

# DISCLOSURES

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This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Institute for Medical Quality/California Medical Association (IMQ/CMA) through the joint providership of Cardea and Northwest Portland Area Indian Health Board. Cardea is accredited by the IMQ/CMA to provide continuing medical education for physicians.

Cardea designates this live web-based training for a maximum of 1 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim credit commensurate with the extent of their participation in the activity.



# DISCLOSURES

## **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](mailto:mdaugherty@cardeaservices.org) or (206) 447-9538



# 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.



# Acknowledgement

This presentation is funded in part by:

The Indian Health Service HIV Program  
and

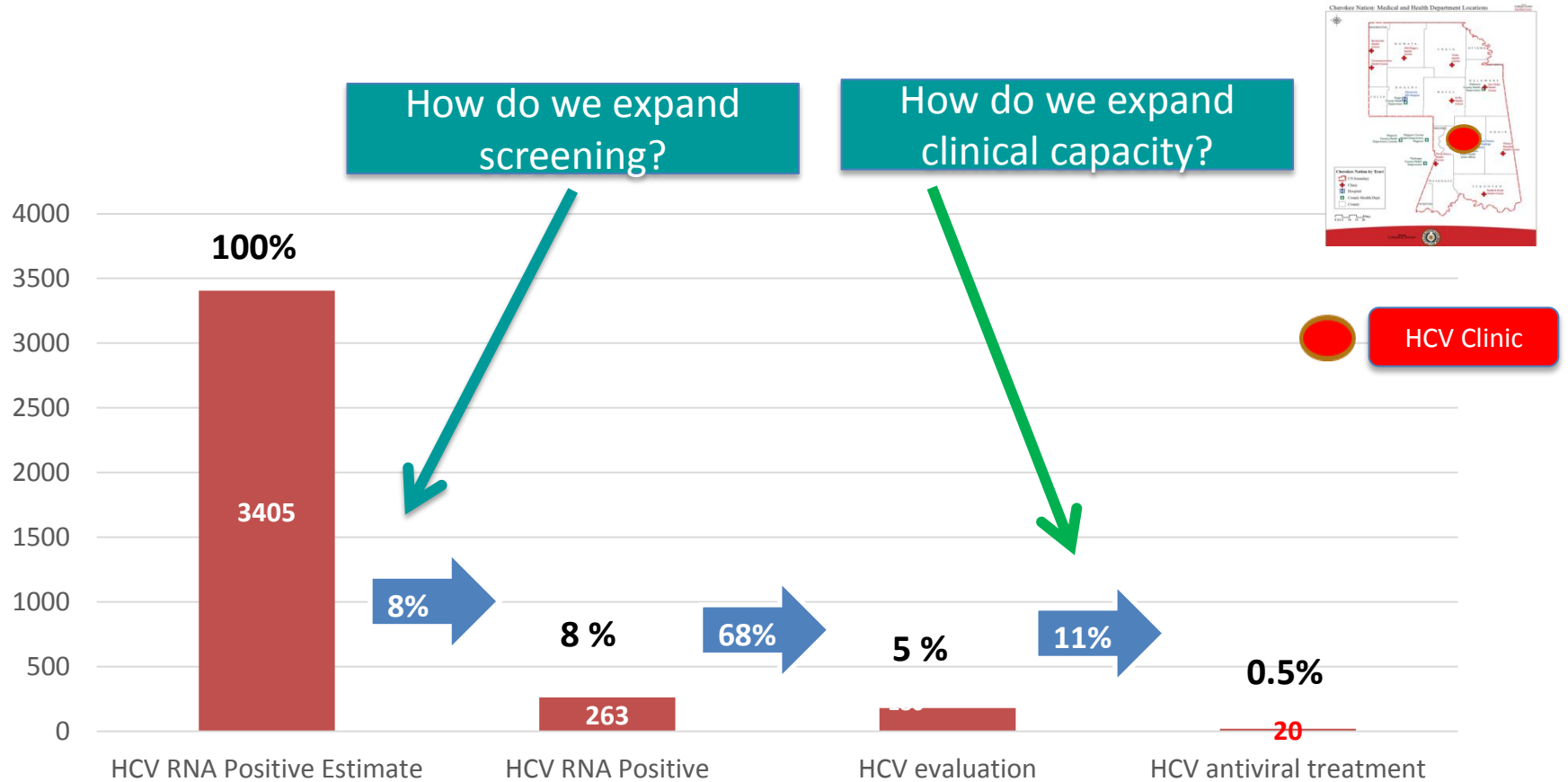
The Secretary's Minority AIDS Initiative Fund



