

**2018
NYC**

Viral Hepatitis Research Symposium

May 24, 2018 | Rockefeller University

EQUITY IN PREVENTION AND TREATMENT

This year's theme emphasizes prevention and treatment among priority populations, including recent immigrants, people who inject drugs, and justice-involved, homeless, and pregnant individuals. Attendees will come away with an understanding of New York City's progress towards health equity, the gaps that exist in our knowledge, future research priorities and interventions.

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IN COLLABORATION WITH



The New York City Department of Health and Mental Hygiene's Viral Hepatitis Program is grateful to Montefiore Medical Center for their support, partnership, and collaboration from the original vision to the final details of this event.

SPONSORS

The Planning Committee wishes to thank the following sponsors for their generous support of the 2018 NYC Viral Hepatitis Research Symposium:

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SYMPOSIUM PLANNERS AND ABSTRACT REVIEW COMMITTEE

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SYMPOSIUM OBJECTIVES

1. Describe the latest viral hepatitis research related to special populations including: recent immigrants, people who inject drugs, and justice-involved, homeless, and pregnant individuals.
2. Identify best practices for increasing screening, linkage to care, and treatment among special populations.
3. Discuss updates to the evidence for effective viral hepatitis policy development.
4. Describe research strategies related to viral hepatitis prevention, intervention, and treatment to improve outcomes for special populations.

AGENDA

7:30am – 8:30am	Lobby	Registration, breakfast, poster set up and viewing
8:30am – 9:00am	Caspary Auditorium	WELCOME Amy Fox, MD, MS Professor of Pathology and Pediatrics <i>Montefiore Medical Center</i> Mary T. Bassett, MD, MPH Commissioner of Health <i>NYC Department of Health and Mental Hygiene</i> Ann Winters, MD Medical Director, Viral Hepatitis Program <i>NYC Department of Health and Mental Hygiene</i>
9:00am – 9:45am	Caspary Auditorium	HEPATITIS B KEYNOTE HBV Are We on the Path to Elimination? Su Wang, MD, MPH Medical Director <i>Center for Asian Health</i>
10:00am – 11:00am	Caspary Auditorium	MORNING BREAKOUT SESSIONS Overcoming Barriers to Improve HCV Screening, Linkage to Care, and Treatment MODERATORS Jonathan Schwartz, MD Professor of Clinical Medicine Briana Norton, DO Assistant Professor <i>Montefiore Medical Center</i>
	Cohn Library	Epidemiology and Treatment of HBV Among Pregnant Individuals MODERATOR Amy Shen Tang, MD Hepatitis B Program Director <i>Charles B. Wang Community Health Center</i>
11:15am – 12:00pm	Caspary Auditorium	VIRAL HEPATITIS POLICY PLENARY Reaching Viral Hepatitis Elimination Requires Federal and Local Action Corinna Dan, RN, MPH Viral Hepatitis Policy Advisor <i>United States Department of Health and Human Services</i> Daniel Raymond Director of Policy and Planning <i>Harm Reduction Coalition</i>

12:00pm – 1:00pm	Faculty Dining Room	LUNCH AND POSTER VIEWING
1:00pm – 1:45pm	Caspary Auditorium	HEPATITIS C KEYNOTE Cured Finding Purpose in My Personal and Professional Experiences with Hepatitis C Navin Vij, MD Value Institute Scholar, Internal Medicine Hospitalist <i>Christiana Care Health System</i>
2:00pm – 3:00pm	Caspary Auditorium	AFTERNOON BREAKOUT SESSIONS HCV Among People Who Inject Drugs, and Homeless and Justice-Involved Individuals MODERATOR Vinh P Pham, MD, PhD Assistant Professor of Medicine <i>NYU Langone Health New York University School of Medicine</i>
	Cohn Library	Epidemiology and Treatment of HBV and HCV Among NYC Immigrants and People of Color MODERATOR Ira Jacobson, MD Director of Hepatology <i>NYU Langone Health New York University School of Medicine</i>
3:15pm – 3:30pm	Caspary Auditorium	AWARDS AND THANK YOUS
3:30pm – 4:00pm	Caspary Auditorium	CLOSING SPEAKER Challenges and Opportunities for the Elimination of HCV and HBV Infection in Special Populations Mark Sulkowski, MD Professor of Medicine <i>Johns Hopkins University</i>

MORNING BREAKOUT SESSION

OVERCOMING BARRIERS TO IMPROVE HCV SCREENING, LINKAGE TO CARE AND TREATMENT

Caspary Auditorium

Sadat Iqbal, MD, Kings County Hospital | New York City Health + Hospitals

Hepatitis C Screening Rates in a Large Urban Underserved Academic Center's Resident Practice

D. Yitz Goldstein, MD, Montefiore Medical Center

Clinical Outcomes Improvement Following Implementation of HCV Reflex Testing

Jeffery J. Weiss, PhD, MS, Icahn School of Medicine at Mount Sinai

A Behavioral Intervention Improves the Rate of Hepatitis C Treatment Initiation Among HIV/HCV Co-infected Patients: Results of a Randomized Controlled Trial

Marie P. Bresnahan, MPH, New York City Department of Health and Mental Hygiene

Project INSPIRE: Expanding Care and Providing Support

Ginger Wey, MD, Montefiore Medical Center

Project Inspire in the Bronx, an Interdisciplinary Approach to Improve Hepatitis C Cure Rates

EPIDEMIOLOGY AND TREATMENT OF HBV AMONG PREGNANT INDIVIDUALS

Cohn Library

Ariba Hashmi, MPH, CPH, New York City Department of Health and Mental Hygiene

Evaluation of Pregnancy Status in Reports of Hepatitis B Submitted by Clinical Laboratories, New York City, Dates: 2014-2017

Robert J. Arciuolo, MPH, CPH, New York City Department of Health and Mental Hygiene

Trends in Hepatitis B Surveillance among Pregnant Women — New York City, 1998-2015

Tatyana Kushner, MD, MSCE, Icahn School of Medicine at Mount Sinai

Treatment of HBV Among Pregnant Individuals

AFTERNOON BREAKOUT SESSION

HCV AMONG PEOPLE WHO INJECT DRUGS, HOMELESS AND JUSTICE-INVOLVED INDIVIDUALS

Caspary Auditorium

Pedro Mateu-Gelabert, PhD, National Development and Research Institutes, Inc.

Injection Risk Behaviors and HCV infection among Young Opioid Injectors in New York City: A Challenge to HCV Elimination

Vaty Poitevien, MD, Housing Works

Hep C TIP: Employing a Community-Based Treatment Incentive Program to Engage and Retain Vulnerable Persons in Curative Hepatitis C Care

Samuel C Muench, MD, Montefiore Medical Center

Effect of Direct Acting Antivirals on Health-Related Quality of Life in Patients who Inject Drugs

Matthew Akiyama, MD, MSc, Montefiore Medical Center

Implementation and Evaluation of a Care Coordination Program for Patients with Hepatitis C Following Release from the New York City Jails

EPIDEMIOLOGY AND TREATMENT OF HBV AND HCV AMONG IMMIGRANTS AND PEOPLE OF COLOR

Cohn Library

Charles Rabinovich, Quality Specialty Pharmacy

Late Presenters among Minority Patients with Chronic Hepatitis C Infection

Kenneth Zhou, MD, NYU Langone Health | New York University School of Medicine

Comparing Disease characteristics of Chronic Hepatitis B Infection in African and East Asian Immigrants

Ponni V. Perumalswami, MD, Icahn School of Medicine at Mount Sinai

Challenges of Viral Hepatitis Screening and Link to Care Among NYC in communities with health care disparities

Harmit Kalia, MD, Montefiore Medical Center

Improving Immigrants' Knowledge, Attitudes and Behaviors toward Hepatitis B: Findings from a Culturally Sensitive Community-based Intervention in the Bronx, New York

FEATURED SPEAKERS



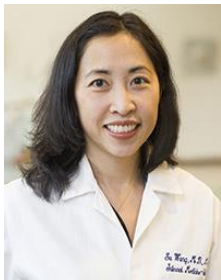
Amy S. Fox, MD, MS, FAAP

Dr. Amy Fox is the Director of the Virology Laboratories and Chief of Point of Care Testing and Outpatient Laboratories for the Montefiore Network. Upon completion of her Pediatric Residency at Montefiore Medical Center, Dr. Fox did her Fellowship in Pediatric Infectious disease at the University of Chicago. She was rewarded for her research in Cytomegalovirus with a Johnson and Johnson Institute Fellowship. The main focus of her work was on Viral Infections in Liver transplantation. In 1989 she was recruited back to Montefiore Medical Center--first to be the Associate Director of Virology and later to the

Director.

In 1998 she was recruited to the first class at the Albert Einstein College of Medicine for its Master of Science program in Clinical Research Methods. In addition to her clinical responsibilities she is the Director for Clinical Translational Research for the Department of Pathology. In this capacity she teaches Residents and Faculty Research Design and Outcomes and oversees projects for all Pathology Residents in this area.

She has served on multiple advisory committees in addition to the College of American Pathologists Committee on Point of Care Testing. In addition to extensive publications she has personally mentored over 35 students. What she is most proud of is in 2011 she co-founded the Einstein Montefiore Summer High School Research program which has become a flagship for programs of its kind. In 2015 she was invited by the March of Dimes to be its Keynote Speaker for its High Schools Student Science Awardees.



Su Wang, MD, MPH

Dr. Su Wang is the Medical Director of the Center for Asian Health, a comprehensive medical practice serving the Asian community in New Jersey. Dr. Wang practices internal medicine and leads the Center's growth, outreach and grant programs as part of Saint Barnabas Medical Center and the RWJ Barnabas Health network. She also serves as the Medical Director of the newly created Saint Barnabas Liver Center. Previously, she directed the Hepatitis B Program at Charles B. Wang Community Health Center in New York City, where she led its nationally recognized programs in primary care-based hepatitis B care and

community-based participatory research.

Dr. Wang is on the Executive Board for the World Hepatitis Alliance, an international partner with the World Health Organization, advocating for viral hepatitis patients and the global efforts to eliminate viral hepatitis by 2030. She is currently Co-Chair of the New Jersey Hepatitis B Coalition and is involved with Hepatitis B United, a national coalition representing community efforts in hepatitis B control and elimination in the U.S. She has served as primary investigator for hepatitis B screening and linkage to care grants sponsored by the Centers for Disease Control and Prevention and other funders, and is the lead for the FOCUS Hepatitis B/C screening program at the Saint Barnabas Medical Center Emergency Department.

She received her medical degree from the University of Miami as part of the Honors Program in Medicine and obtained her Masters of Public Health from Johns Hopkins School of Public Health. She completed a combined Internal Medicine and Pediatric residency at Georgetown University Hospital and then served as an Epidemic Intelligence Service officer for the CDC at the Food and Drug Administration.



