West Virginia Epi-Aid Closeout Meeting: Preliminary Findings
June 24, 2021

Rob Bonacci, MD, MPH
Rebecca Hershow, PhD, MSPH
Epi-Aid objectives

1. **Conduct a rapid assessment with PWID and key stakeholders** to identify factors facilitating HIV transmission and barriers to accessing essential care and prevention services for PWID

2. **Review, abstract, and analyze data from medical records and other relevant sources** (e.g. community service providers, first responders, SUD treatment) to understand engagement with various services

3. **Review and analyze partner services procedures and data** from partner services interviews and HIV testing activities to better understand behaviors, networks, and geography of PWID
# Epi-Aid timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>May 17</td>
<td>WV BPH and KCHD requested Epi-Aid to assist with 3 investigation objectives</td>
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<tr>
<td>June 2</td>
<td>Epi-Aid kickoff meeting</td>
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<tr>
<td>June 24</td>
<td>Epi-Aid exit presentation with preliminary findings</td>
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<tr>
<td>Late July/Early August</td>
<td>Full report with findings and recommendations</td>
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<tr>
<td>TBD/Ongoing</td>
<td>Continuing support provided as needed</td>
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Outline

- Background
- Individual level records analysis
- Rapid assessment/qualitative interviews
- Discussion and questions
Background
New HIV Diagnoses by Quarter, Kanawha County*, 1/1/19 to 6/10/21

*residents or homeless in Kanawha County at time of HIV diagnosis
Controlled Substance Prescription Trends – Kanawha County

Source: WV Office of Drug Control Policy Dashboard
Buprenorphine prescribing slowly increasing, methadone decreasing

Source: WV Office of Drug Control Policy Dashboard
Suspected overdoses: Kanawha County & West Virginia

EMS Suspected Overdoses

ED Suspected Overdoses

Source: WV Office of Drug Control Policy Dashboard
Note: ED suspected overdoses determined by discharge/SNOWMED codes and/or review of chief complaint text containing “drug” and “overdose”
Kanawha County fatal overdose rates ~2 times higher than West Virginia and steeply increase in 2020

Source: WV Office of Drug Control Policy Dashboard
Data presented for West Virginia Region 5: Boone, Cabell, Clay, Kanawha, Lincoln, Logan, Mason, Mingo, Putnam, Wayne
Pre-Exposure Prophylaxis (PrEP) coverage* for Kanawha County and WV lag significantly behind US average for 2017 - 2020§

**EHE PrEP Goal (2025) = 50%**

*PrEP Coverage is number of persons aged ≥16 years classified as having been prescribed PrEP divided by the estimated number of persons aged ≥16 years who had indications for PrEP

† 2017 Data for Kanawha County suppressed

West Virginia hepatitis B and hepatitis C rates significantly above US averages

Daily COVID-19 Cases in WV, 2020 – 2021

3/16/20 State of Emergency
3/17/20 First COVID-19 Case

12/14/20 1st COVID-19 vaccine given in WV

Source: https://dhhr.wv.gov/COVID-19/Pages/default.aspx
# CAMC Ryan White Services Report: 2018 – 2020

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td><strong>Total Clients</strong></td>
<td>362</td>
<td>375</td>
<td>396</td>
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<tr>
<td><strong>Key Trends Among Clients</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Temporary or Unstable Housing</strong></td>
<td>21 (6)</td>
<td>26 (7)</td>
<td>33 (8)</td>
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<tr>
<td><strong>HIV Risk Factor - IDU</strong></td>
<td>33 (9)</td>
<td>42 (11)</td>
<td>66 (17)</td>
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<tr>
<td><strong>Not Prescribed Antiretroviral Therapy</strong></td>
<td>0 (0)</td>
<td>5 (1)</td>
<td>9 (6)</td>
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<tr>
<td><strong>Last Viral Load Test &lt;200 copies</strong></td>
<td>323 (89)</td>
<td>336 (90)</td>
<td>320 (81)</td>
</tr>
<tr>
<td><strong>No Insurance/uninsured</strong></td>
<td>5 (1)</td>
<td>15 (4)</td>
<td>23 (6)</td>
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Source: CAMC Ryan White Services Report, 2018, 2019, 2020
Objective 2: Chart Abstraction
Methods

