Justice-Involved Veterans: Mental Health and Substance Use Disorder Diagnoses and Treatment Use

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Poll

- Who is joining us on the call?
  - VA Researchers
  - Non-VA Researchers
  - HCRV/VJO Specialists
  - Criminal justice system partners
  - Treatment providers/clinicians
Roadmap

• Background
  – Justice-Involved Veterans (JIV)
  – Connection to VA services
• VHA Veterans Justice Programs
• Highlighted Studies
  – Study 1: Examining mental health and substance use disorder diagnoses and treatment use among HCRV and VJO Veterans
  – Study 2: Gender differences in mental health and substance use disorder diagnoses and treatment use among HCRV and VJO Veterans
  – Study 3: Access to pharmacotherapy for opioid use disorder among HCRV and VJO Veterans compared to non-justice-programs Veterans
• Building Research-Operations Partnerships
• Developing Areas
Justice-Involved Veterans (JIV)

- 10% of the incarcerated population are Veterans
- ~146,000 released from jails/prisons each year
- 10-12% of Iraq and Afghanistan Veterans have interacted with the justice system since returning from deployment

(Elbogen et al., 2012; Greenberg & Rosenheck, 2008; Noonan & Mumola, 2007; Rieckhoff et al., 2012)
Homelessness Common in JIV

• 30% of incarcerated Veterans have a history of homelessness

• Incarceration as an adult male is the single highest risk factor of ever being homeless (NSHAPC/Burt, 1996)
  – Disrupts social and family ties
  – Interferes with ability to maintain employment and housing

(Metraux, Roman, and Cho on prison reentry/jail stays, National Symposium on Homelessness Research, 2007; Tsai et al., 2014)
High Mortality Risk Among JIV

- 13x higher mortality risk during first two weeks post prison release
- VA benefits served as a protective factor for all-cause mortality

(Binswanger et al., 2013; Wortzel et al., 2012)
Less Connection to VA services Among JIV

- Jailed Veterans vs. Homeless Veterans
  - Higher rates of alcohol and drug problems
  - Half as likely to use VA outpatient services

<table>
<thead>
<tr>
<th>Services</th>
<th>Jailed Veterans</th>
<th>Homeless Veterans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any VA services</td>
<td>38%</td>
<td>84%</td>
</tr>
<tr>
<td>Mental health outpatient</td>
<td>30%</td>
<td>73%</td>
</tr>
<tr>
<td>Residential care</td>
<td>4%</td>
<td>11%</td>
</tr>
<tr>
<td>Medical and surgical outpatient</td>
<td>29%</td>
<td>60%</td>
</tr>
</tbody>
</table>

(McGuire et al., 2003)
Poll

- Do you have familiarity with Veterans Justice Programs?
  - No
  - Yes, but I have not had contact with any Veterans in the Veterans Justice Programs
  - Yes, and I have contact with Veterans in Veterans Justice Programs
VHA Justice Programs: Mission

To partner with the criminal justice system to identify Veterans who would benefit from treatment as an alternative to incarceration. VJP will ensure access to exceptional care, tailored to individual needs, for justice-involved Veterans by linking each Veteran to VA and community services that will prevent homelessness, improve social and clinical outcomes, facilitate recovery and end Veterans’ cyclical contact with the criminal justice system.
Sequential Intercept Model

Community

Local Law Enforcement

Arrest

Initial Detention

First Appearance Court

Jail - Pretrial

Dispositional Court

Specialty Court

Jail Sentenced

Prison

Probation

Parole

Community

VJO

HCRV

(Adapted from Blue-Howells et al., 2013)
**VHA Justice Outreach Services**

**Veterans Justice Outreach (VJO)**
- Gain access to the jail
- Identify Veterans and Determine Eligibility
- Conduct outreach, assessment, and case management for Veterans in local courts and jails
- Provide/coordinate training for law enforcement personnel
- Linkage to VA and Community Services/Resources

- Number of VJO Specialists funded: 248
- Number of local jail facilities serviced: 1284 (39%) of 3,322 local jails
- Number of Veterans receiving VJO services (through end FY 14): 87,000+

**Health for Re-Entry Veterans (HCRV)**
- Gain access to the prison
- Educate Veterans’ groups about VA and VA services
- Identify Veterans and Determine Eligibility
- Reentry Planning
- Linkage to VA and Community Services

- Number of HCRV Specialists funded: 44
- Number of state and federal prisons serviced: 998 (81%) of 1,234 US prisons
- Number of incarcerated Veterans receiving reentry services (through end FY 14): 63,000+
Justice Involvement and VA Health Care

