HEPATITIS C ELIMINATION

Hepatitis C Dashboard to Improve Linkage to Comprehensive Care

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COLUMBIA | COLUMBIA UNIVERSITY IRVING MEDICAL CENTER

Overview

Building on both our past success and local research we are developing at the Comprehensive Health Program of NewYork Presbyterian/Columbia University Irving Medical Center a sustainable program to improve linkage to care and treatment services for people living with hepatitis C virus (HCV) through use of a novel electronic medical record (EMR)-based dashboard

Talk Outline

- Brief introduction to Columbia's Comprehensive Health Program
- Background Research: Three prior studies
- Development of Hepatitis C Dashboard
- Workflow and Current Activities

Comprehensive Health Program (CHP)

- Integrates HIV Primary Care with specialty Infectious Disease services at NewYork-Presbyterian/Columbia University Irving Medical Center
- New York State Designated AIDS Center (DAC)
- NCQA designated Patient Centered Medical Home (PCMH)
- HealthHome Case Management Agency (CMA)
- Services include HIV specialty and primary care for adults, adolescents, and children living with HIV

Comprehensive Health Program (CHP) in 2024

- Academic urban medical center in Upper Manhattan serving Manhattan and the Bronx
- 2800 People Living with HIV, 1500 Prevention/HCV/ID patients
- Clinicians (14), fellows (8), nurses (4), part-time psychiatry (3), nutritionist (1), gyn/perinatal care (2), RN Care Managers (3), behavioral health social workers (8), care coordinators (11), and field navigator program (3)
- Inpatient and outpatient HIV care
- Open Access/Walk-in Care
- Population health and panel management focus
- Data Driven Performance and Quality

CHP Services with highest overlap for a HCV screening and treatment program

- HIV specialty and primary care
- LGBTQIA+ care
- Prenatal/GYN HIV care
- General pediatric care for families affected by HIV
- HIV counseling, testing and linkage to care services
- Antiretroviral adherence assistance programs
- Basic and complex care coordination services
- Nutritional services
- Integrated care transition programs
- On-site social work and mental health treatment
- On-site medication-assisted therapy (MAT) for opioid use disorder
- Dalbavancin infusion
- 24-hour emergency on call system
- Hepatitis, HIV treatment and prevention research and clinical trials

PRIOR LOCAL STUDIES

Previous research at Columbia on HCV care pathways and barriers to screening

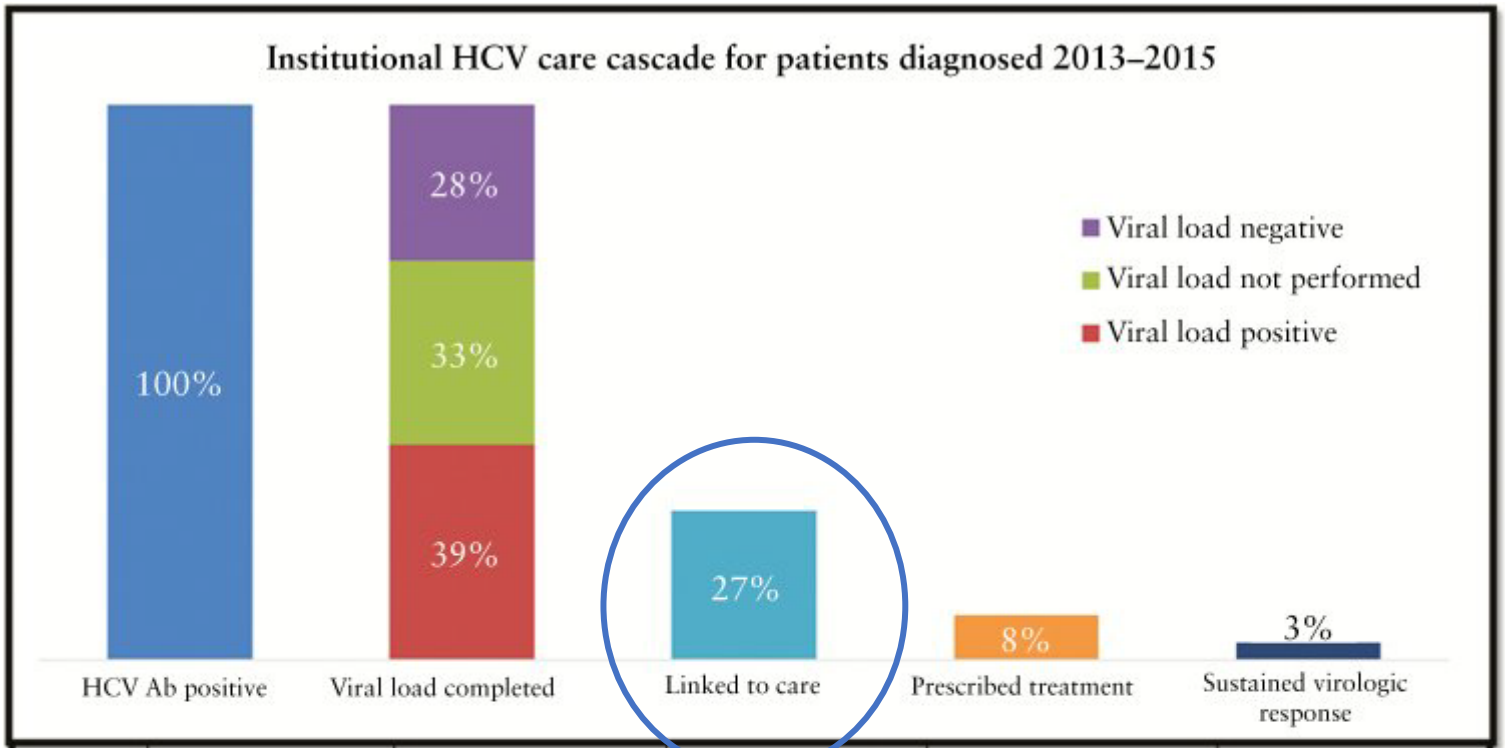
Use of EMR to create a local HCV Care Cascade

