HCV Testing and Linkage to Care: Expanding Access to HCV Care Through Electronic Health Engagement

Imtiaz Alam, M.D.
Clinical Associate Professor of Medicine, Dell Medical School, UT Austin
Medical Director, Austin Hepatitis Center
ERADICATING HCV Is Everyone’s Job in the Community

- **Identify undiagnosed HCV**
  - HCV rapid testing
  - PWID Testing – “Next Wave”
  - Age Cohort Testing

- **Preventing infection and reinfection**
  - Outreach and education
  - Safer injection counseling
  - Reinfection prevention counseling

- **Treatment access and delivery**
  - Linkage to HCV care
  - Access to HCV drugs
  - Primary care–based therapy
  - Methadone-based directly observed therapy
  - Access to specialty care
    - Telemedicine
Chronic HCV Treatment Cascade in the US (2003-2009)

- **Persons With HCV in the US (%):**
  - Chronic HCV Infection (n=3,500,000) = 100%
  - Diagnosed and Aware (n=1,743,000) = 50%
  - Access to Outpatient Care (n=1,514,667) = 43%
  - HCV RNA Confirmed (n=952,726) = 27%
  - Underwent Liver Biopsy (n=581,632) = 17%
  - Prescribed HCV Treatment (n=655,883) = 16%
  - Achieved SVR (n=326,859) = 9%

**The Largest Gap**

Systematic Review and meta-analysis: MEDLINE, EMBASE, and Cochrane Database of Systematic Reviews (n=10 eligible articles).

Numbers in parentheses are number of articles assessing a step in the cascade.
IDU Is the Primary Risk Factor for New HCV Infections in the United States¹

~3.5 million people living with chronic HCV in the United States²

~60% are current or former PWIDs³

With an estimated 34,000 new HCV infections in the United States in 2015, new infections have nearly tripled in the past 5 years, reaching a 15-year high.²,⁴ *

The greatest increases in new HCV infections, and the highest overall number of cases, were among young people aged 20-29 years, with injection drug use as the primary route of transmission.⁴

*Estimated prevalence of acute HCV infections after adjusting for under-ascertainment and under-reporting. Latest available data.
HCV is Underdiagnosed and Undertreated, Even More for PWIDs

Cascade of Care*

- Chronic HCV infection: ~3.5 Million
  - HCV in general US population: ~2.1 Million
  - HCV in PWID US population: ~1.75 Million

- Diagnosed and aware: 50%
  - HCV in general US population: ~1 Million
  - HCV in PWID US population: ~1 Million

- Treated: 49%
  - HCV in general US population: ~560,000
  - HCV in PWID US population: ≤~189,000

HCV disproportionately impacts PWIDs, but treatment rates are even lower relative to the overall HCV population

*All numbers are approximate.
†2003-2013.
‡Estimated, 2005.
§Estimated, 2014.
Cascade of Care for Suburban Heroin Users 17-35 years age, New Jersey Oct 2014-June 2015

Princeton House – Psychiatric Facility with an Active Opioid Detoxification Program

N = 861 were HCV Ab tested
N = 16 patients returned for in-office F/U visits
N = 2 started treatment

Akyar E et al. Emerg Infect Dis; 22 [5]; May 2016
What Are The Barriers To HCV Linkage To Care?

– Fragmentation of HCV services
– Denial or lack of understanding about the importance of care
– Concerns about costs of care
– Conditions that make it harder for patients to enter care, like substance abuse and mental health issues
– Difficulties arranging transportation, childcare, time away from work, or other logistics related to keeping appointments
– Fear of stigma
Barriers to Care Identified by Pts in OST Clinics and Needle Exchange Programs

• Survey of PWID in Philadelphia needle exchange program (N = 188)

Self-Reported Barriers to Care Among HCV-Infected PWID (n = 117)

- No Insurance
- Can’t Afford Copay
- Can’t Afford Transport
- Treatment Will Make Me Sick
- Fear of Liver Biopsy
- Feel Fine Without Treatment
- Fear of Judgement by Doctor

