

*Patient Engagement Learning Series*

**How Do We Provide HCV Care for  
Individuals Experiencing Homelessness?**

Tuesday, January 19, 2021 at 2:00 pm ET



**NATIONAL  
NURSE-LED CARE  
CONSORTIUM**  
a PHMC affiliate

# Disclaimer

*Through the Patient Engagement Learning Series, we intend to create a space where providers, community advocates, and patient representatives can engage thoughtfully on challenging topics surrounding patient care. We commit to providing evidence-based data and research to support all content presented.*

*We believe that addressing this topic aligns with the aims of the Learning Series and is therefore integral to our discussion. We welcome your feedback to continue guiding our content development.*

*Funding for this webinar has been provided to the National Nurse-Led Care Consortium through the Patient-Centered Outcomes Research Institute (PCORI) Contract Number 14507. Contents are solely the responsibility of the authors and do not necessarily represent the official views of PCORI.*

# National Nurse-Led Care Consortium

The **National Nurse-Led Care Consortium (NNCC)** is a membership organization that supports nurse-led care and nurses at the front lines of care.

NNCC provides expertise to support comprehensive, community-based primary care and public health nursing.

- Policy research and advocacy
- Program development and management
- Technical assistance and support
- Direct, nurse-led healthcare services

# Speakers



**Marguerite Beiser, ANP-BC, AAHIVS**  
Director of HCV Services  
Boston Health Care for the  
Homeless Program



**Shukriyyah Mitchell-Hinton, BSN, RN**  
Nurse Supervisor  
National Nurse-Led Care Consortium



**Shawana Mitchell, HHS**  
Community Health Navigator  
National Nurse-Led Care Consortium

# Objectives

- Explore unique challenges to HCV treatment implementation for individuals experiencing homelessness.
- Provide practical solutions for successful engagement in HCV care for this population.

# Panel Discussion



**Marguerite Beiser, ANP-BC, AAHIVS**  
Director of HCV Services  
Boston Health Care for the  
Homeless Program



**Shukriyyah Mitchell-Hinton, BSN, RN**  
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Community Health Navigator  
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# Pop Up Question

**What are some challenges around maintaining patient engagement in HCV care?**

# How do we provide HCV care for individuals experiencing homelessness?

Marguerite Beiser, ANP-BC, AAHIVS

1/19/21



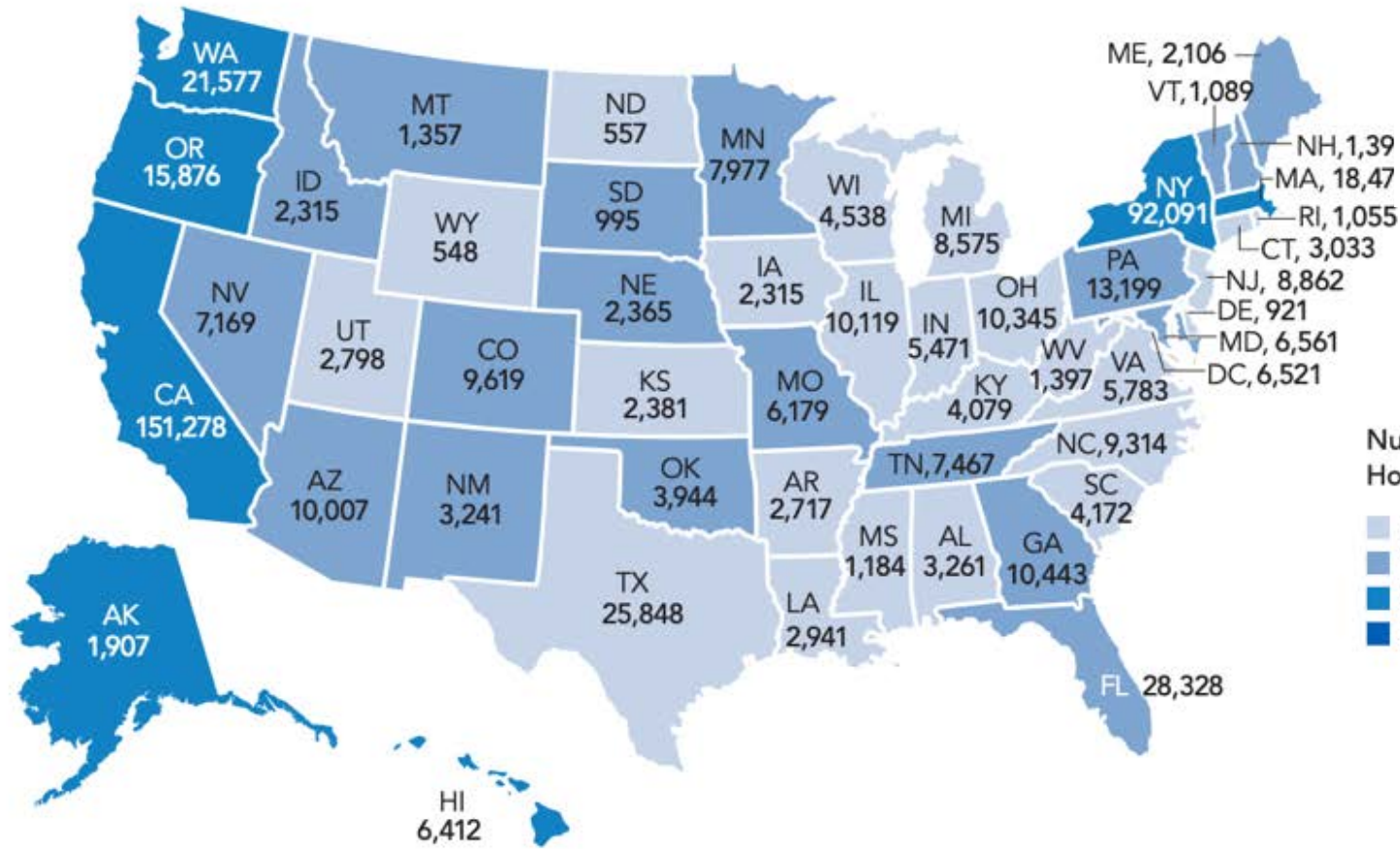


- I have no disclosures
- Citations included on slides
- Thank you to my patients and colleagues at Boston Health Care for the Homeless Program!

