



BACKGROUND:

- Approximately 25% of those with HIV are coinfectd with HCV
Current treatment cascades focus on HCV mono-infected patients and based on multiple data sources, not surveillance
Using expanded surveillance capacity and validated HIV matching algorithms, we created an HCV treatment cascade for HIV/HCV coinfectd persons in Connecticut

METHODS:

Surveillance databases used: CTEDSS (HCV) and eHARS (HIV)

- eHARS timeframe: HIV Labs from 1/1/2015 to 10/1/2019
Two HCV timelines were studied:
Cumulative: All CTEDSS entries ever recorded (1/1/1994 to 1/1/2020)
Abbreviated: All CTEDSS entries ever with labs from 1/1/2016 to 1/1/2020.
Coinfectd lists generated by matching CTEDSS and eHARS
HCV treatment cascade status assessed using standardized surveillance case definitions

Table 1: Disposition definitions using surveillance labs to determine cascade status

Table with 2 columns: Disposition and Reported Laboratory Sequence. Rows include Not Chronic Positive screen, Chronic Positive screen & Chronic, SVR Positive screen, Chronic & SVR, Not Infected (Excluded), and Unknown (Excluded).

SUMMARY:

- Using updated statewide surveillance, the SVR rate was 68.6% (Figure 1)
SVR rates vary between abbreviated and cumulative timeframes (Figure 4)
Contributing factors for improved SVR rates include:
2016 HCV case definition change (increased HCV PCR testing)
Enhanced CTEDSS electronic lab interface with ability to recording serial negative PCRs
Enhanced DAA availability (improved treatment adherence)
Increase use of reflex PCR testing
We believe using more updated surveillance data better represents the current coinfectd population
Most likely to achieve SVR: baby boomers & low/undetectable HIV viral loads (Table 2)

Creating a Statewide HCV Treatment Cascade for HIV/HCV Co-Infected Persons Using a Partnership with DPH

Maximilian Wegener1, Ralph Brooks1, Lisa Nichols1, Suzanne Speers2, Merceditas Villanueva1

1Yale University - New Haven, CT, United States; 2CT Department of Public Health - Hartford, CT, United States

It is feasible to create statewide HCV treatment cascades for HIV/HCV co-infected individuals using public health surveillance

Figure 1: HCV treatment cascade for HCV/HIV coinfectd individuals using abbreviated timeframe

