

Getting to 90-90-90: Development of an HIV Reengagement Team

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Disclosures

- None

Overview

- Southern HIV Epidemic
- Current Reengagement Efforts
- Development of a Reengagement Team

GOAL:

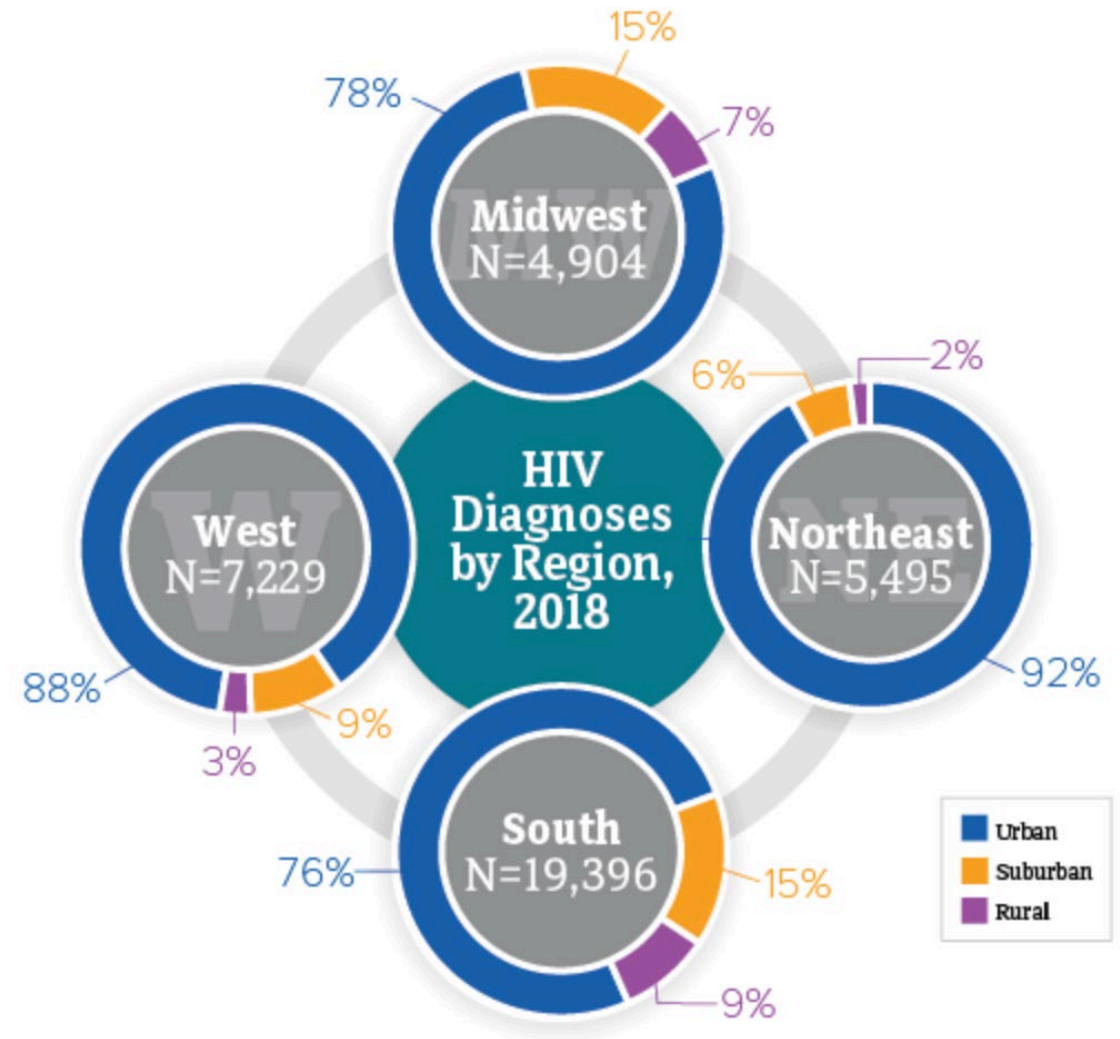
75%
reduction in new
HIV infections
by 2025
and at least
90%
reduction
by 2030.

The Epidemic Globally

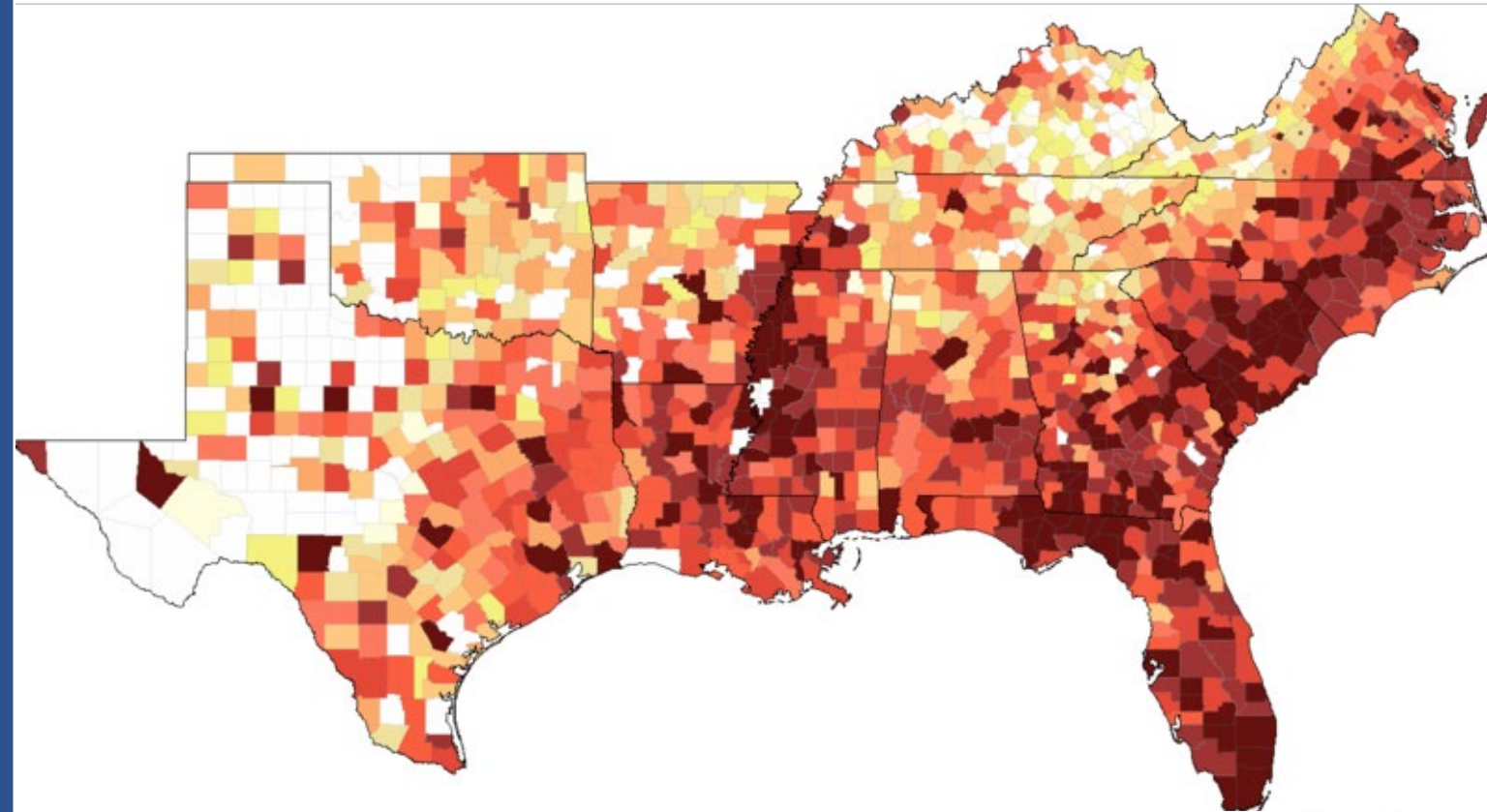


The Epidemic Nationally

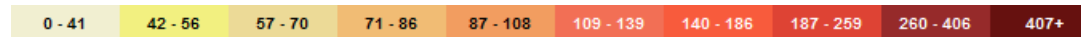
- In 2019:
- Estimated 1,189,700 people aged \geq 13 living with HIV
- 158,500 (13%) are not diagnosed
- 36,801 new infections
- 15, 815 deaths of PWH (any cause)





HIV in the South



AIDSVu 
www.AIDSVu.org



Data not shown * 
Data not released to AIDSVu ** 

- 52% of new infections nationally
- Region of lowest PrEP use
 - PrEP to Need ratio 1

Centers for Disease Control and Prevention. CDC HIV Prevention Progress Report, 2019.
Siegler AJ, Mouhanna F, Giler RM, et al. The prevalence of pre-exposure prophylaxis use and the pre-exposure prophylaxis-to-need ratio in the fourth quarter of 2017, United States. *Annals of Epidemiology*. 2018;28:841-849

