Beating Hepatitis C: Closing Gaps in the Cascade

Carolyn Chu, MD, AAHIVS & Cristina Gruta, PharmD, AAHIVP
Clinician Consultation Center
May 21, 2018

Disclaimer

The views, opinions, and content expressed in this presentation do not necessarily reflect the views, opinions, or policies of the Center for Mental Health Services (CMHS), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Health Resources and Services Administration (HRSA), or the U.S. Department of Health and Human Services (HHS).
Disclosures

- Dr. Chu has no conflicts of interest to disclose.
- Dr. Gruta has no conflicts of interest to disclose.

Hepatitis C: What have you heard?
Why should I care about hepatitis C?

- Treatment has been revolutionized over the past few years
- Numbers of new infections are rising, despite recent attention to this important public health issue
- PBHCI/PIPBHC grantees play an extremely important role in engaging clients in prevention, screening/testing, treatment initiation, and treatment completion
- We all can help “eliminate hepatitis C”

Learning objectives

- Identify risk factors for HCV acquisition and transmission
- List steps in the HCV Care Continuum and why screening is vital to eliminating HCV
- Understand how to incorporate HCV screening as a part of integrative practice
- Increase awareness of how PBHCI/PIPBHC grantees can support patients living with, and/or at risk for, hepatitis C
Epidemiology update

NEW HEPATITIS C INFECTIONS HAVE NEARLY TRIPLED SINCE 2010

GIVEN LIMITED TESTING AND UNDERREPORTING, CDC ESTIMATES THE ACTUAL NUMBER OF AMERICANS NEWLY INFECTED IS 34,000

Taking a closer look...

- Screening → linkage to HCV care → treatment cascade must work for all who are at risk
- Treatment of Person Who Inject Drugs (PWIDs) + harm reduction efforts are essential for HCV elimination efforts


Slide credit: clinicaloptions.com
Access to prevention

2017 study: 80% of young people with HCV live > 10 miles from syringe service program (SSP)

What increases someone’s risk?

- Injection drug use (current or former); intranasal drug use
- Born between 1945-1965
- Receiving tattoos or body piercings in unregulated setting (i.e. non-sterile equipment use), such as during incarceration
- Receipt of blood, blood product, or organs before 1992; or receipt of blood/product/organ from donor with HCV
- Long-term hemodialysis
- Occupational exposures (e.g., healthcare workers & needlesticks)
- HIV infection
- Perinatal exposure (maternal HCV)
- Sharing certain household items (e.g., razor) with a person who has HCV
- Having unprotected sex with someone living with HCV (esp. MSM)
Worldwide epidemiology

Prevalence

- High (≥ 5%)
- High moderate (2 to <5%)
- Low moderate (1.5 to <2%)
- Low (1 to <1.5%)
- Very low (0 to <1%)

Q: How can I talk with clients about their risk?

A: In much the same way you talk about their behavioral health!

- **Open, non-judgmental** approach
- Use **plain words**
- Important to use person centered language to prevent **perpetuating bias** against hepatitis C or associated risk behaviors
- Exploring someone’s risk (or perception of risk) often taps into **sensitive content** such as sexual and substance use history
- Try to identify **client’s goals** for the discussion – pay attention to their **reactions, beliefs, concerns**
- Might help to start conversation with: “What have you heard about hepatitis C?”...“Can I help you with getting tested?”
How does hepatitis C affect health?

(1) Liver inflammation

The liver:
- Breaks down medications, toxins, and nutrients
- Is important for blood clotting
- Helps store iron, some vitamins
- Helps filter blood supply
- Is the only organ that can heal!

(2) Can also affect other organ systems (“extrahepatic” impact)

https://www.hepatitisc.uw.edu/
Extrahepatic manifestations: brain, mood changes

Other extrahepatic manifestations

- Vasculitis, cryoglobulinemia
- Lichen planus
- Porphyria cutanea tarda
- Arthritis, arthralgias
- Kidney disease
- Cancer (lymphoma)
- Hypothyroidism
- Neuropathy
Goals of HCV treatment

Primary goal

- Eradicate HCV infection ("cure")

Secondary goals

- Improve inflammation/scarring
- Slow down liver disease progression
- Reduce risk of liver cancer and death (end stage liver disease/cirrhosis, etc.)
- Reduce harmful impact on other organ systems
- Improve health-related quality of life
- Prevent transmission to others

https://www.hcvguidelines.org

Treatment can prevent onward transmission ("treatment as prevention")

Observed and modeled HCV prevalence among PWID in Australia


Slide credit: clinicaloptions.com
U.S. Hepatitis C Care Continuum: where are the gaps?

