



Working to Eliminate Hepatitis C (HCV) in West Virginia (WV)

Judith Feinberg MD^{1,3}, Adam Baus MPH PhD²,
Andrea Calkins MPH², Susan Moser BSN³,
Richard Sutphin MPH⁴

¹ West Virginia University School of Medicine

² West Virginia University School of Public Health

³ West Virginia Hepatitis Academic Mentoring Partnership

⁴ West Virginia Rural Health Association



WEST VIRGINIA

Of the 13 States that Comprise the Appalachian Region,
Only West Virginia Lies Entirely within Appalachia





Despite its great natural beauty, WV is a poor, underresourced state that has been heavily impacted by the 21st century injection opioid epidemic

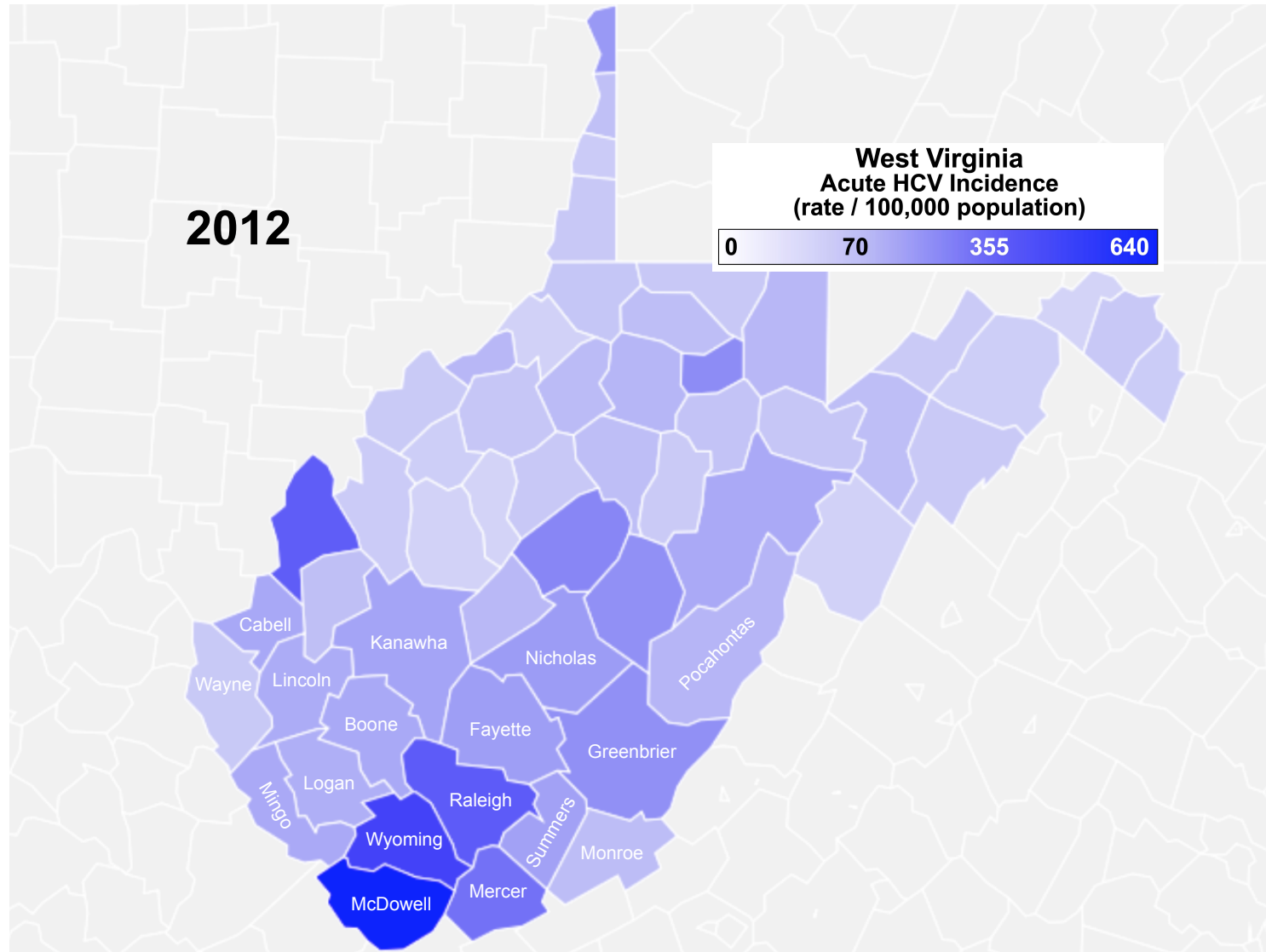


Multiple Injection Opioid Syndemics in WV (intertwined epidemics)

