Saving Veterans Lives through Implementation of Opioid Overdose Education and Naloxone Distribution (OEND)

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Conflict of Interest and Disclosure

- No fiduciary conflicts of interest to disclose
- Will discuss an intranasal naloxone kit with an intranasal device that is not FDA-approved for naloxone delivery (off-label use)
- Received funding from the VA Health Services Research & Development Quality Enhancement Research Initiative (RRP-13-446) to conduct a formative evaluation of VA OEND implementation in Veterans Integrated Service Networks (VISNs) 10 and 21
Acknowledgments

• National
  – VA OEND National Support & Development Workgroup; VA OEND Spanish Translation Workgroup
  – Pharmacy Benefits Management Services (PBM); National Academic Detailing Program
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  – MHS Web Services Team and Matthew McCaa (OEND SharePoint)
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  – VA HSR&D Quality Enhancement Research Initiative (RRP 13-446)

• VISN/Facility
  – Jesse Burgard, Veterans Integrated Service Network (VISN) 10
  – Initial VA OEND pilot programs: VISN 10, Atlanta, Brockton, Palo Alto, Salt Lake City, San Francisco, Providence

• Community
  – Eliza Wheeler and Sharon Stancliff: Harm Reduction Coalition
  – Alexander Walley: Boston University, Massachusetts Dept. of Public Health
  – Phillip Coffin: UC San Francisco, San Francisco Dept. of Public Health
Overview

• Background on OEND

• VA OEND Implementation
Overview

• Background on OEND
  – Context
  – Definition
  – Evidence-base

• VA OEND Implementation
Minimizing Adverse Events

- Opioid Overdose Education and Naloxone Distribution (OEND) is one component of an overall VA emphasis on providing effective treatments for opioid use disorders and pain management in a manner that minimizes risk of adverse events
  - Target patient populations for OEND: (1) opioid use disorder, (2) prescribed opioids

- VA facilitates providers using specific tools to minimize these risks, including:
  - Engaging in a risk-benefit discussion and obtaining informed consent for chronic opioid therapy
  - Urine Drug Screening for illicit drug use and prescription adherence monitoring
  - Minimizing co-prescription of sedatives
  - Substance Use Disorder (SUD) specialty treatment
  - Opioid Agonist Treatments (OAT) such as buprenorphine and methadone
  - Mental health treatment, suicide prevention and safety planning
OEND

• Opioid Overdose Education (OE)
  – Provide patient education on how to prevent, recognize, and respond to an opioid overdose

• Naloxone Distribution (ND)
  – Provide patient with a naloxone kit
    • Train patient on how to use naloxone kit (e.g., how to assemble components)
Evidence-base for OEND

3 models

1. Initial Public Health model
   • Distribution to high-risk individuals in the community (primarily injection heroin users)
   • Evidence for effectiveness and cost-effectiveness

2. Expanded Public Health model
   • Distribution to high-risk populations and self-identified potential bystanders
   • Evidence for reduced mortality

3. Health Care model
   • Distribution to patients by health care systems and providers
   • Limited, but growing evidence
Scotland established national program in 2010
  – Implementation strongly supported by successful pilot programs in both urban and rural areas of Scotland (McAuley et al., 2012)
  – Patient Group Direction allows qualified nurses or pharmacists to supply naloxone to anyone they identify as at-risk of opioid overdose; may also give to family/friends of at-risk person (with consent) and staff who work with at-risk populations
    • Primarily distributed via harm reduction (needle exchange and outreach) and SUD treatment programs; recent focus on improving prison service engagement
  – Interest in developing a general practice model (Matheson et al., 2014)

Project Lazarus and Fort Bragg, NC (patients prescribed opioids)
  – Community-based, multi-faceted intervention; risk stratification to identify patients
  – Project Lazarus—Overdose death rate (per 100,000) in Wilkes County dropped from 46.6 in 2009 to 29.0 in 2010 (Albert et al., 2011)
  – Fort Bragg, NC—0 overdoses (FDA, 2012); importance of prevention and education

VA case report: fentanyl overdose, naloxone reversal (Fareed et al., 2015)

Colorado health system study of primary care staff (Binswanger et al., 2015)
Gaps in Evidence Base

- Limited evidence for OEND to patients prescribed opioids and treatment-seeking patients with opioid use disorders
- Intranasal device not FDA-approved for naloxone delivery
- Newly released auto-injector (EVZIO®)
- Only 1 published case report regarding OEND among Veterans
- However, per recent ASAM National Practice Guideline: “The Guideline Committee, based on consensus opinion, recommends that patients who are being treated for opioid use disorder and their family members/significant others be given prescriptions for naloxone. Patients and family members/significant others should be trained in the use of naloxone in overdose” (p. 130).
FOR IMMEDIATE RELEASE: November 5, 2015

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KAINE INTRODUCES BILL TO HELP PREVENT OPIOID OVERDOSE DEATHS

WASHINGTON, D.C. - Today, U.S. Senator Tim Kaine introduced legislation to help prevent opioid overdose deaths by encouraging physicians to co-prescribe the life-saving drug naloxone alongside opioid prescriptions and by making naloxone more widely available in federal health settings. The Co-prescribing Saves Lives Act will enable more health professionals to get naloxone - a safe and effective antidote to opioid overdoses - into the homes of people who are at-risk of overdose.

“In every corner of Virginia, the drug abuse epidemic is hurting families, challenging local law enforcement and leaving businesses without a capable workforce,” said Kaine. “A particularly heartbreaking aspect of this crisis is that many of the deaths from opioid and heroin overdoses could have been prevented. My bill would increase access to medication that can save someone’s life during an overdose and establish clear prescribing guidelines that will help get vital information about opioids to doctors and patients.”

The Co-prescribing Saves Lives Act would require the Secretary of Health and Human Services, Secretary of Defense, and Secretary of Veterans Affairs to establish physician education and co-prescribing guidelines for federal health settings, including VA hospitals, DOD hospitals, Indian health service facilities and Federally-Qualified Health Centers. Additionally, the bill would authorize a program to grant state Departments of Health funding that would help them establish co-prescribing guidelines, purchase naloxone, and fund training for health professionals and patients.
Overview

• Background on OEND

• VA OEND Implementation
  – Need and Support for OEND
  – Technical Assistance
  – Evaluation Studies
  – OEND and Substance Abuse Treatment Staff and Researchers
Opioid overdose epidemic
- Veterans *twice* as likely to die from accidental overdose compared to non-Veterans (Bohnert et al., 2011)

Successful VA pilots
- In fall 2013 Cleveland VA was first to implement OEND; inspired VISN 10 to implement OEND in *every facility* in FY14 as part of a phased roll-out
- Overwhelmingly positive response

**OEND SAVES LIVES!**
- 11,500+ kits dispensed from 139 VA facilities with 124 reported opioid overdose reversals (as of 11/2/15)

Figure 1. Age-adjusted rates for drug-poisoning deaths, by type of drug: United States, 2000–2013

Hedegaard et al., 2015
4. VA providers should consider providing OEND to Veterans who are at significant risk of opioid overdose. Clinical judgment about risk/benefit and patient-centered care involving Veterans and their significant others in shared decision-making should guide decisions on provision of OEND.

- Naloxone kits and auto-injector added to National Drug File
- “Free-to-Facilities” Naloxone Kit Initiative
  - Potential to provide up to 28,000 kits—paid for by PBM—to be dispensed to VA patients without the medical center incurring the cost of the kits (standard Veteran co-payment rules apply to the kits)
- Recommendations for Issuing Naloxone Kits and Naloxone Autoinjectors for the VA OEND Program (June 2015; RFU)
Discuss naloxone as an opioid harm reduction / risk mitigation option with patient and/or family/carer and document the discussion in the patient’s medical records.

