

Hepatitis C Initiatives at Montefiore

Shuchin Shukla MD MPH

Overview

- **Inpatient EMR prompt**
- **Reflex testing**
- **Screening QI Projects**
- **Provider education**
- **Project INSPIRE**
- **Data utilization**
- **Fibroscan and Fibrosure**
- **EMR smart support**

Inpatient EMR Prompt

Pt. Info.	Allergy/ClinUpd	Problem List	Results	Notes	cEMR	Meds	Viewer	Orders	Tools	Const Charting	Labels	Tracking	Ambulatory
Name: CHIVA, Test2		MR#: 03701261		Gender: M		Room: K424-B		DOB - Age: 3-Nov1949=65		Bed Phone: 3406		ADMB LOS: 20Mar15=1	
		Floor: K4		Attending: PHYSICIAN. POE 2									
		PCP: TEST. MD ONE											

Order Pad

TESTING

CARE/TREATMENT

MISC

Alert

HEPATITIS C SCREENING RECOMMENDED!

A Hepatitis C Screening test is recommended for this patient.

The Hepatitis C Screening orderset has been selected. Click the Process Orders button.

OK

CHIVA Test2 65 Y MALE

Unprocessed Orders

Admit to Inpatient (Non Medicare)

Medication Reconciliation Inpat Admissn

HEPATITIS C SCREEN

Enter a few letters of Order Name and press

Inpatient EMR Prompt

Demog	Orders	Results	Viewer	Bookmark	NALLERGY	ALLERGY	Pathways	Pharmacy	Care Mgmt	Setup	Notes	Med Profile	Microbiology Results	FLWADMS	IDX Web
-------	--------	---------	--------	----------	----------	---------	----------	----------	-----------	-------	-------	-------------	----------------------	---------	---------

Name: CHIVA, Test2 **MR#:** 03701261 **Gender:** M **DOB - Aae:** 3-Nov1949=65
Floor: K4 **Room Bed:** K424-B **Bed Phone:** 3406
PCP: TEST, MD ONE **Attending:** PHYSICIAN, POE 2 **ADMB LOS:** 20Mar15=1

HEPATITIS C INPATIENT SCREENING

***** HEP C TEST Order ***** ☐

☐ HCV ANTIBODY-EIA TEST

***** HEP C TEST NOT INDICATED*****

☐ PT DECLINES HCV TEST
☐ PT LACKS CAPACITY TO CONSENT
☐ PT CURRENTLY UNSTABLE
☐ PT TERMINALLY ILL

You must select only one order.

New York State mandates offering HCV test to all persons born between 1945 and 1965

