On the Frontlines of the Opioid Epidemic: Barriers and Challenges in the Emergency Department

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Overview & Objectives

- Review national and local data on SUDs and overdose
- Discuss multi pronged approach to combatting the opioid epidemic
- Illustrate the issues by reviewing a clinical case from the ED
- Introduce and discuss the concept of Peer Support Services
Heroin Use Has INCREASED Among Most Demographic Groups

<table>
<thead>
<tr>
<th>SEX</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2.4</td>
<td>3.6</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>0.8</td>
<td>1.6</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE, YEARS</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-17</td>
<td>1.8</td>
<td>1.6</td>
<td>--</td>
</tr>
<tr>
<td>18-25</td>
<td>3.5</td>
<td>7.3</td>
<td>109%</td>
</tr>
<tr>
<td>26 or older</td>
<td>1.2</td>
<td>1.9</td>
<td>58%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RACE/ETHNICITY</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic white</td>
<td>1.4</td>
<td>3</td>
<td>114%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.7</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANNUAL HOUSEHOLD INCOME</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20,000</td>
<td>3.4</td>
<td>5.5</td>
<td>62%</td>
</tr>
<tr>
<td>$20,000–$49,999</td>
<td>1.3</td>
<td>2.3</td>
<td>77%</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>1</td>
<td>1.6</td>
<td>60%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEALTH INSURANCE COVERAGE</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>4.2</td>
<td>6.7</td>
<td>60%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4.3</td>
<td>4.7</td>
<td>--</td>
</tr>
<tr>
<td>Private or other</td>
<td>0.8</td>
<td>1.3</td>
<td>63%</td>
</tr>
</tbody>
</table>

Heroin Addiction and Overdose Deaths are Climbing

Heroin-Related Overdose Deaths (per 100,000 people)

286% increase

(U) Figure 1: Drug-Related Overdose Deaths in Pennsylvania Counties in 2014, as reported to DEA Philadelphia Field Division

(U) Source: Pennsylvania Coroner Data

PHILADELPHIA DATA

Numbers of Overdose and Injury-related Deaths in Philadelphia, 2003-2015, Residents and Non-residents

- Drug overdose deaths have spiked in Philadelphia in recent years, with nearly 700 such deaths in 2015.
- In 2015, there were more than twice as many deaths from drug overdose in Philadelphia as there were from homicide.

(Source: Philadelphia Department of Public Health, Medical Examiner’s Office)


From 2003 to 2015, trends varied by the type of drugs detected:

- Heroin-related deaths increased sharply beginning in 2011. Heroin in Philadelphia has a high purity and low price.\(^4\)
- Deaths involving fentanyl spiked in 2006 and increased again beginning in 2014. For the same time periods, the use of fentanyl in combination with other drugs contributed to increases in deaths involving other drugs.
- For other pharmaceutical opioids like oxycodone and hydrocodone, trends have been more gradual with peak numbers of deaths occurring before 2013.
- Benzodiazepines and cocaine were detected in combination with opioids in approximately 90% and 70% of deaths, respectively.

(Source: Philadelphia Department of Public Health, Medical Examiner’s Office)
Clinical Case - Amy

• 26 year old female presents to the ED with CC: “I feel sick”
  • HPI: 26yo female reports diffuse abdominal pain, nausea, no vomiting, subjective fevers. States intermittent x 3-4 days, but worse today. No sick contacts. LMP 3 weeks ago
  • VS: BP 129/80    HR 108    RR 18    Temp 99    POx 100%
  • PMH: none       PSurgHX: knee surgery for torn ACL
  • SH: + tobacco, + alcohol, denies other drug use
Amy - Physical Exam

- no acute distress, mild-mod discomfort
- slight dry MM
- lungs - CTA
- heart - mild tachy
- abd - soft, non-distended, mild diffuse discomfort to palpation, normal BS, no guarding
- back - neg CVA tenderness
- neuro - no motor or sensory deficits
- skin - no rashes, track marks in b.l antecub
Responding to the Heroin Epidemic

PREVENT People From Starting Heroin
- Reduce prescription opioid painkiller abuse.
- Improve opioid painkiller prescribing practices and identify high-risk individuals early.

