

Erin Mandel, MPH¹, Mia J. Biondi, NP PhD^{2,3}, Margaret Maheandiran⁴, Elizabeth Hollingdrake⁴, Aaron Vanderhoff², Brett Wolfson-Stofko², Camelia Capraru², Jordan J. Feld, MD MPH^{1,2,5}, Renee Logan, MD³

¹Toronto Centre for Liver Disease, University Health Network, Toronto, ON, Canada. ²Viral Hepatitis Care Network (VIRCAN) Study Group, Toronto Centre for Liver Disease, Toronto, ON, Canada. ³York University Faculty of Nursing, Toronto, ON, Canada. ⁴Centre for Addiction and Mental Health, Toronto, ON, Canada. ⁵Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada.

BACKGROUND

- Psychiatry inpatients experience high HCV infection rates and barriers to care
- Outpatient follow-up after discharge is associated with very high loss to follow-up (~75%)
- On-site hospitalists could effectively manage HCV as non-specialists¹ but awareness and training for HCV treatment among hospitalists is low

OBJECTIVE

- Evaluate inpatient HCV testing and treatment at Canada's largest mental health institution, the Centre for Addiction and Mental Health in Toronto.

METHODS

- De-identified data were extracted from the Centre for Addiction and Mental Health electronic medical record for HCV testing (Ab and RNA) and treatment from January 2017 to May 2021 for individuals with serious mental illness in forensic and non-forensic inpatient units.
- Test volumes and trends were identified.
- Patient care pathways were mapped and evaluated.

RESULTS

Table 1. Cohort Demographics

Total Cohort	1031		
Proportion by Unit Type	Forensic: 609 (59%)	Non-Forensic: 422 (41%)	
Age & Sex	Average Age: 44 years	Male: 753 (73%)	
Total Admissions	1344		
Admissions per Year	209		
Admissions per Individual	1.3 (Range: 1-6)		
Average Length of Stay	11.4 months (Range: 5 months to 24 years) 95% CI 9.7 months to 1.1 years		
Schizophrenia Spectrum and Other Psychotic Disorders Diagnoses	Total Cohort: 856 (83%)	Forensic: 499 (82%)	Non-Forensic: 363 (86%)

