Pharmacist Engagement in the Community to Target Opioid Misuse Prevention
Disclosures

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Opioid Statistics

In most countries, the use of opioid prescriptions is limited to acute hospitalization and trauma (CDC).

New evidence has shown that non-opioid medications are just as effective for pain management as opioids.

As many as 1 in 4 patients receiving long-term opioid therapy struggles with opioid addiction.

Opioid Statistics

Nearly half of all opioid overdose deaths involve a prescription opioid (CDC).

Many of those abusing prescription opioids or even heroin had a prescription medication as their entry point.

Among post-op patients, 92% received an opioid prescription, but 63% of the pills went unused, and 1/3 of patients used none of the pills.

Pharmacy’s Role

Pharmacy’s current approach has been more defensive than pro-active.
- PDMP
- Refusal to fill

But pharmacists have a key role to play in disease prevention and health promotion.

Patient referral

Prevention

Patient screening

Overdose treatment

Opioid and Naloxone Education

ONERx
Pharmacy’s Role

- Screening
  - Risk of Opioid Misuse
  - Risk of Accidental Overdose

Interventions:
- Partial Fill
- Medication Take-Back
- Naloxone
- Community Support Service
- Referral
- Opioid Misuse Risk Consultation
Dr. Amy Werremeyer, Pharm D, BCPP
North Dakota State University
College of Health Professions
- Opioid pharmacology
- Brain Reward Pathway
- Opioid Use Disorder
Opioids

Opiate analgesics have been used and abused since the 3rd century B.C.

- Derived from the Asian opium poppy plant (*Papaver somniferum* and *P. album*)
  - After incision, the poppy seed pod exudes a white substance that turns into a brown gum that is crude opium.
  - Opium contains many alkaloids, the principal one being morphine, which is present in a concentration of about 10%
- Opiate = naturally occurring alkaloid (ex. Morphine, codeine)
- Opioid = any compound that works at opioid receptors
- Medicinal uses: pain, cough suppression
## Opioid receptor activities

<table>
<thead>
<tr>
<th>Receptor Subtype</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \mu ) (Mu)</td>
<td>Supraspinal and spinal analgesia; sedation; <strong>respiratory depression</strong>; slowed gastrointestinal transit; <strong>euphoria</strong>; <strong>physical dependence</strong></td>
</tr>
<tr>
<td>( \delta ) (Delta)</td>
<td>Supraspinal and spinal analgesia; modulation of hormone and neurotransmitter release</td>
</tr>
<tr>
<td>( \kappa ) (Kappa)</td>
<td>Supraspinal and spinal analgesia; psychotomimetic effects; slowed gastrointestinal transit</td>
</tr>
</tbody>
</table>

Modified from Basic & Clinical Pharmacology, 13e  Bertram G. Katzung, Anthony J. Trevor, eds.
Respiratory Depression

Opiates confer a direct depressant effect on respiratory rhythm generation.

- Depress ability to detect high CO2 levels
- Reduce ability to speed up breathing rate
- Produce irregular and aperiodic breathing—especially if other contributing variables are present:
  - COPD, asthma, other respiratory disease
  - Obstructive sleep apnea
  - Relief of pain
  - High opioid dose
    - Daily doses ≥ 50 mg morphine equivalent (MME) double the risk of overdose compared to those less than < 20 MME
    - 10 tablets of hydrocodone/acetaminophen 5/325 mg
    - 12 mg of methadone
  - Concomitant meds/substances: benzodiazepines, alcohol, antidepressants, sedative-hypnotics, muscle relaxants

- Mu opioid receptor antagonists reverse respiratory depression (ie. naloxone, naltrexone)

This is how people die of overdose!
Euphoric Effects

Reinforcing and euphoric effects of opiates occur in the **mesolimbic dopaminergic pathway**

- AKA REWARD PATHWAY
- A brain circuit long implicated in **reward and motivation**
  - Regulates responses to natural reinforcers, such as food, sex and social interaction
- From the ventral tegmental area (VTA) to the nucleus accumbens (NAc), where opiates increase synaptic levels of **dopamine**.
- Release of dopamine from these neurons onto the dopamine receptors in the nucleus accumbens, amygdala and frontal cortex **produces positive reinforcement and/or signals the importance of the stimulus to the individual**

Tolerance to these effects develops quickly.
REWARD PATHWAY

ALL drugs that are potentially addictive induce the release of dopamine from these neurons.