HIV Continuum of Care



90-90-90

90%

diagnosed

90%

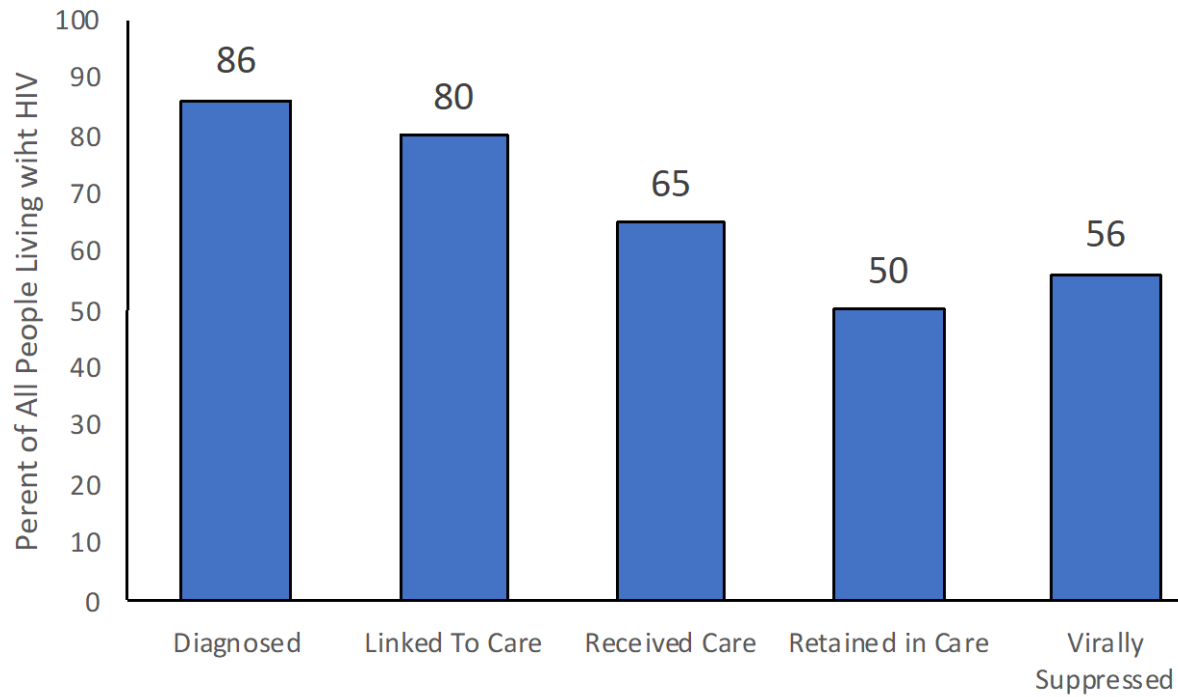
on treatment

90%

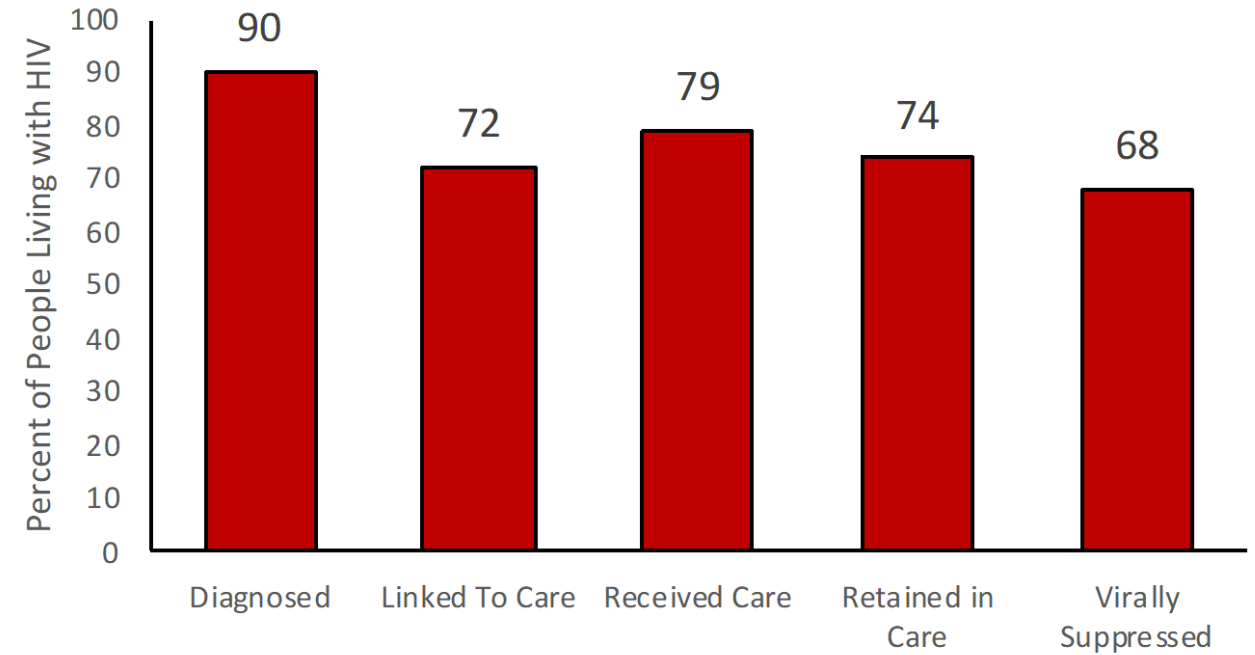
virally suppressed

HIV Continuum of Care

U.S. Prevalence-Based HIV Care Continuum, 2018



North Carolina HIV Care Continuum, 2019

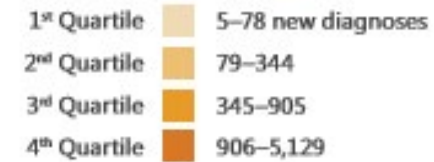
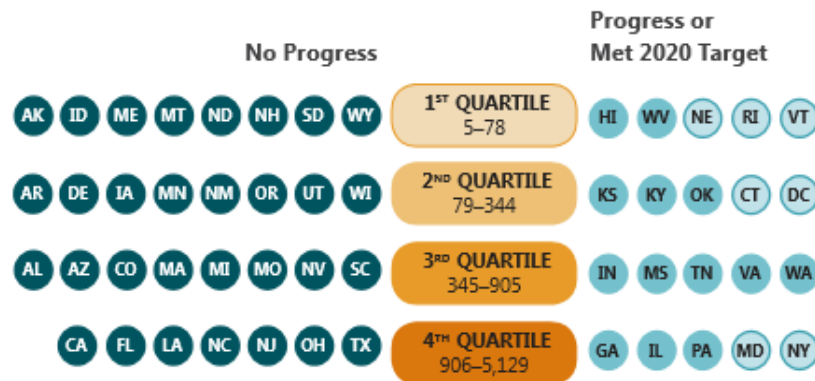


CDC, Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2018. *HIV Surveillance Supplemental Report 2020;25(No. 2)*. Published May 2020.

HIV Care Outcomes in North Carolina, 2019. North Carolina Department of Health and Human Services. Division of Public Health Communicable Disease Branch. Published January 13 2021

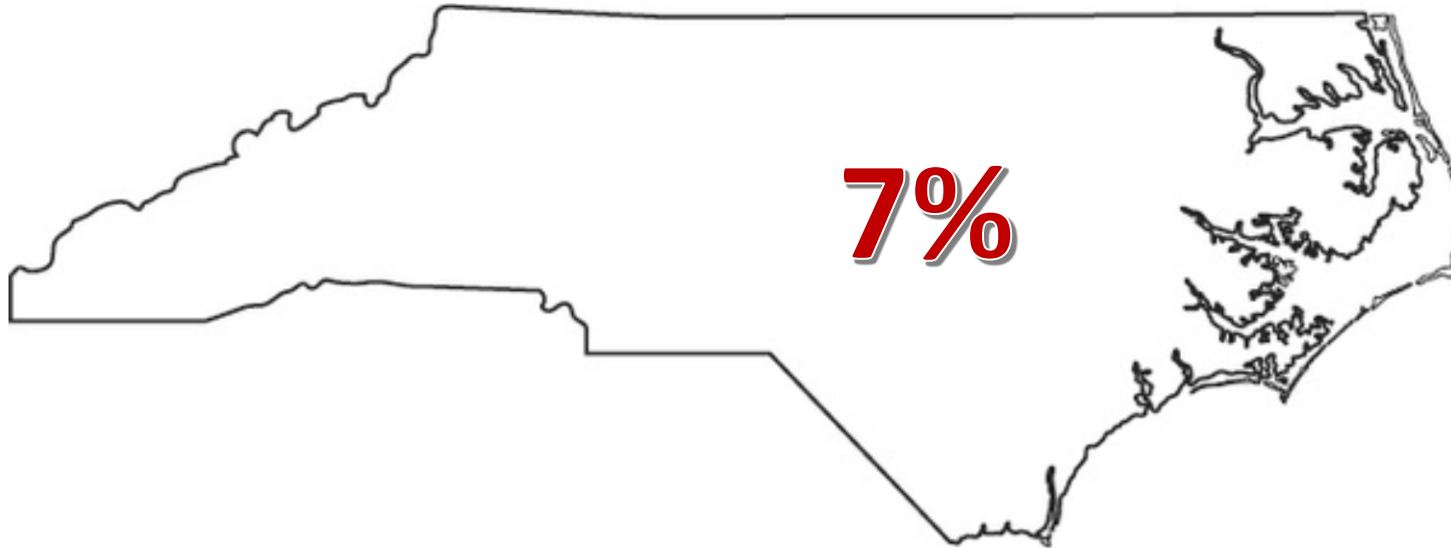
Ending the HIV Epidemic Progress

New HIV diagnoses across the United States, by quartile—2016



HIV in North Carolina

PrEP Coverage Among Eligible Persons ≥ 16 , 2017



- NC 1400 new HIV Infections in 2016 (6th Highest)
- 4th Quartile for Ending the HIV Epidemic Progress Nationally

For 2030:

by 2030

95-95-95

HIV treatment

200 000

New HIV infections or fewer

ZERO

Discrimination



How do we get there?



Diagnose all people with HIV as early as possible.

Treat people with HIV rapidly and effectively to reach sustained viral suppression.



Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).

Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.

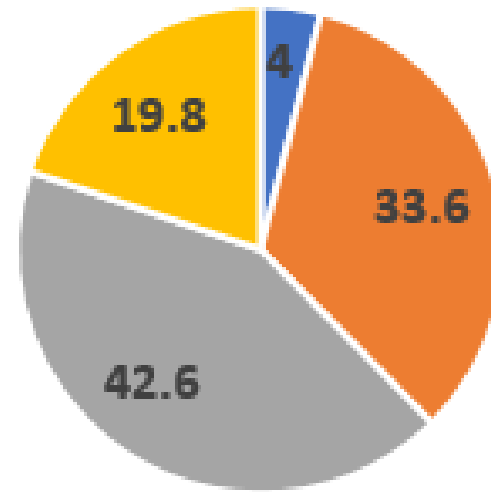


Where to focus our efforts?



Where are new infections coming from?