# **Cherokee Nation Health Services HCV Elimination Program**

**Jorge Mera, MD, FACP**

# CNHS HCV Cascade of Care 2013\*

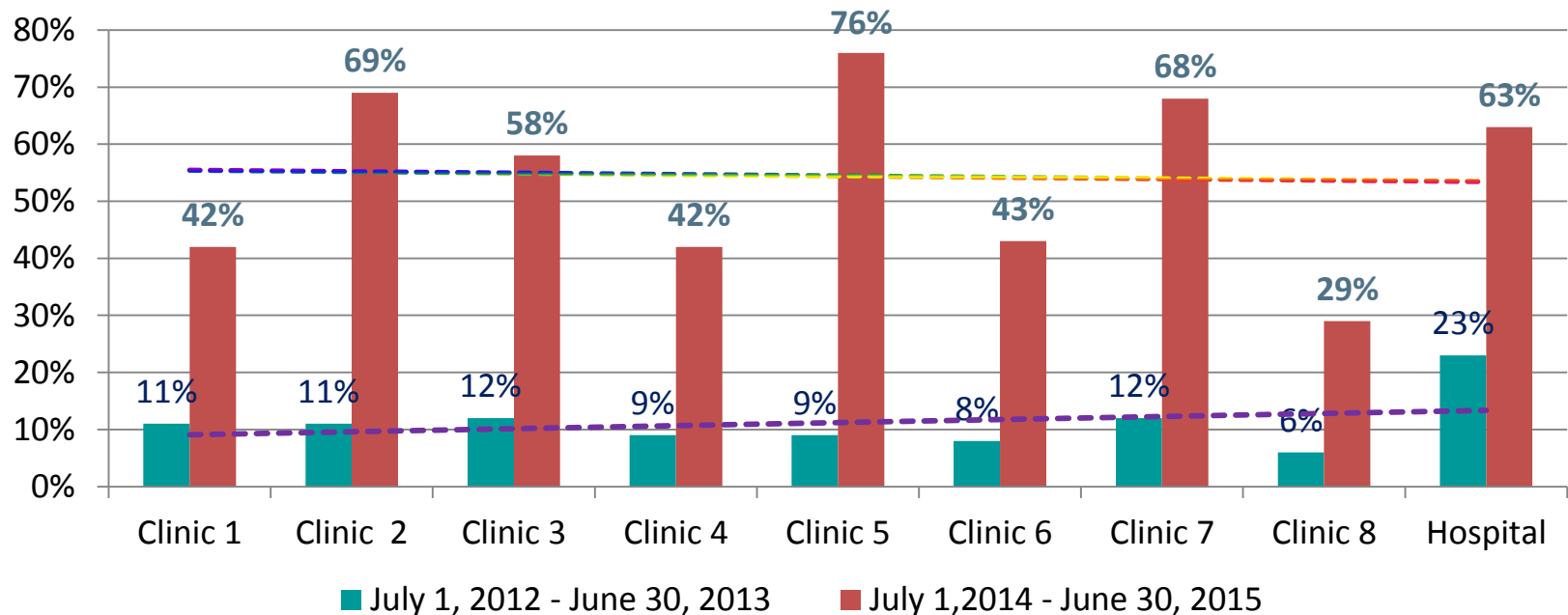


\*Preliminary data

Cherokee Nation Health Services 2013

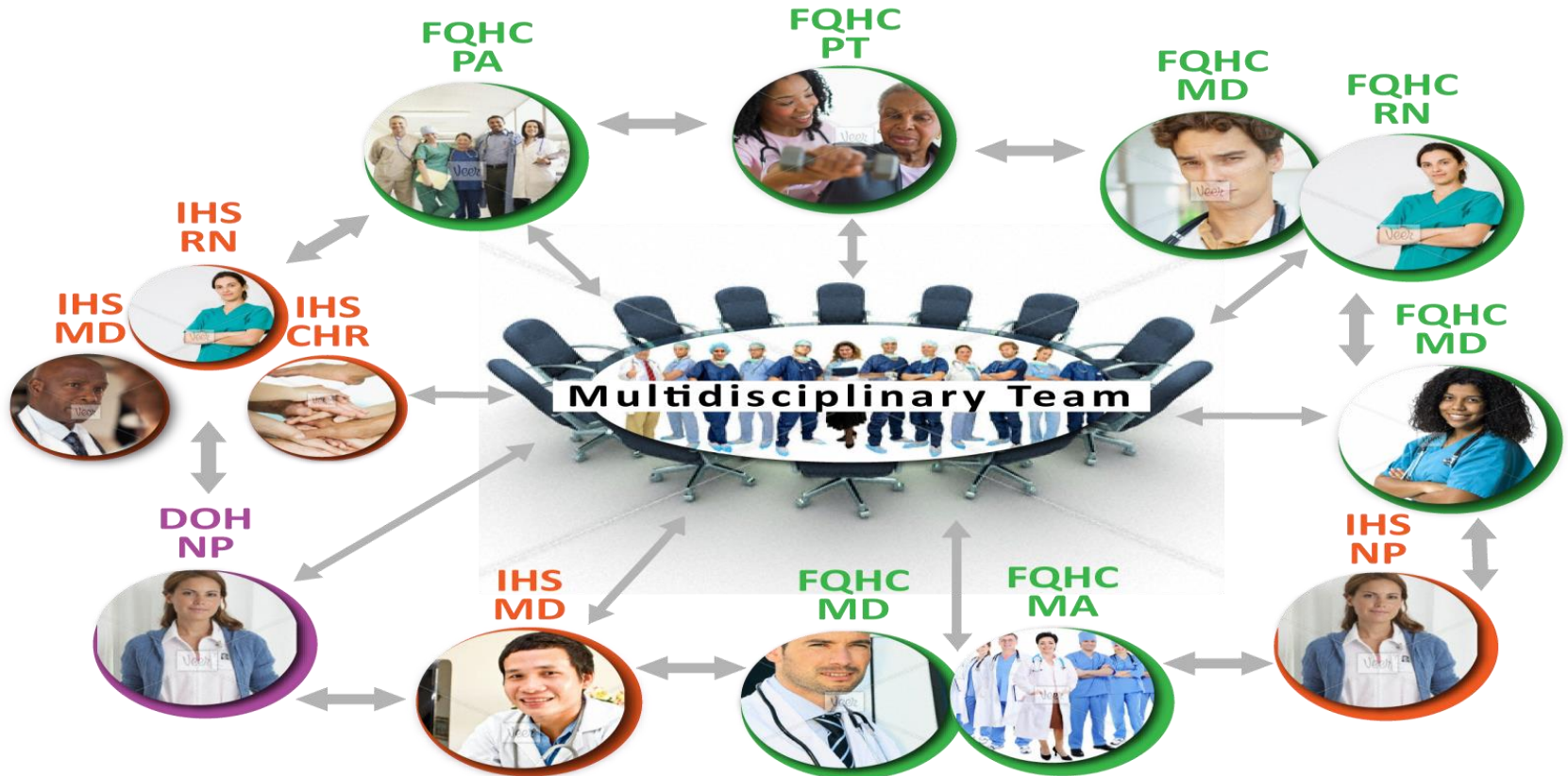
# Impact of EHR reminder on HCV birth cohort screening rates

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



# Extended Community Health Outcomes Project

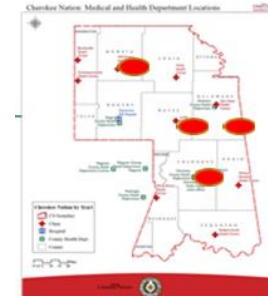
The ECHO Model Improves CAPACITY and ACCESSS simultaneously



