LEARNING OBJECTIVES

Upon completion of this session, learners will be able to:

• Describe a causal pathway from opioid prescribing to opioid misuse disorder
• Compare and contrast upstream disease prevention with downstream disease treatment
• Explain the role of the pharmacist in disease prevention and health promotion
BACKGROUND

• According to the CDC, opioids (including prescription opioids and heroin) killed more than 33,000 people in 2015, more than any year on record.
• In most countries, the use of opioid prescriptions is limited to acute hospitalization and trauma, such as burns, surgery, childbirth and end-of-life care, including patients with cancer and terminal illnesses (CDC).
• As many as 1 in 4 patients receiving long-term opioid therapy in a primary care setting struggles with opioid addiction, so it is important that opioid misuse prevention be moved upstream to the initial patient encounter.


LOCAL LEVEL

• FM Ambulance administered naloxone 99 times in 2016
• In Cass County, ND, there were 31 deaths due to opioid overdose in 2016
• As of July 2017, Cass County has seen 14 deaths due to opioid overdose

Overdose deaths in North Dakota increased from 20 deaths in 2013 to 61 deaths in 2015.
CDC/NCHS. National Vital Statistics System, Mortality
HEALTHCARE SYSTEM PARTNER ROLES

- Third-party Payers
- Pharmacists
- Patients
- Providers
- Behavioral Health

PHARMACY AND THE OPIOID EPIDEMIC

- Nearly half of all opioid overdose deaths involve a prescription opioid (CDC).
- There was a nearly 60% increase in the number of controlled substance prescriptions dispensed in North Dakota between 2008 (935,201) to 2015 (1,493,847).
- Many of those abusing prescription opioids or even heroin had a prescription medication as their entry point, and many patients did not perceive these medication as unsafe.
- 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 ROLE HAS BEEN DEFENSIVE

• Pharmacy’s current approach has been more defensive than pro-active.
  • PDMP
  • Refusal to fill
  • Drug take-back programs

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


PROGRESS

• The number of opioids dispensed in North Dakota declined 22.5% from early 2015 to the fall of 2017.

• Opioid prescriptions per Medicaid recipient decreased 72 percent from 2012 to 2017, measured as morphine equivalent doses.

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

PUBLIC HEALTH FOCUS ON PREVENTION

Onset of symptoms

No Disease, But some Risk  Clinical disease present  Progressive Disease

Primary Prevention  Secondary Prevention  Tertiary Prevention

Primary  Secondary  Tertiary
Prevention of disease or injury before it ever occurs. Require conditions with a known risk factors, detectable preclinical phase, or screening tool.  Early diagnosis and prompt treatment of a disease to slow its progression and prevent more severe problems developing.  Manage the impact of advanced disease to minimize sequelae and comorbidities and reduce hospitalizations.

PUBLIC HEALTH PREVENTIVE SERVICES MODEL

Levels of Prevention

<table>
<thead>
<tr>
<th>Application to opioid use disorder</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid risk tool (ORT) available for screening, offers identification of high risk individuals, risk factor reduction</td>
<td></td>
<td>Early diagnosis and treatment, case-finding, referral, patient education; treatment and counseling opportunities</td>
<td>Patients with advanced disease. Harm reduction strategies, preparedness at ER, law enforcement, etc., managing relapse</td>
</tr>
<tr>
<td>ORT Screening</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Red flags</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Patient Counseling</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Drug take-back</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PDMP</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Naloxone</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Medication-assisted treatment</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cessation</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
OPIOID RISK TOOL