- HCV Care Cascade developed using EMR Algorithm at Columbia
- Criteria to represent each milestone within the HCV-Care Cascade
  - HCV laboratory tests: 1 anti-HCV Ab test and 9 HCV RNA tests
  - 14 clinical note headers used by HCV providers
  - 7 different medication orders for HCV treatment
- 10% patients underwent a reference standard review
  - Algorithm correctly categorized 117/129 (90%) patients
  - Reference standard correctly categorized 126/129 (98%)

Development and Validation of an Electronic Medical Record–Based Algorithm to Identify Patient Milestones in the Hepatitis C Virus Care Cascade

Jason Zucker, Justin G Aaron, Daniel J Feller, Jacek Slowikowski, Henry Evans, Matthew L Scherer, Michael T Yin, Peter Gordon

Open Forum Infectious Diseases, Volume 5, Issue 7, July 2018, ofy153,



Stage of Care	1	2	3	4	5
Description	Diagnosed	RNA viral load	Linked to care	Prescribed Treatment	Sustained Virologic Response
Definition	Positive hepatitis C antibody	Positive hepatitis C quantitative or qualitative viral load	1) Outpatient appointment with an infectious disease or gastroenterology provider after the diagnosis of hepatitis C 2) Any patient prescribed HCV therapy	1)Prescription for any medications used to treated for hepatitis C 2) Any patient linked to care who reached subtained virologic response	Negative HCV viral load >12 weeks after expected completion of therapy

Care Gaps: Trainee perception of HCV screening

- Survey of residents in IM, EM, OB/GYN and pediatrics to assess knowledge, attitudes and practices around sexual health
  - 142 trainees completed the survey (response rate 49%)
- Questions assessing agreement with statements about HCV screening
- Asked to rank 3/10 potential barriers to HCV screening
- Barrier choices divided into 4 domains
  - Health system constraints and competing demands on provider's role
  - Follow-up of results
  - Specific aspects of a provider's patient population
  - Financial reimbursement

