FROM THE PHARMACY TO THE EMERGENCY DEPARTMENT:
OPPORTUNITIES FOR PHARMACISTS AMID THE OPIOID CRISIS

Heather blue PharmD BCPS BCgp
DISCLAIMER

• I HAVE NO FINANCIAL RELATIONSHIPS TO DISCLOSE
OBJECTIVES

• Describe opportunities for pharmacists to address the opioid crisis in two different practice areas

• Explain data collected in two different pharmacist surveys

• Identify additional opportunities for pharmacists to make an impact
THE CRISIS

3 Waves of the Rise in Opioid Overdose Deaths

- **Wave 1:** Rise in Prescription Opioid Overdose Deaths
- **Wave 2:** Rise in Heroin Overdose Deaths
- **Wave 3:** Rise in Synthetic Opioid Overdose Deaths

**Other Synthetic Opioids**
- e.g., Tramadol and Fentanyl, prescribed or illicitly manufactured

**Commonly Prescribed Opioids**
- Natural & Semi-Synthetic Opioids and Methadone

**Heroin**

MINNESOTA PHARMACIST SURVEY 2017

- University of Minnesota College of Pharmacy, MN Board of Pharmacy, MN Department of Health and MN Pharmacists Association

- Use of legislation that supports pharmacists' public health role in the opioid crisis

- Pharmacists' perceptions on their role in the opioid crisis

Data analyzed by University of MN CTSI
Anonymous survey emailed to 8405 MN licensed pharmacists

1564 Pharmacists responded
(18.6% response rate)

1267 Pharmacist report practicing in Minnesota

37.5% Community practice
## MN PHARMACIST SURVEY RESULTS

<table>
<thead>
<tr>
<th>Statement</th>
<th>Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a need within our community to address opioid abuse</td>
<td>Agree</td>
<td>1187</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(96.11)</td>
</tr>
<tr>
<td></td>
<td>Neutral/not sure</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.78)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.11)</td>
</tr>
<tr>
<td>Pharmacists should have a role in the community response to the opioid</td>
<td>Agree</td>
<td>1193</td>
</tr>
<tr>
<td>epidemic</td>
<td></td>
<td>(96.68)</td>
</tr>
<tr>
<td></td>
<td>Neutral/not sure</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.03)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.30)</td>
</tr>
</tbody>
</table>

MN LEGISLATION FOR PHARMACISTS TO ADDRESS OPIOID CRISIS

MN Opiate Antagonist Protocol
Pharmacists may dispense naloxone using protocol rather than individual provider prescription

Syringe Access Initiative
Pharmacists may dispense a 10 pack of syringes without a prescription

Authorized Collector Program
Pharmacists may collect and waste unused medications
### MN SURVEY RESULTS: NALOXONE DISTRIBUTION

<table>
<thead>
<tr>
<th>I am aware of the Opiate Antagonist Protocol (through the Minnesota Board of Pharmacy) that allows pharmacists to dispense naloxone using this collaborative practice agreement without an additional written prescription from each individual provider.</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree</td>
<td>Neutral</td>
<td>Disagree</td>
</tr>
</tbody>
</table>
QUALITATIVE DATE COMMENTS OR CONCERNS REGARDING DISPENSING NALOXONE

<table>
<thead>
<tr>
<th>I understand the process by which pharmacists are able to dispense syringes and needles based on the Minnesota Syringe Access Initiative.</th>
<th>Agree</th>
<th>Neutral/not sure</th>
<th>Disagree</th>
</tr>
</thead>
</table>
I understand the process by which unwanted pharmaceuticals (including controlled substances) can now be collected at pharmacies which become Authorized Collectors through the Board of Pharmacy.