LINKAGE TO C CARE PROGRAM
A COLLABORATIVE CARE MODEL

EDUCATION
- Public
  - Website www.linkagetocare.com

LINKAGE TO CARE
- Medical Provider
  - CME HCV Screening and Treatment Training Program
  - HCV Screening in PWID Population
  - HCV Patient Self Referrals
    - Navigation Team
    - Care Coordination Team
    - HARM Reduction Team
  - Finding A Provider – “Choose Wisely”

CARE COORDINATION
- Individual Counselling
  - “Encourage the patient to follow the treatment care plan”
- Education
  - “Listening to my story”
- Behavior Modification

↑Linkage to Care
- ↑Acceptance of HCV Treatment
- ↑Adherence to HCV Treatment
- ↑HCV Treatment Effectiveness
- ↓Reduce HCV Reinfection post SVR

Rx CARE PLAN
- Real World SVR12
- Patient Related Outcomes [PRO]

RESEARCH
- Adherence to Provider Care Plan
- Adherence to Treatment
- Post-Therapy Viral Re-infection
- In Office Based Care
- Telemedicine
- Project ECHO
- Access to DAA Rx

CME HCV Screening and Treatment Training Program
Project ECHO: Extension for Community Healthcare Outcomes

- Addresses critical gap in availability of specialty care for pts with complex health conditions in rural and underserved settings

Learning loop

- Expert team constitutes the “hub”
- Community-based primary care teams are the “spokes”
- Hub provides training in specialty care services
- Trained primary care providers deliver specialty care services
- Pts receive specialty care services where they need them

https://echo.unm.edu/about-echo/
ASCEND: Nonrandomized Phase IV Trial Comparing HCV Treatment Outcomes by DAA Prescriber Type

- Pts (N = 600) from 13 urban, FQHCs in DC, all treated with LDV/SOF per FDA prescribing information; all providers given 3-hr training in AASLD/IDSA HCV guidance

LINKAGE TO CARE [LTC]

www.linkagetocare.com

Hub and Spoke Model – Centralizes Multi-Site Communication

HCV PATIENT IDENTIFIED

Patient Information Sent to Linkage to Care Program
Web-Based Program [HIPPA Compliant]

Linkage to Care Specialist/Navigator

Uninsured Patient

Insured Patient

Community Clinic
Project ECHO HCV Telemedicine

Local Private Provider Network
• GI/Hepatology
• Addiction Medicine
• Primary Care
• Telemedicine

HARM Reduction

Adherence To Clinical Program
Post Therapy IDU Relapse & HCV Reinfection
Hepatitis C is Treatable and Curable - Begin Your Path to Being Cured Today

Have you or a loved one been diagnosed with Hepatitis C? Did you know that hepatitis C is curable? Get Linked to the Care You Need. Our Linkage to Care services are completely free.
Linkage to C Care Educational Material

1. How do I sign up for Linkage to Care? 
   - Visit the website at logonto linkagecicare.com

2. What information do I need to enter? 
   - All the data that the clinical team needs it

3. How do I refer a patient or myself? 
   - Enter all the information that has been given.

4. Do I have to call anyone? 
   - Yes, you will receive a call from the nurse who will give you an enrollment.

5. When should I expect the confirmation call? 
   - Within 24 hours

6. How will I know that the patient has been connected with a provider? 
   - You will receive an email from the nurse who attended the consultation.

7. How can I communicate with the navigators? 
   - You can communicate through the patient's doctor or other provider.

---

Don't Share Hepatitis C 

New Treatments Have Changed the Game 
We Can Put Hepatitis C in Decline. 
Everyone Needs To End Hep C 

SCREEN, KNOW, GET CURED. 

Screening, Know, Get Cured. 
Specially if you have liverized dogs — even once — you are at risk for Hepatitis C. Even if you think you are not, talk to your medical provider about getting tested.

In 30 Minutes You’ll Know Did You Can DO SOMETHING Right Now?: 
www.linkingtocare.com 
512-689-7088

Got Hep C? 

One Test To Save Your Life 
SCREEN, KNOW, GET CURED. 