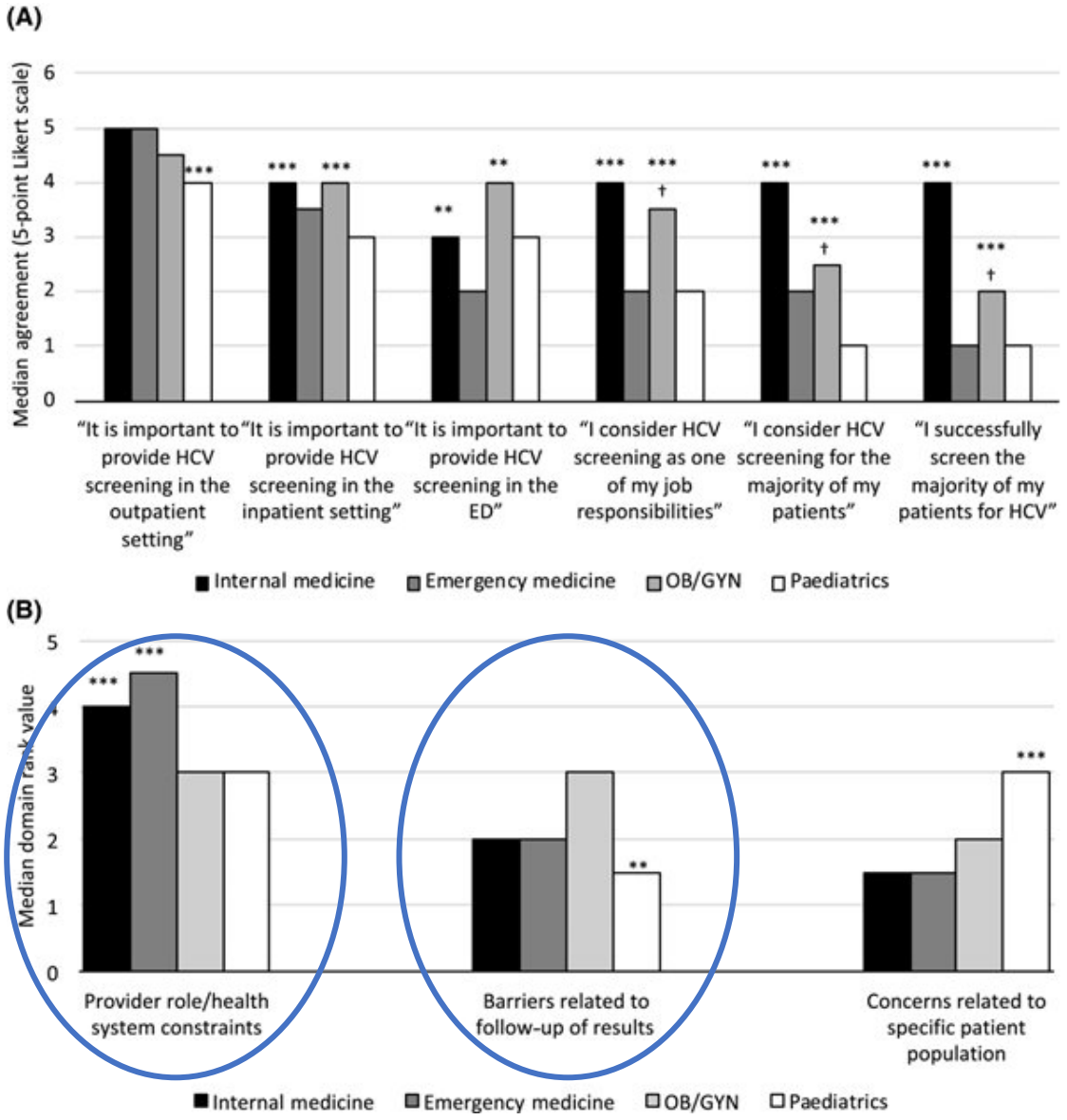

JOURNAL OF VIRAL HEPATITIS

JVH

SHORT COMMUNICATION | Full Access

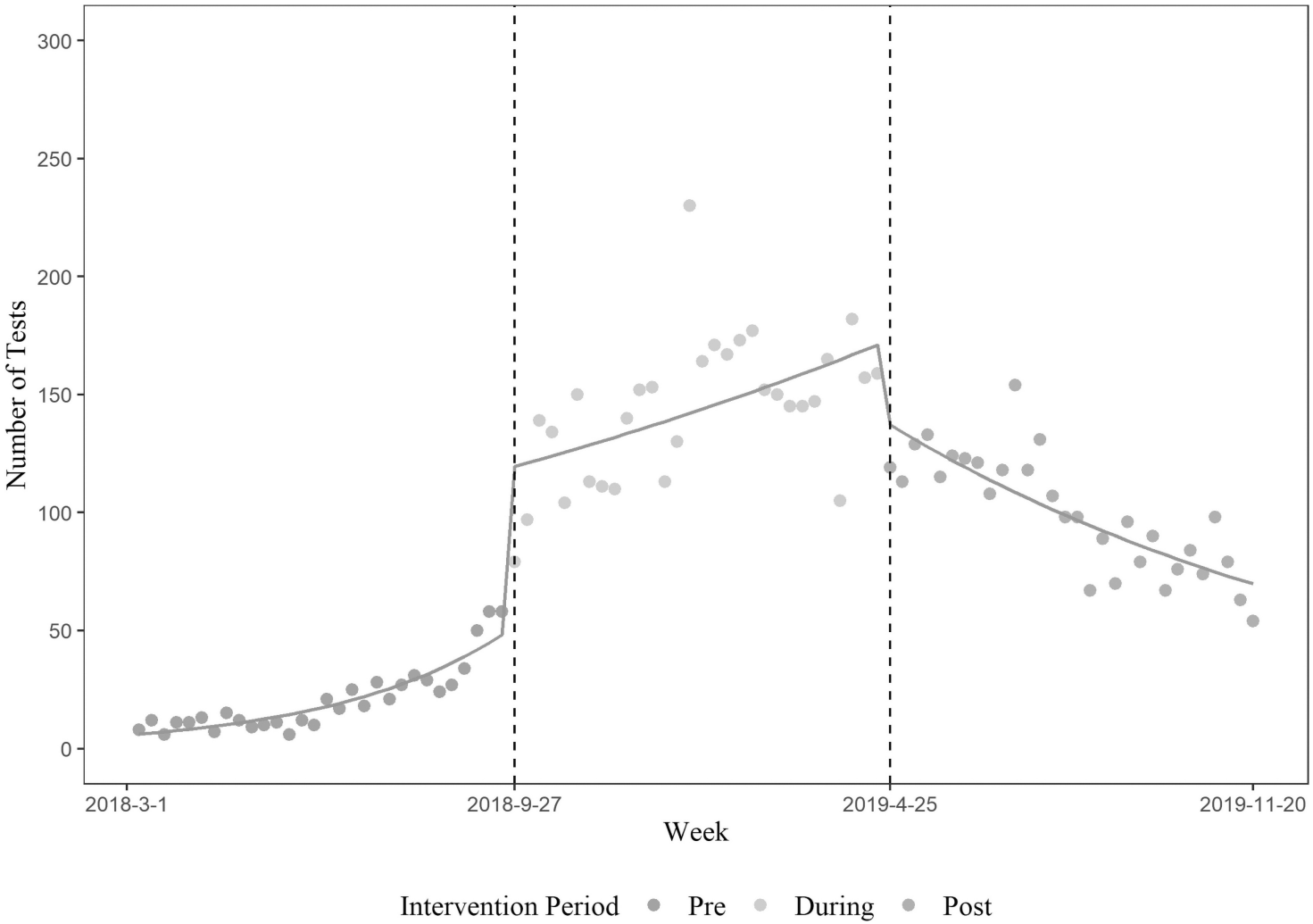
Attitudes, practices and perceived barriers to hepatitis C screening among medical residents at a large urban academic medical center

Daniel Winetsky, Jason Zucker, Caroline Carnevale, Deborah Theodore, Matthew Scherer, Fereshteh Sani, Katherine Elkington, Alwyn Cohall, Magdalena E. Sobieszczyk, Peter Gordon, Susan Olender ... See fewer authors