Offer naloxone kits to Veterans prescribed or using opioids who are at increased risk for opioid overdose or whose provider deems, based on their clinical judgment, that the Veteran has an indication for a naloxone kit.
VA Naloxone Kit Components

VA Intranasal Naloxone Kit
- 2 mucosal atomizer devices
- 2 Luer-lock prefilled syringe naloxone 1 mg/mL (2mL)
- 1 Laerdal face shield
- 1 pair nitrile gloves
- 1 opioid safety brochure
- 1 intranasal naloxone kit brochure
- 1 blue zippered pouch

VA Intramuscular Naloxone Kit
- Two 3 ml, 25g, 1-inch syringes
- 2 vials naloxone 0.4 mg/mL (1 mL) injection
- 1 Laerdal face shield
- 1 pair nitrile gloves
- 2 alcohol pads
- 1 opioid safety brochure
- 1 intramuscular naloxone kit brochure
- 1 black zippered pouch

NDC 09999-9991-07

NDC 99999-9991-08
VA Auto-injector Naloxone Kit
(includes FDA approved Evzio® naloxone auto-injectors)

- Carton/box contains:
  - 1 auto-injector trainer
  - 2 naloxone 0.4 mg auto-injectors
  - 1 prescribing info
  - 2 instructions for use
  - 1 Laerdal face shield
  - 1 pair nitrile gloves
  - 1 opioid safety brochure
  - 1 auto-injector kit brochure
VA Technical Assistance

• **VA National OEND SharePoint** (Step-by-step instructions for implementation; Quick Guide; **TWO** VA Patient Education Brochures (English and Spanish): (1) patients with opioid use disorder and (2) patients prescribed opioids; Posters; “Program Models”)

• **VA OEND Videos**
  – Intro for People with Opioid Use Disorders [https://youtu.be/-qYXZDzo3cA](https://youtu.be/-qYXZDzo3cA)
  – Intro for People Taking Prescribed Opioids [https://youtu.be/NFzhz-PCzPc](https://youtu.be/NFzhz-PCzPc)
  – How to Use the VA Auto-Injector Naloxone Kit [https://youtu.be/-DQBCnrAPBY](https://youtu.be/-DQBCnrAPBY)
  – How to Use the VA Intranasal Naloxone Kit [https://youtu.be/WoSfEf2B-Ds](https://youtu.be/WoSfEf2B-Ds)
  – How to Use the VA Intramuscular Naloxone Kit [https://youtu.be/lg1LEw-PeTE](https://youtu.be/lg1LEw-PeTE)

• **VA OEND Naloxone Kit Distribution Report**

• **VA Academic Detailing**

• **Opioid Safety Initiative (OSI) & Psychotropic Drug Safety Initiative (PDSI)**

• **Panel Management Tools**
  – Opioid Therapy Risk Reduction Report; Stratification Tool for Opioid Risk Mitigation

• **Forthcoming resources** (Accredited provider training; DVDs for providers and patients)
Choose Before You Use

If at all possible, do not use. There is no safe dose of opioids. Help is available, contact your local VA. But if you do use—Choose!

1. Go Slow - Not taking drugs for even a few days can drop your tolerance, making your “usual dose” an “overdose,” which can result in death. If you choose to use, cut your dose at least in half.

2. Wait - If you choose to use, wait long enough after you use to feel the effects before you even consider dosing again (regardless if IV, snorting, smoking).

3. Let Someone Know - Always let someone know you’re using opioids so that they can check on you. Many who overdose do so when dosing alone.

Buddies take care of Buddies. Share this card with a friend or family member.

www.mentalhealth.va.gov/substanceabuse.asp

(Adapted from the Harm Reduction Coalition, Oakland, CA)

Date Created: 12/14

You are at higher risk for opioid overdose or death when

- You’ve not used for even a few days, such as when you are in the hospital, residential treatment, detoxification, domiciliary, or jail/prison. Lost tolerance = higher risk for overdose (OD).

- You use multiple drugs or multiple opioids, especially: downers/ benzodiazepines/ barbiturates, alcohol, other opioids, cocaine (cocaine wears off faster than the opioid).

- You have medical problems (liver, heart, lung, advanced AIDS).

- You use long-acting opioids (such as methadone) or powerful opioids (such as fentanyl).

- You use alone, and don’t let someone know you are using opioids.

Ask a VA clinician if a naloxone kit is right for you

Important considerations:

- During an overdose the user cannot react, so someone else needs to give naloxone.

- Encourage family and significant others to learn how to use naloxone (see “Overdose Resources” section).

- If you have a naloxone kit, tell family and significant others where you keep it.

- Store naloxone kit at room temperature, out of the heat, cold, and light (e.g., do not store in your car), otherwise naloxone will lose its effectiveness.

CHOOSE BEFORE YOU USE

OPSIOD OVERDOSE PREVENTION

Overdose Resources

SAMHSA Opioid Overdose Prevention Toolkit
- Contains safety advice for patients and resources for family members


Community-Based Overdose Prevention and Naloxone Distribution Program Locator
- Identifies programs outside of the VA that distribute naloxone

http://hopeandrecovery.org/locations/

Prescribe to Prevent
- Patient resources and videos demonstrating overdose recognition and response, including naloxone administration

http://prescribetoprevent.org/video/

“How To” Videos for VA Naloxone Kits
- VA Auto-Injector Naloxone Kit: https://youtu.be/-DQBChAPBY
- VA Intranasal Naloxone Kit: https://youtu.be/We5fZ8Ex-Ds
- VA Intramuscular Naloxone Kit: https://youtu.be/Ig1L6w-PeTE
Signs of Overdose

**Check:** Appears sleepy, heavy nodding, deep sleep, hard to arouse, or vomiting  
**Listen:** Slow or shallow breathing (1 breath every 5 seconds); snoring; raspy, gurgling, or choking sounds  
**Look:** Bluish or grayish lips, fingernails, or skin  
**Touch:** Clammy, sweaty skin  

- If the person shows signs of an overdose, see next section “Responding to an Overdose”

*Even if the person responds to an initial safety check, bystanders should continue to monitor any person with these signs constantly to make sure the person does not stop breathing and die.*

Resources

Consider seeking long-term help at your local VA substance use disorder treatment program.

Help on the Web

- VA Substance Use Disorder Program Locator: [www2.va.gov/directory/guide/SUD.asp](http://www2.va.gov/directory/guide/SUD.asp)  
- Substance Use Disorder Treatment Locator for non-Veterans: [http://findtreatment.samhsa.gov/TreatmentLocator/faces/quickSearch.jsp](http://findtreatment.samhsa.gov/TreatmentLocator/faces/quickSearch.jsp)  
- VA PTSD Programs: [www.va.gov/directory/guide/PTSD.asp](http://www.va.gov/directory/guide/PTSD.asp)

Help is Available Anytime

- Local Emergency Services: 911  
- National Poison Hotline: 1-800-222-1222  
- Veteran Crisis Line: 1-800-273-TALK (8255), or text – 838255

Responding to an Overdose

1. **Check For A Response**  
   - Lightly shake person, yell person’s name, firmly rub person’s sternum (bone in center of chest where ribs connect) with knuckles, hand in a fist  
   - If person does not respond—**Give Naloxone, Call 911**

2. **Give Naloxone, Call 911**  
   - If you have intranasal naloxone, spray one half of the naloxone cartridge into each nostril  
   - If you have intramuscular naloxone, inject 1 mL into muscle of upper arm, upper thigh, or outer buttocks  
   - If you have the naloxone auto-injector, pull device from case and follow voice instructions  
   - When calling 911, give address and say the person is not breathing

3. **Airway Open**  
   - **Rescue Breathing (if overdose is witnessed)**  
   - Place face shield (optional)  
   - Tilt head back, lift chin, pinch nose  
   - Give 1 breath every 5 seconds  
   - Chest should rise  
   - **Chest Compressions (if collapse is unwitnessed)**  
   - Place heel of one hand over center of person’s chest (between nipples)  
   - Place other hand on top of first hand, keep elbows straight, shoulders directly above hands  
   - Use body weight to push straight down, at least 2 inches, at rate of 100 compressions per minute  
   - Place face shield (optional)  
   - Give 2 breaths for every 30 compressions

4. **Consider Naloxone Again**  
   - If person doesn’t start breathing in 2-3 minutes, or responds to the first dose of naloxone and then stops breathing again, give second dose of naloxone  
   - Because naloxone wears off in 30 to 90 minutes be sure to stay with the person until emergency medical staff take over or for at least 90 minutes in case the person stops breathing again

5. **Recovery Position**  
   - If the person is breathing but unresponsive, put the person on his/her side to prevent choking if person vomits
Opioids (e.g., heroin, pain medications) can slow down breathing and lead to accidental death!

