

Triple E (Engagement, Education and Eradication) for Individuals with Chronic Hepatitis C: > 2 Years of Results of a Successful, Collaborative, US Model for Improving Education, Screening and Linkage to Care in an Underserved Population

M. KUGELMAS MD¹, A. TALAL, MD², M. TAGLIANTI³, M. KUGELMAS³, J. RANAGAN³

¹South Denver Gastroenterology P.C., Englewood, CO; ²Jacobs School of Medicine and Biomedical Sciences at University of Buffalo, Buffalo, NY; ³Chronic Liver Disease Foundation, Clark, NJ

BACKGROUND

- The Chronic Liver Disease Foundation (CLDF) is a nonprofit educational organization dedicated to increasing awareness of the effects of chronic liver disease in the US
- HCV can be transmitted by sharing needles and syringes, sharing/reusing injection drug equipment and accidental needle sticks due to improper disposal¹
- In the US, increases in the misuse of opioids and heroin has become a public health crisis and is perpetuating the HCV epidemic²
- According to the Centers for Disease Control and Prevention (CDC), 30 states reported increases in new HCV infections of more than 200%, compared with cases reported during 2010-2014¹
- Injection drug use accounts for ~70% of new HCV infections²
- To understand the importance of HCV in the recovery setting, the CLDF provided HCV education and screening to over 1,000 US individuals in 2017 and 2018. Results from a smaller cohort were presented at EASL 2019 as this program has been extended for an additional year.

RATIONALE

- Despite HCV being recognized as prevalent in patients with Substance Use Disorders, most substance abuse treatment facilities in the US do not screen for HCV
- Lack of clinical staff and/or access to knowledgeable HCV experts, limits screening and disease management
- In response to this, in 2017, the CLDF designed and implemented "Triple E (Engagement, Education and Eradication)" an integrated HCV program to improve the care of individuals with SUDs

AIM

- Expand the Triple E program to additional substance abuse centers throughout the US
- Educate substance abuse treatment center personnel on HCV
- Provide support to these centers in order to screen individuals for HCV
- Link individuals who test positive to health care professionals for management and treatment

METHOD

SUBSTANCE ABUSE TREATMENT CENTER SELECTION

- CLDF staff contacted public health departments and addiction/recovery facilities with program opportunities for education and screening

STAFF EDUCATION

- Prior to screening events, Hepatitis C education was provided to site staff
- Content included:
 - Risk factors, prevalence and transmission of HCV in the substance use disorder (SUD) population
 - Review of the damaging effects of chronic HCV emphasizing the importance of screening, diagnosis and treatment
 - Description of screening and confirmatory tests

PATIENT EDUCATION

- Live group and individual patient education and counseling provided by CLDF health care providers and hepatitis C counselors
- Content included HCV risk factors and transmission, symptoms, importance of having confirmatory tests and follow up with a health care provider

SCREENING

- Individual authorization obtained
- OraQuick finger stick test performed
- OraQuick test results provided by health care providers and hepatitis C counselors
 - If positive, HCV-RNA blood draw offered
 - Results provided from the link to care provider to the patient or to the center's appointed health care provider within 3 to 5 days.

LINKAGE TO CARE

- Individual linked directly to CLDF network personnel for counseling and management via onsite hepatitis specialist.

Table 1. Screening and Linkage to Care

Year	Number of Screening Sites	Ab Screened	Ab Positive	Blood Draw Completed (on those Ab positive)*	HCV RNA Detectable	Linked to Care (those who had blood drawn)**
December 2018 to October 2019 (11 months)	30	1,734	681 (39.3%)	521 (76.5%)	351 (67.4%)	416 (79.8%)

*Individual may not have received a blood draw for different reasons including not staying to receive antibody test result, already aware of their Hep C status and would follow up with their provider, or inability to obtain adequate blood sample.