Agree
Neutral
Disagree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Category</th>
<th>All (N = 1235)</th>
<th>Clinical consulting roles (n = 190)</th>
<th>Ambulatory (n = 85)</th>
<th>Community (n = 573)</th>
<th>Hospital (n = 314)</th>
<th>Specialty pharmacy (n = 11)</th>
<th>Retired/Not practicing (n = 55)</th>
<th>Overall P-values&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Significant Bonferroni adjusted pairwise comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist-provided education and naloxone distribution may help reduce opioid overdose and opioid-related deaths in the community</td>
<td>Agree</td>
<td>1023 (82.83)</td>
<td>168 (88.42)</td>
<td>81 (95.29)</td>
<td>441 (76.96)</td>
<td>273 (86.94)</td>
<td>8 (72.73)</td>
<td>47 (85.45)</td>
<td>&lt;.0001</td>
<td>Clinical consulting vs community, P = .0198 Ambulatory vs community, P = .0076 Community vs hospital P = .0201</td>
</tr>
<tr>
<td></td>
<td>Neutral/ not sure</td>
<td>111 (8.99)</td>
<td>15 (7.89)</td>
<td>2 (2.35)</td>
<td>66 (11.52)</td>
<td>23 (7.32)</td>
<td>2 (18.18)</td>
<td>2 (3.64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>101 (8.18)</td>
<td>7 (3.68)</td>
<td>2 (2.35)</td>
<td>66 (11.52)</td>
<td>18 (5.73)</td>
<td>1 (9.09)</td>
<td>6 (10.91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am concerned naloxone promotes opioid use as the patient knows the adverse effects can be reversed</td>
<td>Agree</td>
<td>315 (28.02)</td>
<td>42 (23.46)</td>
<td>16 (20.00)</td>
<td>167 (32.24)</td>
<td>74 (25.61)</td>
<td>2 (20.00)</td>
<td>11 (24.44)</td>
<td>.0050</td>
<td>There were no significant differences in pairwise comparisons.</td>
</tr>
<tr>
<td></td>
<td>Neutral/ not sure</td>
<td>113 (10.05)</td>
<td>15 (8.38)</td>
<td>6 (7.50)</td>
<td>57 (11.00)</td>
<td>25 (8.65)</td>
<td>4 (40.00)</td>
<td>6 (13.33)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>696 (61.92)</td>
<td>122 (68.16)</td>
<td>58 (72.50)</td>
<td>294 (56.76)</td>
<td>190 (65.74)</td>
<td>4 (40.00)</td>
<td>28 (62.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am concerned about the liability of dispensing naloxone</td>
<td>Agree</td>
<td>424 (37.99)</td>
<td>64 (36.36)</td>
<td>16 (20.51)</td>
<td>224 (43.41)</td>
<td>94 (32.64)</td>
<td>4 (40.00)</td>
<td>21 (46.67)</td>
<td>.0001</td>
<td>Ambulatory vs community, P = .0091 Ambulatory vs retired/not practicing P = .0380 Community vs hospital P = .0442</td>
</tr>
<tr>
<td></td>
<td>Neutral/ not sure</td>
<td>172 (15.41)</td>
<td>34 (19.32)</td>
<td>12 (15.38)</td>
<td>60 (11.63)</td>
<td>52 (18.06)</td>
<td>4 (40.00)</td>
<td>9 (20.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>520 (46.59)</td>
<td>78 (44.32)</td>
<td>50 (64.10)</td>
<td>232 (44.96)</td>
<td>142 (49.31)</td>
<td>2 (20.00)</td>
<td>15 (33.33)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> <sup>χ²</sup> tests, P < .05 considered statistically significant.
UNANSWERED QUESTIONS

- Are pharmacists practicing in zip codes with high opioid overdose rates dispensing naloxone?

- Are pharmacists practicing in zip codes with high Hepatitis C rates dispensing syringes?

- What Minnesota zip codes have both high opioid overdose rates and high Hepatitis C rates?
OPIOID OVERDOSE RATES COMPARED TO NALOXONE DISPENSING

In collaboration with UMD Geospatial Center, MN Drive Updraft Grant funding, and MDH data
HEPATITIS C RATES COMPARED TO DISPENSING OF SYRINGES

In collaboration with UMD Geospatial Center, MN Drive Updraft Grant funding, and MDH data
OPIOID OVERDOSE RATES COMPARED TO HEPATITIS C RATES

In collaboration with UMD Geospatial Center, MN Drive Updraft Grant funding, and MDH data
• "I am an overnight pharmacist in the retail setting. We already have to deal with robberies. What impact will adding in dispensing outpatient naloxone have?"

• "It doesn’t address the core problem of opioid addiction so a lot of resources can be used for those that have no interest in quitting and therefore may require multiple times to “rescue” them. There needs to be some sort of follow up program to break the cycle of addiction. It’s great to save them to have another chance at life but not just to continue doing what they are doing."

• "None, pharmacists are more than capable of prescribing much more than simply naloxone. Ridiculous it had taken this long to prescribe a drug that can help prevent drug overdoses that are climbing everyday."
• “[Naloxone] is not a fix, and I don’t agree with mass dispensing of this to all patients ‘at risk.’ It provides a cover-up [from] patients to seek services to help them refrain from using their addictive substances.”