Figure 1. HCV Ab Screening Trends

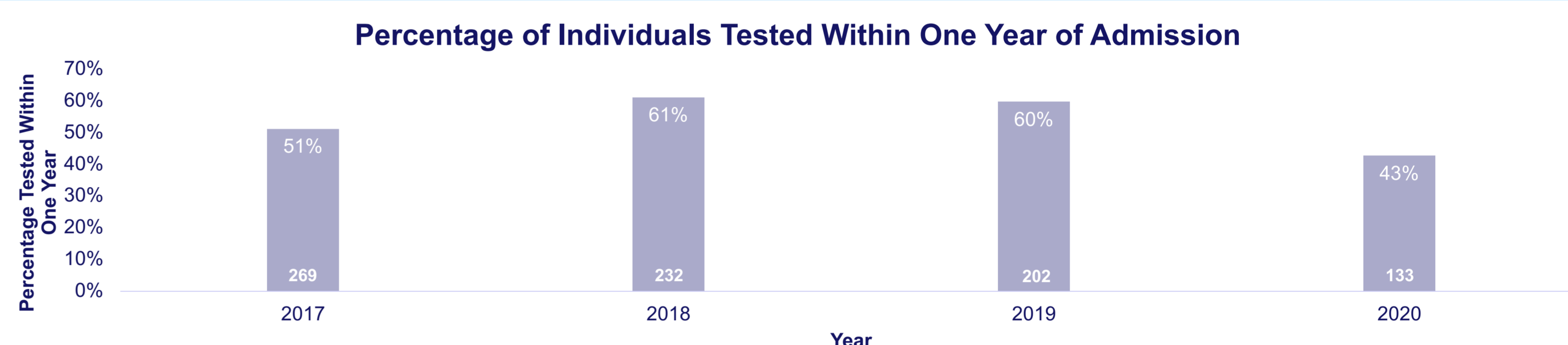


Table 2. HCV Ab Screening Trends and HCV Ab Positivity

Total Individuals Screened	652 (63%)		
Screening by Unit Type	Forensic: 450 (74%)	Non-Forensic: 202 (48%)	
Tests per Person by Unit Type	Forensic: 1.2 (Range: 0-8)	Non-Forensic: 0.8 (Range: 0-10)	
Average Proportion of Inpatients Screened Each Year	65%		
Average Proportion Screened in the Same Year as Admission	54%		
Proportion Screened within 3 Months of Admission by Unit Type	Forensic: 221 (49%)	Non-Forensic: 57 (28%)	
Total HCV Ab Positive Individuals	32		
HCV Ab Positivity	4.9%		
HCV Ab Positive Individuals by Unit Type	Forensic: 22 (4.9%)	Non-Forensic: 10 (5%)	
Age & Sex	Average Age: 47 years	Male: 20 (63%)	
Admissions	Total: 45	Average Length of Stay: 1.84 years	
Psychiatric Diagnoses of HCV Ab Positive Individuals	Schizophrenia Spectrum & Other Psychotic Disorders: 25 (78%)		
	Substance-Related & Addictive Disorders: 8 (25%)		
	Bipolar & Related Disorders: 6 (19%)		
	All Others: <10%		