Patients (%)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic HCV</td>
<td>3,500,000</td>
</tr>
<tr>
<td>Diagnosed and aware</td>
<td>1,743,000</td>
</tr>
<tr>
<td>Access to care</td>
<td>1,514,667</td>
</tr>
<tr>
<td>HCV RNA confirmed</td>
<td>952,726</td>
</tr>
<tr>
<td>Liver biopsy</td>
<td>581,632</td>
</tr>
<tr>
<td>Prescribed treatment</td>
<td>555,883</td>
</tr>
<tr>
<td>Achieved SVR (&quot;cured&quot;)</td>
<td>326,859</td>
</tr>
</tbody>
</table>


Screening, screening, screening!!
Screening: what it is, challenges, and best practices

• Screening involves blood testing - currently, no FDA approval for using saliva or other body fluids
  o Traditional laboratory testing from blood sample, <or>
  o Point-of-care (“rapid”) test from fingerstick or venipuncture

https://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/LicensedProductsBLAs/BloodDonorScreening/InfectiousDisease/ucm126581.htm

HCV testing algorithm

If someone has a positive HCV antibody, but negative/undetectable viral load:
• “Cleared” on own without treatment
• Previously treated and cured
• “False positive”

(Antibody and viral load do NOT give information about severity of liver disease)

https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm
Challenges to screening?

Provider/system factors
- Lack of knowledge about who is at risk
- Too many other things to address during visits
- Fragmented communication between care providers
- No one treating HCV in community

Patient factors
- Competing priorities
- Perception of low/no risk
- “Silent killer” - HCV often doesn’t cause symptoms
- Lack of knowledge regarding consequences of untreated HCV
- Bias
- Mistrust of healthcare system or provider (desire for “non-traditional” screening location)


Best practices for screening

- “Reflex” testing: positive antibody automatically leads to viral load testing without requiring new sample
- Alert in electronic health record
- Screening/incentives that reduce bias (couple with cholesterol or diabetes screening)
- Patient education: flyers in center and around community
- Dedicated resources and staffing to facilitate timely linkage to HCV care; ideal model = on-site, co-located treatment team (“It takes a therapeutic village”)

### Ways to integrate screening in your practice/community

<table>
<thead>
<tr>
<th>WHERE</th>
<th>HOW</th>
<th>WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ PCP office—birth cohort</td>
<td>▪ Current—Ab then RNA</td>
<td>▪ PCP—GP/RN/other medical team members</td>
</tr>
<tr>
<td>▪ Hospital—ED/inpatient</td>
<td>▪ Point-of-care—Ab+ then RNA</td>
<td>▪ ED/hospital staff</td>
</tr>
<tr>
<td>▪ Prenatal</td>
<td>▪ Dried blood spot—Ab with reflex RNA</td>
<td>▪ Peer workers</td>
</tr>
<tr>
<td>▪ Substance use treatment programs/services</td>
<td>▪ Rapid diagnostic test—RNA</td>
<td>▪ Substance use counselors</td>
</tr>
<tr>
<td>▪ Outreach—homeless shelters, supervised injection sites</td>
<td></td>
<td>▪ Outreach workers/case managers</td>
</tr>
</tbody>
</table>

All inter-related—the how will depend on the who and the where

---

### Substance use programs are uniquely well-suited for HCV care

#### Where

- PCP office—birth cohort
- Hospital—ED/inpatient
- Prenatal
- Substance use treatment programs/services
- Outreach—homeless shelters, supervised injection sites

#### Addiction services

- High-risk clients
- Needle exchange
- MAT program (methadone, buprenorphine, etc.)
- Harm reduction and outreach
- Supportive housing
- Daily drop-in center
- Peer counselors: can be trained to offer HCV screening and counseling
Linkage: non-specialists can effectively treat HCV


OKAY, I GET IT: so who can be treated?

EVERYONE!