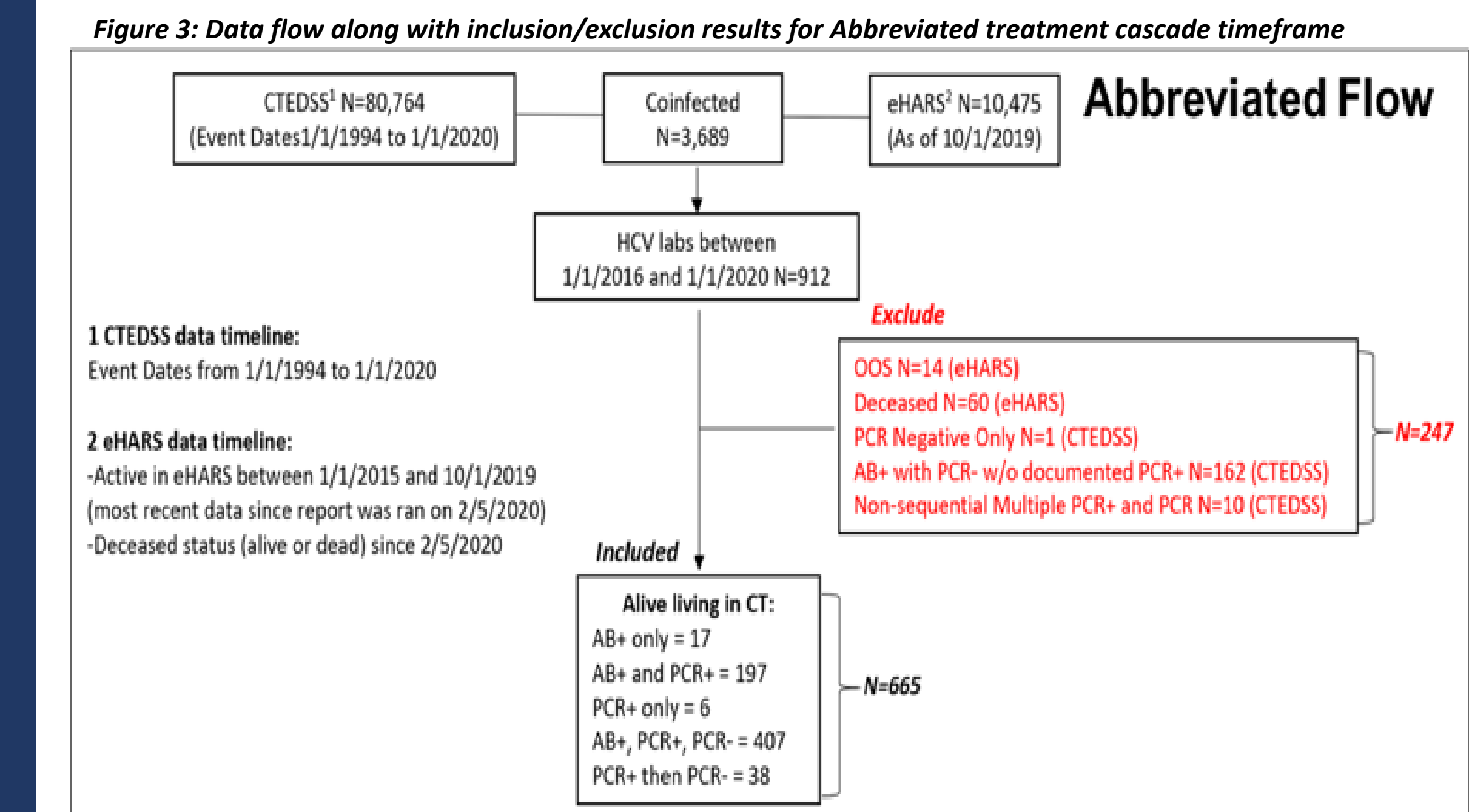
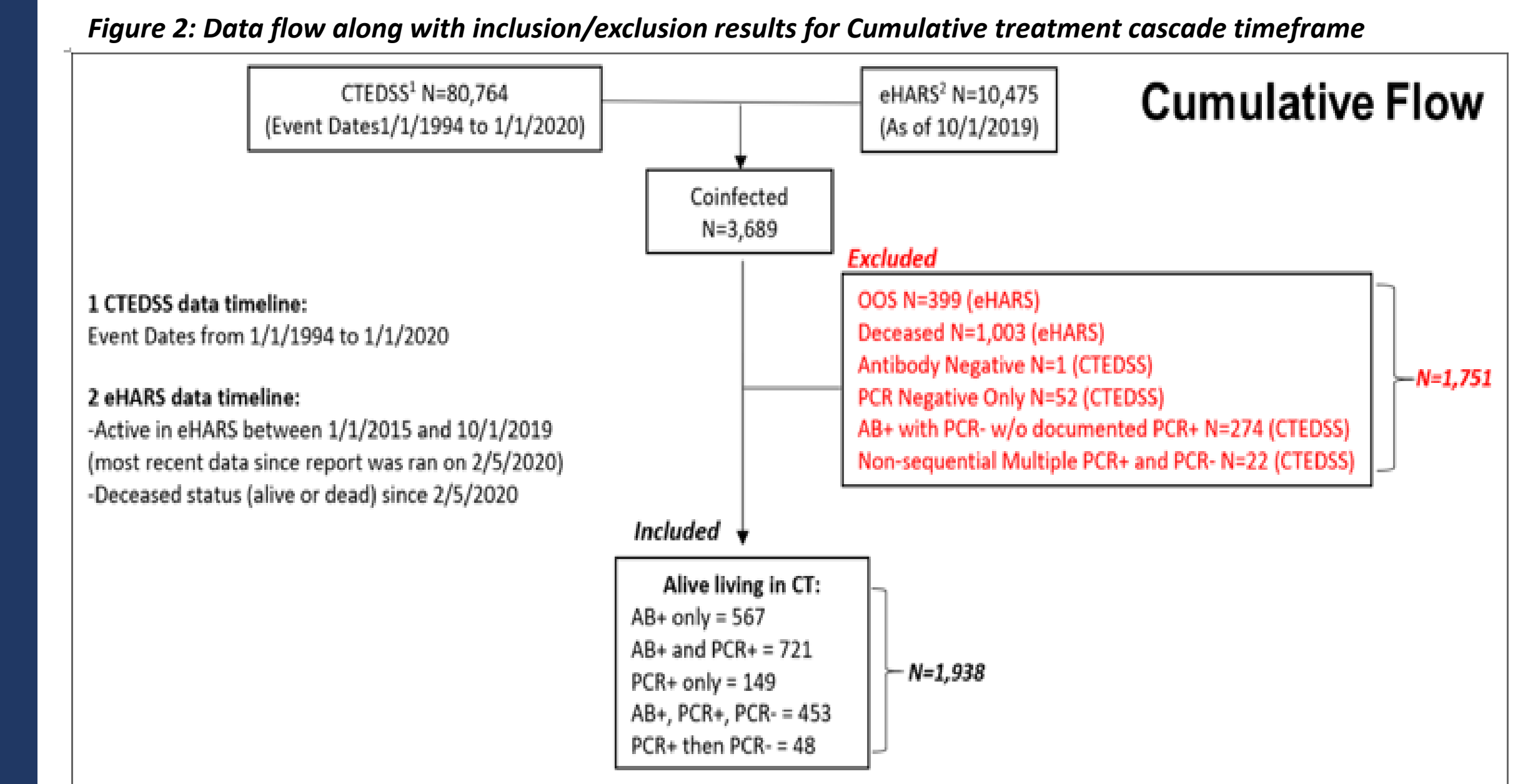