Prior “priming” of the NAc increases risk for addiction.
Reward Pathway

In nature—rewards usually come only with effort and after a delay.

Opioids provide a shortcut.
- Flood the nucleus accumbens with dopamine.
- The pleasure is not serving survival or reproduction--Our brains are not equipped to withstand all this dopamine
  - Chronic use = overwhelmed receptor cells call for a shutdown.
    - The natural capacity to produce dopamine in the reward system is reduced, while the need persists and the drug seems to be the only way to fulfill it. The brain is losing its access to other, less immediate and powerful sources of reward. Addicts may require constantly higher doses and a quicker passage into the brain. It’s as though the normal machinery of motivation is no longer functioning; they want the drug even when it no longer gives pleasure.

Adapted from July 2004 issue of Harvard Mental Health Letter
Reward Pathway

Neuroadaptations following chronic use require the constant presence of the opioid to maintain homeostasis.

- Discontinuation or reduction of the opioid = an acute, intense, typically physically and emotionally unpleasant reaction…aka **WITHDRAWAL**
  - Opioid withdrawal: pain, dysphoria, diarrhea, vomiting, shaking chills, yawning, sialorrhea, rhinorrhea, lacrimation, CNS hyperactivity, restlessness, insomnia, dilated pupils

- The duration and intensity of withdrawal symptoms depend on:
  - The drug’s pharmacokinetics (how fast/slow it gets into/leaves the body) and pharmacodynamics (what it does when it’s in the body)
  - The amount and duration of drug use
  - Individual differences in vulnerability to withdrawal.

- **Avoidance of withdrawal becomes an important factor in maintaining opioid use.**
Vulnerability to relapse

- Stimulation of the reward pathway creates powerful memories between the drug experience and circumstances in which it occurred.
  - Creates cues for use
  - 75% of patients with substance-use disorder will relapse at least once
- Repeated stimulation of the same pathway essentially rewires brain networks
  - Reduced pleasure from normally pleasurable stimuli
  - Enhanced reaction to stress
Question 1

KR is a 48-year-old male who is filling a new prescription for hydrocodone/APAP. Which of the following characteristics makes KR at increased risk of experiencing respiratory depression from his new opioid?

A. He has previously been diagnosed with major depressive disorder
B. He has previously been diagnosed with obstructive sleep apnea
C. He is currently being treated with clonazepam
D. He is currently being treated with metoprolol
Question 2

Which of the following is FALSE regarding opioids’ impact on the reward pathway?

A. Opioids flood the nucleus accumbens with dopamine
B. Opioids provide a shortcut to pleasure that requires little effort
C. Opioids can reduce the brain’s ability to experience pleasure from natural rewards
D. Opioids do not effect the brain’s memory of pleasurable experiences
Definitions

**Substance Use Disorder** = recurrent use of a drug causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. (formerly Substance Abuse)

**Addiction** = a primary chronic disease featuring ≥ 1 of the “5 C’s”
1. Chronicity
2. Impaired control over drug use
3. Compulsive use
4. Continued use despite harm
5. Craving

**Physical Dependence** = withdrawal syndrome occurs with abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist

**Tolerance** = needing more of a drug to achieve the same effect

**Withdrawal** = A group of symptoms of variable clustering and degree of severity which occur on cessation or reduction of use of a psychoactive substance that has been taken repeatedly, usually for a prolonged period and/ or in high doses.

Substance Use Disorder--Diagnosis

Diagnostic Criteria

- Published in the Diagnostic and Statistical Manual (DSM)-5

Problematic pattern of substance use leading to clinically significant impairment or distress, as manifested by at least 2 of the following, occurring within a 12-month period

1. Substance is often taken in larger amounts or over a longer period than was intended
2. Persistent desire or unsuccessful efforts to cut down or control substance use
3. Great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects
4. Craving or a strong desire or urge to use substance
5. Recurrent substance use resulting in failure to fulfill major role obligations at work, school or home
6. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of substance
7. Important social, occupational, or recreational activities are given up or reduced because of substance use
8. Recurrent substance use in situations in which it is physically hazardous
9. Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance
10. Tolerance
11. Withdrawal

Etiology

The disease concept of substance use disorders:

- Individuals who suffer from the disease do not choose to contract the disease any more than someone who suffers from heart disease or diabetes mellitus chooses to contract that illness.

