Mapping an Opioid Overdose Prevention Program: From Jail to Community

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Presenter Discloser

• No conflicts of interest to disclose
• Intranasal naloxone use is currently off-label

At A Glance

Facilities
12 jails: 9 on Rikers Island (1 female facility, 1 adolescent facility), 3 borough houses, public hospital inpatient unit

Average Daily Population
~10,800 (2014)

Annual Admissions
60,000 (2014)

Community Releases*
60,000 / year

Length of Stay
mean=37 days; median~7d

Electronic Health Record (adopted 2008-2011)
eClinical Works, customized for jail setting; care mgt templates; unidirectional interface with NYC DOC Inmate Information System

*Annual releases from NYC DOC Report of Discharges by zip code for CFY'14
**DEMOGRAPHICS**

<table>
<thead>
<tr>
<th>AGE</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 – 21</td>
<td>13.4%</td>
</tr>
<tr>
<td>22 – 31</td>
<td>32.8%</td>
</tr>
<tr>
<td>32 – 41</td>
<td>21.6%</td>
</tr>
<tr>
<td>42 – 51</td>
<td>21.8%</td>
</tr>
<tr>
<td>51+</td>
<td>10.2%</td>
</tr>
</tbody>
</table>

**GENDER:**
- Male: 90%
- Female: 10%

**RACE:**
- Non-Hispanic, Black: 57%
- Hispanic: 33%
- Non-Hispanic, White: 7%

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**NYC JAIL PREVALENCE BY DIAGNOSIS**

- Substance abuse: >50%
- Mental Illness: 30%
- Hepatitis C: 8%
- HIV: 5%
- Diabetes: 5%
- Tuberculosis: 5%
- Other Sexually Transmitted Infections: 6%

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**OVERVIEW OF OPIOID OVERDOSE**

- Every year, 17,000 people die from an opioid overdose and opioid abuse costs $56 billion in medical costs in the United States (Centers for Disease Control and Prevention, 2014).
- Approximately 9,000 New York City residents died of an unintentional drug poisoning (overdose) during the years 2000 - 2012, an average of 700 overdose deaths per year (Epic Data Brief 2013).
- Overdose is the third leading cause of premature death, after cancer and heart disease in NYC.
- New York City’s incarcerated individuals are especially vulnerable: Previously incarcerated individuals are 129 times more likely to die from an opioid overdose within two weeks of being back in the community compared to the average opioid user.
WHAT IS NALOXONE?
- Opioid antagonist
- Injectable or intranasal
- Preventing an overdose from becoming fatal
- Regulated substance (by prescription only but not a controlled substance)
- Usually acts within 2-5 minutes
- Blocks the effects of all opioids
- Lasts for 30-90 minutes
- No adverse affects if the person has no opioids in their system

OVERDOSE PREVENTION FROM JAIL TO COMMUNITY
- As part of DOHMH’s Opioid Overdose Prevention Initiative, THCC is a registered Opioid Overdose Prevention Program with the ability to distribute Naloxone.
- Each kit contains two doses of the medication, instructions for use and information on reporting the overdose reversal.
- THCC conducts outreach with friends and families of inmates at the Central Visitor’s Center, training individuals interested in Naloxone use who can then receive a free kit after their visit.
- Rationale: overdose victims can’t reverse their own OD. They are dependent on the training and response of those around them.
HOW WE DISTRIBUTED NALOXONE

1. Visitors line up here to enter.
2. Visitor's Center
3. Trainings happen in here.
4. Visitors are taken to different areas.
5. Naloxone is administered to visitors returning from jail.
6. Visitors are brought outside by jail staff.
7. Naloxone is administered to visitors returning from jail.
8. Jail visitors are taken to different areas.

ENTERING RIKERS

1. Map showing the entrance to Rikers Island.
2. Visitor's Center
3. Trainings happen in here.
4. Visitors line up here to enter.
5. Visitor's Center
6. Trainings happen in here.
7. Visitors are taken to different areas.
8. Jail visitors are taken to different areas.

RIKERS ISLAND
ANY PROBLEM STARTING THE PILOT IN FEBRUARY?

5. Dispensing naloxone (pilot before NYS approved Standing Order prescribing)
MAPPING ANALYSIS

AIM: Determine if OD kits dispensed at Central Visitor Center reach NYC communities with highest rates of reported opioid overdoses, concentrated poverty, and people returning home after incarceration.

METHODS: Analyze zip code information collected from visitors and compare against:
– The NYC areas with high rates of return after incarceration.

RESULTS

June 1 2014- May 30 2015

While passing through Riker’s Central Visitor Center:
– 2,014 were trained to identify the signs of an overdose
While heading to the bus after visiting:
– 1,532 received OD kits (2 doses of naloxone per kit)
People receiving kits reside in 38 distinct neighborhoods across New York’s five boroughs:
– 34.6% report above average opioid overdoses
– 22.4% have highest rates of return after incarceration
– 15.1% are areas with the highest poverty rates.

34.6% of kits went to neighborhoods with opioid overdose rates above the NYC average
22.4% of kits went to neighborhoods with the highest rates of reentry.

**PROGRAM OUTCOMES**

*June 1 2014 to date*

- 14 informally reported opioid overdose reversals to staff at subsequent visits

**NEXT STEPS**

- Formal program evaluation started in August 2015
  - Goal: identify how often distributed kits are used and in what context
  - Design: Longitudinal cohort study with in-person, telephone, and text message closed-ended questionnaires
- Approximately 289 enrolled
- Follow-up surveys scheduled for 1, 3 and 6 months after receipt of naloxone
- Preliminary results suggest kits are being used
  - 232 reached by phone; 125 responded to text
  - 19 reported using kit through either call or text
  - 1 reported to staff at Visitor Center
- 7% report overdose reversal in 1st month
CONCLUSIONS

- Generally, the distribution of Naloxone kits at the Riker’s Island visitors center was successful in reaching the communities with the highest rates of opioid overdose.
- Initial findings demonstrate that providing overdose education and naloxone to jail visitors can directly reach target populations.
- However, the south shore of Staten Island, a middle class neighborhood with high rates of opioid overdose, was not reached by this distribution method.

THANK YOU

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Community partners: ACQC, LESHF, FROST’D, Harlem United, NYHRE, SACHR, VOCAL, WHCP