



# Barriers to Hepatitis C Treatment Persist from the Interferon-Era

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## Background

- Approximately 53% of people who inject drugs will acquire hepatitis C virus within 5 years<sup>1</sup>. Globally, an estimated 10 million people who use drugs have been exposed to HCV<sup>2</sup>.
- During the interferon-era, there were significant barriers to HCV treatment, especially for patients who use drugs.
- With the introduction of direct acting antivirals (DAAs), HCV cure rates have improved, but there may be continued barriers to treatment for patients with substance use disorder (SUD).

## Objectives

- To evaluate disparities in antiviral treatment for patients with HCV at the West End Clinic, a clinic for patients with concurrent substance use and psychiatric disorders.
- To follow Hepatitis C outcomes in a single cohort through both the pre-DAA and post-DAA eras, in a jurisdiction (Boston, Massachusetts, USA) where most insurers do not impose restrictions based on fibrosis or substance use.

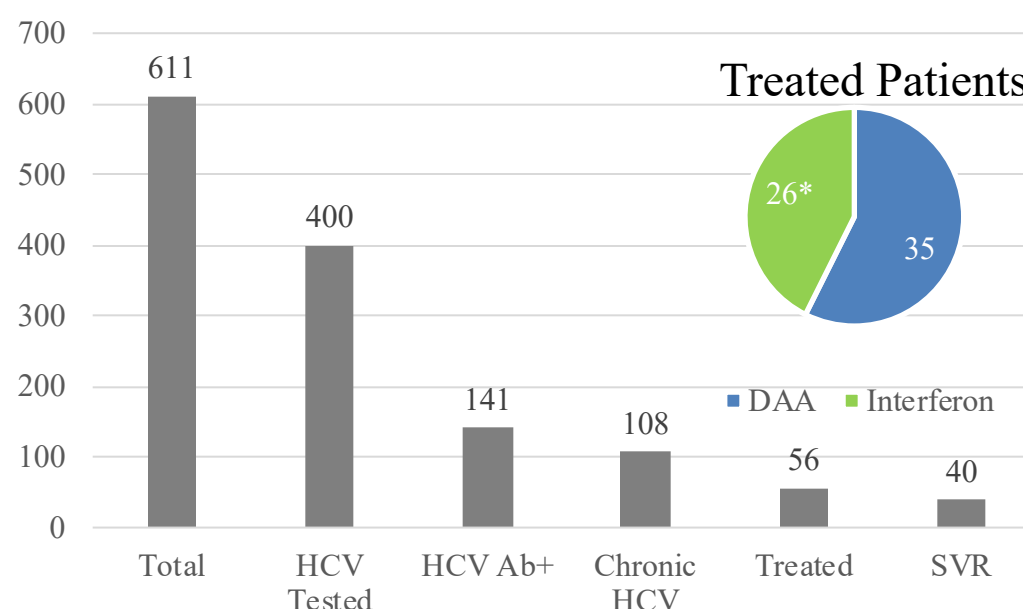
## Methods

- The West End Clinic provides SUD care for patients with primary care at MGH, allowing integrated review of HCV treatment access.
- Out of 611 consecutive patients who underwent intake at the West End Clinic from 2008-2010, 141 were diagnosed with HCV and followed before and after the onset of the DAA era (in January 2014).
- Descriptive statistics were calculated and logistic regression analysis was performed to determine predictors of HCV treatment.

## Results

| Demographics (n=141)    |          | Substances Used |       |
|-------------------------|----------|-----------------|-------|
| Age (mean)              | 50.6 yrs | Alcohol         | 95.7% |
| Male                    | 71.6%    | Cocaine         | 84.4% |
| White race              | 92.1%    | Marijuana       | 83.0% |
| Heterosexual            | 93.2%    | Heroin          | 79.4% |
| IVDU                    | 84.6%    |                 |       |
| History of homelessness | 31.4%    |                 |       |

HCV Cascade for Patients Followed through IFN and DAA Eras



\*5 patients failed interferon therapy and were re-treated with DAAs.

- SVR was attained in 42.3% of patients with IFN-based treatment and in 82.9% of patients treated with DAAs.
- Only 47.3% of HCV-positive patients actively followed during the DAA era received treatment.

Logistic regression was performed to compare those who received HCV treatment to those who did not:

- Predictors of HCV treatment included older age (OR=1.05, p=0.05).
- Predictors of a lack of HCV treatment included a history of IVDU (OR=0.08, p=0.02) and a history of homelessness (OR=0.30, p=0.05).

## Conclusion

- Despite access to specialists and few payor restrictions on antiviral treatment, only a minority of candidates for HCV treatment in a substance use clinic in Boston, MA, have received antivirals.
- Patients who were younger, currently or previously homeless, or had prior IVDU were less likely to receive HCV treatment.
- Although rates of SVR were higher with DAAs, barriers to HCV treatment during the interferon era persist into the DAA era.
- Barriers to hepatitis C antiviral treatment are multi-factorial and likely include lack of linkage to treatment, unstable housing, stigmatization of drug use, and provider bias<sup>3,4</sup>.
- Future efforts at HCV elimination in Boston, MA, should focus on overcoming barriers for these specific patient populations.

## References

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