- Though individuals choose to use a substance initially, biological changes in the brain’s motivation and reward systems in the brain caused by chronic use may perpetuate use due to cravings.

- Brain changes persist over time and confer vulnerability for disease progression and/or relapse in the future.
Risk Factors for Opioid Misuse/Opioid Use Disorder

Age → Current Age < 65 associated with greater risk than age > 65.
- Age of first use: 96.5% of cases of substance use disorder start with substance use before age 21 when the brain is still developing

Family History of Substance Use Disorder

Personal History of Substance Use Disorder
- History of cocaine abuse (4x higher risk)
- History of alcohol abuse (2.6x higher risk)
- Current daily nicotine use

Chronic Pain

Mental Health Disorders
- Diagnosis of major depression, psychosis, PTSD
- Use of psychotropic medications (especially benzodiazepines)
Current Prescription Opioid Use Disorder

- Age: 2.33
- Age + Pain: 3.59
- Age + Pain + Depression: 4.63
- Age + Pain + Depression + Meds: 8.01
- Age + Pain + Depression + Meds + Severe: 14.8
- Age + Pain + Depression + Meds + Severe + Abuse: 56.36

Screening
ELIZABETH SKOY, PHARMD
NORTH DAKOTA STATE UNIVERSITY
COLLEGE OF HEALTH PROFESSIONS
Pharmacist’s Role

• Screen
• Intervene
• Educate
Red Flags for Misuse

- Prescription not from a local provider
- The patient is unknown to the pharmacy or does not have a local address
- History of early refill requests
- Large quantities prescribed
- Multiple doctors
- Requesting a particular brand
- Cash paying/request for not billing insurance
# Opioid Risk Tool

**Opioid Risk Tool**

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family history</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Prescription medications</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Personal history</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Prescription medications</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Age between 16 - 45 years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>History of preadolescent sexual abuse</strong></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Psychological disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention deficit disorder (ADD), obsessive compulsive disorder (OCD), bipolar, schizophrenia</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Scoring total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Low Risk**: 0-3
- **Moderate Risk**: 4-7
- **High Risk**: >7

Prevention of Accidental Overdose

Risk Factors

◦ Long-acting opioids
◦ High dose opioids
◦ Using alcohol or other nonprescription sedative medications and an opioid
◦ Stopping an opioid then restarting
◦ Benzodiazepine or other prescription sedative and an opioid
◦ Underlying respiratory problem (sleep apnea, COPD, asthma)
◦ Underlying kidney or liver disease
◦ Greater than age 64

Pharmacist’s Role

Screen
  ◦ Opioid Risk Tool (ORT)
  ◦ MME calculation
  ◦ Medication review
  ◦ PDMP review
  ◦ Medication profile review
# Patient Intake Form

## Patient Intake Form

**Patient Name: __________________**

**Date of Birth: ____________**

Gender: [ ] male [ ] female

**History of Substance Abuse**

- [ ] Heroin
- [ ] Rapid drug
- [ ] Prescription medication misuse

**Personal History of Substance Abuse**

- [ ] Heroin
- [ ] Rapid drug
- [ ] Prescription medication misuse

**Age between: 18 - 49 years**

**History of previous/current wound care**

**Psychological diagnoses**

- Attention-deficit hyperactivity (ADHD)
- Obsessive-compulsive disorder (OCD)
- Bipolar disorder
- Attention deficit hyperactivity disorder
- Depression

**Check the age the patient is in:**

- [ ] Less than 40
- [ ] 40-64
- [ ] Older than 64

**Medical History:** Check all those which apply to the patient.

- [ ] Allergies
- [ ] Hypertension
- [ ] Diabetes
- [ ] Heart disease
- [ ] Liver disease
- [ ] Kidney disease

**While using this medication, is there a chance the patient may experience any of the following?**

- [ ] Depression
- [ ] Medication known to cause depression
- [ ] Anxiety
- [ ] Medication known to cause anxiety
- [ ] Nausea
- [ ] Medication known to cause nausea

**Are you currently taking any other medications?**

- [ ] Yes
- [ ] No
Patient Intake Form

Circle patient’s gender:  MALE    FEMALE

YES  NO  Have you taken this or other opioid medications in the last 60 days?
Examples: Duragesic® (fentanyl), Oxycontin® (oxycodone), Vicodin® (hydrocodone), morphine

Put a check in the box next to those items which apply to the patient.

