Agenda

• COCHS mission
• Data systems behind bars
• Incarceration and opiate crisis in KY
• Areas for innovation
Who are we?

• COCHS: a nonprofit organization dedicated to breaking down barriers in healthcare between community and correctional health care.

• We accomplish this by;
  • Providing technical assistance to counties and state public safety orgs.
  • Working with correctional health providers to improve care and connect with the community.
  • Convene experts to formulate consensus on policy issues.
COCHS Presenter; Dr. Homer Venters
Senior Health and Justice Fellow

• Former chief medical officer of NYC jail system

  o Nation’s first/largest jail based addiction service.

  o Used electronic medical records to document harms of incarceration.

  o Implemented jail-based re-entry that improved health, lowered emergency department utilization and unstable housing efforts.
Data Systems Behind Bars

Security Service
- Jail Management System
- Paper records for incidents, grievances

Health Service
- EMR?
- Pharmacy/inventory system?
- Paper records for QI, QA
Data Systems Behind Bars

**Jail and Prison EMR attributes**

- Integrate physical and behavioral health records
- Clinical decision support, pharmacy, HEDIS metrics
- Document health risks of incarceration
- Connect correctional/community care
Clinical scenario: care

• 42 year old male admitted to a county jail. Reports daily opiate use and feeling anxious, otherwise wnl. He had an episode of self-harm on a prior jail incarceration.

• How will most jails treat this patient?
• Where will he be housed?
• What tools will be used to monitor his symptoms?
Clinical scenario: care

• Medication assisted treatment (MAT) in jail or prison reduces mortality during and after release.

• What percentage of incarcerated people meet clinical criteria for MAT and what % receive it?

• How is MAT access linked to suicide and other deaths behind bars?
Clinical scenario: community

• Will his community health provider know he has been incarcerated?

• Will his Medicaid be checked re status, suspended?

• How will the care he receives impact his health after jail?
Data Systems Behind Bars

Clinical scenario: community

- EMR’s can send an admit/transfer/discharge (ADT) and can access statewide health information exchange (HIE).
- Medicaid enrollment and activation can occur in jails and prisons.
- EMR’s can allow for matching of community claims data with EMR for analysis of high needs cohorts.
Recent Analysis of ‘Hot Spotters’*

- Among 2013 admissions, those with greatest number of admissions since 2008.

- 16 or more jail stays since 2008

<table>
<thead>
<tr>
<th></th>
<th>Frequently-jailed</th>
<th>Control</th>
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<tbody>
<tr>
<td><strong>Significant drug/alcohol use</strong></td>
<td>96.9%**</td>
<td>55.6%</td>
</tr>
<tr>
<td><strong>Alcohol withdrawal in Jail</strong></td>
<td>22.1%**</td>
<td>4.4%</td>
</tr>
<tr>
<td><strong>Serious Mental Illness</strong></td>
<td>19.0%**</td>
<td>8.5%</td>
</tr>
<tr>
<td><strong>Anti-psychotic Prescriptions</strong></td>
<td>37.0%**</td>
<td>15.6%</td>
</tr>
<tr>
<td><strong>Homeless (missing)</strong></td>
<td>51.5%**</td>
<td>14.7%</td>
</tr>
<tr>
<td><strong>Ever with a Medicaid number</strong></td>
<td>95.9%**</td>
<td>78%</td>
</tr>
</tbody>
</table>

Other clinical scenarios for data connections

Feasibility of Treating Hepatitis C in a Transient Jail Population

Ross MacDonald, Matthew J. Akiyama, Almeo Kopolo, Zachary Roeser, Wendy McGaher, Rodriguez Joseph, Mohamed Jallie, and Herren Venter

1 Correctional Health Services, New York City Health + Hospitals, Bronx and 2 Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, New York

Jails represent a critical component of the public health response to HCV elimination. We report on outcomes of 104 patients receiving HCV treatment from January 1, 2014 to June 30, 2016 in a large urban jail setting. Our data demonstrate that treatment in jails is feasible, but many barriers remain.

Keywords: DAA; HCV; jail; NYC corrections.

METHODS
On the way home

Health Outcomes for HIV-Infected Persons Released From the New York City Jail System With a Transitional Care-Coordination Plan

Paul A. Teixeira, DPH, MA, Alison O. Jordan, LCSW, Nicolas Zalier, PhD, Dipal Shah, MPH, and Homer Venteris, MD, MSc

New York City remains the epicenter of the HIV epidemic in the United States, with more people living with HIV/AIDS than in any other region in the country.\(^1\) AIDS case rates in New York City are nearly 3 times the national average, and HIV remains a leading cause of death for residents.\(^2\) The New York City jail system, the second largest in the country with an average daily census of about 12,500, is comprised of 12 jails with 9 active jails on Rikers Island and 3 closed borough detention centers.

