HCV and the NYC Jail System

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Other Risks 3

• Infectious Disease Transmission
  – TB
  – HIV/HEP B/C
  – MRSA
  – C. Diff
  – Influenza
  – Varicella
HCV Incidence in prison

- Australian prison
  - N=210 prisoners with hx of IDU
  - Interview and HCV VL q6-12monthly
    - 49.1% reported IDU
    - 31% reported sharing
    - 38 incident HCV cases in 270 person years
    - 14/100 person years
    - NYC jails have about 10,000 person years annually

Luciani et al Addiction 2014
Hep C Prevalence

- Australia (29%)\(^1\)
- NYC Various estimates\(^2\)
  - 2006 Seroprevalence study
    - 11.5%
      - 10.5% males
      - 18.9% females
  - 2014 Universal Screening AMKC
    - Male Facility, enriched in Substance Abuse and MH
    - 22%

Newly Reported Chronic Hepatitis C in New York City by ZIP Code, 2014 – 2015

Source: Hepatitis B and C in New York City Annual Report, DOHMH 2015
Hep C Mortality vs. HIV Mortality

Figure. Annual age-adjusted mortality rates from hepatitis B and hepatitis C virus and HIV infections listed as causes of death in the United States between 1999 and 2007.

Because a decedent can have multiple causes of death, a record listing more than 1 type of infection was counted for each type of infection.

Hep C Mortality, NYC Jails

• 14.7% of deaths in the last 2 years (5/34) were attributable to Hepatitis C (unpublished Data)
  – HCC
  – Cirrhosis

• In the absence of a public health response, mortality estimated to more than triple in the next 20 years\(^1\)

• Natural history of epidemic could result in 50% of jail deaths caused by Hep C

1 Rein DB, Dig Liver Dis. 2011
HCV 4-Responses

• Prevention
• Screening
• Treatment
• Linkage to care
Prevention-Rikers Island KEEP

- Initiated in 1987
- Nation’s first Opiate Treatment Program in jail
- Funded by H + H/OMB
- Accredited by the National Commission on Correctional Healthcare (NCCHC)
- Over 9,000 Detoxes per year
- ~3,000 patients maintained per year
Screening

HEP C Testing

- Total Hep C

Rapid Testing Pilot

Cohort Screening

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<tbody>
<tr>
<td>Total Hep C</td>
<td>327</td>
<td>295</td>
<td>398</td>
<td>431</td>
<td>432</td>
<td>444</td>
<td>829</td>
<td>973</td>
<td>821</td>
<td>1039</td>
<td>1013</td>
<td>1024</td>
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<td>964</td>
<td>1195</td>
<td>1210</td>
<td>1069</td>
<td>971</td>
<td>1064</td>
<td>1417</td>
<td>1482</td>
<td>1058</td>
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Confirmed State: Testing

# Patients Tested per 1,000 Average Daily Census 2014-16

30,200 individuals tested between January 2014 – July 2016
Hepatitis C Screening of the “Birth Cohort” (Born 1945–1965) and Younger Inmates of New York City Jails

Matthew J. Akiyama, MD, MSc, Fatos Kaba, MA, Zachary Rosner, MD, Howard Alper, PhD, Robert S. Holzman, MD, and Ross MacDonald, MD

Note. Dotted lines enclose the years 1945 to 1965.

Treatment- Jails vs. Prisons

• Prisons
  – Long sentences (years)
  – ~1.5 million incarcerated
  – Stable population
  – Identified as key point of intervention\(^1\)
    • Australia—full steam ahead
    • US-1/8\(^{th}\) steam ahead
    • Key difference is payment models

Treatment- Jails vs. Prisons

• Jails
  – Transient Population
  – Higher volume: 11.7 million pass through per year
  – Two major questions
    1. What happens to those who come in on treatment?
       – This will happen frequently
       – Up to 1/3 of heroin users pass through the criminal justice system annually\(^1\)
    2. Can we successfully initiate treatment in jail?

Rich, JD et al. NEJM 2011
# Treatment

## Measures

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<th>Measures</th>
<th>Desired Outcomes</th>
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<td>Treatment Initiation</td>
<td>Expansion of Treatment Capacity</td>
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<tr>
<td>Viral Load Testing at Treatment Completion</td>
<td>Linkage to Care to Ensure Treatment Completion</td>
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<tr>
<td>Viral Load Results Post Treatment</td>
<td>Success Rate</td>
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### 104 Treated

1/2014 - 6/2016

- **Treatment Initiation**
  - 60% Community Initiated (n = 62)
  - 40% Jail Initiated (n = 42)

- **Viral Load Testing at Treatment Completion**
  - 71% Follow Up Test Results (n = 74)

- **Viral Load Results Post Treatment**
  - 96% Negative Viral Load Post Treatment
NYC HEALTH + HOSPITALS TO TRIPLE THE NUMBER OF PEOPLE TREATED FOR HEPATITIS C IN JAIL

Correctional Health Services, a division of NYC Health + Hospitals, continues to be a national leader in treating and curing hepatitis C patients in jail and connecting people to care upon release.

(New York, NY) – Dr. Ram Raju, President and CEO of NYC Health + Hospitals, today announced that through a combination of funding in the NYC Budget and a partnership with Merck & Co., the City, between Fiscal Year 2016 and Fiscal Year 2017, will be able to triple the number of incarcerated patients who will receive medication that can cure hepatitis C.

“NYC Health + Hospitals is committed to the health and well-being of all New Yorkers. We are proud to be able to expand life-saving hepatitis C treatment to some of the most vulnerable patients in our City and ensure that people moving into and out of the corrections system can receive a full course of treatment and services,” said Dr. Raju.

“The cost of not treating this disease is devastating in both human and financial terms,” said Dr. Patsy Yang, Senior Vice President of NYC Health + Hospitals for Correctional Health Services. “As one of the largest providers of correctional health services in the nation, we have the rare opportunity and moral obligation to treat and cure individuals in our care who have this serious, transmissible disease. As part of the nation’s largest public hospital system, we can leverage an extensive ambulatory care network to ensure that treatment can be completed even in this transient population. We applaud Merck & Co. for its commitment to extending even further the possibility of a cure to more people.”
Linkage to Care

• Building on Success with HIV care
• Building partnerships with H + H and other safety net providers
• Medication Continuity
  – Pharmacy fills
  – Medicaid coverage
  – Medicaid prior auth
  – Community starts
• Buy in from community Payers
New York City Jail System