<table>
<thead>
<tr>
<th>Family history of substance abuse</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>Depression</td>
<td></td>
</tr>
</tbody>
</table>
Patient Intake Form

Circle the age the patient is in:  Less than 45    45-64    Greater than 64

Medical history: Circle all those which apply to the patient.
asthma     depression     anxiety     COPD/emphysema     sleep apnea     liver disease     kidney disease

While using this medication is there a chance the patient may consume any of the following? YES
NO  Medication used to treat anxiety
    Examples: Xanax® (alprazolam), Ativan® (lorazepam), Valium® (diazepam), Klonopin® (clonazepam)
YES NO  Medication used to treat depression
YES NO  Medication known as a muscle relaxer
    Examples: Flexeril® (cyclobenzaprine), Skelaxin® (metaxalone)
YES NO  Medication used to aid in sleep (prescription or over the counter)
YES NO  Cough or cold medication
YES NO  Alcohol
YES NO  Are you currently taking other opioid medications?
    Examples: Duragesic (fentanyl), Oxycontin (oxycodone), Vicodin (hydrocodone), morphine
Patient Intake Form

Patient Name __________________________ Date of Birth _______________
Gender: patient's gender: MALE  FEMALE

YES  NO Have you taken any opioid medications in the last 12 weeks?
Examples: Dosing (e.g., fentanyl, morphine, heroin, oxycodone, methadone)

Put a check in the box next to those items which apply to the patient.

Family history of substance abuse

Yes  No

Legal drugs

Prescription medication misuse

Yes  No

Personal history of substance abuse

Yes  No

Legal drugs

Prescription medication misuse

Yes  No

Age between 18 - 49 years

History of problematic sexual abuse

Psychological conditions

Examples: attention-deficit disorder (ADD), obsessive-compulsive disorder (OCD), bipolar disorder, depression

Check the age the patient is in: Less than 40  40-64  Older than 64

Mental health: Check all those which apply to the patient.
- Bipolar disorder
- major depression
- other depression
- post-traumatic stress disorder

While using this medication is there a chance the patient may experience any of the following? YES NO
- Difficulty focusing in class or work
  Examples: Trazadone (trazodone), Ativan (lorazepam), Valium (diazepam), Xanax (alprazolam)

YES  NO Medication lead to heat depression

YES  NO Medication known as a mood stabilizer
  Examples: Trazadone (trazodone), Valium (diazepam)

YES  NO Medication lead to loss of sleep (prescription to increase the sedative)

YES  NO Cough (most tolerable

YES  NO Nausea

YES  NO Am I currently taking other opioid medications?
Examples: Demerol (meperidine), Omeprazone (propranolol), Vicodin (hydrocodone, acetaminophen)
Screening Leads to Interventions

Screening

Risk of Opioid Misuse

Risk of Accidental Overdose

Interventions

- Partial Fill
- Medication Take-Back
- Naloxone
- Community Support Service
- Referral
- Opioid Misuse Risk Consultation
Pharmacist’s Role

• Screen
• Intervene
• Educate
Patient Intake Form

Patient Name __________________________ Date of Birth __________________

Gender: Male ✗ Female ✗

Yes ☐ No ☐ Have you taken any other opioid medications in the last 7 days?

Examples: Demerol, Vicodin, Opiates (prescription), Naloxone (prescription), methadone

Put a check in the box next to those items which apply to the patient.

Family history of substance abuse

Drugs: ____________________________

Family history of mental illness

Drugs: ____________________________

Personal history of substance abuse

Drugs: ____________________________

Personal history of mental illness

Drugs: ____________________________

Psychological problems

Examples: Attention deficit disorder (ADD), obsessive compulsive disorder (OCD), bipolar disorder, asthma, anxiety

Sexual Activity: Yes ☐ No ☐

History of previous drug or alcohol abuse

Examples: Alcohol, Ritalin (stimulant), Vicodin (prescription), Opiates (prescription)

History of previous drug or alcohol abuse

Examples: Alcohol, Ritalin (stimulant), Vicodin (prescription), Opiates (prescription)

Put a check in the box next to those items which apply to the patient.