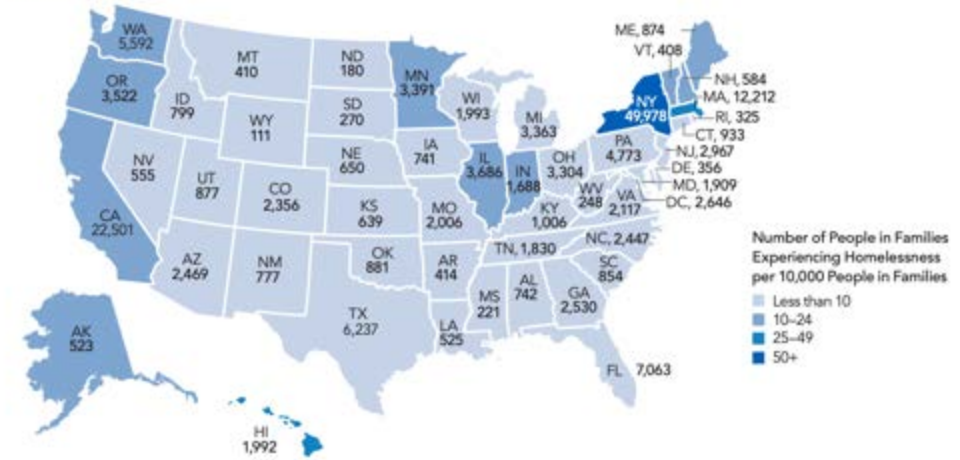
# Outline

- Homelessness in America
  - Scale of homelessness
    - National
    - Local
  - Health implications of homelessness
- Boston Health Care for the Homeless Program (BHCHP)
  - Program approach to delivering care
  - HCV treatment integration with existing services
    - Cases
- Pearls, principles and persistent challenges

**EXHIBIT 1.6: Estimates of People Experiencing Homelessness**  
By State, 2019



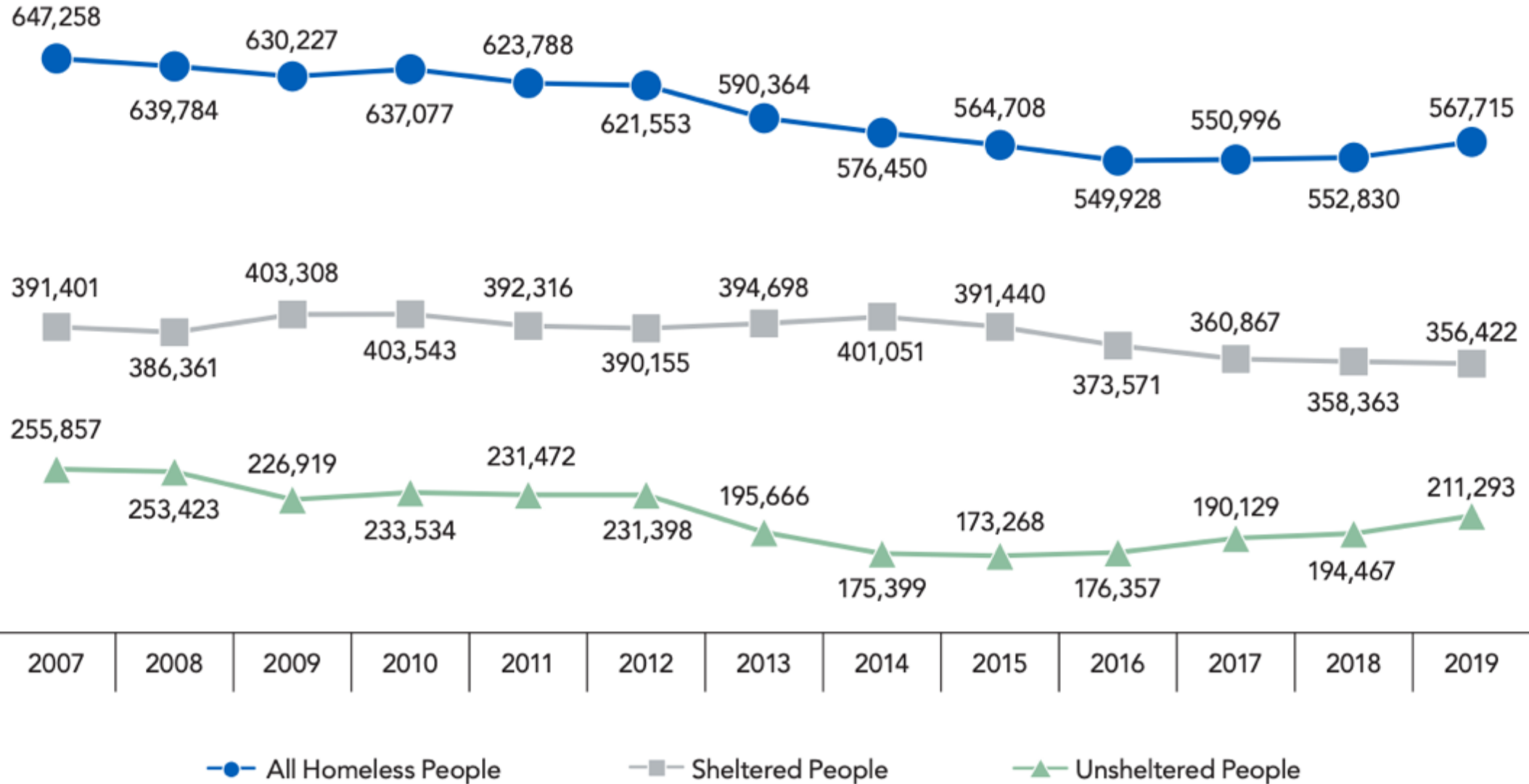
**EXHIBIT 3.5: Estimates of Family Homelessness**  
By State, 2019