**Individuals were linked to care on site but may not have received a blood draw.

Figure 1. Triple E Model



Figure 2. Triple E Screening/Linkage to Care Pathway

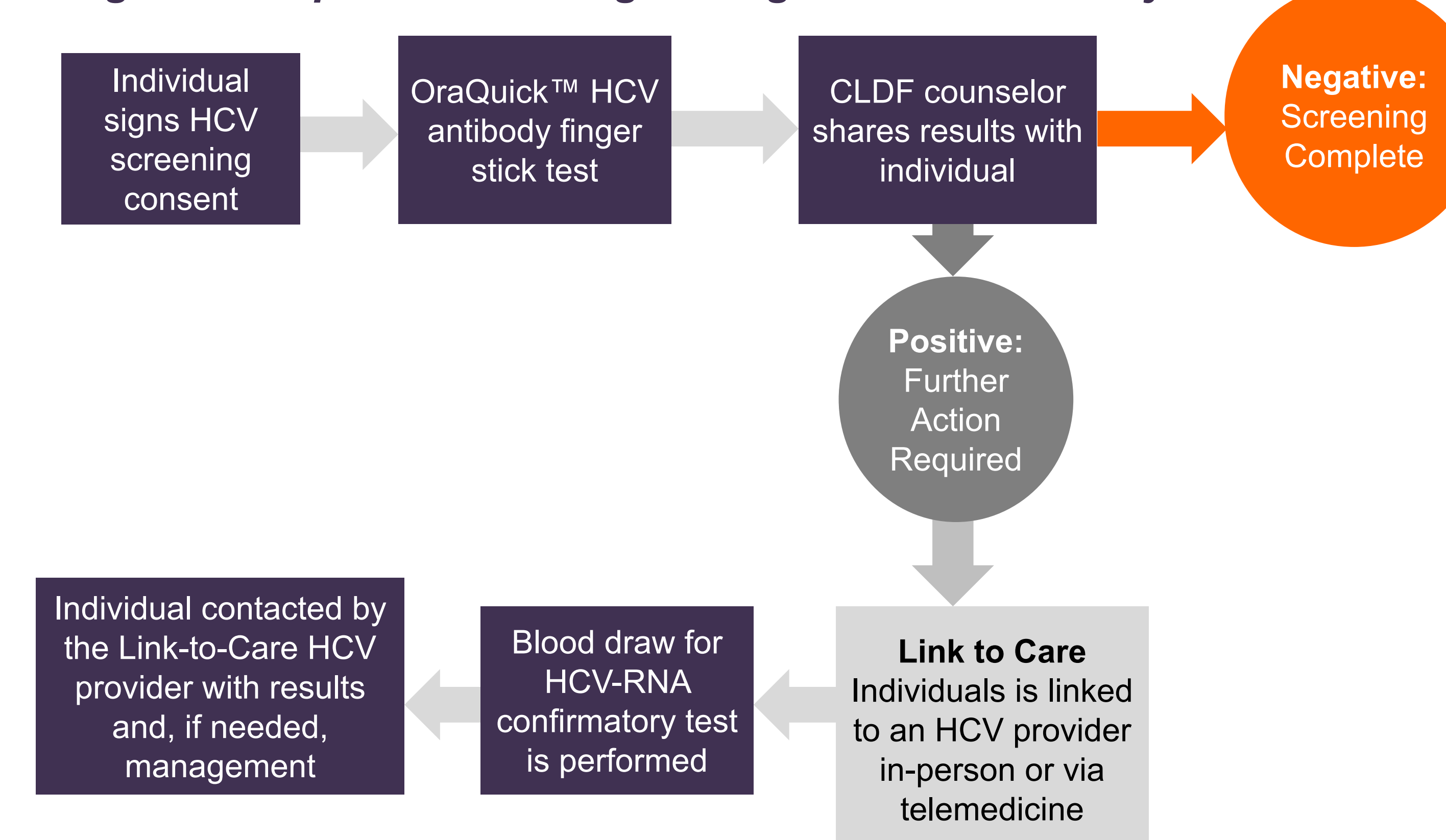


Table 2. CLDF Triple E Hep C Screening Locations

State	# Screened
California	208
Indiana	97
Kentucky	29
Michigan	354
New Mexico	134
Ohio	780
West Virginia	132
Total	1734

*Individual site metrics are available on request and based on approval of individual sites.