Corinna Dan, RN, MPH

Ms. Corinna Dan is the Viral Hepatitis Policy Advisor in the Office of HIV/AIDS and Infectious Disease Policy (OHAIDP) at the U.S. Department of Health and Human Services where she works to implement the National Viral Hepatitis Action Plan and support coordination of viral hepatitis activities across federal agencies and the community. Prior to joining the OHAIDP, Ms. Dan served as Hepatitis B Policy Fellow at the Association of Asian Pacific Community Health Organizations (AAPCHO). In this role, Ms. Dan worked with community leaders and policy makers to promote improved prevention, diagnosis, treatment, and care of viral

hepatitis in Asian American communities across the U.S. Before joining AAPCHO, Ms. Dan held positions in the Hepatitis Foundation International (Chief Operating Officer) and the Chicago Department of Public Health (Hepatitis C Virus Program Coordinator).

Ms. Dan received a Bachelor of Arts degree in Asian Studies from Connecticut College, a Bachelor of Science in Nursing from Rush University in Chicago, and Masters in Public Health from the University of Illinois at Chicago.



Daniel Raymond

Daniel Raymond has worked in the field of harm reduction for over two and a half decades. Mr. Raymond joined Harm Reduction Coalition in 2003 and became Policy Director in 2005. In his capacity as Harm Reduction Coalition's Policy Director, he works with federal and state officials, advocates, and providers to expand critical health interventions for people who use drugs, including overdose education and naloxone distribution, syringe access programs, medication-assisted treatment, HIV and hepatitis C care and treatment, and quality health care access.

He chairs the Injection Drug Users Health Alliance and the Washington Heights CORNER Project Board of Trustees, and formerly chaired the National Viral Hepatitis Roundtable Steering Committee. Mr. Raymond has served on Governor Cuomo's Heroin and Opioid Task Force, the Food and Drugs Administration's Antiviral Drug Advisory Committee, the American Medical Association Physician Consortium for Performance Improvement Hepatitis C Workgroup, and the AASLD/IDSA Hepatitis C Guidance Panel.



Navin Vij, MD

Dr. Navin Vij, is currently a Value Institute Scholar and Internal Medicine Hospitalist at Christiana Care Health System in Delaware. While completing his undergraduate and medical studies as a Rice University/Baylor College of Medicine Scholar, he was a co-founder of the Baker Institute Student Forum and spent time working on health policy issues in British Parliament, at the Center for Strategic and International Studies, and the Texas Program for Society and Health. Navin completed an Internal Medicine/Pediatric Residency and Chief Residency at Case Western Reserve University and subsequently served as an Assistant

Program Director for the Med-Peds Residency Program. Prior to joining Christiana, he was a Robert Wood Johnson Foundation Clinical Scholar at the University of Pennsylvania, during which time he was a co-founder of the Clinician Action Network.

As a former patient cured of Hepatitis C (HCV), he has committed himself to impacting both research and policy efforts to help eradicate the disease. Currently, his research interests focus on how state and federal policies are constructed to help vulnerable populations, with a primary focus on Hepatitis C and the opioid/heroin epidemics. He has worked with a team at the State of Pennsylvania on an epidemiological profile and vulnerability assessment of HCV and is currently working on a project with a community harm reduction program regarding linkage to primary care. Beyond his research interests, Navin has also been involved with patient advocacy and outreach efforts. He has provided testimony to both state and federal committees on the patient experience with HCV and is a Member of the National Patient Advisory Committee for the American Liver Foundation, is involved with the Caring Ambassadors Program as a Board Member.



Mark Sulkowski, MD

Dr. Mark S. Sulkowski is a professor of medicine at the Johns Hopkins University School of Medicine. His areas of clinical expertise include hepatitis C virus infection. Dr. Sulkowski serves as the medical director of the Viral Hepatitis Center in the divisions of Infectious Diseases and Gastroenterology/Hepatology. Dr. Sulkowski received his MD from the Temple University School of Medicine in 1992. He completed his residency at the Duke University School of Medicine and completed a fellowship in infectious diseases in 1998 at Johns Hopkins School of Medicine.

He is a member of numerous professional societies, including the American Association for the Study of Liver Diseases, the European Association for the Study of the Liver, and the Infectious Diseases Society of America. He is also an elected member of the American Society for Clinical Investigation.

Dr. Sulkowski is widely published, with works in *Annals Internal Medicine*, *Nature*, *New England Journal of Medicine*, *Journal of the American Medical Association*, *Journal of Infectious Diseases*, and *Hepatology*. As an invited lecturer, he has presented discussions on the management of viral hepatitis at numerous major national and international medical meetings.

BronxCare Health System

Department of Family Medicine

Hep C Champions:

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Courtney Dower, MBA

Maimonides Medical Center

Life Forward Clinic

Hep C Champion:

Monica Ghitan, MD

Kingsbrook Jewish Medical Center

Pierre Toussaint Family Health Care Center

HIV Program

Hep C Champion:

Joseph Paul, MD

New York-Presbyterian Queens

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Hep C Champions:

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Division of Infection Control and

Infectious Diseases

Hep C Champions:

Jyoti Gupta, MD

Anca Giurgiulescu, MPH

Since 2015, the New York City Department of Health and Mental Hygiene (DOHMH) has coordinated the Hepatitis C Clinical Exchange Network (HepCX), a peer-to-peer learning collaborative for hospital-based providers caring for patients with hepatitis C. The aim is to increase clinical capacity for screening, diagnosing, managing and treating HCV. The network includes 60 Hep C Champions at 38 acute care hospitals across the five boroughs. These providers are clinical leaders in the fields of gastroenterology, infectious disease and primary care.

In 2017, six HepCX member hospitals received small grants to conduct quality improvement projects tailored to the specific needs of each institution. The DOHMH would like to recognize the efforts of each institution and is delighted to continue collaboration for another year.



Hepatitis C Clinical Exchange Network

EQUITY IN PREVENTION AND TREATMENT ABSTRACT AWARDS, 2018

**Albert Einstein College of Medicine
Montefiore Medical Center**

The Relationship between HIV and HCV
Adherence among People Who Inject Drugs
(PWID) on Opioid Agonist Therapy (OAT)
*Minhas HJ, Akiyama MJ, Norton BL,
Heo M, Litwin AH*

**Albert Einstein College of Medicine
Montefiore Medical Center**

Effect of Direct Acting Antivirals on Health-
Related Quality of Life in Patients
Who Inject Drugs
Muench SC, Akiyama MJ, Heo M, Litwin AH

**National Development and Research
Institutes, Inc.**

Injection Risk Behaviors and HCV infection
among Young Opioid Injectors in New York
City: A Challenge to HCV Elimination
*Mateu-Gelabert P, Guarino H, Teubl J, Quinn
K, Friedman SR*

**New York City Department of Health and
Mental Hygiene**

Bureau of Immunization

Evaluation of Pregnancy Status in Reports of
Hepatitis B Submitted by Clinical
Laboratories, New York City, 2014-2017
Hashmi A, Lazaroff J, Rosen JB

**New York City Department of Health and
Mental Hygiene**

Bureau of HIV/AIDS Prevention and Control

Persons without Durable HIV Viral Suppression
are Less Likely to Initiate Treatment for
Hepatitis C
*Penrose K, Moore MS, Casey A, Johnson N,
Schwartz J, Bocour A*

NYU Langone Health

New York University School of Medicine

Late Presenters among Minority Patients
with Chronic Hepatitis C Infection
*Pan CQ, Rabinovich C, Gayam V, Normatov
M, Fidman B, Wang D*

The Abstract Review Committee reviewed and scored each abstract submitted. The abstracts with the highest scores and most aligned with the theme of this year's symposium were selected for this award.

Congratulations to the researchers who are expanding our knowledge of prevention and treatment of viral hepatitis in New York City.



A network building capacity to prevent, manage, and treat hepatitis B and C in NYC.

www.HepFree.NYC

The Need

250,000 people in New York City live with hepatitis (Hep) B or C. This serious liver infection can lead to liver disease and cancer. Hepatitis affects the lives of vulnerable New Yorkers who face numerous barriers to accessing crucial hepatitis prevention and care.

Who We Are

Active since 2004, Hep Free NYC is a citywide network of stakeholders working together to create a hepatitis free New York City. Together, partners seek to build their capacity to prevent, manage and treat hepatitis B and C. Hep Free NYC includes the **NYC Hep B Coalition** and **NYC Hep C Task Force**.



The NYC Hep B Coalition is a network of more than **40** community organizations, health care facilities, providers, and patient advocates. At quarterly meetings, Coalition members share and learn about Hep B resources and collaborate on projects in their communities.



The NYC Hep C Task Force is a network of more than **80** community organizations, health care facilities, providers, and patient advocates. At quarterly meetings, Task Force members meet to network, share resources, and collaborate on new initiatives.

Coalition and Task Force Committees

- ▶ **COALITION AGAINST HEPATITIS FOR PEOPLE OF AFRICAN ORIGIN (CHIPO) NYC:** Tailoring Hep B education and prevention for African communities.
- ▶ **LGBTQ:** Engaging and uniting the LGBTQ community to advance Hep B and C awareness, screening, and access to care through education, outreach, and advocacy.
- ▶ **COMMUNICATIONS:** Guiding Hep Free NYC communications strategy and activities.
- ▶ **AWARENESS DAY PLANNING:** Organizing Hepatitis awareness day commemorations.

To get involved, email hep@health.nyc.gov

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Late Presenters among Minority Patients with Chronic Hepatitis C Infection

Comparing Disease Characteristics of Chronic Hepatitis B Infection in African
and East Asian Immigrants

Albert Einstein College of Medicine | Montefiore Medical Center

Improving Immigrants' Knowledge, Attitudes and Behaviors Toward Hepatitis B: Findings from a Culturally Sensitive Community-Based Intervention in the Bronx, New York.

Eneasoba E, Balogun O, Adedimeji AA, Kalia H, Obonor S, Leon-Kelly A, Nortey E, Reinus Z, Ngom N, Izes J, Sigal S

Background

Hepatitis B is highly endemic in West African populations and can cause considerable morbidity and mortality if left untreated. The Bronx, New York with a rapidly increasing West African population may experience an increased burden of cirrhosis and liver cancer due to Hepatitis B.

Objective

To assess Hepatitis B related knowledge, attitude and barriers to care in the Bronx West African Community and describe results of a community based outreach program.

Method

Survey questionnaires were administered through community and faith based associations to 62 respondents of West African origin selected by simple random sampling. A culturally appropriate intervention aimed at improving knowledge, attitudes and motivation for screening was implemented. A post intervention questionnaire assessed changes and effectiveness of the program.