*Naloxone is an antidote that can be sprayed into your nose or injected into your muscle/under your skin if you have decreased breathing due to opioids.*

Ask a clinician if a *naloxone kit* is right for you.

Talk to a clinician for more information.
If You Try To
“Sleep It Off”
You May Never Wake Up

Drug overdose is the #1 cause of accidental death for adults taking opioids (e.g., prescription pain medications, heroin)

Learn how to spot an overdose and how to reverse it with naloxone (Narcan®)

To learn more contact:
OEND Kit Distribution (October 2015)

State | # Naloxone Opioid Reversals
--- | ---
AL | 1
CA | 4
CO | 1
CT | 1
GA | 5
MA | 37
MI | 9
MO | 7
OH | 39
PA | 11
RI | 1
SC | 1
UT | 1
WA | 1
WV | 1
Total | 120

Naloxone Kit Fills
- 250+
- 130 - 249
- 60 - 129
- 0 - 59

VETERANS HEALTH ADMINISTRATION
**Opioid Therapy Risk Reduction Report**

This report allows VA clinicians to look at their patients on long term opioids and assess risk mitigation strategies including when a naloxone kit was last dispensed.

<table>
<thead>
<tr>
<th>Present Item</th>
<th>Patient ID</th>
<th>Date of Birth</th>
<th>Last Visit Date</th>
<th>Last Visit PCP</th>
<th>CEP</th>
<th>DAS</th>
<th>OD</th>
<th>Active Rx</th>
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</table>

### Data Definitions:
- **CEP**: Clinician Evaluation of Risk
- **DAS**: Direct Access of Medication
- **OD**: Opioid Dispensation
- **Active Rx**: Active Opioid Rx

### Notes:
- Patients with "Red alert" are not eligible for naloxone kits.
- Select Multiple Patients

### Media:
- Long-term Use: All Opioids
- Long-term Use: All Opioids - Patient List
- Opioid Therapy Risk Reduction Report

### Table:

<table>
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<tr>
<th>Active Opioid Rx</th>
<th>Active Benzodiazepine Rx</th>
<th>Last Naloxone Dispensed</th>
<th>Entry Date National OT Consent</th>
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<tr>
<td>Patient Name Test: Sample Patient 1</td>
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<td>Naloxone Kit</td>
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<td>Clinical Detail on Risk Factors</td>
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<td>Relevant Diagnoses</td>
<td>Active SUD Treatment</td>
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<td>Medication Reconciliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Mitigation Strategies</td>
<td>Appointments</td>
<td></td>
</tr>
<tr>
<td>Most Recent Opioid Prescriber: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Care Provider: Sample Provider 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health Treatment Coordinator: Sample Provider 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHIP Team: Team ABC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Patient Perspectives on OEND (Oliva et al., under review)

- **Participants**
  - 4 focus groups conducted with 21 patients in VA residential tx
    - 6 month program for Homeless Veterans, 3 month SUD tx program

- **Results**
  - **Benefits**
    - Training is interesting, novel, and empowering
    - Kits will save lives
  - **Concerns**
    - Legal and liability issues
    - Kits may contribute to relapse (among non-opioid users NOT opioid users)
    - Needles in intramuscular kit
    - Challenges of involving family in training
  - **Suggestions for improvement**
    - Increasing OEND awareness
    - Active learning (hands-on practice)
    - Improved materials
Risk Compensation

• Minority of individuals in two studies self-reported considering riskier opioid use\(^1\), however, studies of observed behavior find overall drug use remains level or decreases following OEND training\(^2\)
• Focus group results: Concerns about naloxone kits triggering relapse were primarily raised by non-opioid users; opioid users—kits not a relapse trigger
  • “Whether it increases, decreases or triggers someone to go out and use it, at least we have a means to save a life”
• While issue may not come up frequently among treatment-seeking individuals, clinicians should be prepared to discuss concerns
  – Opportunity to discuss recovery and review relapse prevention plans
• “Even if greater access to naloxone does induce greater risk taking, it seems unlikely the damage incurred would exceed the benefit of the greater access”\(^3\)

\(^1\)Strang et al., 1999; Seal et al., 2003
\(^2\) Davis et al., 2015; Doe-Simkins et al., 2014; Galea et al., 2006; Green et al., 2015; Seal et al., 2005; Wagner et al., 2010
\(^3\) Humphreys, 2015
VA Facility Patient Feedback Survey

- Administered after OEND training for quality improvement purposes

- Questions identify whether OEND training is meeting the intended goals (how to prevent, identify, respond to an overdose), and ways to improve training

---

**Overdose Education and Naloxone Distribution (OEND) Patient Feedback Survey**

**GOAL:** You are being asked to provide feedback on the Overdose Education and Naloxone Distribution (OEND) training that you just received. This survey is anonymous so that you can feel free to provide us honest feedback so that we can improve OEND training for future patients who will be trained. Thank you for your feedback and for helping us to improve this training!

1. Overall, how satisfied are you with the OEND training that you received?  
   - "Not at all satisfied"  
   - "Somewhat satisfied"  
   - "Extremely satisfied"  
   
2. How helpful was the OEND training in teaching you how to prevent an overdose?  
   - "Not at all helpful"  
   - "Somewhat helpful"  
   - "Extremely helpful"  
   
3. How helpful was the OEND training in teaching you how to identify an opioid overdose?  
   - "Not at all helpful"  
   - "Somewhat helpful"  
   - "Extremely helpful"  
   
4. How helpful was the OEND training in teaching you what to do during an opioid overdose?  
   - "Not at all helpful"  
   - "Somewhat helpful"  
   - "Extremely helpful"  
   
5. How confident are you that you could administer naloxone if you witnessed an overdose?  
   - "Not at all confident"  
   - "Somewhat confident"  
   - "Extremely confident"  
   
6. How important is it for the program to provide OEND training to patients?  
   - "Not at all important"  
   - "Somewhat important"  
   - "Extremely important"  

Please explain: ____________________________________________________________

___________________________________________________________

7. What are one or two things you learned that you did not already know?  
   ____________________________________________________________
   ____________________________________________________________

8. What are one or two things you would like to learn more about/did not fully understand?  
   ____________________________________________________________
   ____________________________________________________________

9. What can the program do to improve OEND training?  
   ____________________________________________________________
   ____________________________________________________________
OEND Patient Feedback Survey

Veterans in Residential Treatment (N=192)

<table>
<thead>
<tr>
<th></th>
<th>Extremely</th>
<th>Somewhat</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>4.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify opioid overdose</td>
<td>4.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowing what to do during opioid overdose</td>
<td>4.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confident could administer naloxone</td>
<td>4.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of OEND training</td>
<td>4.68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# OEND Patient Feedback Survey

<table>
<thead>
<tr>
<th>Open-ended Questions</th>
<th>Sample Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>How important is it for the program to provide OEND training to patients?</td>
<td>“Everybody needs to be aware of these things even though they don't intend to use. You never know.”</td>
</tr>
<tr>
<td></td>
<td>“Because I've had to try and save people on overdoses before.”</td>
</tr>
<tr>
<td>What are one or two things you learned that you did not already know?</td>
<td>“I did not know about Naloxone before today or the signs and symptoms of an O.D.”</td>
</tr>
<tr>
<td></td>
<td>“How easy it is to overdose after not using for so long.”</td>
</tr>
<tr>
<td>What are one or two things you would like to learn more about/did not fully understand?</td>
<td>“The difference between ‘Benzos’ and other depressants including Opioids”</td>
</tr>
<tr>
<td></td>
<td>“More on CPR training”</td>
</tr>
<tr>
<td>What can the program do to improve OEND training?</td>
<td>“More time and more hands on training”</td>
</tr>
<tr>
<td></td>
<td>“Maybe have hands on training with the dummies. Maybe have a short clip video on scenarios that actually shows opioid [overdose reversal] naloxone”</td>
</tr>
<tr>
<td></td>
<td>“Give everyone a kit to keep in case of emergency”</td>
</tr>
<tr>
<td></td>
<td>“Make it mandatory”</td>
</tr>
</tbody>
</table>
OEND and Substance Abuse Treatment
Staff and Researchers

