Surveillance to identify care and monitor trends in Hepatitis C and HIV coinfection in California

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Background: Hepatitis C Treatment for People Living with HIV

- 1 in 5 people in the United States who are living with HIV are coinfected with hepatitis C (HCV).
- Guidelines recommend:
  - Screen for HCV in people living with HIV (PLWH) when they establish HIV care.
  - Consider HCV treatment.
Viral hepatitis treatment among PLWH is a priority in the national strategy, 2017-2020.
The California Department of Public Health (CDPH) is moving to integrate hepatitis C and HIV in 2019.
Background: HIV and Hepatitis C in California

**HIV**
- **5,061** new diagnoses in 2016
- **132,405** people living with HIV
- **Decline** in new diagnoses
- CA AIDS Drug Assistance Program (ADAP) covers HCV medications

**Hepatitis C**
- **38,656** new chronic cases in 2016
- **424,000** estimated chronic HCV prevalence
- **Increase** in cases reported
- CA Medicaid covers treatment for all with chronic HCV
Goal: Use Hepatitis C and HIV Laboratory Surveillance Data

- To monitor overlap of HIV and HCV epidemics
- To identify gaps in HCV care among PLWH
Methods: HCV care among PLWH in HIV care

HIV registry (eHARS) was matched to the Hepatitis C registry

People living with diagnosed HIV and HCV as of 2016

eHARS = Enhanced HIV/AIDS Reporting System
Laboratory surveillance data was used as a proxy for care

- **HIV Care**
  - At least one CD4, viral load or HIV-1 genotype test in 2016

- **HCV Care**
  - Detectable HCV virus (RNA) positive and
  - At least one HCV genotype test or two or more detectable HCV RNA tests within six months.
Of people in California with diagnosed HIV infection at the end of 2016, 11% were known to be coinfected with HCV.
Injection drug use was the most common risk factor among those with known HIV and HCV, reported by 42% of persons with coinfection compared to 10% of persons with HIV monoinfection at the end of 2016.
Results: Trend in HIV and HCV Coinfection

- New HIV diagnoses among people with HCV have increased 63% during 2012-2016.
- New HIV diagnoses 1 year or more after HCV have remained stable.
Transmission Category of New HIV Diagnosed 1 Year + after HCV

Percent of HIV Diagnoses 1 year or more after HCV Report by HIV Transmission Category
Transmission Category of New HIV Diagnosed 1 Year + after HCV

Percent of HIV Diagnoses 1 year or more after HCV Report by HIV Transmission Category

- **2012**: 60% MSM/IDU or IDU, 40% High risk Heterosexual or Heterosexual
- **2013**: 60% MSM/IDU or IDU, 40% High risk Heterosexual or Heterosexual
- **2014**: 50% MSM/IDU or IDU, 50% High risk Heterosexual or Heterosexual
- **2015**: 50% MSM/IDU or IDU, 50% High risk Heterosexual or Heterosexual
- **2016**: 50% MSM/IDU or IDU, 50% High risk Heterosexual or Heterosexual
Transmission Category of New HIV Diagnosed 1 Year + after HCV

Percent of HIV Diagnoses 1 year or more after HCV Report by HIV Transmission Category

- MSM/IDU or IDU
- High risk Heterosexual or Heterosexual
- MSM
83% percent of those with coinfection were in HIV care, while 52% of those with active HCV were in HCV care.
## Results: Characteristics Associated with HCV Care

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Not in HCV Care (n=2,526)</th>
<th>In HCV Care (n=2,706)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age as of 2016 (range)</td>
<td>54 years (6-86)</td>
<td>53 years (20-87)</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Male</td>
<td>49%</td>
<td>51%</td>
<td>NS</td>
</tr>
<tr>
<td>Non-white race</td>
<td>48%</td>
<td>52%</td>
<td>NS</td>
</tr>
<tr>
<td><strong>HIV Transmission Category</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection drug use</td>
<td>47%</td>
<td>53%</td>
<td>NS</td>
</tr>
<tr>
<td>Male-to-male sexual contact</td>
<td>49%</td>
<td>51%</td>
<td>NS</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>49%</td>
<td>51%</td>
<td>NS</td>
</tr>
</tbody>
</table>

*Percents are row percents*
## Results: Characteristics Associated with HCV Care

<table>
<thead>
<tr>
<th>HIV Care Measures</th>
<th>Not in HCV Care (n=2,526)</th>
<th>In HCV Care (n=2,706)</th>
<th>Odds Ratio*</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>In HIV Care</td>
<td>46%</td>
<td>54%</td>
<td>2.1</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Retained in HIV care(^1)</td>
<td>44%</td>
<td>56%</td>
<td>1.7</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Undetectable HIV viral load(^2)</td>
<td>45%</td>
<td>55%</td>
<td>1.5</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

*Adjusted for age of person in 2016

1 Two or more HIV viral load test or CD4 test or genotype test received in the year 2016 at least within 3 months or more apart.

2 Most recent HIV viral load test result in 2016 of <= 200 copies/ml
Conclusions

- An HIV/HCV registry match can help monitor trends in coinfection.
- Only about half of PLWH and HCV coinfection were in care for HCV.
- HIV care was positively associated with care for HCV.
Next Steps

- CDPH is integrating HIV and viral hepatitis programs.
- Vulnerability assessment planned for the state using recent HCV, HIV and opioid data.
- More integrated HIV and HCV testing and linkages to care in settings that serve people who inject drugs.
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