- **acute hepatitis C (*1st or 2nd highest US rate for >decade*)**
- acute hepatitis B (*#1 for >decade*)
- hepatitis A among homeless persons/PWID (*4th highest US rate with 23 deaths*)
- overdoses and OD fatalities (*#1 in US for many years with 49% increase in 2020*)
- Neonatal Abstinence Syndrome (*WV is #1 in US for many years*)
- HIV outbreaks in PWID since 2017, now the “area of greatest concern in the US” (CDC, 2/21)

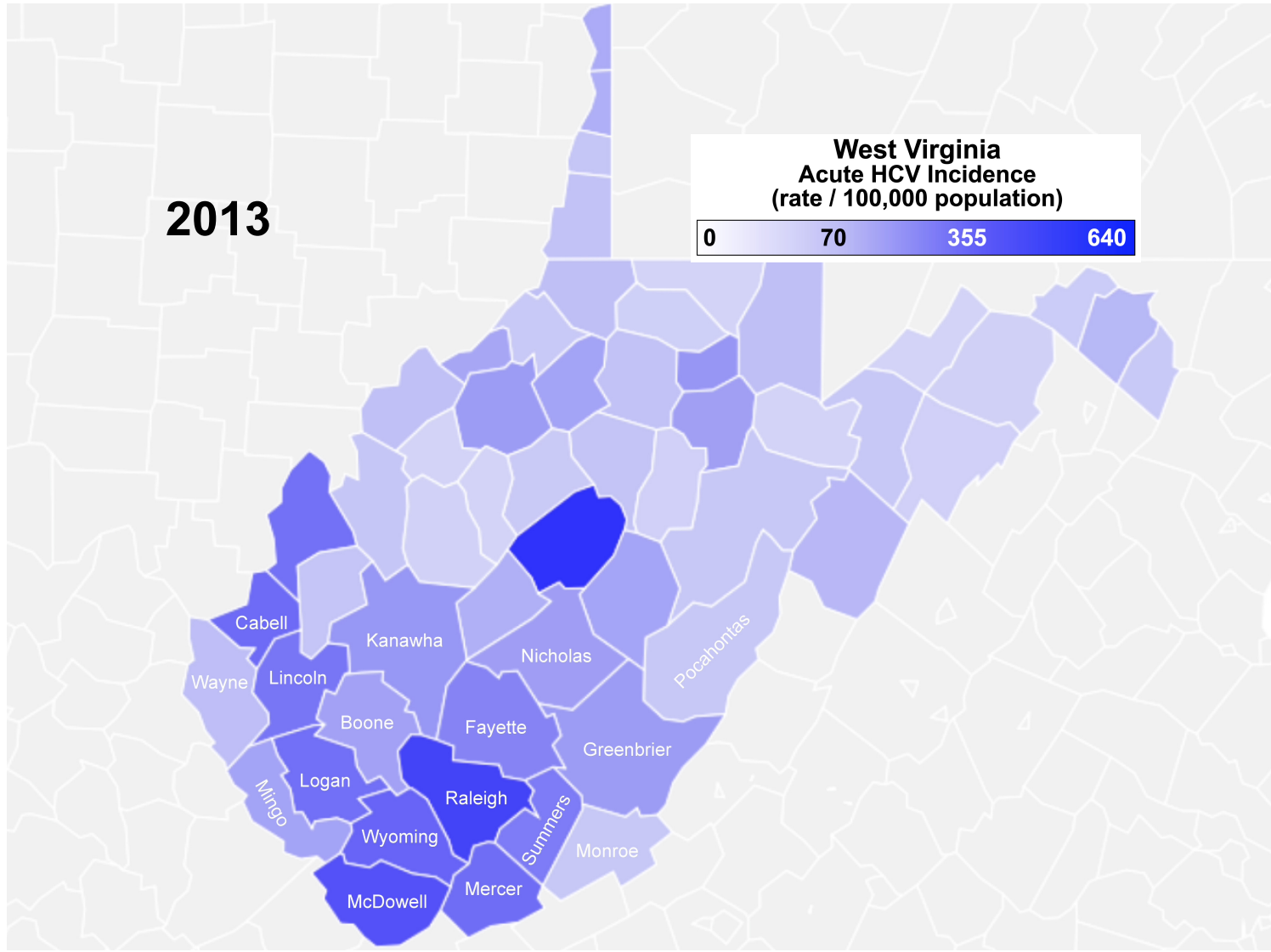
2012

**West Virginia
Acute HCV Incidence
(rate / 100,000 population)**



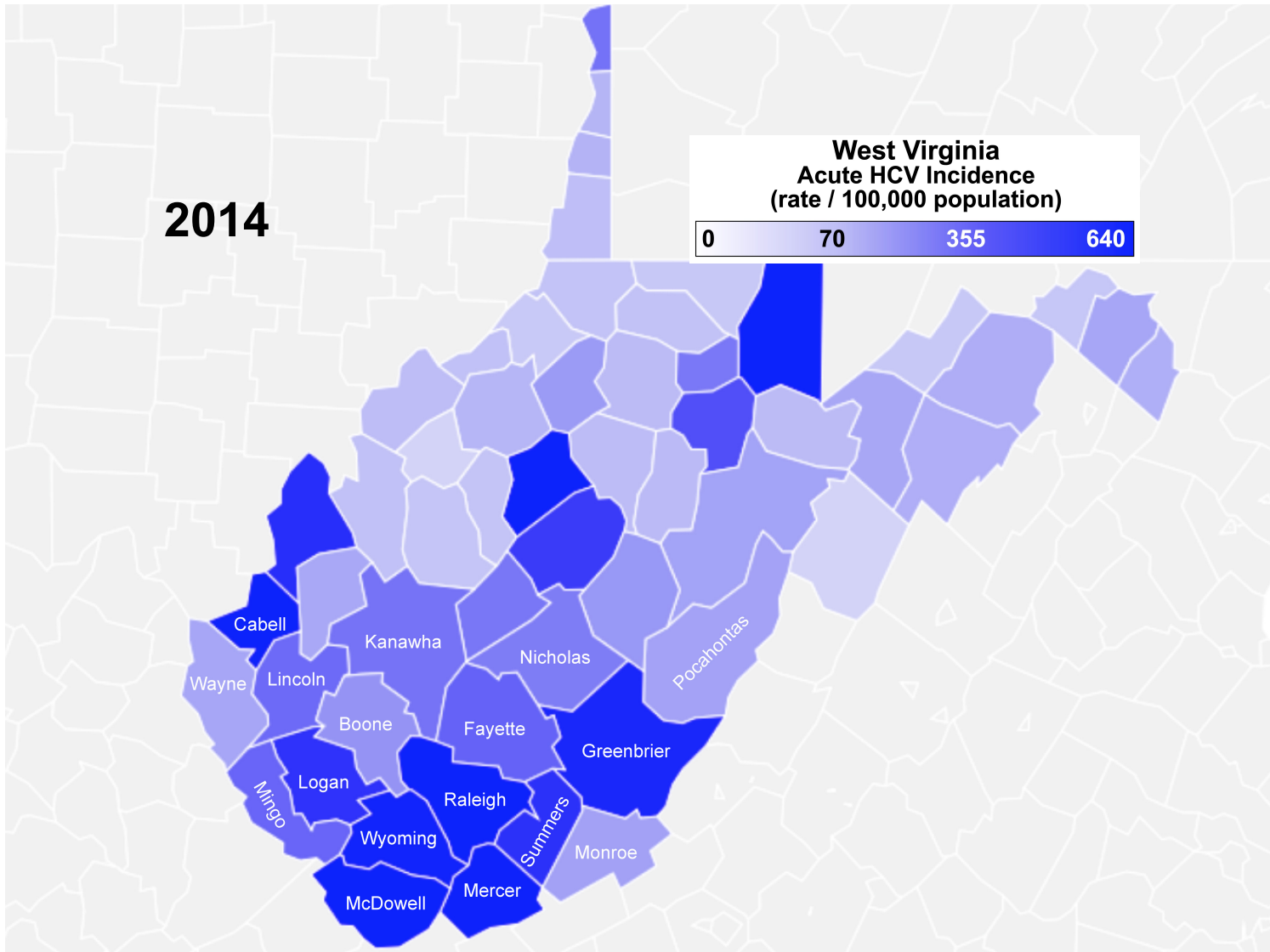
2013

West Virginia
Acute HCV Incidence
(rate / 100,000 population)



