DISCLOSURES

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COMPLETING THIS ACTIVITY

Upon successful completion of this activity 1 contact hour will be awarded

Successful completion of this continuing education activity includes the following:

- Attending the entire CE activity;
- Completing the online evaluation;
- Submitting an online CE request.

Your certificate will be sent via email

If you have any questions about this CE activity, contact Michelle Daugherty at mdaugherty@cardeaservices.org or (206) 447-9538

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CONFLICT OF INTEREST

Dr. Jorge Mera is director of a program partially funded by Gilead.

None of the other planners or presenters of this CE activity have any relevant financial relationships with any commercial entities pertaining to this activity.

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Acknowledgement

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The Indian Health Service HIV Program

and

The Secretary's Minority AIDS Initiative Fund

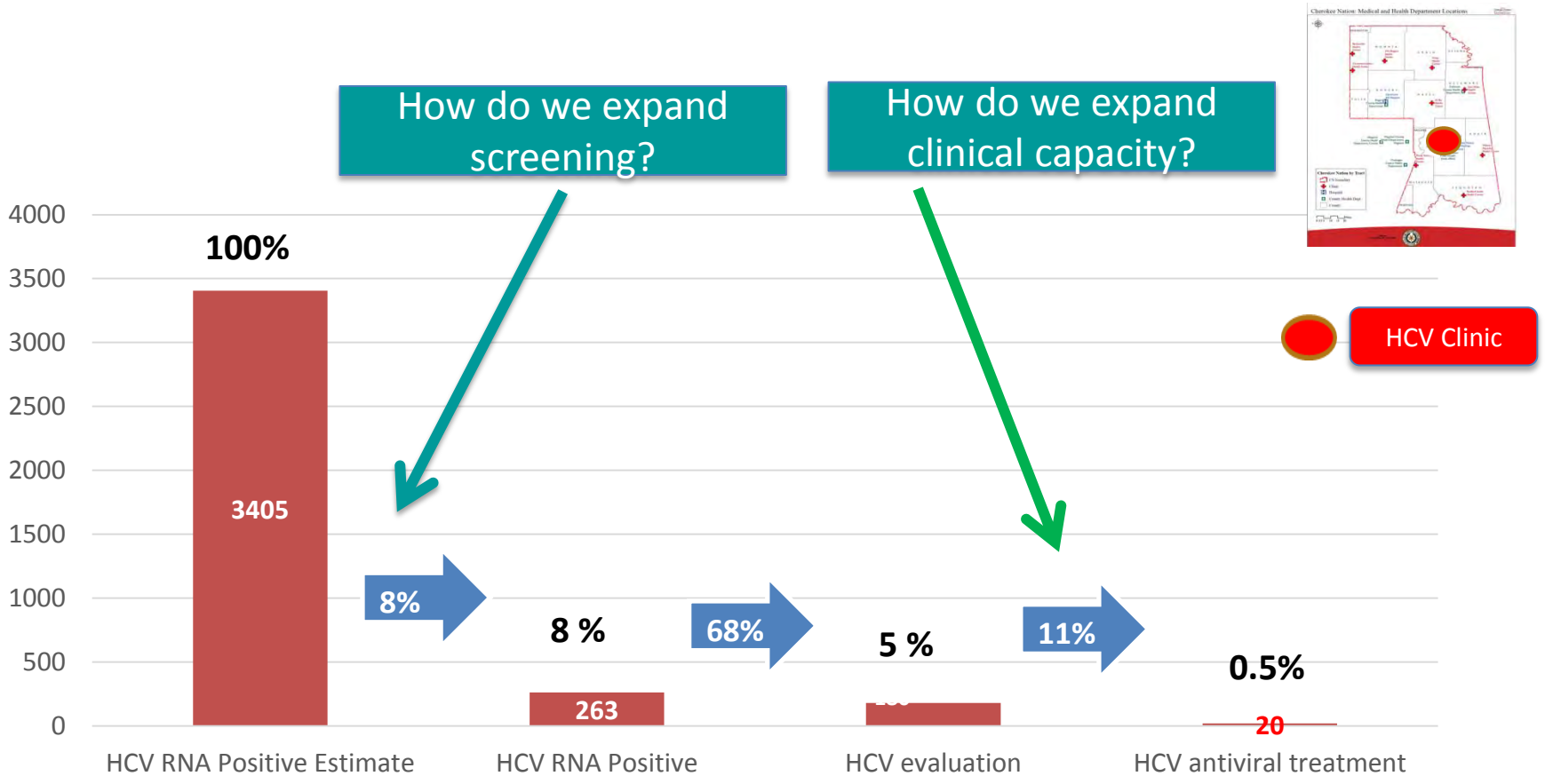
CARDEA

Training, Organizational Development and Research SERVICES

Cherokee Nation Health Services HCV Elimination Program

Jorge Mera, MD, FACP

CNHS HCV Cascade of Care 2013*

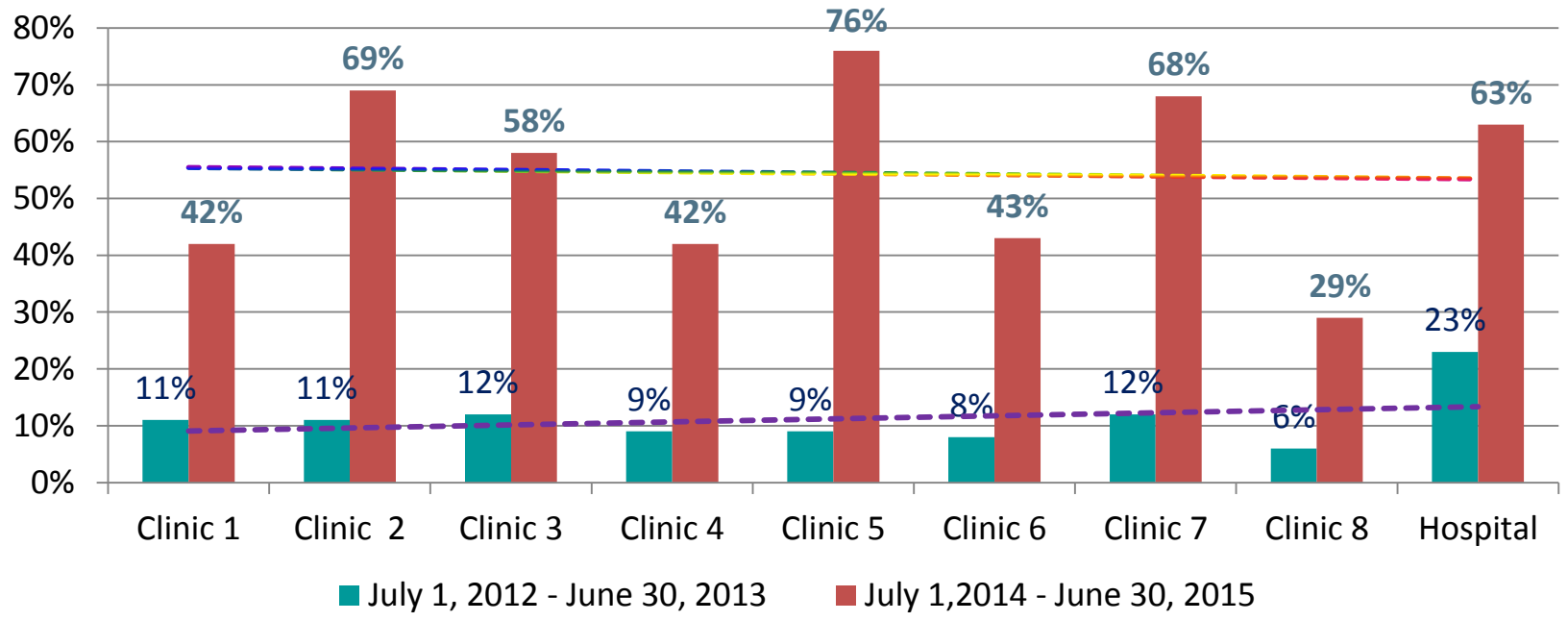


*Preliminary data

Cherokee Nation Health Services 2013

Impact of EHR reminder on HCV birth cohort screening rates

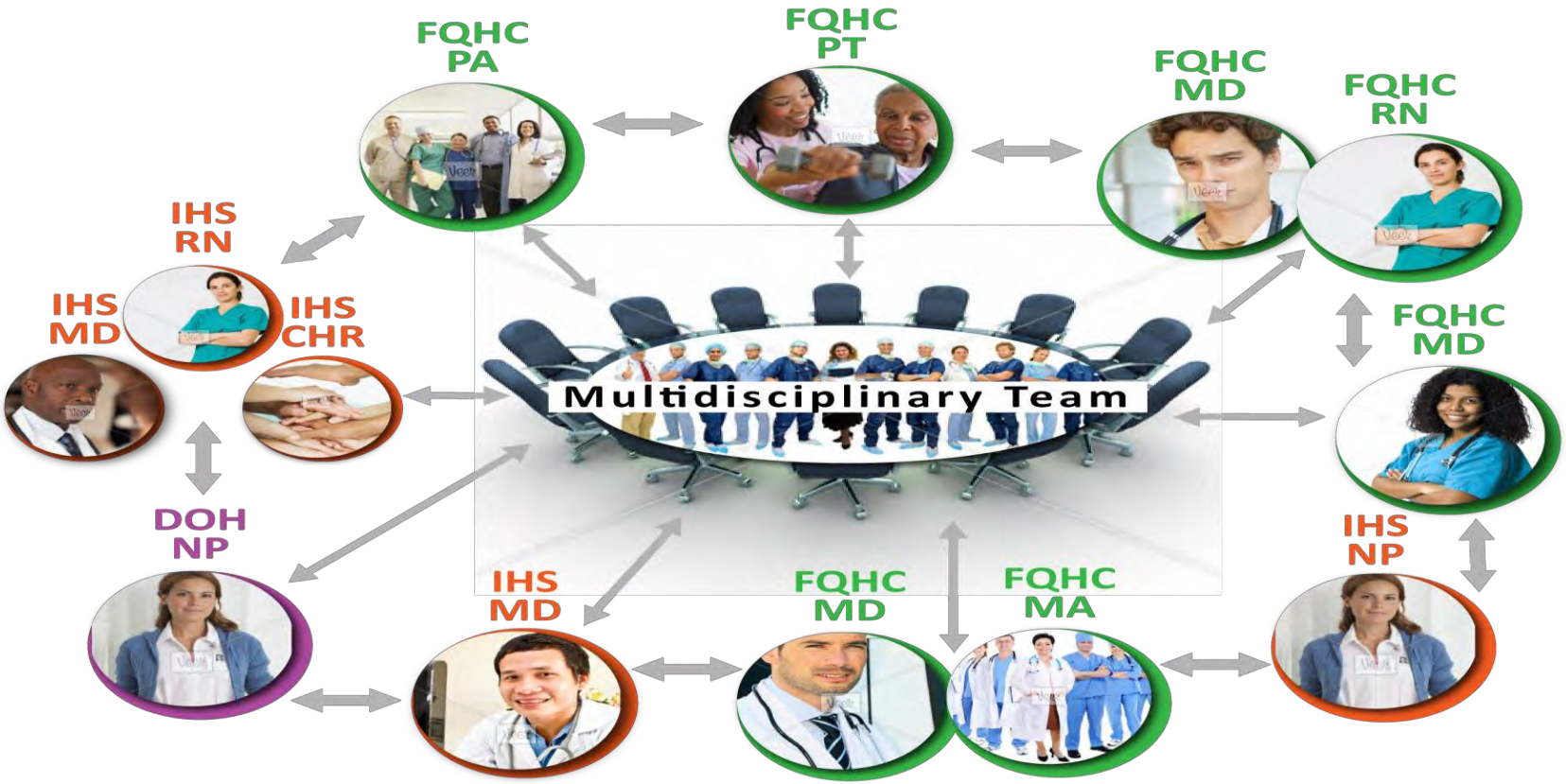
Percentage of baby boomers who attended a primary care clinic and were screened for HCV



Cherokee Nation Health Services 2012-2015

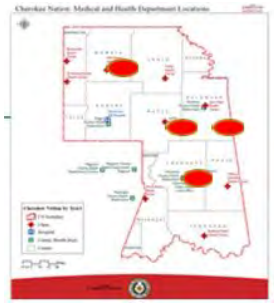
Extended Community Health Outcomes Project