- Invaluable role for treatment staff to help identify and educate patients
  - Be prepared for staff and patient concerns, especially regarding risk compensation
  - Consider stages of change: A large percentage of reported reversals from detox program; naloxone may help keep less motivated patients connected with SUD tx
- High-risk patients seen across services (SUD/MH, PACT, ED, Detox)
  - Getting OEND implemented in at least one setting has been helpful
- Providers may not be aware of or comfortable providing OEND
  - Models of process of education are available (e.g., videos); harm reduction
- OEND implementation could be integrated into existing processes
  - Screening, intake/assessment; patient education groups to help maximize resources
- Train multiple disciplines to help roll-out education (e.g., nurses, pharmacists)
- A wealth of research opportunities regarding OEND
  - Effectiveness among treatment-seeking individuals
  - Universal vs. targeted prescribing
  - Implementation (e.g. patient education; patient awareness; strategies for implementation)
Please Send Questions/Concerns/Feedback about VA OEND Implementation to Elizabeth.Oliva@va.gov
Initial Public Health Model
Community-Based OEND Training

- 5-10 minutes
- Includes:
  - Opioid overdose risk factors and prevention strategies
  - Recognizing an overdose
  - Responding to an overdose, including stimulation (sternal rub), calling 911, performing rescue breathing and administering naloxone
  - Complete paperwork, issue kit to participant
# Effectiveness Among Opioid Overdose Prevention Programs Providing Naloxone (Wheeler et al., 2015)

<table>
<thead>
<tr>
<th>Program size (by no. of vials of naloxone provided annually)</th>
<th>No. of Sites</th>
<th>No. of laypersons received/prescribed kits (2013)</th>
<th>No. of opioid overdose reversals (2013)</th>
<th>No. of laypersons received/prescribed kits (1996-June 2014)</th>
<th>No. of opioid overdose reversals (1996-June 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (&lt;100)</td>
<td>154</td>
<td>1,709</td>
<td>134</td>
<td>7,867</td>
<td>641</td>
</tr>
<tr>
<td>Medium (101–1,000)</td>
<td>129</td>
<td>7,607</td>
<td>1,351</td>
<td>19,239</td>
<td>4,414</td>
</tr>
<tr>
<td>Large (1,001–10,000)</td>
<td>62</td>
<td>6,117</td>
<td>4,329</td>
<td>29,099</td>
<td>11,807</td>
</tr>
<tr>
<td>Very large (&gt;10,000)</td>
<td>299</td>
<td>22,487</td>
<td>2,218</td>
<td>96,078</td>
<td>9,601</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>644</strong></td>
<td><strong>37,920</strong></td>
<td><strong>8,032</strong></td>
<td><strong>152,283</strong></td>
<td><strong>26,463</strong></td>
</tr>
</tbody>
</table>
Cost-Effectiveness of Distributing Naloxone to Heroin Users for Lay Overdose Reversal

Phillip O. Coffin, MD, and Sean D. Sullivan, PhD

**Background:** Opioid overdose is a leading cause of accidental death in the United States.

**Objective:** To estimate the cost-effectiveness of distributing naloxone, an opioid antagonist, to heroin users for use at witnessed overdoses.

**Design:** Integrated Markov and decision analytic model using deterministic and probabilistic analyses and incorporating recurrent overdoses and a secondary analysis assuming heroin users are a net cost to society.

**Data Sources:** Published literature calibrated to epidemiologic data.

**Target Population:** Hypothetical 21-year-old novice U.S. heroin user and more experienced users with scenario analyses.

**Time Horizon:** Lifetime.

**Perspective:** Societal.

**Intervention:** Naloxone distribution for lay administration.

**Outcome Measures:** Overdose deaths prevented and incremental cost-effectiveness ratio (ICER).

**Results of Base-Case Analysis:** In the probabilistic analysis, 6% of overdose deaths were prevented with naloxone distribution; 1 death was prevented for every 227 naloxone kits distributed (95% CI, 71 to 716). Naloxone distribution increased costs by $53 (CI, $3 to $156) and quality-adjusted life-years by 0.119 (CI, 0.017 to 0.378) for an ICER of $438 (CI, $48 to $1706).

**Results of Sensitivity Analysis:** Naloxone distribution was cost-effective in all deterministic and probabilistic sensitivity and scenario analyses, and it was cost-saving if it resulted in fewer overdoses or emergency medical service activations. In a "worst-case scenario" where overdose was rarely witnessed and naloxone was rarely used, minimally effective, and expensive, the ICER was $14 000. If national drug-related expenditures were applied to heroin users, the ICER was $2429.

**Limitation:** Limited sources of controlled data resulted in wide CIs.

**Conclusion:** Naloxone distribution to heroin users is likely to reduce overdose deaths and is cost-effective, even under markedly conservative assumptions.

**Primary Funding Source:** National Institute of Allergy and Infectious Diseases.


For author affiliations, see end of text.
**Expanded Public Health Model**

- **Massachusetts public health program** (Walley et al., BMJ, 2013)
  - Implemented OEND among 19 communities
  - 2,912 potential bystanders trained; 327 rescues
  - Communities that implemented OEND had **significantly reduced deaths related to opioid overdose** compared to those that did not implement OEND

<table>
<thead>
<tr>
<th>Cumulative enrollments per 100,000 population</th>
<th>RR</th>
<th>ARR*</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>No enrollment</td>
<td>Ref</td>
<td>Ref</td>
<td>-</td>
</tr>
<tr>
<td>1-100</td>
<td>0.93</td>
<td>0.73</td>
<td>0.57-0.91</td>
</tr>
<tr>
<td>&gt;100</td>
<td>0.82</td>
<td>0.54</td>
<td>0.39-0.76</td>
</tr>
</tbody>
</table>

* Adjusted Rate Ratios (ARR) adjusted for city/town population rates of age<18, male, race/ethnicity (Hispanic, white, black, other), below poverty level, medically supervised inpatient withdrawal treatment, methadone treatment, BSAS-funded buprenorphine treatment, prescriptions to doctor shoppers, year
Dr. Mike Bartoszek—Chief of interventional wing in the pain clinic
“….we came up with a broadened program of patient, family, and community education, in addition to naloxone, prescribing, for our highest-risk patients. We began this sort of robust education program with an emphasis on the risks of overdose and also the indications and the instructions for a naloxone rescue. And since we've been doing that in our highest-risk patients, what we've noticed is we've had absolutely zero naloxone reversals at all. We've also had zero overdoses and zero deaths at Fort Bragg in the past one year since we've been doing all this. And I think that from what I've heard today -- I've heard a lot about naloxone reversals -- the point I think we've seen, and what I'd like to emphasize, is the prevention piece. For us, it's almost like when I prescribe the naloxone for the patients and their family and support system, there's the education, but then there's that actual moment where you give them the naloxone. And there's that realization of how important this is and how serious this is in their eyes. And it's not just the soldiers' families. It's the soldiers' unit that is not about to let one of their own fall victim to their medication. And so I think what we've found and what I emphasize from what I've heard here today is really the teaching and the prevention that we can be doing. It's not necessarily the rescue. The rescue is secondary prevention. I think it's the primary prevention of education and actually prescribing naloxone that we've seen the effect of at Fort Bragg....” (FDA, 2012)
“….And since we've been doing that in our highest-risk patients, what we've noticed is we've had absolutely zero naloxone reversals at all. We've also had zero overdoses and zero deaths at Fort Bragg in the past one year since we've been doing all this....what I'd like to emphasize, is the prevention piece....when I prescribe the naloxone for the patients and their family and support system, there's the education, but then there's that actual moment where you give them the naloxone. And there's that realization of how important this is and how serious this is in their eyes. And it's not just the soldiers' families. It's the soldiers' unit that is not about to let one of their own fall victim to their medication....”
Health Care Model: VA Case Report
(Fareed et al., 2015)