**Number of People Experiencing Homelessness per 10,000 People**

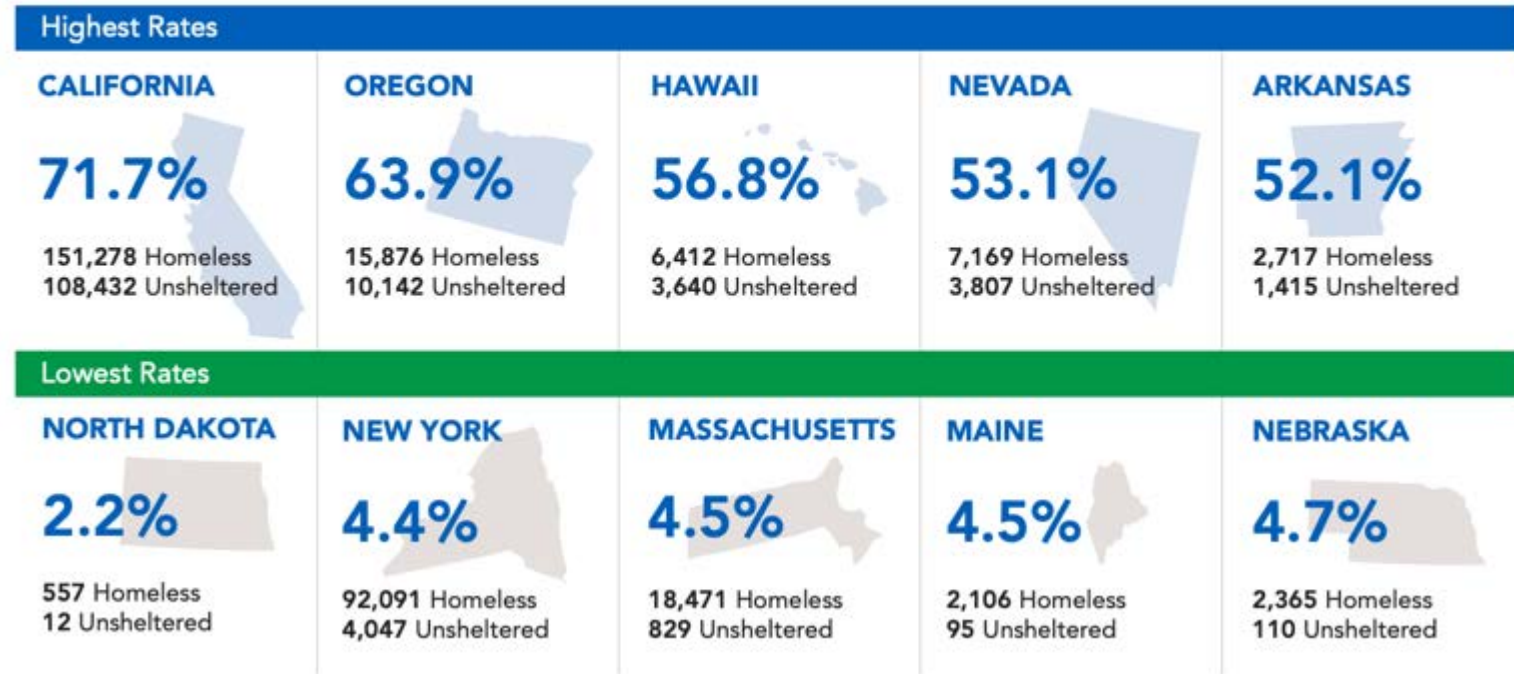
- Less than 10
- 10–24
- 25–49
- 50+

# EXHIBIT 1.1: PIT Estimates of People Experiencing Homelessness By Sheltered Status, 2007–2019



# Homelessness is a heterogeneous and fluid experience

EXHIBIT 1.7: States with the Highest and Lowest Percentages of People Experiencing Homelessness who were Unsheltered  
2019



- Sheltered
  - Emergency shelter
  - Family shelter
  - Hotel/motel
  - Residential treatment programs
  - Doubled up
- Unsheltered
  - Street
  - Vehicle
  - Encampment
  - Rural or urban
  - Abandoned building

# Boston homeless incidence, 2020

- **6,192** total homeless individuals and families
  - 2,115 individuals
    - 135 people on the streets\*
  - 1,294 homeless families
    - 4,021 family members



# Health implications of homelessness

- Conditions encountered as a consequence of being homeless.
  - Infections
    - TB, respiratory infections, cellulitis
    - Violence and Injury
  - Exposure-related
    - Frostbite/heat stroke
    - Immersion foot
  - Arthropod infestations
- Conditions exacerbated by the homeless condition
  - Metabolic diseases
    - HTN
    - DM
  - Cancer
  - Behavioral Health Disorders
  - Addiction
- These can be overlapping, e.g. Diabetic foot ulcer





# Stark disparities in HCV and HIV prevalence between housed and homeless

HCV	
Population studied	Prevalence
Household phone survey <sup>1</sup>	1%
Homeless at 7 HCH sites <sup>2</sup>	31%
Homeless @BHCHP <sup>3</sup>	23%

HIV	
Population studied	Prevalence
National estimate <sup>4</sup>	0.3%
Homeless meta-analysis world-wide <sup>5</sup>	0.3%-21%
Homeless in the US estimate <sup>6</sup>	3.4%
Homeless @BHCHP <sup>7</sup>	2.7%

1. Hofmeister MG, Rosenthal EM, Barker LK, et al. Estimating Prevalence of Hepatitis C Virus Infection in the United States, 2013-2016. *Hepatology*. 2019;69(3):1020-1031.

2. Strehlow AJ, Robertson MJ, Zenger S, et al. Hepatitis C among clients of health care for the homeless primary care clinics. *J Health Care Poor Underserved*. 2012;23(2):811-833.

3. Bharel M, Lin WC, Zhang J, O'Connell E, Taube R, Clark RE. Health care utilization patterns of homeless individuals in Boston: preparing for Medicaid expansion under the Affordable Care Act. *Am J Public Health*. 2013;103 Suppl 2:S311-317.

4. Burnett JC, Broz D, Spiller MW, Wejnert C, Paz-Bailey G. HIV Infection and HIV-Associated Behaviors Among Persons Who Inject Drugs - 20 Cities, United States, 2015. *MMWR Morb Mortal Wkly Rep*. 2018;67(1):23-28.

