

# Emerging Issues

EHR Implementation

Recruitment/Retention

Hepatitis C Program Development and  
Implementation

# Hepatitis C Program Implementation - Key Steps

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- EDUCATE
- SCREEN
- CONFIRM
- PANEL
- TREAT
- CURE

# Step 1 - EDUCATE

## Why should baby boomers get tested for Hepatitis C?

While anyone can get Hepatitis C, more than 75% of adults infected are baby boomers, people born from 1945 through 1965. Hepatitis C can be in your body for many years with no symptoms. Most people with Hepatitis C do not know they are infected.

- Baby boomers are five times more likely to have Hepatitis C.
- The longer people live with Hepatitis C, the more likely they are to develop serious, life-threatening liver disease.
- Getting tested can help people learn if they are infected and get them into lifesaving care and treatment.

**It is recommended that anyone born from 1945 through 1965 get tested for Hepatitis C.**

## Why do baby boomers have such high rates of Hepatitis C?



The reason baby boomers have high rates of Hepatitis C is not completely understood. It is believed most boomers became infected in the 1970s and 1980s when rates of Hepatitis C were very high. Since people with Hepatitis C can live for decades without symptoms, many baby boomers are living with an infection they got many years ago.

Hepatitis C is mostly spread through contact with blood from an infected person. Many baby boomers could have been infected from contaminated blood and blood products before widespread screening of the blood supply began in 1992.

Others may have become infected from injecting drugs, even if only once in the past. Still, many baby boomers with Hepatitis C do not know how or when they were infected.

## What should baby boomers know about Hepatitis C?

Hepatitis C is a serious liver disease that results from infection with the Hepatitis C virus. Some people who get infected with Hepatitis C are able to get rid of the virus, but most people who get infected develop a lifelong infection. Over time, chronic Hepatitis C can cause serious health problems including liver damage, cirrhosis, liver cancer and even death. In fact, Hepatitis C is a leading cause of liver cancer and the leading cause of liver transplants.

### People with Hepatitis C:

- Often have no symptoms
- Can live with an infection for decades without feeling sick
- Can usually be successfully treated with medications

## How would someone know they have Hepatitis C?

The only way to know if someone has Hepatitis C is to get tested. Doctors use a blood test to find out if a person has ever been infected with Hepatitis C.



