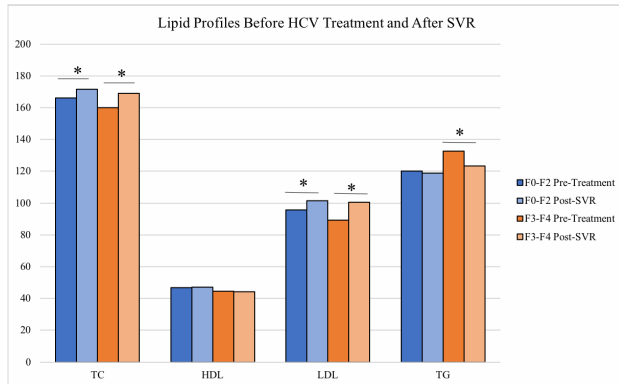


Figure 1. Mean lipid profile parameters before and after HCV treatment for patients who achieved SVR. TC was measured a mean of 8.1 months (228 days, SD 333 days) before treatment and 17.4 months (488 days, SD 196 days) after SVR. LDL was measured a mean of 8 months (224 days, SD 284 days) before treatment and 17.5 months (492 days, SD 201 days) after SVR. \* = differences in means using paired t-test were statistically significant with  $p < 0.05$ . HCV = Hepatitis C Virus, SVR = Sustained Virologic Response TC = Total Cholesterol, HDL = High Density Lipoprotein, LDL = Lipoprotein, TG = Triglycerides.



**Conclusion.** In a cohort of mostly Black HCV-infected Veterans, significant increases in TC, driven by increases in LDL, were seen after SVR regardless of fibrosis stage. In addition, patients with ALD and HIV or DM2, who have an inherently higher risk of CVD, had increased LDL levels, suggesting that these patients should be screened and treated for HCV prior to development of ALD. Correlates such as the ASCVD score should be considered in the timing of HCV treatment, in order to reduce the long-term risk of CVD.

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#### 1068. Large-Scale Migration and the Changing Viral Hepatitis Prevalences in North America: A modeling approach

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**Session:** P-48. Hepatitis

**Background.** Infection by hepatitis B and C viruses causes inflammation of the liver and can lead to cirrhosis, liver failure, and hepatocellular carcinoma. The WHO's ambition to eliminate viral hepatitis by 2030 requires strategies specific to the dynamic disease profiles each nation faces. Large-scale human movement from high-prevalence nations to the United States and Canada have altered the disease landscape, likely warranting adjustments to present elimination approaches. However, the nature and magnitude of the new disease burden remains unknown. This study aims to generate a modeled estimate of recent HBV and HCV prevalence changes to the United States and Canada due to migration.

**Methods.** Total migrant populations from 2010-2019 were obtained from United Nations Migrant Stock database. Country-of-origin HBV and HCV prevalences were obtained for the select 40 country-of-origin nations from the Polaris Observatory and systematic reviews. A standard pivot table was used to evaluate the disease contribution from and to each nation. Disease progression estimates were generated using the American Association for the Study of the Liver guidelines and outcome data.

**Results.** Between 2010 and 2019, 7,676,937 documented migrants arrived in US and Canada from the selected high-volume nations. Primary migrant source regions were East Asia and Latin America. Combined, an estimated 878,995 migrants were HBV positive, and 226,428 HCV positive. The majority of both migrants (6,477,506) and new viral hepatitis cases (HBV=840,315 and HCV=215,359) were found in the United States. The largest source of HBV cases stemmed from the Philippines, and HCV cases from El Salvador.

**Conclusion.** Massive human movement has significantly changed HBV and HCV disease burdens in both the US and Canada over the past decade and the long-term outcomes of cirrhosis and HCC are also expected to increase. These increases are likely to disproportionately impact individuals of the migrant and refugee communities and screening and treatment programs must be strategically adjusted in order to reduce morbidity, mortality, and healthcare expenses.