- Only clinical reason to consider no treatment is anticipated short life-expectancy
- Pre-treatment assessment can be done in 1-2 outpatient visits (will need complete labs, imaging, counseling)
- “Recent or active injection drug use should not be seen as an absolute contraindication to HCV therapy”... “Scaling up HCV treatment among people who inject drugs is necessary to positively impact the HCV epidemic in the U.S. and globally.”
- Cost of HCV therapies have unfortunately led to some payer restrictions: state-by-state criteria, medication formularies

https://www.hcvguidelines.org
Breakdowns in Care Cascade: historical exclusions for HCV therapy

- Active PWID
- Homelessness
- Alcohol use
- Adherence concerns
- Advanced liver disease (or not advanced enough!)
- Mental health diagnoses (interferon)
- Autoimmune disease (interferon)
- Complex cardiopulmonary disease (ribavirin)

Populations with high HCV prevalence and variable access to healthcare:

- Individuals who are incarcerated
- People living with HCV/HIV coinfection
- Men who have sex with men
- Emigrants
- Persons who use drugs

2017 NVHR update: drug/alcohol use leads to reduced treatment access in some settings

2017 Medicaid Fee For Service Sobriety Restrictions for HCV Treatment

Why are the newer HCV therapies so great?

- More effective: >90% “cure” rates – monitoring much simpler
- Many can treat multiple types/strains of HCV (“pangenotypic”)
- Shorter duration of treatment: most 8-12wks
- Fewer pills
- Fewer side effects
- Better options for populations who have been harder to treat in the past (cirrhosis, HIV/HBV co-infection, kidney disease, prior treatment failure)

How do I know when I’m cured?

Sustained Virologic Response 12 with 12-Week Treatment Course

https://www.hepatitisc.uw.edu/
We are making some progress in closing the gaps!

<table>
<thead>
<tr>
<th></th>
<th>Patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic HCV</td>
<td>100%</td>
</tr>
<tr>
<td>Diagnosed and aware</td>
<td>50%</td>
</tr>
<tr>
<td>Access to care</td>
<td>43%</td>
</tr>
<tr>
<td>HCV RNA confirmed</td>
<td>27%</td>
</tr>
<tr>
<td>Liver biopsy</td>
<td>17%</td>
</tr>
<tr>
<td>Prescribed treatment</td>
<td>16%</td>
</tr>
<tr>
<td>Achieved SVR (“cured”)</td>
<td>9%</td>
</tr>
</tbody>
</table>


HCV elimination: simplifying and streamlining care

- Point-of-care testing
- Reflex testing (antibody positive → HCV RNA testing)
- HCV Ag (screening and confirmation in one)
- No genotype testing needed with pangenotypic regimens
- Simple tools to evaluate for cirrhosis
- APRI/FIB4, elastography
- 1 daily dose (1 pill/day) for 8-12 wks
- No ribavirin, no drug interactions
- On-treatment monitoring much simpler
- Affordable
So what can you do?

- **EDUCATION**
- **OUTREACH**
- **LINKAGE TO CARE**
- **HEALTH COACHING**

Translating “doctor talk”

<table>
<thead>
<tr>
<th>Medical term</th>
<th>Patient-friendly language</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Antibody”</td>
<td>What the immune system makes to fight HCV</td>
</tr>
<tr>
<td>“HCV RNA test”</td>
<td>Level of hepatitis C virus in the body</td>
</tr>
<tr>
<td>“Genotype”</td>
<td>Type of hepatitis C virus someone has</td>
</tr>
<tr>
<td>“Cirrhosis”</td>
<td>Liver scarring/damage</td>
</tr>
<tr>
<td>“Immunization”</td>
<td>Shot/vaccine</td>
</tr>
<tr>
<td>“Sustained Virologic Response” (SVR)</td>
<td>No HCV virus in the body (cured!)</td>
</tr>
</tbody>
</table>

Slide credit: Harm Reduction Coalition
Supporting someone before, during, and after treatment

- Encourage clients to have open communication with medical providers
- Questions to consider: Am I ready (physically/emotionally/mentally)?
- Everything in place/coordinated with provider?
  - Working number, secure address for medication delivery
  - Destabilizing life events in near future (move/work/school/family)?
  - Responsibilities that might impact engagement and adherence?

Supporting someone before, during, and after treatment

- Friends/family close by to support through and after treatment?
- HCV patient support group in area?
- Adherence
  - Does client believe treatment can work? Do they trust their provider? Do they have support systems who can help remind them about taking medications, keeping appointments?
  - Plan ahead: troubleshoot with client- what is plan if side effects?
What if my client isn’t ready for treatment?