RESULTS

EDUCATION AND SCREENING

- Education and screening took place between December 2018 and October 2019
 - 750 health care providers and staff participated in education programs
 - ~2000 individuals participated in the patient education program
 - 1734 individuals were screened in 11 months
- Screenings included 30 substance abuse centers located in 7 states: California (n=3), Indiana (n=2), Kentucky (n=2), Michigan (n=6), New Mexico (n=3), Ohio (n=12) and West Virginia (n=2)

CONCLUSIONS

- Individuals with substance use disorders (SUDs) are at high risk for contracting hepatitis C
- CLDF provided HCV education to recovery center staff and screening for >2,700 US individuals at these centers
- Extending this program an additional year resulted in substantially more individuals aware of their HCV status and linked to care
 - Continuation of staff education will allow for sustainability of the model
- 39% (681/1734) of those tested were hepatitis C antibody positive
- 76.5 % (521/681) underwent confirmatory HCV RNA testing
- 79.8% (416/521) of antibody positive individuals with follow up blood draws were linked to care.

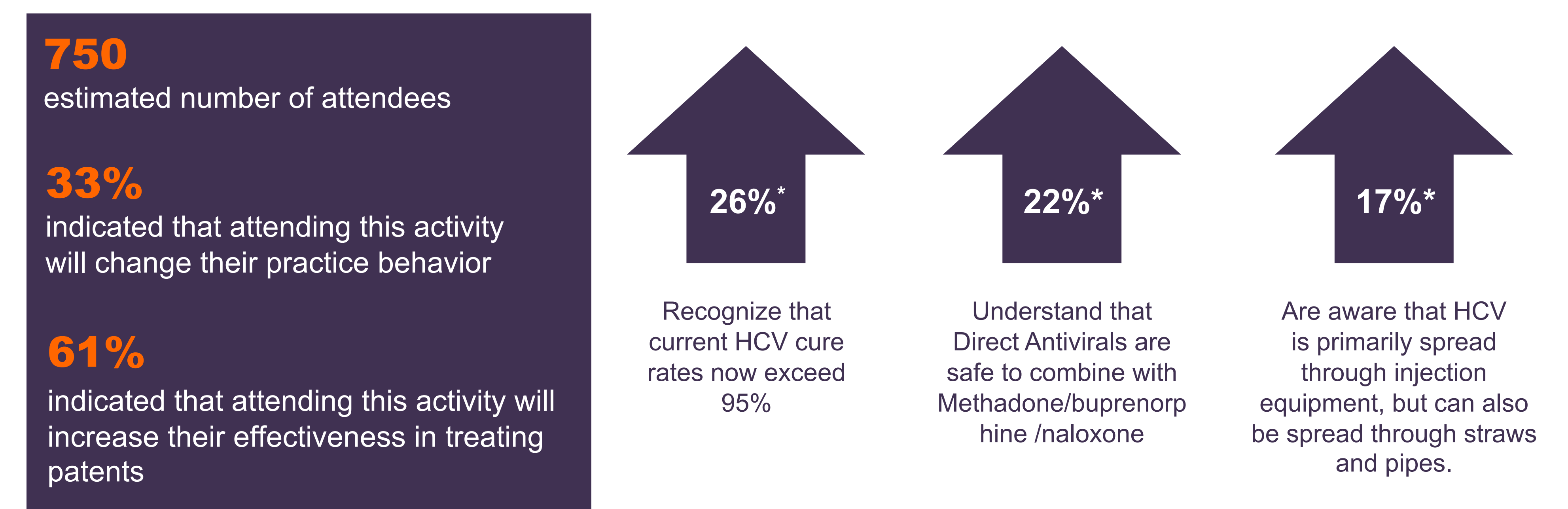
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Figure 3. Recovery Center Staff HCV Educational Outcomes Data



*Percent improvement in responses from pre-activity (N = 161) to post-activity (N = 161).

DISCLOSURES

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- Andrew Talal:
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