**HEPATITIS C**  
.....  
**WHY BABY BOOMERS  
SHOULD GET TESTED**

# Key Education Points

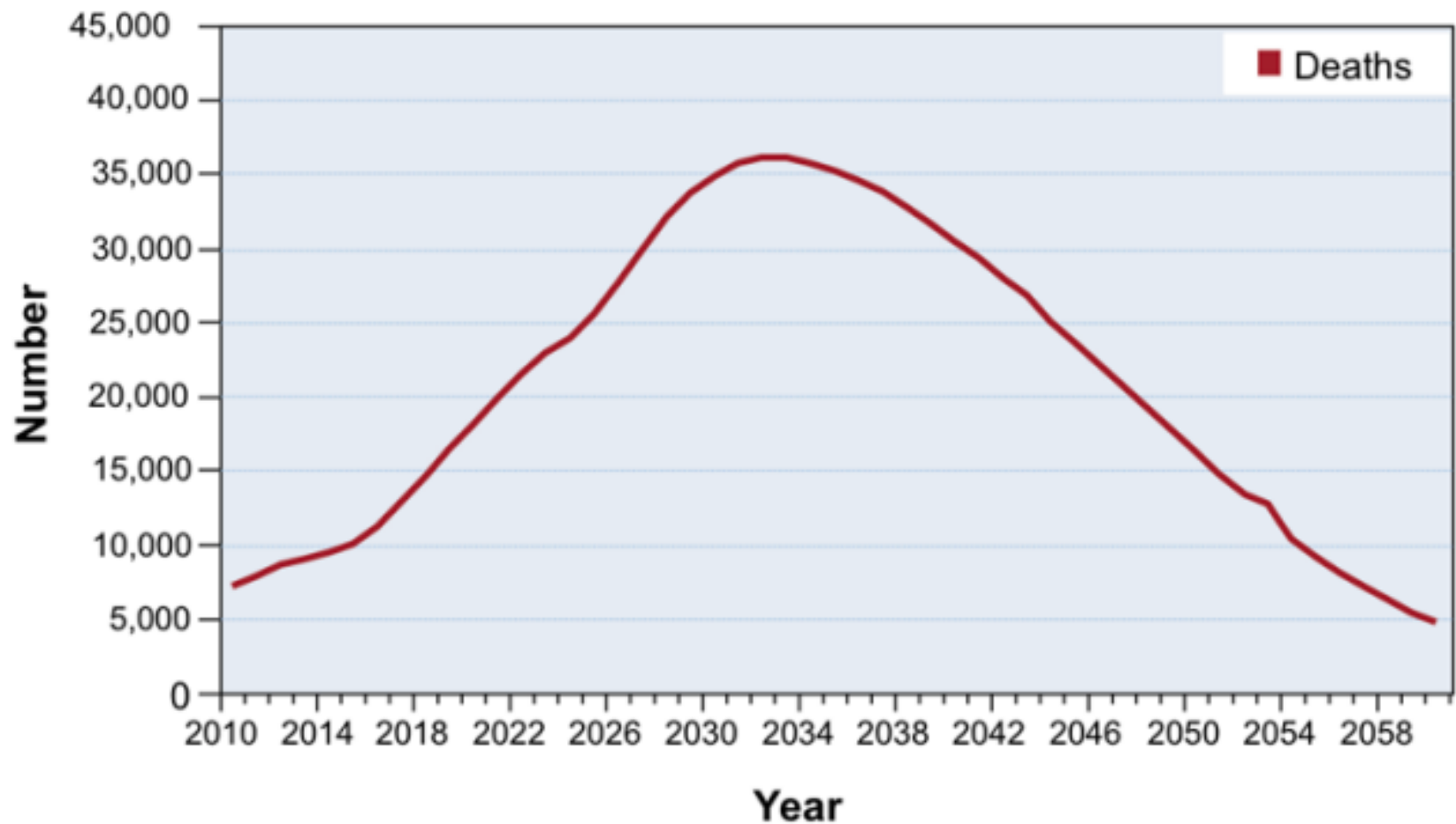
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- Baby Boomers (born 1945 – 1965) are five times more likely to have Hepatitis C
- Hep C may remain in the body for years without symptoms
- Possible disease manifestation increases with age and is often lethal
- All baby boomers should be identified, tested for Hep C infection and receive treatment if results are positive.

### Figure 7 Forecasted Annual Deaths Associated with Chronic Hepatitis C Infection.

Among persons with chronic hepatitis C infection and no liver cirrhosis, the hepatitis-C related deaths peak in 2030 to 2035.

Source: Rein DB, Wittenborn JS, Weinbaum CM, Sabin M, Smith BD, Lesesne SB. Forecasting the morbidity and mortality associated with prevalent cases of pre-cirrhotic chronic hepatitis C in the United States. Dig Liver Dis. 2011;43:66-72.



# Step 2 SCREEN

- CDC recommends 1 time testing of baby boomers (born 1945-1965)

Reminder Resolution: HCV SCREEN Baby Boomers

Adults born during 1945-1965 should receive one-time testing for HCV without prior ascertainment of HCV risk (Strong Recommendation, Moderate Quality of Evidence), and All persons identified with HCV infection should receive a brief alcohol screening and intervention as clinically indicated, followed by referral to appropriate care and treatment services for HCV infection and related conditions (Strong Recommendation, Moderate Quality of Evidence).

Lab order for Hepatitis C screening placed.

Not applicable.

Patient declined.

The patient/family will understand the test(s) to be performed, the potential risks, the expected benefits, and the risks of non-testing.

Historical HEP C Screen reported.

Date: \*    2014  ...