No written consent needed for HCV screening

Start Date: 20MAR2015 Time: 1612

Ordered By: TEST, MD ONE Order Mode: E

Signed By: TEST, MD ONE

Cancel

Process

OCSETH3	MOSES	ODEHI36	490515533	K4	K424-B
---------	-------	---------	-----------	----	--------

Reflex Testing

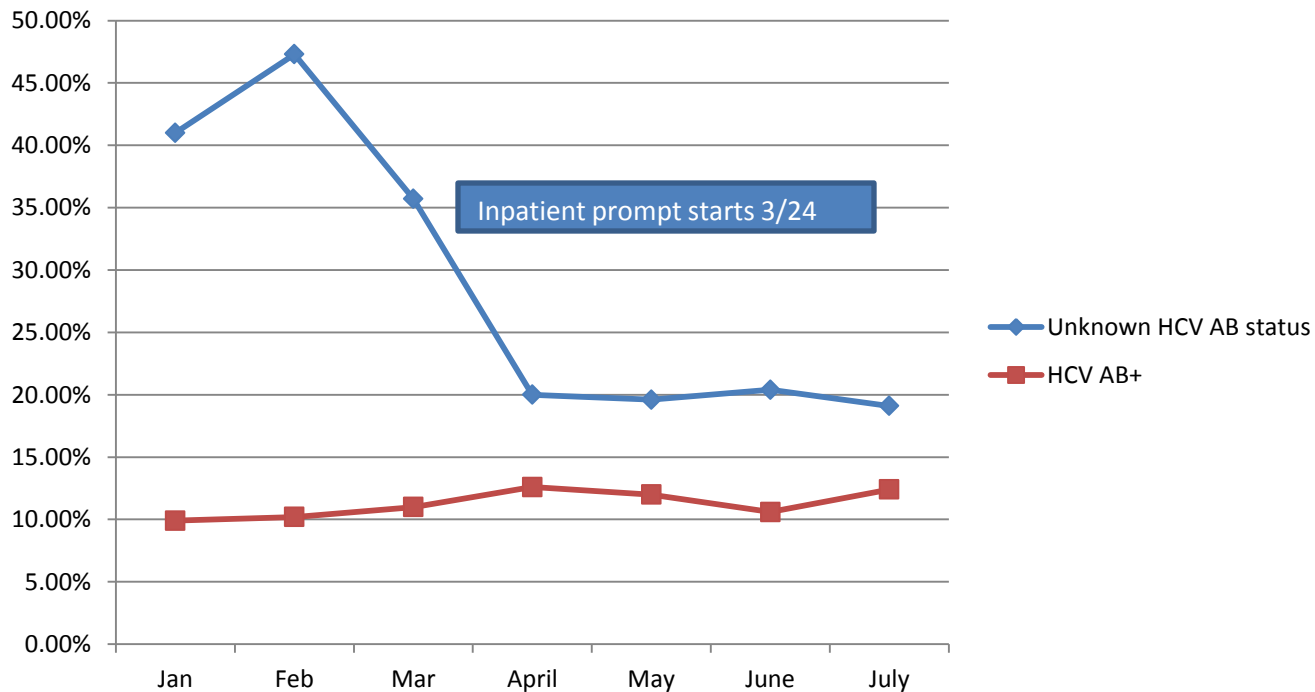
- **Inpatient and outpatient**
- **When provider orders HCV antibody, nurse is automatically prompted to collect enough blood for reflex HCV RNA test**
- **If antibody is positive, RNA is automatically tested**

Admissions to Montefiore Moses Hospital in 2015

	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	June 2015	July 2015
Unique Birth Cohort patients	1075	1006	1246	1277	1217	1256	1283
Unknown HCV AB status	441 (41.0%)	476 (47.3%)	445 (35.7%)	258 (20.0%)	239 (19.6%)	256 (20.4%)	245 (19.1%)
HCV AB+	107 (9.9%)	103 (10.2%)	137 (11.0%)	161 (12.6%)	146 (12.0%)	133 (10.6%)	159 (12.4%)

Impact of Inpatient EMR Prompt

Proportion of Montefiore Moses Admissions Screened



Screening QI Projects

- Organizing Quality Improvement project to improve birth cohort screening at Montefiore outpatient primary care health centers
- Collaboration of non-clinical and clinical staff
- Education for non-clinical staff
- Data feedback
- Plan-Study-Do-Act cycle



Provider Education

- **Mandatory “E-Learning Module” update on NY State Birth Cohort screening mandate**
- **All Primary Care Providers in Montefiore network**
- **Includes basic update about Hep C treatment with new meds and referral resources**