Yes ☐ No ☐ Are you currently taking any other medications?

Examples: Demerol (prescription), Opiates (prescription), Vicodin (prescription), methadone
Screening Leads to Interventions

- Risk of Opioid Misuse
- Risk of Accidental Overdose

Interventions:
- Partial Fill
- Medication Take-Back
- Naloxone
- Community Support Service
- Referral
- Opioid Misuse Risk Consultation
Interventions
Pharmacist’s Role

Educate (Pearls)
- Expectations for pain therapy
- Nonpharmacological approaches
- Drug interactions and risks
- Local resources
- Partial filling option when applicable
- Medication disposal
Roadmap for Interventions

N: prescribe, dispense, counsel on naloxone
C: counsel patient on potential for substance use disorder, community support services
P: counsel on opioid Rx pearls [partial fills, medication disposal]
Roadmap for Interventions

N: prescribe, dispense, counsel on naloxone
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Roadmap for Interventions

- **N + C + P**
- Accidental overdose
- **Red Flags PDMP Professional judgement**
  - Contact prescriber
  - ≥ 8
  - Opioid prescription
  - ORT
  - < 8
  - Red Flags PDMP Professional judgement
  - No risk identified
  - N + P
  - at risk
  - Accidental overdose
  - P

| N: prescribe, dispense, counsel on naloxone |
| C: counsel patient on potential for substance use disorder, community support services |
| P: counsel on opioid Rx pears [partial fills, medication disposal] |
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Screening Leads to Interventions

Screening → Risk of Opioid Misuse → Interventions
Screening → Risk of Accidental Overdose → Interventions

Interventions:
- Partial Fill
- Medication Take-Back
- Naloxone
- Community Support Service
- Referral
- Opioid Misuse Risk Consultation

Opioid and Naloxone Education
Naloxone
North Dakota Law (naloxone)

Pharmacist can dispense naloxone via a written prescription

Pharmacist can prescribe naloxone
- Maintain a current copy of the North Dakota naloxone protocol
- Complete one hour of approved education
- Register with the North Dakota Board of Pharmacy (online)

North Dakota Board of Pharmacy, Rule; Chapter 16-04-12
Pharmacist Prescribing of Naloxone

Patient: “means both an individual who is at risk of opioid overdose and a person who is not at risk of opioid overdose but who may be in a position to assist another individual during an overdose”

Patient may request

Pharmacist may recommend

Keep all prescriptions for 5 years

Notify the primary care provider (if applicable)
Pharmacist Prescribing of Naloxone

Screening
  ◦ Known hypersensitivity

Provide training on overdose
  ◦ Prevention (consultation pearls)
  ◦ Recognition
  ◦ Response
Pharmacist Prescribing of Naloxone

Provide administration counseling
Provide medication counseling
  ◦ Dosing
  ◦ Effectiveness
  ◦ Adverse effects
  ◦ Storage
  ◦ Shelf life
  ◦ Safety

Provide treatment resources or referrals

North Dakota Board of Pharmacy, Rule; Chapter 16-04-12
Naloxone Dosage Forms

**Injectable (generic)**
- 0.4 mg/mL (single dose or multidose vials)
- Inject 1 mL intramuscularly
- Dispense with 23-25 gauge 3mL syringe

**Intranasal (generic)**
- 1 mg/mL
- Spray 1 mL (1/2 of syringe) into each nostril
- Prefilled glass syringe
- Dispense with mucosal atomizer device
Naloxone Dosage Forms

**Intranasal (branded)**
- 4 mg/0.1 mL
- Spray one device into nostril
- Designed for “layperson”
- Excursions 38-104°F

**Auto-injector (branded)**
- 0.4 mg/0.4 mL
- Inject into outer thigh as directed by voice
- Designed for “layperson”
- Excursions 38-104°F
Naloxone Dispensing and Consultation Checklist