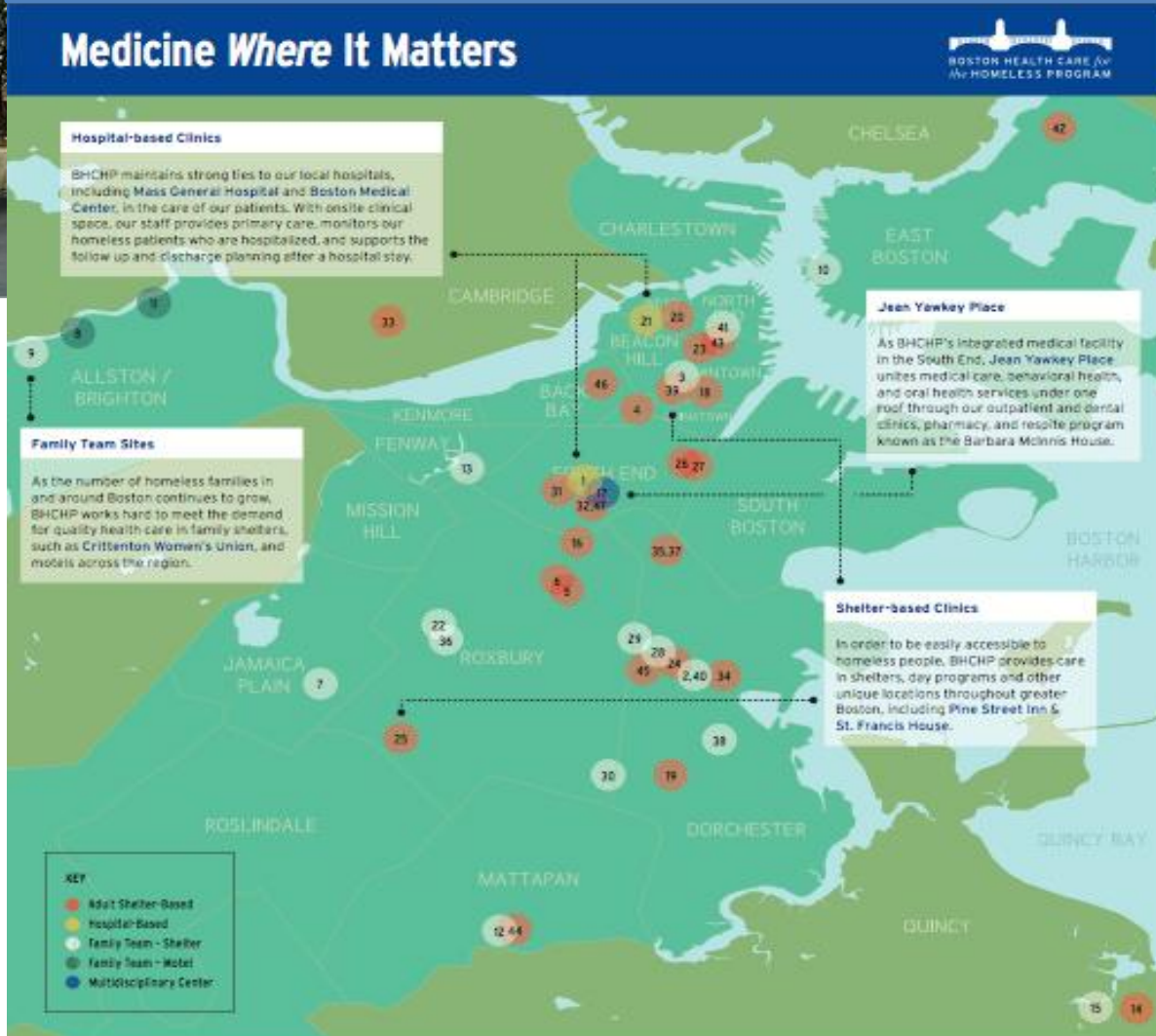
5. Beijer U, Wolf A, Fazel S. Prevalence of tuberculosis, hepatitis C virus, and HIV in homeless people: a systematic review and meta-analysis. *Lancet Infect Dis*. 2012;12(11):859-870.

6. HIV/AIDS and Homelessness. 2009.

7. Internal data



# Boston Health Care for the Homeless Program



## PROGRAM STATS

10,600+  
unique patients  
in 2017

130,000  
visits  
in 2017

380+  
employees

\$55M  
budget,  
FY18

33  
years in  
operation

40+  
clinical  
sites

60%  
patients  
with SUD

# Our Services

- Providing comprehensive, integrated health care services for Boston's most vulnerable individuals and families. Our services include:
  - Primary and episodic medical care
    - Main outpatient clinic, shelter-based, outreach-based
  - Dental care
  - Behavioral health services- psychiatry and counseling
  - Medical respite care- Barbara McInnis House
  - Family Team
  - Street/mobile van outreach
  - Transgender clinic
  - Office-based buprenorphine program for OUD
  - Pharmacy
  - Ryan White HIV Program- primary care, HIV, HCV and STI counseling/testing
  - HCV treatment (founded in 2014)

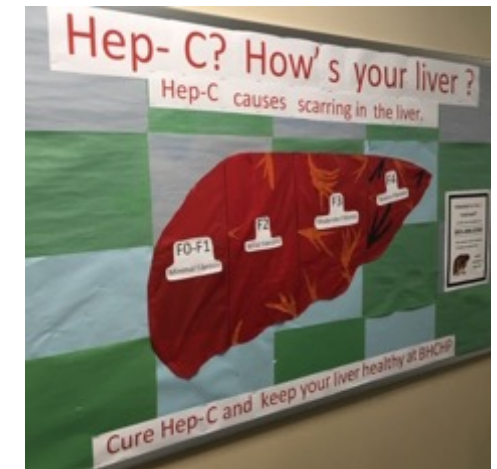


# HCV Team


- Founded in 2014
  - Significant growth over past few years
- Comprised completely of BHCHP providers, nurse, and care coordinators
  - BHCHP PCPs who have developed HCV treatment expertise
  - PCPs already embedded in clinic, shelter, street care teams
  - We see our own patients, those referred by our colleagues/nurses/CMs, as well as outside referrals

## How do we pay for it?

- Directly billable services to third party payers (Medicaid, Medicare, mostly)
- DPH and internal support for nonbillable services



- How do we provide HCV care for individuals experiencing homelessness?
  - Cases
  - Pearls and Principles



# E is 59 yo Hispanic bilingual male with hx of HCV, opioid use disorder, HTN, major depression and PTSD

- Clinical situation:
  - Genotype 1a
  - HCV RNA 8,325,000
  - Tx naïve
  - Minimal fibrosis by FIB-4
  - HBSAg-, anti-HBc+, anti-HBs+
  - HIV neg
  - Medications: sertraline, prazosin, chlorthalidone, amlodipine
- Social situation:
  - Homeless, sleeping in a friend's unheated/unfinished garage
  - Working phone
  - All recent appointments kept
  - Last use of opioids a few months ago, on buprenorphine at outside facility.



