

# PCSI in Practice: Fully Integrated Screening for Hepatitis C Virus in a Sexual Health Clinic

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## Background

- Hepatitis C virus (HCV) is the most prevalent chronic blood-borne infection in the United States.
- An estimated 4.1 million persons have been infected with HCV, of whom 3.2 million are chronically infected.
- The vast majority of those chronically infected are unaware of their infection.
- The number of deaths attributed to HCV infection now surpasses the number of deaths attributed to HIV.
- Despite its frequency and complications, HCV infection is often neglected.

## Objectives

To increase the proportion of persons aware of their infection status and provide counseling and linkage for infected clients, we integrated rapid HCV testing and linkage to care into standard clinic operations.

## HCV Protocol

Triage provider screens all clinic patients for potential HCV risk factors:

- Born between 1945-1965
- Ever injected drugs
- HCV positive sex partner
- Snorted drugs and shared snorting equipment
- Tattoo in unprofessional setting
- Blood transfusion before 1992
- Men who have sex with men

**NO** to all factors:  
no need to test

**YES** to any factor: patient  
offered rapid HCV test

**NO** to test: patient offered  
educational materials

**YES** to test: blood drawn  
for testing

**NON-REACTIVE** rapid test:  
patient provided with  
prevention education

**REACTIVE** rapid test:

- Confirmatory (HCV RNA) test performed
- Patient linked for counseling, support, and education

## Results

**TABLE 1.** Demographics by HCV Antibody Status, Denver Metro Health Clinic, 2013

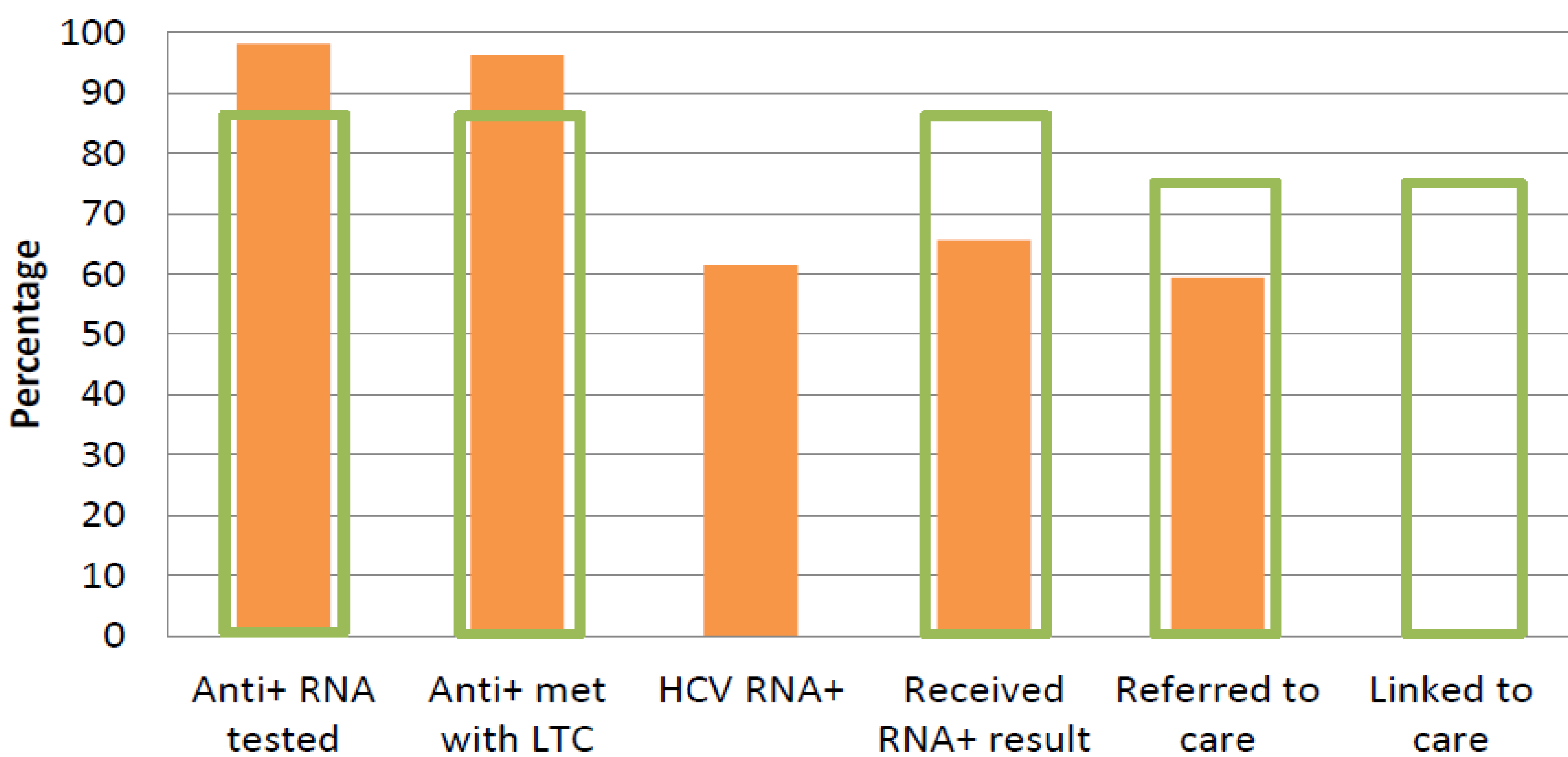
	Total n (%)	HCV Anti- n (%)	HCV Anti+ n (%)	X <sup>2</sup> p-value
TOTAL	2857	2799 (98)	58 (2)	
Gender				
Male	2,068 (72)	2,041 (73)	27 (47)	<0.001
Female	789 (28)	758 (27)	31 (53)	
Race/ethnicity				
White, non-Hispanic	1,280 (45)	1,259 (45)	21 (36)	0.665
Black, non-Hispanic	507 (18)	495 (18)	12 (21)	
Hispanic	873 (30)	854 (31)	19 (33)	
Other/unknown	197 (7)	191 (7)	6 (10)	
Health insurance				
Uninsured	2,486 (87)	2,441 (87)	45 (78)	0.051
Public	349 (12)	336 (12)	13 (22)	
Private	16 (0.6)	16 (0.6)	0	