Location: \*

Results and source of info: \*

\* Indicates a Required Field

CLINICAL REMINDER ACTIVITY  
HCV SCREEN Baby Boomers:  
Historical HEP C Screen reported.  
Date: - Exact date is unknown

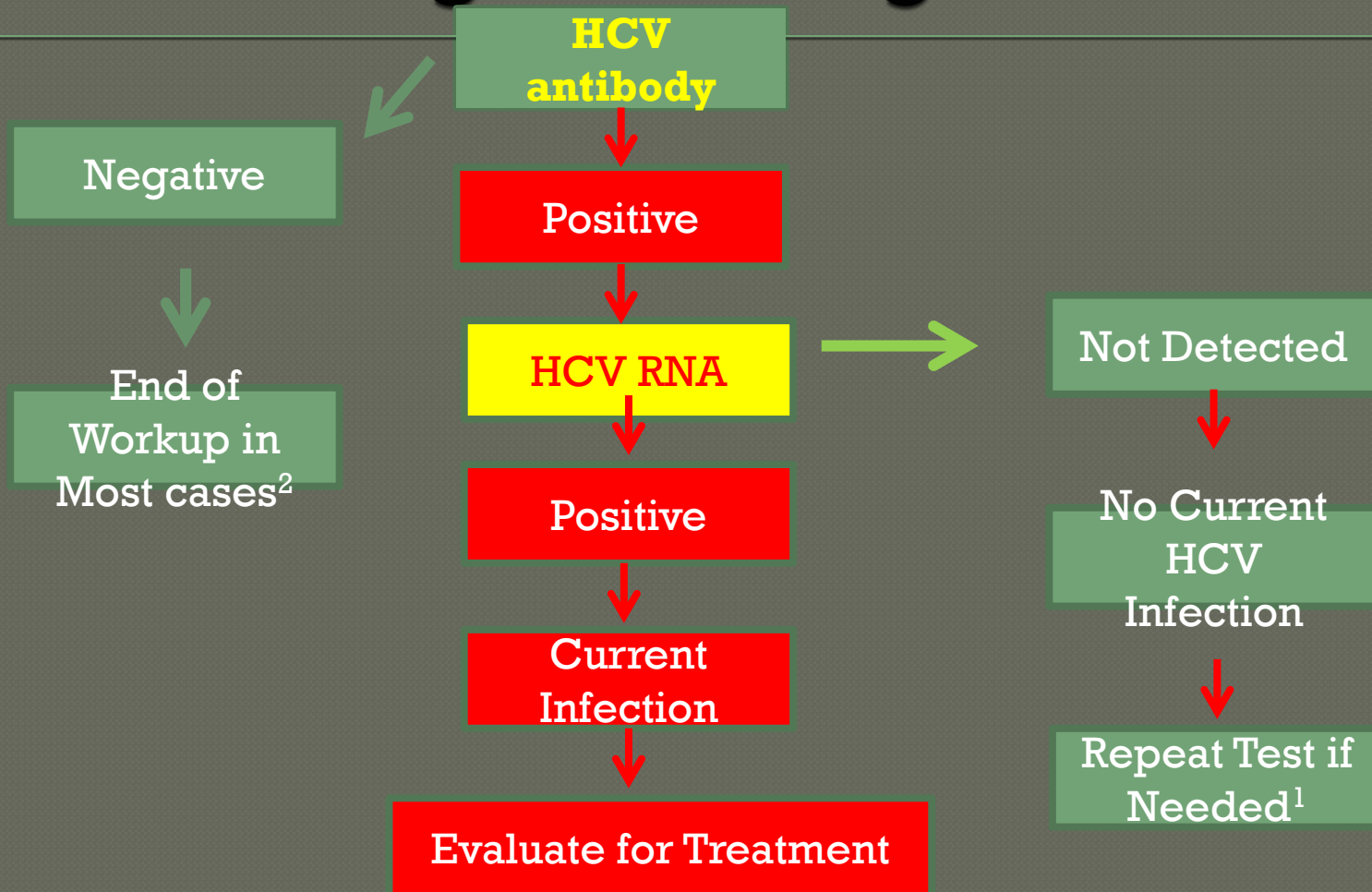
Procedures: HEPATITIS C AB TEST (Historical)