# Case, continued: Treatment

- E would prefer the shortest treatment duration
- Glecaprevir/Pibrentasvir x 8 weeks started 7/1/19
  - PA completed by care coordinator who arranges for med delivery to clinic
  - Pt meets with HCV RN to initiate medication and opts to keep meds in clinic with weekly visits
  - Adherence support provided by HCV RN at in-person visits
  - Week 4 HCV VL <15 not detected
  - **Pt becomes lost to follow-up in week 5**
    - Phone no longer in service
    - No address to do home visit or send letter
    - Not seen in clinic or in the area during outreach attempts



# Case, continued: Returning to care

- E returns to care in December 2019
  - Relates relapse during treatment with departure from MAT clinic
  - Lost his phone
  - Didn't come to clinic due to feeling ashamed and shift in priorities
- Labs show:
  - HCV VL 900,000
  - G1a
  - No NS5a resistance
  - Determined to have experienced **treatment failure**
  - **He didn't feel ready to pursue retreatment at that time**



# Case, continued: COVID surge



- COVID halted all HCV team activities except for pts currently on medications March-June
  - HCV team redeployed to COVID response
  - All care coordination moved to remote/phone-based
- In July-August 2020 we sought out those pts who we had been working up for treatment prior to COVID to see if they were ready to resume care





# Case, continued: Retreatment

- In August E was eager to be retreated for HCV
  - Same unstable living situation
  - Focused on navigating Social Security income issues
  - Using opioids (intranasal) intermittently, not on MAT
    - Overdosed 2 weeks prior to our visit
  - Adherent to other medications and BH appointments
  - Working phone
  - Closely connected to bilingual clinic case manager, seeing her qweek
- What could we do to help support E's treatment success?



# Case, continued: Retreatment

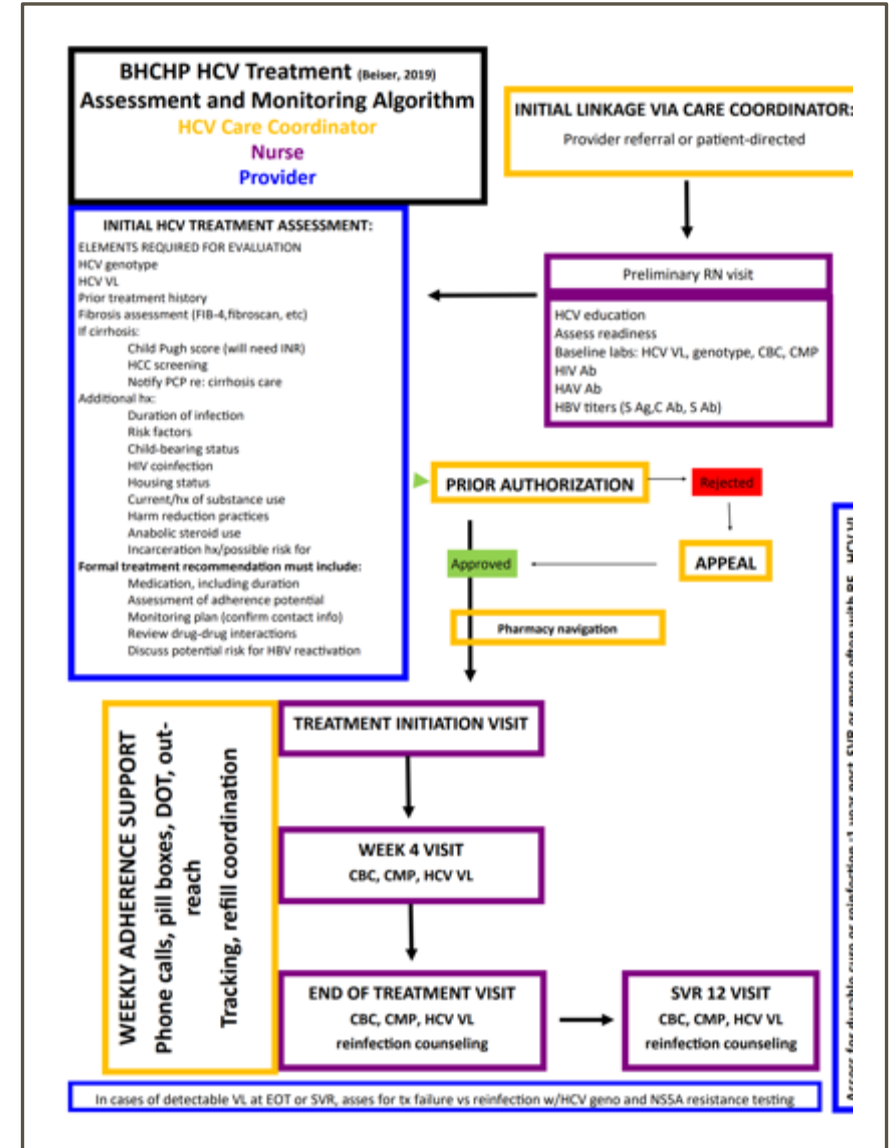
- Retreatment planning
  - Addressing current stressors:
    - Buprenorphine/naloxone initiated
      - Bridging bupe **by HCV treater** weekly while connecting to OBAT team
    - Collaborate with CM, PCP and BH provider who are regularly working with pt
      - Assist in Social Security documentation needs
    - Provide language-appropriate services
- 2 weeks of kept OBAT appts → submit PA for SOF/VEL/VOX x 12 weeks
  - Weekly pillboxes, timed with OBAT visits
  - Has kept all appointments, 4 doses missed along the way
  - Week 4 HCV VL <15 not detected
  - Has moved to Ohio to live with his sister- still in touch and in his last week of treatment.