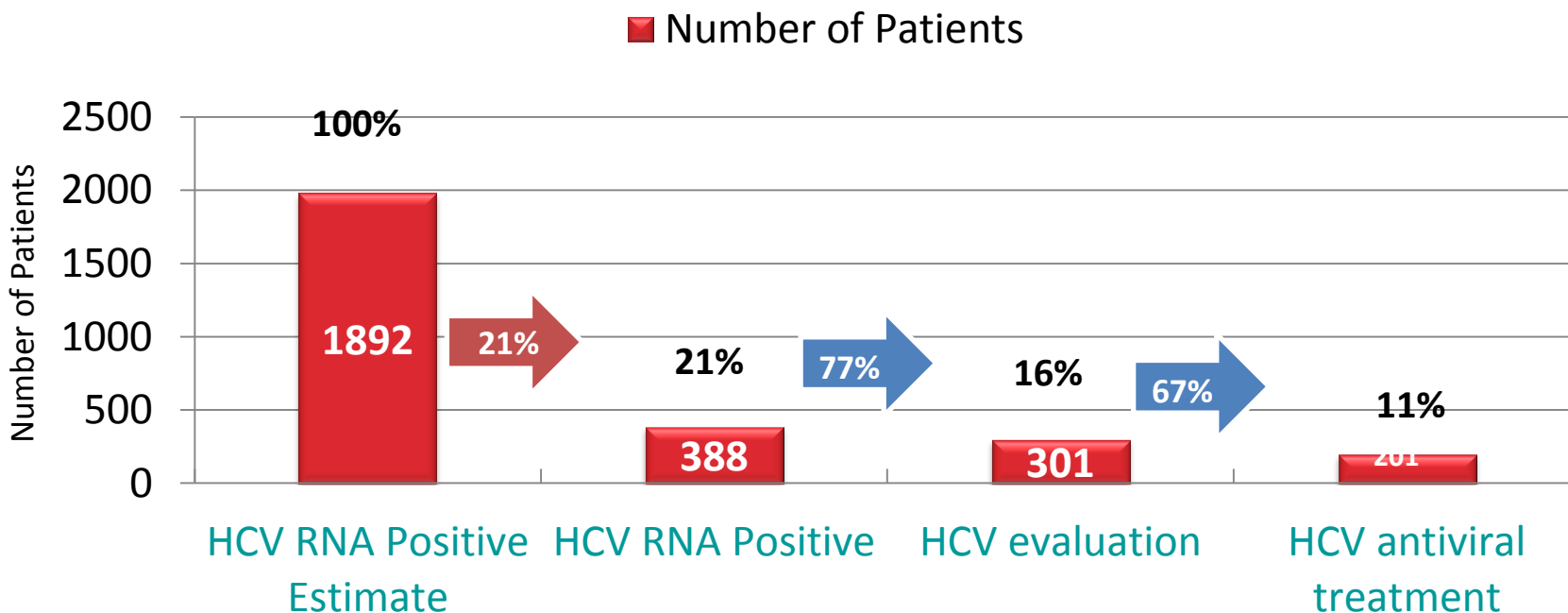
FQHC = Federally Qualified Health Centers ; IHS = Indian Health Service; DOH = Department of Health.; PT = physical therapist; PA = physician assistant; RN = registered nurse; CHR = community health representative; NP = nurse practitioner; MA = medical assistant.



# How did we get from this point.....

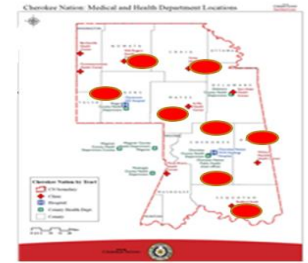


## CNHS HCV Cascade of Care: July 2015

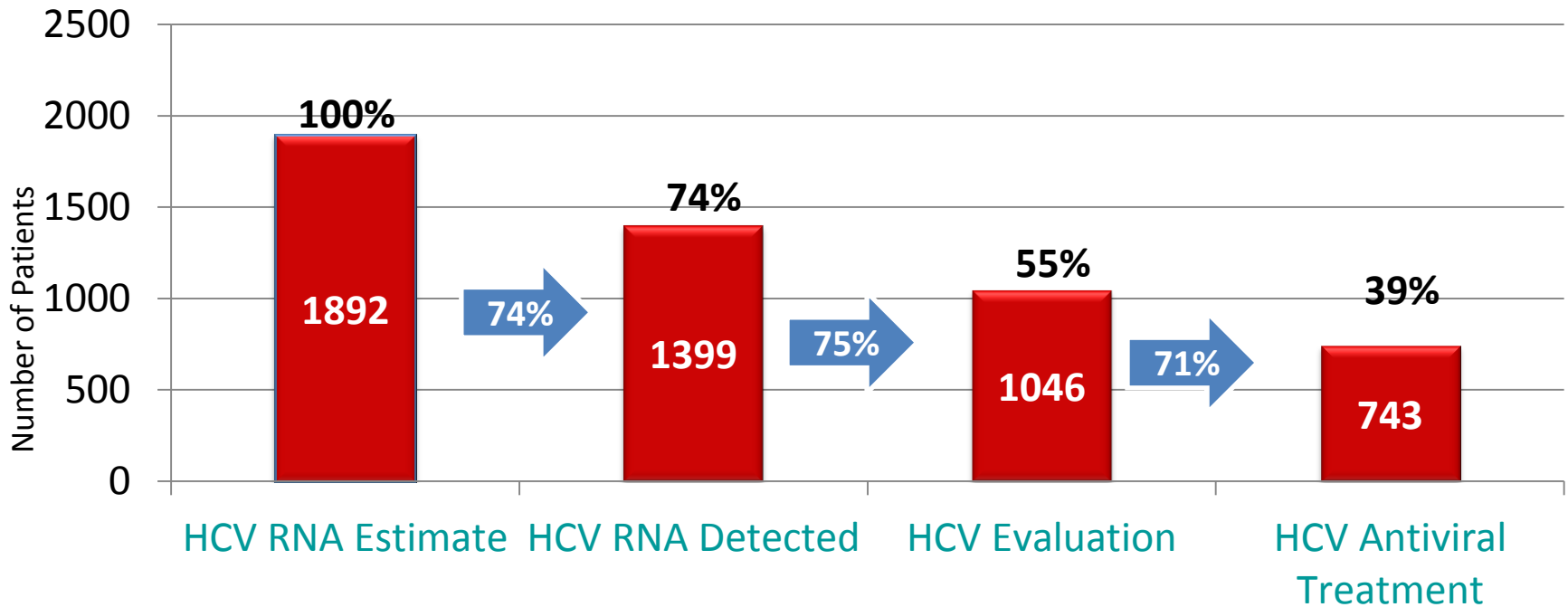


Adapted from: Mera J, Vellozzi C, Hariri S, et al. Identification and Clinical Management of Persons with Chronic Hepatitis C Virus Infection — Cherokee Nation, 2012–2015. MMWR Morb Mortal Wkly Rep 2016;65:461–466.