The ECHO Model Improves CAPACITY and ACCESSS simultaneously



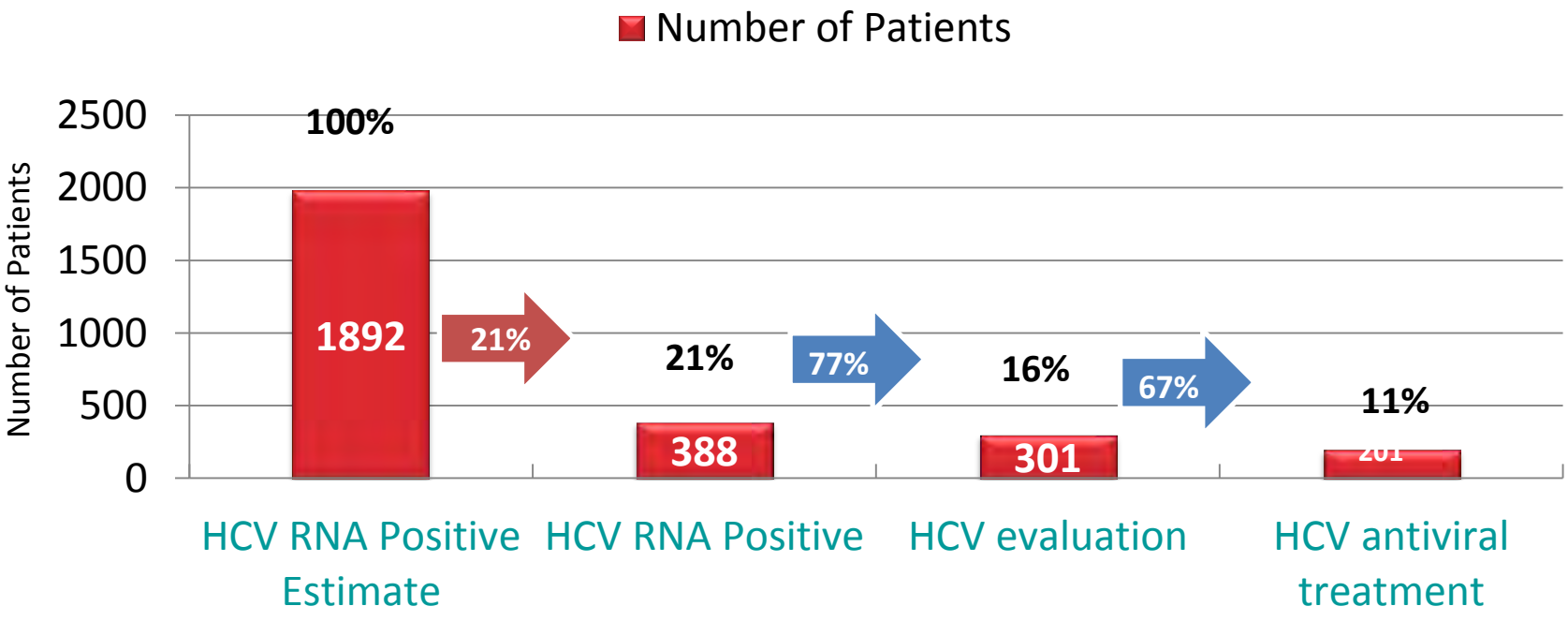
FQHC = Federally Qualified Health Centers ; IHS = Indian Health Service; DOH = Department of Health.; PT = physical therapist; PA = physician assistant; RN = registered nurse; CHR = community health representative; NP = nurse practitioner; MA = medical assistant.

How did we get from this point……



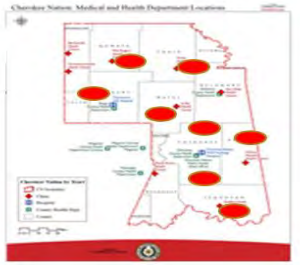
HCV Clinics

CNHS HCV Cascade of Care: July 2015

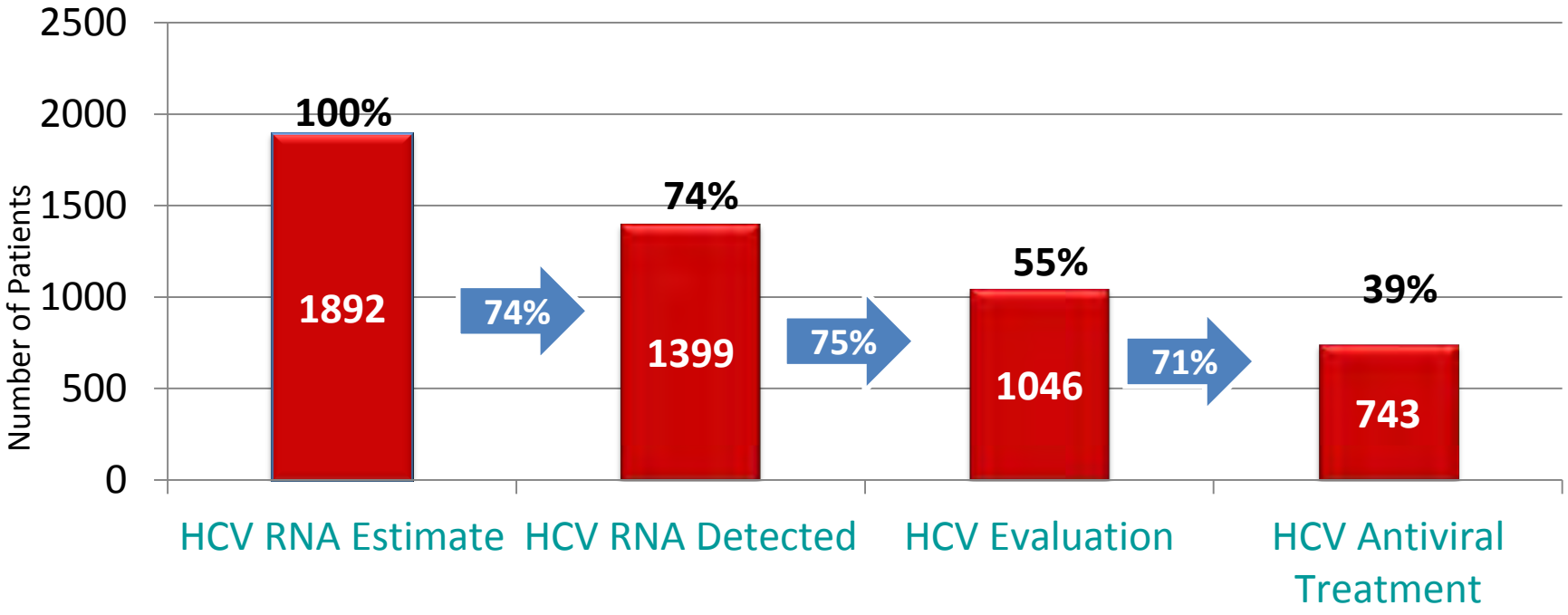


Adapted from: Mera J, Vellozzi C, Hariri S, et al. Identification and Clinical Management of Persons with Chronic Hepatitis C Virus Infection — Cherokee Nation, 2012–2015. MMWR Morb Mortal Wkly Rep 2016;65:461–466.

……to this point?



CNHS HCV Cascade of Care: December 2017



CDC:“Do you think the CNHS can pursue an HCV elimination goal?”

