RxStat Program: Pooling Data to Impact New York City’s Prescription Problem

Bureau of Justice Assistance Harold Rogers
Prescription Drug Monitoring Program National Meeting
Washington D.C.
September 25, 2013
Outline

• Opioid Analgesics in New York City
  
  (Dr. Denise Paone, NYC DOHMH)

• Mayor’s Task Force on Prescription Painkiller Abuse
  
  (Ian Hartman-O’Connell, New York City’s Mayor’s Office)

• Public Safety/Public Health Initiatives-RxStat
  – Public Safety (Chauncey Parker, NY/NJ HIDTA)
  – Public Health (Dr. Denise Paone, NYC DOHMH)

• Data driven policy
  
  (Dr. Denise Paone, NYC DOHMH)
OPIOID ANALGESICS IN NEW YORK CITY

Dr. Denise Paone, Director of Research and Surveillance
New York City Department of Health and Mental Hygiene
Opioid analgesic misuse and the associated consequences have led to a public health crisis in New York City.
• From 2005-2012, the rate of opioid analgesic overdose deaths increased 45%, heroin overdose deaths decreased 9%.

• In 2012, more than one fatal opioid analgesic overdose occurred every other day in New York City.

• In 2005, opioid analgesics were involved in 16% of overdose deaths; in 2012, they were involved in 28%.
Existing data/surveillance on opioid analgesic (pain reliever) misuse

<table>
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<th>Mortality</th>
<th>Overdose deaths?</th>
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<td>Prescribing</td>
<td>Prescriptions Filled?</td>
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<td>Prevalence</td>
<td>How Many Users?</td>
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- **Death Certificates**
- **ED Visits, Treatment Admissions**
- **PDMP Data**
- **National Survey on Drug User Health**
Overdose death rate decreased 17% in NYC

Source: New York City Office of the Chief Medical Examiner & New York City Department of Health and Mental Hygiene 2005-2012
Opioid analgesic overdose death rate increased 45% between 2005 and 2012

Opioid analgesic overdose deaths, NYC, 2005-2012

Source: New York City Office of the Chief Medical Examiner &
New York City Department of Health and Mental Hygiene 2005-2012
Opioid Analgesic-related emergency department visit rates doubled from 2004 to 2011

Opioid analgesic misuse/abuse emergency department visits, NYC 2004-2011

Number of opioid analgesics ED visits

Age-adjusted rate per 100,000 population

Source: Drug Abuse Warning Network, Center for Behavioral Health Statistics and Quality, Substance Abuse Mental Health Services Administration, 2004-2011
Prescriptions for opioids increased 31% from 2008-2012
15% of prescribers write 83% of opioid analgesic prescriptions

Prescriptions filled by NYC residents, 2012

Most Commonly Used Drugs Are Opioid Analgesics

Self-reported drug use in past 12 months, NYC, aged 12+

- Opioid Analgesics
- Cocaine
- Benzodiazepines
- Heroine

Source: Substance Abuse Mental Health Services Administration, Office of Applied Studies, National Surveys on Drug Use and Health, 2002-2009
Ian Hartman-O’Connell, Senior Advisor for Health Policy
New York City Office of the Mayor

NYC MAYOR’S TASK FORCE ON PRESCRIPTION PAINKILLER ABUSE
NYC Mayor’s Task Force on Prescription Painkiller Abuse

- Multi-agency task force co-chaired by Deputy Mayor for Health and Human Services and Criminal Justice Coordinator

- Mission: Implement coordinated strategies for responding to the growth of opioid painkiller misuse and diversion in NYC

- Representatives from public health, law enforcement, and criminal justice agencies including:
  - NYC Department of Health and Mental Hygiene
  - NYC Police Department
  - NYC Health and Hospitals Corporation
  - Human Resources Administration (City’s Medicaid agency)
  - Richmond County District Attorney’s Office
  - Drug Enforcement Administration
  - Office of the Special Narcotics Prosecutor
  - NY/NJ HIDTA
Task Force Work Groups

• January 2013 report
• PDMP Reform: I-STOP
• Provider Trainings
  – ED prescribing guidelines
• Public Education
Public Health/Public Safety Initiatives - RXSTAT

