Expanding Hepatitis Testing and Linkage to Care in Emergency Departments

NASTAD's Hepatitis Testing Partnership

October 17, 2019

NASTAD

NASTAD's vision is a world free of HIV and viral hepatitis

- NASTAD is a non-profit association that represents public health officials who administer HIV and hepatitis programs in the U.S. and around the world.

- We strengthen domestic and global governmental public health through advocacy, capacity building, and social justice.

Hepatitis Testing Partnership

- A diverse coalition of stakeholders working together to increase testing and linkage to care for hepatitis B and C

- Convenes through a listserv and quarterly webinars to share ideas, lessons learned, resources, and best practices

HEPATITIS TESTING PARTNERSHIP

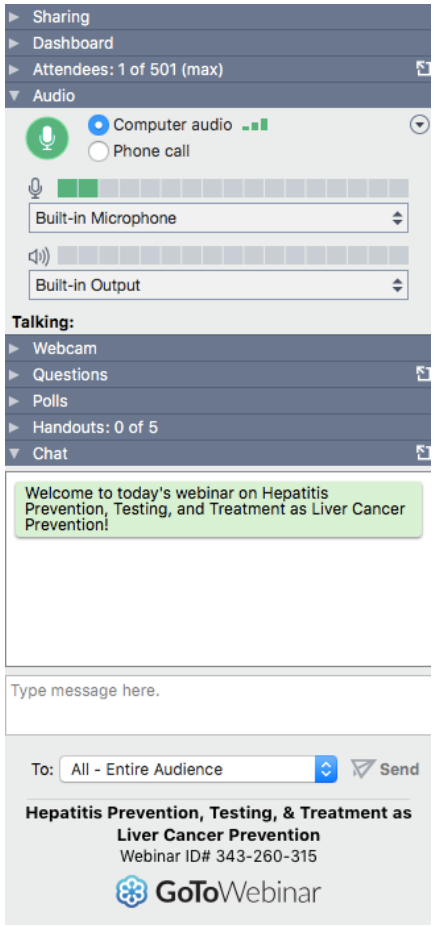
Phone/Audio Options

Call-In #: 1-631-992-3211

Attendee Access Code: 138-157-570

All attendees are muted.

Questions?



Questions? Submit questions in the chat box at anytime throughout the webinar.

Speakers

- Ethan Cowan, MD, MS, FACEP, Director of Research and Community Engagement/Associate Professor of Clinical Emergency Medicine, Mount Sinai Beth Israel

- Heather Henderson, MA, CAS, Director, Social Medicine Strategies, Division of Emergency Medicine, Tampa General Hospital

Non-targeted Hepatitis C Screening in the Emergency Department

Ethan Cowan, MD, MS, FACEP
Director of Research and Community Engagement
Associate Professor of Clinical Emergency Medicine
Department of Emergency Medicine
Mount Sinai Beth Israel
Icahn School of Medicine at Mount Sinai

Mount Sinai Beth Israel

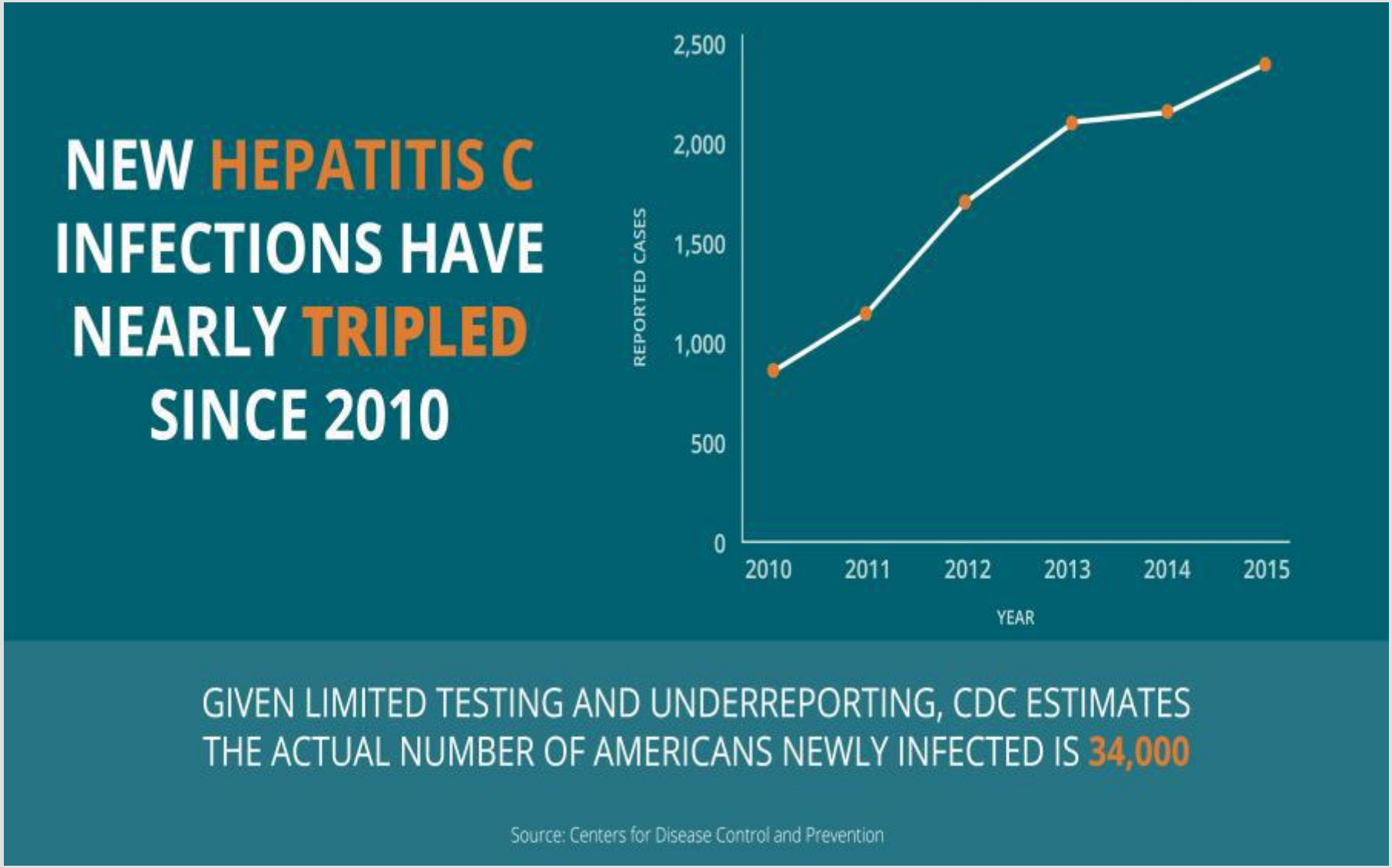

WHAT
WHO
HOW
?
WHEN
WHERE
WHY

https://www.costtree.net/blog-post/why-we-do-what-we-do-our-simon-sinek-story

HCV Facts

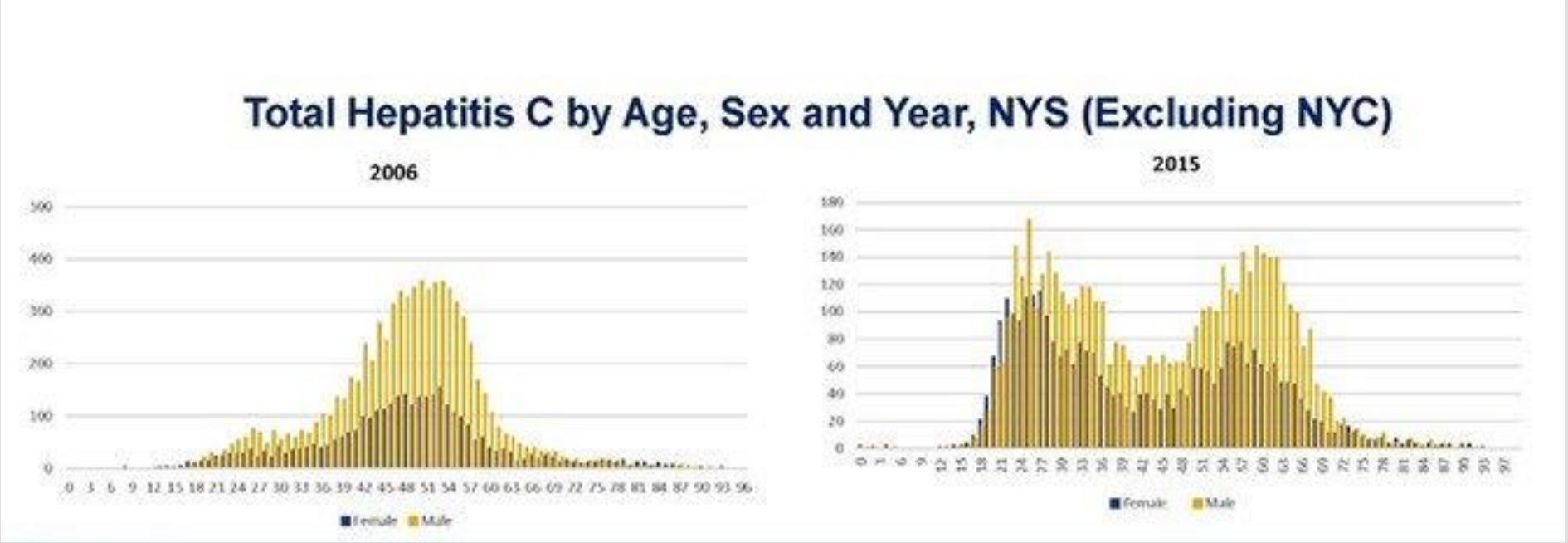
- Most common chronic blood borne infection in the US
- Estimated 2.4 million people in the US living with HCV
- Leading cause of liver disease and liver cancer
- Leading indication for liver transplant in the US
- HCV death rates in NYS now exceed HIV death rates
- HCV is curable

Background and Significance



CDC. Hepatitis Surveillance Report – United States. https://www.cdc.gov/nchhstp/newsroom/2017/hepatitis-surveillance-report.html. Accessed May 1, 2019.

Changing State of the HCV Epidemic



New York State Department of Health (NYSDOH) Communicable Disease Electronic Surveillance System; NYSDOH AIDS Institute

Current CDC HCV Screening Recommendations

- CDC recommends HCV screening for:
  - Current or former injectable drug users
  - Persons born between 1945-1965
  - Recipients of factor concentrates or organ transplant prior to July 1992
  - People with HIV, ever on HD or persistent ALT elevation

- Two Questions
  - Why screen in the Emergency Department?
  - Why do non-targeted screening?