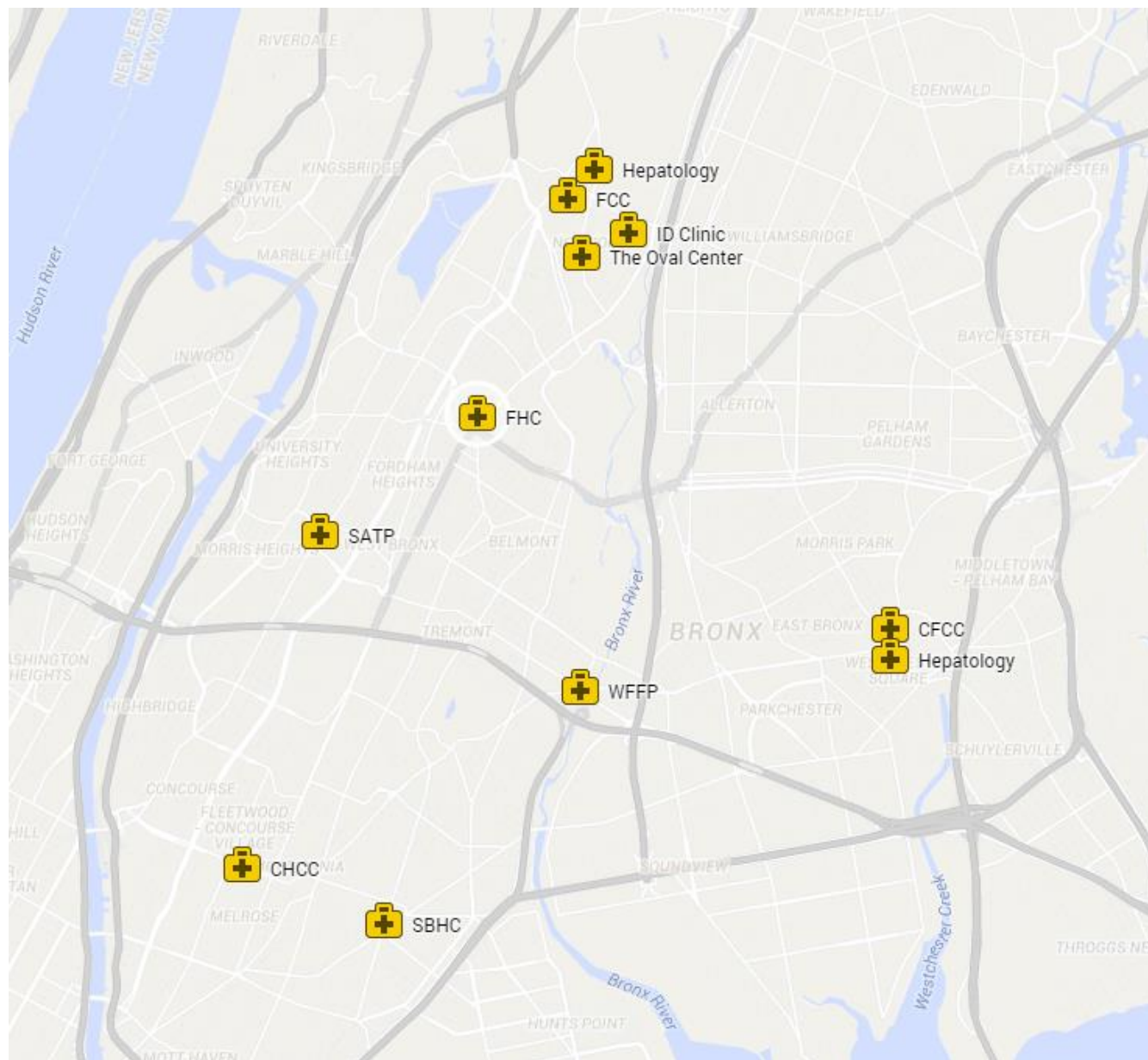
And new treatments are now available!

Directly Acting Antivirals replace interferon based regimens

- Less side effects, less treatment discontinuation
- Cure rates now >95%
- All oral regimens
- Shorter duration of treatment
- Available for most patients, even with kidney disease, active substance abuse, or HIV



Project INSPIRE Montefiore Clinics



Project INSPIRE

- **CMS Grant: NYC DOH, Sinai and Monte clinical partners, Cornell evaluation partner**
- **INSPIRE - Innovate & Network to Stop HCV & Prevent complications via Integrating care, Responding to needs and Engaging patients & providers**
- **Program Period: September 1st, 2014 – August 31st, 2017 (3 years)**