.....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

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



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Contents lists available at [ScienceDirect](#)

Antiviral Research

journal homepage: [www.elsevier.com/locate/antiviral](http://www.elsevier.com/locate/antiviral)



Commentary

### Can hepatitis C be eradicated in the United States?

Brian R. Edlin <sup>a,b,\*</sup>, Emily R. Winkelstein <sup>b</sup>

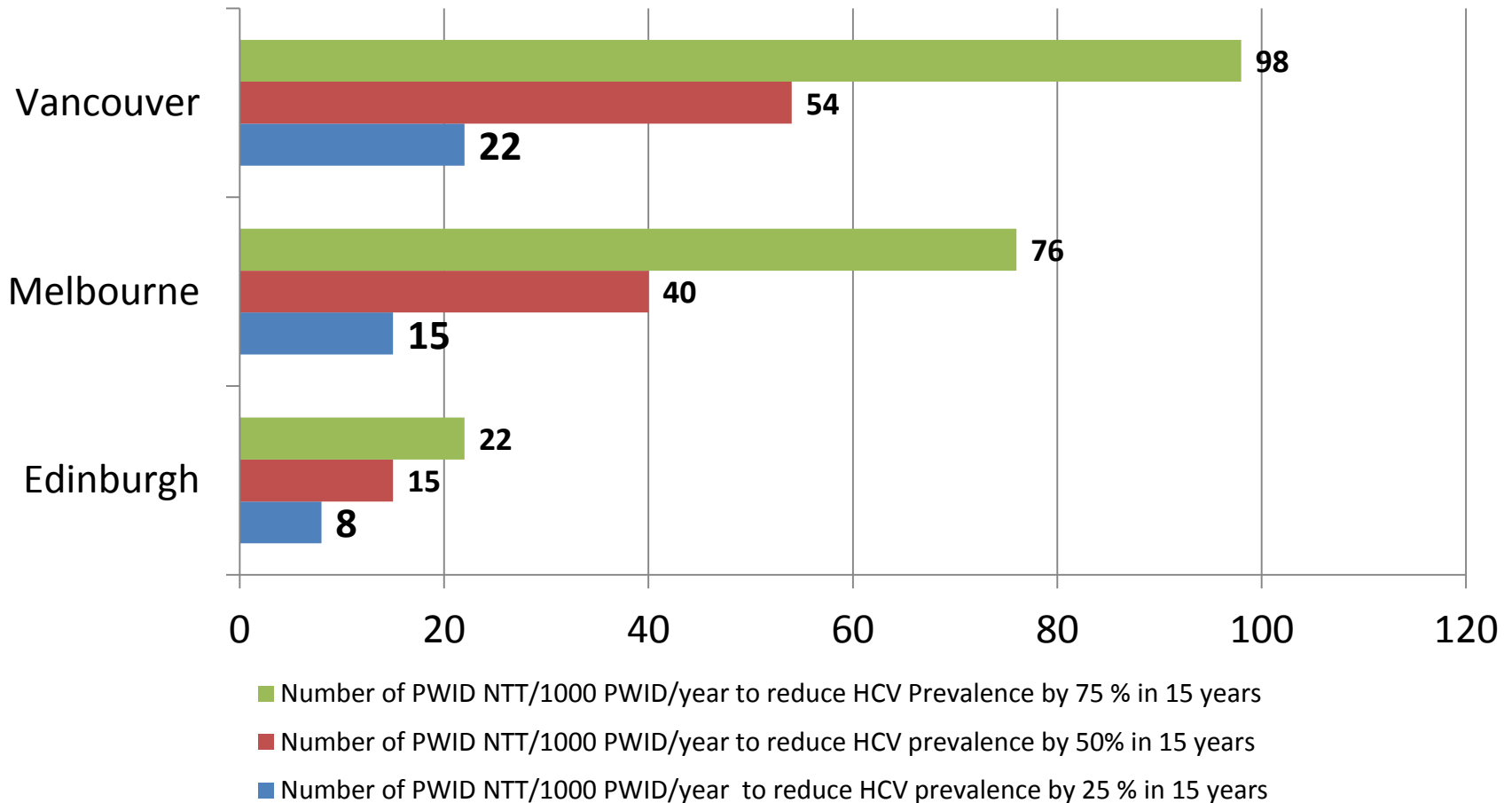
<sup>a</sup>Weill Cornell Medical College, New York, NY 10065, United States

<sup>b</sup>National Development and Research Institutes, 71 West 23rd St., 4th floor, New York, NY 10010, United States