REDUCE Heroin Addiction
- Ensure access to Medication-Assisted Treatment (MAT).
- Treat people addicted to heroin or prescription opioid painkillers with MAT which combines the use of medications (methadone, buprenorphine, or naltrexone) with counseling and behavioral therapies.

REVERSE Heroin Overdose
- Expand the use of naloxone.
- Use naloxone, a life-saving drug that can reverse the effects of an opioid overdose when administered in time.

SOURCE: CDC VitalSigns, July 2015
Health care providers in different states prescribe at different levels.

Number of painkiller prescriptions per 100 people

Lowest

AZ 82
NE 79
MT 82
WA 77
VA 78
ND 75
WI 76
TX 74
MD 74
IA 73
NM 74
CT 72
FL 73
CO 71
NH 72
WY 70
MA 71
VT 67
IL 68
AK 65
SD 66
NJ 63
NY 60
MN 62
HI 52
CA 57

Average

SC 102
NC 97
OH 100
NV 94
MO 95
DE 91
KS 94
RI 90
GA 91
PA 88
OR 89
DC 86
UT 86
ME 85
ID 86
MS 120
AR 116
LA 113
MI 107
IN 103

Highest

AL 143
WA 138
TN 143
OK 128
KY 128

State Abbreviation — GA 91 — Number of painkiller prescriptions per 100 people

SOURCE: IMS, National Prescription Audit (NPA™), 2012.
• Emergency Departments are significant points of access for patients across the country

• Emergency Physicians among the first to draw attention to prescription opioid abuse
Amy

- On further questioning, admits to IVDU
  - 1st exposure to opioids was after knee surgery with Vicodin at age 19
  - Did not use again until 21 when a friend took Percocet and offered her one
  - Continued to use Percocet and moved to Oxycontin - also from friends and eventually by purchase
  - Came to Philadelphia and experimented with heroin with friends
    - Tried heroin at home, but “dope in Philly is so much better”
    - Made more frequent trips to Philadelphia specifically for heroin
NALOXONE: An “opioid antagonist” used to counter the effects of opioid overdose

- counteracts depression of CNS and respiratory system
  - no effect if opiates absent
- Nonscheduled prescription medication
- No potential for abuse
- Can be administered intramuscularly, subcutaneously, intranasally
- Duration of action: 20-90 minutes
EMS Reversals

Narcan Administration by ZIP Code January – YTD June 2015

This map depicts a count of Narcan administrations by Philadelphia Fire and EMS across Philadelphia ZIP Codes.

Total: 1258

Top 5 ZIP Codes:
- 19134 – 253
- 19124 – 92
- 19133 – 92
- 19140 – 69
- 19135 – 49

Narcan Administrations
Heroin Count YTD (June 2015)

- 0
- 1 - 16
- 17 - 32
- 33 - 49
- 50 - 92
- 93 - 253
ACT 139, Standing Order Present New Opportunity to Screen, Educate, Prescribe

• Passage of ACT 139 made it possible for individuals to obtain life-saving medication and reverse an overdose
• First responders reversed 1258 overdoses in Philadelphia Jan 1-Jun 30
• Standing Order October 2015 makes it possible for pharmacies to distribute naloxone to individual presenting in pharmacy without prescription
  • Pharmacy Participation in standing order voluntary
• Physicians can remove barrier by prescribing to insured, as well as uninsured
  • Primary care providers, emergency physicians, MAT providers, pain prescribers, ID specialists, psychiatrists can play most valuable role in reaching individuals not presenting at exchange
OPPORTUNITIES for PRESCRIBING

Act 139 and Standing Order actively encourage prescribers to screen, educate, and prescribe

Best opportunities to prescribe naloxone are while prescribing opioids or benzos

Additional opportunities present for patients/clients who have opioid histories, based on how patients respond to screening
Amy