New HIV Transmissions
by Status of Originating
Person, United States
2016



■ Acute Infection, Unaware

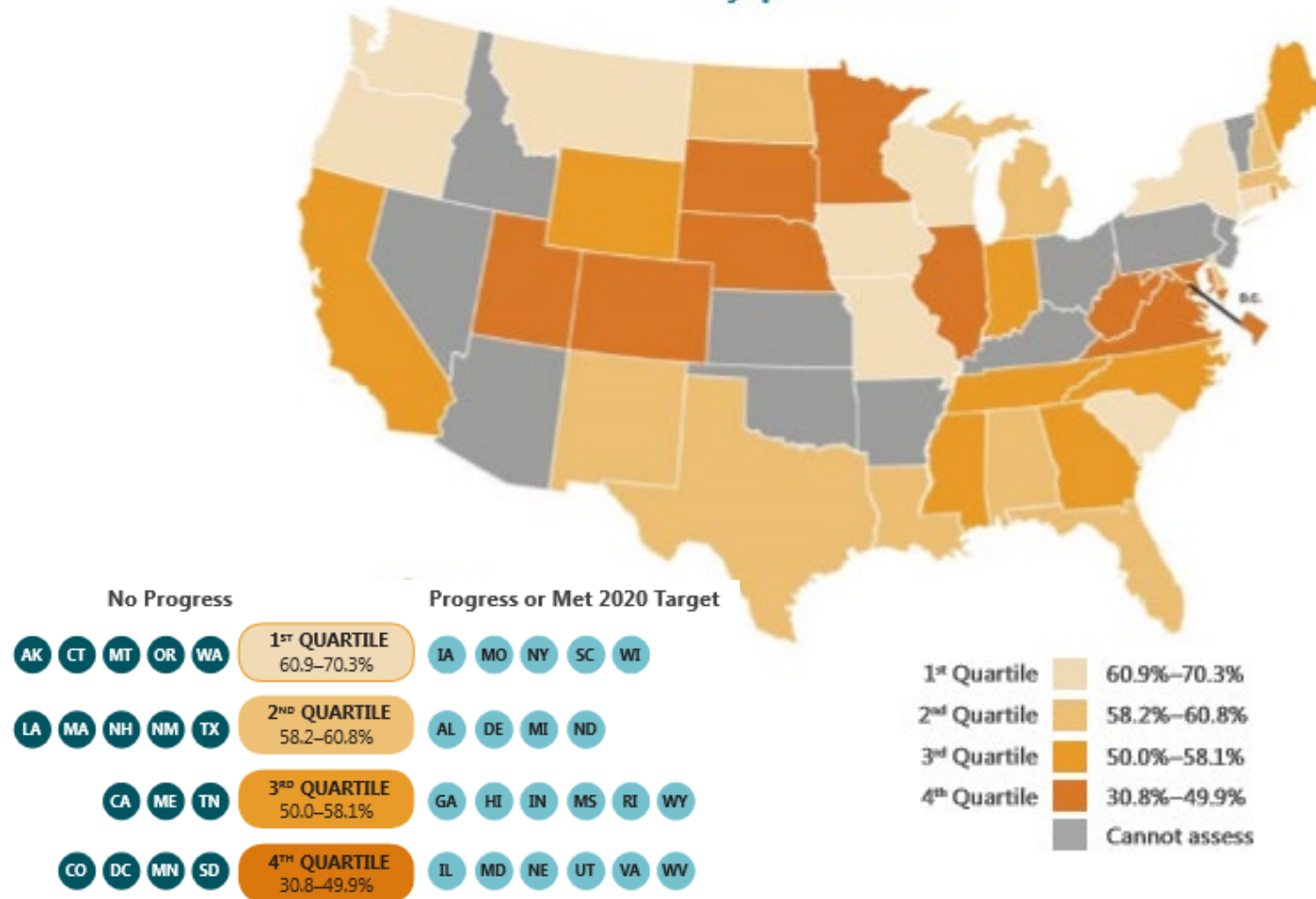
■ Non-Acute Infection, Unaware

■ PLWH Not in Care, Aware

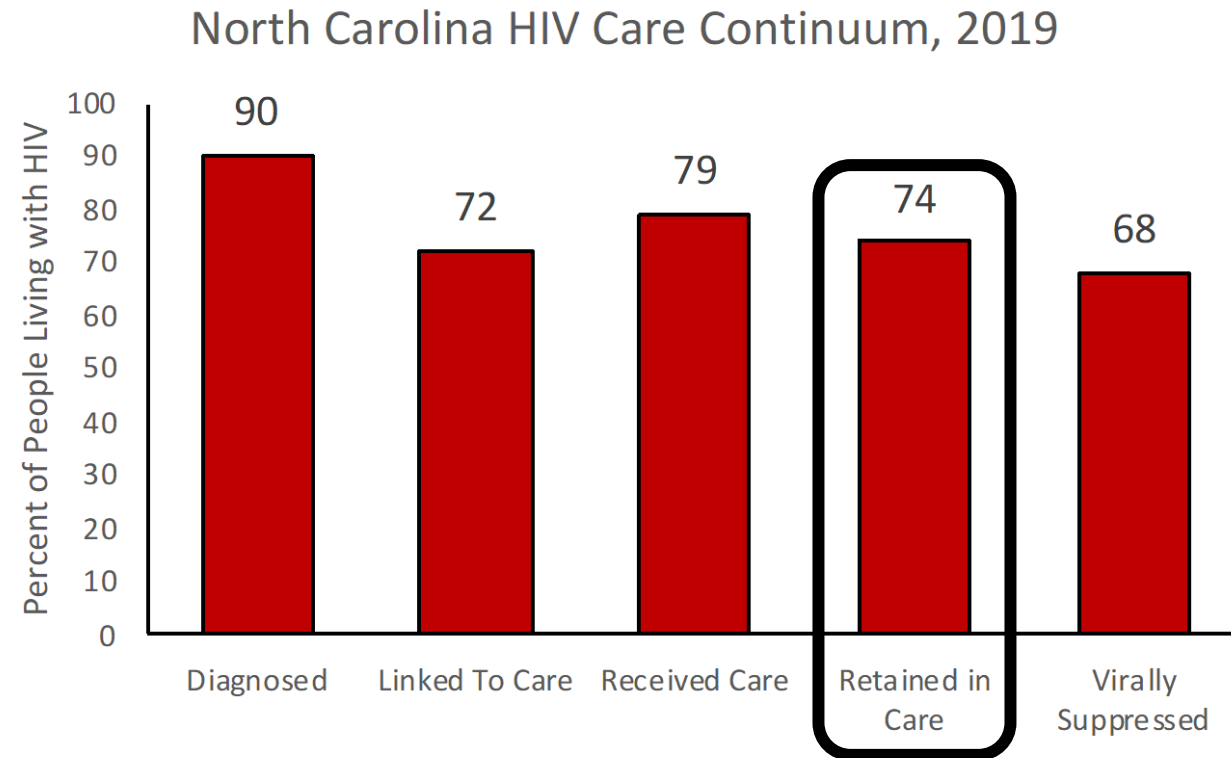
■ PLWH Not Virally Suppressed, Aware

HIV Retention Nationally

Retention in HIV medical care across the United States, by quartile—2015



Target: Retention

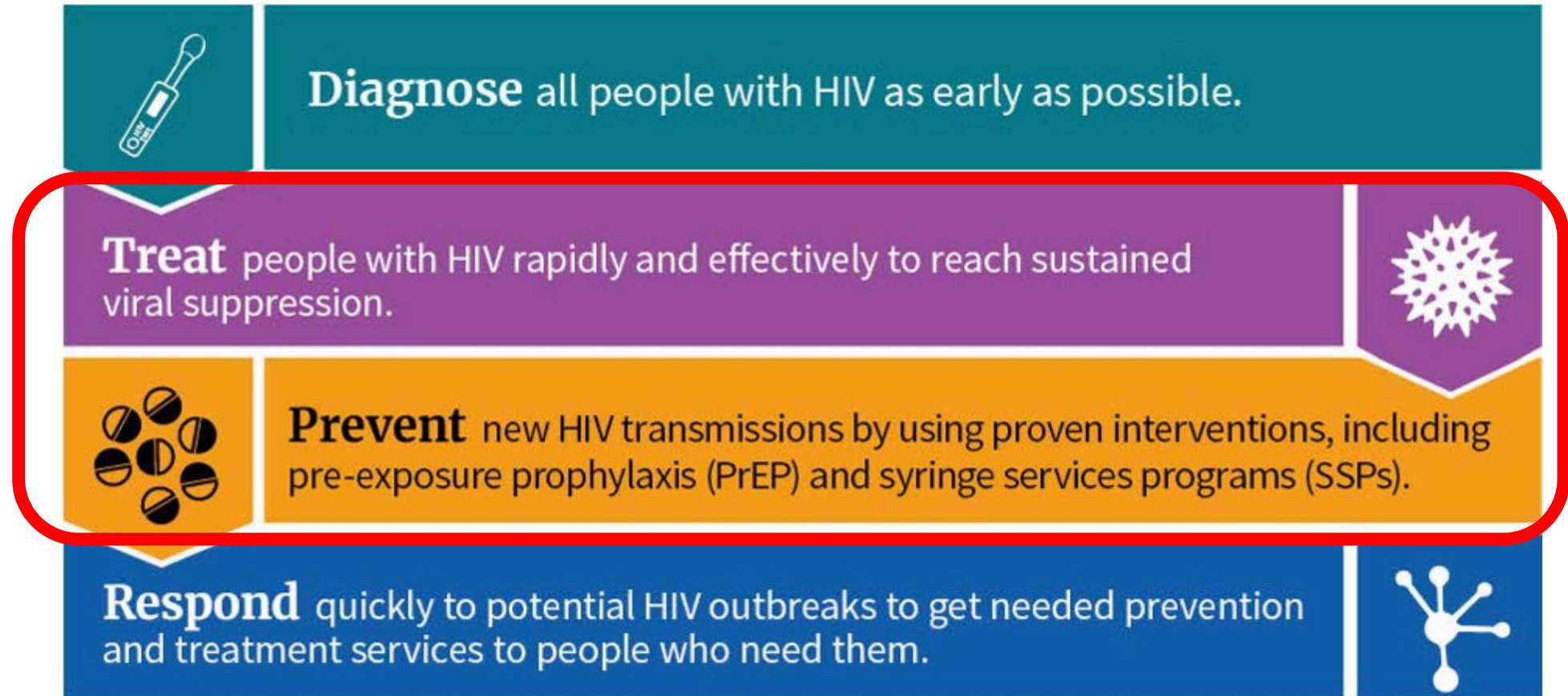


Treatment as Prevention U=U



A person with HIV who takes HIV medicine as prescribed and gets and stays virally suppressed or undetectable can stay healthy and has effectively no risk of sexually transmitting HIV to HIV-negative partners.