• Can provide:
  – Outreach, assessment, referral and linkage to services
  – Treatment for justice-involved Veterans who are not incarcerated

• Title 38 CFR 17.38 (c)(5) does not allow VHA to provide:
  – Hospital and outpatient care for a Veteran who is
    • Either a patient or inmate in an institution of another government agency
    • If that agency has a duty to give that care or services
VHA Justice Programs: Strategic Goals

1. Improve Veteran identification

2. Build staff capacity/skill

3. Match Veterans to appropriate treatment

4. Reduce stigma

5. Develop systems for evaluation, research & knowledge
Study 1: Examining Mental Health and Substance Use Disorder Diagnoses and Treatment Use Among JIV

- What are the mental health and substance use disorder treatment needs of Veterans involved in the criminal justice system who are served by HCRV and VJO?

- Are Veterans in HCRV and VJO with mental health or substance use disorders connecting to VHA mental health or substance use disorder treatment?
Study 1: Sample

- **HCRV cohort:** All Veterans with at least once instance of HCRV clinic visit (591 code) from FY08-FY12
- **VJO cohort:** All Veterans with at least once instance of VJO clinic visit (592 code) from FY10-FY12
- **Excluded if:**
  - Seen by an HCRV or VJO Specialist without a 591 or 592 stop code in the CPRS record
  - Ineligible for VHA services

**HCRV = 22,712 Veterans**

**VJO = 36,358 Veterans**
Study 1: Variables

- **Sociodemographic characteristics:** gender, age, race, ethnicity, marital status, residence, homeless, service-connected disability rating

- **Diagnosis:** mental health disorders, substance use disorders
  - 1+ instance of a mental health or substance use disorder ICD-9 diagnosis code in one year period after HCRV or VJO outreach visit

- **Treatment use:** mental health or substance use disorder outpatient, inpatient, or residential treatment; pharmacotherapy for alcohol or opioid use disorders
  - **Entry:** Any use of treatment in one year period after HCRV or VJO outreach visit
  - **Engagement:** 6+ outpatient visits or 1+ residential days in one year period after HCRV or VJO outreach visit
Women are Small Minority of JIV

**HCRV**
- Women: 2%
- Men: 98%

**VJO**
- Women: 4%
- Men: 96%
Most JIV are Age 45 or Older

- < 25: 1% (HCRV), 4% (VJO)
- 25-34: 7% (HCRV), 19% (VJO)
- 35-44: 16% (HCRV), 14% (VJO)
- 45-54: 42% (HCRV), 31% (VJO)
- 55+: 34% (HCRV), 31% (VJO)
Most JIV are Black/African American or White

<table>
<thead>
<tr>
<th>Race</th>
<th>HCRV</th>
<th>VJO</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian/Alaskan Native</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>39%</td>
<td>32%</td>
</tr>
<tr>
<td>White</td>
<td>54%</td>
<td>59%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>HCRV</th>
<th>VJO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>5%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Few JIV are Married

- Single: HCRV 35%, VJO 40%
- Married: HCRV 45%, VJO 37%
- Divorced/Separated: HCRV 3%, VJO 2%
- Widow: HCRV 3%, VJO 2%
> 20% of JIV Live in Rural Areas

**HCRV**
- Rural: 25%
- Urban: 75%

**VJO**
- Rural: 21%
- Urban: 79%
Many JIV are Homeless

HCRV
- 17% Homeless
- 83% Not Homeless

VJO
- 23% Homeless
- 77% Not Homeless
< 50% of JIV have a Service-Connected Disability Rating

**HCRV**
- None: 11%
- < 50 SC: 18%
- ≥ 50 SC: 71%

**VJO**
- None: 25%
- < 50 SC: 20%
- ≥ 50 SC: 55%
### Majority of JIV have a Mental Health or Substance Use Disorder

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>HCRV</th>
<th>VJO</th>
</tr>
</thead>
<tbody>
<tr>
<td>No mental health or substance use disorders</td>
<td>27%</td>
<td>10%</td>
</tr>
<tr>
<td>Mental health disorder</td>
<td>56%</td>
<td>77%</td>
</tr>
<tr>
<td>Substance use disorder</td>
<td>55%</td>
<td>71%</td>
</tr>
<tr>
<td>Dual (mental health + substance use disorders)</td>
<td>39%</td>
<td>58%</td>
</tr>
</tbody>
</table>