HEPATOLOGY

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Viral Hepatitis

Hepatitis C virus treatment for prevention among people who inject drugs: Modeling treatment scale-up in the age of direct-acting antivirals

Natasha K. Martin, Peter Vickerman, Jason Grebely, Margaret Hellard, Sharon J. Hutchinson, Viviane D. Lima, Graham R. Foster, John F. Dillon, David J. Goldberg, Gregory J. Dore, Matthew Hickman

View issue TOC
Volume 58, Issue 5
November 2013
Pages 1598–1609

Elimination of Hepatitis C Virus Infection Among People Who Inject Drugs Through Treatment as Prevention: Feasibility and Future Requirements FREE

Jason Grebely, Gail V. Matthews, Andrew R. Lloyd, Gregory J. Dore

Clinical Infectious Diseases, Volume 57, Issue 7, 1 October 2013, Pages 1014–1020,

Antiviral Research 110 (2014) 79–93

Contents lists available at ScienceDirect

Antiviral Research

journal homepage: www.elsevier.com/locate/antiviral

Commentary

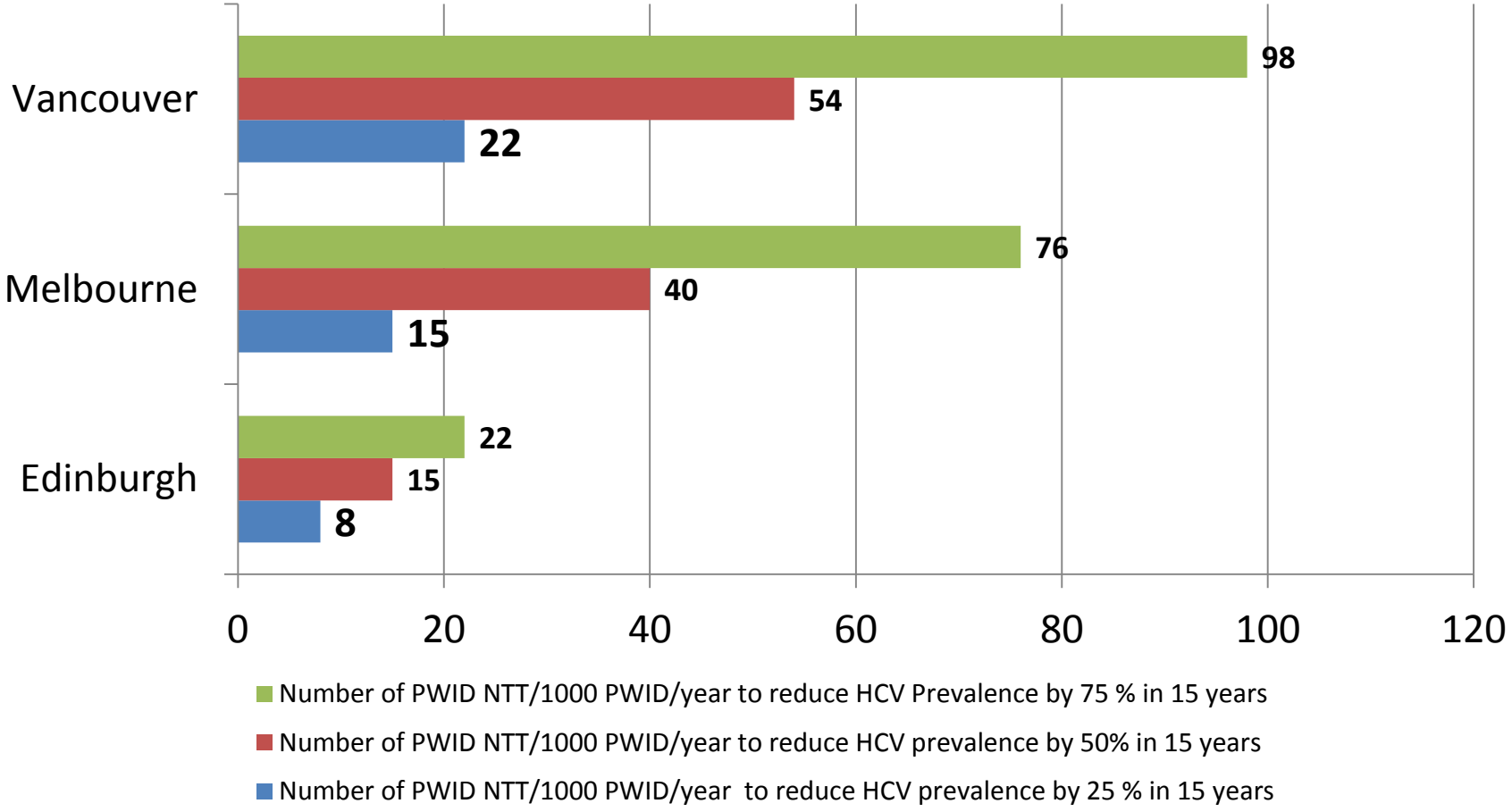
Can hepatitis C be eradicated in the United States?

Brian R. Edlin [a,b,*], Emily R. Winkelstein [b]

[a] Weill Cornell Medical College, New York, NY 10065, United States
[b] National Development and Research Institutes, 71 West 23rd St., 4th floor, New York, NY 10010, United States

Impact of Treatment as Prevention on HCV Prevalence

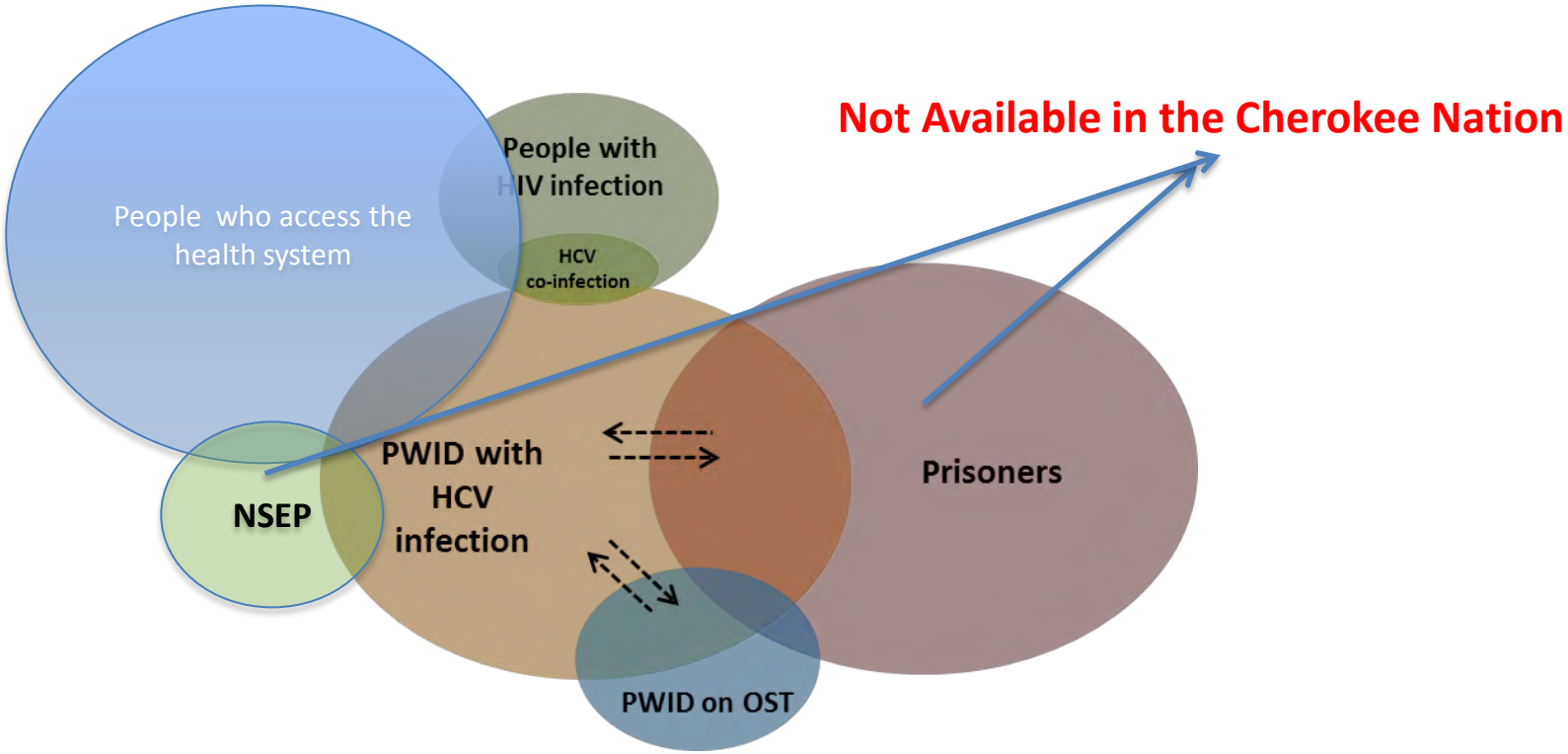
(Mathematical Modeling)