- **Introduction and recommendation**
  - Example conversation starters:
    - Based on ____ you may be a candidate for naloxone therapy
    - Safety precaution in case of accidental overdose (seatbelt or fire extinguisher analog)
    - All individuals who are prescribed opioids have some risk of overdose

- **Verify the intended recipient does not have a known hypersensitivity to naloxone**

- **Signs and symptoms that naloxone may be needed to be administered**
  - pinpoint pupils, difficulty to wake, body limp, slow or shallow breathing, interrupted
    breathing, pale or blue lips or face, choking sounds, cold/drunken skin

- **Administration**
  - If possible call 911 before delivering naloxone
  - Be prepared to provide rescue breathing
  - Instruct on proper administration (use a demonstration device if possible)
  - Provide patient handout on selected naloxones dosage form

- **Effectiveness**
  - If no symptom improvement in 2 to 3 minutes give a second dose

- **Adverse effects**
  - Withdrawal symptoms (shaking, weakness, restlessness, irritability, dizziness, nausea, body
    aches, fever, pain, chills, runny nose)
  - Typically subside within 2 hours

- **Storage conditions**
  - Store at room temperature,
  - Nasal Naloxone Spray and Evooz Auto-Injector may have excursions 39-104°F

- **Shelf-life**
  - Always check the expiration date

- **Safety**
  - If given to someone who hasn’t overdosed there is no effect
  - Does not produce tolerance

- **Disposal**
  - Nasal spray dispose in trash inaccessible to children and pets
  - Injectable attendance dispose in sharps container

- **Verify the name of the patient’s primary care provider to notify if applicable**

- **Common questions concerns to address**
  - Apps or patient information handouts to assist with administration
  - Addiction treatment options and counseling services
  - Good Samaritan Laws

Naloxone Dispensing and Consultation Checklist

- **Introduction and recommendation**
  - Example conversation starters:
    - Based on ____ you may be a candidate for naloxone therapy
    - Safety precaution in case of accidental overdose (seatbelt or fire extinguisher analogy)
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- **Verify the intended recipient does not have a known hypersensitivity to naloxone**

- **Signs and symptoms that naloxone may be needed to be administered**
  - pinpoint pupils, difficult to wake, body limp, slow or shallow breathing, intoxicated behavior, pale or blue lips or face, choking sounds, cold/clammy skin
**Administration**
- If possible, call 911 before delivering naloxone
- Be prepared to provide rescue breathing
- Instruct on proper administration (use a demonstration device if possible)
- Provide patient handout on selected naloxone dosage form

**Effectiveness**
- If no symptom improvement in 2 to 3 minutes give a second dose

**Adverse effects**
- Withdrawal symptoms (flushing, weakness, restlessness, irritability, diarrhea, nausea, body aches, fever, pain, chills, runny nose)
- Typically subsides within 2 hours
- **Storage conditions**
  - Store at room temperature,
  - Narcan Nasal Spray and Evzio Auto-Injector may have excursions 39-104°F

- **Shelf-life**
  - Always check the expiration date

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Resources

OpiRescue
https://opirescue.com/

Start Rescue

- Recognize
- Report
- Resources
- Invite Others
- More Options

About Naloxone:
- Opioids can slow down your ability to breathe. Naloxone reverses the effects of the opioids that cause a slowed or stopped breathing.
- Naloxone is a safe medicine, similar in the settings that it’s good for here websites, but remember you never need it but it.
- Encourage family members or loved ones to know where to access the literature in time of an emergency.

Response to Overdose:

1. **Check responsiveness**
   - Look for all of the following:
     - No response, even after attempts to wake
     - Breathing slow or stop
     - Unconsciousness or blue or gray

2. **Call 911 and give naloxone**
   - Information on how to administer naloxone is needed.

3. **Do rescue breathing and/or chest compressions**
   - Followed by administration of instructions

4. **Stay with person until**
   - Help arrives or the patient wakes up
Payment

Patient
- Insurance coverage
  - Pharmacist NPI
  - Pharmacist to register with North Dakota Medicaid
- Cash
- Prior authorizations
- Free through federal grant

Third party prescribing

Emergency response
ND Medicaid Provider Guide

ND Medicaid Provider Enrollment Online Application Guide

To get started visit:  https://mmis.nd.gov/portals/wps/portal/ProviderEnrollment

Step 1. Select Individual Provider Enrollment link from the above website.