Project INSPIRE - Telementoring

- **Who**
 - 7 primary care provider champions
 - Core Team - 2 ID experts, 1 Hepatologist, 1 Addiction/HCV expert, 1 Psychologist
- **What**
 - Via Webex
 - Didactic Core Curriculum
 - Case presentations
 - >36 sessions to date – Mondays @ 2pm
 - CME credit

Project INSPIRE – Care Coordination

- **7 care coordinators**
 - 1. Support treatment**
 - a) Prior authorizations**
 - b) Standardized pretreatment readiness assessment**
 - c) Referrals for mental health, substance abuse treatment, and benefits/housing**
 - d) Health promotion**
 - 2. Inreach/Outreach**
 - 3. Data input – NYC DOHMH Database**
- **9 peer navigators**
 - Patient support**
 - **Health promotion, adherence support, peer support, outreach**

Data utilization

- **Identify newly diagnosed inpatients- bedside education and linkage to care**
- **Identify known HCV+ in individual primary care sites and conduct outreach**
- **Provide HCV birth cohort screening data to primary care sites**
- **Create “Cascade of Care” for entire Montefiore system**

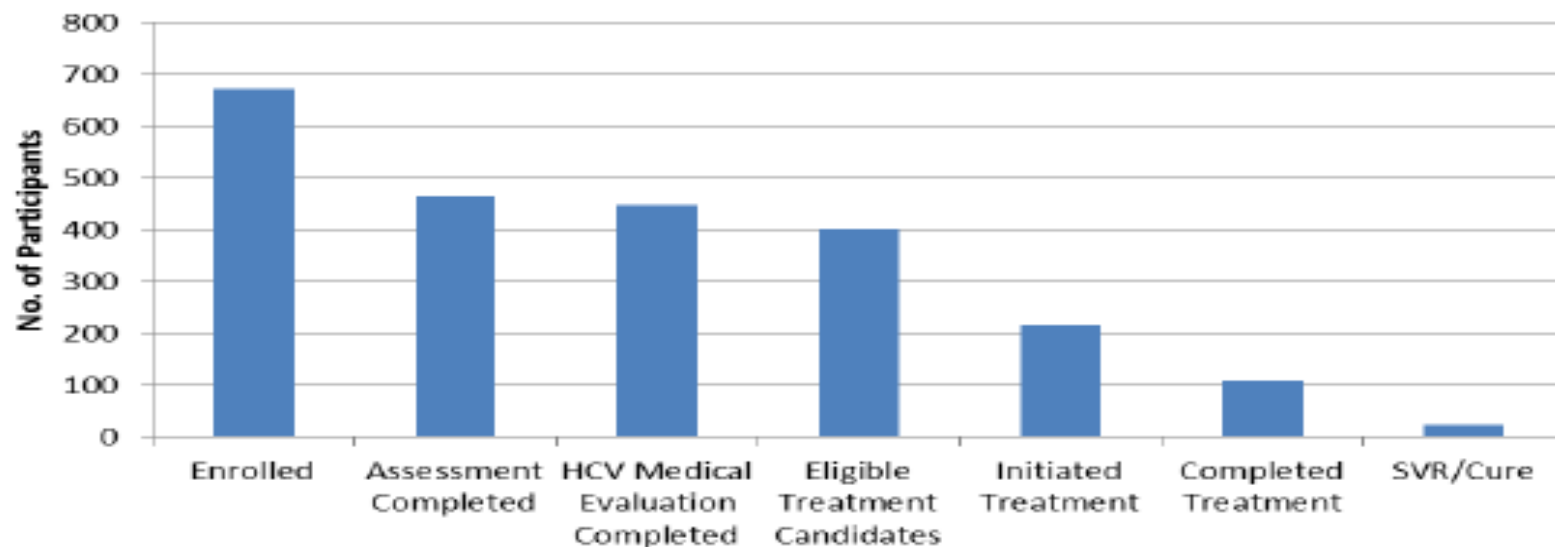
Project INSPIRE Cascade of Care

CARE AND TREATMENT CASCADE - MONTE

Table 5. INSPIRE Treatment Cascade

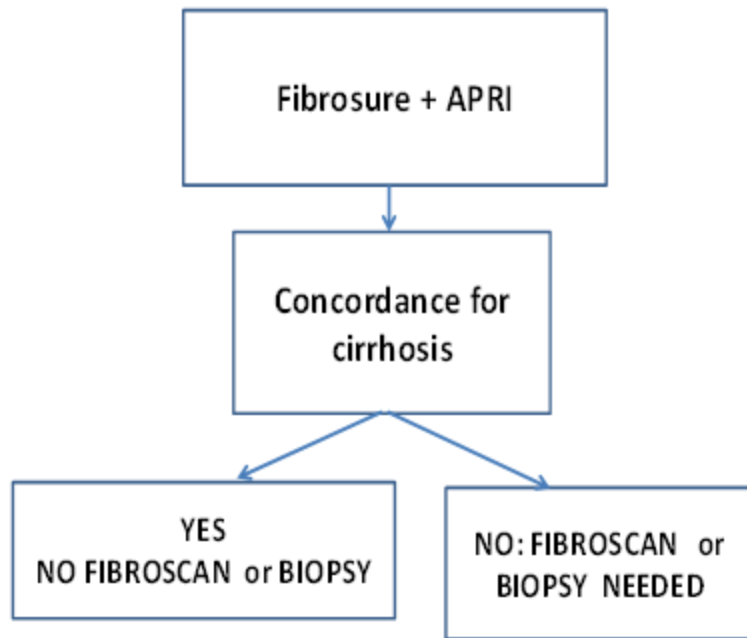
Care Milestone	N	%
Enrolled	672	—