Adapted from NK Martin, et al. Hepatology 2013:58(5):1598-1609

NTT: Number Needed To Treat.
PWID: People Who Inject Drugs

Where Can We Find and Treat HCV (+) PWID?



ED: Emergency Department, UC: Urgent Care

Adapted from Hajarizadeh B et al. The Lancet Gastroenterol Hepatol 2016;1:317-27

Key Concepts to Guide HCV Elimination

- **Treat the HCV infected population to decrease the burden of liver disease (Decrease Prevalence)**
  - Mainly target birth cohort (patients born between 1945-1965)

- **Prevent Transmission (Decrease Incidence and prevalence)**
  - **Mainly target the younger population who are PWID**
    - *Treatment as prevention* (HCV + PWID, HIV/HCV coinfection)
    - Establish or expand MAT
    - Establish or expand needle and syringe services

MAT: Medication Assisted Treatment

PWID: People Who Inject Drugs

CNHS HCV Elimination Program 8/2015 – 10/2018

1. Secure political commitment for HCV elimination

2. **Expand the HCV screening program**

3. Establish robust programs to link to care, treat, and cure patients

4. **Reduce the incidence of new HCV infections**

Goal #1: Secure Political Commitment

HCV Awareness Day

October 31,2015

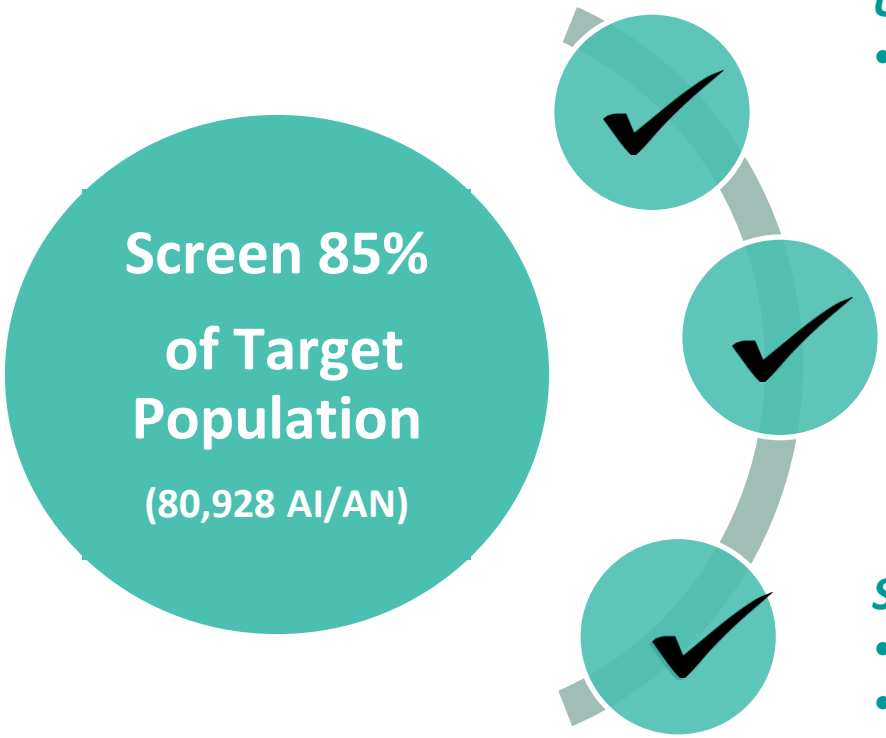
HCV Elimination Awareness Day

October 31, 2017

1. https://www.cdc.gov/hepatitis/statistics/2015surveillance/index.htm Accessed February 12, 2018
2. Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)
3. Ly KN, et al. Clin Infect Dis 2016 May 15;62(10):1287-1288

"As Native people and as Cherokee Nation citizens, we must keep striving to eliminate hepatitis C from our population."
Chief Bill John Baker