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#### 1069. Loss to follow-up does not impact SVR for HCV infection

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**Session:** P-48. Hepatitis

**Background.** Recent advances in hepatitis C treatment using direct acting antiviral (DAA) agents can lead to sustained virologic response (SVR) in almost all treated

subjects. These data along with the availability of generic DAAs have generated optimism to eliminate HCV infection globally. However, recent pilot projects aimed at HCV elimination have resulted in disappointing SVR due to lack of follow up of patients after they complete treatment. In this study, we evaluated the SVR among those who did not follow up for the 12 week post treatment visit versus that of those who did,

**Aim -** To determine SVR among those who follow up compared to those who have delayed follow up to assess SVR.

**Table**

Parameter	Group A (N=137)	Group B (N=89)
Mean Age (in years)	55 ± 11.95	54 ± 12.78
Sex (%)	47	43
Baseline ALT (IU/ml)	68.9 ± 4.8	68.7 ± 5.9
Cirrhosis (%)	27	33
Baseline Fibrosis Score (kPa)	3.82 ± 0.44	4.37 ± .45
Prior treatment (%)	25	31
HCV genotype 3 (%)	55	56
Baseline HCV RNA (log IU/ml)	6.11 ± 0.32	6.47 ± 0.53
SVR (%)	97.1	97.8

**Methods.** 226 patients who underwent treatment for hepatitis C in a subspecialty clinic in Mumbai, India between 2014-16, with complete laboratory and clinical data available were included in this analysis. All patients completed 12 weeks of treatment with an approved DAA regimen. 137 patients had adequate follow up post treatment for SVR (Group A) and 89 patients were "no shows" for SVR (Group B) and had to be actively followed to obtain HCV RNA levels at least 4 weeks after SVR visit. Graph Pad prism and student t test were used to determine the difference between SVR among the two groups.

**Results.** Demographics of both groups of patients are shown in the table below. SVR for the patients with good follow up (Group A) was 97.1% (133/137) and that of patients with poor follow up (Group B) was 97.8% (87/89), which was not statistically different ( $p > 0.05$ ). There were no baseline demographics that was associated with poor follow up, including age, gender, genotype, baseline fibrosis score, ALT levels, previous treatment status, or duration of treatment ( $P > 0.05$ )

**Conclusion.** Lack of follow up after completion of treatment with DAAs is associated with identical SVR compared to those with adequate follow up. These findings suggest lack of follow up after completion of treatment should have minimal effect on HCV elimination projects. In the future, HCV elimination projects need not focus on determination of SVR as long as treatment follow up is ensured

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#### 1070. Risk factors for failed linkage to Hepatitis C care

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**Session:** P-48. Hepatitis

**Background.** Many patients with Hepatitis C (HCV) who are referred to HCV care do not attend their HCV clinic appointments. As social determinants of health are known to affect HCV acquisition, we sought to evaluate their role on successful linkage to HCV care also.

**Methods.** A retrospective chart review was conducted on patients with both a positive HCV antibody or RNA test and a scheduled but not-attended infectious disease (ID) clinic appointment in 2017. Abstracted data included patient demographic, type of insurance, HCV test results, and risk factors that may impair outpatient HCV linkage. Descriptive statistics, chi-square, and Fisher exact tests were performed. We sought to identify the factors limiting patients with HCV from attending their first clinic visit.

**Results.** There were 161 out of 1539 patients (10%) who did not keep their HCV clinic appointment. The mean age was 48 years, 45% were female, and the majority were African American (61%). Most patients had insurance that was accepted by the HCV clinic (76%) and had been tested for HCV while admitted to the hospital (94%). Almost all patients had been tested both for HCV antibodies (98%) and viral RNA via PCR (97%). Risk factors known to contribute to unsuccessful linkage to care were common: substance use (85%), mental health diagnosis (71%), inadequate transportation (66%), housing insecurity (61%), history of medication nonadherence (61%), and alcohol use (52%). Seven patients (4%) died by the end of 2017. Patients alive at the end of 2017 were more likely to have insurance accepted at the ID clinic compared to those without accepting insurance (98% vs. 90%,  $p 0.06$ ).

**Conclusion.** Significant barriers are present among patients with HCV who were not successfully linked to a scheduled HCV appointment. Patients with HCV should be provided additional support as appropriate to address the social determinants of health that may limit their linkage to HCV care. Lack of accepted insurance at the ID clinic was associated with mortality and warrants further investigation into its causes.