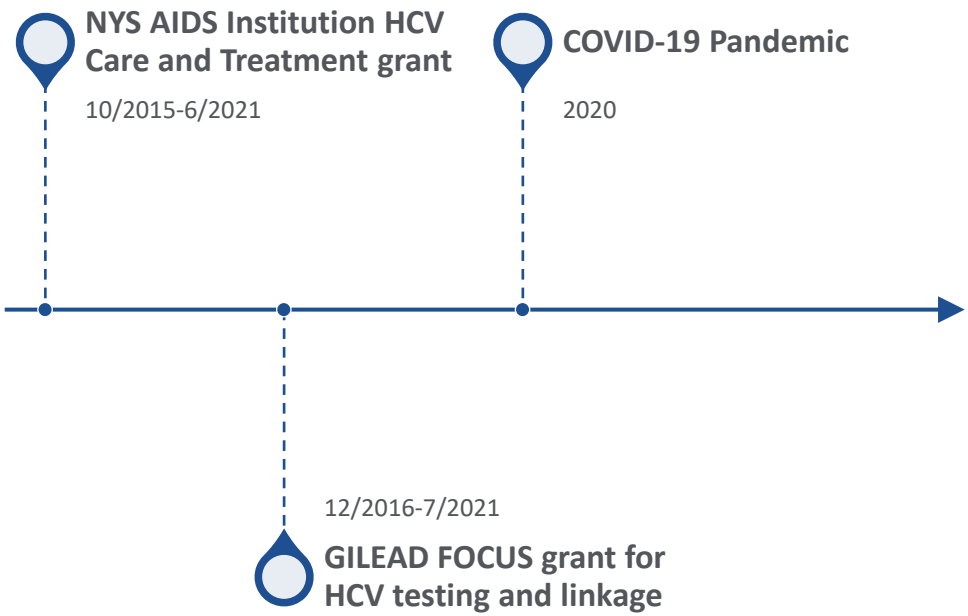

(A)
Median agreement (5-point Likert scale)
0
1
2
3
4
5
6
"It is important to provide HCV screening in the outpatient setting"
"It is important to provide HCV screening in the inpatient setting"
"It is important to provide HCV screening in the ED"
"I consider HCV screening as one of my job responsibilities"
"I consider HCV screening for the majority of my patients"
"I successfully screen the majority of my patients for HCV"
Internal medicine
Emergency medicine
OB/GYN
Paediatrics
(B)
Median domain rank value
0
1
2
3
4
5
Provider role/health system constraints
Barriers related to follow-up of results
Concerns related to specific patient population
Internal medicine
Emergency medicine
OB/GYN
Paediatrics

Care Gaps: HCV Screening in Emergency Dept

- Pre-intervention: HIV and HCV testing dashboards developed that provided a response team with near real-time testing results
- Intervention period: individualized feedback emailed by an ED physician champion to clinical staff who could offer testing
  - Initial feedback showed the preceding 1- and 6-month individual and peer screening counts and rates, the overall screening rate for the prior month, and a target goal of 70%
  - During intervention received monthly feedback + texts including individual screening percentages and peer comparisons
- Post-intervention HIV/HCV testing and response team remained
  - No longer sent provider feedback


300
250
200
150
100
50
0
Number of Tests
2018-3-1
2018-9-27
2019-4-25
2019-11-20
Week
Intervention Period
Pre
During
Post

Previous HCV Funding and Interruptions



HCV DASHBOARD

Utilizing an existing sexual health dashboard to identify treatment opportunities

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Components of Sexual Health Testing Dashboard

- Captures testing across NewYork Presbyterian for Chlamydia, Gonorrhea, HBV, HCV, HDV, HIV, Syphilis
  - Customizable to Hepatitis C only
  - Customizable to specific Campuses
- Displays aggregate monthly testing results
  - Annual breakdown displayed by age, race, ethnicity
  - Filters: Lab group, Lab result, Lab type, Order date, Specimen type, Campus, Department type, Additional location filters, Race, Ethnicity, Age, Sex
- Separate page available with list of patients
  - Includes: Name, MRN, Age, Location, and Test results

Review of HCV Dashboard Results at Columbia

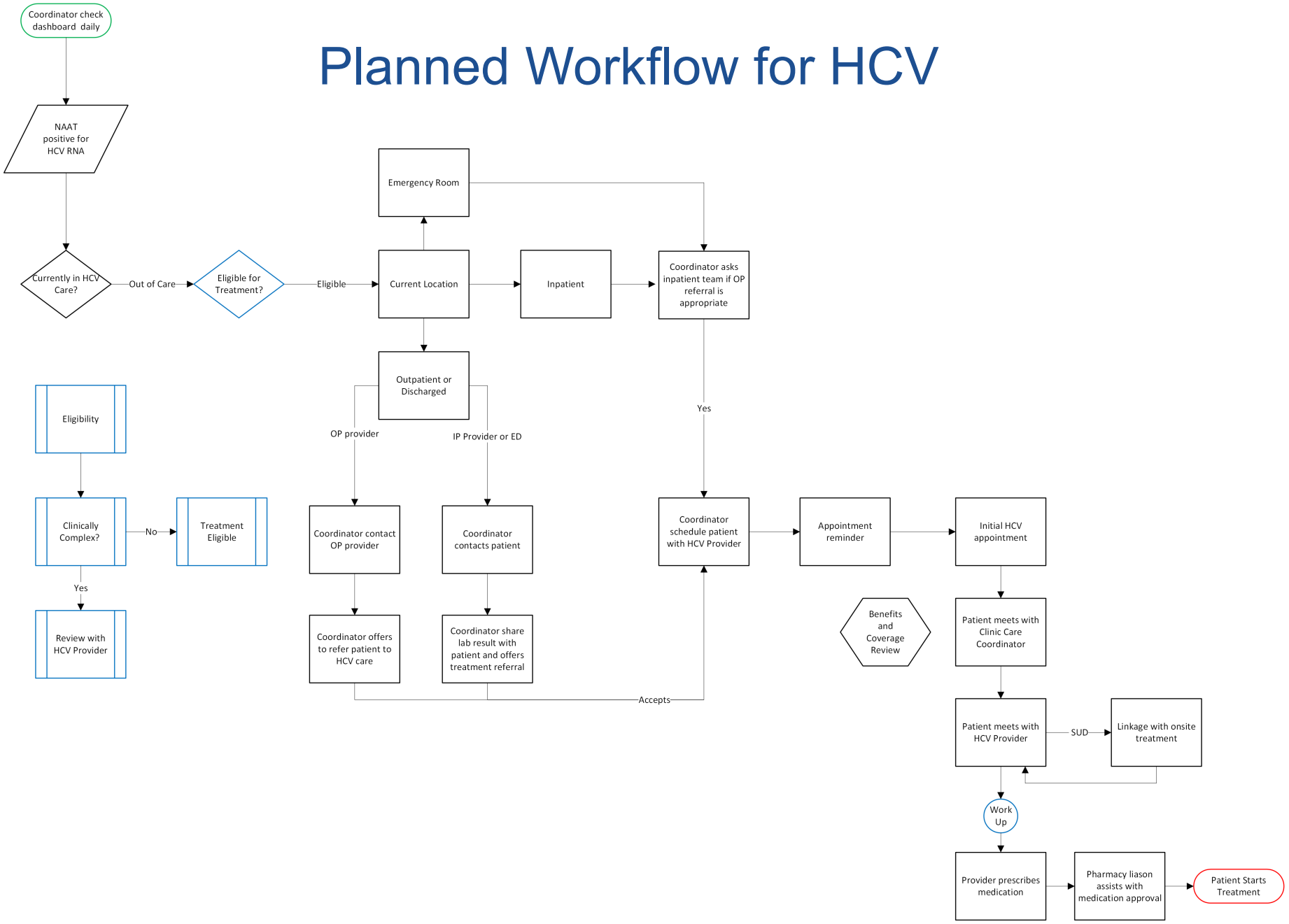
- In 2024 204 unique patients had positive NAAT testing for HCV RNA at Columbia University Irving Medical Center (CUIMC)
- In 2025 as of 4/8/25 including both HCV Ab and NAAT there were 13,400 distinct lab orders for 11,998 distinct patients at CUIMC