Results

Knowledge, attitudes and practices were poor prior to intervention. Only 6 (9.7%) had previously been screened. After intervention, knowledge improved in 96.8% of participants, and more than 80% were willing to be screened and/or go for testing. About 62% reported changes in attitudes regarding discussing the topic or sharing a meal with an infected person and 95% planned on encouraging family and friends to undergo screening.

Conclusion

A culturally sensitive intervention which provides detailed information and addresses barriers to care can improve knowledge and attitudes toward Hepatitis B and promote motivation for screening in at-risk immigrant populations.

Housing Works

Hep C TIP: Employing a Community-Based Treatment Incentive Program to Engage and Retain Vulnerable Persons in Curative Hepatitis C Care

Poitevien V, Saunders G, Shubert G, Andrews P

Background

Housing Works Community Healthcare launched the Hepatitis C (HCV) Treatment Incentive Program (TIP) in April 2016 as an innovative strategy that employs financial incentives as one tool to engage and retain in curative treatment primary care patients with HCV infection who face multiple barriers to care.

Methods

TIP's integrated approach involves patients, clinicians and case managers in interdisciplinary care planning, and employs a toolkit that includes motivational interviewing, behavioral health interventions, adherence support groups, DOT, and up to five \$100 gift card incentives over a one year period for achieving and maintaining undetectable HCV RNA viral loads. Agency-wide training and a social marketing campaign educates clients and staff to engage the full community to "tip" the scale towards HCV elimination.

Results

As of March 2018, 95% of patients had a current HCV screening, up from 70% in 2016, and 7.2% had been diagnosed with HCV infection, three times the estimated NYC prevalence (2.4%). TIP has enrolled 311 patients, who are 71% male, 67% black or Hispanic, 64% 50yrs or older, and 32% co-infected with HIV. Approximately 20% of TIP patients are currently homeless and 50% have a substance use disorder. Of 311 TIP enrollees, 63% have an undetectable HCV viral load following treatment, 14% are in treatment, 19% are awaiting preauthorization or otherwise prepping for treatment, 3% failed treatment adherence, and <1% has paused treatment.

Conclusion

These results point to the potential of the TIP toolbox, including financial incentives, to support curative HCV care for underserved and hard to reach populations.

Challenges of Viral Hepatitis Screening and Linkage to Care in Communities with Health Care Disparities

Perumalswami P

Foreign-born persons and people of color living the United States shoulder a great burden of viral hepatitis B and C infection. The first steps to improving outcomes in infected persons is screening followed by link to care. Hepatitis Outreach Network is a community-based viral hepatitis screening program targeting persons at-risk to offer screening and link to care for HBV and HCV. Over the last 10 years we have worked with community based organizations to offer testing in over 5,000 foreign-born and persons of color. In this talk we will share the lessons learned from viral hepatitis screening and culturally targeted patient navigation strategies.

Treatment of Hepatitis B in Pregnant Individuals

Kushner T

Over 250 million individuals are infected with chronic HBV worldwide, including approximately 65 million women of child bearing age. Globally, perinatal transmission accounts for nearly half of the chronic disease burden. While most adults exposed to HBV spontaneously clear the virus, ~90% of infants with perinatal exposure in the absence of immunoprophylaxis become chronically infected. The World Health Organization has therefore identified maternal to child transmission (MTCT) as a key step in reduction of the global prevalence of HBV. Management considerations during pregnancy include the role of antiviral therapy for the reduction of risk of MTCT, specific pregnancy, delivery, and breastfeeding recommendations, as well as management of potential hepatitis B flares which can occur in association with pregnancy. This talk provides an overview of the management of hepatitis B in pregnant women.

A Behavioral Intervention Improves the Rate of Hepatitis C Treatment Initiation Among HIV/HCV Co-infected Patients: Results of a Randomized Controlled Trial

Weiss JJ, Aaronson C, Cervantes L, Georgi M, Prochno K, Miller TR, Kang T, Prieto S, Mhango G, Heffron S, Lugo LA, Fishberger J, Zewde M, Stivala A, Douglas O, Ferris D, Dieterich DT, Wisnivesky J

Background

Liver disease progresses more rapidly in HCV patients who are co-infected with HIV than in those who are not. Despite the availability of direct-acting antiviral treatment, many patients with HIV/HCV coinfection have not yet been cured of HCV due to multiple barriers. The Psychosocial Readiness Evaluation and Preparation for hepatitis C treatment (PREP-C) intervention is a 4-session, nurse-administered, behavioral intervention targeting the barriers preventing HIV/HCV co-infected patients from achieving sustained virologic response.

Methods

55 HIV/HCV co-infected patients who were engaged in HIV care with well-controlled HIV, who had not engaged in HCV treatment for the prior year, were randomized to the PREP-C intervention (n=29) or an Attention Control (AC) condition (n=26). These patients were followed 6 months post-randomization to see if they were prescribed HCV medication and had initiated HCV treatment.

Results

The subjects were predominantly male (72.7%), members of ethnic minority groups (41.8% Black; 49.1% Hispanic), with a mean age of 54.5 years (SD = 9.6). They had high levels of depression (mean Beck Inventory total = 16.1, SD = 12.7), fatigue (mean Fatigue Severity Scale total = 36.8, SD = 16.5), and cognitive impairment (mean global T-score = 42.4, SD = 7.2). 74.5% of the subjects were HCV treatment-naïve. The only significant difference in demographic or clinical characteristics between the two conditions was that the PREP-C condition had a higher average CD4+ count (mean cells/mL = 752, SD = 356) than the AC (mean = 530, SD = 288; $p = .024$). Subject attendance to both study condition sessions (max = 4) did not differ (mean PREP-C = 3.14, SD = 1.46; mean AC = 2.88, SD = 1.53; $p = .46$). Subjects in the PREP-C condition were significantly more likely to be prescribed HCV medication in the 6 months post-randomization than those in the AC (58.6% vs. 26.9% respectively, $p = .018$; OR 3.85 95% CI [1.23, 12.01]), and also showed a trend to be more likely to initiate treatment in the 6 months post-randomization (48.3% vs. 23.1% respectively, $p = .052$; OR 3.11, 95% CI [.97, 10.00]).

Conclusion

The PREP-C intervention had a significant effect on the barriers to prescription of HCV treatment for HIV/HCV co-infected patients as compared to an AC condition. This low-cost intervention can be widely disseminated by use of the nurse intervention guide, patient workbook and online training (PrepC.org) in order to increase HCV treatment initiation and cure among HIV/HCV co-infected patients.

Hepatitis C Screening Rates in a Large Urban Underserved Academic Center's Resident Practice

Iqbal S, Kreps A, Das C, Francis E, Jina N, Torres T, David Y, Lee M, Chang A

Background

The CDC estimates that up to 41.7% of physicians are unaware of the Hepatitis C (HCV) screening guidelines to screen all adults born between 1945 and 1965. This study seeks to determine: a) whether adequate HCV screening rates are being achieved in our clinic b) rates of non-guideline directed HCV Screening c) resident knowledge of screening guidelines

Methods

A retrospective cross-sectional analysis was performed on patients receiving care at Resident Primary Care Practice at an Urban Safety Net Hospital between July-December 2017. We excluded patients with a known history of HCV or if test was ordered for diagnostic purposes. A survey assessing resident's knowledge of the HCV screening guideline was also performed.

Results

304 patient charts were reviewed. The median age was 54, with 65% females. 94% were black/Afro-Caribbean descent and 52% were uninsured. 145 patients met the age screening criteria. Of these 31% had no HCV screening ordered. Of the 148 who were outside the age guidelines, 24% had HCV antibodies ordered. In terms of knowledge of HCV screening, our survey showed about 79% knew the age guidelines.

Conclusion

The results show that there is still room for improvement in our HCV screening rates. Previous quality improvement projects at other institutions have shown that being able to screen 90% of eligible patients is attainable. Our survey suggests that one of the barriers to optimal screening is a deficiency in knowledge of the USPSTF HCV guidelines. Plan is to develop lecture series for the residents to help reinforce guidelines.

Implementation and Evaluation of a Care Coordination Program for Patients with Hepatitis C Following Release from the New York City Jails

Akiyama MJ, Macdonald R, Jordan A, Schwartz J, Litwin AH, Eckhardt B, Carmody E

Background

Hepatitis C virus (HCV) is a major public health problem in correctional settings. HCV treatment is often not possible in US jails due to short lengths of stay. We present rates of linkage associated with a care coordination program (CCP) for patients with HCV following release from NYC jails and discuss barriers to HCV care.

Method

We conducted a one-armed clinical trial to assess rates of linkage to care (LTC) associated with the CCP. The CCP consists of a needs assessment, discharge planning, HCV education, appointment scheduling, reminder calls, and appointment accompaniment by a community patient navigator. We determined predictors of linkage using the Addiction Severity Index at enrolment. Statistical significance was determined using Fisher's exact tests.

Results

Among 100 eligible participants, the mean age was 45; 59 were male, 52 were Hispanic, 23 were non-Hispanic (NH) white, 19 were NH black, 6 were other. In terms of disposition, 84 were released to the community, 8 were transferred to state prison or another jurisdiction, 2 were pending release, 4 initiated HCV treatment, 1 spontaneously cleared, and 1 died pre-release. Of those released, 34 (40%) were reincarcerated ≥ 1 time within 180 days. Reincarceration was the initial event for 30 (36%) within a median of 117 days. 26 (31%) linked to HCV care within a median of 21 days, and 31 (37%) were lost to follow up. Having an existing primary care provider ($p=0.05$), being on opioid agonist therapy ($p=0.01$), and feeling supported socially (0.03) prior to incarceration were all associated with LTC.

Conclusion

These data provide preliminary evidence that an integrated CCP may be effective in improving timely LTC. However, additional multicomponent interventions aimed at increasing social support, linkage to primary care, and opioid agonist therapy could lead to further improvement.

Clinical Outcomes Improvement Following Implementation of HCV Reflex Testing

Goldstein DY

Background

Laboratory initiated reflexive HCV RNA confirmation following positive screening minimizes unnecessary medical visits. However, whether such reflex testing impacts the time to successful HCV evaluation and subsequent treatment outcomes is unknown.

Methods

We utilized a novel hospital developed information system which aggregates clinical, diagnostic and patient outcomes data to assess clinical outcomes following institutional initiation of reflex testing.

Results

We found that clinical outcomes improved in the post-reflex cohort. The percentage of patients without a viral load performed at 180 days for the pre and post groups were 40.9% and 4.5% respectively. Prior to reflex testing, 40.7% of patients with confirmatory HCV RNA had a documented follow up visit with an HCV related ICD within 180 days vs 51.7% during the post reflex time period ($p=0.00015$). The percentage of patients achieving first instance of undetectable HCV RNA within one year following diagnosis were 14.6% vs 20.3% ($p=0.01$) for the pre and post cohorts respectively.

