Treatment Metric

Objective

As one of the three primary metrics designed to track Hepatitis C Elimination, the treatment metric aims to monitor treatment and clearance of infection among individuals diagnosed with hepatitis C using reportable laboratory test results.

Background

The availability and accessibility of curative medications to treat hepatitis C has increased the number of people treated for this disease. Past and current clinical guidelines for treating hepatitis C have included conducting hepatitis C RNA testing at various points during and after initiation of treatment in order to ensure that treatment is working and/or that a patient has been cured.[1] A negative RNA result can indicate either treatment is working, a patient has been cured, or a patient has spontaneously cleared their infection without treatment. A patient is determined to be cured of hepatitis C if they have a negative RNA test result at least 12 weeks following the completion of treatment. In New York State (NYS), laboratory reporting guidelines require reporting of positive hepatitis C antibody test results, positive hepatitis C RNA results and, as of July 2014 in New York City and January 2016 statewide, negative hepatitis C RNA results. The collection of these results makes it possible to employ a laboratory test-based algorithm to monitor hepatitis C treatment and clearance of infection.

Methodology

The treatment metric will utilize patients' histories of hepatitis C laboratory results, as maintained in the Hepatitis Elimination and Epidemiology Dataset (HEED), a statewide registry of individuals with a history of or current hepatitis C. An algorithm will be applied to the record of laboratory results in order to identify individuals who have had a positive hepatitis C RNA or genotype test, followed by one or more additional negative RNA tests, without any subsequent positive RNA tests.

The algorithm's application to the HEED data will be the primary means by which treatment and clearance will be tracked. Because patients are not always tested for hepatitis C RNA at the recommended intervals, and because negative hepatitis C RNA results were not always reported prior to 2016, this laboratory test-based measure of treatment and clearance may underestimate the number of patients who have been successfully treated. Matches between HEED and other sources of hepatitis C treatment data will be conducted to more fully measure treatment over time.

Treatment Metric Outcome Measure

Primary Outcome Measure: Number of individuals who initiated treatment for Hepatitis C in NYS		
Measure specification	*Definition*	*Monitoring*
Number of individuals with laboratory evidence of treatment for, or spontaneous clearance of, hepatitis C infection	Number of individuals with positive RNA test **OR** genotype test followed by a subsequent RNA negative report	Baseline: 2016 Frequency: Annual

1. American Association for the Study of Liver Disease and Infectious Diseases Society of America. HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. https://www.hcvguidelines.org