Program Description

https://www.behance.net/gallery/23222933/THIS-IS-HOW-WE-DO-IT

Offer & Screening Eligibility

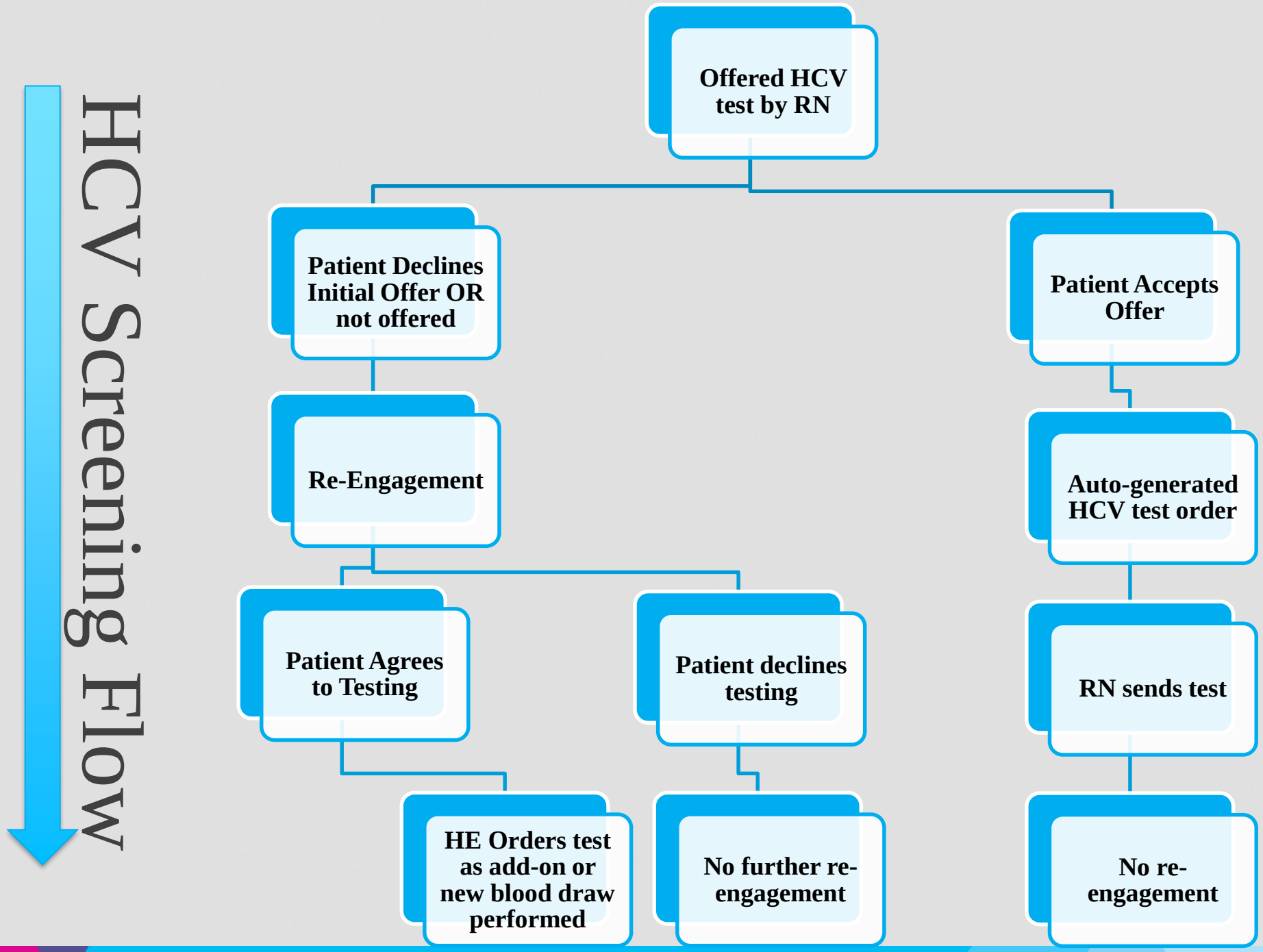
1. Initial HCV testing offer done by the RN at the time of the primary assessment (“hard stop” in EMR)

   “We offer HIV and Hepatitis C testing to all of our patients. We recommend that you get tested today. Is that okay?”

2. Eligibility
   1. All patients aged 18 and older
   2. Being seen in the adult and pediatric areas of the ED
   3. Able to consent to testing
   4. Medically stable

3. Exclusion criteria
   1. Triaged to the psychiatric ED
   2. Intoxicated, or Mentally Incapacitated or critically ill

HCV Screening Flow



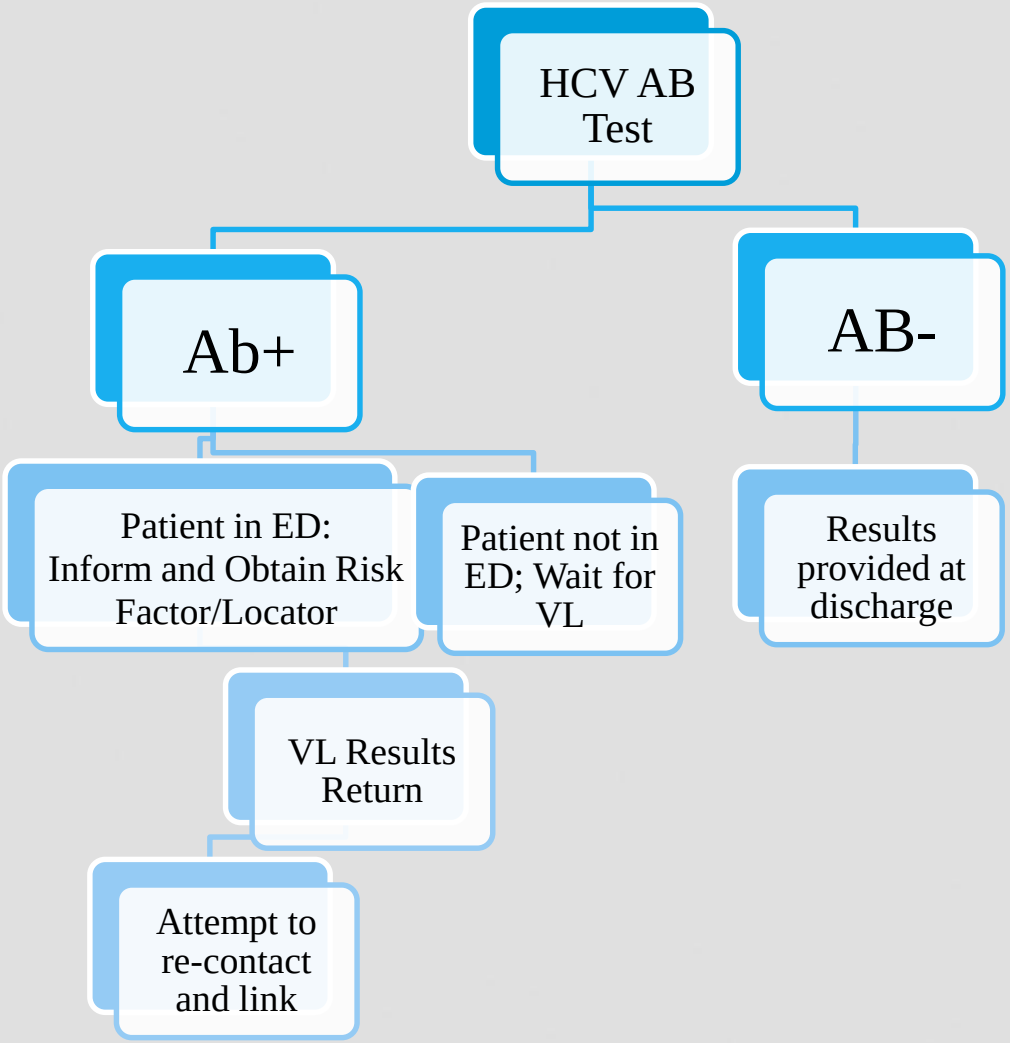
Re-Engagement

1. Structured Re-Engagement Performed by a Trained Health Educator (HE)

2. HEs attempt to reengage all patients who decline or are not offered testing by the RN
    1. Brief educational session
    2. Important to be tested at least once in your life
    3. You can have HCV and not know it because there may not be symptoms
    4. HCV is curable

3. Coverage
    1. 15 hours per day on weekdays (9am-Midnight)
    2. 8 hours on weekends (10am-6pm)

Hepatitis C Positive Patients



Lab Results:

Antibody Results:

- 1 hour lab turn around time

Viral Load Results:

- 5 to 7 day turn around time

Risk Factor Form: 17 question survey given to all patients testing Ab+

Linking Patients

- Positive patients given appointments in Liver Clinic
- Linkage defined as attending 1st outpatient appointment for HCV treatment

Lost to Follow-up Procedures for RE HCV Ab

1. Patients with phone numbers called up to 7x, then monthly
2. Patients with address have mailgrams sent
3. Patients with no contact information “flagged” in EMR
4. Monthly jail search
   - list sent to CHS – Contact initiated by CHS staff
5. Monthly list provided to DHS
   - homeless outreach performed by DHS
6. Quarterly list provided to DOHMH (QNS and VL+) for registry matching

1st Year Program Results

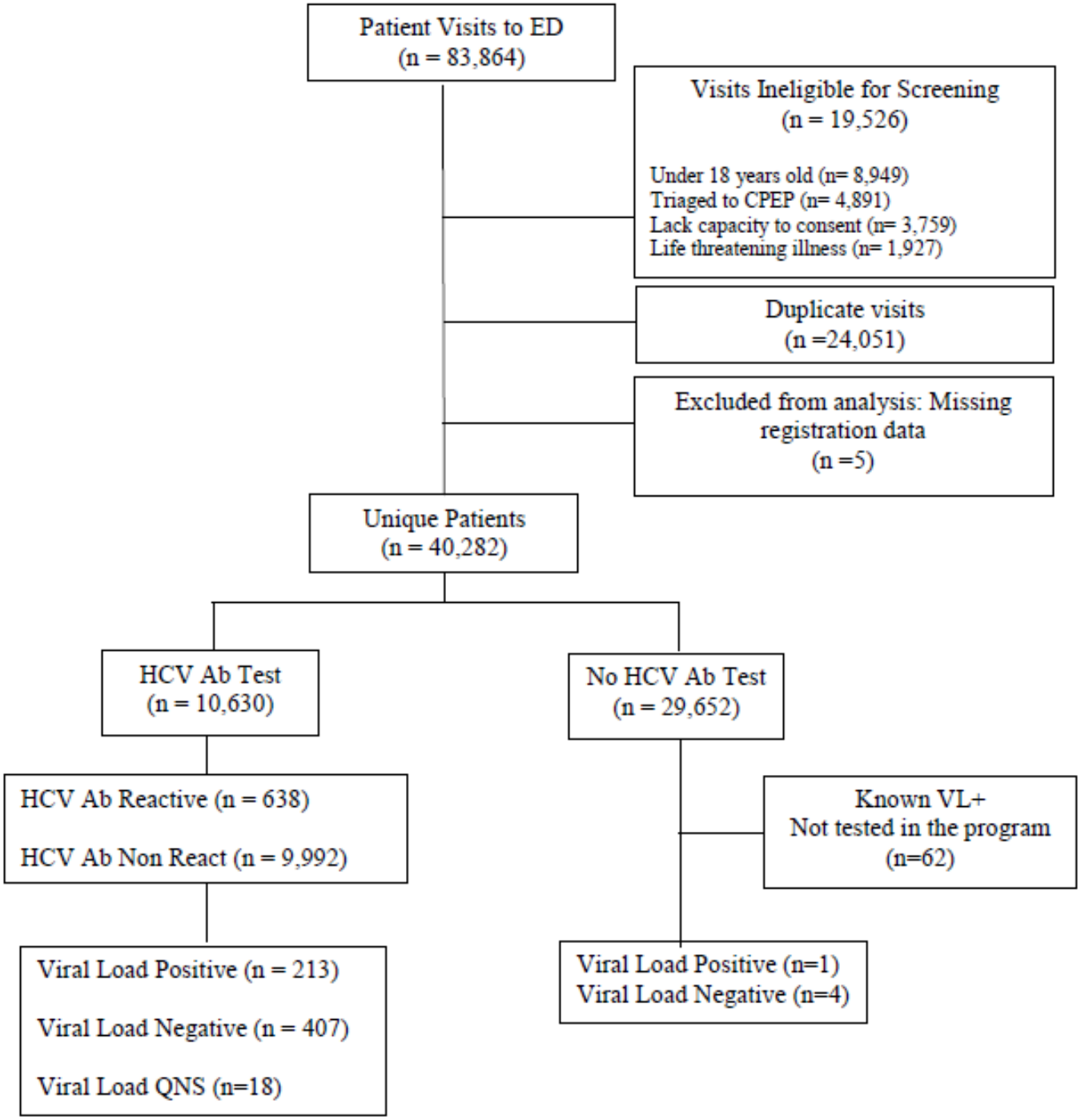
June 6, 2018 – June 5, 2019

Program Summary
6/6/2018 – 6/5/2019

83,864
Patient Visits

13,933
Tests Performed

HCV test performed in 17% of all ED Visits


Patient Visits to ED
(n = 83,864)
Visits Ineligible for Screening
(n = 19,526)
Under 18 years old (n= 8,949)
Triaged to CPEP (n= 4,891)
Lack capacity to consent (n= 3,759)
Life threatening illness (n= 1,927)
Duplicate visits
(n =24,051)
Excluded from analysis: Missing registration data
(n =5)
Unique Patients
(n = 40,282)
HCV Ab Test
(n = 10,630)
No HCV Ab Test
(n = 29,652)
HCV Ab Reactive (n = 638)
HCV Ab Non React (n = 9,992)
Known VL+
Not tested in the program
(n=62)
Viral Load Positive (n = 213)
Viral Load Negative (n = 407)
Viral Load QNS (n=18)
Viral Load Positive (n=1)
Viral Load Negative (n=4)