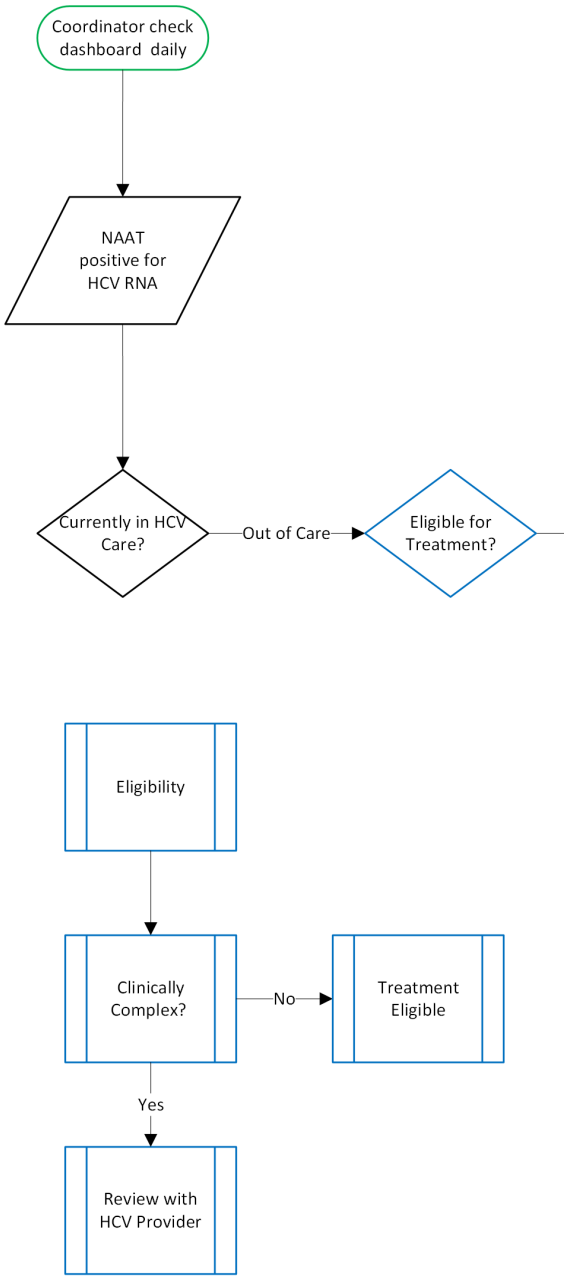
	Distinct Lab Orders for HCV NAAT			**Distinct Patients Tested for HCV NAAT**		
Month	*Total Number*	*Number Positive*	*Percentage Positive*	*Total Number*	*Number Positive*	*Percentage Positive*
Jan	321	26	8.1	264	19	7.2
Feb	308	28	9.1	266	24	9.0
Mar	323	31	9.6	269	28	10.4