HCRV: n = 13,468 (59% of initial sample); VJO: N= 32,012 (88% of the initial sample)
Mental health disorders: Depressive disorders, PTSD, anxiety, bipolar, schizophrenia, personality disorders.
Substance use disorders: Alcohol, opioid, cocaine, amphetamine, cannabis, sedative, and other drug use disorders.
Mental Health Disorders are Common

- Depression: 40% HCRV, 50% VJO
- PTSD: 20% HCRV, 30% VJO
- Anxiety: 10% HCRV, 15% VJO
- Bipolar: 5% HCRV, 6% VJO
- Schizophrenia: 3% HCRV, 4% VJO
- Personality dis.: 2% HCRV, 3% VJO
Substance Use Disorders are Common
Most JIV Entered Mental Health Treatment and Majority Entered Substance Use Disorder Treatment

<table>
<thead>
<tr>
<th>Mental health treatment among JIV with mental health disorders</th>
<th>HCRV</th>
<th>VJO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td>93%</td>
<td>97%</td>
</tr>
<tr>
<td>Engagement</td>
<td>64%</td>
<td>78%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance use disorder treatment among JIV with substance use disorders</th>
<th>HCRV</th>
<th>VJO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td>57%</td>
<td>72%</td>
</tr>
<tr>
<td>Engagement</td>
<td>37%</td>
<td>54%</td>
</tr>
<tr>
<td>Pharmacotherapy for alcohol use disorder</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>Pharmacotherapy for opioid use disorder</td>
<td>12%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Study 1: Summary

• Mental health and substance use disorder treatment needs are substantial

• HCRV and VJO programs are linking a majority of Veterans with mental health and substance use disorder treatment

• Entry and engagement in substance use disorder treatment may represent a window of opportunity for program enhancements
Questions?
Study 2: Gender Differences in Mental Health and Substance Use Disorder Diagnoses and Treatment Use Among HCRV and VJO Veterans

- Do the mental health and substance use disorder treatment needs of Veterans in contact with the HCRV or VJO programs differ by gender?
- Same cohort as Study 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>425</td>
<td>2%</td>
</tr>
<tr>
<td>Men</td>
<td>22,287</td>
<td>98%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>1,621</td>
<td>4%</td>
</tr>
<tr>
<td>Men</td>
<td>34,737</td>
<td>96%</td>
</tr>
</tbody>
</table>
Women are Younger than Men

Under 45

45 and older

0%

10%

20%

30%

40%

50%

60%

70%

Age

HCRV Women

HCRV Men

VJO Women

VJO Men

Under 45

45 and older
Higher % of HCRV Men are Live in Rural Areas

HCRV Women  HCRV Men  VJO Women  VJO Men

Rural
Homelessness Varies Less for Women

- HCRV Women: 20%
- HCRV Men: 17%
- VJO Women: 19%
- VJO Men: 24%
Higher % of Women have a Service-Connected Disability Rating

- HCRV Women: 22%
- HCRV Men: 18%
- VJO Women: 22%
- VJO Men: 36%

- < 50 SC: 22% (HCRV Women), 22% (HCRV Men), 21% (VJO Women)
- ≥ 50 SC: 23% (HCRV Women), 11% (HCRV Men), 36% (VJO Women), 27% (VJO Men)
## Mental Health and Substance Use Disorders are Common

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>HCRV Women</th>
<th>HCRV Men</th>
<th>VJO Women</th>
<th>VJO Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>No MHD or SUD</td>
<td>17%</td>
<td>28%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>MHD</td>
<td>76%</td>
<td>56%</td>
<td>88%</td>
<td>76%</td>
</tr>
<tr>
<td>SUD</td>
<td>51%</td>
<td>55%</td>
<td>58%</td>
<td>72%</td>
</tr>
<tr>
<td>Dual (MHD+ SUD)</td>
<td>44%</td>
<td>38%</td>
<td>55%</td>
<td>58%</td>
</tr>
</tbody>
</table>

HCRV: 324 women (76% of initial sample); 13,144 men (59% of initial sample).
VJO: N= 1,535 women (95% of initial sample); 30,478 men (88% of initial sample).
Mental health disorders: Depressive disorders, PTSD, anxiety, bipolar, schizophrenia, personality disorders.
Substance use disorders: Alcohol, opioid, cocaine, cannabis, and other drug use disorders.
Higher Prevalence of Mental Health Disorders Among Women
Lower Prevalence of Substance Use Disorders Among Women

![Graph showing prevalence of substance use disorders by gender and substance type.]