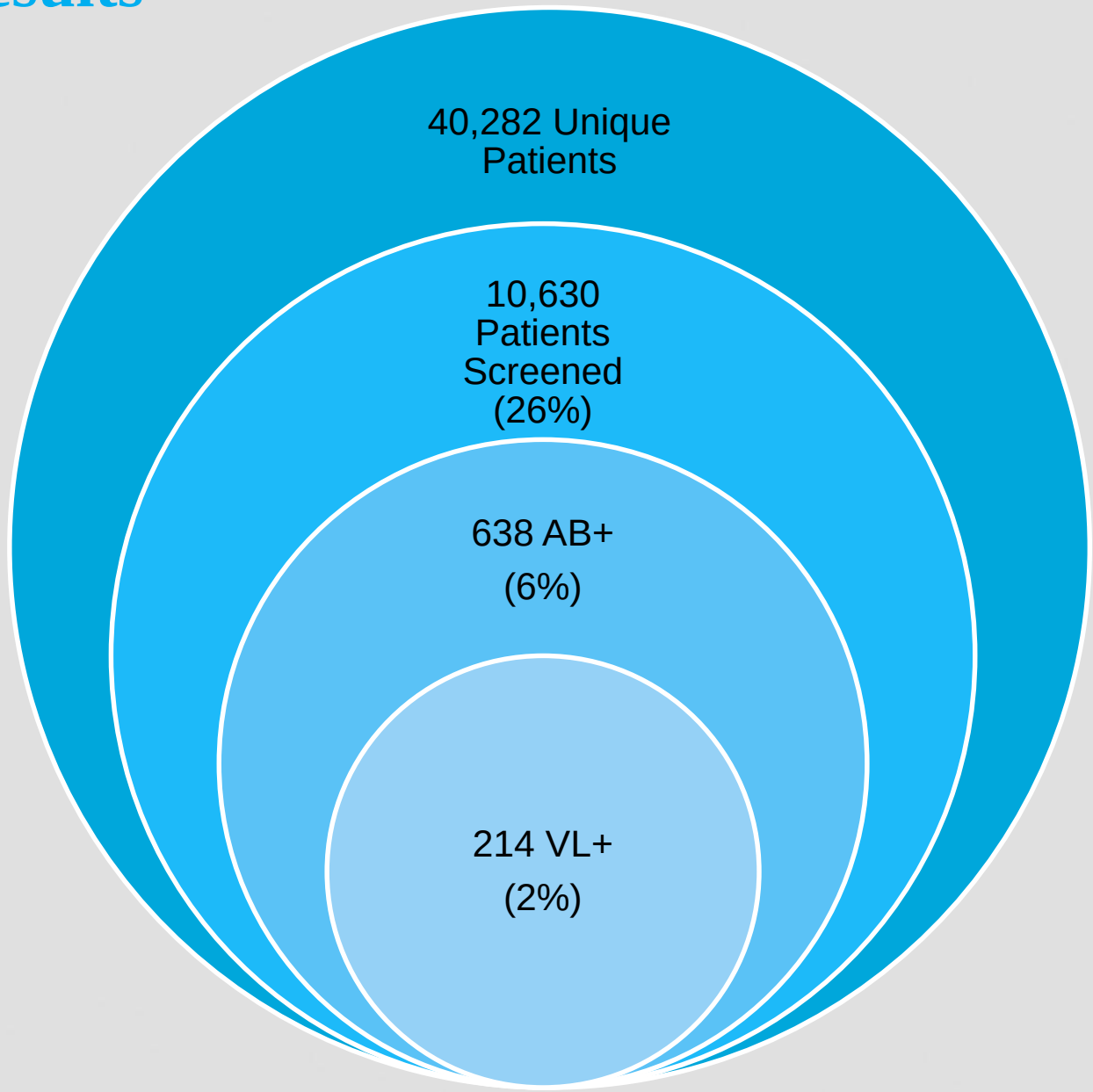
Program Summary
6/6/2018 – 6/5/2019

40,282
Unique Patients

10,630
Tests Performed

26% of all unique eligible patients are tested

Testing Results



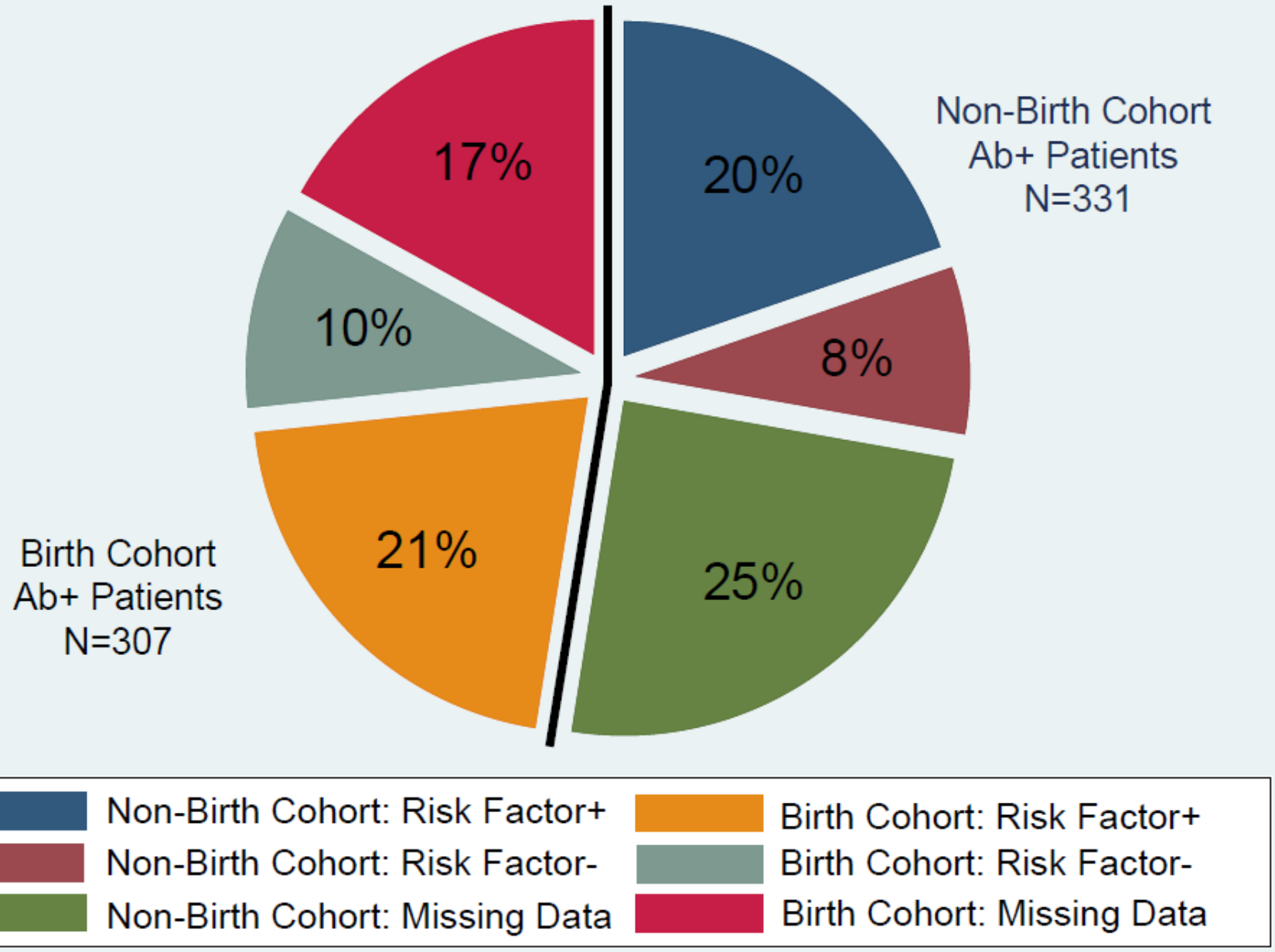
Population Characteristics

		Unique Patients N = 40,282		Tested N = 10,630	
Age*	Mean (SD)	47.23	(19.27)	45.96	(18.45)
Birth Cohort*	Yes	10,513	(26%)	2,671	(25%)
	No	29,769	(74%)	7,959	(75%)
Sex*	Male	17,715	(49%)	4,567	(47%)
	Female	18,843	(51%)	5,048	(53%)
Race*	Asian	2,113	(5%)	535	(5%)
	Black	6,467	(16%)	2,031	(19%)
	Unknown	10,929	(27%)	2,795	(26%)
	White	10,251	(26%)	2,194	(21%)
	Other	10,522	(26%)	3,075	(29%)
Ethnicity*	Spanish/Hispanic/Latino	6,019	(15%)	1,980	(19%)
	Not Spanish/Hispanic/Latino	12,128	(30%)	3,131	(29%)
	Unknown	22,135	(55%)	5,519	(52%)
Insurance*	Commercial	11,806	(29%)	2,825	(27%)
	Medicare	8,375	(21%)	2,138	(20%)
	Medicaid	12,658	(31%)	3,958	(37%)
	Unknown	414	(1%)	79	(1%)
	Self Pay	7,029	(18%)	1,630	(15%)