- Persons who inject drugs with an HIV diagnosis 1/1/2019 or later who had ≥1 visit to CAMC or Health Right during review period

- Review period: 1 year prior to HIV diagnosis until present

- Only highest level of care recorded for an encounter
Methods: Data Sources
Methods: Variables Collected

Demographics

Risk Factors

Encounter Data

Labs

HIV Data

Immunization Data
Results

- 65 people with HIV included in the investigation
- 498 healthcare encounters reviewed in full from CAMC and Health Right
- 185 reviewed from WV HIN for date of encounter and location
Patient Demographics

- Median age: 34
- Gender: 54% male
- Race: 92% White, 3% Black, 5% Other, 0% Hispanic

Medicaid 85%
Ryan White 20%
Self-pay 14%
Risk factors

- 61% ever homeless/unstably housed
- 31% ever incarcerated
- 36% with mental health condition
Ongoing risk: 74% injecting drugs within 6 months of last health care encounter
Heroin and methamphetamines were most common substances used
Healthcare Utilization – 498 Encounters

- Median total visits: 5 (IQR 2-10)
- Emergency Dept: 42%
- Inpatient: 20%
- Outpatient, other: 19%
- Ryan White HIV/AIDS Program: 16%
- Health Right: 3%
26% of ED and inpatient encounters end in patient leaving against medical advice.
Prior to HIV Diagnosis – 212 Encounters

- Median (IQR) encounters prior to HIV diagnosis: 2 (1-4)
- Emergency Dept.: 60%
- Inpatient: 27%
- Outpatient, other: 9%
- Health Right: 3%
5 HIV-negative tests recorded across 212 pre-HIV encounters
Prior to HIV – Diagnoses at Medical Encounters

- Overdose: 8 (4%)
- Intoxication: 5 (2%)
- IDU-associated infections: 107 (51%)
  - Skin/soft tissue infection: 73%
  - Sepsis: 25%
  - Bacteremia: 9%
  - Endocarditis: 9%
  - Osteomyelitis: 8%
- STI: 3 (1%)
0% of individuals prescribed PrEP prior to HIV diagnosis
Among IDU-related encounters* (n=198), naloxone prescribed or documented at 10% of encounters

Among OUD-related encounters** (n=284), medications for opioid use disorder prescribed or documented at 20% of encounters

6% of individuals received syringe services

*IDU-related encounters includes diagnoses of overdose, intoxication, or IDU-associated infections

**OUD-related encounters refers to any encounter in which opioids were documented in clinician notes
HIV Care

- CD4 at HIV diagnosis, median (IQR): 436 (274-616)
- Time to linkage to care, median (IQR): 15 days (4-66)
- Evidence of care in last 3 months: 30%
- ART prescribed, ever: 68%
- Virally suppressed, ever: 34%
WV HIN shows most patients seek care at **CAMC**

- CAMC
- Health Right
- Thomas Health
- Med Express
- WVU Medicine
- Cabell Huntington Hospital
- Marshall Health
- Pleasant Valley Hospital
- LHC Group Inc
- Genesis Healthcare
- Community Care WV
- Fresenius
Patient 1 – Prior to HIV Diagnosis

- **1/19 Abscess**
- **1/19 Assault**
- **4/19 Heroin OD**
- **4/19 Sepsis**
- **8/19 Endocarditis**
- **12/19 Asthma**
- **12/19 Osteo**