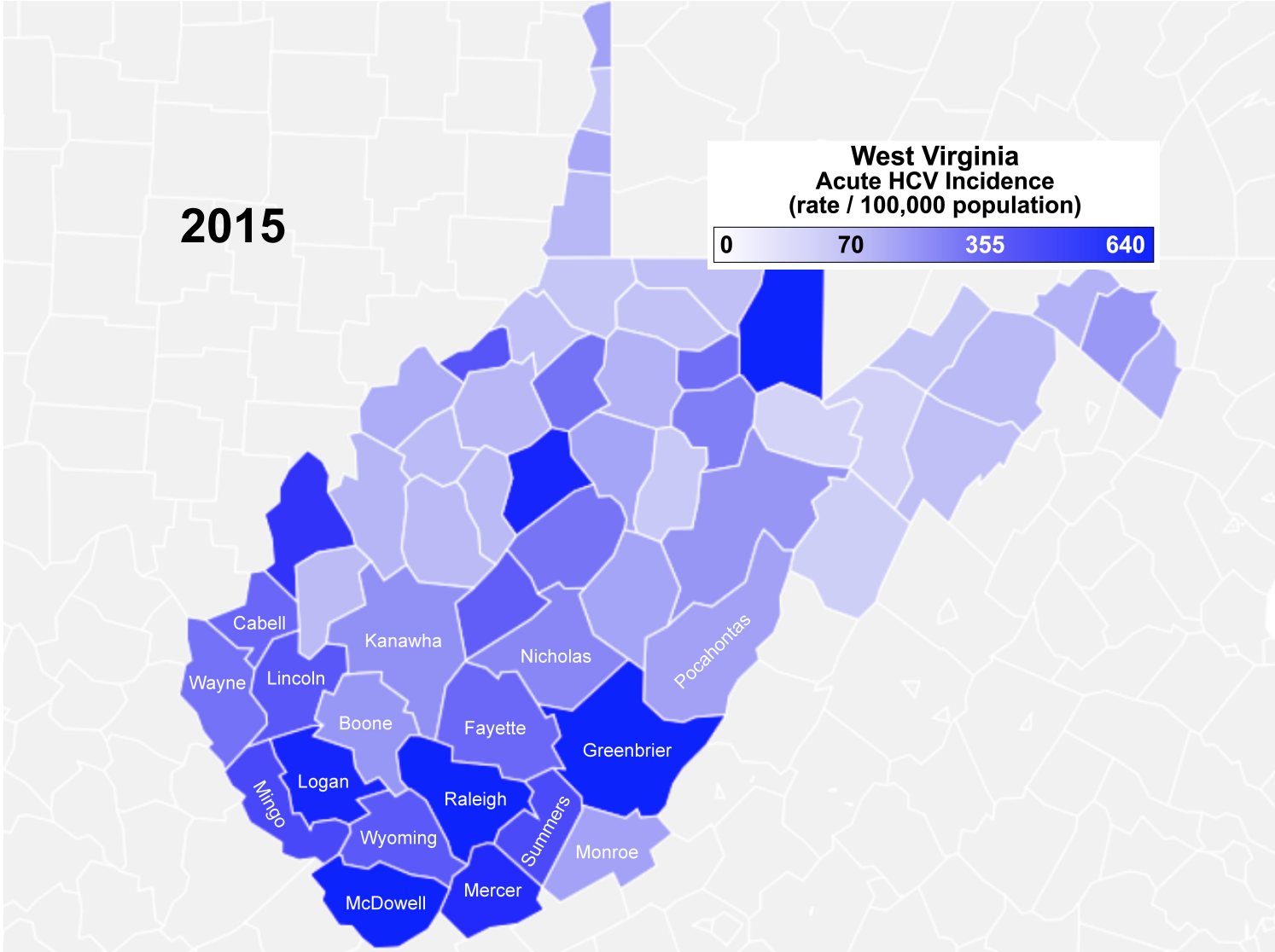
2014

West Virginia
Acute HCV Incidence
(rate / 100,000 population)



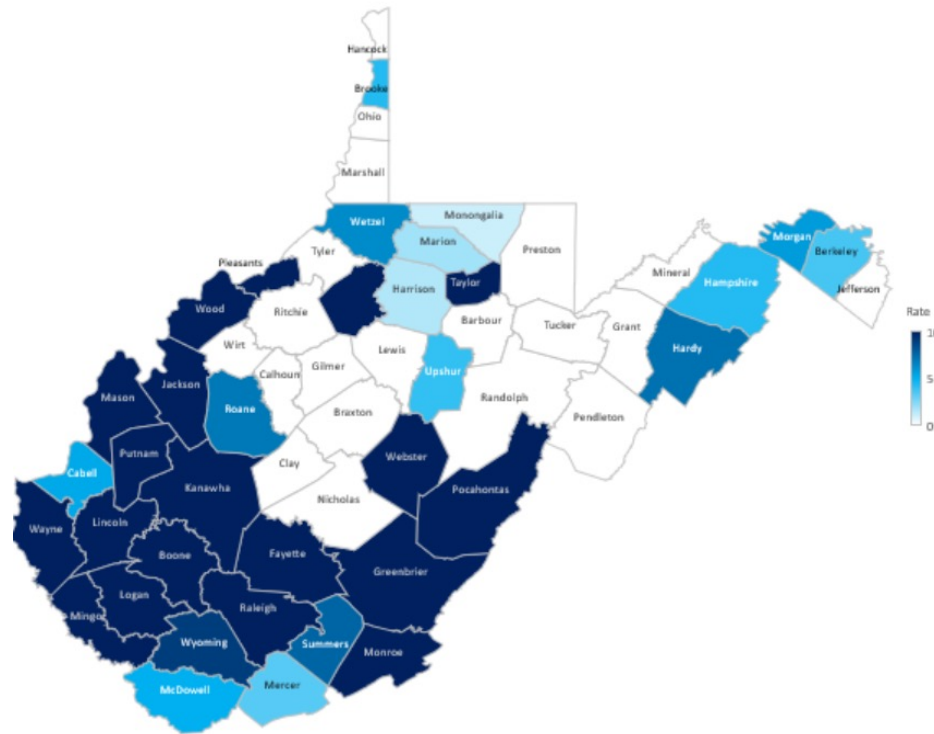
2015

West Virginia
Acute HCV Incidence
(rate / 100,000 population)