# D is a 50 yo female with hx of HIV, HCV, cirrhosis, and opioid use disorder

- I am her PCP and HCV treater- integrated HCV treatment into our care plan as soon as feasible after she entered **residential treatment**
- Around week 3 of HCV tx, she left her program and returned to the **street** and active use
  - Adjusted adherence plan from meds at program to meds at clinic with weekly disbursement. Some meds lost, repleted from clinic supply.
  - Coordination with OBAT visits/ability to accommodate walk-in visits
  - Collaborate with coworkers doing street outreach
- Lost to follow-up in week 5
- **Hospitalized** with COVID, pneumonia and osteomyelitis of toe in week 6
  - Brought meds to hospital team
- Pt transferred to **medical respite** at our site to recover from toe amputation, remaining HCV meds provided there
- HCV VL <15 NOT DETECTED

# Principles for treatment evaluation

- Streamline
- Codify
- Limit unnecessary additional appointments
- Document in consistent format
- Identify clear pathway and roles through process



# Pearls and principles for HCV treatment

- Everyone should be treated. Reduce barriers, don't add them
- Recognize that you have power to prioritize HCV care alongside other health issues
  - **There is no perfect situation-** kept appointments as proxy for stability
  - Be prepared/willing to address other simultaneous issues
  - Readiness can be assessed over time, but don't wait too long
- When is the wrong time for treatment?
  - Lack of contact info (and no clear work-around)
  - Lack of interest (referred by someone more invested than the pt)
  - Imminent transitions through SUDs tx continuum
- **Do not assume things are stable on treatment**
  - Weekly adherence checks allow team to respond quickly to destabilizing issues, such as:
    - Loss or theft of medication
    - Loss of insurance
    - Relapse/progression to more chaotic drug use and increased exposure risk
    - Incarceration



# Pearls related to treating HCV among people currently using drugs

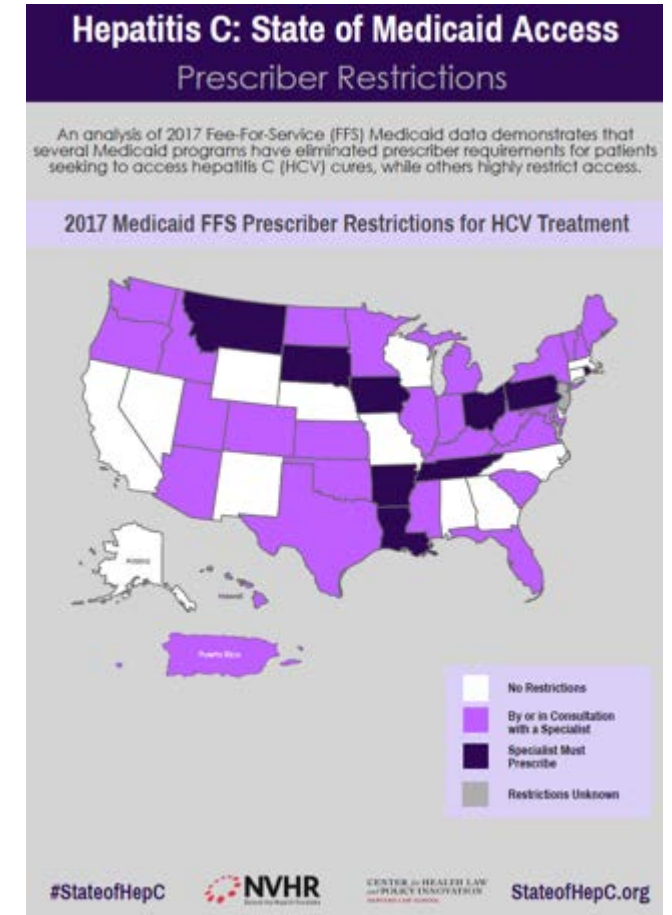
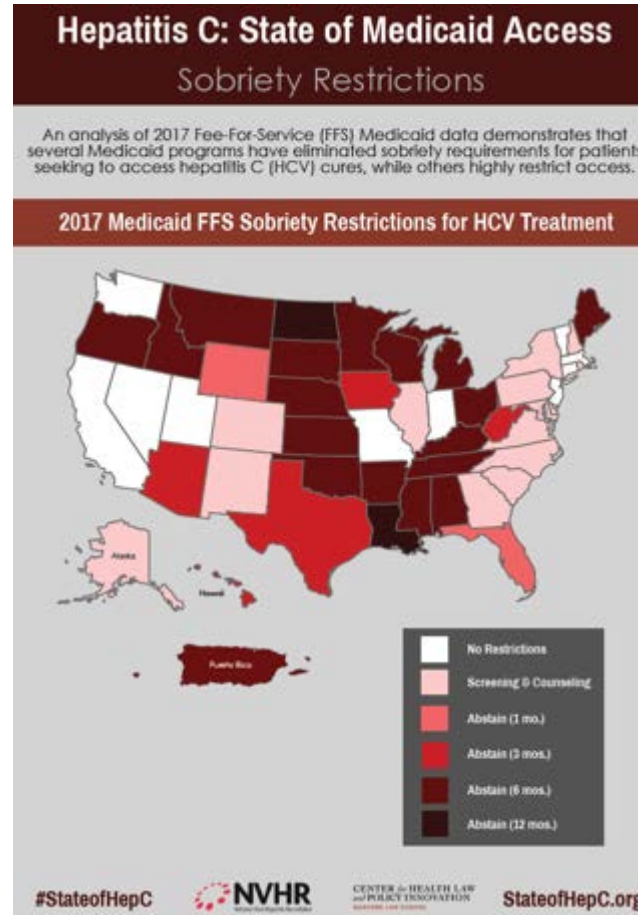
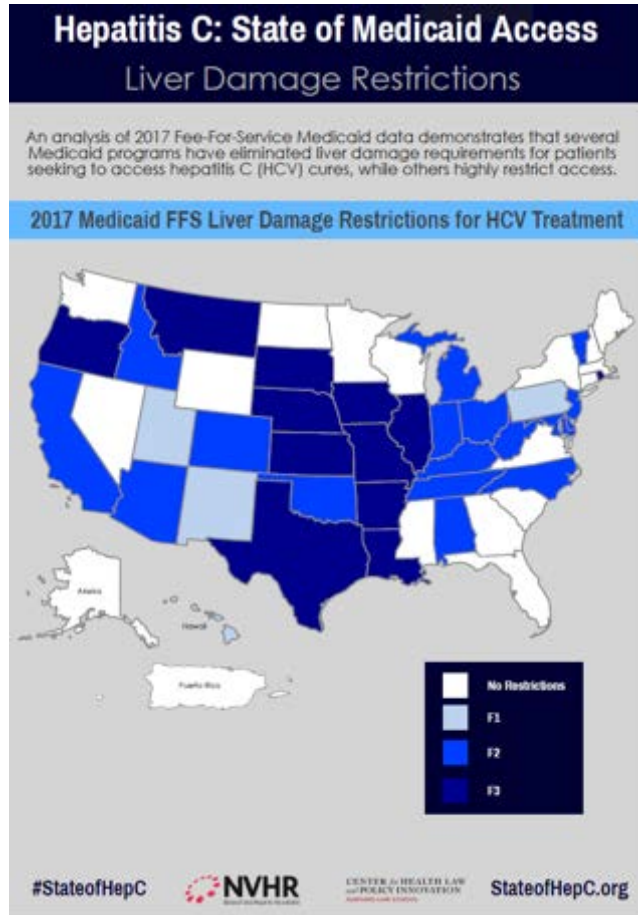
- Obtain as many points of contact as possible
  - Phone numbers, email/MyChart, case workers at programs, contacts at syringe exchange programs (SEPs)- COLLABORATE WITH EXISTING SUPPORTS
- Try to treat couples or other drug-using partners concomitantly
- Try to reinforce that the goal is to continue HCV therapy through any challenges
  - **Destigmatize**
  - Keep communication flexible and responsive to times of crisis
  - Anticipatory guidance to reduce risk of reexposure
  - \*\*\*MAT on demand by HCV treater



