

Mobile HCV Screening in At-Risk Urban Population Identifies Significant Fibrosis

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DeLIVER Care
MOBILE UNIT

Mobile HCV screening and fibrosis staging in at-risk communities identified 38% prevalence of HCV Ab+, with 27% having advanced fibrosis.

Table. Population Characteristics

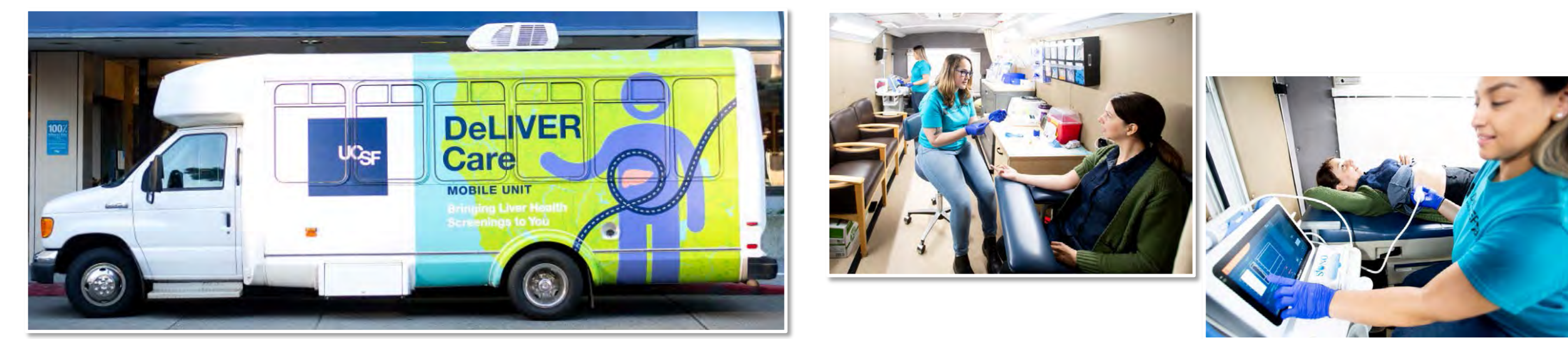
	HCV Ab- (N=348)	HCV Ab+ (N=209)	p-value
Age, year (Median, IQR)	52 (39, 61)	54 (45, 61)	0.17
Male gender	67%	67%	0.44
Sexual Orientation			0.53
Heterosexual	78%	81%	
Bisexual, Gay, Lesbian, Queer	18%	16%	
Other	5%	3%	
Race			0.01
African American	35%	27%	
White	33%	47%	
Hispanic	15%	9%	
Other	17%	16%	
Risk factor for HCV transmission			
Ever injection drug use	31%	88%	<0.001
Ever smoked crack or speed	66%	89%	<0.001
Current injection drug use	19%	57%	<0.001
Current non-injection drug use	49%	68%	<0.001
Incarcerated >24 hours	40%	76%	<0.001
MSM	9%	9%	1.00
HIV-positive	6%	7%	0.60
Born during 1945-1965	38%	45%	0.09
Receipt of blood products pre-1992	5%	4%	0.65
Not employed	79%	89%	0.003
Health insurance coverage			<0.001
Medi-Cal	65%	82%	
Medicare	13%	5%	
None	11%	6%	
Private	4%	1%	
Healthy San Francisco	4%	1%	
Other	4%	4%	
Housing status, most severe in past 12 months			0.03
Rent or own	18%	19%	
SRO or hotel	12%	20%	
Treatment or transitional housing	2%	1%	
Staying with a friend	4%	1%	
Shelter	13%	8%	
Outdoors or in a vehicle	51%	51%	

Background

- Most people living with hepatitis C virus (HCV) remain undiagnosed, impacting HCV elimination efforts.
- People living with HCV experience many barriers to care.
- Community-based HCV services may mitigate disparities in the HCV care cascade.
- We designed a mobile unit to bring HCV screening and liver fibrosis staging to at-risk communities in San Francisco.