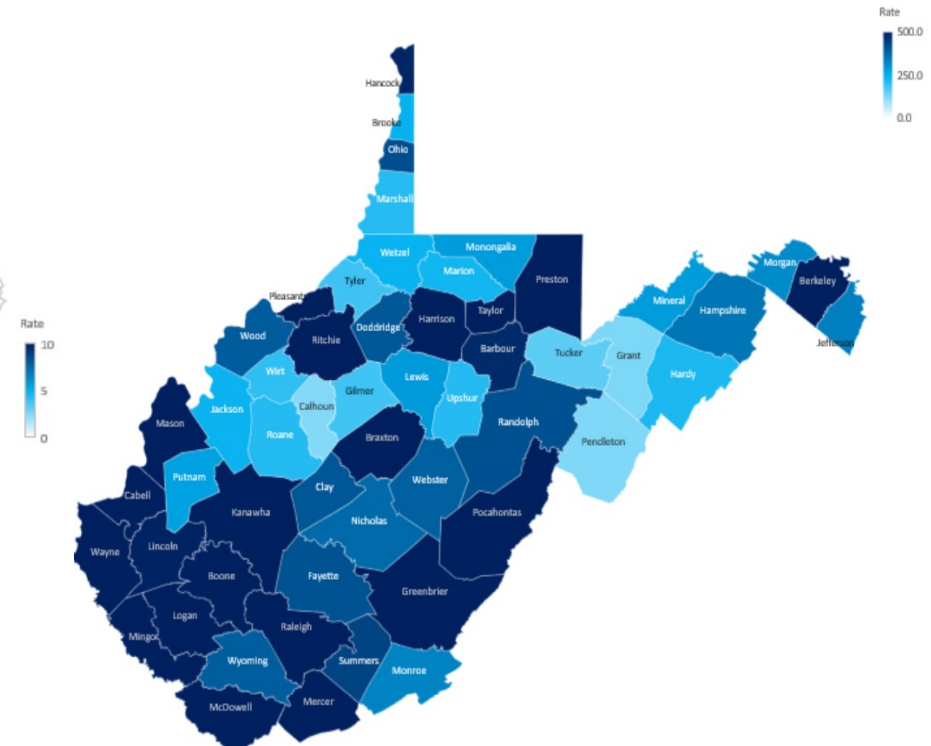


Acute and Chronic HCV Infection, 2018

Rate* of Acute HCV Infection
N= 171

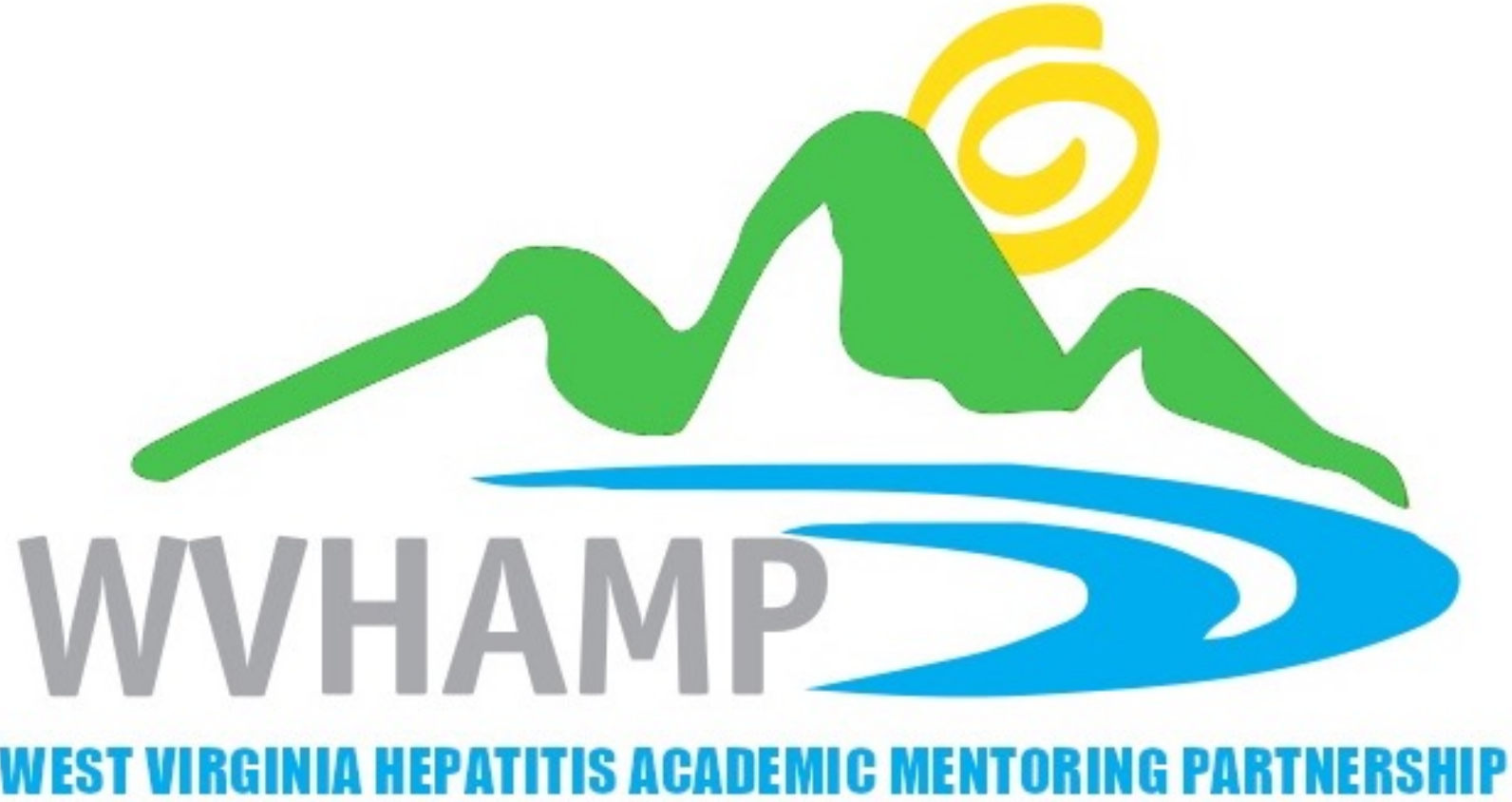


Rate* of Chronic HCV Infection
N = 9,002



*rate per 100,000 population

West Virginia Hepatitis Academic Mentoring Partnership





Rationale for WVHAMP

- WV has consistently had the highest or second-highest rate of acute HCV in the entire U.S. for over a decade
- need to increase access to hep C care in high-risk, low-resourced rural areas by removing barriers to care
 - 90% of HCV-infected persons have WV Medicaid insurance
 - WV Medicaid requires primary care providers (PCPs) to treat HCV under the guidance of a specialist
 - but few specialists in state, and almost none in rural areas
 - lack of transportation is another obstacle
- **WVHAMP is a training/consultation process that empowers PCPs to manage HCV in the community**



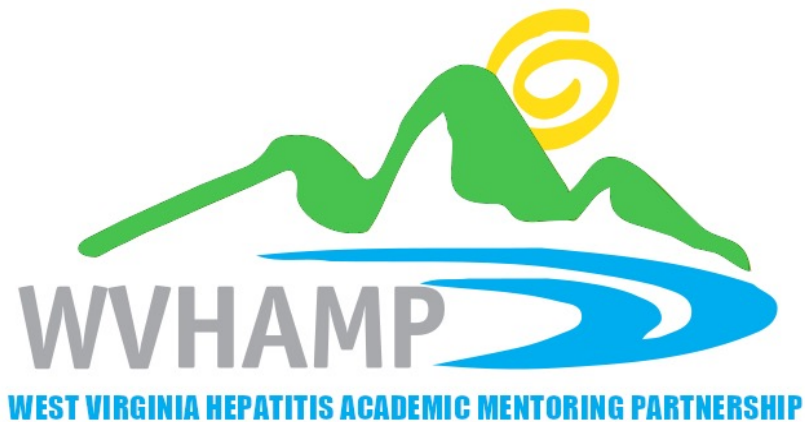
WVHAMP Goals

- establish a network of primary care and addiction care providers trained and supported by hepatitis C experts who can complete the hepatitis C care continuum:
Screen → Diagnose → Evaluate → Treat → Cure
- expand access to hepatitis C training by recruiting providers from healthcare facilities in high-risk settings, both urban and rural
- train at least 1 provider in each of WV's 55 counties
- increase the number of West Virginians with HCV infection who are linked to care, achieve cure and contribute to slowing and eventually eliminating the hep C epidemic



The WVHAMP Model

- live, tele-mentorship & peer-based training program → FREE, including continuing education credits
- primary care and addiction care providers have ready access to hepatitis C experts
- enables patients to receive care in their community with providers they know and trust
- meets WV Medicaid rules regarding consultation with ID/GI/Hepatology specialist to allow non-specialist prescribing