# Solutions to Practical Challenges

Challenge	Solution
Readiness	Multiple visits to gauge adherence potential Anticipate RF for tx interruption Collaborate with established care teams who know pt well
Medication loss/theft prevention	DOT, weekly pill boxes, home delivery, emergency insurance override
No phone	Pre-arranged appts My Chart, if applicable Outreach to nearby shelter/program settings at reliable intervals
Lack of transportation	Bus passes, medication delivery, satellite laboratory
Competing priorities	Decrease barriers as much as possible Co-schedule with PCP or OBAT/MMT Limit unnecessary travel <b>Accept less than perfection</b>
Specialty pharmacies (copay, home delivery, time)	HCV team care coordinator navigates for pt Insurance authorized rep Mail to clinic

# Ongoing barriers to HCV treatment



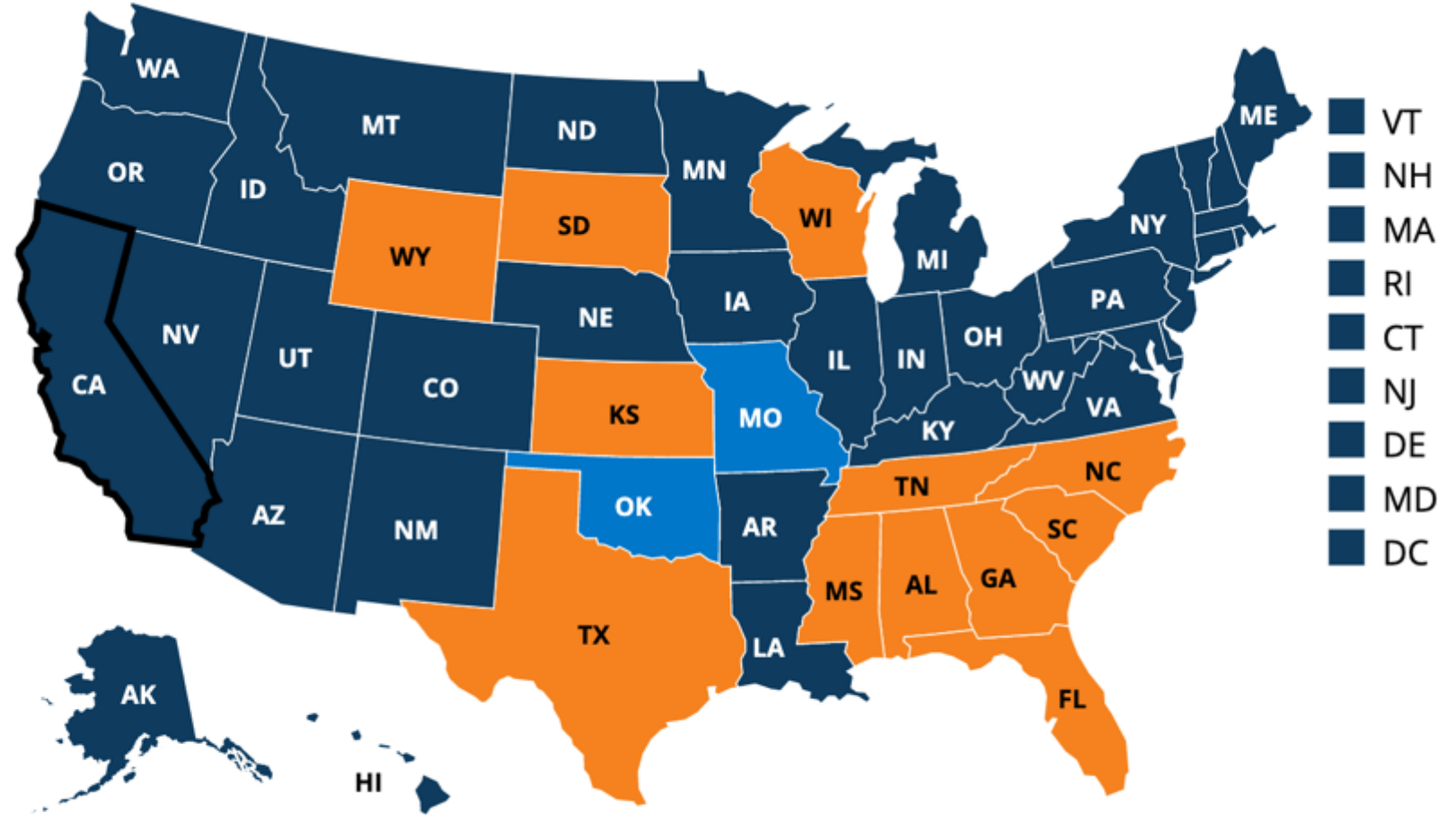
Also... stigma, competing priorities, time/administrative burden, lack of funding, etc