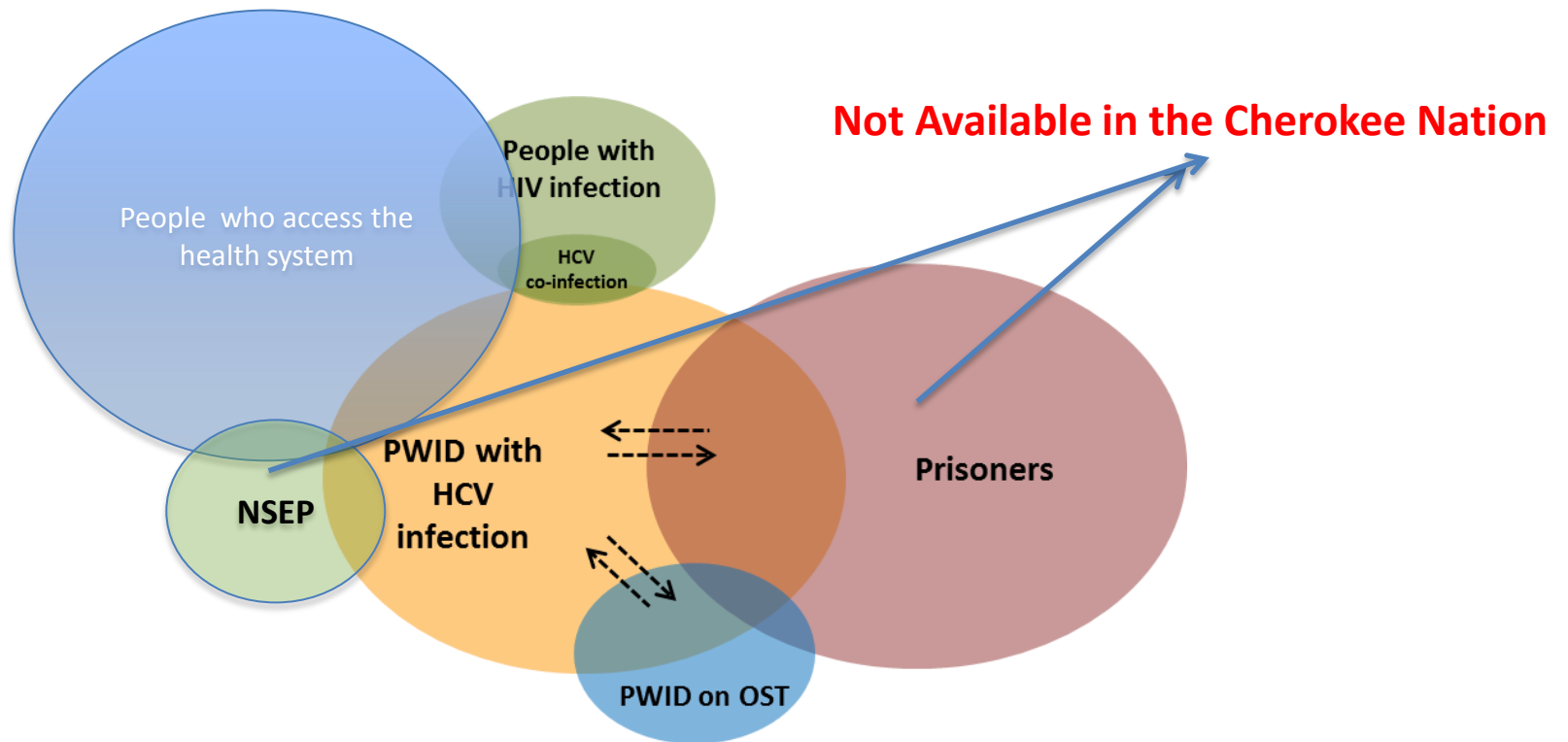
# Impact of Treatment as Prevention on HCV Prevalence

(Mathematical Modeling)



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

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



# 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

## 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

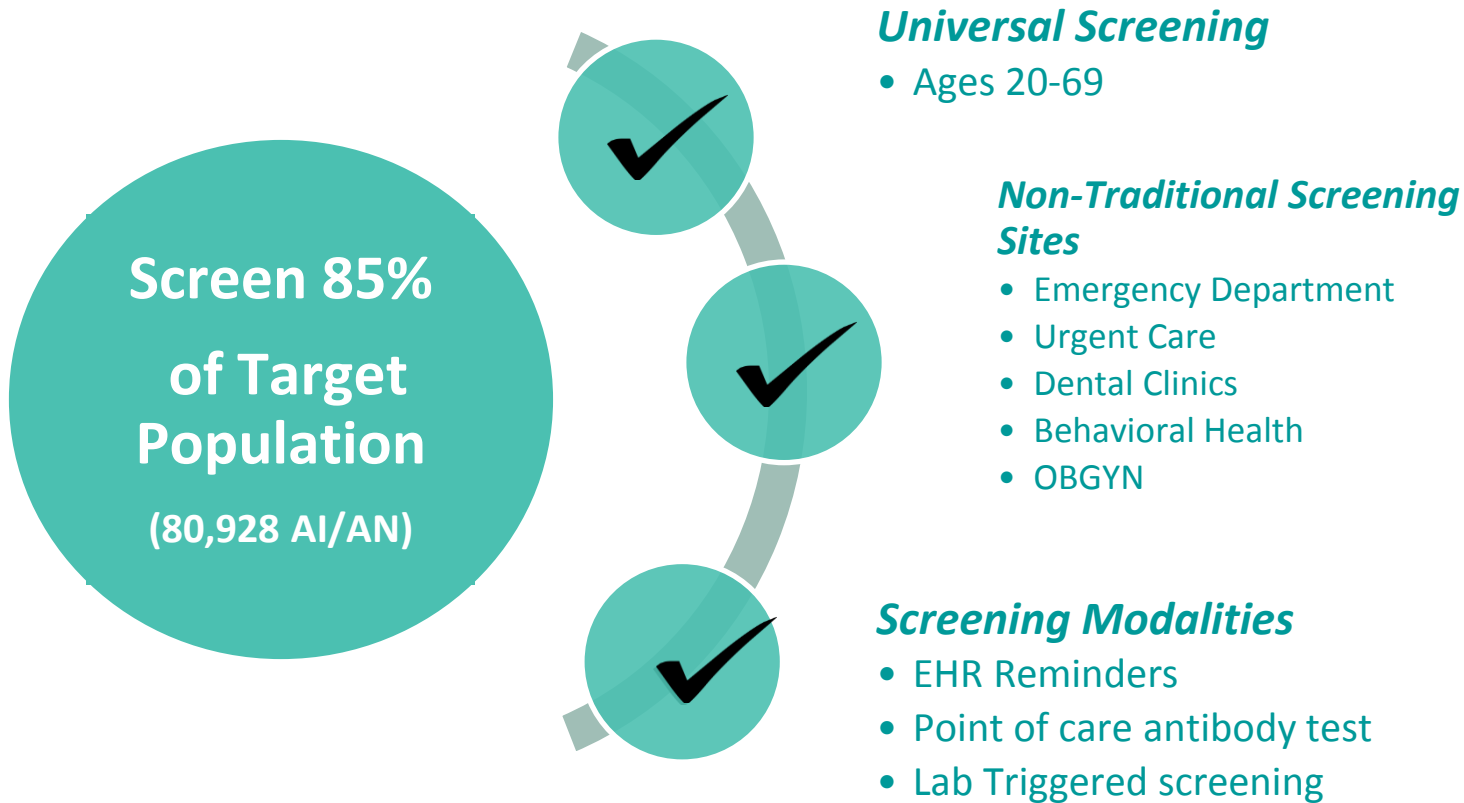


*“As Native people and as Cherokee Nation citizens, we must keep striving to eliminate hepatitis C from our population.”*