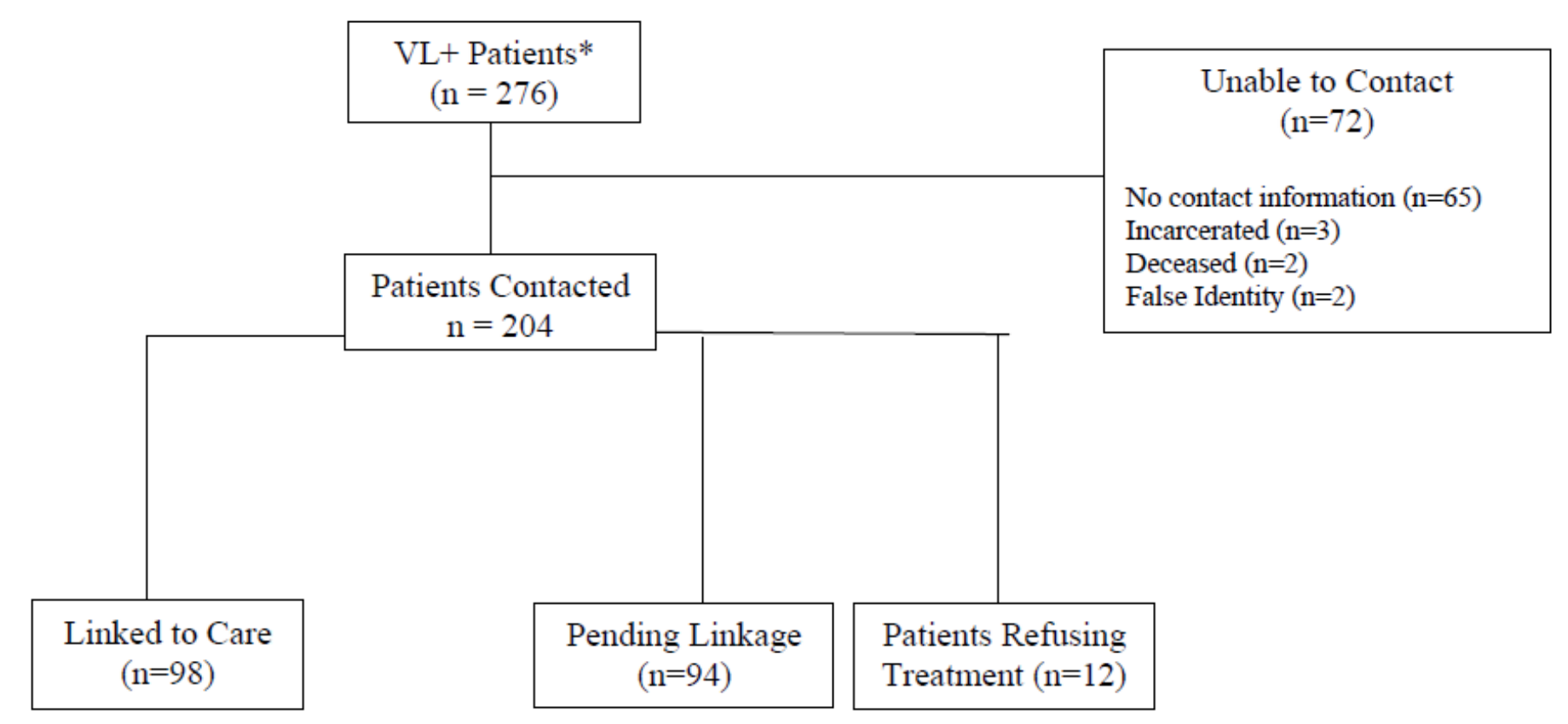
Population Characteristics

		Reactive N = 638		VL Positive N = 214	
Age*	Mean (SD)	53.86	(15.05)	52.98	(14.27)
Birth Cohort*	Yes	307	(48%)	101	(47%)
	No	331	(52%)	113	(54%)
Sex*	Male	414	(65%)	156	(73%)
	Female	223	(35%)	57	(27%)
Race*	Asian	24	(4%)	7	(3%)
	Black	130	(20%)	49	(23%)
	Unknown	134	(21%)	45	(21%)
	White	168	(26%)	61	(29%)
	Other	182	(29%)	52	(24%)
Ethnicity*	Spanish/Hispanic/Latino	134	(21%)	38	(18%)
	Not Spanish/Hispanic/Latino	221	(35%)	76	(35%)
	Unknown	283	(44%)	100	(47%)
Insurance*	Commercial	63	(10%)	7	(3%)
	Medicare	177	(28%)	47	(22%)
	Medicaid	307	(48%)	117	(55%)
	Unknown	11	(2%)	1	(0.5%)
	Self Pay	80	(12%)	42	(19%)

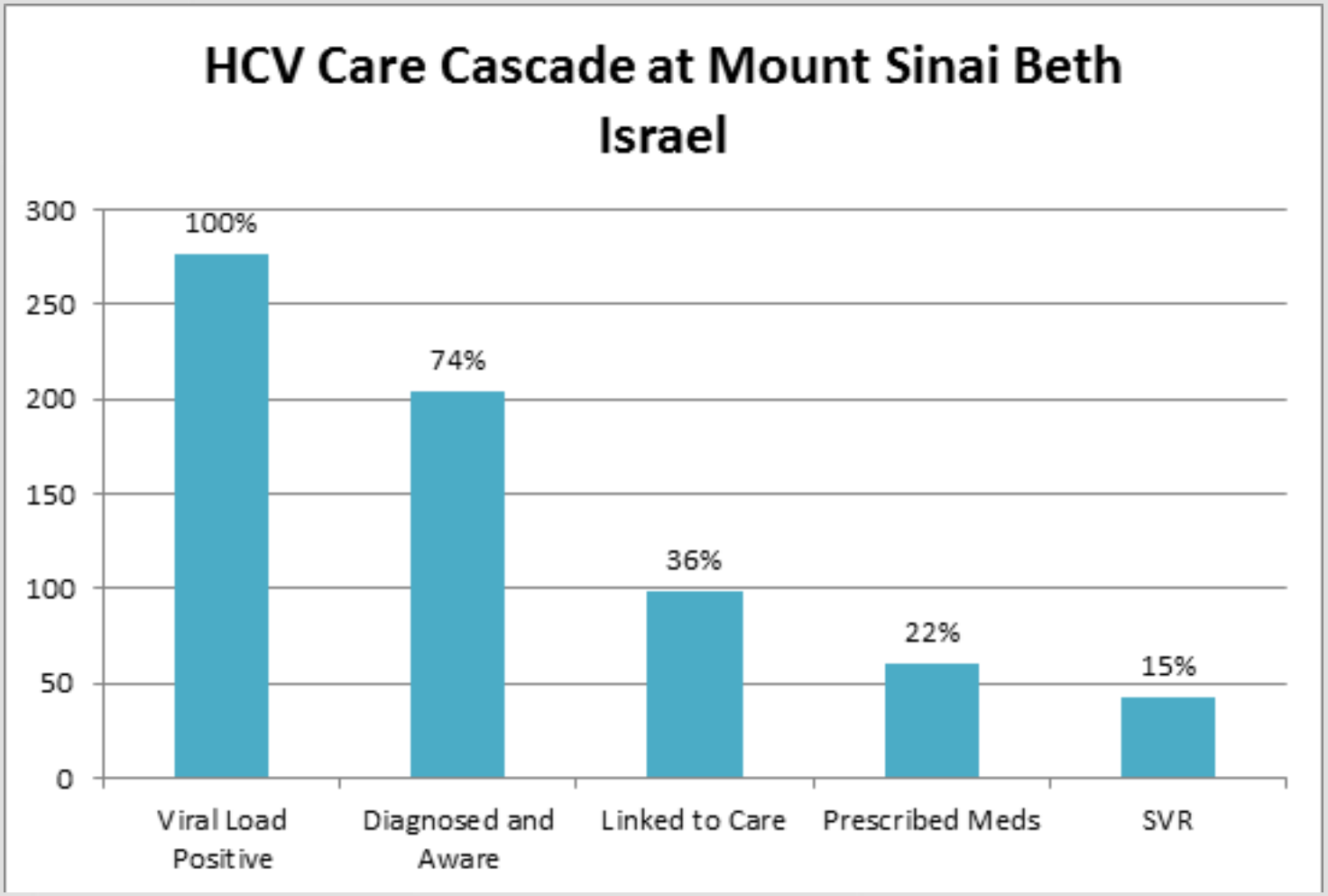
Risk Factors for Birth and Non-Birth Cohort AB+ Patients



Linkage to Care Summary



*Includes known positives, not tested by our program and out of care


HCV Care Cascade at Mount Sinai Beth Israel
300
250
200
150
100
50
0
100%
74%
36%
22%
15%
Viral Load Positive
Diagnosed and Aware
Linked to Care
Prescribed Meds
SVR

Costs & Funding

Program Costs

1. Direct costs approximately $350,000/annually

    - Partial support for program director
    - Partial support for a project manager
    - Three (3) FTE Heath Educator lines
    - Supplies and Travel
    - Statistical and data support

HOW 340B WORKS

340B HEALTH For more information, please contact Kathryn DiBiatto at 202-552-5855 or kathryn.dibiatto@340bhealth.org.

1

Drug manufacturer sells outpatient drugs to 340B hospital at discounted price

2

Only hospitals that treat high volumes of low-income patients or serve remote, rural areas qualify for 340B

3

Hospital provides 340B drug to outpatient when hospital is responsible for patient's care

4

Low-income and uninsured patients receive drugs at free or reduced cost.

Insured patients pay their normal co-pay, and their insurer reimburses the hospital their normal payment.

5

The hospital's 340B savings are the difference between what the hospital paid for a drug at the 340B price and what it would have paid at a non-340B price.

6

Examples of how 340B hospitals use savings to help low-income patients

- Provide free oncology services to low-income patients treated in the hospital's cancer clinic
- Implement medication therapy management programs to improve patient care and reduce overall health costs and readmissions
- Provide lifesaving drugs at free or no cost to uninsured and vulnerable patients
- Open a new indigent care clinic

Our Team

Medical Director:	Ethan Cowan
Project Manager:	Joan Esbri-Cullen
Health Educators:	Samantha Brandspiegel
	Joseph Zaheer
	Clare O’Brien-Lambert
Program Hepatologist:	Amreen Dinani
Program Epidemiologist:	George Loo

Co-Locating Linkage to Care for HCV and Opioid Use Disorder in the Emergency Department

Heather Henderson, MA, CAS
Director of Social Medicine Strategies
Division of Emergency Medicine
Tampa General Hospital
PhD Candidate, University of South Florida

HCV In the United States

3.5 million estimated cases of HCV in the United States

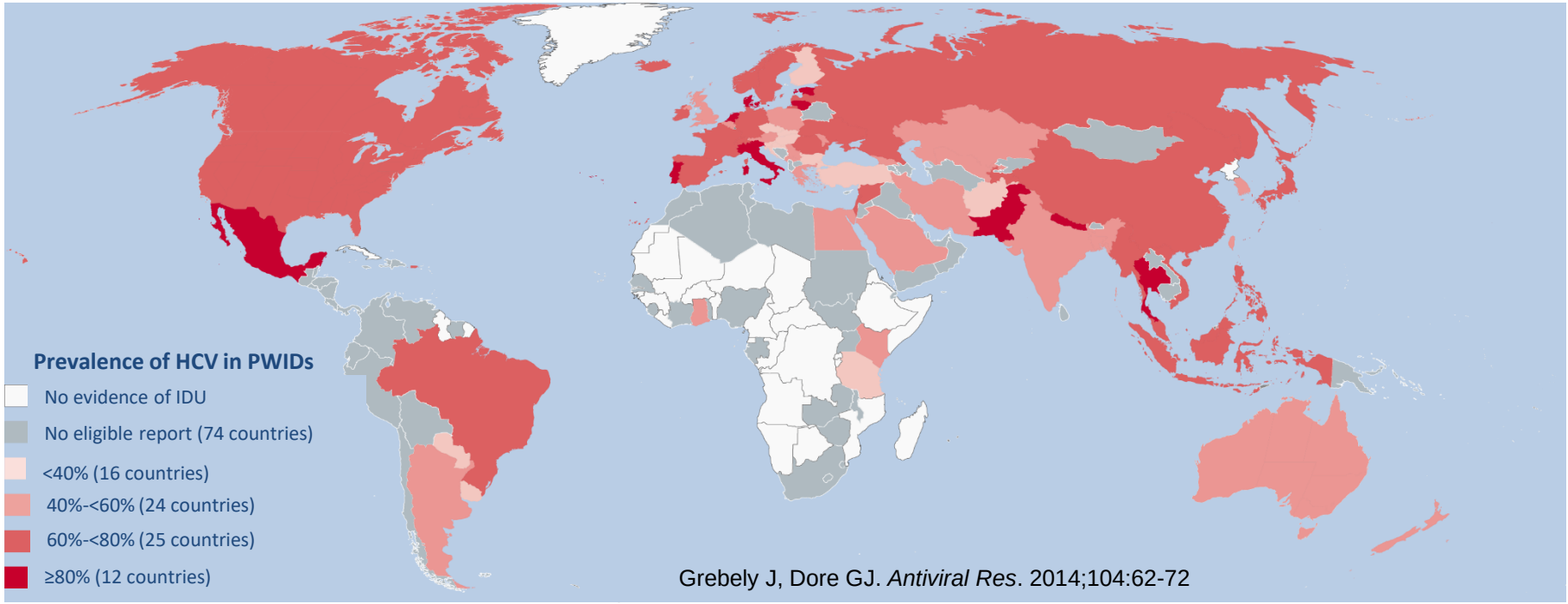
34,000 new HCV infections in 2015

New infections tripled over 5 year period

The greatest increases in new HCV infections, and the highest overall number of cases, were among young people aged 20-29 years, with injection drug use as the primary route of transmission