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#### 1071. Social Determinants of health (SDOH) among PWID living with HCV

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**Session:** P-48. Hepatitis

**Background.** Though people who inject drugs (PWID) represent the overwhelming majority of those living with HCV, most have not been treated. Many HCV+ PWID represent the most marginalized persons in society, often experiencing poverty and poor access to care. We set out to determine the social determinants of health (SDOH) among a population of HCV+ PWID and determine if poor SDOH were related to reduced HCV treatment uptake.

**Methods.** The HCV-GET UP study was a randomized controlled trial to assess the effectiveness of an HCV group evaluation intervention vs. individual HCV treatment among PWID within a primary care clinic in the Bronx, NY. HCV treatment was provided according to national guidelines. Here, we include all patient characteristics and baseline social determinants of health (SDOH), obtained through questionnaires using Audio Computer-Assisted Self-Interview (ACASI) technology. We performed bivariate analyses between treatment initiation and the various factors of the SDOH using chi square tests.

**Results.** The majority of the 84 participants enrolled were black (35%) or Hispanic (60%) males (77%), aged 51 (SD11). The majority are on NY State Medicaid insurance (68%), indicating that their income is less than 138% of the Federal Poverty Level. 42% of participants report running out of money for basic needs on a daily or weekly basis, 69% receive food stamps, and 23% are homeless. Nearly half (45%) of participants have less than a high school education, 57% have ever been incarcerated, 48% report not having transportation to get to a medical appointment, and 25% do not trust doctors. A total of 57% of participants initiated HCV treatment, and no factors of SDOH were associated with treatment initiation.

**Conclusion.** We found that HCV+ PWID have extremely poor SDOH. Despite this, over half of participants initiated HCV treatment, indicating participants willingness to receive HCV treatment, and resilience in overcoming SDOH. Poor SDOH, such as homelessness, should not be a reason to delay HCV treatment in this population; however, we risk severely muting the health benefits of HCV cure in this population, if we do not address the underlying SDOH that will certainly lead to poor health outcomes, and early death.

**Disclosures.** Chinazo O. Cunningham, MD, MPH, General Electric Health (Other Financial or Material Support, My husband is currently employed by General Electric Health and receives stock and stock options.) Quest Diagnostics (Other Financial or Material Support, My husband was previously employed by Quest Diagnostics and received stocks and stock options.) Alain H. Litwin, MD, MPH, MS, Gilead (Advisor or Review Panel member) Merck (Advisor or Review Panel member)

**1072. The Impact of Hepatitis C-Related Knowledge on Perceptions of Stigma Among Infected Individuals**

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**Session:** P-48. Hepatitis

**Background.** Stigma is an important and understudied barrier to hepatitis C virus (HCV) infection treatment and elimination. Education to dispel disease-based myths and misinformation has been identified as a key intervention point to reduce disease-related stigma; however, the association between knowledge about HCV infection and perceptions of stigma among HCV-infected patients remains unknown.

**Methods.** To address this gap and evaluate the association between patient-level HCV knowledge and HCV-related stigma, we conducted a cross-sectional study among 270 HCV-infected patients (147 [56%] HIV-coinfected) from 5 clinics across Philadelphia. HCV-related stigma was measured using the validated 33-item HCV Stigma Scale (range, 33-132). HCV-related knowledge was measured via the National Health and Nutrition Examination Survey (NHANES) Hepatitis C Follow-up Survey (2003-2008), an eleven item True/False survey (range, 0 to 11) comprising statements about HCV-related health effects and transmission. The association between HCV knowledge and HCV-related stigma was evaluated via linear regression by HIV status. Self-reported demographic, behavioral, and clinical covariates were evaluated in adjusted analyses.

**Results.** The median overall HCV knowledge score was high at 9 out of 11 points (IQR, 9-10). Median knowledge scores did not significantly differ between HIV/HCV-coinfected and HCV-monoinfected participants (10 versus 9; p=0.29). However, higher HCV knowledge scores were associated with higher HCV-related stigma score among HCV-monoinfected participants (p=0.03) but not among HCV/HIV-coinfected participants (p=0.12). Differences by HIV status were also observed when adjusting for demographic, behavioral, and clinical covariates.