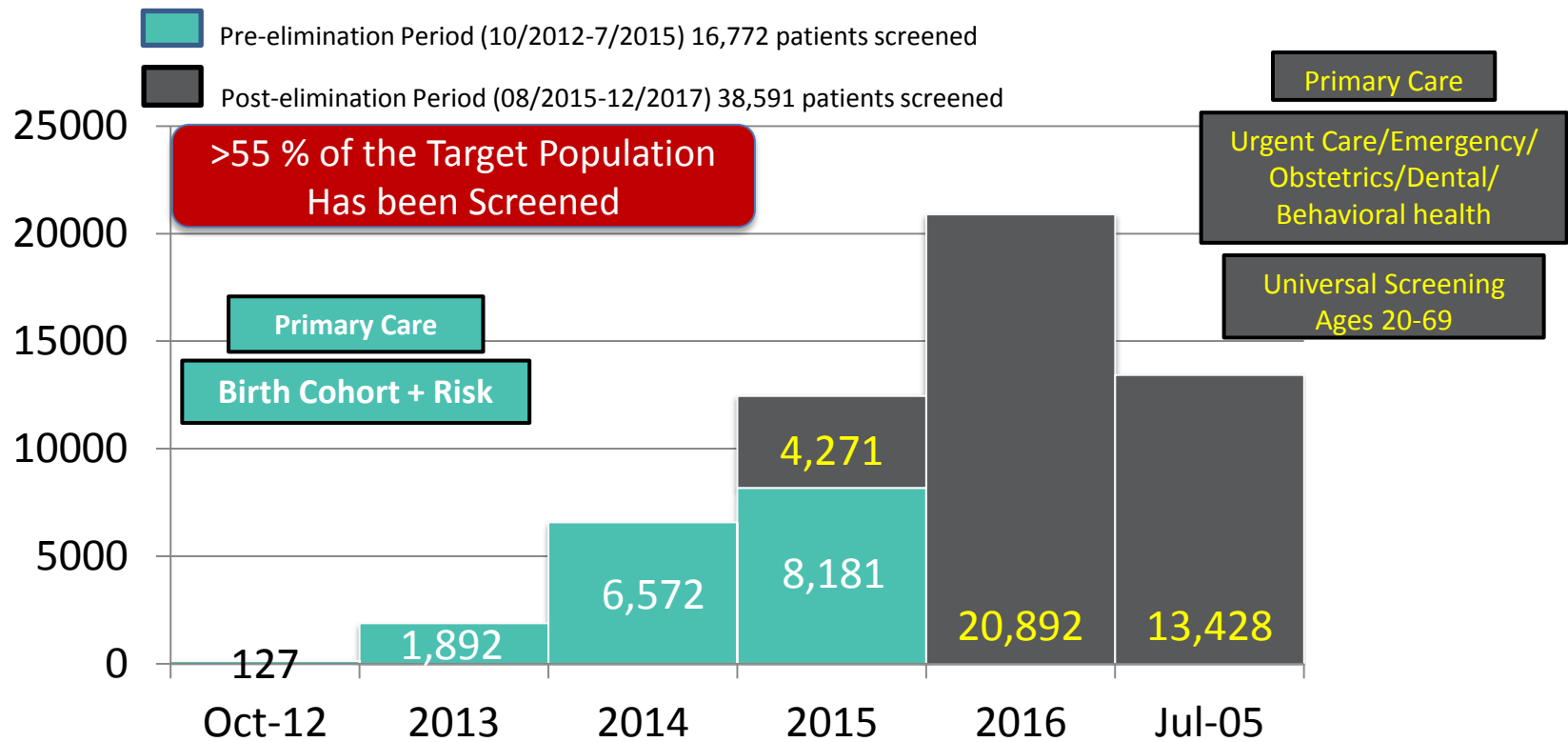
*Chief Bill John Baker*



# Goal #2: Expand Screening Program



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



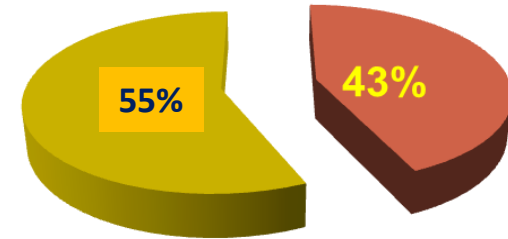
\*preliminary data

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

## Prevalence

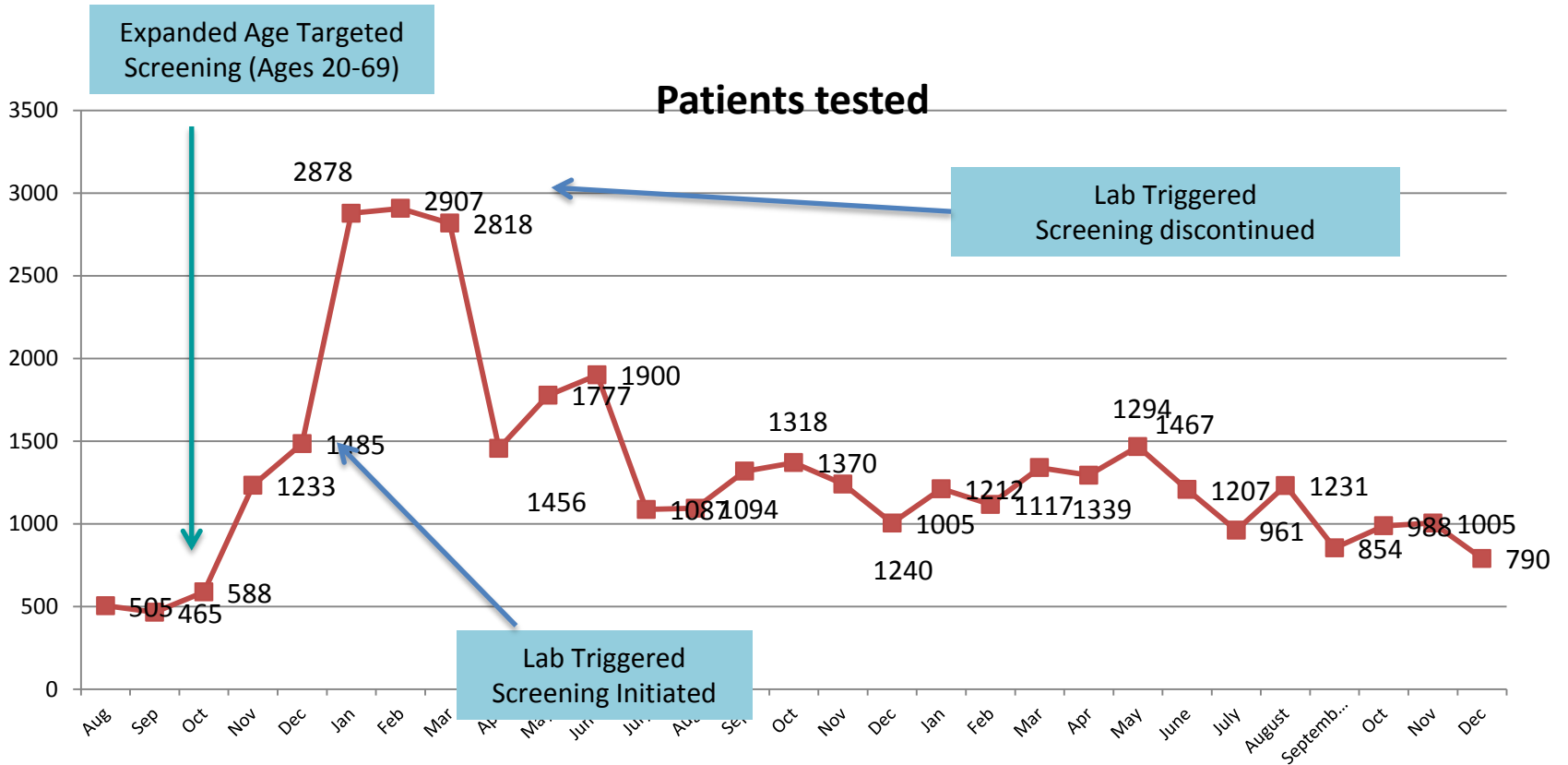