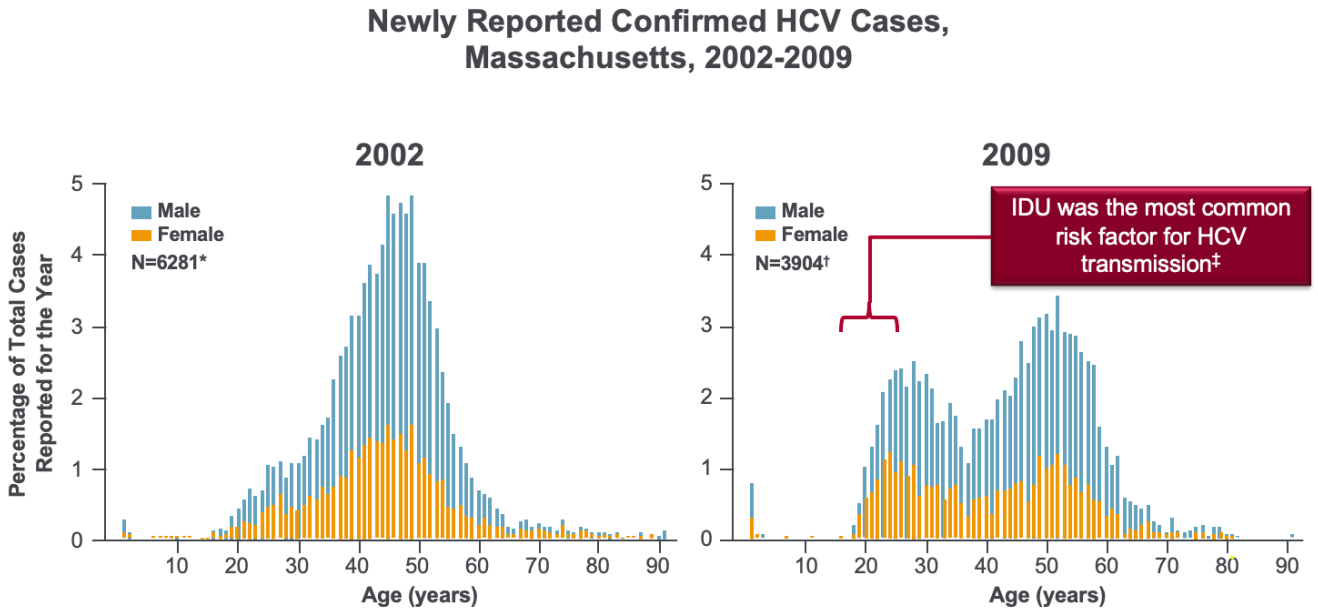
https://www.cdc.gov/hepatitis/statistics/2015surveillance/Commentary.htm#hepatitisC

Prevalence of HCV in People Who Inject Drugs (PWID)



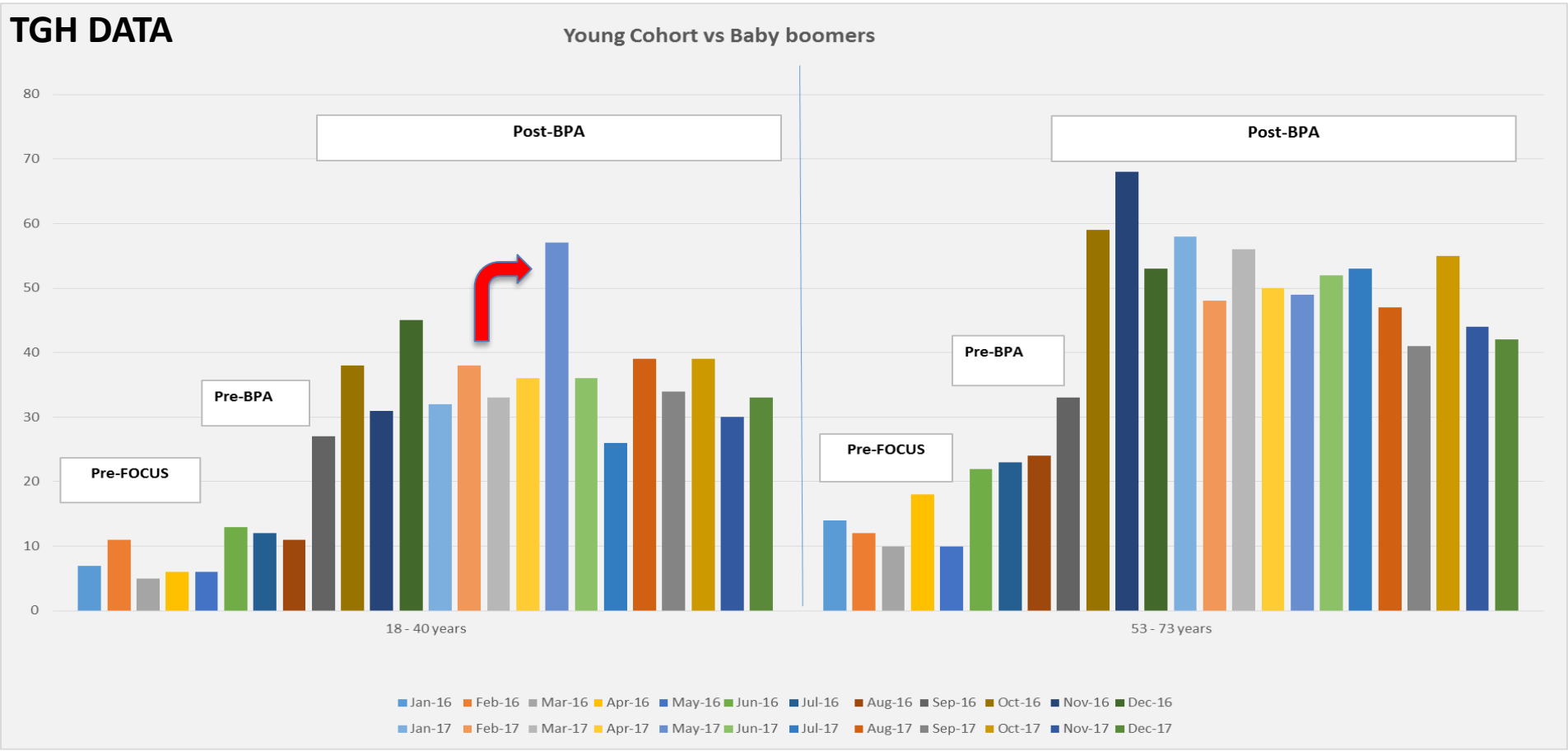
Grebely J, Dore GJ. *Antiviral Res*. 2014;104:62-72

Injection drug use has changed the age distribution of HCV in the past decade

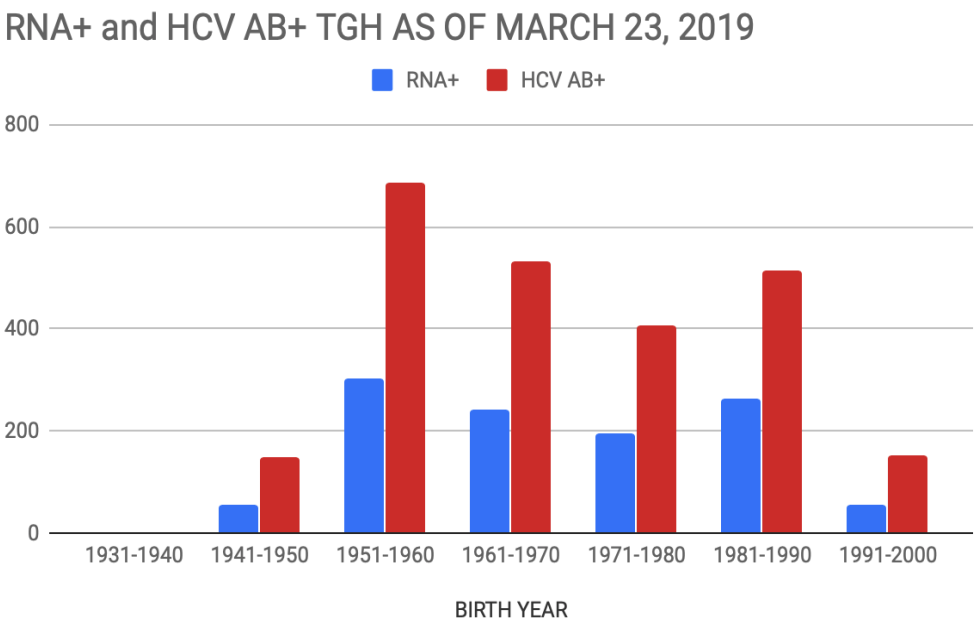


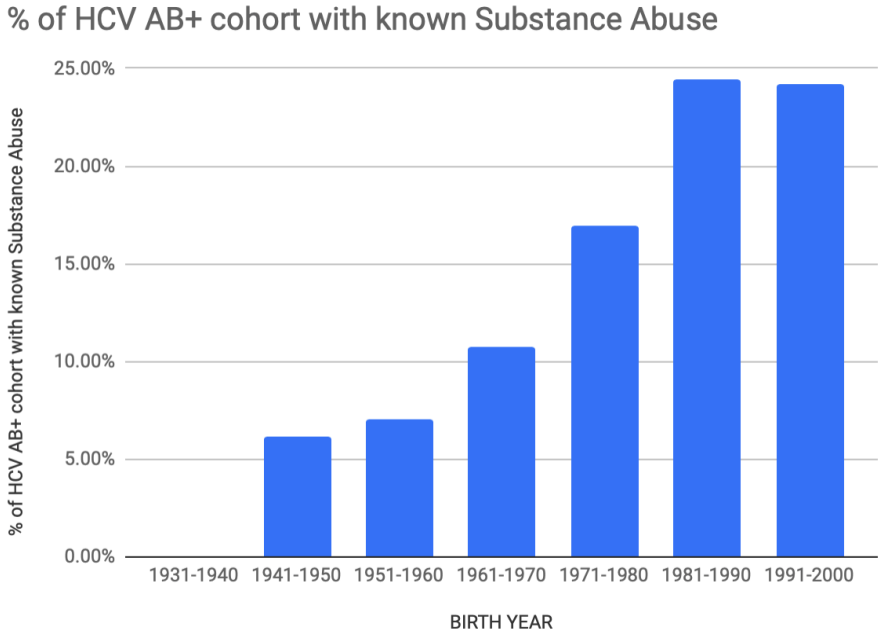
CDC. *MMWR Morb Mortal Wkly Rep*. 2011;60(17):537-541.

