



Analysis of an Automated Letter HCV Screening Program within a Veterans Affairs Health System: Implications for Universal HCV Screening

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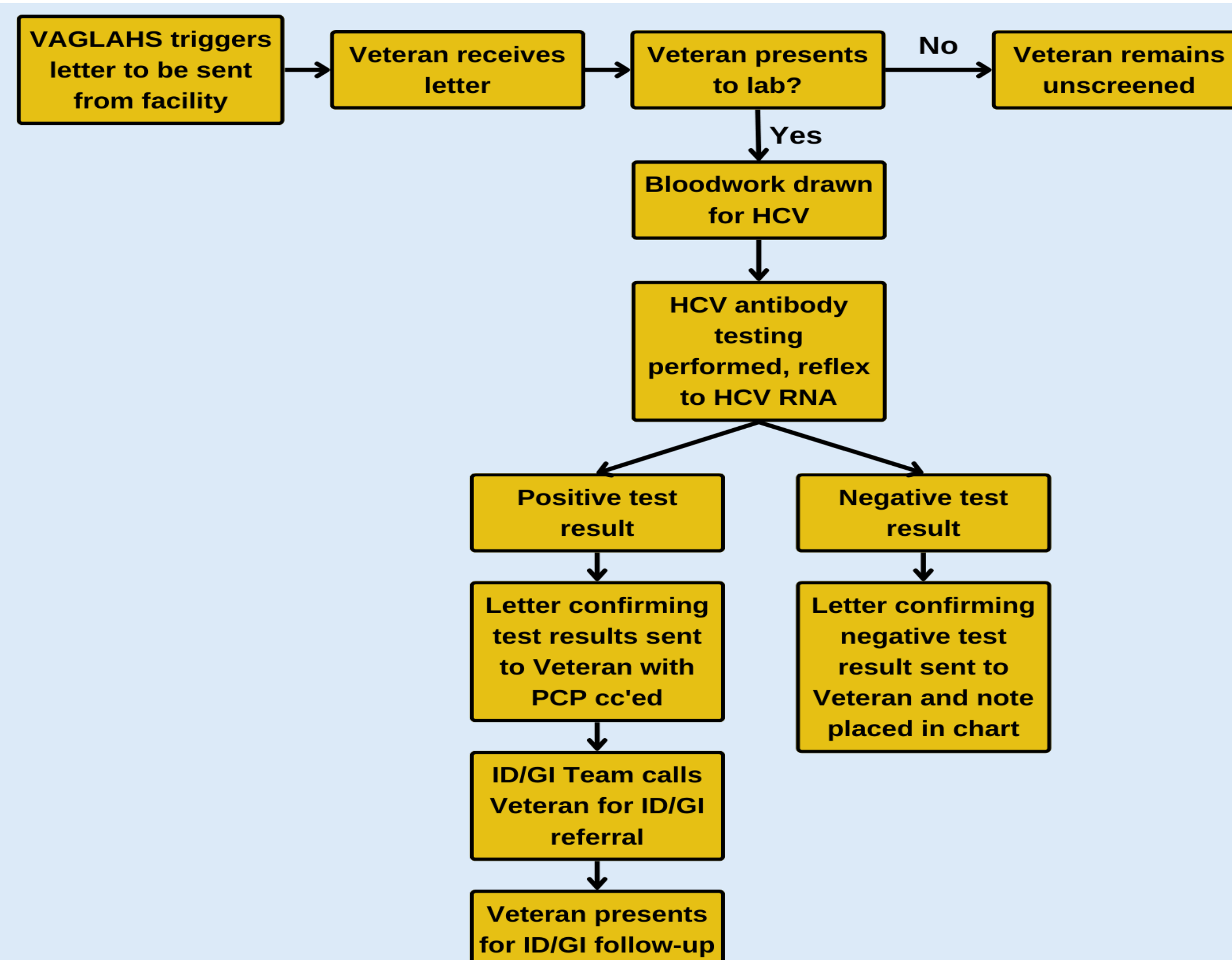
Background

- Universal HCV screening was recommended in the U.S. in 2020
- Optimal implementation method of universal HCV screening is unknown
- The objective of this study is to evaluate the efficacy of an automated letter screening program at the Veteran's Affairs (VA) Greater Los Angeles Healthcare System (VAGLAHS) and evaluate associations with linkage to HCV care

