DELAWARE OPIOID METRIC INTELLIGENCE PROJECT

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CEBCP Symposium June 27, 2019
DOMIP Overview

- Goals: improve drug intelligence and community responses in hope of reducing opioid-related problems

- Integrating data to identify opioid-related issues

- Understand causes of and develop solutions to these issues
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- Integrating data to identify opioid-related issues
  - Develop key opioid metrics from different data sources
  - Identify trends over time and in detail
  - Conduct hot-spot mapping
Developing Opioid Metrics: Integrating Diverse Datasets

- Toxicology Data
- Arrest & Criminal Justice Data
- Incident Data
- Prescription Data
- Demographic Data
Identify Trends:
Opioid Metrics Over Time

![Graph showing trends in overdose death rates over time for males and females, broken down by all overdose and opioid overdose.](image)
Identify Trends: Details of Overdoses

Opioid Overdose Death Rate

- Male 45 - 64

Bar chart showing the opioid overdose death rate for different categories:
- Any opioid
- Rx opioid, excl fentanyl
- Fentanyl
- Heroin
- Opioid & Benzo
- Opioid & Cocaine

The chart indicates higher opioid overdose death rates for males aged 45-64 compared to other categories.
Conduct Hot Spot Mapping: DOMIP Mapping App

Asset Mapping

Local Metrics

2017 Metrics for Christiana/Varlano (Newark)

- Overdose Death Rate (per 100,000) 12.25
- 2017 Mean Overdose Death Rate (per 100,000) 35
- # of Methadone Clinics 0
- # of Residential Treatment Facilities 0
- # of Other Treatment Facilities 1
- Median Home Value $ 247,300.00
- Unemployment Rate (16 years or older) 9.50%
Conduct Hot Spot Mapping:
DOMIP Mapping App

https://www.cdhs.udel.edu/projects/domip
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- Goals: improve drug intelligence and community responses in hope of reducing opioid-related problems
- Integrating data to identify opioid-related issues
- Understand causes of and develop solutions to these issues
  - Spatial modeling of opioid problems to find sources
  - Analyze policy responses to opioid problems
Spatial Modeling of Opioid Problems: Geodemographic Prediction of Overdoses

• Question: do overdose death rates vary by neighborhood type?

Cluster Analysis
Spatial Modeling of Opioid Problems: Geodemographic Prediction of Overdoses

![Graph showing the overdoses in different income groups](image)

- **Fentanyl**
  - Middle
  - Lower Income
  - Wealthy

Impact of Responses to Opioid Problems: Prediction of Opioid-Related Arrests

- Is there a relationship between calls for overdose incident services and arrests?

**Dover's 'ANGEL' initiative steers opioid users into treatment instead of jail**
Takeaways

- Addressing the opioid crisis requires data integration
- Opioid metrics should illuminate shifts in problems over time
- Maps and spatial models incorporate community context
- Prediction and evaluation may help with risk reduction and issue prevention
Thank you!

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