How do we get there?



How do we improve retention?



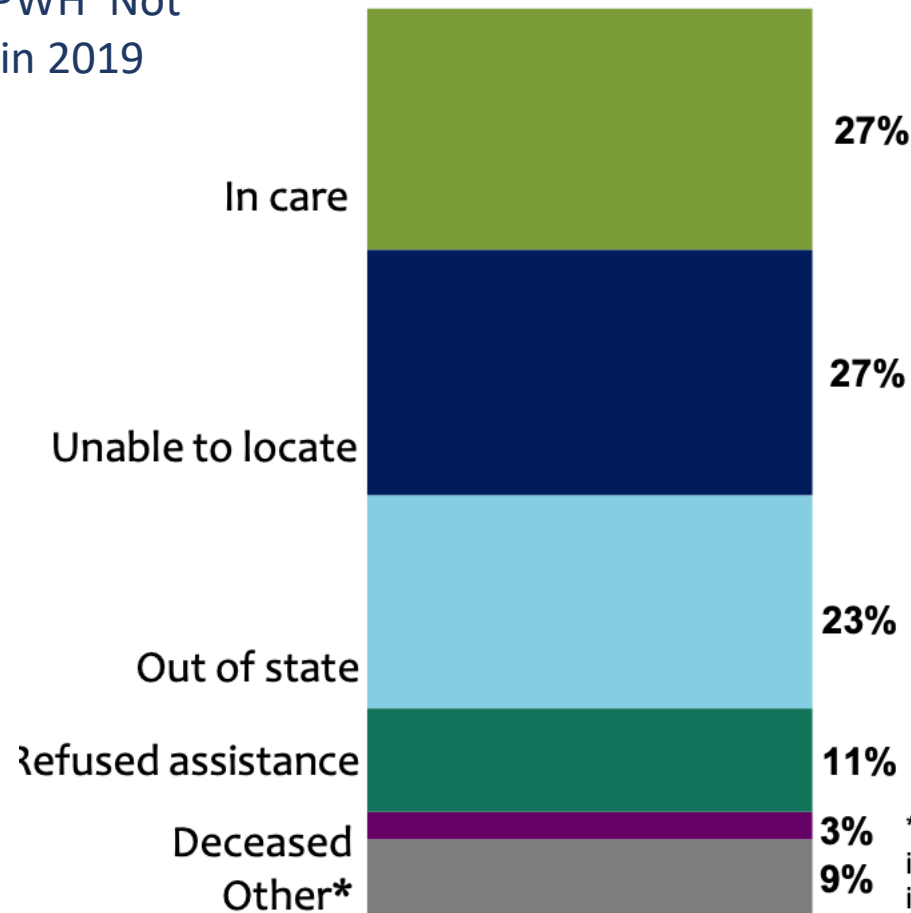
Data To Care (D2C)



- “A public health strategy that provides a framework for health departments who want to use HIV surveillance data to identify people with HIV and link them to medical care and other services”
- A Collaboration between the Health Department, HIV providers, support service providers.
- Broad scope
 - Identify PWH who are not in care or virally suppressed and re-engage them
 - Perinatal HIV services coordination
 - Improved surveillance data quality
 - Expanded partner service for PWH (prevention strategies)
 - Adherence support

North Carolina Reengagement Efforts 2019

Approx. 2498 PWH Not receiving care in 2019



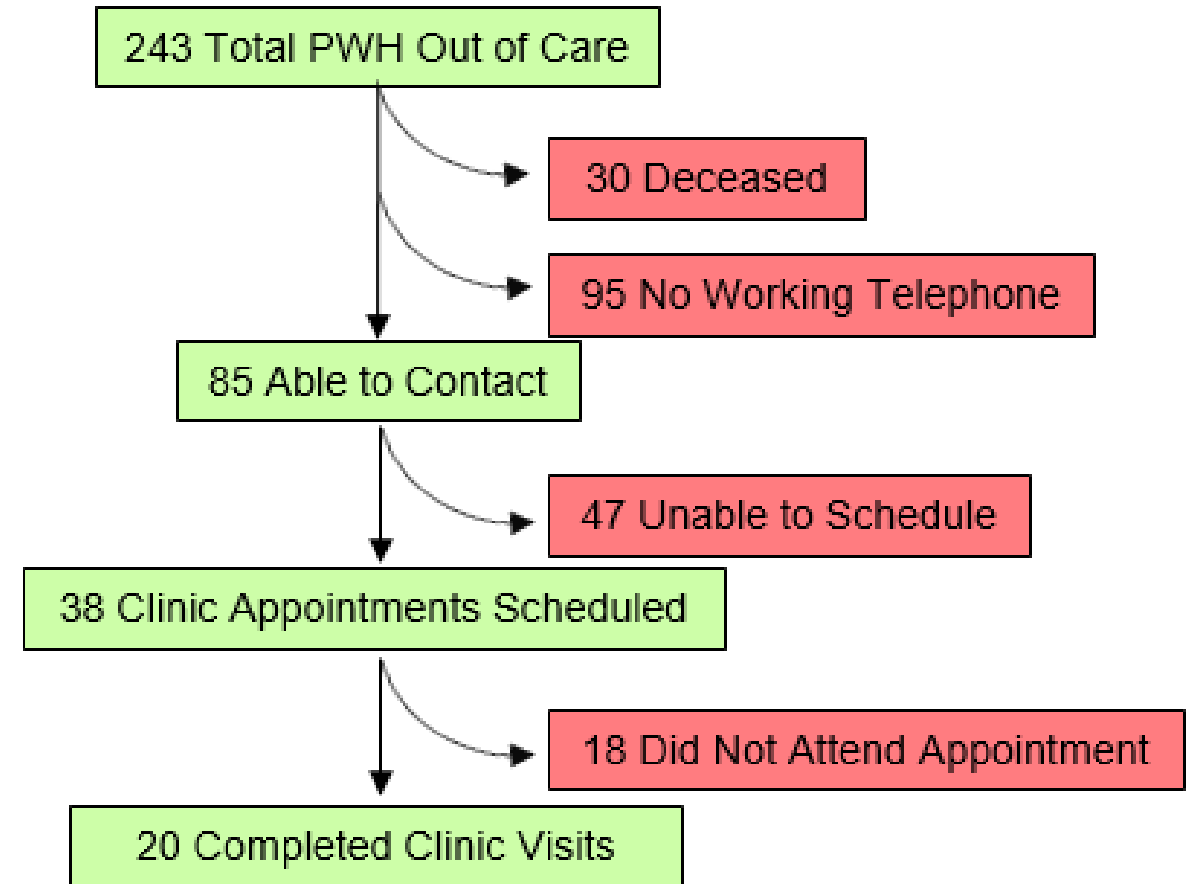
*Other includes incarcerated and cases w incomplete information.

Obstacles to Care Engagement:

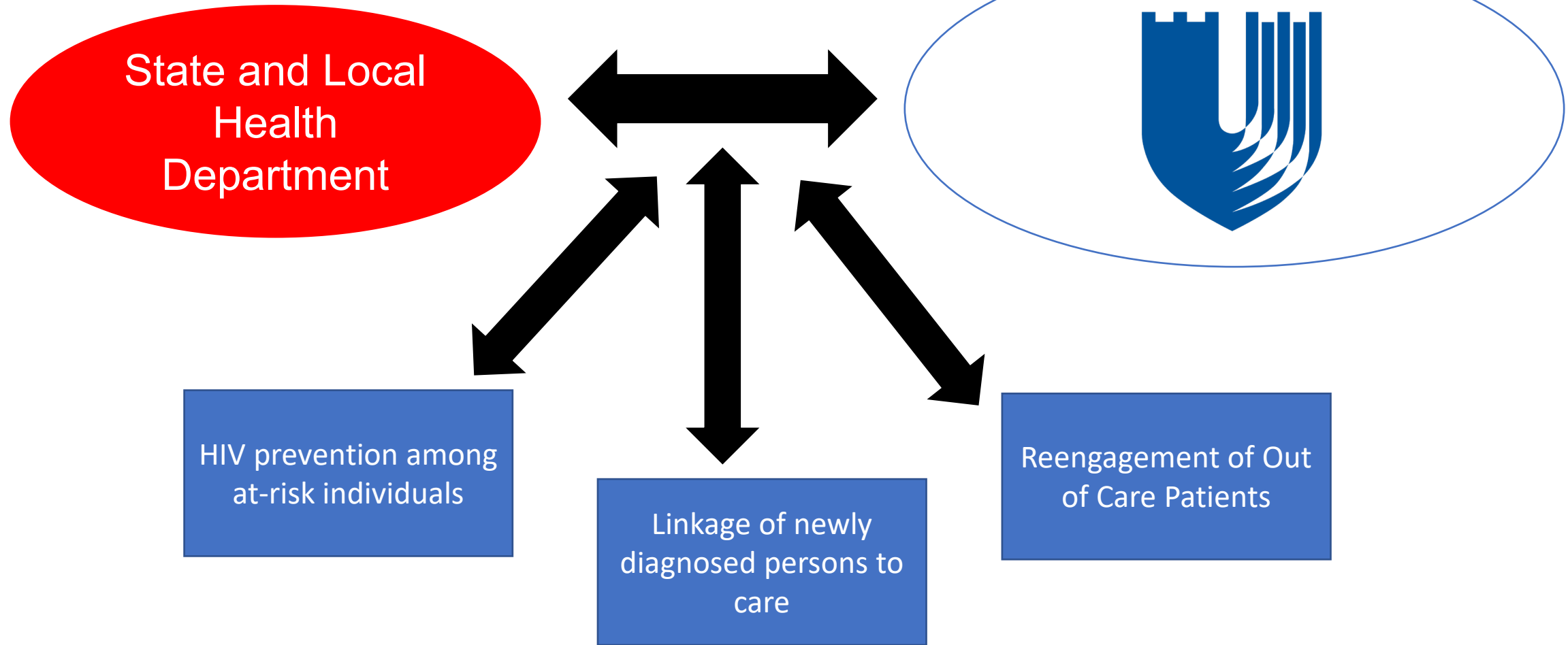
- Financial
- Transportation
- Housing
- Distrust of medical/surveillance system