Conclusion

Our analysis supports routine reflex viral load testing for anti-HCV positive patients not simply for expeditious testing but reflexive testing can enhance clinical outcomes as well.

Effect of Direct Acting Antivirals on Health-Related Quality of Life in Patients Who Inject Drugs

Muench S, Akiyama M, Heo M, Litwin AH

Background

Direct acting antivirals (DAAs) have transformed the treatment of hepatitis C virus (HCV). Our study examined the relationship between DAA treatment and HRQOL among people who inject drugs (PWID) on opioid agonist therapy (OAT).

Methods

PWID (N=150) received one of 3 models of HCV care on OAT: directly observed therapy (DOT), group treatment (GT), and self-administered individual treatment (SIT). Study visits occurred at baseline (BL), treatment weeks 4, 8, 12 and at follow-up weeks 12 and 24. We compared results from the EQ-5D-3L and HQLQ between BL and later time points and between treatment arms. We applied mixed-effect linear models with first order autoregressive correlation structure to account for temporal correlations among the repeated HRQOL measures.

Results

141 PWID achieved SVR and were included in the analysis. We observed improvement in HRQOL in EQ-5D-3L domains: ability to perform daily activities ($p<0.02$), pain/discomfort ($p<0.001$) and anxiety/depression ($p<0.001$). HQLQ improvements were observed in: general and perceived health, limitations due to emotional problems and general and HCV-specific distress. Comparisons between treatment arms demonstrated relative improvements in HRQOL within the GT arm as compared to DOT and SIT arms regarding: limitations due to physical ($p<0.03$) and emotional problems ($p<0.01$), social functioning ($p<0.03$), general and HCV-specific distress ($p<0.003$) and limitations ($p<0.006$).

Conclusion

Our study demonstrates positive impact of DAAs on HRQOL in PWID and suggests an important role for group treatment in treating HCV in this vulnerable population.

Montefiore Medical Center

Project INSPIRE in the Bronx: An Interdisciplinary Approach to Improve Hepatitis C Cure Rates

Wey G

Chronic hepatitis C patients in the Bronx present a unique and challenging treatment population. Project Inspire at Montefiore Hospital enrolled patients from September 1, 2014 through August 31, 2017 with a total of 1812 treatment candidates identified. Utilizing an interdisciplinary team comprised of primary care doctors, care coordinators, infectious disease specialists, and a hepatologist, a total of 950 patients were cured. Hepatitis C treatment rates improved as a result of this novel approach.

**Injection Risk Behaviors and HCV infection Among Young Opioid Injectors in New York City:
A Challenge to HCV Elimination**

Mateu-Gelabert P, Guarino H, Teubl J, Quinn K, Friedman SR

Background

The ongoing opioid epidemic has led to an expansion of the population of young people who inject drugs (PWID). This new generation of young PWID is vulnerable to HCV and HIV infection through the use of non-sterile injection equipment.

Methods

539 opioid users aged 18-29 who had used opioids (POs or heroin) in the past 30 days were recruited via Respondent-Driven Sampling. Analyses are based on the 353 participants who ever injected drugs. Variables were assessed via self-report, except HCV and HIV status established via rapid antibody testing.

Results

PWID were 34% female, 73% White/non-Latino (mean age 24 y/o). 59% reported household income while growing up greater than \$50,000. Participants initiated heroin injection at the mean age of 20.4 y/o. 40% of lifetime PWID reported receptive syringe-sharing and 60% reported sharing cookers in the past 12 months. 30% tested positive for HCV, 3 (0.85%) for HIV. In multivariable analysis, testing HCV-positive was associated with lifetime homelessness, injecting with 8 or more people in past 3 months, having been incarcerated 3 or more times and injecting 7+years. In a separate analysis, knowing any opioid user(s) older than 29 was associated with testing HCV-positive.

Conclusion

Despite the high coverage of harm reduction services in NYC many young PWID engage in risky injection practices and associate with older injectors that may expose them to HCV. Prevention efforts should expand early access to Medication-Assisted Treatment for Opioid Use Disorder and develop new strategies to engage young PWID in harm reduction services.

Trends in Hepatitis B Surveillance Among Pregnant Women — New York City, 1998-2015

Arciuolo R, Lazaroff J, Rosen J, Lim S, Zucker J

Background

Approximately 240,000,000 persons are infected with hepatitis B virus (HBV) worldwide; prevalence ranges from <1% to >8% by country. Infants born to women with HBV infection are at high risk for HBV infection, sequelae, and premature death. Understanding the epidemiology of HBV infection in pregnancy in New York City (NYC) is required to inform prevention activities.

Methods

Incidence of births to HBV-infected women/100,000 was calculated and stratified by race, birthplace, and age. Counts of HBV-infected women residing and delivering in NYC (1998-2015) were obtained from NYC Perinatal HBV Prevention Program surveillance database. Citywide birth data were obtained from NYC Office of Vital Statistics. Annual percentage change (APC) in incidence was calculated using joinpoint regression.

Results

Of 29,896 women included, 94% were foreign-born, 59% of whom in China. By race, 67% were Asian, 21% Black, 10% White, and 2% Other/Unknown. Overall incidence increased between 1998 and 2006 (1,156 to 1,573/100,000 births; APC=3.1%, $p<0.01$) but declined to 1,329/100,000 through 2015 (APC=-1.4%, $p=0.02$). Incidence among U.S.-born women declined from 1998 to 2015 (330 to 84/100,000; APC=-7.3%, $p<0.01$), but among foreign-born women increased through 2007 (1,877 to 2,864/100,000, APC=3.6%, $p<0.01$). Incidence among women born in China increased between 1998 and 2006 (13,275 to 16,480/100,000; APC=1.8%, $p=0.02$) but decreased to 12,631/100,000 through 2015 (APC=-3.3%, $p<0.01$), driven by a reduction in incidence among women aged 15-24 years ($p<0.01$).

Conclusion

Incidence of births to HBV-infected women in NYC has declined among U.S.-born but not foreign-born women. This highlights the continued need for support of Perinatal HBV Prevention Programs.

New York City Department of Health and Mental Hygiene

Project INSPIRE: Expanding Care and Providing Support

Bresnahan MP

Context

Increasing hepatitis C virus (HCV) treatment access and completion are critical to eliminating HCV in the United States (US). However, historically hard-to-treat patients, including active injection drug users (IDU) or persons co-infected with HIV, often require comprehensive supportive services to effectively engage in HCV care.

Objective

To examine demographic, socio-behavioral, and clinical factors associated with HCV treatment outcomes in a population enrolled in a HCV care coordination program.

Setting

Montefiore Medical Center and Mount Sinai Medical Center (NYC)

Participants

2,775 Medicaid or Medicare beneficiaries, 18 years or older, residing in NYC, with chronic HCV infection.

Intervention

Key components of the HCV care coordination intervention include a comprehensive intake assessment, an individualized care plan, HCV-focused health promotion modules, treatment readiness counseling, and medication adherence support. In coordination with tele-mentoring used to expand treatment to primary care and other settings.

Results

The majority of participants were persons of color, with 46% Hispanic and 35% black, non-Hispanic (NH). Two-thirds (63%) reported prior or current IDU, 45% had a mental health diagnosis and 19% reported current alcohol use. Of those enrolled, 76% initiated treatment, 82% completed treatment, 72% returned for follow up testing, and of those who returned 609 (96%) achieved sustained virologic response (SVR).

Conclusions

The INSPIRE care coordination model demonstrates high rates of HCV treatment initiation and cure in a complex patient population. Tele-mentoring is an effective way treatment settings for HCV. The success of this intervention under real-world conditions creates a strong argument for integrating care coordination and tele-mentoring into Medicare and Medicaid policy.

New York City Department of Health and Mental Hygiene

Evaluation of Pregnancy Status in Reports of Hepatitis B Submitted by Clinical Laboratories, New York City, 2014-2017

Hashmi A, Lazaroff J, Rosen J

Background

Vertical transmission of hepatitis B (Hep B) can result in severe consequences for infants. For prevention, the New York City Department of Health and Mental Hygiene (NYC-DOHMH) identifies cases and facilitates management of infected pregnant women. To improve timeliness, completeness, and accuracy of case identification, NYC amended its Health Code in July 2014, to require laboratories to include a pregnancy indicator in electronic laboratory reports (ELR) sent to the NYC-DOHMH.

Methods

Laboratory compliance with the Health Code amendment was assessed in a retrospective analysis using data from the NYC-DOHMH surveillance system. Cases of Hep B infected pregnant women confirmed between 7/1/2014 and 6/30/2017 were reviewed to determine the percentage of cases initially identified as pregnant by ELR.

Results

As of 6/30/2017, 34 (79%) of 43 laboratories that conduct testing for Hep B were compliant with the Health Code. ELR was the first source of pregnancy status for 18% of the 4,882 confirmed cases of Hep B infected pregnant women in the third quarter of 2014, and increased 39 percentage points to 57% by the second quarter of 2017. ELR was the only source of report for both the case and pregnancy status for 25% of the prenatal reports. Investigations confirmed that among 2,127 Hep B laboratory reports with pregnancy status, 93% were accurately reported as pregnant.

Conclusion

For the majority of cases, ELR is the earliest source of a disease report and may be the only source, therefore ELR, and the inclusion of pregnancy status is important for timely disease intervention. This evaluation found that the amendment improved completeness of pregnancy status reporting in positive Hep B ELR. Additional work is necessary to on-board non-compliant laboratories

Late Presenters Among Minority Patients with Chronic Hepatitis C Infection

Pan C, Rabinovich C, Gayam V, Normatov M, Fidman B, Wang D

Background

Although minority patients are under-screened for chronic hepatitis C (CHC) in the US, fewer data exists for minority patients with advanced fibrosis.

Methods

Quality Specialty Pharmacy is a US specialty pharmacy network. Pertinent data for patients prescribed DAA in 2017 and 2018 were obtained through the network. Subjects were divided into White patients and the minority group. The mean fibrosis scores and percentages of patients with advanced fibrosis, i.e. the late presenters for care were compared between groups.

Results

Among 1558 consecutive patients, 1545 had self-reported ethnicity. The liver fibrosis staging (scores 0 to 4) by serum markers, fibro-scan or biopsy were available in 1421/1545 (92%) of patients including 697 White, and 724 minority (484 Hispanic, 175 Black, 65 Asians). The sociodemographic characteristics were presented in Table 1. Compare to the White, a significantly higher mean fibrosis score was presented in the minority group (2.48 ± 1.39 vs. 2.15 ± 1.39 ; $p < 0.001$). Additionally, a significantly higher percentage of patients were late presenters in the minority group (51.24% [371/724] vs. 40.09 [285/697]; $p < 0.001$). In subgroup analyses, the mean fibrosis scores for Hispanic, Black and Asian patients were 2.58 ± 1.38 , 2.28 ± 1.41 , and 2.28 ± 1.40 ; respectively. The percentages of late presenters of Hispanic, Black, and Asian patients were 54.55%, 46.28%, and 42.53%; respectively.