WVHAMP Partners and Collaborators

Lead Partner: West Virginia Rural Health Association

- provides infrastructure and administrative support
- arranges funding/sponsorships
- provides CME/CE credits

Collaborating State Agencies

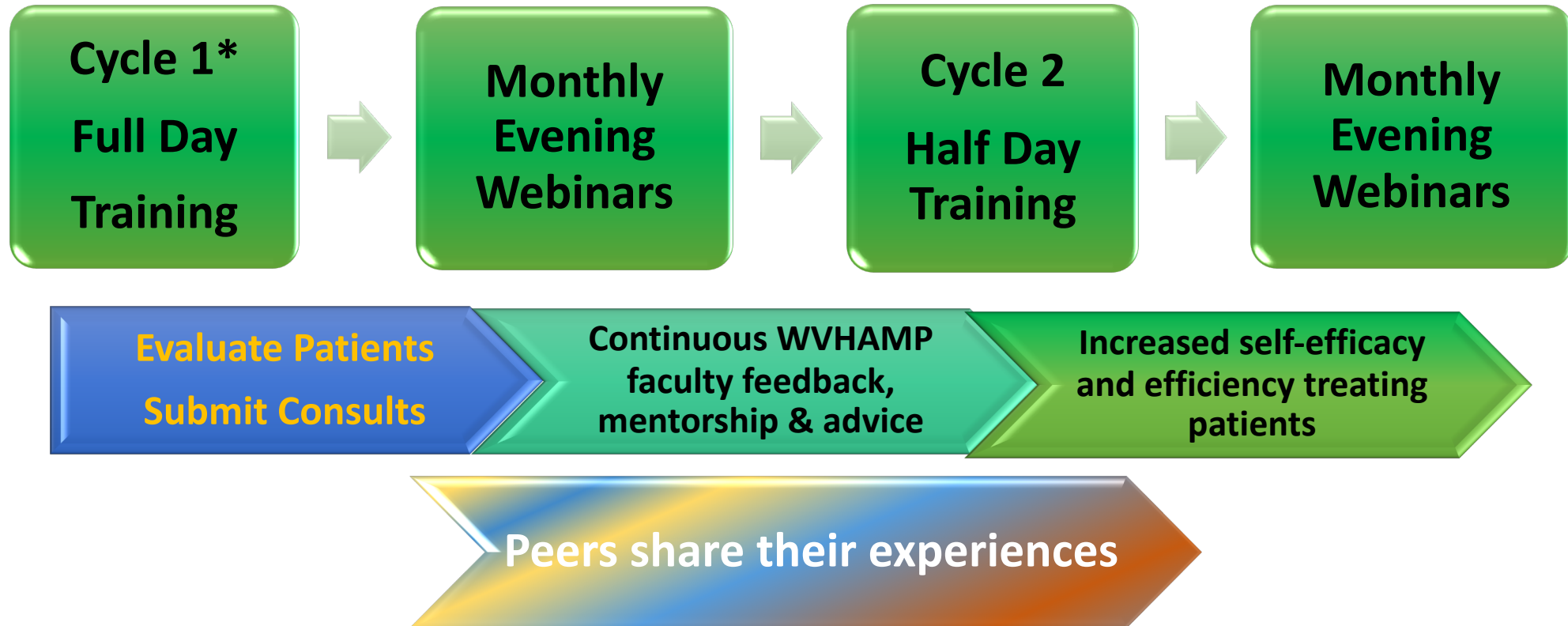
- West Virginia Medicaid
- West Virginia Bureau for Public Health

Faculty Partners

- West Virginia University, RTI International, University of Louisville, Cincinnati Children's Hospital Medical Center



The WVHAMP Model: Training/Mentoring Process



*occurs quarterly



Topics Covered in Cycle 1

- HCV epidemiology
- screening & diagnosis
- assessing fibrosis stage
- understanding patterns of liver disease and liver function tests
- determine HAV/HBV infection status and immunization needs
- assess treatment readiness
- treating patients with substance use disorder
- recognize opportunities for harm reduction, overdose education, naloxone training & distribution
- treating HCV: understand treatment choices, common drug interactions, monitoring during and after treatment, insurance requirements
- following patients after cure
- know when to refer