Step 2. Enter Name, date of birth and SSN.

Step 3. Individual will enter a taxonomy number associated with specific provider type.
   (List is located at https://www.nd.gov/dhs/info/mmis/docs/mmis-individual-provider-code-taxonomy.pdf)

Step 4. Enter individual’s (pharmacist’s) NPI number.

Step 5. Enter practice address.

Step 6. Enter the establishment ND Medicaid Identification or NPI number where individual practices.
   (ie pharmacy NPI number)

Step 7. Electronic transaction submission information will be entered.

Step 8. The next 3 questions are associated with business type and provider descriptions.

After above steps are complete the application can be submitted for review by the North Dakota Department of Human Services Medicaid.

Retrieved from:

Medicaid Provider Enrollment, Training Guide, ND Dept of Human Services,

ND Overdose Prevention and Immunity Law

According to ND Law, any individual (family, friends, community member) is protected from civil or criminal liability for giving naloxone for a suspected opioid overdose.

North Dakota Century Code 23-01-42
North Dakota Good Samaritan Law

The Good Samaritan Law was passed to encourage friends, family members, and bystanders to call 911 in the event of an overdose.

In order to be immune from prosecution, you need to:

Call 911

Remain onsite until assistance arrives

Cooperate with law enforcement and emergency medical service personnel

North Dakota Century Code 19-03.1-23.4
Common Questions

Do I incur added liability by prescribing and dispensing naloxone?
Am I just perpetuating the opioid problem by dispensing naloxone?
Will people be offended if I offer naloxone?
Others?

Communicating with Patients about Opioids
DR. AMY WERREMEYER, PHARM D, BCPP
NORTH DAKOTA STATE UNIVERSITY
COLLEGE OF HEALTH PROFESSIONS
Words matter…

Brown-noser
Glutton
Assertive Feelings Manipulator
World Leader
Addict
Abuser

Strategic relationship navigator
Person with an insatiable appetite
Bully
Tyrannical dictator
Patient with substance use disorder
Person with chronic disease
## Changing the way we think—and talk—about people with substance use disorders

<table>
<thead>
<tr>
<th>Words to Avoid</th>
<th>Words to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addict, alcoholic</td>
<td>Person with substance use disorder</td>
</tr>
<tr>
<td></td>
<td>Person with addiction</td>
</tr>
<tr>
<td>Drug abuser</td>
<td>Person with substance use disorder</td>
</tr>
<tr>
<td>Drug abuse</td>
<td>Drug misuse, harmful use, risky use</td>
</tr>
<tr>
<td>Drug problem, drug habit</td>
<td>Substance use disorder</td>
</tr>
<tr>
<td>Clean</td>
<td>Abstinent, not actively using</td>
</tr>
<tr>
<td>Dirty</td>
<td>Actively using</td>
</tr>
<tr>
<td>A clean drug screen</td>
<td>Testing negative for substance use</td>
</tr>
<tr>
<td>A dirty drug screen</td>
<td>Testing positive for substance use</td>
</tr>
<tr>
<td>Former addict, reformed alcoholic</td>
<td>Person in recovery, person in long-term recovery</td>
</tr>
<tr>
<td>Opioid replacement, methadone maintenance</td>
<td>Medication assisted therapy (MAT)</td>
</tr>
</tbody>
</table>

[https://www.shatterproof.org/about-addiction/stigma/stigma-reducing-language](https://www.shatterproof.org/about-addiction/stigma/stigma-reducing-language)
Principles of patient communication—motivational interviewing

REMEMBER:
◦ Your patient is NOT a disease
◦ Consider (and curb) any bias and/or stigma you may have
◦ Rapport building is based on relationship development

GOAL = Patient acceptance of information

= Minimization of patient resistance (ie. openness to consider different perspective about opioid)
Principles of patient communication—motivational interviewing

Individuals make behavioral decisions based on their assessment of the pros and cons. You—as the health professional—are the expert on the overall pros and cons. You are NOT the expert on the pros and cons as they apply to your patient. THE PATIENT IS.

You are hereby relieved of the responsibility to solve the problem for the patient.