Objectives. We sought to assess 6-month outcomes for HIV-infected people released from New York City jails with a transitional care plan.

Methods. Jail detainees in New York City living with HIV who accepted a transitional care plan during incarceration were asked to participate in a multi-site evaluation aimed at improving linkages to community-based care. The evaluation included a 6-month follow-up; HIV surveillance data were used to assess outcomes for those considered lost to follow-up.

Results. Participants (n = 434) completed baseline surveys during incarceration in a jail in New York City. Of those seen at 6 months (n = 243), a greater number were taking antiretroviral medications (92.6% vs 55.6%), had improved antiretroviral therapy adherence (93.2% vs 80.7%), and reported significant...
Data & the health risks of incarceration

- Solitary confinement
- Traumatic brain injury
- Sexual abuse
- Medical neglect
Solitary Confinement

• Associated with 7x higher rate of self-harm.

• Little evidence of improving security

• Used to respond to behavioral health problems
How many people are in Kentucky’s criminal justice system?

104,000 Kentucky residents are behind bars or under criminal justice supervision.

- Federal Prisons: 3,500
- State Prisons: 24,000
- Probation: 48,000
- Local Jails: 13,000
- Parole: 15,000
- Youth 510 Involuntary Commitment: 50

Sources and data notes: See https://www.prisonpolicy.org/reports/correctionalcontrol2018.html
Racial and ethnic disparities in prisons and jails in Kentucky

Whites are underrepresented in the incarcerated population while Blacks, Latinos and American Indians are overrepresented.

Compiled from 2010 Census, Summary File 1.
Opiate Crisis in Kentucky

![Graph: Rate of Opioid-Related Overdose Deaths in Kentucky](image1)

![Graph: Number of Opioid Overdose Deaths in Kentucky](image2)

*Source: CDC WONDER*
Innovation in data systems

• EMR adoption, HIE connectivity
• Integration of social service data on housing
• Development of care coordination with local safety net systems
Thanks to:

• Rachelle Seger & Foundation for a Healthy Kentucky

• INTERACT FOR HEALTH
Health Outcomes for HIV-Infected Persons Released From the New York City Jail System With a Transitional Care-Coordination Plan

Paul A. Trowe, DPH, MA, Alison O. Jordan, LCSW, Nicole Zulak, PhD, Dipal Shah, MPH, and Homer Yonts, MD, MS

New York City remains the epicenter of the HIV epidemic in the United States, with more people living with HIV/AIDS than in any other region in the country. AIDS case rates in New York City are nearly 3 times the national average, and HIV remains a leading cause of death for residents. The New York City jail system, the second largest in the country with an estimated 10,000 beds, houses a diverse population with a high prevalence of infection with HIV, hepatitis C, and other blood-borne, sexually transmitted, and STI-related conditions. This population is often overlooked, underserved, and stigmatized, and their needs are often unmet.

Objectives. We sought to assess 6-month outcomes for HIV-infected people released from New York City jails with a transitional care plan.

Methods. Jail detainees in New York City living with HIV who accepted a transitional care plan during incarceration were asked to participate in a multi-site evaluation aimed at improving linkages to community-based care. The evaluation included a 6-month follow-up. HIV surveillance data were used to assess outcomes for those considered lost to follow-up.

Results. Participants (n = 454) completed baseline surveys during incarceration and 6-month follow-up surveys, with 6-month data available on 363 participants. At follow-up, 17.6% of participants were undetectable for HIV, and 32.8% of participants had at least one health-related need.

Disparities in Mental Health Referral and Diagnosis in the New York City Jail Mental Health Service


The care of persons with mental illness in the United States is incessantly linked to the criminal justice system. Approximately 1.2 million people pass through a jail or prison annually, with the majority cycling through local jails. Approximately one third of these persons have an identified mental illness diagnosed before or during incarceration. Treatment and discharge planning for this population represent considerable challenges. In some small jails, a single mental health professional is responsible for screening, intake, and treatment of individuals with mental illness, putting the burden of care and promotion of mental health on a single individual.

Objectives. To better understand jail mental health services entry, we analyzed diagnostic testing relative to solitary confinement, diagnosis of illness, and treatment.

Methods. We analyzed 2011 to 2013 medical records on 45,189 New York City jail first-time admissions.