Conclusion

The minority patients with CHC in the US experience disparities in access to hepatitis C treatment in early fibrosis stages. The strategies in public health to address the disparity are urgently needed, as late presenters are at risk of hepatocellular carcinoma.

Comparing Disease Characteristics of Chronic Hepatitis B Infection in African and East Asian Immigrants

Zhou K, McCulloch D, Parajuli S, Xu J, Carmody E

Background

The clinical course of chronic hepatitis B (HBV) is modeled significantly on East Asian cohort studies, which also inform guidelines for treatment, HCC risk stratification and HCC screening. These guidelines may not generalize to African populations, where transmission patterns and viral genotypes differ, early HBeAg seroconversion predominates, and some observational data suggest risk of earlier HCC.

Methods

We conducted a retrospective chart review-based cohort study of 498 outpatients with chronic HBV (100 African-born immigrants, 398 Asian-born) seen at an urban, municipal hospital July 2015-June 2016 to compare disease characteristics. We hypothesized that compared to Asian patients, Africans experience earlier HBeAg seroconversion and higher prevalence of HBeAg-negative immune reactivation hepatitis defined by 2015 American Association for Study of Liver Diseases HBV treatment guidelines.

Results

Higher proportions of Africans were HBeAg-negative in all age cohorts <50 years compared to similarly-aged Asian patients ($p < 0.05$). Among patients with HBeAg-negative disease, Africans had lower levels of viremia (median 2.1×10^3 vs. 5.9×10^4 IU/mL) and mean peak ALT (39.0 ± 43.6 vs. 76.5 ± 353.0 U/L) than their Asian counterparts. Fewer African patients experienced HBeAg-negative immune reactivation hepatitis (15.4%) compared with Asians (55.4%, $p < 0.05$); significant in all age cohorts <50. Risk of immune reactivation HBeAg-hepatitis was 3.52 times higher in Asians than in Africans (95% CI: 2.13-5.80).

Conclusion

African-born immigrants with chronic eAg-negative HBV appear to be at lower risk for immune reactivation hepatitis compared to Asian immigrants. Our data suggest that Africans are not at increased risk for HCC compared to Asians via this mechanism.

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Albert Einstein College of Medicine | Montefiore Medical Center

The Relationship Between HIV and HCV Adherence Among People Who Inject Drugs (PWID) on Opioid Agonist Therapy (OAT)

Minhas HJ, Akiyama MJ, Norton BL, Heo M, Litwin AH

Background

60% of PWID have HCV and 50-90% of HIV-infected PWID are co-infected with HCV. Data regarding the impact of HCV treatment initiation on antiretroviral therapy (ART) adherence is conflicting and no studies address this among PWID receiving HCV direct acting antivirals (DAAs) on opioid agonist therapy. We aimed to 1) assess adherence to DAA therapy among a cohort of HCV mono-infected (N= 129) and HIV/HCV co-infected (N=21) PWID, 2) assess for changes in ART adherence and HIV outcomes following HCV treatment initiation.

Methods

HCV adherence was measured using electronic blister packs with good adherence defined as >80% of doses taken during the treatment period. ART adherence was measured using patient self-report and dichotomized to excellent or other. ART adherence, CD4 count, CD4%, and HIV viral load were identified 6-months prior to, during, and 6-months after HCV treatment. Statistical significance was assessed with t-tests and mixed-effects regression models.

Results

Mean adherence rates among HCV mono-infected and HIV/HCV co-infected PWID were 78% (SD=17) and 80.3% (SD=16), respectively (p=.56). There were no significant changes in ART adherence, CD4 counts, CD4%, or HIV viral loads between the pre-, during-, and after-HCV treatment periods. Correlation between DAA and ART adherence was 0.181 (p=.49)

Conclusion

This is the first assessment of the relationship between ART and DAA adherence among PWID. Our data demonstrate no effect of HCV treatment on ART adherence or HIV outcomes, and suggest concerns for worsening ART adherence and outcomes due to increased pill-burden with HCV treatment are not warranted.

[poster #1]

Improving Inpatient Screening for Hepatitis C: Lessons Learned from a Large Municipal Hospital

Taupin D, Mgbako O, Martin T, Mcculloch D, Carmody E

Background

The prevalence of Hepatitis C virus (HCV) antibody positivity among the baby boomer birth cohort (born 1945-1965) in our hospital's emergency department was 7.3% in 2014-2015, over twice the national average.¹ Despite this, screening rates among baby boomers admitted to the inpatient medicine service were only 19.4% (March-July 2017). We hypothesized that knowledge gaps among providers regarding HCV screening, and perceived barriers to initiating care for HCV-infected patients contributed significantly to screening failures. To test this hypothesis, we implemented a multimodal HCV screening campaign targeting inpatient internal medicine residents and faculty.

Methods

Beginning August 2017, inpatient internal medicine residents received monthly briefings on HCV screening. Informational flyers were placed in work areas detailing current screening rates, screening criteria, and an algorithm for care initiation. The role of HCV outpatient navigators and the infectious diseases consult service was expanded to address the care of HCV-infected inpatients. We then compared inpatient screening rates among baby boomers five months before and after initiation of these interventions.

Results

Among baby boomers without a prior HCV antibody test admitted to the internal medicine service in 2017, screening occurred in 19.4% (187/962) in the interval prior to our intervention and 18.1% (177/978) following our intervention ($P = 0.46$, 95% CI -2.17 to 4.78).

Conclusion

Attempts at improving inpatient HCV screening rates using interventions focused on provider education and linkage to care were ineffective. This may have been due to low prioritization of screening interventions by providers caring for acutely ill patients. To improve screening rates, validated interventions such as electronic medical record decision support tools should be implemented.²

¹Allison WE, Chiang W, Rubin A, et al. Hepatitis C virus infection in the 1945-1965 birth cohort (baby boomers) in a large urban ED. The American journal of emergency medicine 2016;34:697-701.

²Sidlow R, Msaouel P. Improving Hepatitis C Virus Screening Rates in Primary Care: A Targeted Intervention Using the Electronic Health Record. Journal for healthcare quality: official publication of the National Association for Healthcare Quality 2015;37:319-23.

[poster #2]

Using Multifaceted and Multidisciplinary Care Coordination Techniques to Improve Linkage to Care and Treatment Success in Transient Populations

Muniz-Cadorette J

Background

Transient populations are often faced with several barriers, including, but not limited to, inadequate means of transportation, gaps in insurance coverage, and language and literacy barriers that ultimately contribute to health disparities that cannot be resolved through traditional health care systems. With the increasing number of diagnoses of Hepatitis C and the rising rates of Hepatitis C related deaths, it is imperative to take a holistic approach to engaging, educating, and providing treatment to the most vulnerable populations in New York City. A robust care coordination program focusing on intensive outreach, patient education, integrated workflows that put patients at the center of a multidisciplinary care team, and incentives aligned with important treatment milestones promotes health literacy and ultimately treatment adherence. The care team, consisting of a provider, pharmacist, care coordinator, and peer, work in unison to guide patients through the program's curriculum.

Methods

Through this comprehensive care model, 134 patients, both mono- and dually-infected (HIV), were enrolled in a period of twelve months. Of these 134 patients, 124 (92.5%) were linked to care, of which 59 clients (47.6%) initiated treatment, with 36 of these 59 (61.0%) successfully completing treatment.

Results

This model confirms that multidisciplinary and intensive care coordination is advantageous to the retention and treatment of transient patients.

Conclusion

Milestone incentives effectively promote appointment and treatment adherence, subsequently improving patient-care team relationships and treatment success rates. Through community engagement, education, and treatment advocacy, we can end the viral hepatitis epidemic within New York City's vulnerable populations.

[poster #3]

BronxCare Hospital Center

A Model for Patient-Centered Hepatitis C Treatment Within Primary Care

Smith J, Perry R, Dower C

Background

As medical treatment options for Hepatitis C have advanced tremendously in recent years, now virtually all infected patients qualify for treatment. With such a broad patient population in need of treatment, added focus on identifying and eliminating potential treatment barriers has become increasingly more important.

Methods

The Department of Family Medicine at BronxCare Hospital Center has incorporated a team-based approach to its Hepatitis C care that combines a group model with community health workers (CHW's) partnering directly with the Hepatitis C PCPs to collaboratively maximize positive long term outcomes.

Results

Since the various components' implementations, this approach has led to the curing of more than two hundred fifty patients previously infected with Hepatitis C

Conclusion

The proven peer component of Dr. Russell Perry's group model allows patients to see that they too can achieve cure with support of others with similar life experience. The CHW-PCP partnership provides Hep-C patients with a dedicated team to help with appointment adherence, medication compliance, hepatitis education, and non-health-related barriers to care. At the beginning of 2018, this program began working closely with nearby methadone programs through the utilization of a Hepatitis C outreach liaison who meets with patients and their counselors to discuss Hepatitis C treatment and potential barriers. The liaison then connects them to the PCP and the CHW who will follow them throughout treatment. It is our belief that this Hepatitis C treatment model can be utilized in medical settings throughout New York City and beyond as we continue the fight toward "Hep free NYC."

[poster #4]

Charles B. Wang Community Health Center

An Educational Comic Book Encouraging Hepatitis B Screening: The Test

Lyu J, Yan M, Ocampo R, Tang AS, Pong P

Purpose

To encourage HBV testing in at-risk populations, the Charles B Wang Community Health Center developed a culturally sensitive and educational comic book, “The Test” in English and Chinese and conducted an evaluation to assess the change in HBV attitudes and knowledge.

Methods

We conducted a 23-questionnaire pre- and post- survey among 100 adult patients who were randomly selected in the waiting rooms of a community health center. The survey was administered in Chinese and English and included questions about the patient’s demographics, familiarity, attitudes, and knowledge on HBV, prior to and after reading the comic book. Changes in pre- and post-knowledge and attitudes were measured for comparison.

Results

After reading the comic book, patients’ mean scale scores for HBV knowledge improved significantly ($p < 0.001$). Of the 100 patients surveyed, 31% learned that HBV affects individuals mainly from Asia and Africa, 40% learned you need 3 shots to complete HBV vaccination, and 55% learned that there is treatment available for HBV. Overall, more patients were likely to encourage and talk about HBV screening with family and friends as well as doctors after reading the comic book ($p < 0.001$). There were no significant differences in knowledge gain and positive attitude change between the Chinese and English speaking patients, despite the English patients having higher levels of education.

Conclusion

The comic book is an effective tool to raise awareness about HBV and encourage and educate patients with varying levels of education on HBV screening, prevention, and management.