**Conclusion.** Regardless of HIV status, the majority of both HIV/HCV-coinfected and HCV-monoinfected participants in this study answered questions about HCV knowledge correctly. Surprisingly, greater HCV knowledge was associated with increased HCV-related stigma among HCV-monoinfected participants,

but this association was not observed among coinfecting participants. Additional studies are needed to understand why this association was observed only among mono-infected persons.

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**1073. The Time is Now for Rapid Initiation of Hepatitis C Virus (HCV) Treatment**

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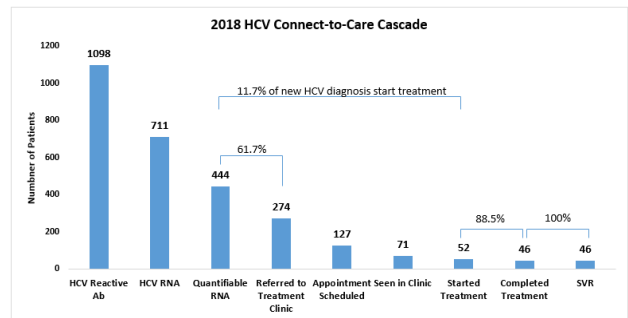
**Session:** P-48. Hepatitis

**Background.** An estimated 65,000 New Mexicans are infected with HCV, accounting for ~3% of the state's population with intravenous drug use being the most common risk factor for the acquisition of HCV. In 2020, the US Preventive Service Task Force recommended universal HCV screening for all adults aged 18 to 79 years old. HCV screening requires a two-step process involving a HCV antibody (Ab) test followed by a confirmatory HCV ribonucleic acid (RNA) test to detect active infection. Acute HCV infections are typically asymptomatic leaving many individuals unaware of their diagnosis for years. New Mexico was one of the first states to abandon the requirement for specialist referral, fibrosis staging, and abstinence from substance abuse to facilitate HCV treatment. Despite removal of these barriers, major gaps in access to HCV treatment still persist. The objective was to develop a HCV connect-to-care cascade for the University of New Mexico Hospital (UNMH) to understand the potential barriers preventing patients from receiving appropriate care.

**Methods.** This was a retrospective, single center, descriptive study conducted at UNMH, a level 1 trauma, tertiary care academic medical center with 527 beds. All patients with a positive HCV Ab, RNA, or genotype obtained in 2018 were included in this study. There were no exclusions.

**Results.** In 2018, over 11,000 unique patients received HCV testing in any form resulting in a total of 14,566 HCV tests being performed.

2018 UNMH Connect-to-Care Cascade



**Conclusion.** Of the patients who screened positive, only 61.7% were referred for treatment, representing the largest gap in the cascade. However, once patients were seen in the clinic, 88.5% completed treatment with 100% having sustained virologic response (SVR). With the pan-genotypic HCV treatments having fewer side effects and high clinical success rates, it's feasible that HCV treatment may no longer require a specialist. Similar to the rapid initiation of antiretrovirals in newly diagnosed HIV patients, where immediate access to treatment within days of diagnosis resulted in improved retention in care, decreased time to viral suppression, and decreased viral transmission, rapid initiation of HCV treatment may be the wave of the future.

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**1074. Understanding Screening Practices for Hepatitis B Prior to Starting Biologics at an Academic Medical Center.**

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**Session:** P-48. Hepatitis

**Background:** It is estimated that 0.3% of the US population has chronic hepatitis B (HBV) infection, most of whom are asymptomatic. When a patient receives a biologic medication, chronic HBV can reactivate with mortality rates as high as 40%. We aim to understand HBV screening practices prior to starting biologics at a single tertiary academic medical center.

**Methods:** We retrospectively reviewed over 500 patient charts. These patients aged ≥ 18 years were prescribed a biologic medication at one of the three clinics (Dermatology, Rheumatology, or Gastroenterology) at Tufts Medical Center from January 2016 to April 2019. To determine the rate of HBV screening compliance, we reported the proportion of patients who had appropriate HBV serologies (HBV surface antigen and HBV core antibody) drawn prior to initiation of the biologic therapy. A survey was sent to providers from these departments to understand their current practices of HBV screening.