• “Reversal of Overdose on Fentanyl Being Illicitly Sold as Heroin With Naloxone Nasal Spray: A Case Report” (Atlanta VAMC)

• Describes reversal of fentanyl overdose with naloxone nasal spray
  – Patient was unaware that fentanyl was being sold as heroin
  – Required 2 doses

• Implemented OEND in Evaluation, Stabilization and Placement (ESP) substance abuse outpatient assessment clinic
  – Provided educational sessions for 63 Veterans and their families
  – Prescribed 41 naloxone kits
  – 3 reports of opioid overdose reversals

• Strongly advocate for dissemination of OEND
  – Easily implemented and low cost
“Overdose Education and Naloxone for Patients Prescribed Opioids in Primary Care: A Qualitative Study of Primary Care Staff”

Aim to investigate knowledge, attitudes and beliefs about OEND

Focus groups in 10 practices in 3 large Colorado health systems
- Denver Health Medical Center, Kaiser Permanente, University of Colorado Hospital

Results
- Knowledge gaps about naloxone and its use in outpatient settings
- Uncertainty about who to prescribe naloxone to
- Logistical barriers (e.g., busy clinical schedules; competing needs; training bystanders; difficulty assembling intranasal device; billing uncertainty; patient costs; pharmacy availability)
- Fears about offending patients
- Concerns about increased risk behaviors
- Discomfort with own opioid prescribing
- Barriers balanced by beliefs that prescribing naloxone could prevent death and result in safer opioid use behaviors
VA Naloxone Kit Brochures: Opioid Safety (in every naloxone kit)

**OPIOID DO’S AND DON’TS**

**DO’s**
- DO take opioid and non-opioid medications as prescribed
- DO inform all providers that you are using opioids, including non-VA opioids
  - Tell your primary provider if another provider prescribes an opioid for you
- DO be cautious about driving or operating machinery
  - Never drive or operate machinery if you feel sleepy/confused
- DO try to remain under the care of one primary provider
- DO get help from family and friends
  - Tell them that you use opioids
  - Ask them to help you use opioids safely
  - Tell them where you keep the naloxone kit and how to use it

**DON’Ts**
- DON’T take extra doses of opioids
  - You could overdose and die
- DON’T drink alcohol or take “street” drugs when using opioids; they can impair your ability to use opioids safely
- DON’T cause severe harm or death
- DON’T share, give away, or sell your opioids
  - This is dangerous and illegal
- DON’T stop taking opioids on your own
  - You may have flu-like withdrawal symptoms
  - Your provider can help you stop safely
  - You may overdose if you start using opioids again after an opioid-free break

**RESOURCES**

**Taking Opioids Responsibly for Your Safety and the Safety of Others**

**SAMHSA Opioid Overdose Prevention Toolkit**
- Contains safety advice for patients and resources for family members

**Community-Based Opioid Overdose Prevention and Naloxone Distribution Program Locator**
- Identifies programs outside of the VA that distribute naloxone
  - [http://hopeandrecovery.org/location1](http://hopeandrecovery.org/location1)

**Prescribe to Prevent**
- Patient resources and videos demonstrating overdose recognition and response, including naloxone administration
  - [http://prescribetoprevent.org/](http://prescribetoprevent.org/)

**VA Substance Use Disorder Treatment Locator**
- [http://www2.va.gov/directory/guide/SUD_fish.asp?raFlash=1](http://www2.va.gov/directory/guide/SUD_fish.asp?raFlash=1)

**Veterans Crisis Line**
- 1-800-273-TALK/8255

**Opioid Safety**
VA Naloxone Kit Brochures:
Opioid Safety (tri-fold 15”w x 5.5”h)

WHAT ARE OPIOIDS?

Opioids are drugs which affect brain and basic bodily functions, such as breathing and digestion. Opioids are found in some pain and other prescription medications and in some illegal substances of abuse (e.g., heroin).

Opioid medications are used for treating pain, cough, and addiction.
- Common opioid medications
  - Codeine (Tylenol with Codeine No. 3)
  - Fentanyl (Duragesic)
  - Hydrocodone (Vicodin, Norco, Lortab)
  - Hydromorphone (Dilaudid)
  - Methadone
  - Morphine (MS Contin, Kadian)
  - Oxycodone (OxyContin, Percocet, Roxicodone)
  - Oxymorphone (Opana)

Opioid harms:
- Taking too much opioids can make a person pass out, stop breathing and die.
- Opioids can be habit-forming and abused.
- Tolerance to opioids can develop with daily use. This means that one will need larger doses to get the same effect.
- If a person stops taking opioids, he/she will lose tolerance. This means that a dose one takes when tolerant could cause overdose if it is taken again after being off of opioids.
- An opioid dose a person takes could cause overdose if shared with others. Others may not be tolerant.

WHAT IS AN OPIOID OVERDOSE?

Opioid overdose occurs when a person takes more opioids than the body can handle, passes out and has no or very slow breathing (i.e., respiratory depression).
- A person can overdose on opioids and stop breathing seconds to hours after taking opioids; this could cause death.

Naloxone works only for opioid overdose and may temporarily reverse opioid overdose to help a person start breathing again.
- Naloxone is not a substitute for safe use of opioids.
- Often opioid overdoses occur so quickly that the user cannot react, or no one is present to give naloxone.

Signs of an opioid overdose:
- Heavy nodding; deep sleep
- Snoring, gurgling, choking
- No response to shaking or shouting the person’s name
- No or slow breathing (less than 1 breath every 5 seconds)
- Blue or gray lips and fingernails
- Pale, clammy skin

NOTE: If a person seems excessively sedated, sleepy or “out of it”, or has fallen into a deep sleep, bystanders should monitor the person constantly to make sure the person does not overdose and stop breathing. If the person doesn’t respond to shaking, shout his/her name, or to your family rubbing his/her sternum—i.e., bone in center of chest where ribs connect—with your knuckles (hard in a fist), call 911 immediately and give naloxone if available.

SAFE USE OF OPIOIDS

Safe use of opioids means preventing opioid overdose and other opioid harms from happening to not only you, but also family, friends and the public.

To use opioids safely:
- DON’T mix your opioids with:
  - Alcohol
  - Benzodiazepines (Alprazolam/Xanax, Lorazepam/Ativan, Clonazepam/Klonopin, Diazepam/Vanlum) unless directed by your provider
  - Medicines that make you sleepy
- Know which pill and drugs you’re taking (color, shape, size)
- Take your opioid medication exactly as directed
- Follow the Opioid Do’s and Don’ts listed in this brochure
- Review the booklet Taking Opioids Responsibly for Your Safety and the Safety of Others with your provider

Keep naloxone on hand in case of opioid overdose:
- Tell family and significant others where you keep the naloxone kit
- Encourage family and significant others to learn how to use naloxone (see “Resources” section)
- Store your naloxone kit at room temperature, away from light
- Keep your naloxone kit out of the heat (e.g., do not store in your car), otherwise naloxone will lose its effectiveness.
**VA Auto-Injector Kit Brochure**

**How to Use the Naloxone Auto-Injector***

1. Pull the auto-injector from the outer case.
2. Pull firmly to remove the red safety guard (do not touch the black base).
3. Place the black end against the middle of the outer thigh, through clothing if necessary, then press firmly and hold in place for 5 seconds.

*This brochure is not meant to replace the auto-injector instructions. Please review the instructions included with your auto-injector.