TGH DATA


Young Cohort vs Baby boomers
80
70
60
50
40
30
20
10
0
Post-BPA
Pre-BPA
Pre-FOCUS
Post-BPA
Pre-BPA
Pre-FOCUS
18 - 40 years
53 - 73 years
Jan-16 Feb-16 Mar-16 Apr-16 May-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16
Jan-17 Feb-17 Mar-17 Apr-17 May-17 Jun-17 Jul-17 Aug-17 Sep-17 Oct-17 Nov-17 Dec-17

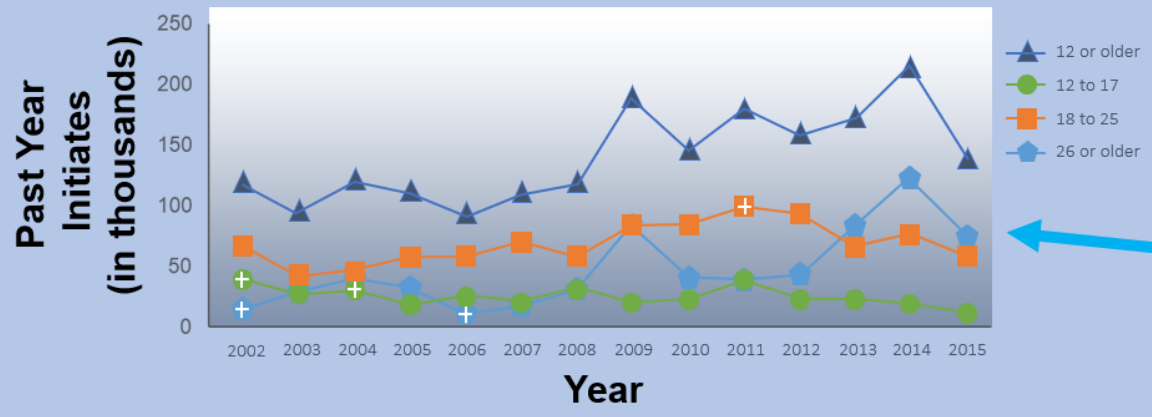
TGH DATA


RNA+ and HCV AB+ TGH AS OF MARCH 23, 2019
RNA+
HCV AB+
800
600
400
200
0
1931-1940
1941-1950
1951-1960
1961-1970
1971-1980
1981-1990
1991-2000
BIRTH YEAR


% of HCV AB+ cohort with known Substance Abuse
% of HCV AB+ cohort with known Substance Abuse
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
1931-1940
1941-1950
1951-1960
1961-1970
1971-1980
1981-1990
1991-2000
BIRTH YEAR

Injection Drug Use in the United States

Past Year Heroin Initiates Among People Aged ≥12 Years, by Age Group (in Thousands): 2002-2015*



Heroin use doubled among people over 26 in the last decade

"+" = Difference between this estimate and the 2015 estimate is statistically significant at the 0.05 level.

Defining populations and injecting parameters among people who inject drugs: Implications for the assessment of hepatitis C treatment programs

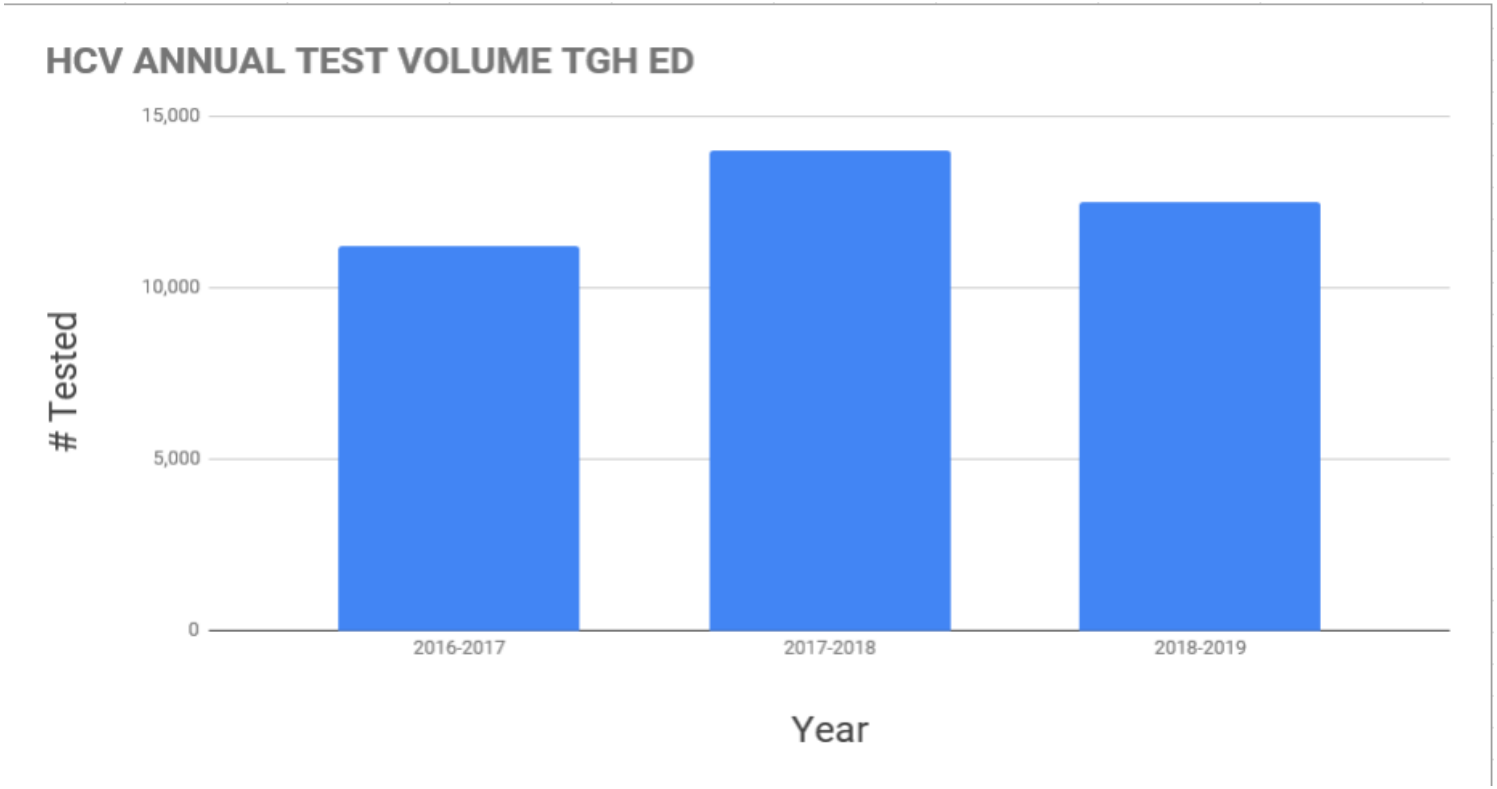
Sarah Larney [a,*], Jason Grebely [b], Matthew Hickman [c], Daniela De Angelis [d], Gregory J. Dore [b], Louisa Degenhardt [a]

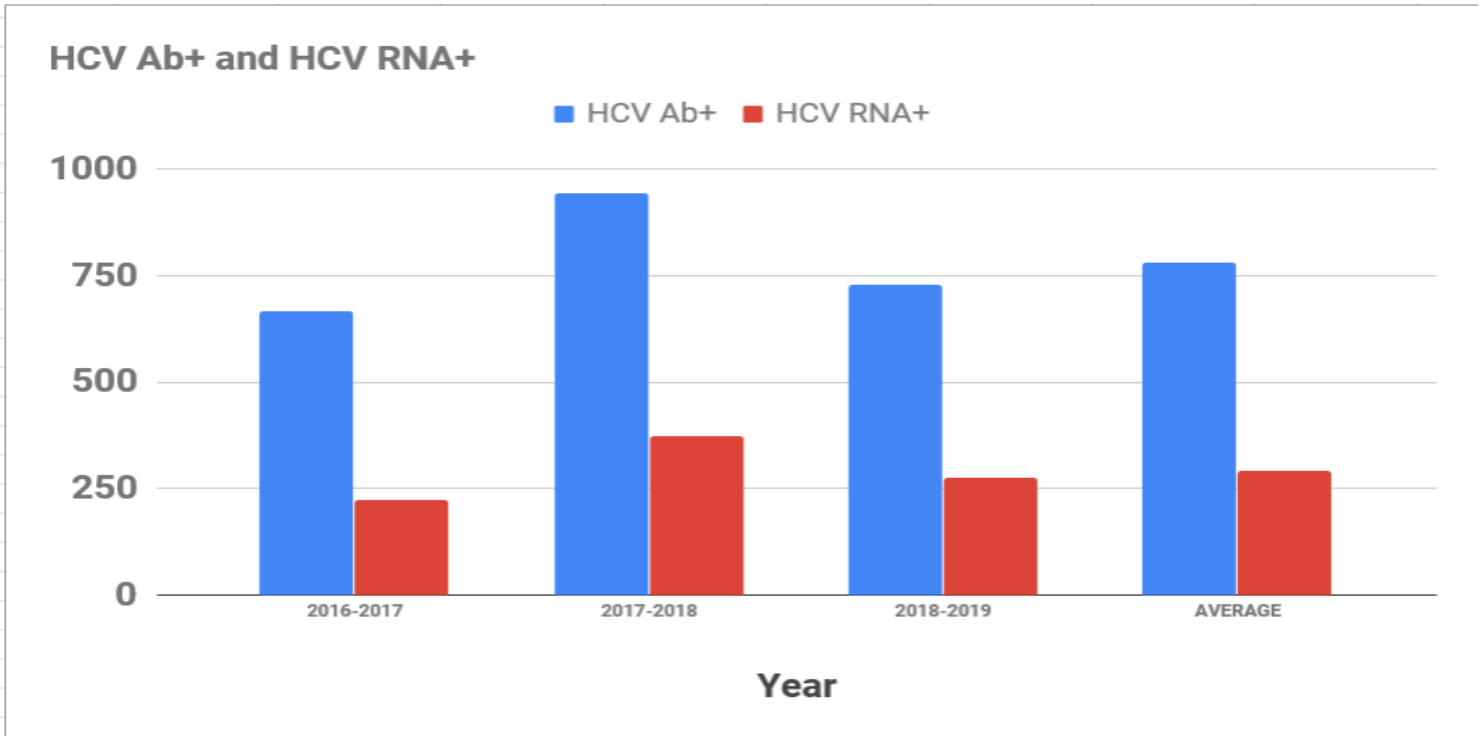
[a] National Drug and Alcohol Research Centre, University of NSW, Sydney, Australia
[b] Kirby Institute, University of NSW, Sydney, Australia
[c] School of Social and Community Medicine, University of Bristol, Bristol, United Kingdom
[d] Medical Research Council Biostatistics Unit, Cambridge, United Kingdom