[poster #5]

Charles B. Wang Community Health Center

Assessing Trends in Hepatitis B Virus Hepatitis B Infection and Immunity at a Community Health Center with Universal Screening Practices

Tang A, Lyu J, Wang S, He Q, Lin K, Pong P, Harris AM

Purpose

To assess trends in HBV infection and immunity at a health center in New York City with universal screening practices.

Methods

We performed a retrospective chart review of 25,565 adults with complete screening tests—HBV surface antigen (HBsAg), surface antibody (anti-HBs), and total core antibody (anti-HBc)—from 1997–2017. HBV test results were categorized by infection and immunity status and analyzed by patient's birth year, place of origin, and participation in the local health department's HBV household contacts program. Chi square analysis and univariate and multivariate regression were calculated to determine significance and odds ratios between subgroups

Results

A total of 25,565 adults, mostly foreign born (90%) from China (73%), completed HBV screening with HBsAg, anti-HBs, and anti-HBc; 13.4% were currently infected, 52.1% were ever infected, 33.4% were immune from vaccination and 14.5% were susceptible. Current HBV infection was highest among those with a family history of HBV (48%) or those living with HBV infected individual (22%). Significant factors associated with ever infection were birth before or during 1980, male sex, and China-born ($P<0.001$).

Conclusion

Our study demonstrates a high burden of HBV current (13.4%) and ever (52.1%) infection, particularly among males born in China before or during 1980. It is important to test patients at high risk for HBV infection with all three tests, especially among the foreign-born, to identify patients with current infection or at risk for reactivation, and to assess the effectiveness of public health interventions.

[poster #6]

Preliminary Screening Results Outside the 1945-1965 Birth Cohort: A Forgotten Population for HCV?

Winetsky D, Zucker J, Slowikowski JJ, Scherer M, Gordon P

Background

Historically, hepatitis C virus (HCV) infection was most prevalent among those born between 1945 and 1965. Current CDC guidelines recommend screening for HCV only among this birth cohort or in patients with known risk factors for HCV infection. However, recent epidemiologic data shows increasing HCV incidence among younger patients. Universal screening may facilitate earlier recognition of infected individuals.

Methods

At our center, the admission order set previously included a required prompt to order HCV screening for patients born between 1945 and 1965. In December 2017, we expanded the default order to include all patients above the age of 18. We compared rates of HCV screening and positivity during the first three months of this policy to similar months in the preceding year. We also reviewed the charts of HCV-positive patients to identify documented risk factors.

Results

From December 2017 to February 2018, a total of 11,118 patients were screened with 389 (3.5%) positive results, compared with 8,423 patients and 361 (4.3%) positives during the same months in 2016-2017. Outside the birth cohorts, 179 (1.1%) patients were HCV-positive in 2017-2018 compared with 117 (2.3%) in 2016-2017. Thirty-five HCV-positive patients were born outside the birth cohort. Twenty-one (60%) had no documented risk factors. Among the cohort born after 1965, only three out of 17 (17%) patients had no known risk factors, compared with all 18 (100%) patients born before 1945.

Conclusion

Documented substance use disorders and social vulnerability were highly prevalent in HCV-positive patients born after 1965 and rare in those born before 1945.

[poster #7]

Family Health Center of Harlem

HIV and HCV in Family Medicine: Laying Data Groundwork for Meaningful Intervention

Pizarro V

Background

The purpose is to better understand the number of HCV and HIV co-infected people receiving primary care in a family medicine Federally Qualified Health Center (FQHC), with the intent to develop appropriate protocol and workflows, as well as informed interventions, for HCV medical and social support services for patients already receiving HIV care in the same setting.

Recent research (2018) supports a significant number of persons with HCV are routinely seen in primary care settings, resulting in higher rates of tested/screened patients. Despite advancements in simplified treatments¹, many are left untreated and cured. Phase 1 involved gathering information to 1) Determine data capture best-practice via EMR, 2) Determine 2017 HCV-treated patient population, 3) Determine baseline data of total dually infected patients across 3 HIV clinics, so to 4) Delineate test/treatment protocol and 5) Begin discussing ideas for support intervention.

Methods

Electronic medical record, Business Objects, and BioReference Lab reporting of patient-level data were created, obtained, and analyzed. Clinical discussions were conducted with family medicine providers, with and without HCV treatment experience, to collect information regarding providers' current testing, treatment, and medical management practices to inform the development of best practices. Literature reviews were conducted to gather relevant models of intervention for HCV treatment in primary care.

Results

Census data determined and collated, giving concrete population data across 31 IFH sites, which subsequently led to narrowed census data for HCV/HIV co-infected patients and site of focus – a high visit volume clinic in East Harlem (The Family Health Center of Harlem- FHCH). The intention is to now put into practice a dual intervention (provider and patient-level) piloted at the FHCH. These interventions will incorporate staff across disciplines, and HCV/HIV co-infected patients at FHCH outcomes will be monitored closely.

Conclusion

The results of this project point to need for improved patient/provider-level interventions. Current plans involve increasing the support via Peer Educators, dually trained in HCV and HIV to conduct rigorous and structured outreach with goal of linking patients to appropriate providers and supportive services. Next steps also include the development of HCV provider competency via clear protocol, workflow, and treatment best practices. Elements of the ECHO Model - a virtual peer-to-peer intervention specific to primary care settings will be utilized.

[poster #8]

The Added Benefit of Patient Navigation Services Increasing Health Promoting Behaviors of Patients in Methadone Maintenance Programs During Treatment of Hepatitis C

Constantino J, Weisberg I, Cervini C

Background

Care coordination and patient navigation programs have become increasingly popular in the treatment of high risk, hard to reach patient populations. There has been increasing evidence in the efficacy of case coordination and patient navigation systems in the treatment of HCV positive patients enrolled in methadone maintenance programs; however the extent of health promoting behaviors other than the primary objective of treatment of HCV has yet to be measured.

Methods

This study reviews the additional services offered by primary care and subspecialty physicians to patients recruited by a patient navigator from methadone maintenance programs for the treatment of their hepatitis C.

Results

Since its inception in May of 2017, a patient navigation service has aided in recruiting patients from 5 methadone maintenance programs who were HCV seropositive to undergo treatment for their hepatitis C. These 5 methadone maintenance programs continue to service over 350-500 patients each, totaling to at least 1500 high risk individuals. The patient navigator surveyed and interviewed all HCV seropositive patients within the 5 clinics throughout New York City to evaluate their willingness to undergo full HCV treatments and assess each individuals' personal barriers to receiving treatment. After a strict screening process, 58 patients were chosen to undergo treatment of their hepatitis C. With the aid of their patient navigator, 20 (35%) of those patients were sent to establish care with a primary care physician and other subspecialties. The services offered by a primary care physician or subspecialist are summarized in Table 1. Based on chart review of primary care physician visits, the majority of patients who saw primary care physicians were screened or treated for chronic problems such as hypertension, diabetes, hyperlipidemia, asthma, and COPD.

Conclusion

It suggests that care coordination and patient navigation services can act as a gateway for further medical care and healthcare maintenance for a group of high risk patients that would otherwise be devoid of any medical care.

[poster #9]

Electronically-Monitored Adherence to a Once-Daily Single-Tablet Regimen in Inner-City Patients with Chronic Hepatitis C Infection Treated in a Primary Care Setting

Weiss JJ, Prochno K, Rogers J, Dawson T, Srivastava S, Atreja A, Preziotti S, Parrella K, Davidson A, Wyatt B, Vu T, Perumalswami P

Background

There are limited data on adherence to once-daily single-tablet medications for chronic hepatitis C virus (HCV) infection in real-world patient populations. Medication adherence is crucial to achieving sustained virologic response (SVR), yet there is no consensus on the minimum adherence level required.

Methods

Thirty-three patients initiating single-tablet HCV treatment for at least 12 weeks were recruited from 2 primary care practices. Patients used AdhereTech smart wireless pill bottles during the course of treatment, which provided real-time data on patient opening of the bottles using cellular technology. Adherence was examined over the 84 days immediately following treatment initiation in terms of dosing adherence (percentage of days that bottle was opened at least once) and timing adherence (percentage of days that bottle was opened +/- 4 hours from scheduled dose time).

Results

Thirty-two patients had usable adherence data (male, 62.5%; black, 46.9%; Hispanic, 25.0%, mean age, 58.4 ± 9.4); 1 patient broke the bottle and was excluded. 18 patients (56.3%) had Medicaid, 8 (25.0%) had Medicare, and 4 (12.5%) had both. 27 patients (84.4%) were genotype 1, and 28 (87.5%) were treatment naïve. 25 patients (78.1%) were on a ledipasvir/sofosbuvir regimen (with 1 also prescribed ribavirin), and 7 (21.9%) were on a sofosbuvir/velpatasvir regimen; 30 (93.8%) were prescribed for 12 weeks, and 2 (6.3%) for 24 weeks. The mean dosing and timing adherences were 94.7% (SD=6.4%) and 81.3% (SD=26.8%), respectively. 22 patients (68.8%) had dosing adherence >95%, and 15 (46.9%) had timing adherence >95%. 5 patients were not yet eligible for SVR12. 20 of the 27 eligible patients (74.1%) achieved SVR12; of the other 7, 2 relapsed and 5 had unknown statuses due to loss to follow-up. There were no significant differences in dosing or timing adherence between patients of differing statuses (SVR12, relapsed, lost to follow-up).

Conclusion

To our knowledge, this is the first study in a real-world population utilizing an Internet of Things (IoT) device to objectively measure HCV medication adherence. Our data show that adherence in this population could be improved, but more data are needed on the relationship between dosing and timing adherence and SVR. The second phase of this study is ongoing, in which 66 patients are randomized to one of two conditions (HepCure mobile application / provider web dashboard + AdhereTech monitoring OR HepCure toolkit + AdhereTech monitoring with medication reminders) is investigating whether these interventions improve adherence as compared to the patients reported on here and the adherence-SVR relationship in this larger sample.

[poster #10]

Sofosbuvir Based Regimens in the Treatment of Chronic Hepatitis C Genotype 1 Infection in African-American Patients-a Real-World Experience

Gayam V, Mandal AK, Khalid M, Garlapati P, Mukhtar O, Mansour M

Background

Direct-acting antiviral (DAA) drugs have been highly effective in the treatment of chronic hepatitis C (HCV) infection. We aim to evaluate the treatment response of Sofosbuvir based DAAs in African-American patients with HCV Genotype 1 (GT1) infection in community practice setting.

Methods

All the African-American HCV GT1 patients treated with Sofosbuvir based DAAs between January 2014 and December 2017 in a community clinic setting were retrospectively analyzed. Pre-treatment baseline patient characteristics, treatment efficacy with the sustained virologic response at 12 weeks post-treatment (SVR12), and adverse reactions were assessed.