- Alcohol
- Opioid
- Cocaine
- Cannabis
- Other drug

Legend:
- HCRV Women
- HCRV Men
- VJO Women
- VJO Men
More Women Enter and Engage in Treatment

<table>
<thead>
<tr>
<th>JIVs with mental health disorders</th>
<th>HCRV Women</th>
<th>HCRV Men</th>
<th>VJO Women</th>
<th>VJO Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry - mental health</td>
<td>96%</td>
<td>93%</td>
<td>98%</td>
<td>97%</td>
</tr>
<tr>
<td>Engagement – mental health</td>
<td>72%</td>
<td>64%</td>
<td>84%</td>
<td>77%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JIVs with substance use disorders</th>
<th>HCRV Women</th>
<th>HCRV Men</th>
<th>VJO Women</th>
<th>VJO Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry - SUD</td>
<td>62%</td>
<td>57%</td>
<td>75%</td>
<td>54%</td>
</tr>
<tr>
<td>Engagement - SUD</td>
<td>41%</td>
<td>37%</td>
<td>56%</td>
<td>53%</td>
</tr>
<tr>
<td>Pharmacotherapy for alcohol use disorder</td>
<td>8%</td>
<td>5%</td>
<td>22%</td>
<td>10%</td>
</tr>
<tr>
<td>Pharmacotherapy for opioid use disorder</td>
<td>20%</td>
<td>11%</td>
<td>18%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Study 2: Summary

- Women have a higher prevalence of mental health disorders.
- Women have a lower prevalence of substance use disorders.
- Women enter and engage in mental health and substance use disorder treatment at higher rates than men.
- Entry and engagement in substance use disorder treatment may represent a window of opportunity for program enhancements for both women and men.
Questions?
Study 3: Access to pharmacotherapy for opioid use disorder among HCRV and VJO Veterans compared to non-justice-program Veterans

- Among Veterans diagnosed with opioid use disorder, does access to pharmacotherapy for opioid use disorder (i.e., methadone, buprenorphine, or naltrexone) vary by justice status?
- Retrospective cohort of Veterans in FY2012 who had an opioid use disorder diagnosis

HCRV Veterans = 1,245
VJO Veterans = 3,972
Non-justice-program Veterans = 48,168
Receipt of Pharmacotherapy for Opioid Use Disorder

- HCRV: 18%
- VJO: 26%
- Non-justice-programs: 27%
HCRV and VJO Veterans have Lower Odds of Receiving Pharmacotherapy for Opioid Use Disorder

<table>
<thead>
<tr>
<th>Odds of receiving treatment</th>
<th>HCRV</th>
<th>VJO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacotherapy for opioid use disorder</td>
<td>0.66 (0.57-0.78)</td>
<td>0.88 (0.81-0.96)</td>
</tr>
<tr>
<td>Outpatient</td>
<td>2.19 (2.07-2.31)</td>
<td>3.99 (3.86-4.14)</td>
</tr>
<tr>
<td>Residential</td>
<td>1.39 (1.25-1.55)</td>
<td>2.11 (2.00-2.23)</td>
</tr>
<tr>
<td>Pharmacotherapy for alcohol use disorder</td>
<td>1.03 (0.93-1.15)</td>
<td>1.47 (1.39-1.55)</td>
</tr>
</tbody>
</table>
Study 3: Summary

• Veterans in HCRV or VJO are facing barriers to accessing pharmacotherapy for opioid use disorder compared to non-justice-program Veterans.

• Increasing receipt of pharmacotherapy for opioid use disorder for Veterans in HCRV and VJO is an important quality improvement target.
Building Partnerships Between Research and Operations

• Long timeframe
• Dynamic partnership
• Clinical education
• Operational needs
VJP Program – Developing Areas

Program Evaluation

Police Intervention Skill Development

Treatment Targeting Recidivism Risk

Trauma Treatment Training of Prison Staff

Telejustice

Child Support Assistance/Legal Support

Employment
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Centers of Innovation (COINs)
• Center for Innovation to Implementation (Ci2i):
  http://www.hsrd.research.va.gov/centers/ci2i.cfm
• All COINs: http://www.hsrd.research.va.gov/centers/default.cfm

Veterans Justice Programs
• Veterans Justice Outreach: http://www.va.gov/HOMELESS/VJO.asp
• Health Care for Reentry Veterans: http://www.va.gov/HOMELESS/Reentry.asp
References Cited


References Cited


