

# Improving appropriate vaccination of Hepatitis A in non-immune patients who are being treated for Hepatitis C at the Center for Family Medicine

Katie Lockhart MD, Jessica Bloom-Foster MD, Stephanie McCullough MD



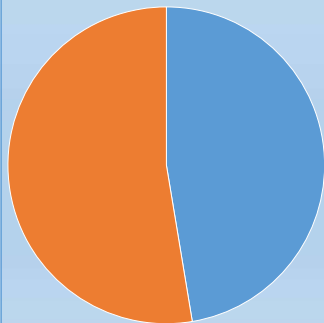
## Introduction

Individuals who have contracted hepatitis C (HCV) share risk factors for also acquiring hepatitis A (HAV). Acute HAV superinfection in a patient with HCV can lead to fulminant hepatic failure and a higher risk of mortality. Recommended initial laboratory testing in patients diagnosed with hepatitis C includes testing for hepatitis A immunity, with hepatitis A antibody. If patients are non-immune, then according to the Hepatitis C guidelines from the American Association for the Study of Liver Diseases (AASLD) and Infectious Diseases Society of America (IDSA), vaccination against hepatitis A is recommended for all persons with HCV infection.

## Defined Project Aim

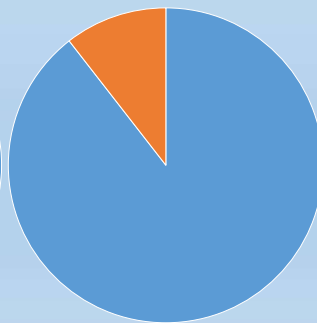
The aim is to improve the percentage of patients being treated for Hepatitis-C at the Center for family Medicine who are appropriately vaccinated for Hepatitis A, with a goal vaccination rate of 90% in the next 90 days

Chart 1: Current Vaccination Rate



■ Previously non-immune, now vaccinated  
■ Unvaccinated non-immune

Chart 2: Goal Vaccination Rate



■ Previously non-immune, now vaccinated  
■ Unvaccinated non-immune

## Methods

Patient population to be evaluated includes patients beginning treatment for chronic hepatitis C at the Center for Family Medicine. Specifically, all patients prescribed treatment in the 2 years prior to, compared to the 90 days after the intervention.

### Data collection plan

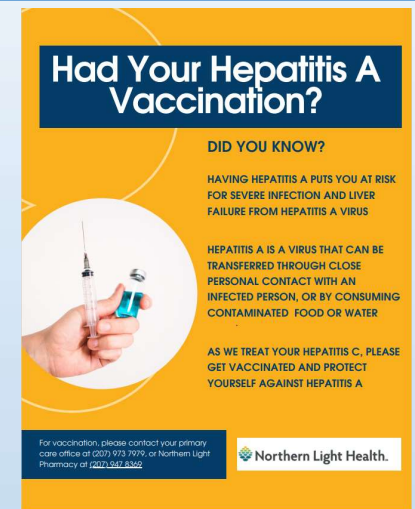
1. A baseline performance rate will be established with a list of patients who began treatment for hepatitis C at the Center for Family Medicine in the past 2 years. All 27 patients treated by CFM pre-intervention will be included.
2. Chart review will be completed on these patients to determine if patients who were non-immune to hepatitis A (i.e., negative hepatitis A antibody as part of their initial pretreatment work up) were appropriately vaccinated for hepatitis A. If available, a report generated by HealthEAnalytics software will be used to simplify data extraction and/or confirm chart review accuracy.
3. After 90 days following implementation of the intervention, chart review (and/or report generation with HealthEAnalytics) will be performed again to determine if each patient was appropriately vaccinated for Hepatitis A. It is estimated that 10-15 charts will be reviewed.
4. The percentage of people vaccinated in the pre and post intervention groups will be compared to see if the intervention resulted in improved vaccination rates and the project aim has been met.

Intervention: All new prescriptions for Hepatitis C prescribed by the Center for Family Medicine will have a patient education handout mailed along with the medication. This handout will provide education on the importance of vaccination, and advise the patient to present to a Northern Light Pharmacy to receive the immunization. A standing order is already in place for this immunization to be given.

## Primary Outcome

Change in percentage of patients being treated for chronic Hepatitis C who were appropriately vaccinated against Hepatitis A within the intervention period (90 days).

Picture 1: Patient education handout on importance of Hepatitis A vaccination and how to obtain immunization



## Results

Baseline data revealed that 19 patients had been non-immune to Hepatitis A at the time of initiation of treatment for Hepatitis C. Of these patients, 9 were subsequently appropriately vaccinated, giving a baseline vaccination rate of 47% (Chart 1)

Intervention took place April 1<sup>st</sup>, data will be reviewed again 90 days after intervention (June 30<sup>th</sup>)

## Disclosures

- This project was undertaken as quality initiative; as such it was not formally submitted to or supervised, reviewed, or approved by the Northern Light Eastern Maine Medical Center Institutional Review Board.
- None of the authors for this presentation have relevant financial relationship(s) to disclose with ineligible companies.

## References

- Hepatitis-C guidance 2018 Update: AASLD-IDSA recommendations for testing, managing and treating hepatitis-C virus infection, Clinical Infectious Diseases, 2018