Prior Retention Efforts (2016)

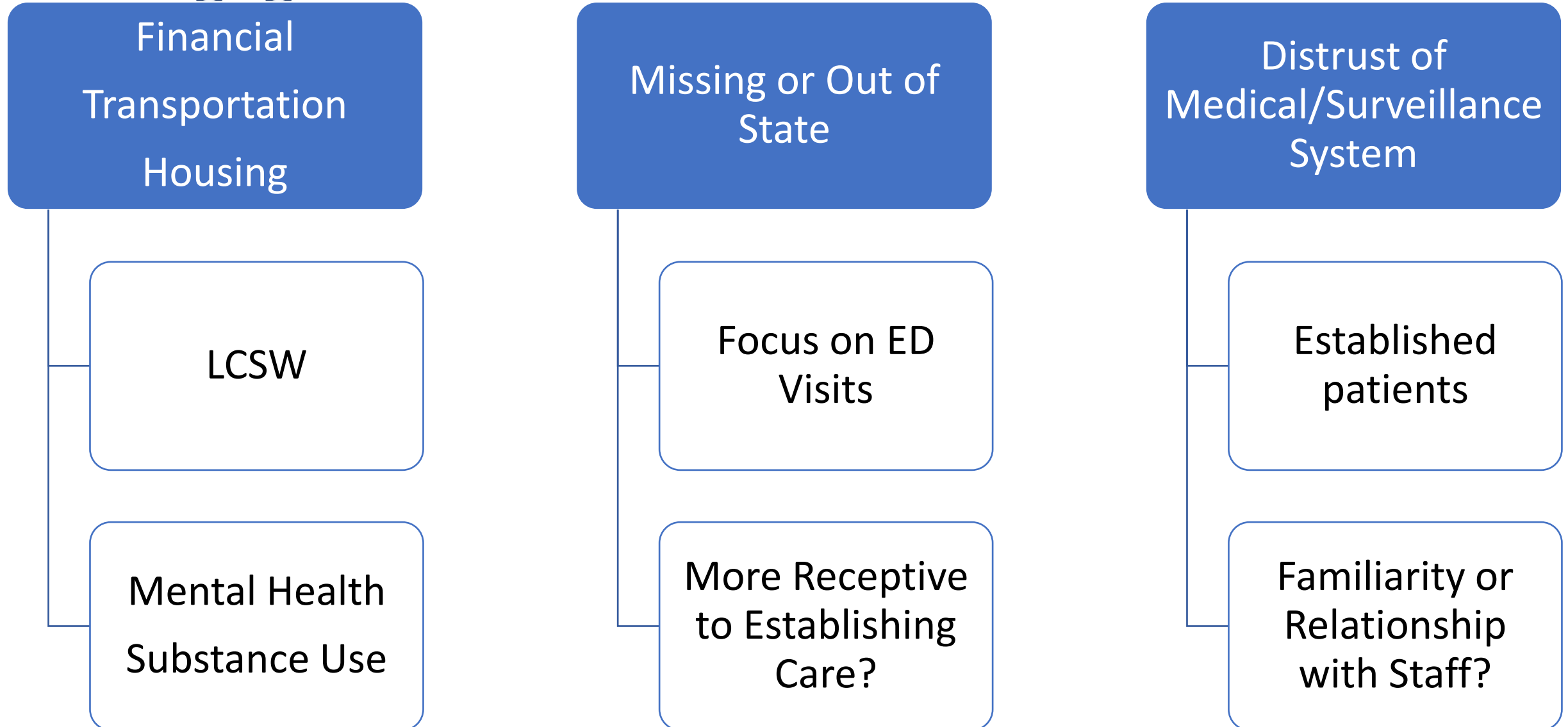
- 1900 PWH
- Adults (18>)
- Wide range across North Carolina
 - Urban and Rural Counties
- 1/8 of clinic disengaged in 12 month period
- In the 1 year after disengagement:
 - 43 patients resulted in 114 ED visits



Can we leverage DUHS to assist with NC efforts?



How can we overcome obstacles to reengagement?



Who do we target?

Inclusion

- ≥ 18 years old
- Known to be living with HIV
- ≥ 1 prior encounter in our clinic
- Presenting to ED
- No clinic visit within prior 1 year

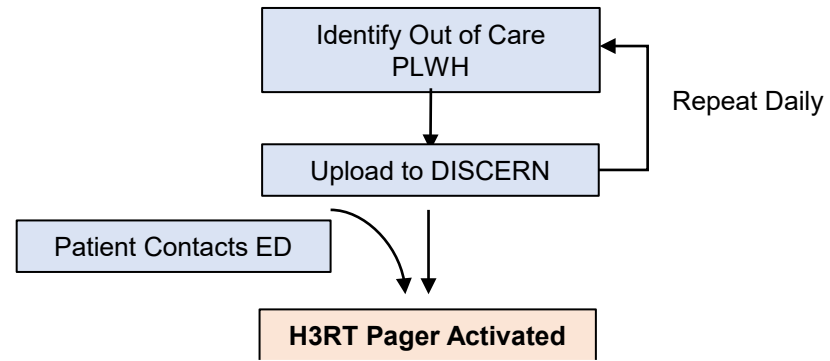
Exclusion

- Upcoming scheduled appointment with our clinic
- Repeat ED visits (after contact)
- Established with outside provider
- Critical illness

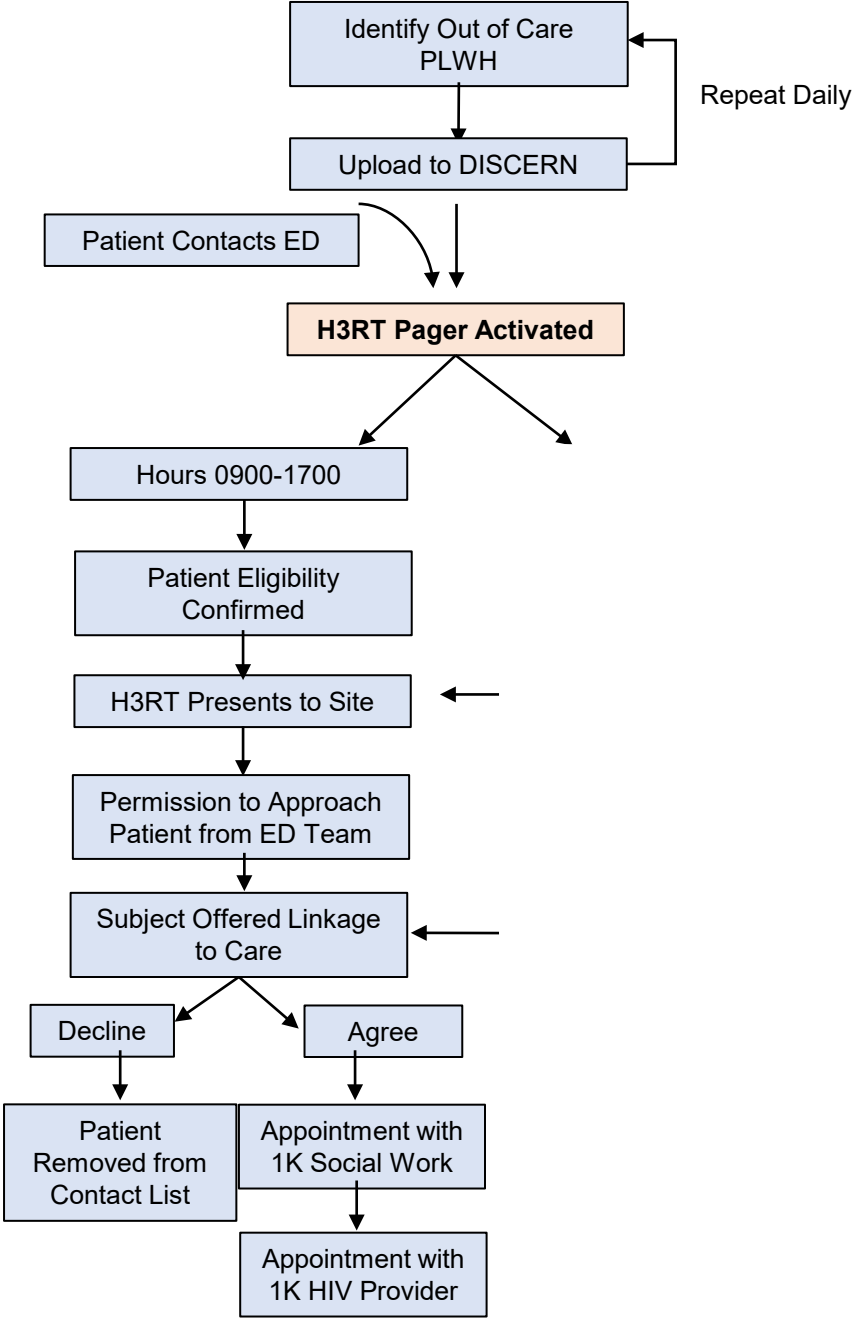
Building a Model

- Utilize the EHR as a population-level surveillance data platform to identify PWH who have fallen out of care and re-engage them upon contact with DUH
- Develop an automated notification system for an on-call reengagement counselor
- Deploy H3RT counselor to provide expedient reengagement counseling at the point of access
- Innovative because at the health system level vs Health Department