Clear Clinical Maint < Back Next > Finish Cancel



# Step 3: CONFIRM

## HCV Diagnostic Algorithm



1. If exposure was within the last 6 months  
Concern in the handling of specimen

2. Immunocompromised or exposure in last 6 months

Adapted from Paneer N et.al. CID 2014;59(15) 875-82

## Step 4 - PANEL AND PRIORITIZE

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Remember – do not forget to identify any patients that had a positive screen in the past and for one reason or another were not able to get treatment.



# Hepatitis C Workup

## COMORBIDITIES

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- ◉ Alcohol or drug dependence
- ◉ Depression (PHQ9 score)
- ◉ Uncontrolled illness
  - Diabetes mellitus
  - Coronary artery disease
  - COPD
  - Obesity
  - Vitamin D deficiency
- ◉ Anemia

## INITIAL LAB WORKUP

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- ◉ CBC and CMP
- ◉ HBV serology
  - HBsAg/HBsAb/HBcAb
- ◉ HAV serology
  - IgG or Total
- ◉ HIV serology
- ◉ Fe/TIBC
- ◉ INR
- ◉ Liver Ultrasound

# Step 5: TREAT

## Treatment Guidelines

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### HIGH PRIORITY OWING TO HIGH RISK FOR COMPLICATIONS

- Fibrosis (F2)
- HIV-1 coinfection
- HBV coinfection
- Other coexistent liver disease (eg, NASH)
- Debilitating fatigue
- **Type 2 Diabetes mellitus**
- Porphyria cutanea tarda

### PERSONS AT ELEVATED RISK OF HCV TRANSMISSION

- Men who have sex with men with high-risk sexual practices
- Active injection drug users
- Incarcerated persons
- Persons on long-term hemodialysis
- HCV-infected women of child-bearing potential wishing to get pregnant
- HCV-infected health care workers who perform exposure-prone procedures

# **Settings of Liver-Related Complications and Extrahepatic Disease in Which HCV Treatment is Most Likely to Provide the Most Immediate and Impactful Benefits.**