1/2019 to 12/2019

- **12/19 Osteo**
- **9/19 Osteo**
- **9/19 Osteo**

**= left AMA

Red = No HIV testing

Blue = HIV testing

Purple = HIV diagnosis
Patient 1 – After HIV Diagnosis

** = left AMA
Red = HIV care visit

1/2020

- 2/20 Bacteremia**
- 2/20 Ryan White
- 7/20 Cellulitis**
- 10/20 Sepsis**
- 10/20 Endocarditis**
- 1/21 Cough**
- 1/21 Assault
- 3/21 Osteo

Present

VL Suppressed
Major Findings From Healthcare Encounters

Healthcare utilization high, especially for ED & inpatient

Patients leave against medical advice frequently

HIV testing is infrequent

PrEP not prescribed at any encounter
Major Findings From Healthcare Encounters

- Medication for opioid use disorder infrequently prescribed
- Over 80% of individuals covered by Medicaid
- Medical encounters for overdose and STIs infrequent
- High frequency of IDU-associated infections
- Homelessness & incarceration are prevalent
Objective 1: Rapid Assessment
We conducted interviews with PWID and stakeholders in the community.

People with and without HIV
People engaged and not engaged in care
People actively using and in recovery

Medical and substance use treatment providers
Social service providers
Law enforcement
Other community leaders
PWID were recruited through provider referral or outreach activities.

- **Purposive sampling**
- **Eligibility criteria**
  - 18 years of age or older
  - Currently living or accessing services in Kanawha County
  - Injected drugs in the last 12 months
Data collection was completed from June 7–23.

- Semi-structured qualitative interviews
  - Note-taking
  - Audio recording, if permitted
- Interview debrief
  - Document key findings
- Daily group debrief
  - Capture key themes
Data were analyzed by identifying themes across areas of interest.

- **Areas of interest**
  - Drug use behavior
  - HIV risk behavior (needle / equipment sharing, unprotected sex, exchange sex)
  - Barriers to accessing HIV or substance use services
  - Suggestions to address HIV outbreak

- **Identified patterns across interviews and between sub-groups (i.e., people who use meth vs those who use heroin)**
  - Compared responses across participants for each topic area
Providers with long-standing, trusting relationships helped recruit PWID for interviews.

- HIV testing event
- Social service provider
- Medical service provider
- Public health practitioner
- Recovery house
Characteristics of PWID who were interviewed (n=26)

- 42% were aged ≤35 years
- 58% male, 42% female
- 85% identified as White & 15% identified as African American
- 72% had lived in Kanawha County ≥5 years
- 50% spend time West Side, 31% East End, 12% Kanawha City, 7% Dunbar
- Substance use
  - 55% reported injecting >1/day (range: 1-10 injections/day)
  - 73% reported polysubstance use
  - 23% were in recovery
Incarceration, homelessness, and exchange sex among people who were interviewed

33% reported being detained or incarcerated in the last year

35% reported currently experiencing homelessness

15% reported having sex in exchange for money, drugs or food
HIV status and engagement in HIV services among people who were interviewed

16/18 of PWID without HIV reported getting HIV tested in the past 6 months

8/26 reported receiving an HIV-positive test result

6/8 of PWID with HIV visited an HIV provider in the past 6 months
A total of 37 stakeholders were interviewed.

- Medical and Substance Use Treatment Providers, n=22
  - HIV providers
  - MAT providers
  - Primary care clinicians
  - ER & Infectious Disease clinicians
  - Addiction & harm reduction specialists
  - EMS/paramedics

- Social Service Providers, n=4

- Law Enforcement Personnel, n=3

- Other Community Leaders, n=8
  - Policymakers
  - Religious leaders
PWID and stakeholders’ descriptions of current drug use patterns

- Meth
- Cocaine
- Heroin
- Illicitly manufactured fentanyl
- Non-prescription suboxone
- Illicitly manufactured fentanyl
People are facing multiple, co-occurring complex challenges.

- Substance use disorder (SUD)
- Trauma & loss
- Depression & anxiety
- Unemployment
- Chronic pain
- Unstable housing
- Food insecurity
- HIV

Hopelessness

Drug use behavior
People described using substances to cope with trauma, loss, and hopelessness.