Goal #2: Expand Screening Program



Universal Screening

- Ages 20-69

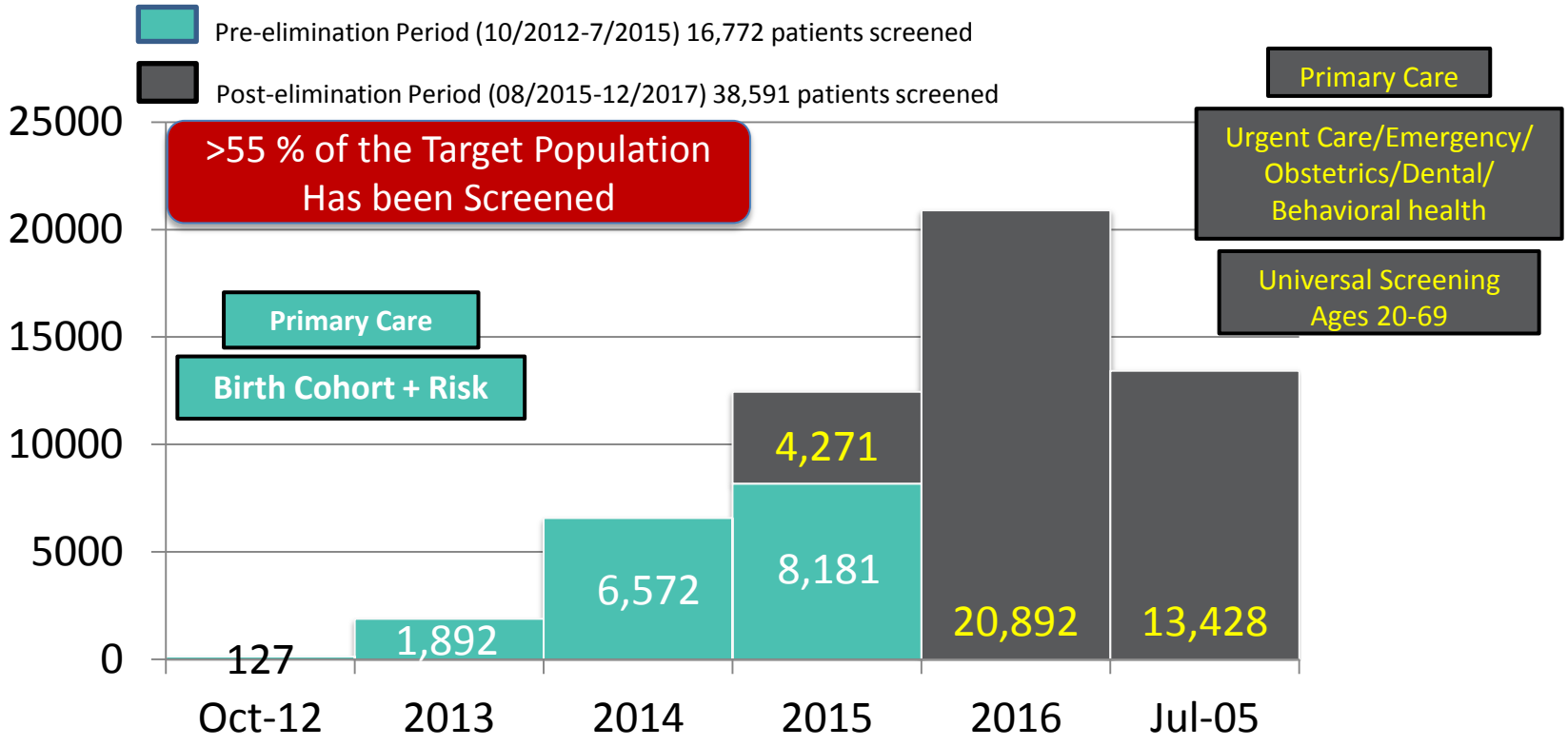
Non-Traditional Screening Sites

- Emergency Department
- Urgent Care
- Dental Clinics
- Behavioral Health
- OBGYN

Screening Modalities

- EHR Reminders
- Point of care antibody test
- Lab Triggered screening

HCV Screening in the CNHS: 10/2012 – 12/2017



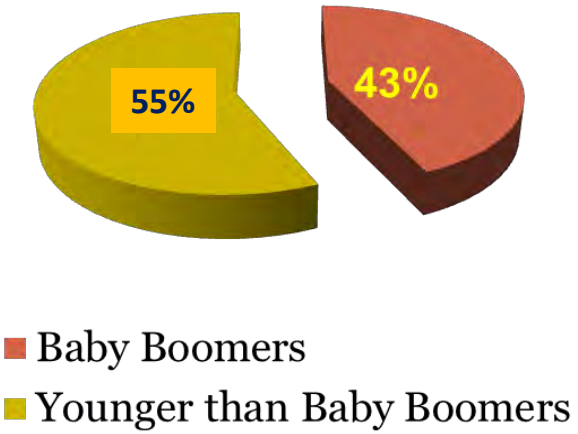
*preliminary data

HCV Prevalence, Gender and Age Distribution*: 8/2015 – 12/2017

Prevalence

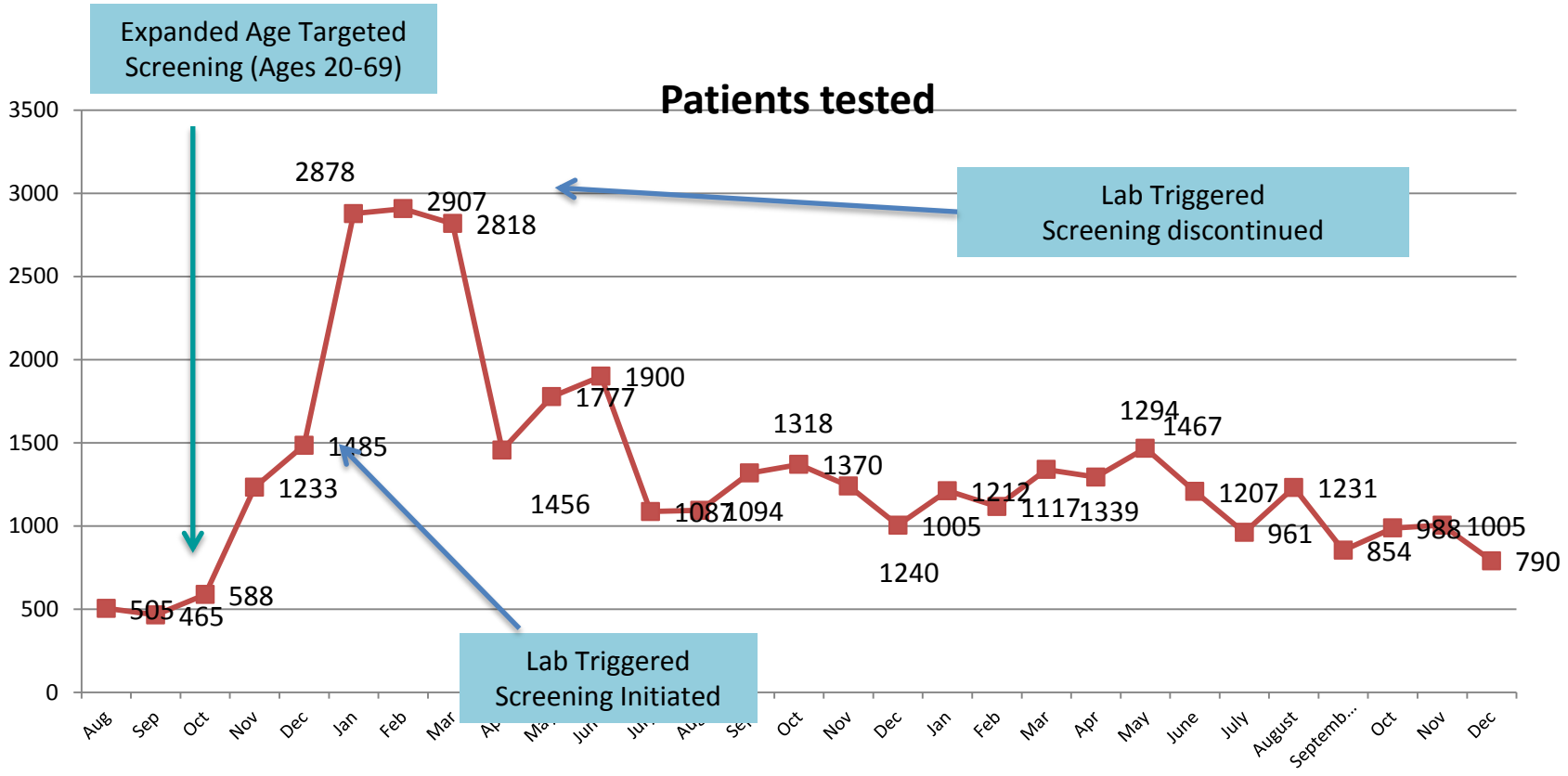
- 38,591 patients screened
- 1,328 HCV antibody positive
  - Overall Prevalence ~ 3.4%
    - Male 4.5%
    - Female 2.7%
  - Baby boomers
    - 3.9% (12,540)
  - Younger than Baby Boomers
    - 3.2% (18,319)