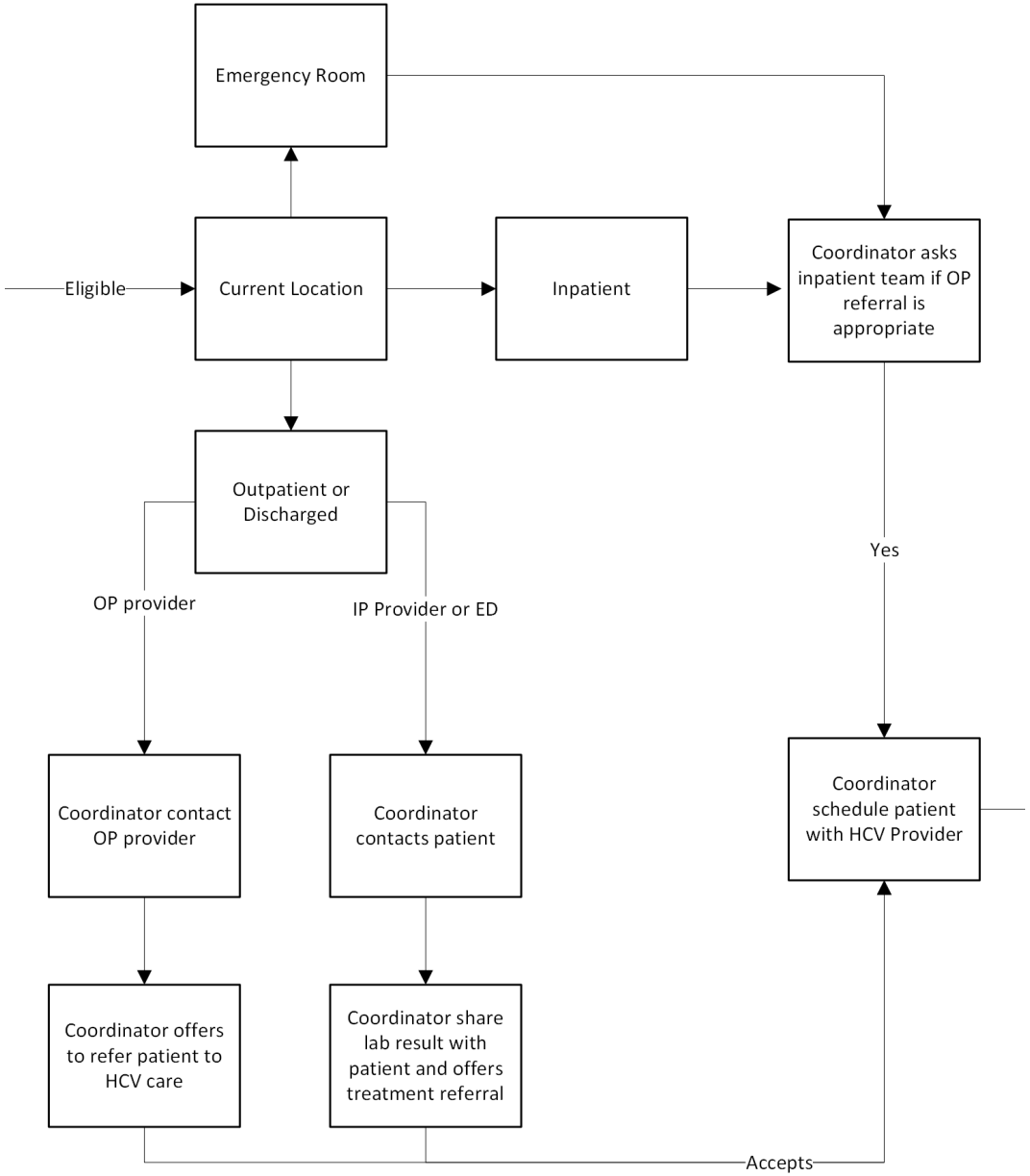
CURRENT ACTIVITIES

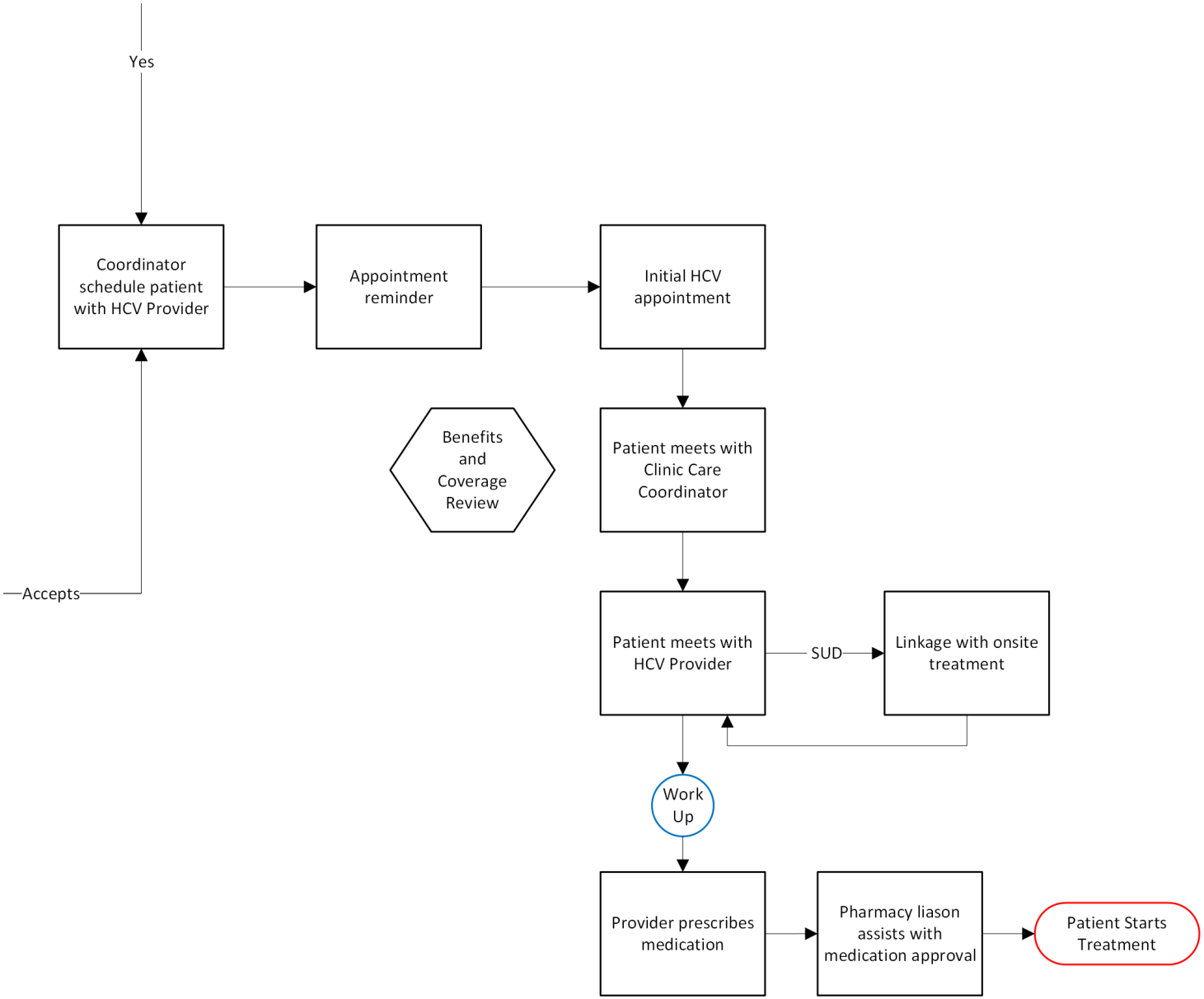
Review of workflow and outcomes

Planned Workflow for HCV




Coordinator check dashboard daily
NAAT positive for HCV RNA
Currently in HCV Care?
Out of Care
Eligible for Treatment?
Eligibility
Clinically Complex?
No
Treatment Eligible
Yes
Review with HCV Provider


Emergency Room
Eligible
Current Location
Inpatient
Coordinator asks inpatient team if OP referral is appropriate
Outpatient or Discharged
Yes
OP provider
IP Provider or ED
Coordinator contact OP provider
Coordinator contacts patient
Coordinator schedule patient with HCV Provider
Coordinator offers to refer patient to HCV care
Coordinator share lab result with patient and offers treatment referral
Accepts