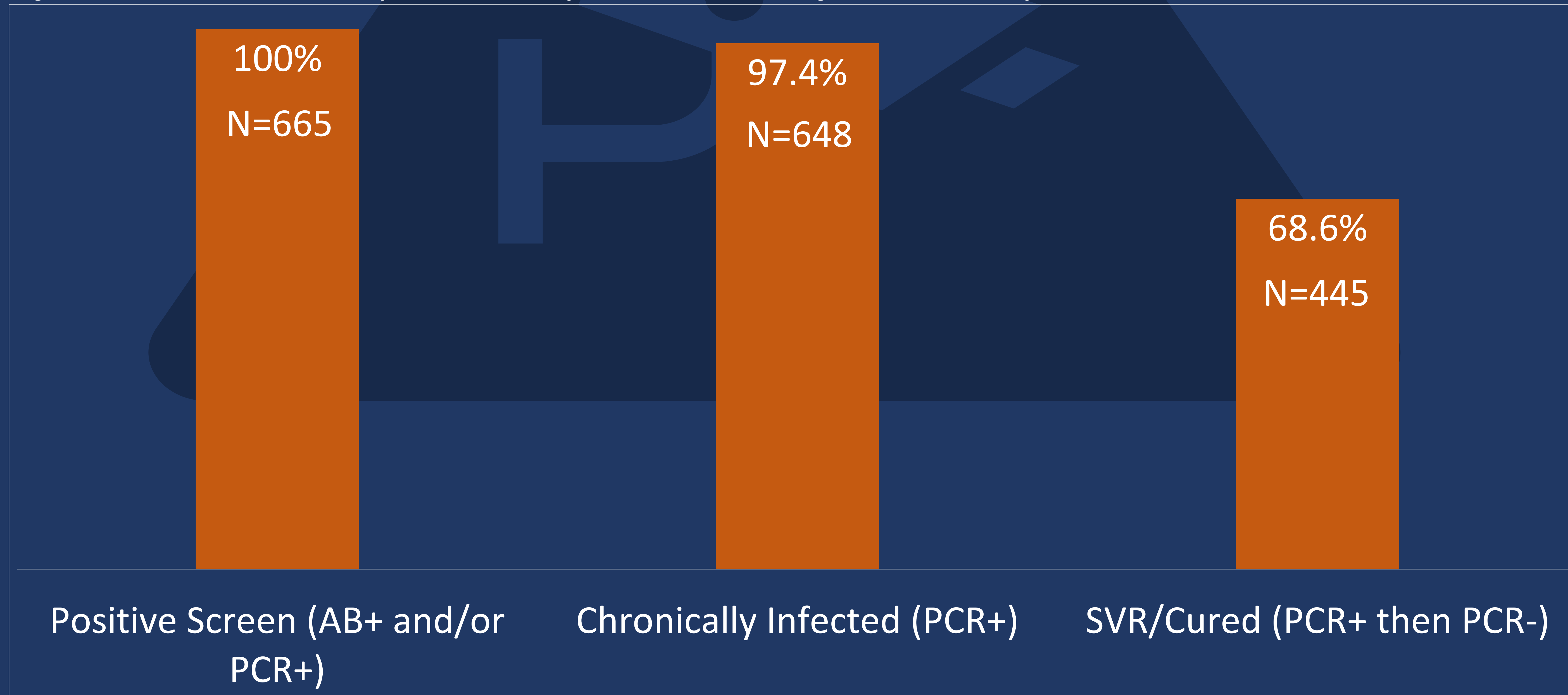