Chauncey Parker, Director
New York/New Jersey High Intensity Drug Trafficking Area

Dr. Denise Paone, Director of Research and Surveillance
New York City Department of Health and Mental Hygiene

PUBLIC HEALTH/PUBLIC SAFETY INITIATIVES-RXSTAT
RxStat Goals
“COMPSTAT for Prescription Drug Abuse”

Reduce prescription drug misuse in NYC and associated health and safety consequences by:

• Facilitating accurate and timely analysis of public health and public safety data

• Targeting resources and coordinating efforts to provide the most effective and efficient City response

• Providing measures to track strategies
RxStat
“COMPSTAT for Prescription Drug Abuse”

- Public Health & Public Safety Collaboration
- “Real-time” (enhanced) surveillance
- Participants and stakeholders at city, state, and federal organizations
- Monthly RxStat meetings with key stakeholders
Enhanced Surveillance Efforts

- **Mortality** → Monthly Monitoring, OCME Bottle Project
- **Morbidity** → Daily ED Visits, Daily NYC PCC Calls, Quarterly Treatment Admissions
- **Prescribing** → Quarterly PMP data*, Quarterly DEA Data
- **Prevalence & Intelligence** → Qualitative Component, Data Analytics/Mapping
- **Crime & Diversion** → Monthly Prosecutions*, NYPD Data, Quarterly DEA Losses, Rx Crimes*

*Discussed in more detail later in the presentation.*
APPLICATION IN PUBLIC SAFETY

Chauncey Parker, Director
New York/New Jersey High Intensity Drug Trafficking Area
New York County 2012 Drug Prosecutions by Drug Type
(reflecting 11,712 instances of drugs in 10,559 prosecutions)

“Benzodiazepines” includes Alprazolam, Clonazepam, Diazepam, etc.
“Opioid Analgesics” includes pure & compound versions of Oxycodone, Hydrocodone, Oxymorphone, Morphine, etc. (excludes Methadone).
Rx Crimes

• Central repository for Rx-related Robberies/Burglaries, direct LEA access to police reports.
• Fill cross-border/interagency sharing gap.
• Allow proactive analysis:
  — Emerging crime patterns (e.g., through the roof)
  — Security alerts
  — Sources of drugs
  — Targeted drugs
APPLICATION IN PUBLIC HEALTH-HIGHLIGHTING PMP

Dr. Denise Paone, Director of Research and Surveillance
New York City Department of Health and Mental Hygiene
PMP: Background

• Tool utilized for reducing prescription drug misuse and diversion
  – Drug Epidemic Warning System
  – Drug Diversion & Fraud Investigative Tool

• Collect, monitor, and analyze dispensing data
  – Avoidance of Drug Interactions
  – Patient Care Tool
  – Identification & Prevention of “Doctor Shopping”*

• Data used to support states’ efforts in education, research, enforcement and abuse prevention

• Not meant to infringe on the legitimate prescribing of controlled substances

• Public Health surveillance tool
  · Doctor Shopping: Practice of obtaining multiple controlled substance prescriptions from multiple doctors

Source: http://www.pmpalliance.org/content/prescription-monitoring-frequently-asked-questions-faq
A State Law Called I-STOP

• I-STOP = Internet System for Tracking Over-Prescribing Act

• New state legislation went into effect August 27, 2013 to re-vamp NYS PMP
  – Can access all controlled substances during previous 6 months or more (exact time period TBA)
  – Providers required to check when prescribing controlled substance
  – Can authorize qualified designee to check on their behalf
  – Pharmacists can now view
  – Real-time data
Rate of opioid analgesic prescriptions by borough, NYC 2012

Note: Schedule II opioids + hydrocodone

New York State Prescription Drug Monitoring Program, Number of Prescriptions by United Health Fund Neighborhood