Yes
Coordinator schedule patient with HCV Provider
Appointment reminder
Initial HCV appointment
Benefits and Coverage Review
Patient meets with Clinic Care Coordinator
Accepts
Patient meets with HCV Provider
SUD
Linkage with onsite treatment
Work Up
Provider prescribes medication
Pharmacy liason assists with medication approval
Patient Starts Treatment

Challenges and Next Steps

- Challenges with outreach; especially contact phone numbers
- Flexibility with follow up and missed appointments
- Scaling up outreach
- Longitudinal linkage to care after HCV treatment

Progress Update

- Currently most patients are coming from provider referral
- Patients actively in treatment
  - HIV/HCV overlap
  - HIV PrEP patients referred for sexually acquired HCV
- Active partnership with care coordinator and behavioral health
- Pharmacy assistance with medication delivery to clinic or home

Acknowledgements Slide

Thank you to Peter Gordon, Susan Olender, Lauren Pitt, Matt Scherer, Peter Scheerer, Yasbert Soberal Perez, Jason Zucker and everyone at the Comprehensive Health Program!

References

- Winetsky D, Zucker J, Carnevale C, Theodore D, Scherer M, Sani F, Elkington K, Cohall A, Sobieszczyk ME, Gordon P, Olender S. Attitudes, practices and perceived barriers to hepatitis C screening among medical residents at a large urban academic medical center. J Viral Hepat. 2019 Nov;26(11):1355-1358.
- Zucker J, Aaron JG, Feller DJ, Slowikowski J, Evans H, Scherer ML, Yin MT, Gordon P. Development and Validation of an Electronic Medical Record-Based Algorithm to Identify Patient Milestones in the Hepatitis C Virus Care Cascade. Open Forum Infect Dis. 2018 Jul 3;5(7):ofy153.
- Zucker J, Purpura L, Sani F, Huang S, Schluger A, Ruperto K, Slowkowski J, Olender S, Scherer M, Castor D, Gordon P. Individualized Provider Feedback Increased HIV and HCV Screening and Identification in a New York City Emergency Department. AIDS Patient Care STDS. 2022 Mar;36(3):106-114.

ACR Health

NYS Hepatitis C Elimination Progress Report

Presenter:

Pete Emery

ACR Health
Opening doors to create healthy communities

ACR Health
Opening doors to create healthy communities

Goals

- Engage with new facilities.
- Offer treatment services to their clients currently not available.
- Educate facility staff on the treatment cascade.
- Reduce client stigma regarding HCV treatment/healthcare.
- Establish trustful relationships with clients.
- Provide all-inclusive HCV treatment services.

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Opening doors to create healthy communities

Target Recruitment Plan.

- OASAS, Shelters, Syringe Exchange, Correctional, Community Based Organizations, Primary Care Providers.
- Research services currently provided for HCV treatment.
- Communication with staff, client support.
- Provide progress and referral success.

ACRHealth
Opening doors to create healthy communities

Services Provided

- Point of Care RNA testing, Cepheid update.
- Individual care plan.
- Navigation throughout the treatment process.
- Referrals for additional services.

ACRHealth
Opening doors to create healthy communities

Program Overview

- Enrollment process.
- HCV diagnosis to cure.
- Timeline to begin treatment.
- Client relationship with Navigator.
- Use of Tele-Health.
- Post treatment service.

ACRHealth
Opening doors to create healthy communities

Benefits of HCV Navigation

- Person centered care.
- Flexible appointments.
- Goal of starting treatment within two weeks of intake.
- Provide transportation.
- Stigma free treatment.
- Improved willingness to health care.

ACRHealth
Opening doors to create healthy communities

Improve the HCV Navigation Program

- Streamline the treatment cascade.
- Communication with clients.
  - Client's lived experience is key to eliminating barriers.
- Regular contact with facility staff.
  - Referral sources often have high turnover.
- Support new engagement methods.

ACRHealth
Opening doors to create healthy communities

Enrollment and Treatment Review

- Program enrollments: 717

November 1, 2018, thru April 1, 2025

91% initiated treatment with 86% completing.

- March 2025 treatment update:

70 active clients.

ACR Health
Opening doors to create healthy communities

Success of the HCV Navigation Program

- Correctional facilities.
- Timeline for access to treatment.
- Client relationships.
- Client stories.

ACRHealth
Opening doors to create healthy communities

ACR Health HCV Navigation contact information

Pete Emery, HCV Program Manager

315-982-4775

Amanda Serrano, HCV Patient Navigator

315-489-0161

Jenifer Cole, HCV Coordinator

315-240-0852

ACR Health
Opening doors to create healthy communities

HEPATITIS C MENTOR AND SUPPORT GROUP

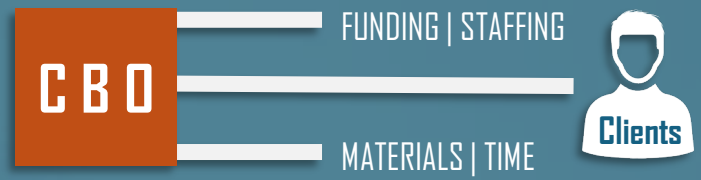
The Circle: A Progressive Model towards Addressing the Syndemics of Hepatitis C

Presenter: Robert Desrouleaux

What is The Circle?

The Circle is a non-clinical model adopted by CBOs, SSPs, OPCs, hospitals, and clinics who can provide a physical support environment for participants. It serves as an enhancement to strengthen existing services and programs within the partner organizations. Partner organizations are provided HCMSG's educational training tools, materials and support.

Why does The Circle work?



HCMSG's works with community-based partners to broaden and enhance Hepatitis C education, awareness, support, and linkage to care. We service clients/patients and staff nationwide. Adopting the model grants your organization access to HCMSG's full suite of educational materials, group facilitation guidelines, staff training materials, Educational Counseling Kits, and more at no cost.

How does The Circle work?