HIV Reengagement Rapid Response Team (H3RT)

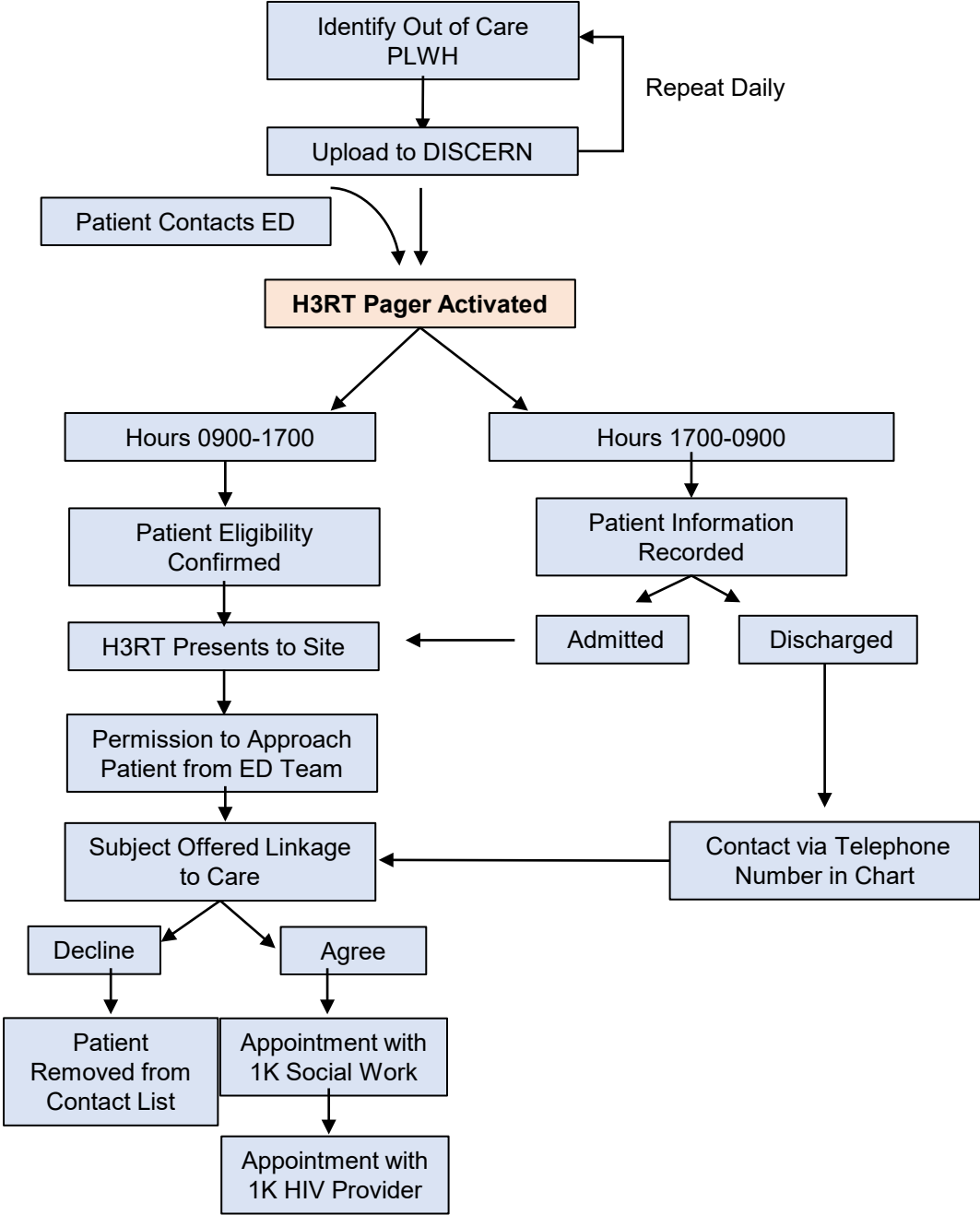


HIV Reengagement Rapid Response Team (H3RT)



HIV Reengagement Rapid Response Team (H3RT)