There are two things you need to know about Hepatitis C. 
1. Hepatitis C Is CUREABLE 
2. A Finger prick test can save your life

Get Screened NOW, 
Specially if you have liverized dogs — even once — you are at risk for Hepatitis C. Even if you think you are not, talk to your medical provider about getting tested.

In 30 Minutes You’ll Know Did You Can DO SOMETHING Right Now?: 
www.linkingtocare.com 
512-689-7088
January – October 2017:

- 1038 patients screened ± referred through LTC
- 503 RNA positive
  - 39% self-referred
  - 61% referred from 27 opioid addiction facilities in 19 states
  - 57% uninsured
  - 52% were between the ages of 21-40 years
  - 51% males
- 398 (80%) initiated LTC Protocol starting with education within 48 hours after referral
- On average, patients were contacted twice before scheduling their first provider appointment
EASL 2018 – Abstract 3558
LTC CASCADE OF CARE FOR PWID HCV PATIENTS

- 80% (398) of Confirmed Chronic HCV – Initiated LTC Protocol starting with Education
- 63% (249) who Initiated LTC Protocol Scheduled Appointment to Medical Provider
- 47% (116) who Scheduled Appointment Attended First Medical Provider Appointment

NUMBER OF INDIVIDUALS

SCREENED/REFERRED: 1038
HCV RNA [+]: 503
LINKED TO CARE EDUCATION: 398
REFERRED BY LTC TO A: 249
MADE IT TO THEIR FIRST: 116
INITIATED HCV RX: 69
AWAITING FURTHER LAB RESULTS: 47
COMPLETED HCV RX: 11
SVR12: 11
SEEN IN OFFICE vs. TELEMEDICINE

- Seen in Office: 92%
- Telemedicine: 8%

EASL 2018 – Abstract 3558
A.T - Texas
August 2017
My thanks and gratitude go out to ALL of you as none of this would be possible without all your dedication and sincere desire to help people. Again I am speechless and can only say, most sincerely, thank you for all the time and effort you have expended.

D.P - Texas
August 2017
2 1/2 months ago I happened across this web site in my search to receive treatment for Hepatitis C. I emailed you guys a message, and minutes later (yes, minutes and it was a Sunday!) I received a call from Ms. Tariq. I was dubious at first that it was going to be possible to actually receive treatment, but was assured over and over by both Ms. Tariq and Ms. Cook that it was indeed possible and true! Yesterday I picked up my first 28 day supply of Harvoni and this morning (30 minutes ago to be exact) I took my first pill! I just wanted to express my heartfelt thanks again for all you do at this clinic and for the incredible customer service (is that what it should be called?) that you provide in bringing a cure to those who are unable to afford it. Thank you, thank you, thank you for all your help and for pushing my hope beyond what I thought was possible.

V.C - Georgia
July 2017
Thank you so much!!! I'm so overwhelmed with happiness I want to thank you for all your work--you've been amazing with me--

M.R - California
July 2017
Hello Denise I can't tell you how much happiness I am feeling in right this moment .. I just saw my results from the lab and I know it's too soon to tell but so far they said that "HCV RNA , quantitative real time PCR < 15 not detected" now I'm no doctor but I don't know why I have a great feeling and I am so full of joy ... I am so hopeful ... thank you very much

R.O - Colorado
April 2017
You have taken the time to explain about Hep C and if I'm positive all the options from meds, labs, and to treatment. Most don't give me the time of the day because I'm uninsured. If I can repay y'all someday I will. Thank you so much.

Nohemi - Florida
April 2017
Hello Denise today at 1:40 pm of April 25th of 2017 , got my first jar of pills of Epclusa!!! I can't tell you how I am feeling.. I am so thankful because without LinkageToCare I wouldn't be able to start my treatment. I am way over joy.. thank you all very much God bless you all always every step of your journey
BEST PRACTICES

• HCV screening among the PWID population can be normalized and routinized [reducing stigma]
• LTC among this population starting with HCV education can lead to medical care
• Patient Database Management System [PDMS] provides an opportunity to assist these treatment centers and patients who can engage through an electronic portal that assists with HCV education and linkage to care navigation