- 38,591 patients screened
- 1,328 HCV antibody positive
  - Overall Prevalence ~ **3.4%**
    - Male **4.5%**
    - Female **2.7%**
  - Baby boomers
    - **3.9%** (12,540)
  - Younger than Baby Boomers
    - **3.2%** (18,319)

## Age Distribution of HCV Ab (+)



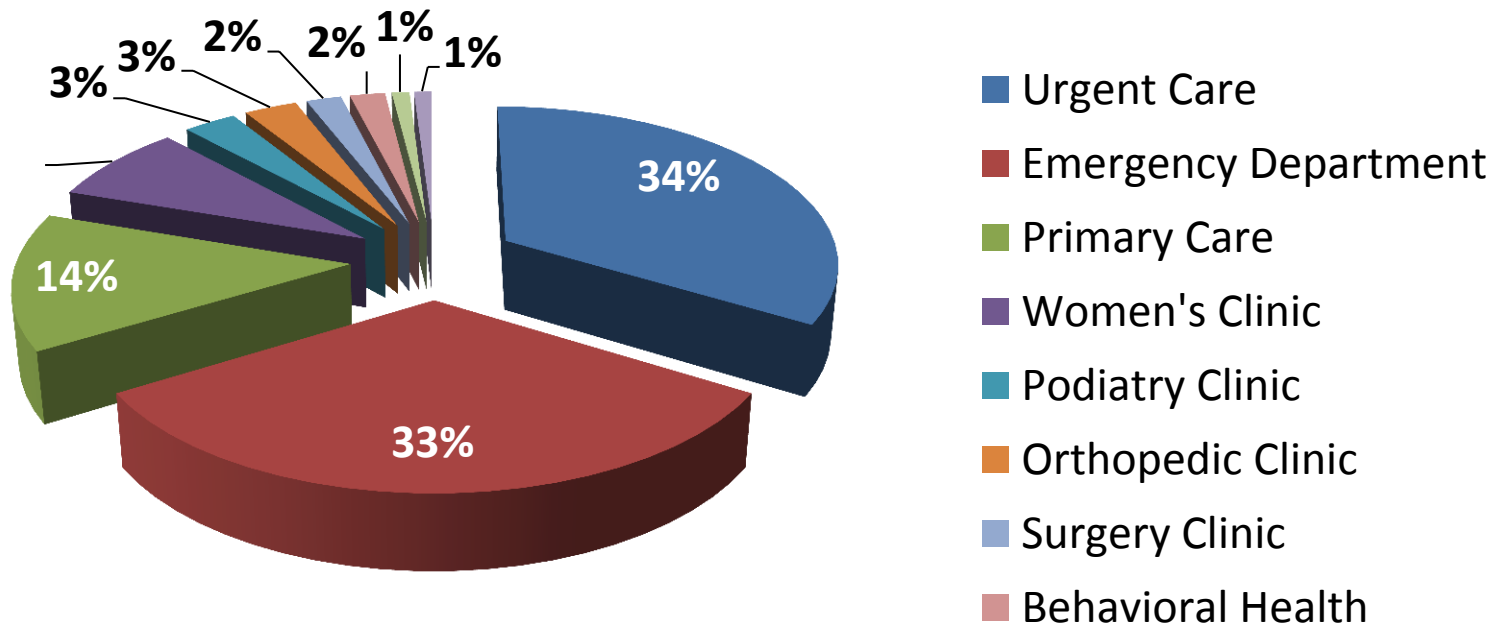
- Baby Boomers
- Younger than Baby Boomers