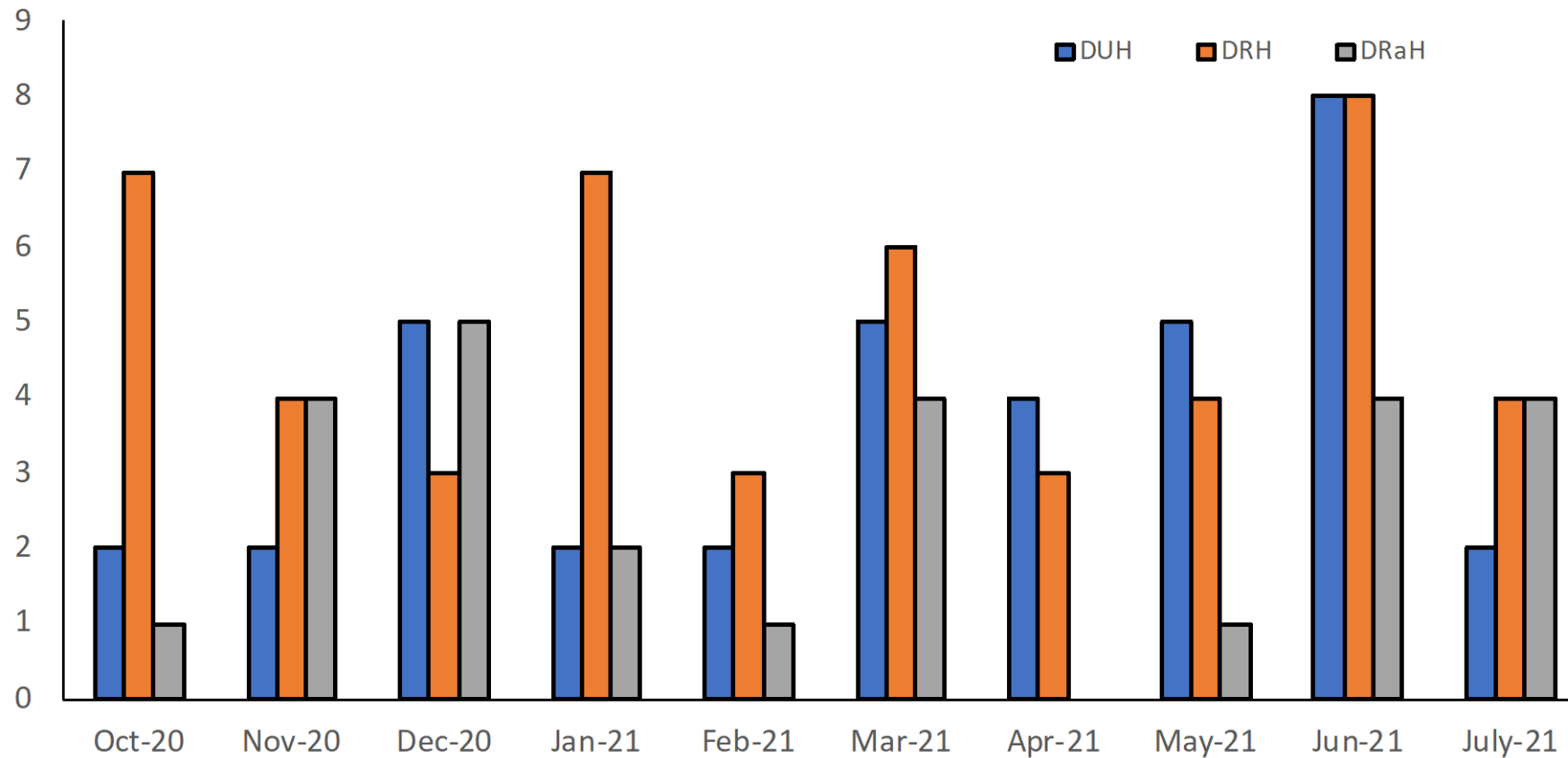
Live: 10/9/2020



H3RT Total Alert Summary

Average 11/mo

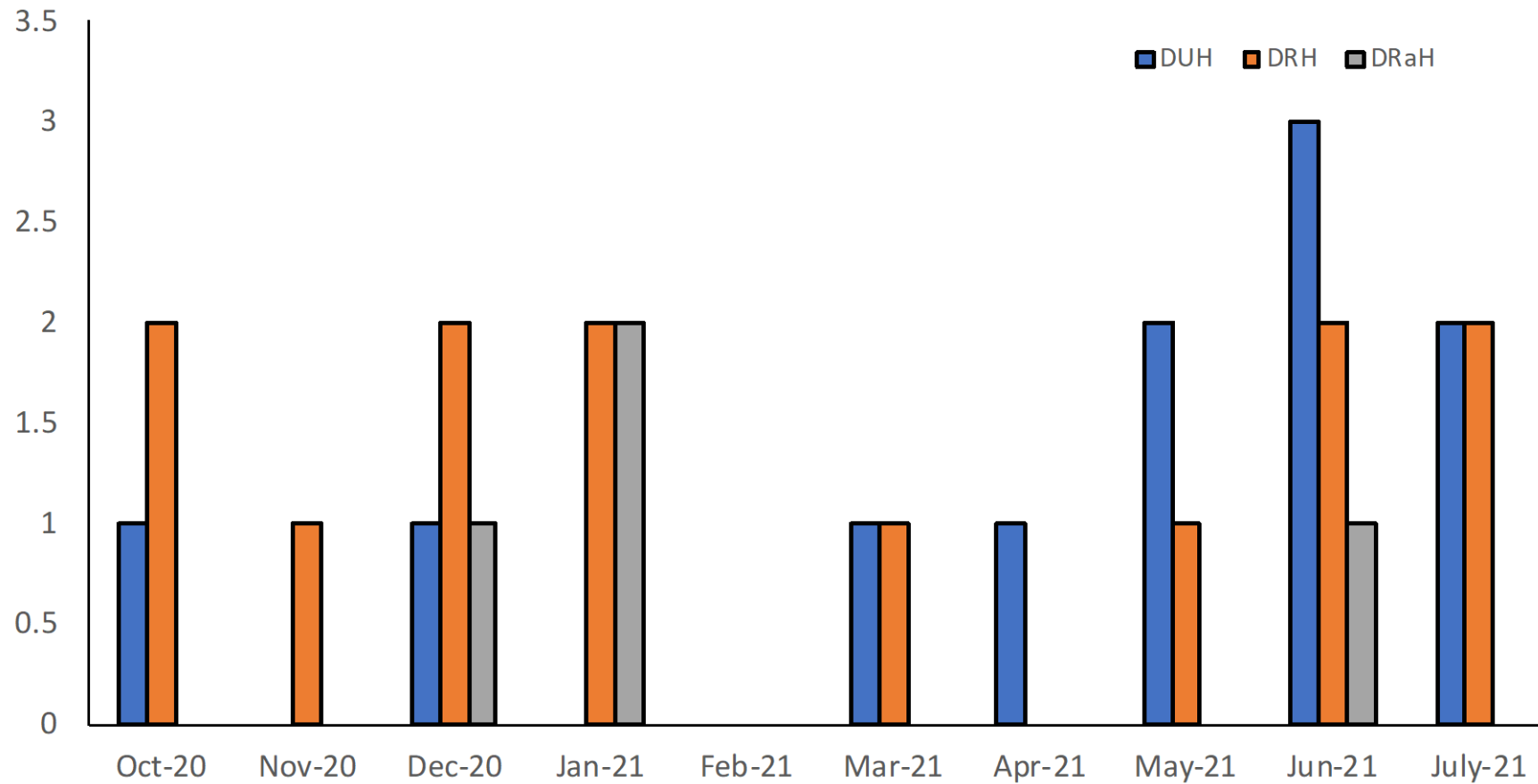
H3RT Alerts 10/9 - 7/15/2021



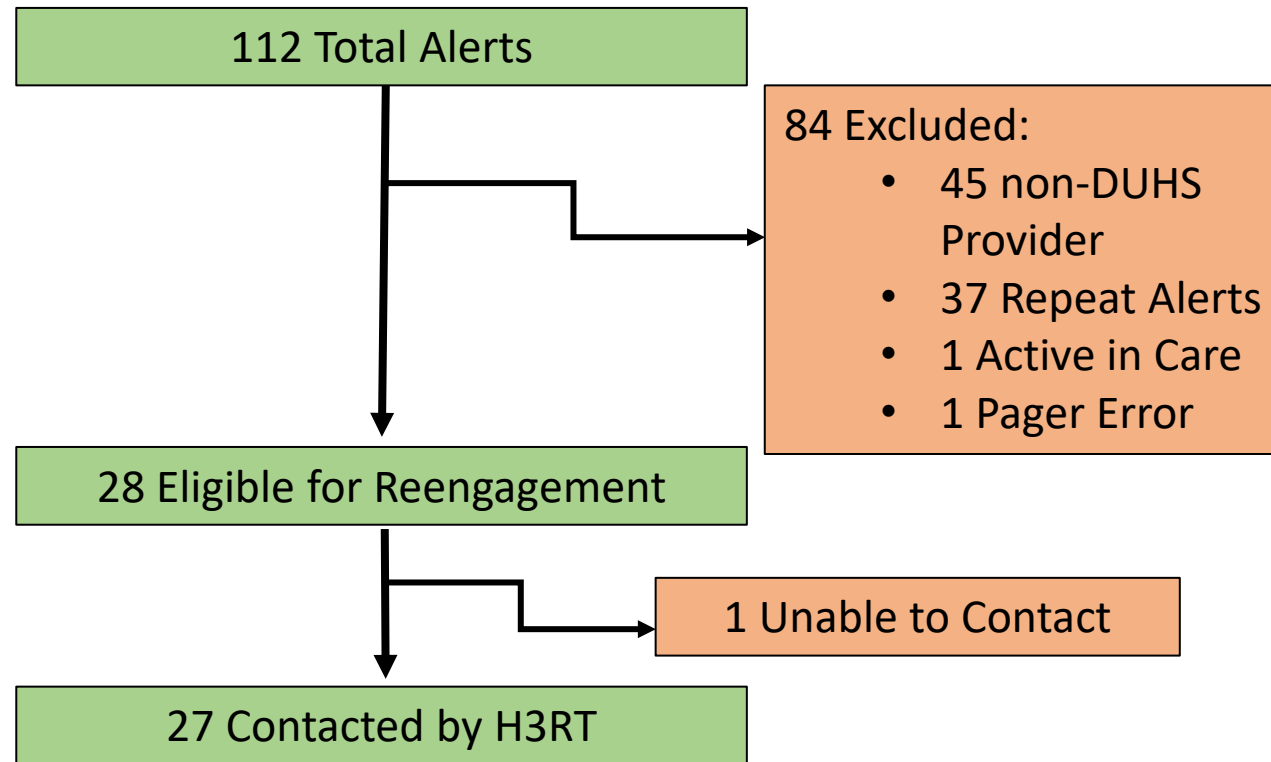
H3RT Eligible Alert Summary

Average 3/mo

H3RT Eligible Alerts 10/9 - 7/15/2021



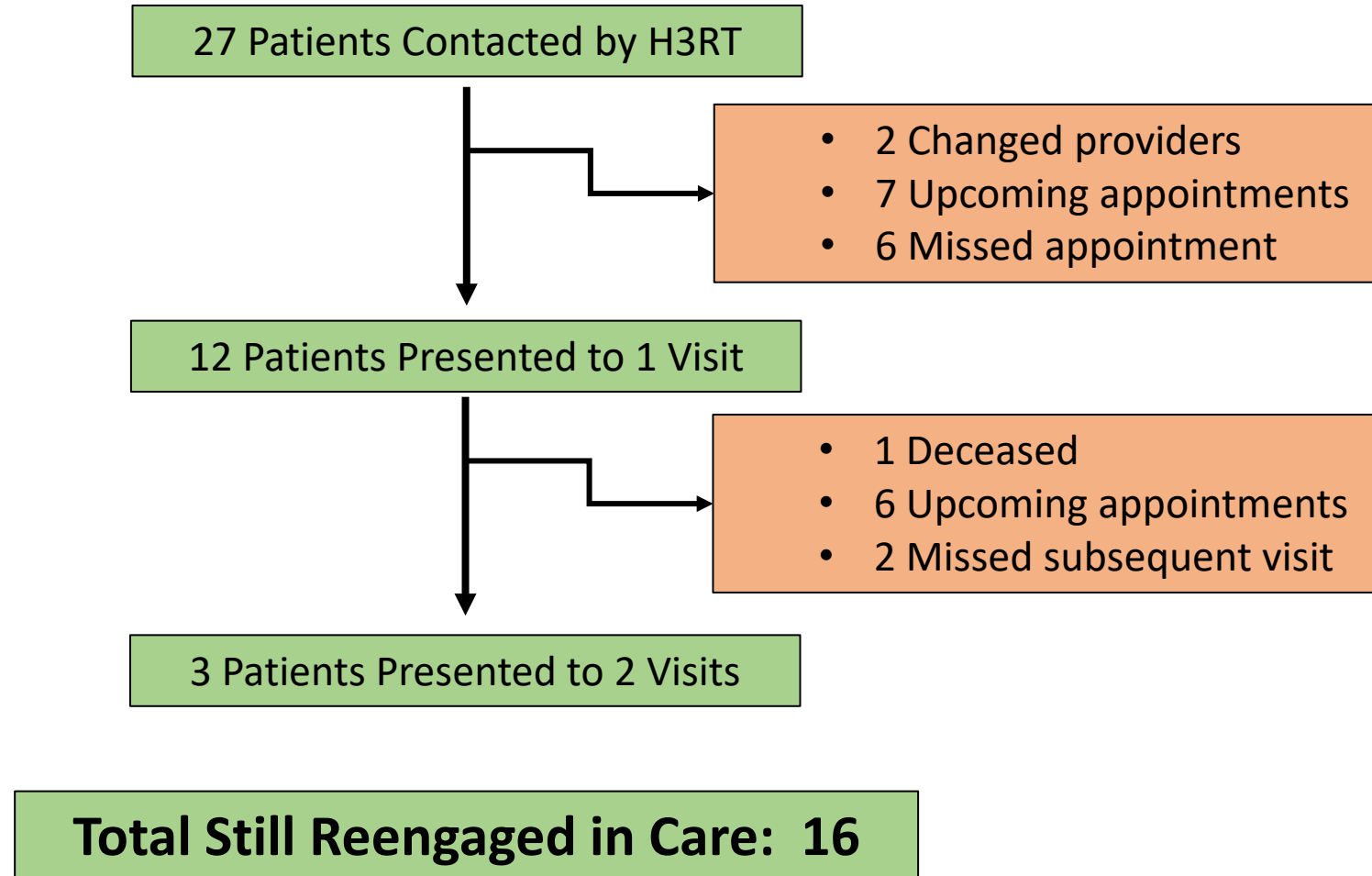
H3RT Results 10/9/20 -7/15/21



H3RT Eligible Patients

| Demographic | N = 28 |
|------------------|--------|
| Age: | |
| Mean Age: 52 | |
| Age Range: 29-82 | |
| Gender | |
| Male | 17 |
| Female | 11 |
| Race | |
| Black | 23 |
| Caucasian | 4 |
| Other | 1 |
| Insurance | |
| Private | 3 |
| Medicare | 9 |
| Medicaid | 7 |
| None | 9 |

H3RT Recruited Outcomes



How do we compare?

- University of Chicago
- Emergency and Inpatient
- Similar approach with automated lists and trained navigator
- 14 months
- 420 Alerts
 - 56 were out of care
 - 12 were patients receiving care previously at University of Chicago
 - 37 Re-Engaged

Practice Brief Report

A Clinical Informatics Approach to Reengagement in HIV Care in the Emergency Department

Jessica P. Ridgway, MD, MS; Ellen Almirol, MPH, MAMS; Jessica Schmitt, LCSW; Lindsey Wesley-Madgett; David Pitrak, MD, FIDSA

Further Questions/Directions



What are we missing?