<table>
<thead>
<tr>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family history of substance abuse</strong></td>
</tr>
<tr>
<td>Alcohol</td>
</tr>
<tr>
<td>Illegal drugs</td>
</tr>
<tr>
<td>Prescription medication misuse</td>
</tr>
<tr>
<td><strong>Personal history of substance abuse</strong></td>
</tr>
<tr>
<td>Alcohol</td>
</tr>
<tr>
<td>Illegal drugs</td>
</tr>
<tr>
<td>Prescription medication misuse</td>
</tr>
<tr>
<td><strong>Age and history of sexual abuse</strong></td>
</tr>
<tr>
<td>Age between 16 - 45 years</td>
</tr>
<tr>
<td>History of preadolescent sexual abuse</td>
</tr>
<tr>
<td><strong>Psychological disease</strong></td>
</tr>
<tr>
<td>Examples: attention deficit disorder (ADD), obsessive compulsive disorder (OCD), bipolar disorder, schizophrenia</td>
</tr>
<tr>
<td>Depression</td>
</tr>
</tbody>
</table>


PILOT PROJECT

- The first objective of the project was to determine the feasibility of using the ORT with all patients receiving opioids prescriptions. This objective was evaluated by pharmacist report.

- The second objective was to determine the prevalence of ORT ≥4. This objective was evaluated by patient records submitted by the participating pharmacists.
**Triage Tool**

- **N + C + P**
  - Accidental overdose
  - Contact prescriber
  - Red Flags
    - Subjective
    - Professional judgment
    - N + P
  - ORT
  - ≥ 4
  - Contact prescriber
  - Red Flags
    - Subjective
    - Professional judgment
  - N + P
  - at risk
  - Accidental overdose
  - No risk identified

**Results**

<table>
<thead>
<tr>
<th>Demographic information of patients receiving opioid prescriptions</th>
<th>Proportion of patients (n=107)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>43.0%</td>
</tr>
<tr>
<td>Female</td>
<td>47.7%</td>
</tr>
<tr>
<td>Unreported</td>
<td>9.3%</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt;25</td>
<td>4.7%</td>
</tr>
<tr>
<td>25-44</td>
<td>32.0%</td>
</tr>
<tr>
<td>45-64</td>
<td>49.0%</td>
</tr>
<tr>
<td>65+</td>
<td>14.0%</td>
</tr>
<tr>
<td>Unreported</td>
<td>1.0%</td>
</tr>
</tbody>
</table>
OPIOID MISUSE

PATIENTS IN LONG-TERM OPIOID THERAPY IN PRIMARY CARE SETTING WHO STRUGGLE WITH ADDICTION

PATIENTS IN PILOT STUDY IDENTIFIED AT SOME RISK OF MISUSE
26%

PATIENTS IN PILOT STUDY IDENTIFIED AT RISK OF ACCIDENTAL OVERDOSE
30%

All patients receiving opioid prescription

Opioid Risk Tool (ORT)

Risk of accidental overdose

Yes

No

62.5%

37.5%

24.4%

76.4%

Medication take-back
Partial fill
Naloxone education
Community support
Substance use disorder counseling

Medication take-back
Partial fill
<table>
<thead>
<tr>
<th>Service provided</th>
<th>Number of patients (n=107)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduced medication take-back program</td>
<td>71</td>
</tr>
<tr>
<td>Explained the benefits of naloxone</td>
<td>43</td>
</tr>
<tr>
<td>Provided community support services information</td>
<td>17</td>
</tr>
<tr>
<td>Prescribed naloxone</td>
<td>5</td>
</tr>
<tr>
<td>Contacted the patient's provider</td>
<td>4</td>
</tr>
<tr>
<td>Prescription partial fill</td>
<td>3</td>
</tr>
<tr>
<td>Dispensed naloxone (nasal spray, based on insurance coverage)</td>
<td>3</td>
</tr>
</tbody>
</table>

NEXT STEPS

• Statewide upscaling
• Feasibility study with providers
• Invite pharmacists to join coalitions and community working groups
ACKNOWLEDGEMENTS

• This project was funded by the FM Area Foundation and the North Dakota Board of Pharmacy.

REFERENCES

• Eukel H and Strand MA. Early returns are promising for pharmacists screening patients receiving opioid prescriptions. NaDak Pharmacy, 2018; 31(1):22-23.