Oxycodone with 100 MED or More Daily Dose

Age Adjusted Rate per 1000 residents

- Bronx -
  - Kingsbridge - Riverdale
  - Northeast Bronx
  - Fordham - Bronx Park
  - Pelham - Throgs Neck
  - Coitona - Tremont
  - Highbridge - Morrisania
  - Hunts Point - Mott Haven
  - -Queens-
    - Greenpoint
    - Downtown - Heights - Stoops
    - Bedford Stuyvesant - Crown Heights
    - East New York
    - Sunset Park
    - Borough Park
    - East Flatbush - Flatbush
    - Canarsie - Flatbush
    - Bensonhurst - Bay Ridge
    - Sheepshead Bay
    - Williamsville - Sheepshead
    - -Manhattan-
      - Washington Heights - Inwood
      - Central Harlem - Morningside Heights
      - East Harlem
      - Upper West Side
      - Upper East Side
      - Chelsea - Clinton
      - Gramercy Park - Murray Hill
      - Greenwich Village - Soho
      - Union Square - Lower East Side
      - Lower Manhattan
      - -Brooklyn-
        - Long Island City - Astoria
        - West Queens
        - Rushing - Coney Island
        - Bayside - Little Neck
        - Ridgewood - Forest Hills
        - Fresh Meadows
        - Southwest Queens
        - Jamaica
        - Southeast Queens
        - Rockaway
        - -Staten Island-
          - Port Richmond
          - Stapleton - St. George
          - Willowbrook
          - South Beach - Tottenville

Rate per 1000

- 6 - 13
- 16 - 20
- 14 - 16
- 21 - 37
- 37 - 128
Residents of Manhattan have the lowest median days supply of all New Yorkers, 2012

Note: Schedule II opioids + hydrocodone

Residents of Staten Island and the Bronx have the highest proportion of prescription >100 MED

Note: Schedule II opioids + hydrocodone

Doctor Shopper

- Defined as patients with prescriptions from 4 prescribers and filled at 4 pharmacies in 2010\(^1\)
- 2 million prescriptions filled by 723,915 unique patients
  - 1.1%, or 7,915 patients were defined as doctor shoppers
  - Filled 153,566 prescriptions (7.6% of all prescription in 2010)
  - Visited 4,127 unique prescribers
  - Visited 1,711 unique pharmacies

\(^1\)Katz, N, Panas, L, Kim, M et al. (2010). Usefulness of prescription monitoring programs for surveillance—analysis of schedule II opioid prescription data in Massachusetts, 1996-2006. Pharmacoepidemiology and Drug Safety, 19, 115-123

Doctor Shopper

• No demographic differences were predictive of doctor shopping

• Doctor shopping was associated with type of opioid prescription
  – Hydrocodone
  – Short-acting oxycodone

• Clinicians have an opportunity at the point of prescribing to consider the potential for drug misuse and diversion

Neighborhoods with High Rates of Opioid Prescription Fills Also Have High Rates of Opioid Overdose Death

RxStat
“COMPSTAT for Prescription Drug Abuse”

• RxStat creates a platform for collaborative problem solving to reduce prescription drug abuse

• RxStat uses PMP in conjunction with other data sources to reduce the public health and public safety consequences of opioid analgesic misuse
Dr. Denise Paone, Director of Research and Surveillance
New York City Department of Health and Mental Hygiene

DATA DRIVEN POLICY IN NYC
Preventing Misuse of Prescription Opioid Drugs

- Physicians and dentists can play a major role in reducing risks associated with opioid analgesics, particularly fatal drug overdose.
- For acute pain:
  - If opioids are warranted, prescribe only short-acting agents.
  - A 3-day supply is usually sufficient.
- For chronic noncancer pain:
  - Avoid prescribing opioids unless other approaches to analgesia have been demonstrated to be ineffective.
  - Avoid whenever possible prescribing opioids in patients taking benzodiazepines because of the risk of fatal respiratory depression.
Emergency Department (ED) Opioid Prescribing Guidelines: Goal and Rationale

• Establish standards for prescribing.
• Balance pain treatment with reducing opioid analgesic misuse.

• Why Emergency Departments?
  – Pain is a common presentation in EDs.
  – Opioid analgesics are commonly prescribed in EDs, although EDs not the main source.
  – One component of a multi-pronged approach.
Target & Adoption

- Patients *discharged* from EDs.
- Not meant for palliative care programs or cancer pain.
- Adopted by all Health and Hospitals Corporation EDs (NYC’s public hospital system).
ED Opioid Prescribing Guidelines

Prescribing Opioid Painkillers in the Emergency Department

People sometimes misuse opioid painkillers, either by taking them in ways they weren’t prescribed or by taking someone else’s prescription. In New York City, one in four overdose deaths involve opioid painkillers. Our emergency department will only provide pain relief options that are safe and appropriate.