I was feeling **hopeless, homeless, and going through a lot**, and just got caught up in my feelings and ended up in a bad day...See, that's the thing, I **had been clean**...I was living, actually living in a shelter. But I was just a **little hopeless, and shelter life was overwhelming**, and I really **don't have family or nobody here**. And I was feeling stupid cause I gave up my apartment, come stay with my son's girlfriend, and that didn't work out. So I end up in the shelter, so I was just down, having a bad day.

-- PWID, woman without HIV
Medical and social service providers are making efforts to address co-occurring health and social issues that PWID face.

We used to refer to [job placements services], but we didn't have a single outcome from that... So we started taking it upon ourselves. In individual therapy, I help people fill out job applications.

-- SUD treatment provider
Participants suggested implementing low-barrier one-stop-shop models and improving service integration.
People have low access to clean syringes, leading many to reuse or share needles.

We [PWID] use the same needle until we can’t...I say that from experience because that’s how I got it [HIV]... I don’t feel like [HIV] rates would be so high if we had needle exchange.
-- PWID, woman with HIV
People mainly reported having low access to clean syringes due to the closure of syringe services programs (SSPs).

- Closure of previous SSPs
- Low awareness of syringe services elsewhere
- High-barrier access to existing syringe services, such as photo ID requirement
- Pharmacist refusals to provide syringes
Despite low access to clean needles, some people described using HIV risk reduction strategies.

- Disposing own used needles
- Collecting and disposing syringe litter found in hot-spot IDU areas
- Distributing clean needles
- Reducing size of injection network
  - Only sharing with close circle/main sexual partner
- Encouraging people to avoid re-using or sharing needles
- Disclosing HIV or hepatitis C status before sharing drugs or equipment with others
- HIV and hepatitis C testing regularly
- Smoking or snorting when clean needles are unavailable
- Using bleach to clean needles
- Backloading or frontloading with clean needles
There were numerous misconceptions about HIV transmission, prevention, and treatment.

If I was having sex with you, we was having a sexual relationship, I didn't care to share a needle because we had sex. To me, there wasn't no big difference because I didn't ever use a condom or anything.
-- PWID, man without HIV

Well, yeah [interested in PrEP] but I'm not a slut. I got morals, you understand? I don't sleep with everybody... because a lot of people don't have no respect for their self.
-- PWID, man without HIV
Provide health education to PWID

- HIV prevention (risk, safe injection)
- HIV treatment
- Overdose prevention
- Substance use treatment
PWID and stakeholders noted that exchange sex is contributing to the HIV outbreak.

Prostitution is a big part of [the increasing HIV infection rate], but a lot of it is sharing needles and stuff... But the thought of like these old men that are picking these girls up... I'm talking about 50, 60, 70 year old men who I'm sure are probably married, that are being infected with HIV and have absolutely no clue, no clue at all. And you know when it comes to men, a lot of men don't like to go to the doctor, period.

-- PWID, woman with HIV
PWID expressed strong negative views towards hospitals.

[Hospital providers] have no respect. They see you as a user and they automatically are real nasty people. They're nasty. That's what I can say about them...That's probably why, well another reason why I wouldn't go to the hospital unless I was dying, because they don't care about you.
-- PWID, man without HIV

Every single person you run into in the hospital treats an addict like you are the scum of the earth...they basically make you feel like you wish you were dead.
-- PWID, man with HIV

[PWID have] been let down by the healthcare system and mistreated.
-- Medical provider

Barriers to HIV services
Providers understood the significance of the HIV outbreak but had competing priorities to address.

Competing Priorities to Address

- Substance use disorder (SUD)
- Trauma & loss
- Depression & anxiety
- Unemployment
- Chronic pain
- Unstable housing
- Food insecurity
- Acute medical conditions
Patients with SUD in the ED and across the hospital are not being routinely screened for HIV.