**Kit Instructions**
- Keep two auto-injectors with you at all times.
- Store auto-injectors at room temperature, away from light.
- Keep auto-injectors out of the heat or cold—e.g., do not store in your car—otherwise naloxone will lose its effectiveness.
- If you use an auto-injector or your auto-injectors expire, contact your provider as soon as possible for a replacement.
- Contact your pharmacy about the proper disposal of your auto-injectors.
- Be sure to properly dispose of used auto-injectors; they cannot be reused.

**Check for a Response—Give Naloxone—Call 911—Airway open (Rescue breathing or Chest compressions)—Consider Naloxone again—Recovery Position**

1. Check for a Response
   - Person is unresponsive, no breathing, no pulse
   - Call 911
   - Lay person flat, if in bed, pull out of bed

2. Give Naloxone—Call 911
   - Pull auto-injector from case and follow voicemails
   - When calling 911, give the address and say the person is not breathing
   - See other side for detailed instructions

3. Airway Open
   - Make sure nothing is in person’s mouth
   - If no pulse is present:
     a. Start CPR
     b. Give 2 breaths
     c. Check pulse
     d. If pulse is present, call 911
     e. If pulse is not present, continue CPR

4. Consider Naloxone Again
   - Two situations in which to consider naloxone again:
     1. If person doesn’t start breathing in 2-3 minutes, give second dose of naloxone
     2. If person starts breathing after first dose, because naloxone wears off in 10-60 minutes, second dose may be needed if person stops breathing again
   - Be sure to stay with person until emergency medical staff take over or for at least 60 minutes to make sure person doesn’t stop breathing again

5. Recovery Position
   - If person is breathing but unresponsive, put the person on his/her side to prevent choking if person vomits...
VA Intranasal Kit Brochure

(quad-fold 20”w x 5.5”h)

HOW TO GIVE INTRANASAL NALOXONE

1. Pull or pry off end caps

2. Pry off end cap

3. Grip clear plastic wings below cone; screw into tip of syringe

4. Screw cartridge of naloxone into syringe barrel

5. Insert cone into nostril; give a short, vigorous push on end of a naloxone cartridge to spray naloxone into nose; spray one half of the naloxone cartridge into each nostril

6. If no reaction in 2-3 minutes or if the person stops breathing again, give the second dose of naloxone (spray one half of the second cartridge into each nostril)

KIT INSTRUCTIONS

- Keep naloxone kit with you at all times
- Store naloxone kit at room temperature, away from light
- Keep naloxone kit out of the heat or cold—e.g., do not store in your car—otherwise naloxone will lose its effectiveness
- If you use your naloxone kit or it expires, contact your provider as soon as possible to replace the kit
- Contact your pharmacy about the proper disposal of your naloxone kit

How to use the VA Intranasal Naloxone Kit:

1. Check for a Response
   - Check for a response--Give naloxone--Call 911--Airway open (Rescue breathing or Chest compressions)--Consider naloxone again--Recovery position

How to Give Naloxone:

- Pull and caps off both ends of the syringe
- Pry off cap of naloxone
- Grip clear plastic wings below cone; screw into tip of syringe
- Screw cartridge of naloxone into syringe barrel
- Insert cone into nostril; give a short, vigorous push on end of a naloxone cartridge to spray one half of the naloxone cartridge into each nostril

Airway Open

- Make sure nothing is in person’s mouth
- (If person is unconscious; i.e., you see the person stop breathing)

Rescue Breathing

- Two face shields (optional)
- Pinhead to pinhead; pinch nose
- Give 1 breath every 5 seconds
- Chest should rise

Chest Compressions

- Place heel of one hand on center of person’s chest (between nipples)
- Place other hand on top of first hand
- Keep elbows straight with shoulders directly above hands
- Use body weight to push straight down, at least 2 inches, at rate of 100 compressions per minute
- Place face shield (optional)
- Give 2 breaths for every 30 compressions

Recovery Position

- If the person’s breathing returns, put the person face up against a firm surface so that the natural head to foot position is maintained

Opioid Overdose Rescue with Naloxone
**Program Models**

*Please also see helpful information to promote opioid safety in the Opioid Safety Initiative Tool Kit [http://vanwvva.gov/PAIN_MANAGEMENT/Opioid_Safety_Initiative_Toolkit.aspx](http://vanwvva.gov/PAIN_MANAGEMENT/Opioid_Safety_Initiative_Toolkit.aspx)*

<table>
<thead>
<tr>
<th>Location</th>
<th>Program Description</th>
<th>Resources</th>
</tr>
</thead>
</table>
| **Battle Creek** | - **Program**: Facility-wide implementation  
- **Route(s) of Naloxone Administration**: Intranasal (preferred); intramuscular also available  
- **Training**: Individual training by nurses and doctors in primary care and inpatient units. Group training for RRTP Veterans by mental health clinical pharmacy specialist.  
- **Unique Feature(s)**: Developed a facility-wide model of implementation that has penetrated RRTPs, inpatient units, and primary clinics including CBDCS. Developed a local TMS training for staff and medical providers. Only through completion of Restricted Medication Request Note which allows for easy identification of veteran specific risk factors for overdose and documentation of veteran and/or caregiver training. | **Staff TMS Training** (PowerPoint format)  
Presentation for staff on how to order naloxone kits through CPRS  
Staff TMS Competency Exam  
E-mail to Facility about OEND Program |
| **Cincinnati** | - **Program**: Primary Care and Pain Clinics  
- **Route(s) of Naloxone Administration**: Intranasal  
- **Training**: Group and individual training by NPs and MDs. Weekly walk-in OEND groups for patients, significant others, and staff who would like to be trained. Patients are given the opportunity to practice administering using a demonstration kit. A CPR manikin is used for instruction on Rescue Breathing. Trainings are also held in the Chronic Pain Clinic for those on higher dose opioids (monthly) and via video teleconferencing in the Domicils.  
- **Unique Feature(s)**: Developed a CPRS note template. Patients complete pre- and post-training surveys. They are targeting both patients with an opioid use disorder (OUD) as well as those on chronic opioid therapy (COT) for pain at morphine equivalent doses of 50 mg/day or more. A weekly walk-in COT OEND clinic is under development. They are also working with VAD and county fairs to incorporate OEND. They have a thoughtful approach for opening up OEND training that draws upon patients' emotional connection to the topic (see Program Summary and Project DAWN link for more information). | **Program Summary**  
Proposal  
CPRS Note Template  
Patient Education Brochure  
Flyer for Facility-Wide Training  
[http://www.healthy.ohio.gov/Topics/dpd/Pages/projectDAWN.aspx](http://www.healthy.ohio.gov/Topics/dpd/Pages/projectDAWN.aspx) [begin OEND training by showing 15-minute video from Ohio's Project DAWN] |
| **South Texas** | - **Program**: Targeting IV drug users and patients prescribed greater than 400 mg oral morphine equivalents by VA.  
- **Route(s) of Administration**: Intranasal  
- **Training**: Separate education groups are held for SUD population and chronic pain patients. Patients will be offered the opportunity to bring friends and family to a joint education section on intranasal naloxone administration.  
- **Unique Feature(s)**: DATA M. ART is used to identify patients prescribed high opioid doses (greater than 400 mg oral morphine equivalents daily dose). After being identified, patients are invited to an opioid overdose education and naloxone distribution group. Patients receiving hospice and/or palliative care will be excluded. | **Standard Operating Procedures** |
### Step 1
**Identify**
Identify clinical champion(s) and target population(s).