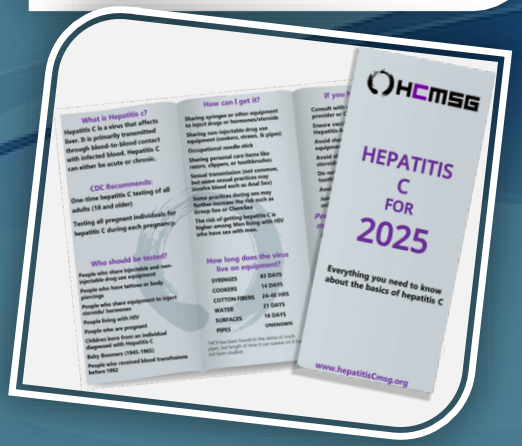
Evaluation	Discussion	Curate	Execution	Tracking/Data
• HCMSG starts with an evaluation of your current programs and services to determine gaps, opportunities, and barriers.	• How the Circle can complement these services.	• We works closely with each partner organization to curate a support strategy specific to each organization and patient population's needs.	• In collaboration with the partner organization, we begin providing support services as per the planned strategy	• Program effectiveness is tracked and the data is analyzed during regular updates with the individual organizations.

The Circle: Methods

- **Working with the staffs** of community organizations to integrate Hepatitis C and Harm Reduction education into their programs when such education is lacking.
  - Meet and train **organization's patients** to help educate and support them.

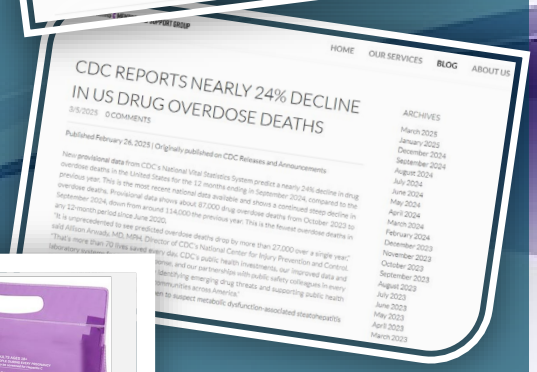
The Circle: Methods

- **Training and training materials** on group meeting facilitation, education on Hepatitis C, co-infection with HIV, Harm reduction strategies, and the importance of advocacy including the HCV elimination plans.
  *** Support in forming educational groups surrounding syringe exchange programs**
  * Training available in video format



The Circle: Methods

- **An informational website** (www.hepatitisCmsg.org), award winning blog, and social media updates.
- **Educational Webinars** to provide up to date information on the priority populations and communities affected by Hepatitis C.
- **Educational Counseling Bags** to provide self-care products and educational materials to promote awareness



The Circle: Methods

- **Tele-Support** - The same training as above only provided via conference call.
  * This fills various needs such as trainings for facilitators and support groups for patients in areas where there is no support and education available.

The Circle: Outcomes & Sustainability - SITES

The Circle Model has 16 nationwide partner sites. The populations served include **PWUD, LGBTQIA+ and TGNCNBI, youth and young adults, pregnant people, and anyone affected.**

ekiM for Change Syringe Exchange *Greenville, NC,*

Hawaii Department of Health *Honolulu, HI,*

Hep Free Hawaii *Honolulu, HI,*

Hawaii Health and Harm Red Ctr *Honolulu, HI,*

Kumukahi Health and Wellness*, Honolulu, HI*

Choice Health Network *Knoxville, TN,*

Harm Reduction Clinic *Knoxville, TN,*

Tennessee Recovery Alliance *Knoxville, TN,*

OnPointNYC *, Washington Heights, NY,*

OnPointNYC East Harlem*, New York, NY*

SunRiver Health *Bronx, NY,*

BronxMovil, *Bronx, NY*

Montefiore Buprenorphine Treatment Network*, Bronx, NY,*

Harm Reduction Coalition*, Greater New Yor Area,*

CT Harm Reduction Alliance*, Hartford, CT*

CT Harm Reduction Alliance*, New Haven, CT*

The Circle: Outcomes & Sustainability - DATA

DATA COLLECTED

ATTENDANCE

INCENTIVES

TESTING

PREVENTION

CURE

Overall Results:

1. Participants were advised to follow up with providers.

2. 50+% of the participants were tested for Hep C.

3. 1000+ participants completed our training with a 70% response rate to how stigma affects them.

- Peer - "*When diagnosed with Hep C, I immediately thought 'My fault', I didn't feel I deserved treatment and didn't go for a very long time."*

- Staff – *"I have clients who use drugs & live with HCV. Stigma has convinced them that treatment needs to be "earned".*

Monte Buprenorphine Network (MBN)

Montefiore

Consistent use of the Circle Model resulted in:

- 100% Hepatitis C testing rates across all sites.
- Significant improvements in harm reduction knowledge and practices.
- Safer sexual behaviors encouraged through education and materials.

BOOM Health Circle Model

Key Outcomes for BOOM Health Circle Model Data

- A healthy mix of new participants (40-50%) and returnees (50-60%) demonstrates strong participant retention and outreach effectiveness.
- 100% testing rate:
- All participants were tested for Hepatitis C in each session, highlighting the program's success in integrating testing into Circle Model activities.
- Trust-building efforts and consistent education were critical in achieving this high testing rate.

BOOM Health Circle Model

- Participants showed significant improvements in harm reduction behaviors, with 80% reporting adopting safer practices
- HCMSG Circle Model Materials:
  - Distributed to 80-90% of participants monthly, ensuring widespread access to resources.
- Educational Counseling Kits:
  - Reached 75-85% of participants, further supporting harm reduction and sexual health education.

BOOM Health Circle Model

- Stigma Reduction:
  - Peer-led discussions and stigma-reduction workshops effectively created a safe and supportive environment for participants.
  - 60-80% of participants reported having a support system, indicating progress in fostering community connections and addressing stigma.

HEPATITIS C MENTOR AND SUPPORT GROUP

The Circle: A Progressive Model towards Addressing the Syndemics of Hepatitis C

Questions?

To contact us:

Email: hepatitisCmsg@gmail.com | **Website:** www.hepatitisCmsg.org

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