• Medical providers have competing priorities (acute medical conditions)

• Participants suggested the following:
  • Train medical providers on SUD, substance use treatment, and stigma reduction
  • Link patients with SUD to the Ryan White program for testing and linkage to treatment
HIV testing outreach events are not reaching people at highest risk for HIV infection.

• HIV testing outreach events could be improved
• Participants suggested the following:
  • Increase focus on hot-spot areas (West Side, Kanawha City, South Charleston)
  • Operate in the afternoons and evenings
  • Pair discrete, mobile outreach with stationed testing event
  • Provide comprehensive services (wound care, linkage to services)

-- Community leader

You can't test your way out of an [injection drug use-driven] HIV outbreak...testing without syringe access is not a reasonable option.
PWID and stakeholders had mixed views on the role of PrEP in HIV prevention.

I mean, if [PrEP] was affordable to me. I mean, taking the pill that would actually work. Advertise it. Tell people about it. Tell one person about it... The funny thing is, especially with homeless people, tell one person, by an hour it gets spread all over town, to every homeless person.

-- PWID, man without HIV

I've always found that a person who is appropriate for [PrEP], who would take that, probably would behave differently...I think the *appropriate population is extremely rare around here.* So the answer is, I *don't think it's offered often.*

-- Medical provider
Some people with HIV face multiple barriers to engagement & retention in care.

- Need to enroll in Medicaid and get a photo ID
- Low awareness of Ryan White across hospital
- Medical providers outside of Ryan White have competing priorities
- High medical mistrust (especially in hospitals) due to previous experiences with provider stigma and discrimination
- Leaving hospital against medical advice without linkage to HIV care
- Long waiting times to complete necessary labs and provider visits (anxiety about or actual experience of withdrawal symptoms)
- Stolen medications due to unstable housing
- Fear of HIV disclosure and HIV stigma
People who accessed HIV testing or treatment in the past 6 months had positive experiences.

I had one [HIV test] in the parking lot over here, just like the little finger tab test. They said in six months or something like that, it can take a while for it to show up, so I done it again and I was clean again... I was walking by, and I walked there to see what was going on and yeah, got me a $10 gift card... It was something to do. I was just curious.

-- PWID, man without HIV

Oh, I love them [Ryan White clinicians]. They're good people. Down to earth. Talk to you like I'm talking to you...[ART has] worked on me very well. I've missed a day or two here and there. I try not to, but I can tell in my body when I do. Then I get back on it. I... take it every night before I go to bed. That way I don't forget.

-- PWID, woman with HIV
Misconceptions about SUD treatment, stigma, delayed linkage, and relapse triggers pose barriers to engagement and retention.

[Methadone is] no different than getting a bag of dope...it’s just legal.
-- PWID, woman with HIV

I went with my oldest sister. Got clean. And then when I come back, it was...
How they say? You've got to change the people, places, and things? It's true. Because as soon as I come back, it's the same situation. And I went right back to getting high.
-- PWID, man without HIV
Summary of key findings from interviews

- Multiple, co-occurring complex challenges
- Low access to clean syringes and syringe services programs, leading many to reuse or share needles
- Exchange sex is contributing to the HIV outbreak
- Experiences of stigma and discrimination in hospitals, exacerbating medical mistrust
- Structural and individual-level barriers to accessing HIV and substance use services
- Individuals at highest risk are not accessing HIV testing regularly
Participants provided suggestions for service integration, improved access, and stigma reduction.

- Overdose prevention
- Mental health services
- Social services
- Wound care
- Sterile syringes
- Substance use treatment
- HIV testing
- Linkage to HIV care

"...It's going to take people rowing in the same direction."

-- Social service provider
Next Steps
Epi-Aid: Next Steps

- Complete additional stakeholder interviews
- Continue data analysis
  - Objective 3: Partner services data are still being updated and entered into the database. Findings will be shared with BPH and KCHD at a later date.
- Share final report and recommendations in late July or early August
- Support BPH and KCHD with dissemination of findings, as needed
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Disclaimer

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of Health and Human Services.
Questions?