### Step 2
** Garner Support**
Garners support for OEND implementation.

### Step 3
**Train & Implement**
Train staff members and implement OEND.

### Step 4
**Evaluate**
Evaluate OEND implementation.

### VA OEND Resources
- Resources to help implement VA OEND programs

#### VA National OEND Resources
- VA Under Secretary for Health Information Letter
- Pharmacy Recommendations for Use (RFU)
- Creating Naloxone Kits (CMCQ)
- VA Naloxone Kit Distribution Report
- Patient Education Brochure (patients with SUD)
- Patient Education Brochure (patients prescribed opioids)
- Quick Start Guide to facilitate Patient-Provider Discussion
- Quick Start Guide Script
- General Poster (fire extinguisher)
- General Poster (alcohol)
- Poster (patients with SUD)
- Poster (pain medications)
- OEND Resource List

#### Sample Materials from VA OEND Programs
- Sample SOP
- Sample Business Proposal
- Sample Flow Chart
- Sample CPRS Note Template with Refill
- Sample Flyer for Facility-Wide Training
- Sample Trainer's manual
- Sample Presentation (leadership)
- Sample Presentation (staff)
- Sample Presentation (patients)
- Sample TMS training
- Sample Nursing Competency
- Sample Facility E-mail about OEND Program
- Sample Training Log
- Sample Patient Feedback Survey
VA OEND Quick Guide

VA Opioid Overdose Education and Naloxone Distribution (OEND) Program

What is OEND?
The VA OEND Program aims to reduce harm and risk of life-threatening opioid-related overdose and deaths among Veterans. Key components of the OEND program include education and training regarding opioid overdose prevention, recognition of opioid overdose, opioid overdose rescue response, and issuing naloxone kits.

What is Naloxone?
Naloxone is a medication intended for reversing a life-threatening opioid overdose. Naloxone has no other effects and cannot be used to get high.

What puts people at risk of overdose?
1. Loss of tolerance to opioids
2. Mixing opioids with other depressant drugs or alcohol
3. Poor or compromised physical health
4. Variation in strength and content of drugs

Who should be prescribed naloxone kits?
Offer naloxone kits to Veterans prescribed or using opioids who are at increased risk for opioid overdose or whose provider deems, based on his/her clinical judgment, that the Veteran has an indication for a naloxone kit.

Who are generally not good candidates for a naloxone kit?
Hospice/palliative care patients. OEND should be considered on a case by case basis and not routinely in these patients.

Remember:
- Naloxone kits and overdose education complement, and do not replace, safe and responsible opioid use.
- Don’t ignore an opioid use problem or disorder. Consider getting treatment or accepting a referral for treatment.
- Discuss the risks and benefits of using opioids for pain with your provider. Together you may decide whether the risks outweigh the benefits.

Patient education and training

<table>
<thead>
<tr>
<th>When to give naloxone</th>
<th>Life threatening opioid overdose (no response, no or very slow breathing [1 breath every 5 seconds], blue/purple or ashen-grey appearance)</th>
</tr>
</thead>
</table>
| How to give naloxone  | • Ask Veterans to demonstrate assembly and administration.  
• Is he/she unable to assemble or administer naloxone properly and in a timely fashion despite several practice trials? If not, consider naloxone auto-injector. |
| How to call for emergency medical services | “911” |
| How to provide rescue maneuvers | • Rescue breathing (if overdose is witnessed)  
• Chest compressions (if collapse is witnessed)  
• Recovery position (if person is breathing but unresponsive) |
| When to consider a second dose of naloxone | • If the person doesn’t start breathing 2-3 minutes after the first naloxone dose, give a second dose.  
• Remind the Veteran that naloxone only lasts 30-90 minutes so calling 911 and being prepared to give a 2nd dose of naloxone if the person stops breathing again is important. |
| How to properly dispose of sharps | • Give sharps to ambulance crew for disposal.  
• Use alternative sharps disposal receptacles, such as a heavy-duty plastic household laundry detergent container. The container should be leak resistant, remain upright and stable during use, have a tight fitting. puncture-resistant lid, and have a “hazardous waste” warning label affixed to it. Follow local or community guidelines for proper disposal of the container. |
| When to ask for a naloxone refill or replacement | • After naloxone has been used to reverse opioid overdose.  
• When naloxone expires or the container is damaged or cracked.  
• When naloxone solution becomes discolored or cloudy.  
• When in doubt about naloxone potency after prolonged exposure to extreme temperatures. |

Questions to ask after naloxone has been used for a rescue

1. Date of use
2. Patient information
3. Who administered naloxone?
4. Who overdosed?
5. Where did the overdose occur?
6. What was the victim’s condition when found? (responsiveness, breathing rate, skin color, pulse present/absent?)
7. Which naloxone product did you use?
8. Did the naloxone work?
9. How many doses were given?
10. Did you provide rescue breathing or chest compressions?
11. Did you place the victim in the rescue position?
12. Did police, EMTs, and/or firefighters arrive?
13. Did you stay with the person until the naloxone wore off or until the person got medical attention?
14. Did the person live?
15. How did you dispose of the naloxone kit components?
16. Do you have anything else you’d like to talk about with your provider?

For more information please refer to the Recommendations for Use of Naloxone Kits at www.gbm.va.gov.
What are Opioids?
Opioids are a type of drug found in some pain or other prescription medications, and in some illegal drugs of abuse (e.g., heroin). In certain situations, opioids can slow or stop a person’s normal breathing function.

Opioid harms
• Taking too much opioids can make a person pass out, stop breathing and die.
• Opioids can be addicting and abused.
• Tolerance to opioids can develop with daily use. This means that one will need larger doses to get the same effect.
• If a person stops taking opioids, he/she will lose tolerance. This means that a dose one takes when tolerant could cause overdose if it is taken again after being off of opioids.
• An opioid dose a person takes could cause overdose if shared with another person. Another person may not be tolerant.

Safe Use of Opioids
Safe use of opioids prevents opioid harms from happening to not only you, but also to family, friends and the public.

To use opioids safely
• Know what you’re taking (e.g., color/shape/size/name of medication)
• Take your opioid medication exactly as directed
• Review the booklet Taking Opioids Responsibly for Your Safety and the Safety of Others with your provider
• DON’T mix your opioids with:
  » Alcohol
  » Benzodiazepines (Alprazolam/Xanax, Lorazepam/Ativan, Clonazepam/Klonopin, Diazepam/Vallium) unless directed by your provider
  » Medicines that make you sleepy

Ask a VA clinician if a naloxone kit is right for you
Important considerations:
• Naloxone works only for opioid overdose and may temporarily reverse opioid overdose to help a person start breathing again
• During an overdose the user cannot react, so someone else needs to give naloxone
• Encourage family and significant others to learn how to use naloxone (see “Overdose Resources” section)
• If you have a naloxone kit, tell family and significant others where you keep it
• Store naloxone kit at room temperature, out of the heat, cold and light (e.g., do not store in your car), otherwise naloxone will lose its effectiveness

Share this card with a friend or family member.
Opioid Overdose

1. **Check For A Response**
   - Lightly shake person, yell person’s name, firmly rub person’s sternum *(bone in center of chest where ribs connect)* with knuckles, hand in a fist
   - If person does not respond — **Give Naloxone, Call 911**

2. **Give Naloxone, Call 911**
   - If you have intranasal naloxone, spray one half of the naloxone cartridge into each nostril
   - If you have intramuscular naloxone, inject 1 mL into muscle of upper arm, upper thigh, or outer buttocks
   - If you have the naloxone auto-injector, pull device from case and follow voice instructions
   - When calling 911, give address and say the person is not breathing

3. **Airway Open**
   - **Rescue Breathing (if overdose is witnessed)**
     - Place face shield *(optional)*
     - Tilt head back, lift chin, pinch nose
     - Give 1 breath every 5 seconds
     - Chest should rise

   - **Chest Compressions (if collapse is unwitnessed)**
     - Place heel of one hand over center of person’s chest *(between nipples)*
     - Place other hand on top of first hand, keep elbows straight, shoulders directly above hands
     - Use body weight to push straight down, at least 2 inches, at rate of 100 compressions per minute
     - Place face shield *(optional)*
     - Give 2 breaths for every 30 compressions

4. **Consider Naloxone Again**
   - If person doesn’t start breathing in 2-3 minutes, or responds to the first dose of naloxone and then stops breathing again, give second dose of naloxone
   - Because naloxone wears off in 30 to 90 minutes be sure to stay with the person until emergency medical staff take over or for at least 90 minutes in case the person stops breathing again