**TABLE 2.** Risk Factors by HCV Antibody Status, Denver Metro Health Clinic, 2013

	Total n (%)	HCV Anti- n (%)	HCV Anti+ n (%)	X <sup>2</sup> p-value
Born 1945-1965	536 (19)	503 (18)	33 (57)	<0.001
Ever injected	140 (5)	116 (4)	24 (44)	<0.001
Shared intranasal supplies	713 (27)	692 (26)	21 (38)	0.051
Unprofessional tattoo	597 (23)	580 (22)	17 (31)	0.140
HCV+ sex partner	81 (3)	71 (3)	10 (20)	<0.001
MSM activity	822 (29)	818 (29)	4 (7)	<0.001

NOTE: Risk factors are not mutually exclusive

**FIGURE 1.** HCV Linkage to Care Cascade, Denver Metro Health Clinic, 2013



NOTE: Green boxes denote CDC benchmarks

## Setting

### Denver Metro Health Clinic

- Largest STI clinic and HIV testing facility in Rocky Mountain region with approximately 13,000 visits annually.
- Free and confidential STI, HIV, and HCV testing, counseling, and treatment (sliding fee scale implemented January 2014).
- Also offer family planning (Title X clinic) and immunization services (HPV, HBV, HAV).
- Established HIV Linkage to Care program (LTC).
- Electronic medical record system (HealthDoc®).
- Operates using a physician extender model: employs a 12-person clinical staff and a 3-person clerical staff, supervised by a nurse manager and clinic administrator, with daily medical activities supervised by one of 7 attending physicians.
- Housed within Denver Public Health, part of Denver Health and Hospital Authority.

## Lessons Learned

- Obtaining buy-in from clinic staff is critical.
- Using a blood draw for rapid test facilitates completion of confirmatory testing (when necessary).
- Leveraging existing HIV linkage program is efficient way to provide linkage services for HCV positive clients.
- Limited access to primary care providers creates difficulty for linkage.
- Follow-up with STI clinic patients can be challenging.
- Screening in an STI clinic provides an opportunity for HCV education and counseling for at-risk persons.
- Need to think about sustainability of HCV screening in STI clinics in era of expanded healthcare coverage.

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