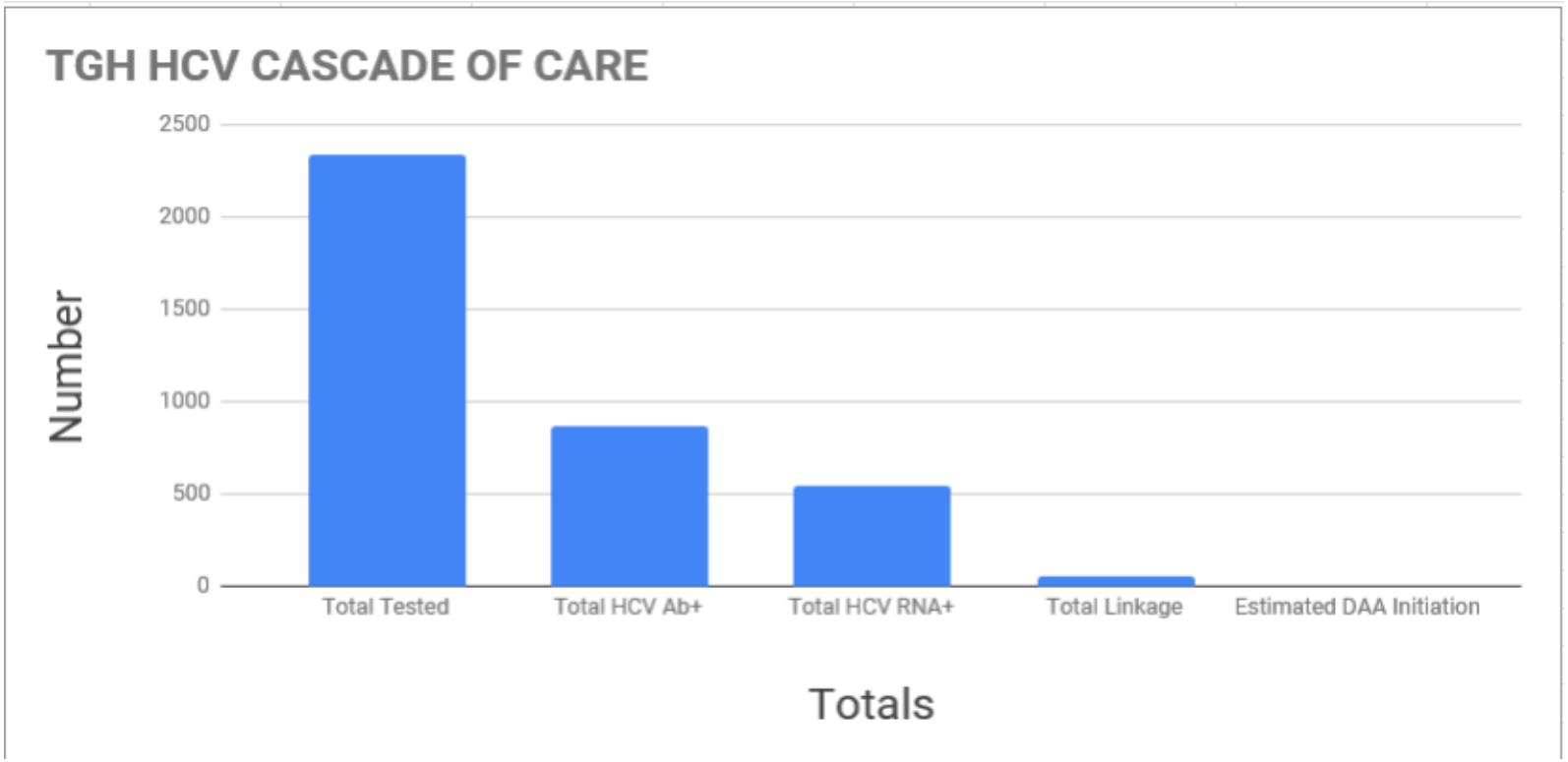
International Journal of Drug Policy 26 (2015) 950–957

- Estimated 15 million people in the world inject drugs
- 67% of those are estimated to have HCV (10 million)
- 80% of new HCV infections are in PWIDs
- 153,000 PWIDs in the United States are estimated to have a dual infection (HIV and HCV)

Grebely J, et al. *Clin Infect Dis*. 2013;57(7):1014-1020.


HCV ANNUAL TEST VOLUME TGH ED
15,000
10,000
5,000
0
Tested
2016-2017
2017-2018
2018-2019
Year


HCV Ab+ and HCV RNA+
HCV Ab+
HCV RNA+
1000
750
500
250
0
2016-2017
2017-2018
2018-2019
AVERAGE
Year


TGH HCV CASCADE OF CARE
2500
2000
1500
1000
500
0
Number
Total Tested
Total HCV Ab+
Total HCV RNA+
Total Linkage
Estimated DAA Initiation
Totals

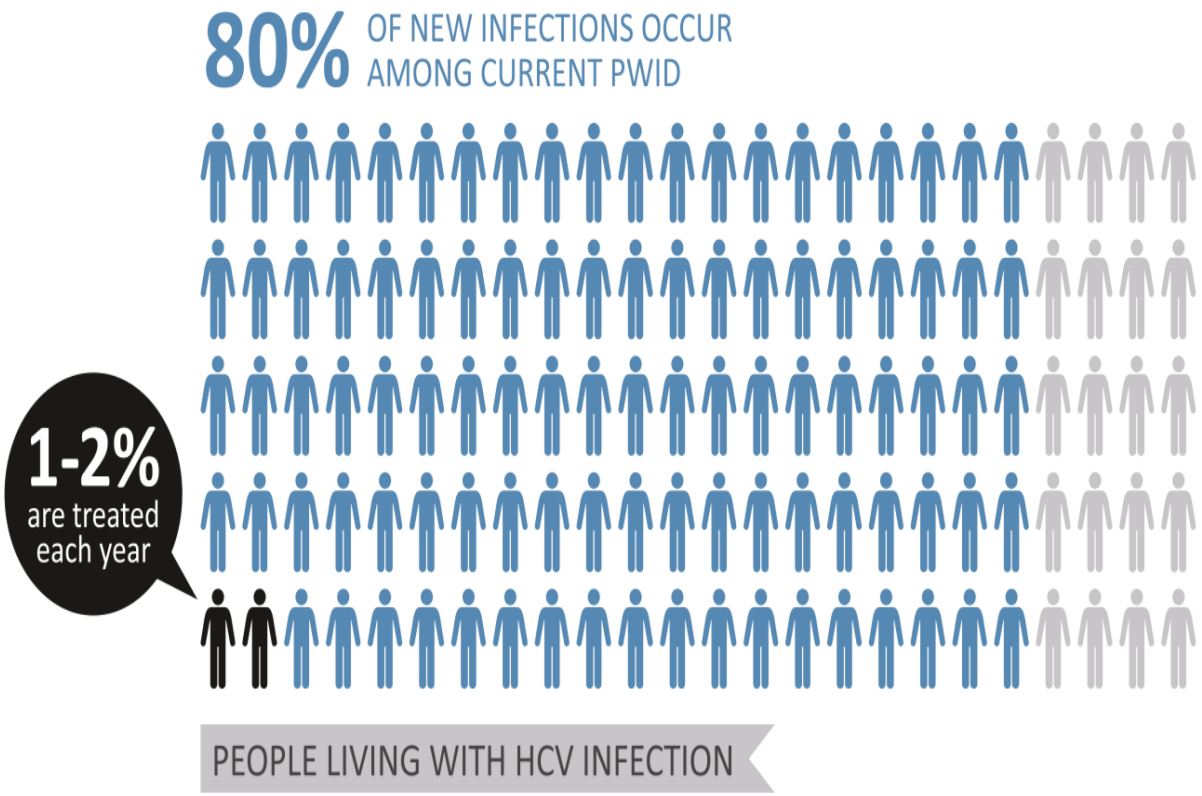


Fig. 1. Despite high burden of HCV infection among PWID, treatment uptake remains low. In many high-income countries (and some low- and medium-income countries), >80% of new cases of HCV infection occur among PWID each year (Hajarizadeh et al., 2013). However, the annual HCV treatment uptake is only 1–2% among PWID (Grebely et al., 2009; NCHECR, 2010a,b; Mehta et al., 2008; Alavi et al., 2013; Iversen et al., 2014).

Linkage to Care for HCV and Injection Drug Use in the ED

Medication Assisted Treatment Pathway for Opioid Use Disorder Launched September 10th, 2018

115 Patients enrolled to date

64.5% follow-up rate (compared to national average of 22%)

62% of Pathway Patients HCV RNA Positive

Buprenorphine and DATA 2000 Act

A DATA 2000 Waiver Requires:

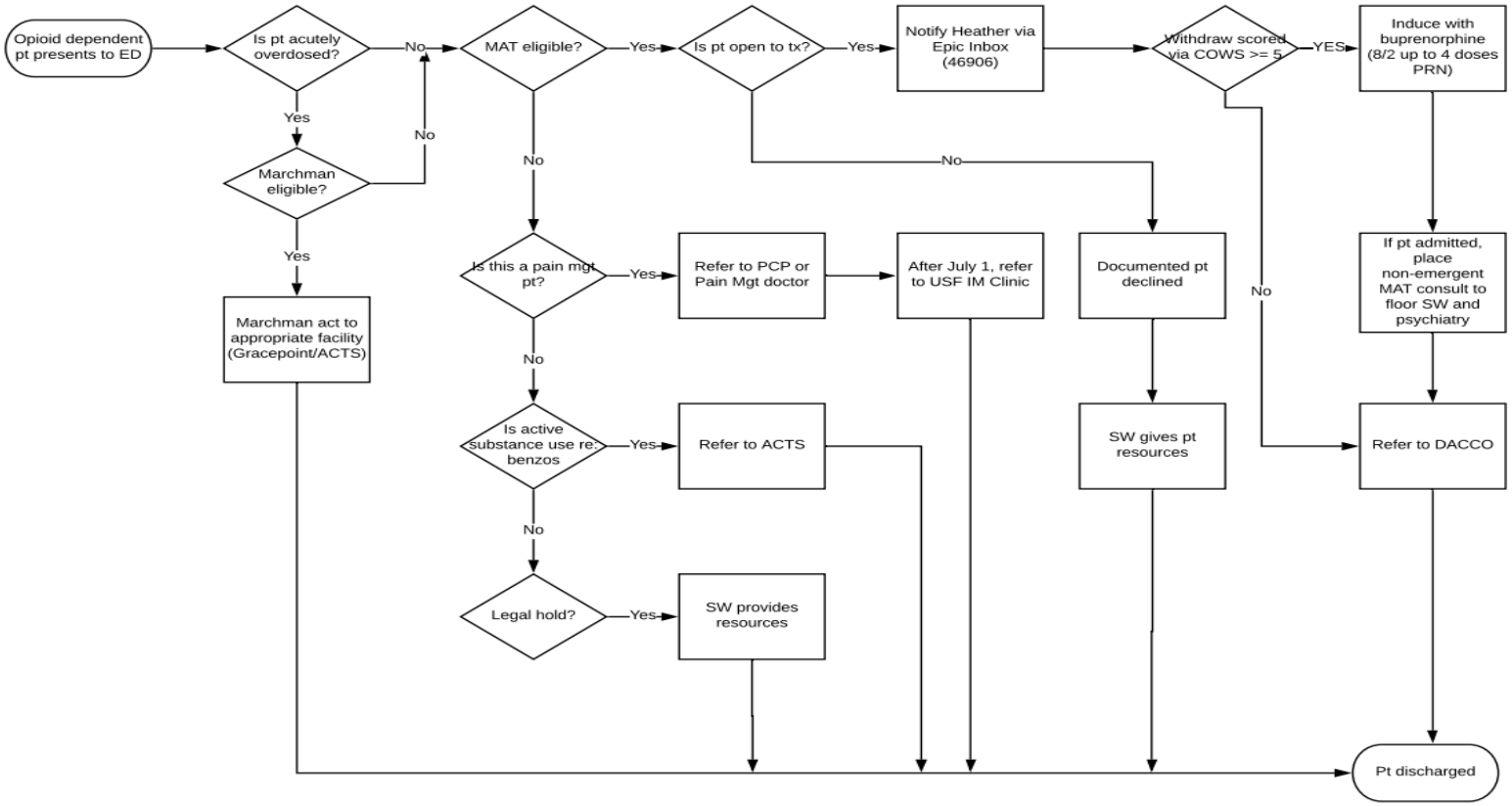
- 8 hour course for physicians
- 24 hour course for PA's and ARNP's
- After completion of course (offered by ASAM and AAAP for $199)
- Submit certificate to SAMHSA
- Receive "X-number" which allows treatment of up to 30 active patients

According to the Controlled Substance Act (CSA)* it is illegal to prescribe a controlled substance for treatment of OUD, **unless:**

The practitioner is specially licensed and compliant with requirements of act

Administering the drug acutely for a period not more than 72 hours

Administering the drug to a hospital patient who is being treated for another medical or surgical condition while in a hospital setting


Opioid dependent pt presents to ED
Is pt acutely overdosed?
No
Yes
Marchman eligible?
No
Yes
Marchman act to appropriate facility (Gracepoint/ACTS)
MAT eligible?
Yes
No
Is this a pain mgt pt?
Yes
Refer to PCP or Pain Mgt doctor
After July 1, refer to USF IM Clinic
No
Is active substance use re: benzos
Yes
Refer to ACTS
No
Legal hold?
Yes
SW provides resources
Is pt open to tx?
Yes
No
Notify Heather via Epic Inbox (46906)
Withdraw scored via COWS >= 5
YES
No
Induce with buprenorphine (8/2 up to 4 doses PRN)
If pt admitted, place non-emergent MAT consult to floor SW and psychiatry
Refer to DACCO
Documented pt declined
SW gives pt resources
Pt discharged

PATIENT PRESENTS TO ED
Chief Complaint: Withdrawal, Substance Abuse, Anxiety, Back Pain, Abdominal Pain, Etc.

