MeRIT Project: Optimizing the Hepatitis C Cascade of Care in the Direct-Acting Antiviral Era

BACKGROUND
• Almost all patients with chronic hepatitis C virus (HCV) infection have a >90% chance of sustained virologic response (SVR) once treated with a direct-acting antiviral (DAA) regimen with or without ribavirin.
• Despite improved treatments for HCV, barriers remain in the HCV cascade of care, limiting the impact of DAAs therapy.
• A systematic review and meta-analysis of the HCV treatment cascade in the United States prior to the DAA era reported that of the 3.5 million people estimated to have chronic HCV:
  • Prescribed HCV treatment: 16%
  • Achieved SVR: 9%
• Estimates from the Centers for Disease Control and Prevention (CDC) Chronic Hepatitis Cohort Study (CHeCS) also prior to DAA era and estimated that of all patients estimated to have chronic HCV:
  • Received HCV treatment: 7.11% (220,000-360,000).
  • Completed HCV treatment: 5.6% (170,000-200,000).

AIMS

Aim 1: Frequency of Movement through the HCV Cascade of Care

Aim 2: Patient Characteristics within the HCV Cascade of Care

SIGNIFICANCE
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METHODS

METHODS (continued)

CONCLUSION
• The largest disparity in the HCV treatment cascade was at the treatment initiation step. Furthermore, identifying differences between patient groups who have historically been difficult to treat will help devise specific interventions targeted to improve care among these cohorts.

REFERENCES:

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Aim 1 Analysis
• Evaluate the primary endpoint of cascade completion in all patients with HCV referred to the VUMC ID clinic.
• Frequency distributions and descriptive statistics for independent variables will be used to describe the patients achieving the primary endpoint.
• Chi square test to compare the percent of completion across all stages of the cascade

Aim 2 Analysis
• Univariate analysis to identify differences between baseline characteristics and progression through the cascade of care
• Use logistic regression to compare patients with the characteristic of interest to those without predicting each stage separately, using baseline characteristics to adjust for confounders

EXAMPLE OF ANTICIPATED RESULTS