Assessment Completed	456	69%
HCV Medical Evaluation Completed*	449	67%
Eligible Treatment Candidates	402	90%
Initiated Treatment	216	54%
Completed Treatment	109	50%
SVR/Cure	24	22%
Percent is calculated a % of previous row		
*HCV Medical Evaluation is calculated a % of all enrollees		

Figure 5. Montefiore HCV Care and Treatment Cascade



Fibroscan and Fibrosure

-Avoid biopsy, support primary care work up for HCV+ patients



EMR smart support

- **Challenges with new EPIC transition**
- **Also opportunities to build “SmartTools” to assist PCPs who do NOT treat HepC:**
 - **Prompts for labwork and imaging**
 - **Prompts for referrals**
 - **Algorithms and education built in**
 - **Extractable data to help build Cascade of Care**

Epice

Patient Lookup

Remind Me

Personalize

HCS-ISTOP

UptoDate

NYC CIR

Sign My Visits

Send Letter

ZZtest,Cfctfour

ZZtest, Cfctfour

ZZtest, Cfctfour

Male, 5 y.o., 01/01/2010

Admitted: No

POP: None

MRN, CSN: 05500014, 334200915

HT: None

WT: None

BMI: None

Allergies: No Known Allergies

Patient FYIs: FYI

Barriers to Learning: None

Health Maintenance

Montefiore MyChart: No proxy exists

Advance Directive Filed?: None

Code: Not on file

Pref Language: None

Primary Ins.: None

Pharmacy: None

Outside Info: None

Registries: Mmc Wellness Regis.