- Continue encouraging them to think about it
- Help ensure they remain engaged with HCV team/provider
- Encourage prevention, including hepatitis A, B vaccinations
- Reminders for regular liver cancer screening, if necessary*
- Healthy diet, avoiding liver toxins (including alcohol and some supplements), exercise, rest
- Stress management
- Encourage engagement in HIV, HBV care (if applicable)

*Recommended if someone has cirrhosis  https://prepc.org/

Motivational interviewing/troubleshooting strategies

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Examples</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic</td>
<td>No insurance or limited coverage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unable to afford medication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difficult completing forms &amp; follow-up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low literacy level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other examples?</td>
<td></td>
</tr>
<tr>
<td>Logistical Issues</td>
<td>Difficulty arranging or having access to reliable transportation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scheduling conflicts &amp; difficulty making appointment on time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difficulty finding child or adult care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other examples?</td>
<td></td>
</tr>
<tr>
<td>Language &amp; Culture</td>
<td>Difficulty understanding medical staff &amp; terminology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difficulty speaking or reading English</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difficulty communicating during, needs &amp; concerns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beliefs regarding treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other examples?</td>
<td></td>
</tr>
<tr>
<td>Feelings, Emotions &amp;</td>
<td>Anxiety about treatment</td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>Mistrust or fear</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phobic/Feels about illness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other examples?</td>
<td></td>
</tr>
<tr>
<td>The Healthcare System</td>
<td>Difficulty navigating system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difficulty obtaining care when needed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication gaps</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of coordination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of cultural competency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other examples?</td>
<td></td>
</tr>
</tbody>
</table>

Patient-centered discussions: solution-oriented
Life after cure...

• Staying healthy
• Preventing reinfection
  o Virus can remain in water, filters, syringes, cookers, for 2-8+ weeks
  o Virus can also remain on straws/pipes
  o Safer sex practices
  o Tattoo equipment should be sterilized
  o Don’t share razors/toothbrushes/nail clippers

https://www.cdc.gov/hepatitis/partners/hepatitiscoordslist.htm
Key take-home points

• “Baby boomers” and PWID are two important populations that need increased HCV screening
• Improved screening and broader access to HCV treatment can close gaps in the HCV Care Cascade
• Substance use and mental health co-morbidities are not absolute contraindications for HCV treatment
• HCV elimination is only possible with engagement, linkage, and treatment of more challenging populations

SAMHSA-HRSA Center for Integrated Health Solutions

WHO WE ARE

The SAMHSA-HRSA Center for Integrated Health Solutions (CIHS) is a national training and technical assistance center dedicated to the planning and development of integration of primary and behavioral health care for those with mental illness and/or substance use disorders and physical health conditions, whether seen in specialty mental health or primary care safety-net provider Settings across the country.

CIHS is jointly funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Health Resources Services Administration (HRSA), and is run by the National Council for Behavioral Health, the unifying voice of America’s healthcare organizations that deliver mental health and addictions treatment and services.
CIHS News and Resources

Visit www.integration.samhsa.gov or e-mail integration@thenationalcouncil.org

Free consultation on any integration-related topic!

AETC Clinician Consultation Center

The Clinician Consultation Center is a free telephone advice service for clinicians by clinicians. Receive expert clinical advice on HIV, PrEP, PEP, hepatitis C, substance use and perinatal HIV.

Go to nccc.ucsf.edu for more information!

HIV/AIDS Warmline 800-933-3413
HIV testing, ART decisions, complications, and co-morbidities

HEPline 844-HEP-INFO
HCV screening and testing, monitoring, treatment

Substance Use Warmline 855-300-3595
Substance use evaluation and management, MAT options

Perinatal HIV Hotline 888-448-8765
Pregnant women living with HIV or at-risk for HIV & their infants

PrEPline 855-HIV-PrEP
Pre-exposure prophylaxis for persons at risk for HIV

PEPline 888-448-4911
Occupational and non-occupational exposure evaluation and management
Thank You

SAMHSA’s mission is to reduce the impact of substance abuse and mental illness on America’s communities.

The mission of HRSA is to improve health and achieve health equity through access to quality services, a skilled health workforce, and innovative programs.

Carolyn Chu (Carolyn.Chu@ucsf.edu) or check out: nccc.ucsf.edu

integration.samhsa.gov