Methods

- From January 2017 to May 2020, Veterans within the VAGLAHS and born between 1945-1965 (birth cohort) were identified if no HCV antibody result within the last 10 years
- Veterans could present their letter to a VA laboratory for HCV Ab testing, including reflex HCV viral load
- Those with HCV viremia were referred to ID/GI clinics for initiation of HCV treatment where baseline characteristics were collected
- The first HCV visit was defined as the first clinical visit to ID or GI specialty clinic for evaluation and/or treatment
- Independent chi-square tests were performed to determine associations with linkage to care

HCV Screening and Linkage to Care Process:



Results

Table 1: Efficacy of Birth Cohort Letter Screening Program

Year	# letters mailed	#HCV Ab tested	# positive HCV Ab	# positive HCV VL	% HCV viremic (of HCV Ab positive)	% HCV viremic (of all letters mailed)
2017	2478	1332	34 (2.5%)	10	29.4%	0.40%
2018	6276	1741	80 (4.6%)	42	52.5%	0.67%
2019	2482	833	44 (5.3%)	14	31.8%	0.56%
2020	1639	105	9 (8.6%)	3	33.3%	0.18%
Total	12,875	4,011	167 (4.2%)	69	41.3%	0.54%

- 12,875 Veterans were identified, and **4,011 (31%) Veterans presented for HCV Ab testing**
- 4.2% of those who tested were HCV antibody positive
- 41.3% of those who were HCV antibody positive were HCV viremic

Results

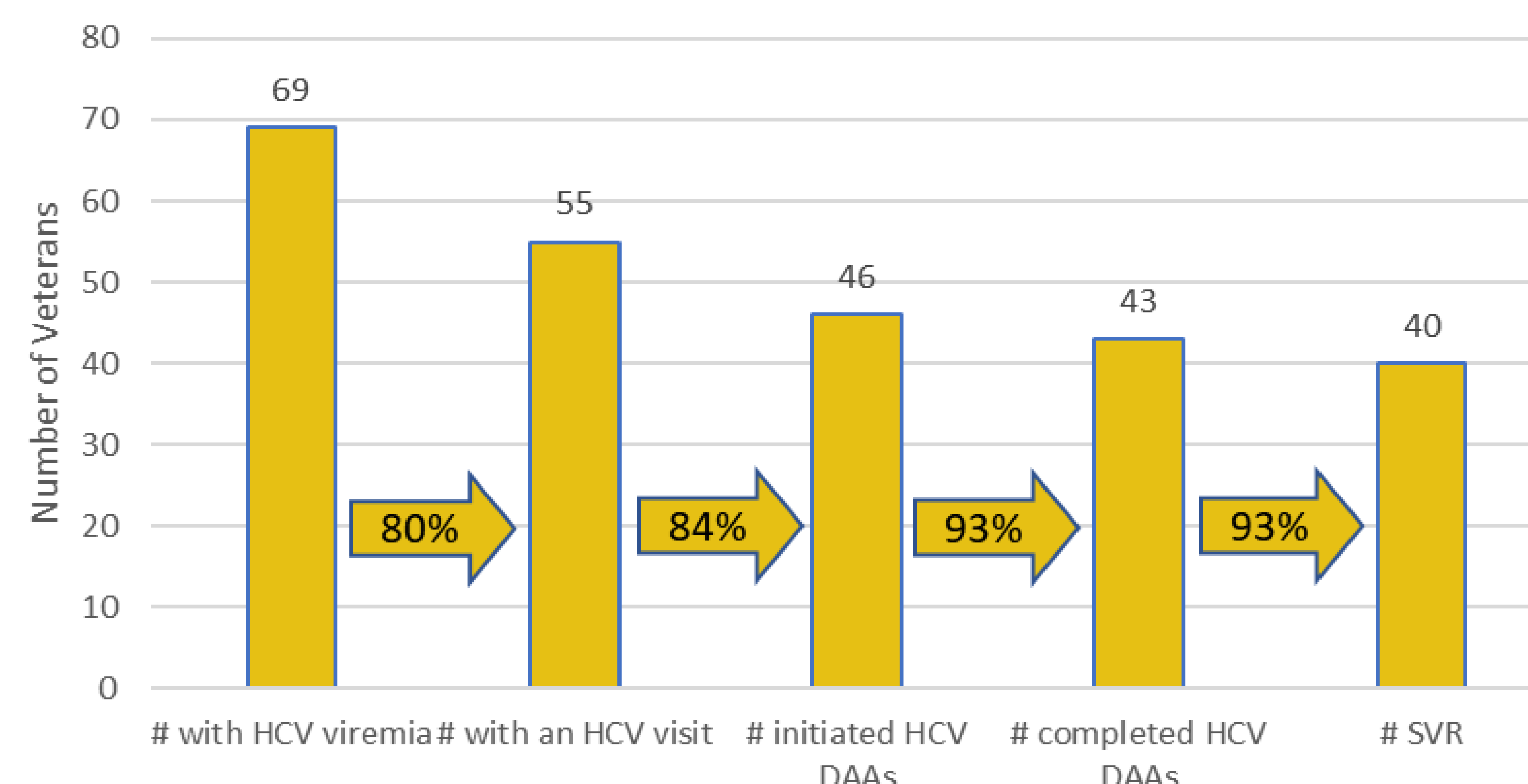
Table 2: Baseline Characteristics of HCV Viremic Veterans (N=69)