Bronx RHIO: Not On File

Implants: None

12/7/2015 visit with Shuchin J Shukla, MD for Documentation

Documentation

Reason for Doc

Notes

Chart Review

Care Everywhere

Growth Chart

Immunizations

Order Entry

Education

Communications

FYI

Flowsheets

Report Viewer

Write Note

Medical History

Mark as Reviewed

Never

Allergic rhinitis

Anemia

Asthma

Atrial fibrillation

Back Pain

Cardiomyopathy

Carpal tunnel

CKD Stage 3

Other Medical History

CKD Stage 4

Colon cancer

Colon polyps

Constipation

COPD

Coronary artery disease

Deep vein thrombosis

Diabetes mellitus type 2

Diverticulitis

Eczema

GERD

High Cholesterol

Hypertension

Hypothyroidism

Irritable bowel syndrome

Kidney stones

Lung cancer

MI, old

Migraines

Osteoarthritis

Pulmonary embolism

Sleep apnea

Surgical History

Mark as Reviewed

Never

AAA repair

AAA stent

Adenoidectomy

Aortic valve repair

Aortic valve replacement

Appendectomy

CABG

Carotid endarterectomy

Carpal tunnel release

Cervical discectomy

Other Surgical History

Cleft lip

Cleft palate

Coronary PTCA

Defibrillator

Fem-pop

Gastric bypass

Gastric Lap Band

Gastric sleeve

Hernia, inguinal

Hernia, umbilical

Hernia, ventral

Knee Meniscectomy

Knee Replacement

Laminectomy

Lithotripsy of renal stone

Lumbar fusion

Lung removal partial

Lymph node biopsy

Lysis of adhesions

Mitral valve repair

Mitral valve replacement

Pacemaker

Prostate Biopsy

Shoulder rotator cuff

Splenectomy

Thyroidectomy, partial

Thyroidectomy, total

Tonsillectomy

TURP

Family History

Mark as Reviewed

Never

Relationship

Name

Status

Default View

Positives Only

Negatives Only

View All

Alcohol abuse

Anxiety

Asthma

Bipolar disorder

BRCA 1/2

Breast cancer

Colon cancer

COPD

Dementia

Depression

Diabetes

Heart disease

Hypertension

Liver disease

Lung cancer

Migraines

Ovarian cancer

Prostate cancer

Stroke

Sudden death

Thrombosis

Unknown

Mother

Father

Sister

Brother

Daughter

Son

Mat Aunt

Mat Uncle

Pat Aunt

Pat Uncle

MGM

MGF

PGM

This Visit

Sidebar Report

Sidebar Report

Current as of: Mon 12/7 6:00 PM. Click to refresh.

Vitals

No data recorded

Allergies

No Known Allergies

Mark as Reviewed

Reviewed by NP on 10/28/2015

Medications

Outpatient Medications (1)

Hospital Medications (0)

Clinic-Administered Medications (0)

insulin glargine (LANTUS SOLOSTAR) 100 unit/mL (3 mL) inpn

Mark as Reviewed

Never Reviewed

Medical History

None

Problem List

None

Mark as Reviewed

Reviewed by NP on 10/28/2015

Surgical History

None

Specialty Comments

Edit

Show All

No comments regarding your specialty

No data filed

Family History

None

Relevant Encounters (Maximum of 5 visits)

Date

Type

Department

Provider

Description

Immunizations/Injections

DTaP

5/7/2015, 12/30/2010

SHUCHIN S.