Figure 4: Comparison of HCV treatment cascade for HCV/HIV coinfectd individuals between abbreviated and cumulative timeframes

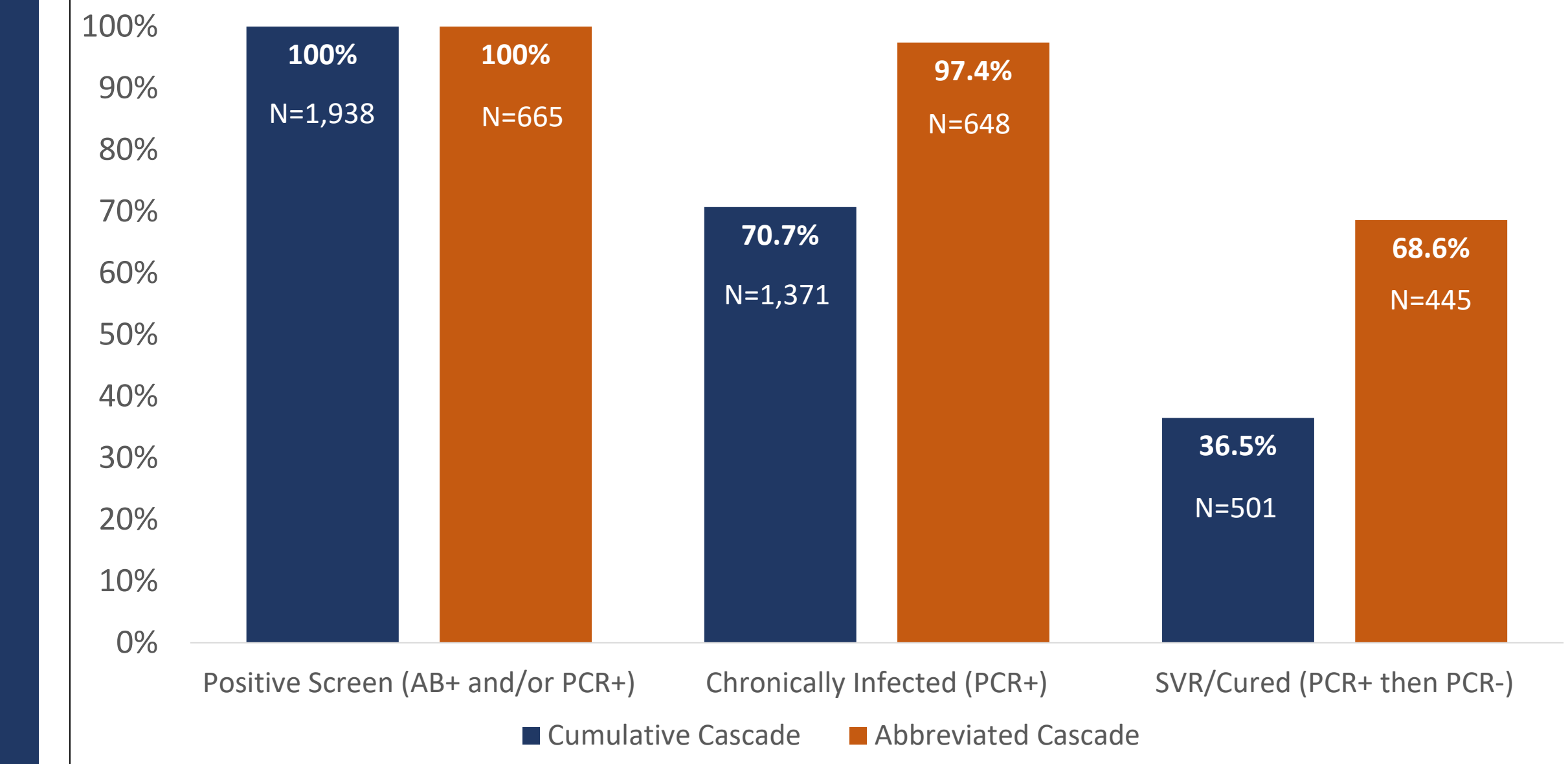


Table 2: Demographic breakdown and analysis of SVR vs Not SVR for Abbreviated cascade timeframe

Table with 6 columns: Variable, Categories, SVR (N=445), Not SVR (N=220), X^2 p-value, Odds Ratio (95% CI). Rows include Birth Cohort, Gender, Race/Ethnicity, HIV Transmission Mode, and HIV Viral Load Level.

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$2,300,000 with no percentage financed with nongovernmental sources.

DISCLAIMER: The Department of Public Health Human Investigations Committee approved this research project, which used data obtained from the Department of Public Health. The Department of Public Health does not endorse or assume any responsibility for any analyses, interpretations or conclusions based on the data.