MAT Specialist uses COWS to score for withdrawal, and gains verbal consent for Social Work to meet with patient for MAT treatment.

MAT Specialist meets with provider and SW to discuss results of COWS. Provider and SW meet with patient to gauge readiness to stop using substances/MAT pathway enrollment

Upon Pathway enrollment (patient readiness and ≥5 COWS), provider dispenses 8/2 Buprenorphine dose to patient

- Assess after 20 minutes. Repeat if necessary
  - **Consult on-call MAT provider if patient is still ≥5 after two doses**

Once patient is medically stable, SW will email MAT referral form to DACCO, and arrange transportation

END PATHWAY

*IF patient is pregnant, substitute SUBUTEX for BUPRENORPHINE

*IF patient has overdosed, assess if they are appropriate for Marchman Act Pathway first.

***IF patient is going to be admitted, please place a non-emergent psych consult, with MAT PATHWAY as the heading. Please also place a non-emergent SW consult so that floor SW/CM can provide continuation of care.**

ON CALL SCHEDULE FOR ENROLLMENT QUESTIONS/PATIENT CONSULTS

1st and 3rd Week of the Month: Jack Mcgeachy | jmcgeacy.ufl@gmail.com | 352-410-2595
1st and 3rd Week of the Month: Heather Henderson | heather42@mail.usf.edu | 813-842-4640
2nd and 4th Week of the Month: Andrew Smith | afsmith@uab.edu | 256-714-3299
2nd and 4th Week of the Month: Kristina Ledbetter | kledbetter@mail.usf.edu | 727-542-9844

MEDICAL ASSISTED TREATMENT REFERRAL FORM

PATIENT INFORMATION
Name:
D.O.B.
TGH MRN:
Contact Number:

MEDICAL INFORMATION
Primary Care Physician:
Insurance:
Did patient receive a MAT dose in the ED? ☐ YES ☐ NO
If you indicated yes, please provide time/dose:
HCV Status:
Liver Function: ☐ **AST** ☐ **ALT** ☐ **TOTAL BILIRUBIN**

***IF TOX SCREEN COMPLETED IN ED, PLEASE ATTACH RESULTS**

PATIENT SIGNATURE **DATE**

By signing this form, you are authorizing Tampa General Hospital to release your medical record information to DACCO for treatment. Subsequently, if you are in need of treatment for hepatitis, you authorize DACCO to release your medical record information to Tampa General Hospital.

PLEASE EMAIL TO TGHMATPATHWAY@DACCO.ORG

SIGNS OF OPIOID USE DISORDER

- Taking opioids for longer than intended, or in larger amounts than intended
- Having strong cravings and a drive to use opioids
- Spending a lot of time and effort to get and use opioids
- Missing work, missing time with family and friends or no longer doing the things you used to love to get and use opioids
- Being in situations that are dangerous to your emotional health or physical safety to get and use opioids
- Not being able to cut down on or stop using opioids, even if you want to

DACCO Behavioral Health
4422 E. Columbus Dr.
Tampa, FL 33605
(813) 384-4000

TGH Tampa General Hospital

Tampa General Hospital's medication assisted treatment (MAT) for opioid use disorder is offered in partnership with DACCO Behavioral Health.

www.tgh.org • (813) 844-7000

Primary teaching hospital for the USF Health Morsani College of Medicine.

TGH Tampa General Hospital

MEDICATION ASSISTED TREATMENT

for opioid use disorder

In partnership with DACCO Behavioral Health

ORDERING BUPRENORPHINE [SUBOXONE] IN THE ED

- Patient Presents in Opioid Withdrawal
- Provider Orders Buprenorphine [Suboxone]
  - 8/2 mg buprenorphine-naloxone SL
    - (Subutex for Pregnant Women)
  - One now and one in 30 minutes, if still in withdrawal
  - Consult with on-call MAT doctor if >2 doses necessary
- Discharge After Medical Clearance
- Patient Presents to DACCO
- MAT Associate Follows-up with Patient

COMMONLY ASKED QUESTIONS

Question: Can I prescribe Buprenorphine [Suboxone] without a DEA X-Waiver?
Answer: You do not need a waiver to dispense in the emergency room. You can write for the dose(s) needed to stabilize and discharge the patient.

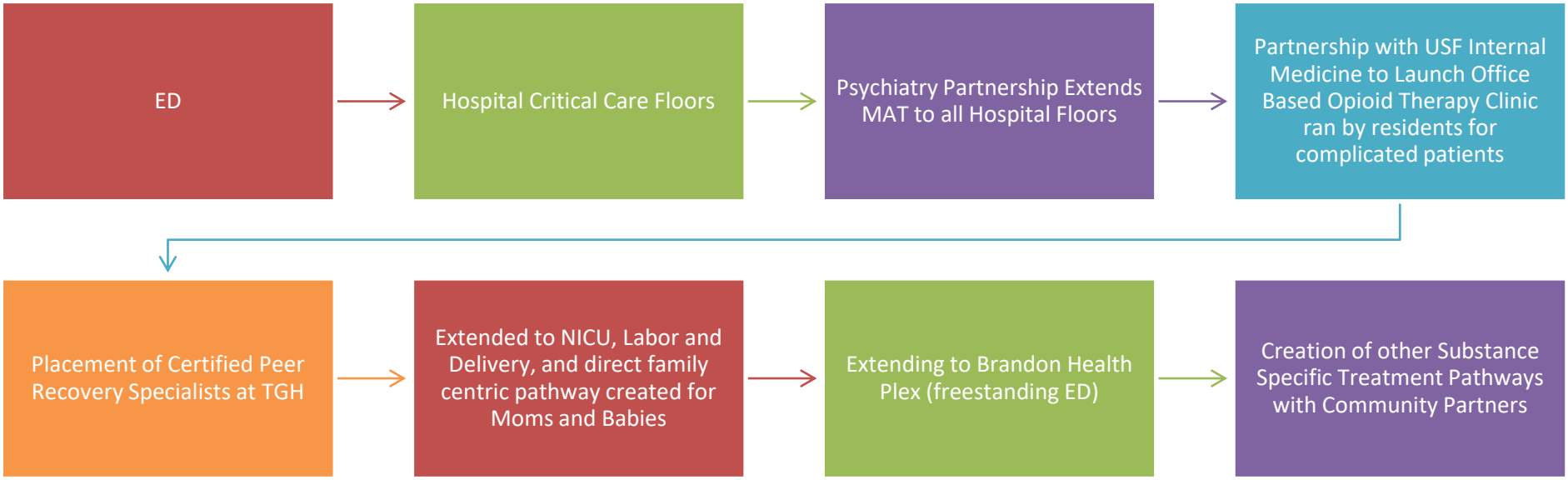
Question: Do I need to discharge patient with a prescription?
Answer: No. Patient will receive continuation of care at DACCO for MAT treatment.

Question: What if the patient needs further assistance?
Answer: If the patient needs further assistance (such as transportation to DACCO, the MAT specialists and Social Work will work together to address any further patient needs.

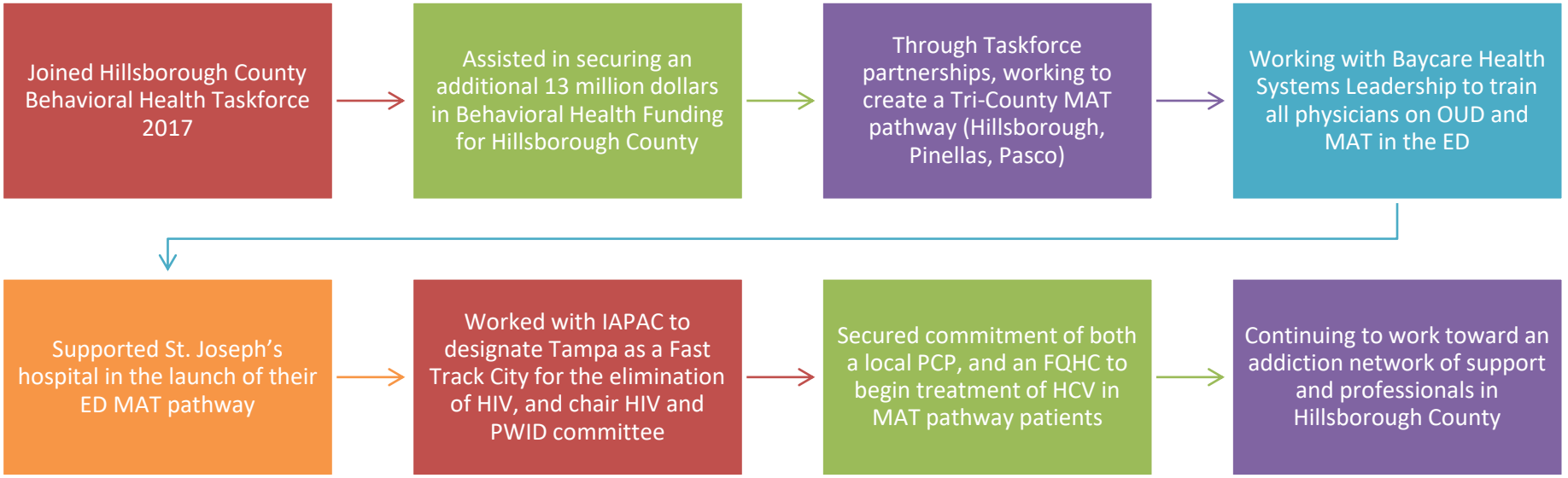
Question: How do I consult MAT specialist in ED?
Answer: MAT specialists are watching EPIC for potential candidates based on chief complaints. If you want to begin therapy, contact MAT specialist/research assistant (in POD 5). A Best Practice Alert is scheduled to go live August 2019.

Program Innovations

Evolution of Substance Use Disorder Treatment Availability



Continued Community Engagement



Current Partnerships

DACCO Behavioral Health Inc.

gracepoint

METRO INCLUSIVE HEALTH

40 acts 1978 - 2018 Years of Recovery

Central Florida Behavioral Health Network, Inc.

Internal Medicine Residency Program

Hillsborough County Florida

Tampa Family Health Centers

At the U, we transform lives through teaching, research, and service.

Florida HEALTH

USF HEALTH COLLEGE OF PUBLIC HEALTH UNIVERSITY OF SOUTH FLORIDA

Disclaimer

The FOCUS Program is a public health initiative that enables partners to develop and share best practices in routine blood-borne virus (HIV, HCV, HBV) screening, diagnosis, and linkage to care in accordance with screening guidelines promulgated by the U.S. Centers for Disease Control and Prevention (CDC), the U.S. Preventive Services Task Force (USPSTF), and state and local public health departments.

FOCUS funding supports HIV, HCV, and HBV screening and linkage to the first medical appointment after diagnosis. FOCUS partners do not use FOCUS awards for activities beyond linkage to the first medical appointment.

Questions?

Contact Us

NASTAD's Hepatitis Testing Partnership
http://bit.ly/hepatitistestingpartnership

hepatitis@NASTAD.org

NASTAD
444 North Capitol Street NW, Suite 339
Washington, DC 20001
Phone: 202.783.0083