Figure 2. Time to HCV RNA Testing and Time to Treatment Initiation

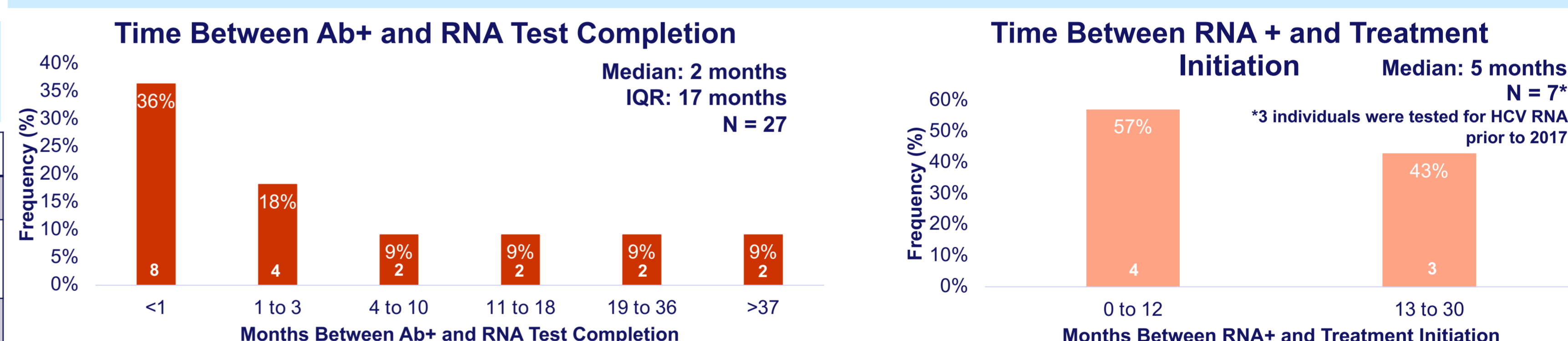


Figure 3. CAMH Inpatient HCV Cascade of Care

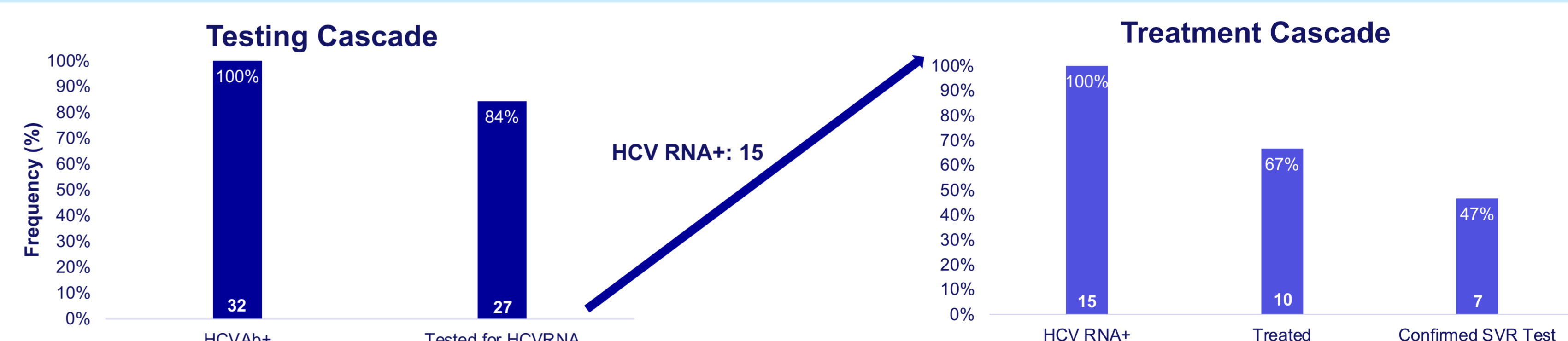
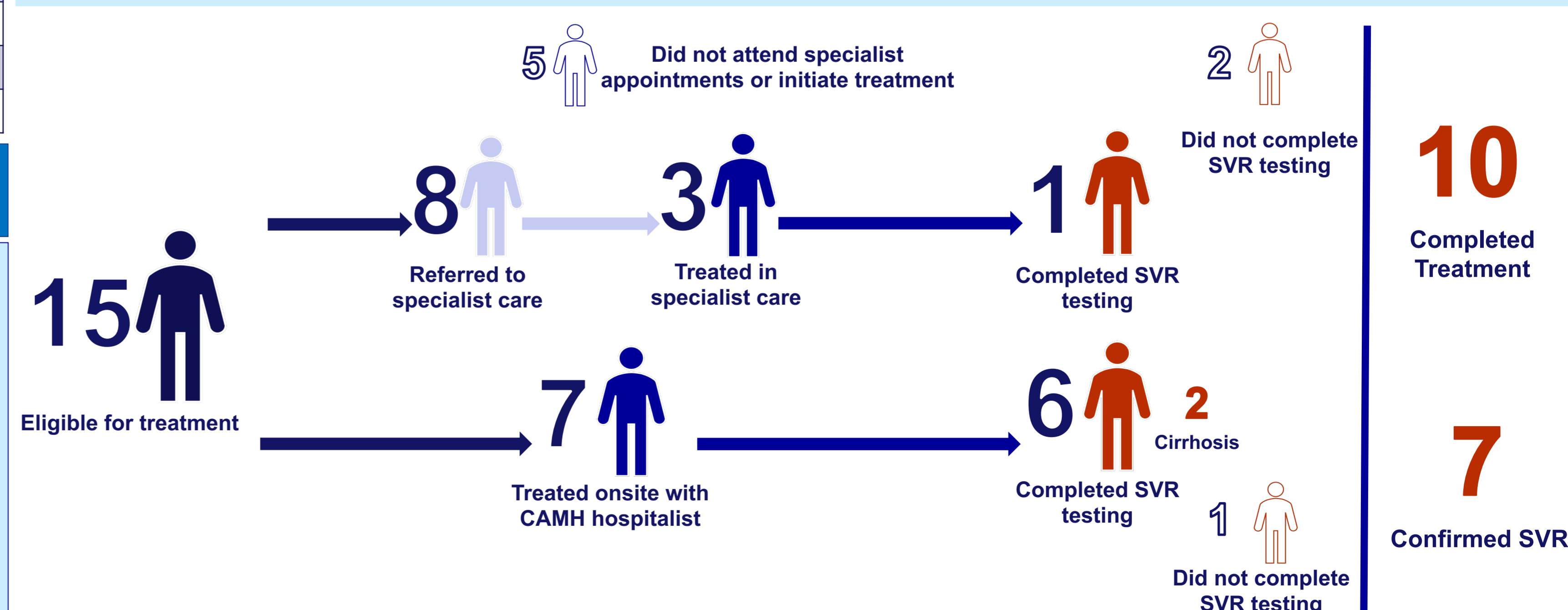


Figure 4. CAMH Inpatient HCV Care Pathways and Outcomes



CONCLUSIONS

- There was a high prevalence of HCV in this inpatient population. HCV Ab+ individuals were admitted for longer than the general cohort, enough time for all steps in the care and treatment cascade.
- Shortening the time between steps, and increasing hospitalist awareness and confidence in HCV management are attainable quality improvement goals for this setting that will improve progression to confirmation of SVR.
- Progression through the cascade of care to confirmation of SVR was better when hospitalists provided treatment.**

ACKNOWLEDGEMENTS

We would like to acknowledge the Viral Hepatitis Care Network and Centre for Addiction and Mental Health for their assistance and support of this work.

1. S. Kattakuzhy et al., *Ann Intern Med.* 2017