- Contacting and reengaging patients may not be enough
- What do our patients need?
- What else can we offer?

Substance Abuse and Mental Illness Symptoms Screen (SAMISS)

- Alcohol Use: Range 0-4
 - (5+ is positive)
- Non Prescription Drug Abuse: 0-1
 - (3+ is positive)
- Prescription Drug Abuse: 0-3
 - (3+ is positive)
- Need to cut down score: 0
 - (1+ positive)

Substance Abuse and Mental Illness Symptoms Screener (SAMISS)

1. How often do you have a drink containing alcohol?

Never Monthly or less 2-4 times/mo 2-3 times/wk 4+ times/wk
0 1 2 3 4

2. How many drinks do you have on a typical day when you are drinking?

None 1 or 2 3 or 4 5 or 6 7-9 10 or more
0 1 2 3 4 5

H3RT Patient Comments: Disengagement

- Confidentiality (concern of being seen in waiting room)
- Work schedule conflicts
- Transportation issues
- Transitioning care after incarceration
- Food/nutrition concerns (vs cost of care)
- Avoiding health care setting due to COVID

H3RT Patient Comments: Suggestions

- Evening appointment options
- Increased clinic availability
- Reminder calls
- Financial assistance

Future Directions: Patient Needs

- Mental Health and Substance Use integration
- Intensive Reengagement Clinics
- Improved availability
- Navigators to give point of contact and stay in touch

Who are we missing?

84 Excluded:

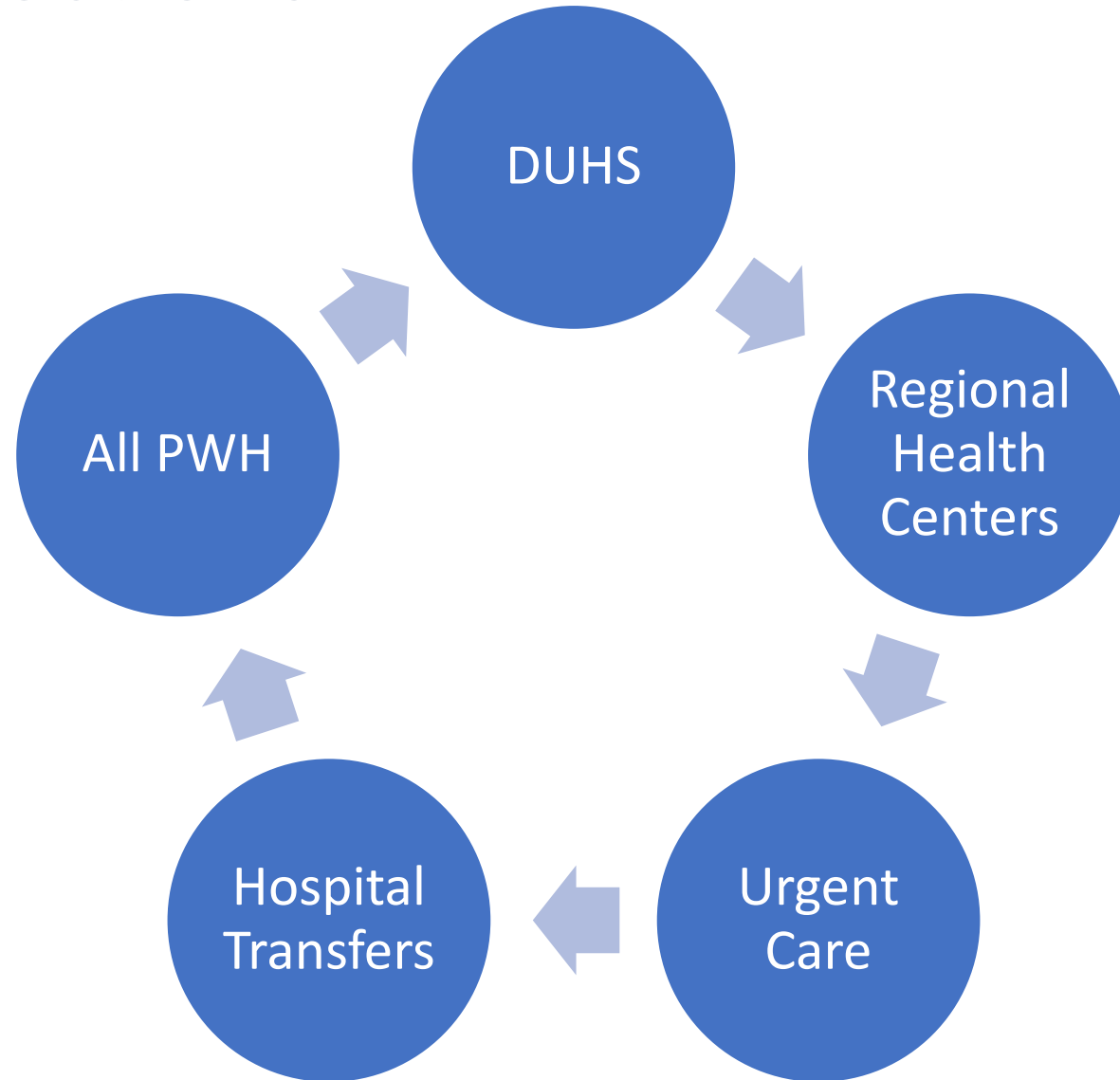
- 45 non-DUHS Provider
- 37 Repeat Alerts
- 1 Active in Care
- 1 Pager Error



45 non-DUHS Provider:

- **21 Lincoln Community Health Center**
- 8 Private ID provider
- 7 Outside academic center
- 5 Other provider, not listed in chart
- 3 Primary Care
- 1 Other community health center

Future Directions



Are we improving outcomes?

- How many patients attending follow up visits?
- How many are starting back on ART?
- How many are getting to undetectable viral loads?
- How many are keeping CD4 <200?
- If not, then why not?

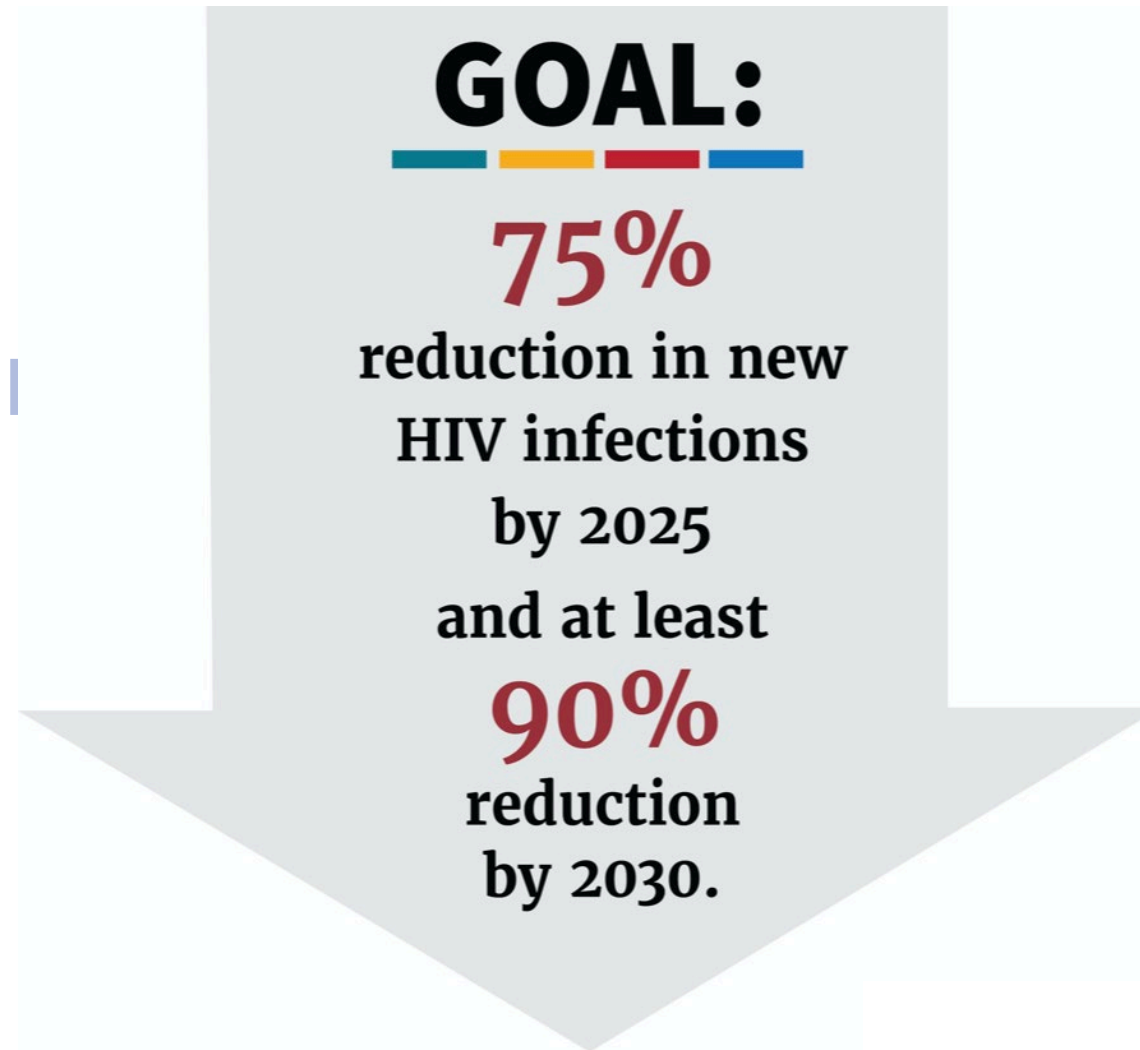


Summary:

- We are in a position to end the HIV epidemic
- The South is a region of critical need
- Data to Care can be used at the health system level
- HIV reengagement teams are feasible at the health system level
- Improving retention can lead to decreased transmission

Getting to 90-90-90

H3RT



↓ HIV
Transmission

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