• “I am concerned that non-users might be more easily coerced or willing to try heroin or other opiates because of a ‘safety net.’”
OTHER COMMUNITY PHARMACISTS TOOLS

Prescription Drug Monitoring Program

New MN opioid regulations
ADDITIONAL OPPORTUNITIES FOR PHARMACISTS IN THE PHARMACY

- Increased utilization of current legislation
- New legislation allowing pharmacists to prescribe naloxone
- Increased partnerships with prescribers
- Assistance with prescription opioid tapering
TO THE EMERGENCY DEPARTMENT
OPIOID OVERDOSE EDUCATION AND NALOXONE DISTRIBUTION (OEND)
EMERGENCY DEPARTMENT STAFF PERCEPTIONS

- **St. Luke’s Hospital, Duluth MN**
- **Survey exploring emergency department staff perceptions**
  - Prescribers (14)
  - RNs (27)
  - Pharmacists (17)
- **Overall survey response rate of 63%**.
- **Intent was to help guide initiation of an opioid overdose education and naloxone distribution (OEND) service**

There is a need to address opioid overdoses in our community.

No statistical difference between groups
PROVIDING AN OPIOID OVERDOSE EDUCATION AND NALOXONE DISTRIBUTION SERVICE IN THE ED WILL EFFECTIVELY ADDRESS OPIOID ABUSE IN THE COMMUNITY.

Overall
Prescribers
Pharmacists
RNS

<table>
<thead>
<tr>
<th>Prescribers compared to RNs</th>
<th>Prescribers compared to Pharmacists</th>
<th>RNs compared to Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0294</td>
<td>0.5947</td>
<td>0.2102</td>
</tr>
</tbody>
</table>

**By providing naloxone, I am enabling patients to continue to abuse opioids.**

<table>
<thead>
<tr>
<th>Overall Prescribers</th>
<th>Pharmacists</th>
<th>RNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribers compared to RNs</td>
<td>0.0241</td>
<td>0.9756</td>
</tr>
<tr>
<td>Prescribers compared to Pharmacists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNs compared to Pharmacists</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I AM COMFORTABLE EDUCATING PATIENTS AND THEIR FAMILY MEMBERS ABOUT OPIOID OVERDOSE AND NALOXONE

I support implementing an opioid overdose education and naloxone distribution service from the ED.

Overall
Prescribers compared to
Pharmacists
RNs compared to
Pharmacists

<table>
<thead>
<tr>
<th>Prescribers compared to RNs</th>
<th>Prescribers compared to Pharmacists</th>
<th>RNs compared to Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0013</td>
<td>0.5316</td>
<td>0.0185</td>
</tr>
</tbody>
</table>

PREScribers

“Opiates and naloxone are the only perfect pair of addictive intoxicant and reversal agent...yet we cannot get past the stigma”

"It would be very helpful to be able to provide these patients with an outpatient follow-up appointment...so that they have at least...the sense that someone actually cares about their addiction problem, and that we are genuinely trying to help them."
"I think this can be successful given the proper in person training and policy development."

"I would be concerned that we would be used as a Narcan distribution location."
"I think it [OEND] is vital in our continued battle with opioid addiction."

"My biggest struggle is that such a program cannot be the end all, be all and it can in no way prevent the opioid problem in its entirety."

"I would choose not to be a part of it."

OPIOID OVERDOSE EDUCATION AND NALOXONE DISTRIBUTION (OEND) AT ST. LUKE’S

• St. Luke’s Foundation Grant to purchase Narcan® kits

• 48 kits available for distribution
NALOXONE DISTRIBUTION FROM ST. LUKE’S ED

- Narcan® two pack
- St. Luke’s educational handout
- Numbers of local resources
  - Opioid treatment centers
  - Suicide hotline
  - Rural Aids Action network
    - Needle exchange
    - Naloxone distribution
    - Free HIV, hepatitis testing
- Naloxone training (video and live)
UPDATE on naloxone kits
OPPORTUNITIES FOR PHARMACISTS IN THE EMERGENCY DEPARTMENT

• Opioid prescribing guidelines
• Increased use of non-opioid options
• Development of a Referral program with local opioid treatment center with a Peer support response team
• Initiation of buprenorphine from the ED to bridge to treatment
EDUCATION
Continuing education for pharmacists and other healthcare professionals

Z.UMN.EDU/NALOXONE

1 hour continuing education and naloxone resources
What's still needed?

- Increased education
- Increased involvement
- Increased collaboration
ACKNOWLEDGEMENTS

• Dr. Laura Palombi
• Minnesota Board of Pharmacy
• Minnesota Pharmacists’ Association
• Minnesota Department of Health
• University of Minnesota CTSI
• University of Minnesota Duluth Geospatial Analysis Center
• University of Minnesota College of Pharmacy
Questions

hblue@d.umn.edu