For Your Safety, We Do Not:

- Prescribe long-acting opioid painkillers. Such as oxycodone (OxyContin®), morphine (MSContin®), fentanyl patches (Duragesic®) or methadone.
- Prescribe more than a short course of opioid painkillers.
- Refill lost, stolen or destroyed prescriptions.

Prescription opioid painkillers can be just as dangerous as illegal drugs.

- Opioid painkillers can cause confusion, drowsiness and increased sensitivity to pain.
- People can become dependent on or addicted to opioid painkillers.
- An overdose of opioid painkillers can cause a person to stop breathing and die.

Keep your prescription opioid painkillers safe!

- Keep opioid painkillers in their original labeled containers.
- Keep opioid painkillers out of sight and out of reach of children, preferably in a locked cabinet or on a high shelf.
- Get rid of opioid painkillers you are no longer using by flushing them down the toilet.

Problem with painkillers?
Help is available – call 1-800-LIFENET

NYC Health
Staten Island public health detailing campaign on opioid analgesics

- 1-on-1 “detailing” visits from DOHMH representatives
- Deliver key prescribing recommendations, clinical tools, patient education materials
- Aim to reach ~1,000 Staten Island physicians, NPs, PAs
- June–August 2013
Naloxone

PREVENT DRUG OVERDOSE
Naloxone (or Narcan)

- An opioid antagonist: temporarily reverses opioid-induced sedation and respiratory depression
- Takes effect within 2 - 8 minutes
- Causes sudden withdrawal in the opioid-dependent person – an unpleasant experience
- Can’t get high from it
- Has no effect if an opiate is not present
- Routinely used by EMS (but in larger doses)
“The purchase, acquisition, possession or use of an opioid antagonist … shall not constitute the unlawful practice of a profession.

Use of an opioid antagonist pursuant to this section shall be considered first aid or emergency treatment for the purpose of any statute relating to liability…”
Rationale for bystander overdose education and naloxone distribution

• Most opioid users do not use alone
• Known risk factors:
  – polydrug, abstinence, using alone, unknown source
• Opportunity window:
  – opioid OD takes minutes to hours and is reversible with naloxone
• Bystanders are trainable to recognize OD
• Fear of public safety
Overview of OD Prevention Programs in New York City and State

- 80+ programs registered in New York State
  - 51 of them are in NYC

- Programs that dispense naloxone provide:
  - OD prevention trainings
  - Trained participants receive a prescription and OD prevention kit including naloxone

- In 2009, NYC DOHMH began dispensing intranasal naloxone

- In 2013, New York State Pilot program of EMT carrying and administering naloxone in the field
Intranasal Naloxone Kit:

- Face mask for rescue breathing
- 2 doses of naloxone
- 2 intranasal devices
- Brochure reviewing OD and rescue steps
NYC-Funded Programs Providing Naloxone:

- **16 Syringe Access Programs** in NYC required to provide overdose prevention with naloxone

- **Department of Homeless Services** supports naloxone provision on-site at targeted homeless shelters
  - 930 shelter staff, street outreach staff and Peace Officers trained
Program Successes in NYC

- 10,659 IN kits (2x naloxone doses) distributed since January 1, 2009
- 243 reversals reported to DOHMH using IN naloxone since January 1, 2010
- > 500 IM reversals reported by trained overdose responders
Next Steps

- Testimonials – new media campaign
- High-dose prescriber education
- Assessment of buprenorphine availability
- Consider co-prescribing – opioids and naloxone
- Prospective study: naloxone
- Evaluation of Clinical guidelines
Ian Hartman-O’Connell, Senior Advisor for Health Policy
New York City Office of the Mayor

PUBLIC HEALTH & PUBLIC SAFETY PARTNERSHIPS
Challenges & Conclusions

- Legality of prescription drugs
- Complexities of regulation
- Data availability/data silos
- Terminology across fields
- Addressing misinformation
- Developing collaborative approaches

Common Goal -
Reduce prescription drug abuse and the associated public health and public safety consequences.
Questions