Age Distribution of HCV Ab (+)



*preliminary data

CNHS: HCV Screening* 8/2015 – 12/2017

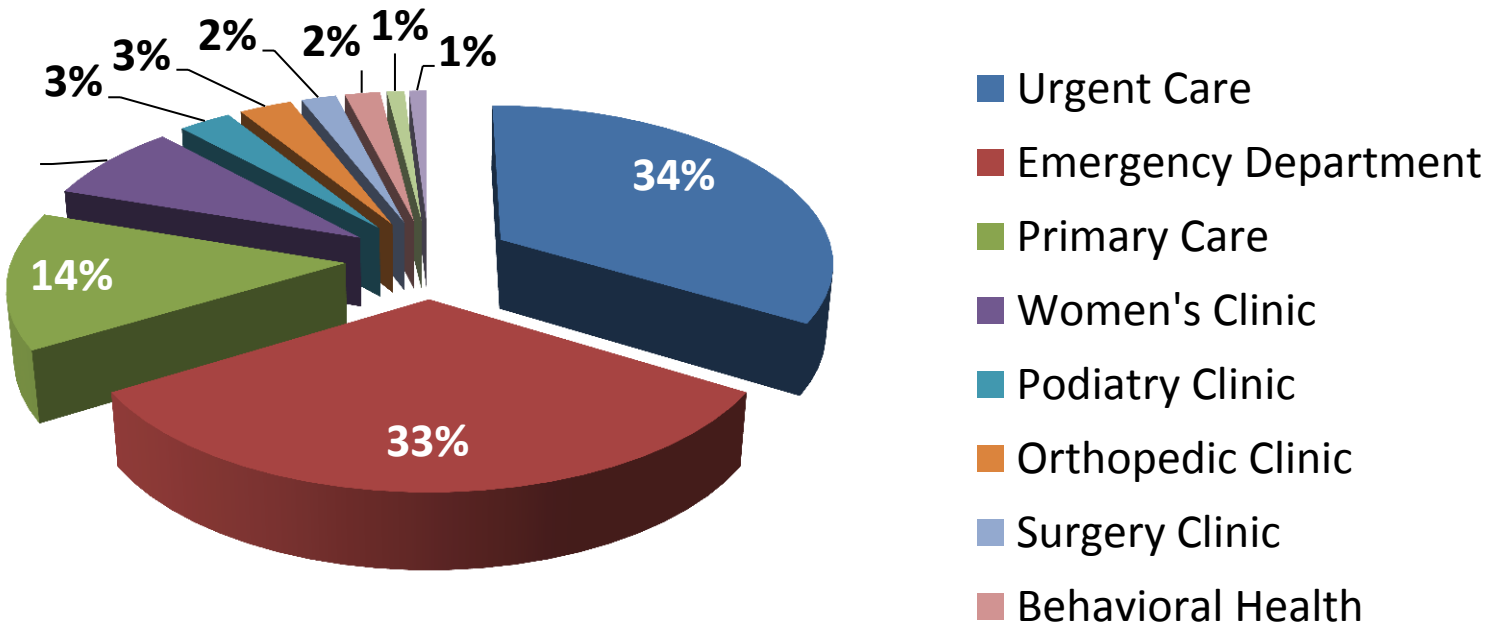


Cherokee Nation Health Services 2018

*preliminary data

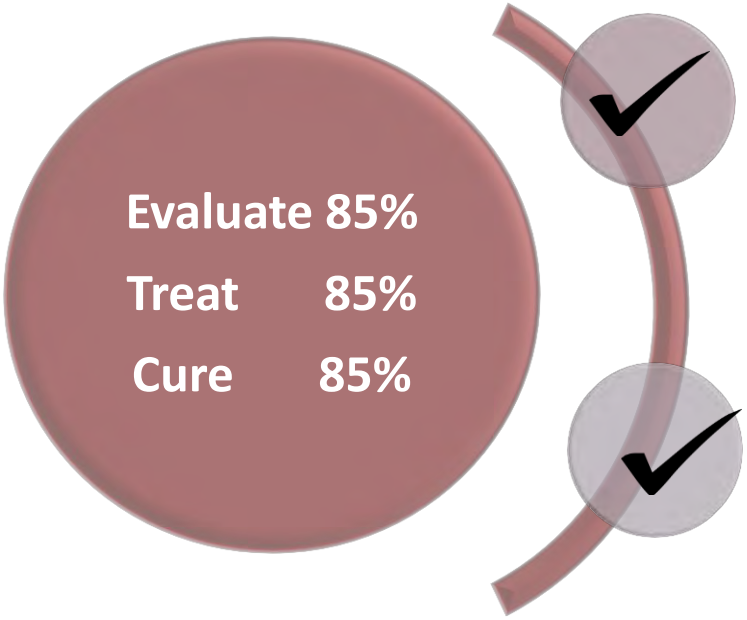
Lab Triggered Screening: Screening location

97 patients with new positive HCV antibody screen at WW Hastings Hospital



67% were detected in the Urgent Care/Emergency Department

Goal # 3: Link to Care, Treat, and Cure



Expand Case Management Capacity

- Patient navigator
- Case manager for antiviral procurement
- Clinical Case Manager
- Pharmacy managed follow up