Results

Two hundred and seventy eight patients were included in the study. One hundred and sixty four patients were treated with Ledipasvir/Sofosbuvir (Harvoni) ±Ribavirin, 36 were treated with Simeprevir/Sofosbuvir and 78 patients were treated with Sofosbuvir/Velpatasvir (Epclusa). Overall SVR at 12 weeks was achieved in 95 % of the patients who received one of the two DAA regimens (95% in Harvoni group, 92 % in Simeprevir/Sofosbuvir group and 97 % in Epclusa group. Fatigue was the most common adverse effect and none of the patients discontinued the treatment due to adverse effects.

Conclusion

In the community care setting, Sofosbuvir based DAAs are effective, safe and well tolerated in patients with chronic HCV GT1 African-American patients with a high overall SVR 12 of 95 %.

[poster #11]

Latino Commission on AIDS

Empowering and Engaging Older Gay/Bi Latino Men to Develop Awareness and Seek Treatment/Care for Hepatitis

Maldonado C, Mares L, Monroig A

Background

A recent study of older Latinos living with HIV has highlighted the obstacles faced in achieving optimal health and well-being, including fear and mistrust of medical institutions, management of competing comorbidities, social isolation due to stigma, and health care maintenance and access challenges.

Results

Peer-led empowerment and education models have been found to effectively bridge these gaps for vulnerable populations.

[poster #12]

Stigmatization by Health Care Providers: The Doctor's Office as a Deterrent to Care for People Who Inject Drugs?

Aponte-Meléndez Y, Mateu-Gelabert P, Eckhardt B, Davis L, Fong C, Kapadia S, Edlin BR, Marks K

Background

Despite high HCV prevalence, few people who inject drugs (PWID) receive HCV treatment. This analysis presents stigma experienced by PWID when interacting with health care providers.

Methods

In an on-going study to examine HCV care for PWID delivered at needle exchange programs, we present data on the first 40 participants recruited. Eligibility criteria includes positive HCV RNA and current injection. Participants completed baseline structured interviews on health care experiences, HCV treatment, and drug use. A 15-items scale was developed to assess PWID experiences with medical providers on stigmatization, hiding drug use, requests to quit drugs, and feeling respected

Results

The median age was 39.5, most were men (75%), 50% White, 56% homeless, and 10% HIV+. Before the study, 90% of participants knew their HCV+ status and 75% had not sought HCV treatment. A majority of participants report being stigmatized when interacting with health care providers: 56% were told critical or insulting things about their drug use; 74% felt doctors don't treat drug users as nicely as non-drug users; 69% felt ashamed of their drug use; 69% try to hide drug use from their doctors; 59% do not want to disclose their drug use. On the other hand, 49% reported feeling respected by doctors.

Conclusion

A majority of PWID report feeling stigmatized and needing to hide their drug use when interacting with medical providers. Medical providers should be trained in providing judgment-free care for PWID. Reducing stigma in medical settings may help increase PWID engagement in HCV care.

[poster #13]

New York City Department of Health and Mental Hygiene

A Qualitative Approach to Understanding Perspectives from Patients and the Clinical Team of Project INSPIRE, a Comprehensive Hepatitis C Care Coordination Program

Davidson C, Stalsburg BL, Bresnahan MP, Deming R

Background

Project INSPIRE was a three-year, comprehensive hepatitis C care coordination program implemented at two sites in New York City with the aim of treating and curing high-need hepatitis C patients. We sought to obtain a qualitative understanding of experiences of those who received or provided patient care during the program and identify key program strengths and weaknesses.

Methods

In December 2017, following the conclusion of INSPIRE services, focus groups were conducted with INSPIRE patients and with three groups of care team members: medical providers, care coordinators, and peer navigators. Eligible participants were recruited via phone and email and invited to attend a 90-minute discussion about their INSPIRE experience. Discussions were moderated by trained facilitators and were recorded, transcribed, and analyzed for themes using iterative, interpretive qualitative methods.

Results

Overall, 46 INSPIRE stakeholders (26 patients, 8 medical providers, 8 care coordinators, and 4 peer navigators) participated across six stakeholder-specific focus groups. Patients expressed benefitting from relationships built with care teams, while care team members felt empowered by INSPIRE provider trainings and the opportunity to cure a disease. Perceived program shortcomings included considerable data entry requirements and lack of protocol flexibility to tailor health promotion sessions to client needs. Additionally, it was unclear among care team members how effectively INSPIRE promoted patient self-sufficiency.

Conclusion

Focus groups indicated that INSPIRE succeeded in making patients feel respected and strengthening self-perceived physician competencies. However, future implementation of the model might require protocol refinement to increase acceptability of health promotion sessions for providers and patients.

[poster #14]

New York City Department of Health and Mental Hygiene

Quality Improvement Initiatives for Hepatitis C Management in Hospital-Based Practices in New York City.

Kela-Murphy N, Harrison E, Duerme R, Bresnahan MP, Winters A

Background

The National Strategy for the Elimination of Hepatitis B and C highlights the importance of partnerships between local governments and provider organizations. In 2017, the New York City Health Department funded two-year quality improvement projects at six hospitals to increase screening, linkage to care, and cure for patients with HCV. AIM: Evaluate the progress of HCV-related quality improvement initiatives at six NYC hospitals.

Methods

Participating hospitals responded to qualitative and quantitative surveys about quality improvement initiatives between March and September 2017. Initiatives were classified in five categories: provider training, clinical workflow, systematic patient data monitoring, electronic medical record (EMR) upgrade, and patient education. Successes and challenges in implementing these initiatives were analyzed.

Results

Six-month successes included: 1) establishing partnerships to improve HCV screening and patient education, 2) enhancing provider training and education materials, and 3) recruiting clinical and patient navigation staff. Challenges included: 1) limited time to train providers and improve workflows and 2) cumbersome EMR screening alerts and internal data monitoring systems.

Conclusion

These preliminary results will be used to guide the next phase of this quality improvement study. As we learn from these successes and challenges, we aim to further expand the projects at other Hepatitis C Clinical Exchange Network (HepCX) hospitals with the goal of overcoming barriers to screening, linkage to care and expanded treatment capacity and achieving HCV elimination in NYC.

[poster #15]

New York City Department of Health and Mental Hygiene

Using Surveillance Data to Understand Hepatitis C Testing Practices at New York City Hospitals

Khosa P, Bocour A, Duerme D, Kela-Murphy N, Peterson E, Winters A

Background

Using surveillance data from patients of the Hepatitis C Clinical Exchange Network (HepCX), a DOHMH-facilitated provider-to-provider learning collaborative comprised of 38 NYC hospitals, we created dashboards for the goal of improving the rates of HCV confirmatory RNA testing. The dashboard, a report of RNA testing rates of HCV antibody positive patients by HepCX facility, allows visualization of gaps in RNA testing, and is used to work one-on-one with facilities to increase RNA testing.

Methods

Hepatitis C test results were assigned to a standardized facility by evaluating health care facility data. Dashboards displaying percentage of patients with a positive antibody test in 2016 who received a RNA confirmatory test ordered by the same facility within 3 months was generated using Microsoft Excel.

Results

In 2016, there were 15,493 patients with a positive antibody test ordered by a HepCX hospital and 67% (10,332) had RNA test within 3 months of antibody test. The median facility RNA confirmatory testing rate was 77% (range 10-100%). Variability of data used to standardize health care facility was a limitation of this analysis which could underestimate confirmatory testing rates. Dashboards were emailed to each HepCX facility, and high volume facilities will be displayed on the DOHMH website.

Conclusion

HCV facility dashboards can be used to illustrate differences in HCV testing practices among high volume HCV facilities. By sharing the dashboards with hospitals, we aimed to highlight the benefit of implementing reflex RNA testing. Future dashboards could display surveillance-based HCV treatment initiation and cure rates to assess linkage to care and treatment.

[poster #16]

Persons Without Durable HIV Viral Suppression are Less Likely to Initiate Treatment for Hepatitis C

Penrose K, Moore M, Casey A, Johnson N, Schwartz J, Bocour A

Purpose

Though individuals co-infected with hepatitis C (HCV) and HIV experience accelerated liver disease progression and higher mortality than HCV mono-infected individuals, many have not yet been treated for HCV. We examined factors associated with not initiating HCV treatment in 2016 among co-infected individuals in New York City (NYC).

Methods

HIV and HCV surveillance registry matching identified individuals diagnosed with both viruses by the end of 2015, living in NYC at the end of 2016, and with ≥ 1 positive HCV RNA test prior to 2016. HCV treatment initiation was defined as a first negative RNA result in 2016 preceded by a high positive RNA result. Durable HIV viral suppression was defined as ≥ 2 HIV viral loads (VL) ≤ 200 copies/mL ≥ 3 months apart and no VLs > 200 copies/mL in 2016. Multivariate Poisson regression was used to identify factors associated with non-initiation of HCV treatment.

Results

Of 5,568 co-infected individuals without a negative HCV RNA result reported prior to 2016, 26% initiated HCV treatment in 2016. Compared to those with durable HIV viral suppression, individuals without durable HIV viral suppression were 66% less likely to initiate HCV treatment (aRR: 1.34; 95% CI: 1.30 – 1.39). However, among co-infected individuals without durable HIV viral suppression, 53% had ≥ 1 suppressed HIV VL in 2016.

Conclusion

Lack of durable HIV viral suppression was significantly associated with delays in HCV treatment initiation. However, HCV treatment is now brief, and half of individuals without durable HIV viral suppression achieved at least one suppressed HIV viral load, suggesting that these individuals, if appropriately supported, could adhere to HCV treatment.

[poster #17]

New York-Presbyterian Hospital

Leveraging Off-The-Shelf Tools to Drive Real-Time Care Management for HCV Positive Patients

Slowikowski JJ, Zucker J, Scherer ML, Gordon P

Background

Care teams are inundated with data from multiple sources and can struggle to balance institutional demands with the needs of their patients. Every day, New York Presbyterian sees almost 7000 patients and processes an average of 49,000 labs. Acquiring resources to translate these volumes of data into actionable, real-time information has been challenging. Moreover initiatives like Hepatitis C outreach are often sidelined due to enterprise-wide goals and legal requirements from federal and state partners.

Methods

The Comprehensive Health Program (CHP) at NYP has developed a robust tool that leverages Tableau, a commercially available data visualization product, with NYP's data warehouse to create near real-time outreach guidance for care management. A team of medical and IT subject-matter experts gathered to address key weaknesses in the existing HCV linkage to care workflow. An algorithm was constructed that considers clinical best practices, current and historic testing data, and diagnosis codes. The tableau workbook was published to NYP's secure internal server for relevant care management teams to reach out to patients who have been flagged for outreach. Teams are provided with the patient's location as well as HCV testing history. Importantly, only staff with appropriate credentialing can access these data.

Results

98 inpatients were screened positive as inpatients, identified on the dashboard, and successfully linked to care.