5. **Recovery Position**
   - If the person is breathing but unresponsive, put the person on his/her side to prevent choking if person vomits

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**Signs of an Overdose**

- **Check:** Appears sleepy, heavy nodding, deep sleep, hard to arouse, or vomiting
- **Listen:** Slow or shallow breathing *(1 breath every 5 seconds)*; snoring; raspy, gurgling, or choking sounds
- **Look:** Bluish or grayish lips, fingernails, or skin
- **Touch:** Clammy, sweaty skin

*Even if the person responds to an initial safety check, bystanders should continue to monitor any person with these signs constantly to make sure the person does not stop breathing and die.*

**Overdose Resources**

- **SAMHSA Opioid Overdose Prevention Toolkit**
  - Contains safety advice for patients and resources for family members

- **Community-Based Opioid Overdose Prevention and Naloxone Distribution Program Locator**
  - Identifies programs outside of the VA that distribute naloxone
  - [http://hopeandrecovery.org/locations/](http://hopeandrecovery.org/locations/)

- **Prescribe to Prevent**
  - Patient resources and videos demonstrating overdose recognition and response, including naloxone administration
  - [http://prescribetoprevent.org/video/](http://prescribetoprevent.org/video/)
Do you take pain medications such as:

Oxycodone (Percocet®, Oxycontin®), Hydrocodone (Vicodin®), Hydromorphone (Dilaudid®), Methadone, Morphine (MS Contin®), Fentanyl, or any opioid medication?

Naloxone is an antidote that can be sprayed into your nose or injected into your muscle/under your skin if you have decreased breathing or can’t be woken up due to these pain medications.

Ask a clinician if a *naloxone kit* is right for you.

*Talk to a clinician for more information.*
The Tool provides daily updates on OEND implementation progress to facilities:

- Number of kit prescriptions
- Number of patients receiving kits
  - Opioid therapy patients
  - Opioid use disorder patients
- Real-time distribution to identify locations that may need assistance getting their OEND programming started
VA Naloxone Kit Distribution Report

Select
- # kits
- # patients

Click
Apply

Link
Naloxone Reversal Reporting

• Centralized reversal tracking tool that standardizes documentation and aggregation of spontaneous reporting of reversal events

• Academic Detailing Program Office provides training sessions to the field on how to report a reversal to the centralized reversal tracking tool

• Outreach to prescriber if reversal is reported to consider additional intervention, replacement prescription and provider need for additional resources/educational programming
Academic Detailing

• Definition of Academic Detailing (AD):

“A service-oriented outreach education for health care professionals by health care professionals; leveraging the one-on-one communication approach of pharmaceutical industry detailers combined with the evidence-based, non-commercial aims of academic groups, research, and development centers”
Key VA Initiatives and Academic Detailing

• OEND (Opioid Overdose Education and Naloxone Distribution)

• OSI (Opioid Safety Initiative)

• PDSI (Psychotropic Drug Safety Initiative)
OEND – Academic Detailing Supports Implementation

OEND Implementation by Fiscal Quarter

#New Stations: Academic Detailing Program Office initiates OEND involvement

#Kit Prescriptions Released: *QTR 3 Incomplete
OSI and PDSI initiatives focus on increasing guideline recommended practices to reduce adverse event risk in mental health and pain patients.

**OSI Toolkit and OSI Dashboard**
- Toolkit contains documents to aid clinical decisions about starting, continuing or tapering opioid therapy and other challenges related to safe opioid prescribing.
- Suggest considering OEND for patients on OSI dashboard who are:
  - Prescribed > 200 MEDD
  - Co-prescribed opioids and benzodiazepines

**PDSI Dashboard**
- Includes 20 measures with real-time patient trackers to facilitate case review and panel management; identifies patients with an opioid use disorder.

**Stratification Tool for Opioid Risk Mitigation (STORM)**
- Real-time predictive model-based tool for patient risk stratification; can identify high risk cases in need of OEND (alpha testing).
Opioid Therapy Risk Reduction Report

- This report allows VA clinicians to look at their patients on long term opioids and assess risk mitigation strategies including when a naloxone kit was last dispensed.
VISN and Facility Evaluation Approaches

• Pilot program implementation of OEND was used to inform VA on steps for healthcare system implementation
• Research project—“Implementing Overdose Education and Naloxone Distribution: A Formative Evaluation”
• Facility evaluation programs utilizing patient measures
  • Patient feedback survey programs
  • Call-back programs
  • Pre- and post-test assessments following OEND education
A VA facility instituted a call back process involving case managers calling Veterans who, in the past 6 months, were trained in OEND and who were dispensed naloxone kits.

Allows staff to identify if a reversal occurred and if additional patient interventions are needed.
Implementation Considerations

• Utilize point-of-care tools that incorporate naloxone
  – Panel management tools
  – Capitalize on Electronic Medical Records to capture naloxone dispensing; can use note template to guide education and process
    » Methods need to be in place to capture various methods of dispensing
    » Electronic medical records need to tie events with prescription dispensing so clinical teams know to follow-up patients at high risk
    » Quick prescription orders empower and remind prescribers to offer OEND with instructions defaulted to make the process more efficient

• Need evaluation to show value of OEND
  – Particularly for patients prescribed opioids as the current evidence base is for individuals with Opioid Use Disorder
Lessons Learned

• Stand on the shoulders of giants (e.g., VA; community partners; Scotland)
• One tool in clinical armamentarium—not a panacea, not just about naloxone!
• Collaboration and communication across medical settings and disciplines
• Need training materials and resources for patients and providers
  – Tailor message; ensure provider comfort; chart templates/screenshots; SOPs; videos
  – Opioid use disorder—provider and patient concerns about iatrogenic effect
  – Prescribed opioids—lack of effectiveness data; need to identify at-risk patients
• Issues surrounding scopes of practice, accreditation, liability
  – Laws surrounding naloxone→lawatlas.org
• Look/sound alike: NaLOXone and NaLTREXone
• Co-payments for training and for kits; Coding guidance
Implementation Considerations

- High-risk patients seen across services (e.g., SUD/MH tx, PACT, ED, Detox)
  - Encourage leadership to work across services to develop implementation strategy to ensure high-risk patients receive OEND
  - However, getting OEND implemented in **at least one setting** has been helpful

- Providers may not be aware of or comfortable providing OEND
  - Modeling the process of education with the patient, using videos and having demo kits facilitates uptake of new prescriptions and OEND education

- Training strategies should take into consideration that effective use of naloxone requires training bystanders/family in overdose response

- Patient education groups provide patients an opportunity to discuss questions in a supportive environment; may help maximize resources
  - Individual training should still be available within each clinic/program
Future Directions

• Submitted legislative proposal to waive patient co-pays for naloxone
• Submitted query to Office of the General Counsel
  – Can non-licensed and/or non-medical staff: (1) administer naloxone, (2) provide training on how to use naloxone (scope of practice; liability)?
  – Can VA prescribe naloxone to Veterans prior to release from incarceration?
  – Co-payment for preventive intervention?
• Coding guidance workgroup
• Identifying other ways to increase patient interest and knowledge about OEND (e.g., testimonials)
• Opioid overdose is a growing cause of preventable death
• Increasing data supporting the effectiveness of OEND to reverse opioid overdose and prevent opioid overdose mortality
  – Most evaluated implementation has used a public health approach. Models of implementation in health care systems are emerging.
  – Data suggest effectiveness and cost-effectiveness when targeting persons with opioid use disorders. Data is limited on programs targeting higher risk patients prescribed opioid medication.

• OEND provides a promising risk mitigation strategy to prevent opioid overdose mortality among Veterans and VA facilities are encouraged to initiate programs
  – Under Secretary for Health’s Information Letter supports implementation
  – Naloxone kits are on national formulary and currently “Free-to-Facilities”
  – PBM Recommendations For Use
  – Technical assistance: OEND SharePoint (OMHO), Academic Detailing