Results

Rx Request

Patient Calls

CC'd Charts

MyChart Rx Request

MyChart Advice Request

Staff Message

Future/Standing Orders

6:01 PM

12/7/2015

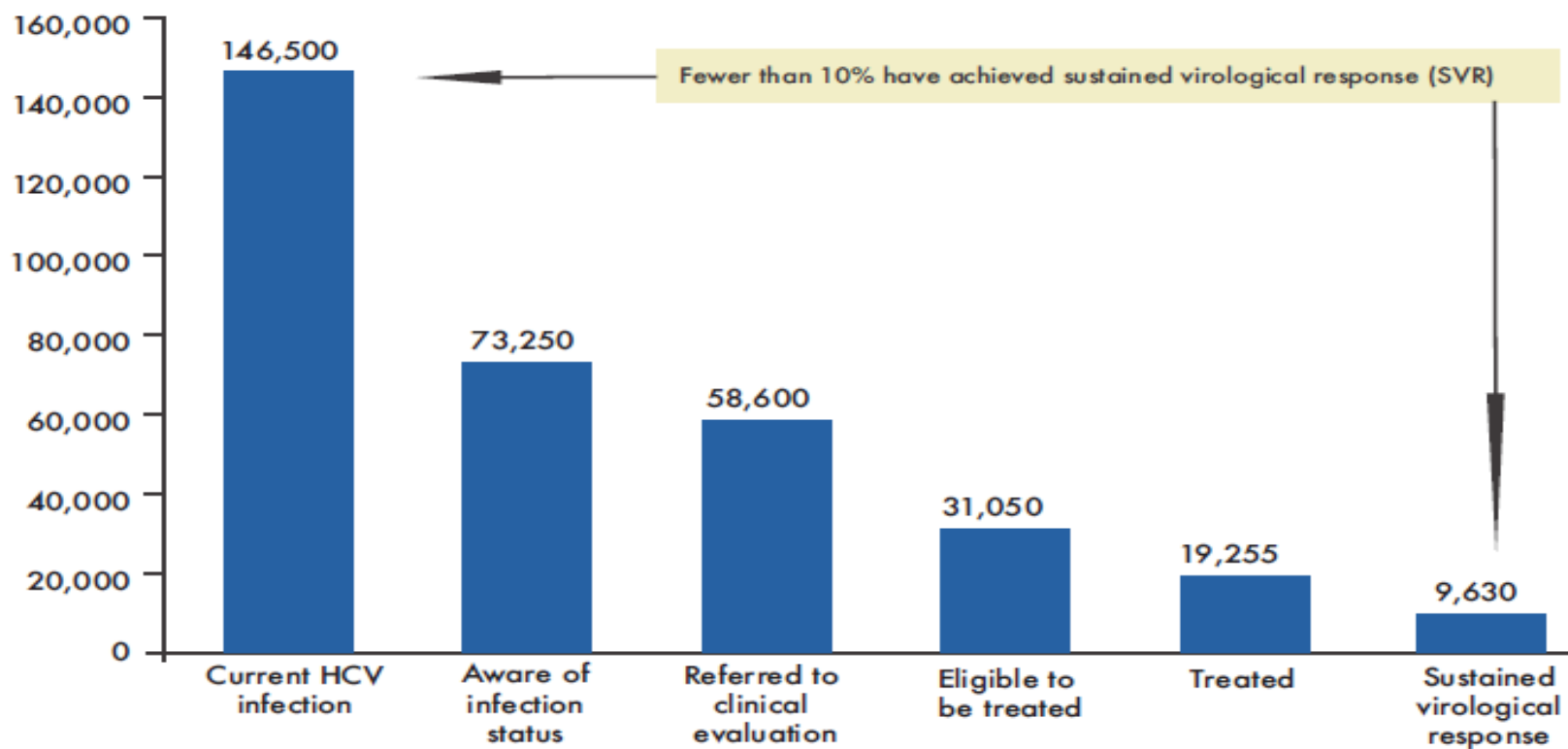
A Roadmap For Success...

- 1) Multidisciplinary process:
 - Vice President for Medical Affairs, Assistant Dean of Research, Director of Research and Program Development, leaders in the Departments of Pathology, Family Medicine, Medicine (Divisions of General Medicine, Infectious Diseases, Hepatology, and Hospital Medicine), and Psychiatry and Behavioral Sciences (Division of Substance Abuse Treatment); Data Management; EMR; and QI.
- 2) Collaboration among Hepatology, Infectious Diseases, and Primary Care and convening an internal multidisciplinary task force is key!
- 3) Educating key stakeholders about the importance of HCV treatment
- 4) Collecting and disseminating high quality data is key to both influencing key leaders and obtaining internal and external resources.
- 5) Don't reinvent the wheel. Learn from HIV successes (e.g. pop up tool) and from other institutions.

Special Thanks

- Alain Litwin
- Paul Meissner
- Jonathan Schwartz
- Kim Yu
- Magdalena Slosar
- Brian Currie
- William Southern
- Jeff Weiss
- Noel Brown
- Amy Fox
- John Reinus
- Fabienne Laraque and DOH team

Questions?



Sources: Balter et al. 2013; Denniston et al. 2012.

Notes:

(1): Estimates of current HCV prevalence and awareness of infection status from Balter et al.

(2) All other estimates extrapolated from Denniston et al.