug abusers. Naloxone is currently widely used by EMS in emergency situations and nurses in hospitals to reverse opioid overdoses. With naloxone based harm reduction, there is huge potential to impact thousands of lives.

References

1. Naloxone. Lexi-Drugs Online [Internet]. Hudson (OH): Lexi-Comp, Inc. 1978-2013 [Accessed 2013 Oct 23]. Available from: https://online.lexi.com/lco/action/doc/retrieve/docid/patch_f/7338.
2. Wermeling DP. Opioid Harm Reduction Strategies: Focus on Expanded Access to Intranasal Naloxone. *Pharmacotherapy* 2010;30(7):627–631.
3. Doe-Simkins M, Walley AY, Epstein A, Moyer P. Saved by the nose: bystander-administered intranasal naloxone hydrochloride for opioid overdose. *Am J Public Health*. 2009 May;99(5):788-91.
4. National Treatment Agency for Substance Abuse. Life saving kits to be given to families of injecting drug users in groundbreaking scheme [press release]. UK National Health Service. June 25, 2009.
5. Vital Signs: Risk for Overdose from Methadone Used for Pain Relief — United States, 1999–2010. *MMWR* 2012;61e, No 703;1.
6. City and County of San Francisco Department of Public Health. “Naloxone Training For Providers”. 8 Nov 2012. Available from: http://www.sfdph.org/dph/files/CBHSdocs/NaloxoneTraining_11082012.pdf.
7. Leavitt S. “Intranasal Naloxone for At-Home Opioid Rescue.” *Practical Pain Management*, Oct 2010:42-46.
8. Prescribetoprevent.org
9. Hansen RN, Oster G, Edelsberg J, Woody GE, and Sullivan SD. Economic Costs of Nonmedical Use of Prescription Opioids. *Clin J Pain*. 2011;27:194–202.
10. KRS 217.015(35). Available from: <http://www.lrc.ky.gov/Statutes/statute.aspx?id=9265>.
11. SAMHSA toolkit for opioid overdose: prescribers. Available from: http://www.integration.samhsa.gov/Opioid_Toolkit_Prescribers.pdf.
12. Harris J. No one deserves to die by overdose. AlterNet [online]. Jun 2009. www.alternet.org/story/140618/.