Methods

- A university shuttle bus was furnished with a phlebotomy station, Fibroscan®430 Mini+ and clinical exam table

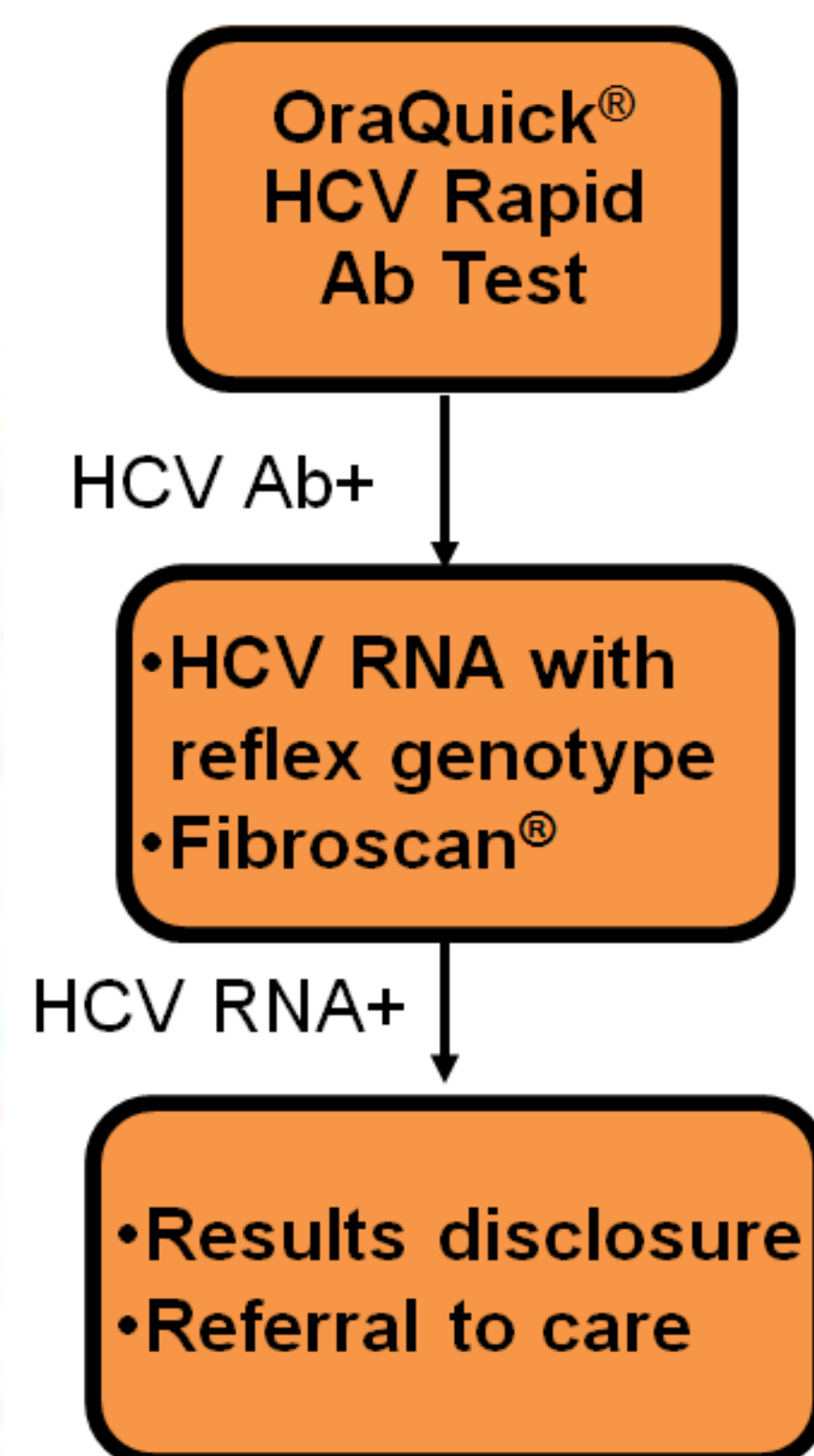


- HCV antibody (Ab) screening, confirmatory HCV RNA testing, and liver stiffness measurements (LSM) were performed at several locations in San Francisco (Figure 1)
- Significant fibrosis and advanced fibrosis were defined as liver stiffness measurement of ≥ 7.0 kPa and ≥ 9.5 kPa, respectively.