Conclusion

No matter the resilience of project champions, even a carefully curated and adhered-to outreach workflow can suffer from missed linkage opportunities. By capturing subject-matter expertise within a Tableau dashboard CHP has doubled its linkage for qualifying HCV positive patients.

[poster #18]

New York-Presbyterian Queens

Prevalence of HBV, HCV and HIV in the ED and Ambulatory Clinic of a New York City Urban Hospital

Hines A, Patel A, Chary M, Chiang C, Sckell B, Siegal J, Pugh S, Leung W, Bunim A, Chang M

Background

Offer routine screening of HCV, HBV and HIV in our Emergency Department (ED) and Ambulatory Care Center (ACC) to link positive patients to access care.

Methods

A prospective cohort study was initiated by routine HCV, HBV and HIV tests in the ACC and the ED in April/May 2016. Consent obtained and order generated for HCV, HBV and HIV test while continuing to receive standard care. A patient navigator contacted all patients with positive test results and linked them to care.

Results

A total of 57,213 patients were eligible, of which 3,641 patients consented. 64.3% of tested patients were female, and 35.7% male. 32.2%. There were 1,185 baby-boomers (born between 1945-1965). 3,676 HCV antibody tests were offered and 38 (1.03%) were positive of which 7 (20%) had detectable viral loads. 5 (71.4%) were linked to care. 12 (30.8%) of patients positive for HCV antibody were younger than baby-boomers. 3,677 HBV surface antigen (HBsAg) tests and 3,676 HBV surface antibody (HBsAb) tests were offered, 49 (1.33%) were positive for HBsAg, of which 46 (93.9%) were linked to care and 93.9% of them were born in the area which has a HBV prevalence greater than 2%. Over 60% of individuals did not have detectable HBsAb and 26% of them were female under age of 40. For HIV, 3,670 HIV tests were offered, 9 (0.25%) tested positive, of which 7 (77.8%) linked to care.

Conclusion

VTI dramatically increased screening and linkage to care for HCV, HBV, and HIV in our patient population.

[poster #19]

**Successful Retreatment of Hepatitis C (HCV) Direct Acting Anti-Viral Therapy (DAA) Failures:
Utilizing Currently Available Therapies to Achieve Success**

Bernstein D, Lee S, Lee TP, Tiev M, Demabildo M

Background

Current DAA therapies for HCV achieve a sustained viral response rate of greater than 90%, regardless of genotype or fibrosis stage. Despite this high cure rate, there are still patients who fail to respond to these therapies. As of June 2017, there were no standard salvage therapies for DAA failures leading to provider and patient frustration. In 2016, we treated more than 500 patients with DAA therapies at our center. Eleven patients were identified as DAA failures. We report the retreatment of these patients with currently available DAA therapies.

Method

Retrospective observational study from October 2016- April 2017 at Northwell Health to assess the descriptive demographic and clinical characteristics of patients who have had virology failure with the new DAA regimens and were able to get access to new DAA for retreatment.

Result

Two out of ten patient failed the retreatment regimen and one patient passed away from renal failure. Both patient that failed the retreatment had resistance associated variants (RAVs). Patient 8 had RAVs Q30H and Y90H which was resistant to all commercially available NS5A inhibitor, velpatasvir was not tested. Patient 9 had RAVs Q30Q/Q and Y93Y/C which were resistance to all NS5A inhibitor except velpatasvir.

[poster #20]

**Access to Direct Acting Anti-viral (DAA) Therapies for HCV Infection:
An Analysis of Various DAA Therapies and Copays by Select Insurance Carrier**

Lee S, Bernstein D, Lee TP, Tiev M

Background

The advent of new direct acting antivirals (DAAs) medications has transformed the landscape of Hepatitis C Virus (HCV) treatment in terms of ease of use, side effects and a significantly higher cure rate. However, the process of obtaining DAA therapy is onerous and often restrictive making it sometimes difficult for HCV patients to obtain curative therapy. As our office has a greater than 98% success rate in DAA approval, we analyzed consecutive pts who were approved for DAA therapies to determine DAA choice and copays.

Methods

Retrospective chart review of patients whose therapy DAA therapies were approved by their insurance carrier were analyzed for choice of DAA therapy, prescription plan, and copayment.

Results

300 patient's first copayment information was compiled. In categories of copayment paid by range: \$0-\$5 n=194(65%), \$6-\$50 n=67 (22%), \$51-\$100 n=15 (5%), \$101-\$500 n=7 (3%), \$1,001-\$5,000 n=13 (4%), \$5,001-\$20,000 n=4 (1%). Copayment average by top three type of insurance: Medicaid n=43 \$2.33, Medicare n=75 \$317.01 and commercial insurance n=53 \$890.44.

Conclusion

Despite the high cost of HCV medication price, the out of pocket cost is less than what was anticipated by patients. Of the 300 patients' copayments, the average copay was \$320.38 and the sum of all 300 patients' copayments was \$95,151.81. Majority of the patients, 65% had a copay of \$5.00 or less.

[poster #21]

New York State AIDS Institute

eHEPQUAL – A Web-based Hepatitis C Quality of Care Application for Providers

Wilberschied L, Flanigan C

Background

eHEPQUAL, a web-based application designed to capture data and generate reports, including a care cascade, enables health care providers to assess the quality of care provided to patients living with the hepatitis C virus (HCV). A randomly selected sample of patients are reviewed on an annual basis.

Methods

Fifteen NYS AIDS Institute-funded programs completed reviews on samples of patients with positive HCV antibody tests from 4/1/2016-12/31/2017 and measured thirteen quality indicators across the HCV care continuum: HCV diagnosis (confirmation of viremia), genotype testing, alcohol use assessment and counseling, substance use screening and counseling, HIV testing, linkage to care, fibrosis staging, adherence assessment and counseling (pre-treatment and while on treatment), HCV treatment initiation, achievement of sustained virologic response (SVR). Additional demographic and risk factor information is also entered into the online system.

Results

Among the sample of 595 patients reviewed, 92 % had RNA testing, 98% had genotype testing, 84% had HIV testing; 90% were linked to care; 86% had an alcohol assessment; 96 % of alcohol users had counseling, 87% had substance use screening; 82% had a pre-treatment adherence assessment; 86% had a quantitative assessment of treatment adherence during treatment; 82% had fibrosis staging, 51% initiated treatment; 64% were assessed for SVR and 93% achieved SVR.

Conclusion

Measuring HCV quality of care across the care continuum will help increase the number of people cured of HCV. eHEPQUAL allows providers to monitor the quality of HCV care and identify areas for improvement by generating a variety of on-demand reports.

[poster #22]

An Improved and Cost Effective Interdisciplinary Approach to Hepatitis C (HCV) Screening at an Urban Orthopedic Hospital

Sibley RA, Moynihan AM, Pham V, Bosco J

Background

In 2012 the CDC issued a new recommendation for HCV screening stipulating that all adults born from 1945-1965 undergo one-time testing. On January 1, 2014, New York State mandated that hospitals offer screening to all inpatients within this birth cohort.

Methods

Subsequently, NYU Langone Orthopedic Hospital implemented an HCV pre-admission testing (PAT) program. PAT interventions included training RN and PA staff, educating patients during PAT about HCV, coordinating with NYU Laboratory Services to use one sample for both antibody and RNA tests, and creating an electronic medical record workflow so screening questions were still asked to all admitted patients. Our goals were to report the results and costs of birth-cohort HCV PAT at NYU Langone Orthopedic Hospital from February 3, 2015 to January 27, 2017. We screened 3,758 of the 3,844 patients eligible (97.8%). 60 were antibody positive or indeterminate, after which a quantitative RNA PCR is sent from the same sample.

Results

Nine were RNA positive; eight could be notified via telephone. Of the eight, three were unaware of infection, four received treatment successfully, and four declined intervention. We calculated the cost of screening using time-driven activity based costing, which accounts for costs of lab tests plus costs of the time of any employee involved. Costs per newly diagnosed patient and per treated patient were \$49,240.02 and \$36,930.02, respectively. To compare, the estimated cost of a liver transplant in the U.S. in 2011 was \$577,100.

Conclusion

Successful and cost-effective HCV screening and treatment therefore requires interdisciplinary collaboration.

[poster #23]

**Adherence Impact for New Hepatitis C Treatment on Cost Effectiveness
in a Managed Care Organization**

Alenkina K, Shell S, Benyola L, Dobkin J

Background

The pharmacy claim data from January 2014 to June 2016 for completed cases was examined.

Methods

Weekly monitoring of HCV therapy by MCO pharmacist was implemented to reduce interruption and improve adherence. Pharmacist reviewed all approved Prior Authorization (PA) cases for appropriate duration and timely refills until end of therapy.

Results

The completion rate of HCV therapy for cohort was 99% (409 out of 413 cases) due to the MCO pharmacist intervention. Projected Waste Prevented is approximated at \$3,562,131. Projected Re-treatment Cost Savings is approximated at \$13,877,728.

Conclusion

This analysis demonstrates the dramatic potential impact that interrupted or non-completed HCV treatment can have on the cost-effectiveness of this promising new treatment modality. As well as, highlighting the significant impact of interventions by a Managed Care Organization (MCO) to prevent waste of this valuable resource.

[poster #24]

The Path to Eliminating Hepatitis C virus Infection in the US: State officials Address High Drug Prices, Stigma, and Building Treatment Capacity

Kapadia S, Johnston CM, Marks K, Schackman BR, Martin EG

Purpose

The uptake of direct acting antivirals (DAA) for hepatitis C (HCV) has been limited by high cost and controversial treatment eligibility criteria. We aimed to learn how state health agencies have responded to the challenges of HCV treatment access.

Methods

We conducted 18 semi-structured interviews with health officials and advocates in six states and at non-governmental organizations, selected using purposive sampling. Transcripts were analyzed using content analysis to identify dominant themes and contrasts. We reviewed publicly available treatment eligibility criteria and national guidelines to triangulate findings.

Results

Drug pricing is the most important barrier to access, encouraging restrictive authorization criteria from payers that in turn discourage providers from offering treatment. However, payers have not experienced the budget impact that was initially feared. Although authorization criteria are being lifted for fee-for-service Medicaid programs, ensuring that managed care organizations follow suit remains a challenge. The effect of stigma, a shortage of treating providers, and lack of political motivation are additional challenges to expanding treatment. The response to the HIV epidemic can augment or inform strategies for HCV treatment delivery, but this is limited by the absence of dedicated funding.

Conclusion

While access to DAAs is improving, many challenges remain to achieving HCV elimination. Political disinterest, stigma, and a lack of specialty providers are continued barriers in some jurisdictions. Provider education and treatment by primary care providers may be strategies to overcome these barriers. Despite uncertainty about federal policy changes to Medicaid, states can identify opportunities to improve access.

[poster #25]

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