You are hereby entrusted with the responsibility to equip the patient to solve the problem or make the decision for himself/herself.
Principles of patient communication—motivational interviewing

Ask open ended-questions.
- What do you already know about…?
- Would you be willing to…?
- Would it be alright if I…?

Reflect back what you hear. Validate it.
- I’m hearing that you’re very frustrated. That is understandable.
- I’m hearing that you’re worried about being in pain. That must be very scary.
- I’m hearing that you’re concerned with the changes your doctor is making.
Principles of patient communication—motivational interviewing

Build discrepancy between current behavior and goals.
  ◦ Express concern about wellbeing or longevity or functionality
  ◦ Inquire about progress toward treatment goals
    ◦ Tell me about the progress toward your goal to have pain that is low enough to allow you to garden.
  ◦ Help the patient to identify discrepancy when goals and patient’s treatment approach do not match
    ◦ You must be frustrated that you are too tired and sluggish to get out in your garden. What alternative treatment options have you and your provider discussed?
  ◦ Use objective information whenever possible
    ◦ Ie. “The research indicates that this hydrocodone may cause more risks than it does benefits when it is used longer than a few weeks.” VS. “This medication is very addictive. You shouldn’t take it very long.”
    ◦ Ie. “Our records indicate that this medication isn’t due to be filled again for 7 days based on the number of tablets you filled last time.” VS. “You aren’t supposed to be filling this yet. You must be taking more than was prescribed.”
Talking with patients about opioids

Areas to explore with patients:

- Importance of treatment goal-setting; Self-monitoring progress toward goals of therapy
  - Tell me about your goals for your pain.
  - What is your optimal level of function? (not pain, but function)
  - Is your opioid helping/hindering to achievement of those goals? In what specific way(s)?
- Recommended length of therapy / therapeutic endpoint
  - What have you been told about how long you’ll take your opioid?
- “myth” of pain freedom
  - Often complete absence of pain is an unrealistic goal. What have you learned about living with manageable levels of pain?
- Risk of hyperalgesia and other side effects
  - What have you learned about the possibility that opioids can make pain worse?
  - What experience(s) have you had with nonopioid pain relievers?
- Risk of overdose:
  - if others take your opioids
  - if you stop and then restart opioids
Nonopioid alternatives for pain treatment

<table>
<thead>
<tr>
<th>Regular exercise</th>
<th>Hydrotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical therapy</td>
<td>Biofeedback</td>
</tr>
<tr>
<td>Accupuncture</td>
<td>Massage therapy</td>
</tr>
<tr>
<td>TENS units</td>
<td></td>
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<tr>
<td>Relaxation and/or mindfulness training</td>
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<tr>
<td>Cognitive Behavioral Therapy</td>
<td></td>
</tr>
<tr>
<td>Gabapentin/Pregabalin</td>
<td></td>
</tr>
<tr>
<td>SNRI / TCA antidepressants</td>
<td><strong>May actually be less expensive than opioid treatment overall.</strong></td>
</tr>
</tbody>
</table>

Referring to community support services

- Emphasize your concern about the patient, not judgement or punishment
- Offer information and caring attitude
- Offer to talk further now or in the future. Set a specific time, if necessary.
- Recognize that most people need to hear message of concern about their use several times before they seek help.
  - Don’t take rejection personally
  - Those with substance use disorders have a disease. It affects their physical and mental health. It also affects their decisions, judgement and motivation.
Referring to community support services

**Referring to Community Support Services**

When you refer a patient to community support services it is important to be able to provide tangible, hands-on, real-time information that the patient can use almost immediately. The longer and harder the patient has to work to find a treatment location or information, the lower the chances that he or she will make it into treatment.

When an individual is referred to treatment (often referred to as chemical dependency treatment, or CD treatment), generally they will first undergo a full evaluation (sometimes also called an assessment) by a licensed chemical dependency counselor, who will determine IF treatment is needed and WHAT LEVEL of treatment would be best. So, your referral of a patient to treatment does not mean that you are diagnosing them with a problem. It just means that you are providing information and potential healthcare resources.

**Recommended sources of information:**

1) First Link: [http://myfirstlink.org/](http://myfirstlink.org/)
   
   “First Link assists people to identify, access, and make effective use of community and volunteer resources 24 hours a day. It’s the first link to connect people to resources.” First link is specific to North Dakota and does not include resources in other states.