Topics Covered in Cycle 2

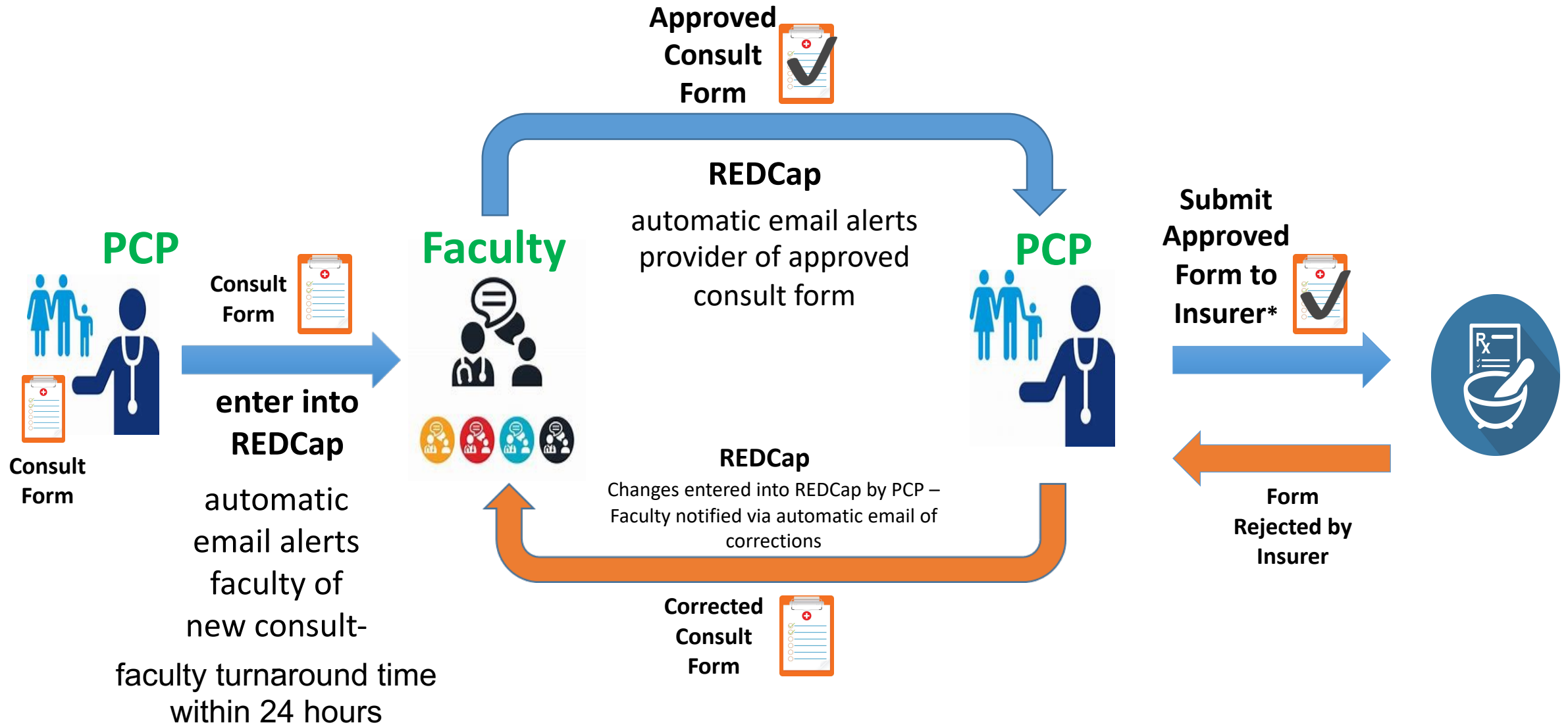
- HCV in children & adolescents
- extrahepatic manifestations of HCV
- COVID-19 and HCV
- hepatitis A outbreaks in people who use drugs
- HIV PrEP
- NAFLD
- case discussions



Monthly Evening Webinars

- case discussions
- brief didactic presentations on topics raised by recent consultations, such as:
 - 'occult' hep B
 - fatty infiltration seen on ultrasound

WVHAMP Consult Process Flow – REDCap Database



*downloadable as pdf- serves as Prior Authorization request & can be inserted into EHR



Achievements to Date: 9/10/21

- initial training of Cohort 1: March 5, 2020 (in person)
- March 12: COVID-19 pandemic arrived
- all subsequent trainings & evening webinars online via Zoom
- total 92 Scholars trained (Cohorts 1-6), from 24/55 counties (44%)
 - 41 physicians
 - 44 nurse practitioners
 - 7 physician assistants
 - Have also trained pharmacists, nurses and administrators
- first consultations received April 2020



Achievements from 4/1/20-9/10/21

- 308 initial consultations submitted by 25 PCPs in 17 months
- 92 patients have completed therapy and have reached the timepoint for determining SVR12 (cure)
- **90/92 (97.8%) have achieved cure!**
 - 90% are covered by WV Medicaid
- ***demonstrates that with guidance and support, PCPs who have never previously treated HCV can achieve same rate of cure as specialists***



WVHAMP as a Model for HCV Care in US

- WVHAMP can be easily replicated in other states and tailored to local requirements
 - developing a US-HAMP to share model with other states
- can be effective in *any* underserved area, rural or urban
- improves access to care and health equity for PWID who have poor healthcare access in the US
- key strategy for achieving goal of HCV elimination, especially in resource-limited regions