Figure 1. Screening locations and procedures

Screening settings:

- 1) Street outreach sites ★
- 2) Community events ★
- 3) Methadone Programs ★



Results

- From 1/17/2019-2/4/2020, 557 clients completed HCV Ab screening on the van at:
 - Street outreach sites (n=377, 68%)
 - Community events (n=53, 10%)
 - Outside methadone programs (n=127, 23%)
- Median age was 53 (IQR 42-61), 67% were male, 51% reported living outdoors or in a vehicle in the past year, and 6% were living with HIV (Table)
- 209 were HCV Ab+ (38%), although HCV Ab+ prevalence varied by screening location (Figure 2)
 - 160 (77%) had HCV RNA testing performed (Figure 3) and 61 (38%) of those tested were HCV RNA+
- 70 of the HCV Ab+ underwent LSM, including 35 HCV RNA+
 - 36 (51%) had significant fibrosis ($\geq F2$)
 - 19 (27%) advanced fibrosis ($\geq F3$)
 - Fibrosis prevalence was similarly high regardless of HCV RNA status.
- Among the 61 HCV RNA+
 - Most had health insurance (92%) and a PCP (62%)
 - 38 were referred to further HCV care, including 14 who have started HCV treatment on the van.

Figure 2. Rapid HCV Ab results by screening location

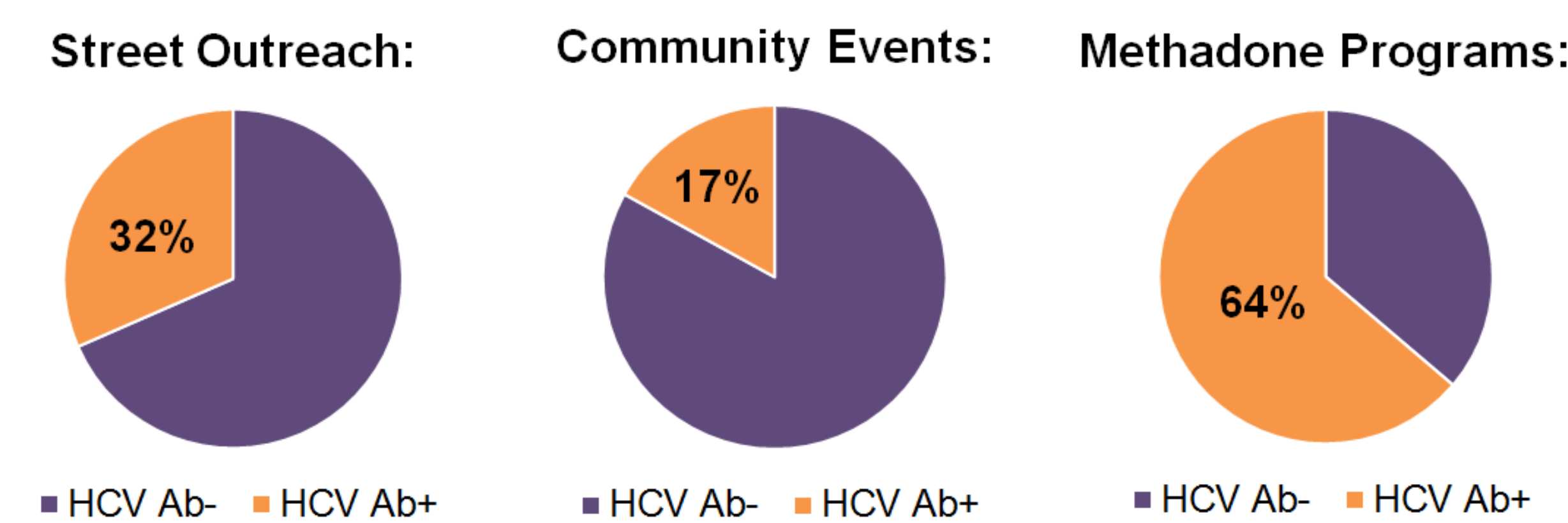
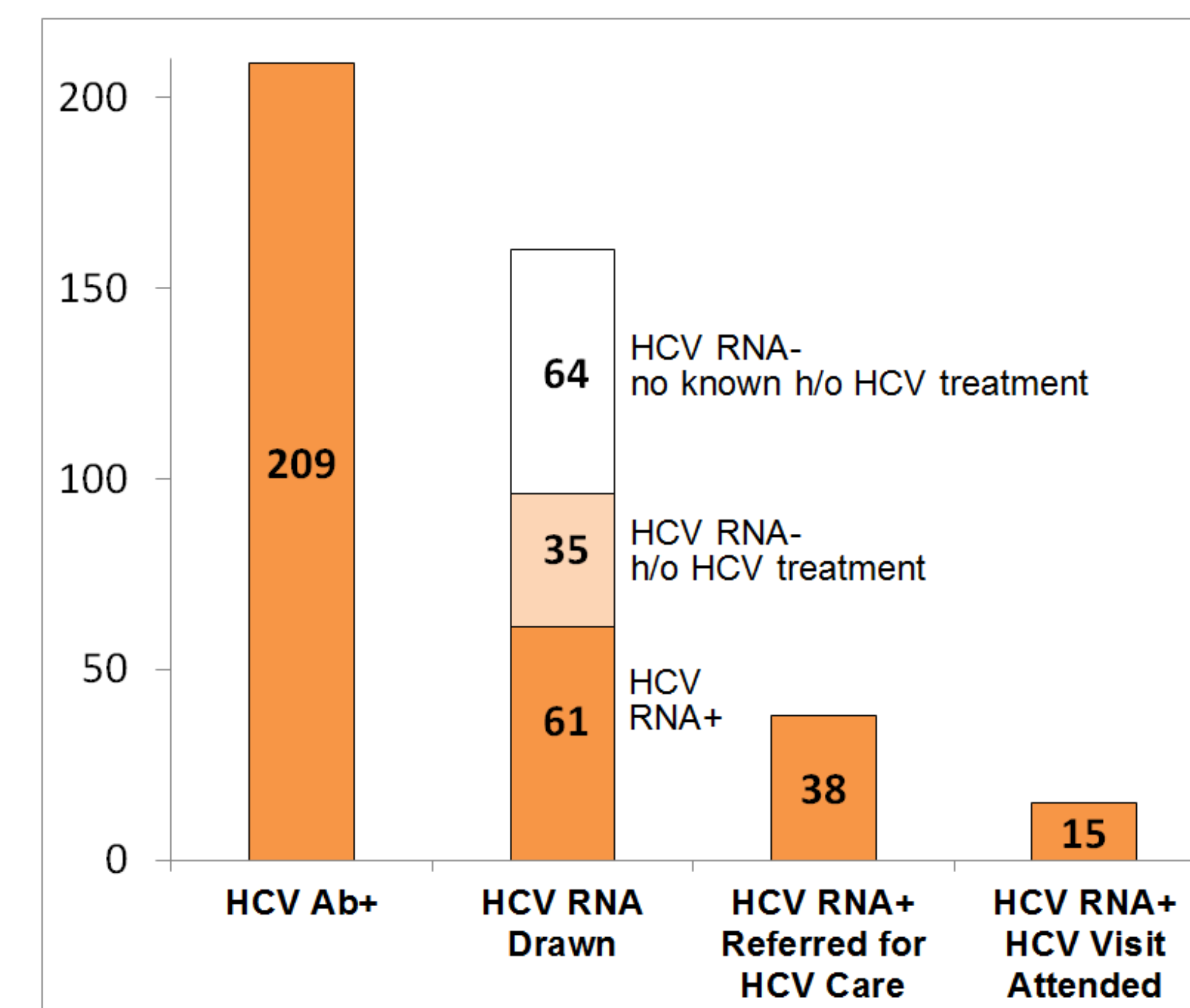


Figure 3. HCV Care Cascade for the HCV Ab+



Conclusions

- HCV screening on a mobile van throughout San Francisco demonstrated a high prevalence of HCV Ab+ (38%) among high-risk groups, with one-fourth having advanced fibrosis.
- Despite the majority having insurance and a PCP, 38% of the HCV Ab+ had active HCV viremia.
- **This underscores the need for heightened efforts to improve HCV treatment access to high-risk groups and has motivated a program offering HCV treatment on the mobile unit.**

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