# CNHS: HCV Screening\* 8/2015 – 12/2017



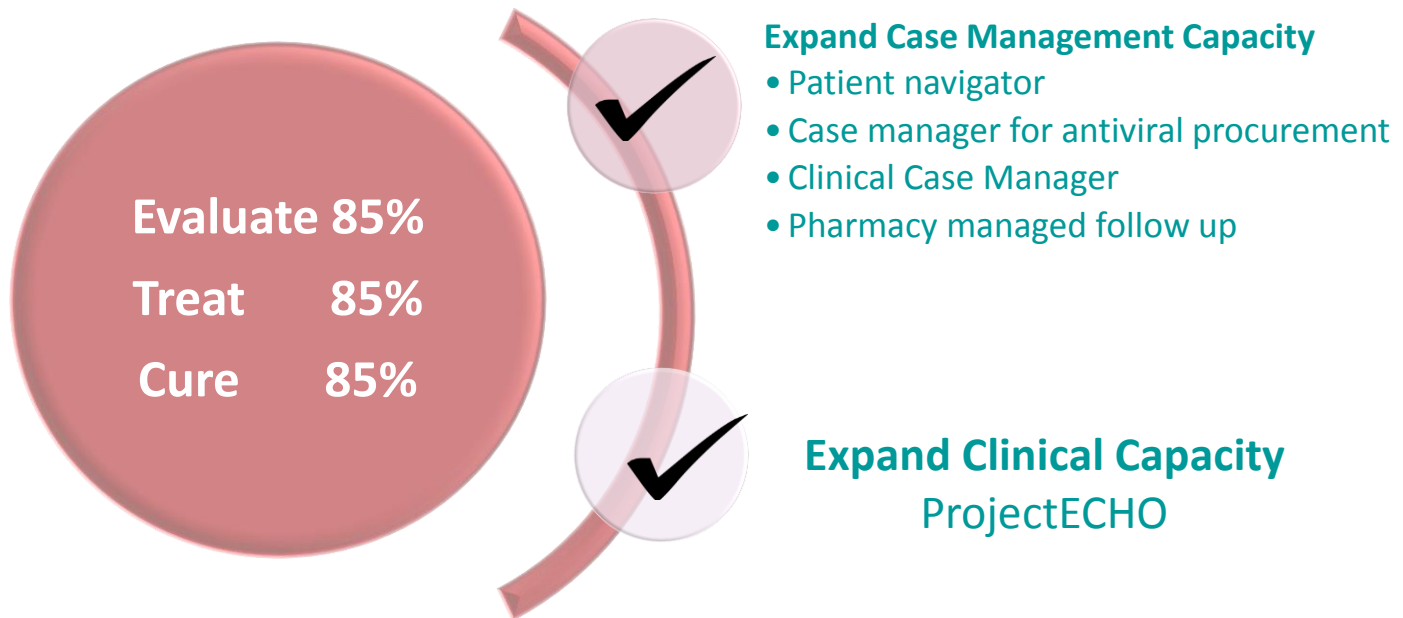
# Lab Triggered Screening: Screening location

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



# Patient and Medical Provider Support

## ➤ Before HCV Evaluation

- **Patient Navigator** contacts patient to make sure and appointment is secured
- If the patient can't be reached a **Public Health Nurse** is sent to the patient's home

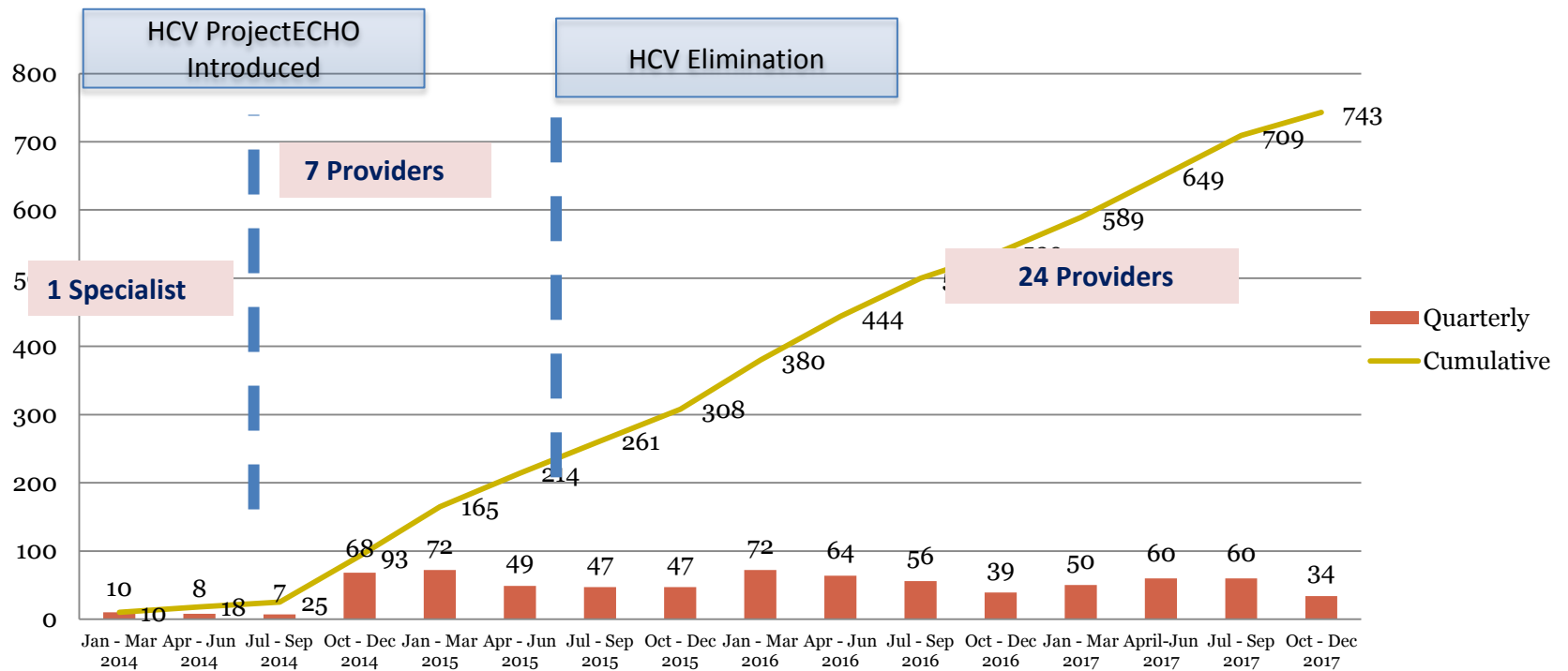
## ➤ During Evaluation

- 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)

# 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



**Decrease Incidence**

**Public and Provider Awareness**

- Public Campaign
- Provider Training

**Contact Tracing**

- Acute HCV
- PWID

**Harm Reduction**

- Treatment as Prevention
- OST
- NSEP

**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 through 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