	Median [IQR] or N (%)
Age (years)	63 [60, 65]
Male	65 (94.2)
Race/Ethnicity	
White	34 (49.3)
African American	18 (26.1)
Other	17 (24.6)
Housing Status	
Stable Housing	43 (62.3)
Other	26 (37.7)
Patient Distance from WLA VA (miles)	27.9 [11.71, 93.75]
Cirrhosis	12 (17.4)
Opioid Use Disorder	7 (10.1)
Alcohol Use Disorder	20 (29.0)
HCV Genotype	
Genotype 1	42 (60.9)
Genotype 3	12 (17.5)
Other	15 (21.8)
Treatment Naïve	65 (94.2)

Race/ethnicity 'Other' includes those who identified as Multiracial or Native Hawaiian or other Pacific Islander (n=2), and included those who declined to answer (n=15)
HCV Genotype 'Other' includes those who did not obtain results or whose results are pending

- Median age was 63 years,
 - majority were male (94.2%),
 - almost half (49.3%) were White
 - 26.1% were African American
- Median patient distance from VA clinic was 27.9 miles, 24% lived >90 miles from nearest VA clinic
- Majority had stable housing (62.3%), 17.4% had cirrhosis, and 10.1% had an opioid use disorder

Cascade of HCV Care



Results

Cascade of HCV Care:

- Of 69 Veterans with HCV viremia identified, 80% attended a first HCV visit
- 84% of those who with a first HCV visit initiated HCV DAAs
- 93% of those who initiated DAAs completed the regimen
- 93% of those who completed DAAs made it to SVR

Table 3: Proportion of HCV Viremic Veterans Attending First HCV Visit (N=69)

	Attended first visit	Did not attend first visit	P-Value
	Median [IQR] or N (%)	Median [IQR] or N (%)	
Age (years)	63 [59, 65]	63 [60, 65]	0.47
Male	51 (73.91)	14 (20.29)	0.30
Race/Ethnicity			0.80
White	26 (37.68)	8 (11.59)	
African American	15 (21.74)	3 (4.35)	
Other	14 (20.29)	3 (4.35)	
Housing Status			0.02
Stable	38 (55.07)	5 (7.25)	
Other	17 (24.64)	9 (13.04)	
Patient Distance from WLA VA (miles)	24.64 [9.47, 85.71]	61.51 [15.79, 97.29]	0.06
Cirrhosis	12 (17.39)	0 (0.00)	0.05
Opioid Use Disorder	4 (5.80)	3 (4.35)	0.49
Alcohol Use Disorder	17 (24.64)	3 (4.35)	0.12

Race/ethnicity 'Other' includes those who identified as Multiracial or Native Hawaiian or other Pacific Islander (n=2), and included those who declined to answer (n=15)

- Housing status and cirrhosis were associated with linkage to first HCV visit
- Living at a greater distance to clinic trended towards an association with non-linkage to first HCV visit

Conclusions

- One third of Veterans in the birth cohort approached via mail participated in HCV Ab testing
- In this cohort, overall HCV Ab positivity rates were 4% and nearly half had HCV viremia
- Majority of Veterans were linked to care but housing status and cirrhosis were associated with linkage to first HCV visit. Distance from clinic trended towards non-linkage to care.
- Automated letter screening may be an important implementation tool for universal HCV screening
- Methods to facilitate remote evaluation and therapy, i.e telehealth and e-consults will be important for those with marginalized housing status and other barriers to care.

Acknowledgments

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References

1. "HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C." Recommendations for Testing, Managing, and Treating Hepatitis C | HCV Guidance, American Association for the Study of Liver Disease (AASLD), <https://www.hcvguidelines.org/>.