- Heroin use became more debilitating
  - Had hx of overdose requiring reversal with naloxone
  - Had been in rehab three times
  - Was no longer allowed to stay at parents’ home
  - Lost parental insurance coverage
  - Was staying with different friends in Philadelphia and hometown
- 5 days ago, one friend overdosed and could not be revived
  - prompted her to try and cut back/ stop use
Percentage of Hospital Emergency Department Visits for Treatment of Opioid Drug Overdoses, 2007-2015, Philadelphia

- In addition to people who died from opioid overdoses, many more were treated in hospital emergency departments.
- The percentage of Philadelphia hospital emergency department visits related to opioid overdoses increased from approximately 0.4% in 2007 to nearly 0.7% in 2015.
- In 2015, there were over 6,500 emergency department visits for opioid overdoses.
- For each opioid-related death, there were approximately 12 hospital emergency department visits.

(Source: Philadelphia Department of Public Health, Division of Disease Control)
• Limited options from most Emergency Departments
• Multiple Barriers
  • within ED
    • identification of the problem
  • ED capabilities
  • external to ED
Barriers to Direct Referral

- Identification
- Residence
- Insurance
- Treatment options and availability
- Coordination
- Patient volition and engagement
Peer Engagement

- **Peers**: someone who has experienced a behavioral health condition firsthand and is now in recovery from a mental health and/or substance use condition

- **Peer Support**: mutual form of shared interactions in which participants seek to use their personal experiences to both help others and gain additional reinforcements for their own life circumstances

- **Peer Support Services**: intentional peer services that are delivered by people who have received training and certification to provide these services

# Peer Engagement

## FIGURE 1. Peer Services Providers Address Unmet Patient and Clinical Service System Factors

### How Consumer Provider Services Address Patient and Treatment System Factors

<table>
<thead>
<tr>
<th>Patient Factors</th>
<th>Treatment System Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social isolation</td>
<td>Overburdened providers</td>
</tr>
<tr>
<td>Disconnection with ongoing outpatient treatment</td>
<td>Fragmented services</td>
</tr>
<tr>
<td>Powerless &amp; demoralization regarding illness</td>
<td>Lack emphasis on recovery-rehabilitation, empowerment</td>
</tr>
</tbody>
</table>

### Factors that contribute to poor outcomes for those with SMI

<table>
<thead>
<tr>
<th>Consumer provider services address each of the factors:</th>
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<tbody>
<tr>
<td>Enhance social networks by:</td>
</tr>
<tr>
<td>- role modeling</td>
</tr>
<tr>
<td>- facilitating peer support activities</td>
</tr>
<tr>
<td>Engages patients; makes treatment more relevant through collaboration</td>
</tr>
<tr>
<td>Activates patients; teach coping &amp; street smarts; provide hope through role modeling</td>
</tr>
<tr>
<td>Supplement existing treatment; increase access</td>
</tr>
<tr>
<td>Provide case management/system navigation to increase access</td>
</tr>
<tr>
<td>Emphasize recovery:</td>
</tr>
<tr>
<td>- liaison between consumer &amp; system</td>
</tr>
<tr>
<td>- advocate for community integration over symptom stabilization</td>
</tr>
</tbody>
</table>

Peer Engagement

- Offers ideal linkage and coordination of patient needs to overcome barriers for referral to treatment
- What does the ideal Peer Engagement Program look like?
  - Qualifications of Peers
  - Staffing Model
  - In-house vs On Call
  - Funding Sources
Amy

- On ED visit, all labs were within normal limits
  - both Amy and MD recognized withdrawal symptoms. Had received morphine in the ED while being worked up
- In discussion with Social Worker, Amy could not be directly admitted to detox/rehab from ED
  - not Philadelphia resident
  - no drivers license
  - no insurance
- Was discharged with informational packet for resources around the city and specific instructions on walk-in services the next day
Looking ahead

- EDs are often limited in ability to provide full extent of services for to address SUDs in alignment with best practices.
  - New strategies and novel approaches are needed for ideal care
- Peer engagement directly from the ED is one such approach
- Development of close collaboration between institutional and community addiction and mental health services and the Emergency Department is an essential step in combatting the opioid epidemic
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SOURCE: CDC Vital Signs, July 2015
Questions?

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