Expand Clinical Capacity

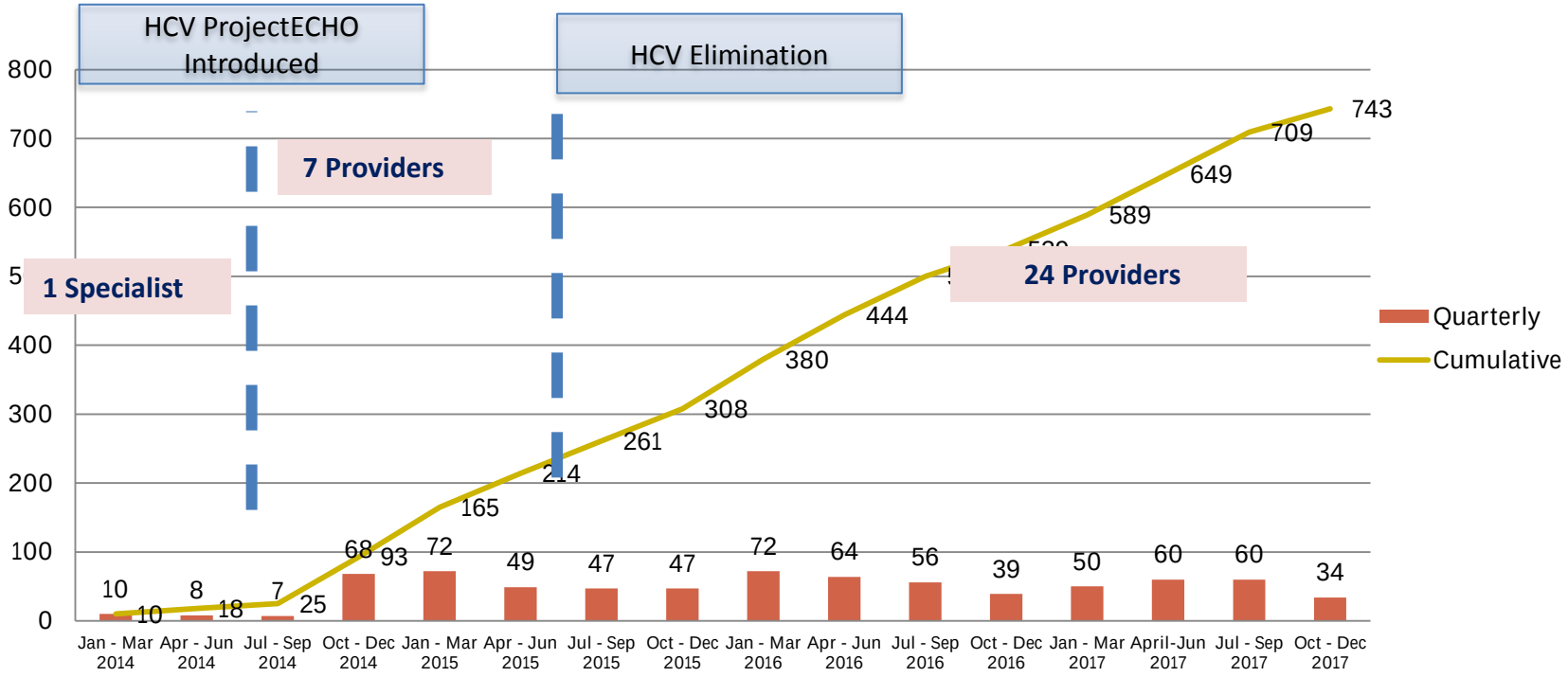
ProjectECHO

Patient and Medical Provider Support

- **Before HCV Evaluation**
  - ***Patient Navigator*** contacts patient to make sure and appointment is secured
  - If the patient cant be reached a ***Public Health Nurse*** is sent to the patients home
- **During Evaluation**
  - Most patients are evaluated by a ***drug and alcohol counselor***,
  - If substance use disorder is detected, referral to a ***behavioral health specialist***
- **After Treatment Initiated**
  - ***Clinical case manager, pharmacist*** and a ***community health worker*** will assist with adherence follow-up and treatment (including DOT)

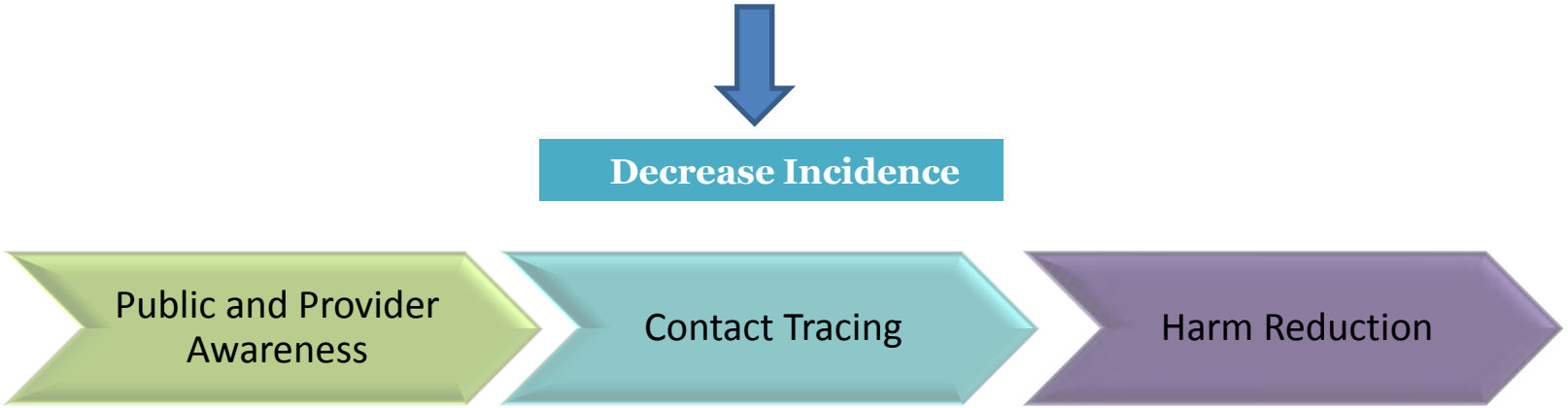
DOT: Direct Observed Therapy

CNHS HCV Program: Clinical Capacity Expansion: 1/2014 – 12/2017



Providers included 1 Specialist, 8 Physicians, 8 Pharmacists and 7 Nurse Practitioners

Goal #4: Reduce the incidence of new HCV infections



CNHS HCV Elimination Program Strategies and Goals, 8/2015-10/2018

CNHS: Cherokee Nation Health Services. PWID: People Who Inject Drugs, OST: Opioid Substitution Therapy, NSEP: Needle and Syringe Exchange Program

Moving Forward

- **Increase public awareness and intensify HCV screening** in "hot spots" and out in the community
- **Improve engagement in care of PWID**
  - Expand Medication Assisted Treatment
  - Advocate for needle and syringe service
  - Identify networks of transmission trough the Global Health Outbreak Surveillance Technology (GHOST) program
- **Treat, treat and treat patients with HCV!!!!!!!**
- **Define measures to monitor program outcomes**
  - 90 % reduction in incidence by the year 2030
  - 65 % reduction in mortality by the year 2030