<https://stateofhepc.org/resources/>



# Ongoing barriers to HCV treatment

Medicaid expansion status as of Nov 2020

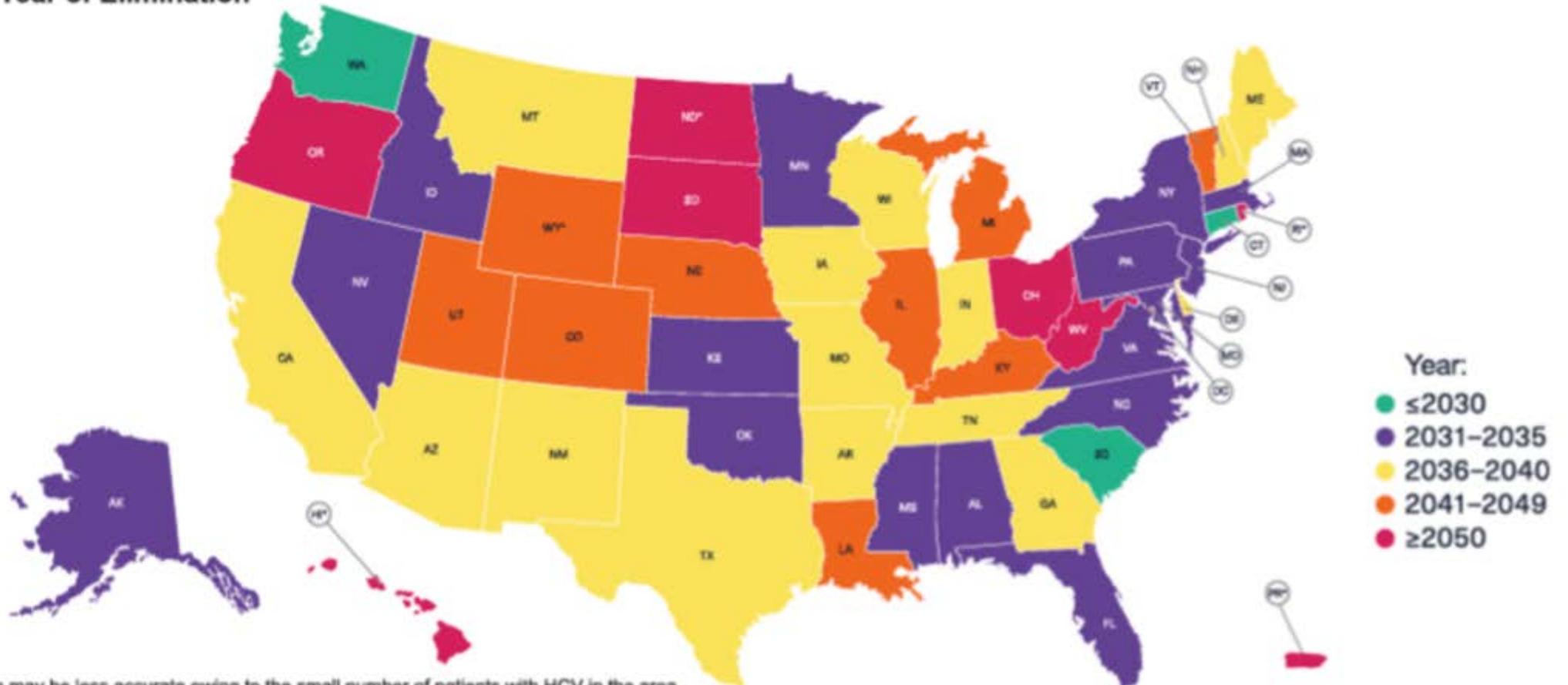


■ Adopted and Implemented ■ Adopted but Not Implemented ■ Not Adopted

## ANNUAL NUMBER NEEDED TO TREAT TO MEET 2030 WHO TREATMENT TARGET

- The estimated annual number of treatments required during 2020–2030 to reach the 2030 treatment target is 173,514 in the US
- The estimated annual number of treatments ranged from 51 to 29,147 across 50 states, with Hawaii having the lowest number needed to treat (51) and California (29,147) having the highest number needed to treat (**Figure 3**)

Figure 1. Year of Elimination



\*The estimation may be less accurate owing to the small number of patients with HCV in the area.

# Resources

- NVHR/CHLPI state-based Medicaid coverage guidance <https://stateofhepc.org/>
- AASLD/IDSA treatment guidelines <https://www.hcvguidelines.org/>
- University of Washington module training on HCV and liver health <https://www.hepatitisc.uw.edu/>
- University of Liverpool Hep Interaction <https://www.hep-druginteractions.org/>
- NATAP journal and conference coverage: [natap.org](http://natap.org)
- Hepatitis B Management: Guidance for the Primary Care Provider: <https://www.hepatitisb.uw.edu/page/primary-care-workgroup/guidance>

# Thank you for your time!

Questions?



[mbeiser@bhchp.org](mailto:mbeiser@bhchp.org)



# Pop Up Question

**What are some ways that providers can support patients to continue HCV treatment through any challenges?**

# Discussion






Join us next week!

*Patient Engagement Learning Series*

**Patient Engagement for HIV  
Services Amid COVID-19**

Tuesday, January 26, 2021 at 3:00 pm ET

**Speaker:** Jason E. Farley, PhD, MPH, ANP-BC, FAAN, Johns Hopkins University  
School of Nursing





**Thank you**

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