Results. Of this cohort, 23.2% were aged 21 years or younger, 40.0% were Hispanic, 40.6% were non-Hispanic Black, 8.8% were non-Hispanic White, and 3.9% experienced solitary confinement. Overall, 14.8% received a mental health diagnosis, which was associated with longer average jail stays (120 vs 48 days), higher rates of solitary confinement (13.1% vs 3.9%), and injury (26.4% vs 7.1%). Individuals aged 21 years or younger were less likely than older individuals to be diagnosed with mental illness.

The Rikers Island Hot Spotters: Defining the Needs of the Most Frequently Incarcerated

Ross MacDonald, MD, Futos Kato, MA, Zachary Rossner, MD, Allison Vase, BA, David Weiss, MD, Moby Bittner, MD, Moby Skeeker, BA, Nathaniel Dolezy, MPH, WR, and Homer Yonts, MD, MA

The United States has the highest rate of incarceration in the world, with a nearly 5-fold increase in the prison population since 1970 and approximately 6.9 million people under the supervision of adult correctional systems at the end of 2013. Though the causes of this growth are complex, the “war on drugs” and “reincarceration” of insipid psychiatric hospitals have been proposed as key drivers of growth in the incarcerated population over this time. The war on drugs refers to a law enforcement commitment to the problem of drug-related crime and conflict, but the term also suggests a war directed against the source of drugs and drug use.

Objectives. We used “hot spotting” to characterize the persons most frequently admitted to the New York City jail system in 2013.

Methods. We used our Correctional Health Services electronic health record to identify 800 patients admitted in 2013 who returned most since November 2008. We compared them to a randomly selected control group of 800 others admitted in 2013, by using descriptive statistics and cross-tabulations, including data through December 2014.

Results. The frequently incarcerated individuals had a median of 21 incarcerations (median duration 11 days), representing 18,713 admissions and $329 million in custody and health costs versus $36 million for the controls. The frequently incarcerated were significantly older (42 vs 35 years), and more likely to have serious mental illness (19% vs 8.8%) and homelessness (5.1% vs 14.7%).

Solitary Confinement and Risk of Self-Harm Among Jail Inmates

Futos Kato, MA, Andrea Lewis, PhD, Sarah Geda-Kolitsch, MPH, James Haskel, MD, MPH, David Lee, MPH, Howard Aper, PhD, Daniel Sellan, PsyD, Ross MacDonald, MD, Angela Solimo, MS, Amanda Parsons, MD, MPH, and Homer Yonts, MD, MS

Self-harm is a prevalent and dangerous occurrence within correctional settings. Inmates in jail and prison attempt to harm themselves in many ways, resulting in outcomes ranging from trivial to fatal. Suicide is a leading cause of death among the incarcerated; however, suicide and suicide attempts represent a small share of all acts of self-harm. The motivations of inmates who harm themselves are complex and often difficult to discern. Inmates may engage in suicidal acts in correctional settings with existing mental illness and high harm, but they may also be influenced by a range of factors, including access to means, management of behavior, and the presence of observers.

Objectives. We sought to better understand acts of self-harm among inmates in correctional institutions.

Methods. We analyzed data from medical records on 244,979 incarcerations in the New York City jail system from January 1, 2010, through January 31, 2013.

Results. In 13,003 (0.05%) of these incarcerations, 21,822 acts of self-harm were committed, 1,089 potentially fatal and 7 fatal. Although only 2.3% of admissions included any solitary confinement, 53.3% of acts of self-harm and 46.5% of acts of potentially fatal self-harm occurred within this group. After we controlled for gender, age, race/ethnicity, serious mental illness, and length of stay, we found self-harm to be associated significantly with being in solitary confinement at some point in the incarceration (odds ratio 1.60, 95% confidence interval 1.20 to 2.13), among inmates with serious mental illness (odds ratio 1.23, 95% confidence interval 1.13 to 1.33), and being held in a jail with lower rates of mental health services (odds ratio 1.34, 95% confidence interval 1.11 to 1.62).
Formerly Incarcerated at Risk

Figure 1. Age-standardized rate of death (deaths per 100,000 person-years) from suicide, homicide, and drug-related causes, New York City, 2001–2005. Persons living in the poorest neighborhood included New York City residents living in the South Bronx (United Hospital Fund’s neighborhood designations 105, 106, and 107). The South Bronx is the New York City neighborhood with the highest percent of people living in poverty (42%) according to the US Census 2000.

Lim et al 2012 3
Risk is Post-Release

Figure 1. Mortality Rates among Former Inmates of the Washington State Department of Corrections during the Study Follow-up (Overall) and According to 2-Week Period after Release from Prison.

The dashed line represents the adjusted mortality rate for residents of the State of Washington (223 deaths per 100,000 person-years), and the solid line represents the crude mortality rate among inmates of the state prison system during incarceration (201 deaths per 100,000 inmate person-years).

Binswanger et al 2007