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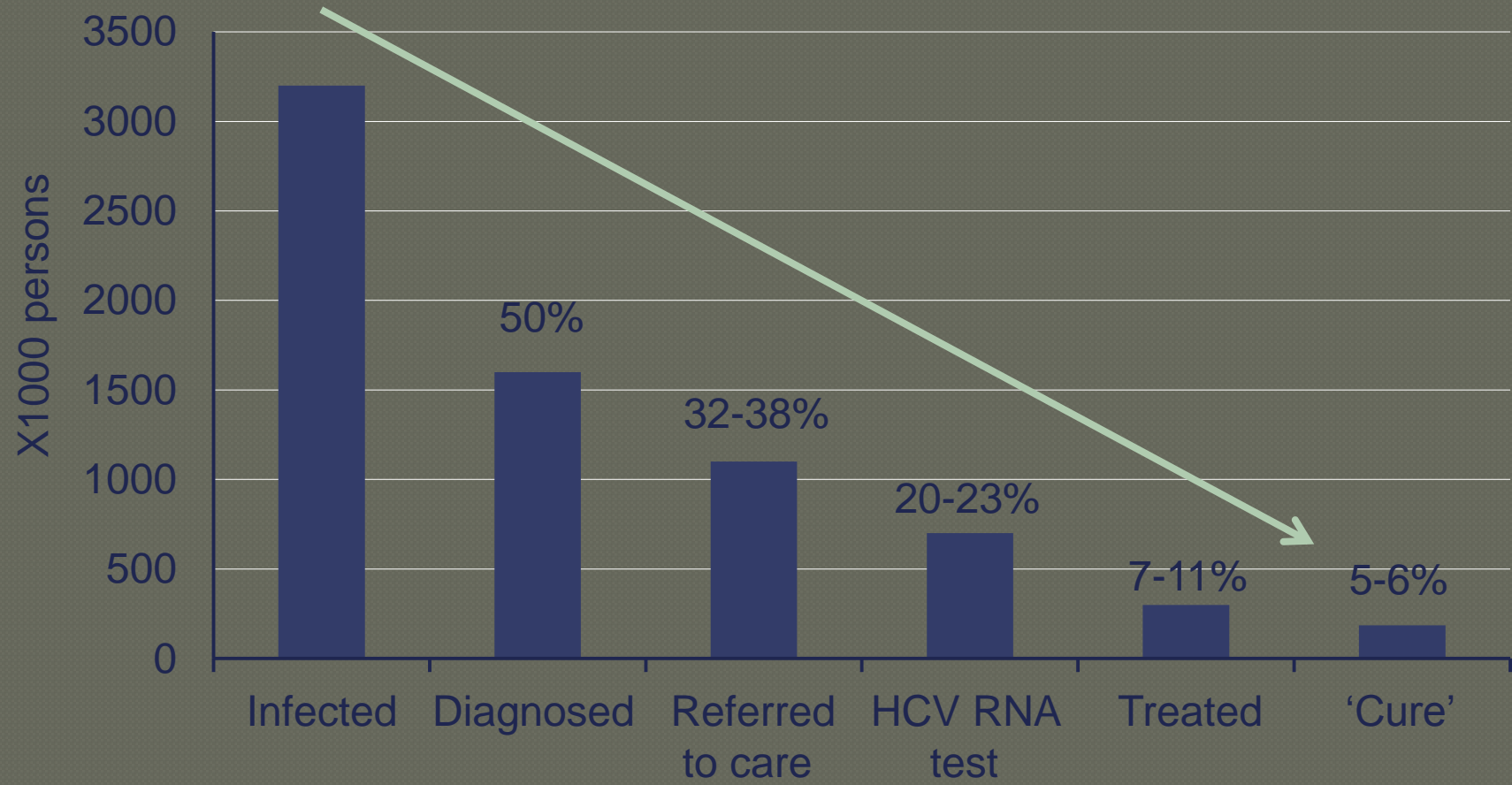
## **Highest Priority**

- Advanced fibrosis (F3) or compensated cirrhosis (F4)
- Organ transplant
- Type 2 or 3 essential mixed cryoglobulinemia with end-organ manifestations (eg, vasculitis)
- Proteinuria, nephrotic syndrome, or membranoproliferative glomerulonephritis

# Efficacy in GT 1 Treatment-naïve Patients With and Without Cirrhosis (8-12 Week Treatment Regimens)

Regimen	Duration	Patient Population	SVR12	Patients
SOF + PEG/RBV	12 Weeks	Non-cirrhotic (NEUTRINO)	92%	273
		Cirrhotic (NEUTRINO)	80%	54
SOF + SMV	12 Weeks	F3-F4 (COSMOS)	86%	7
SOF + SMV + RBV	12 Weeks	F3-F4 (COSMOS)	92%	12
LDV + SOF	12 Weeks	Non-cirrhotic (ION-1)	100%	179
		Non-cirrhotic (ION-3)	95%	216
	8 Weeks	Cirrhotic (ION-1)	97%	33
		Non-cirrhotic (ION-3)	94%	215
LDV + SOF + RBV	12 Weeks	Non-cirrhotic (ION-1)	100%	178
	Cirrhotic (ION-1)	100%	33	
	8 Weeks	Non-cirrhotic (ION-3)	93%	216
3D Regimen	12 Weeks	GT 1b non-cirrhotic (PEARL-III)	99%	209
3D Regimen + RBV	12 Weeks	Non-cirrhotic (SAPPHIRE-I)	96%	473
		GT 1a non-cirrhotic (PEARL-IV)	97%	100
		GT 1b non-cirrhotic (PEARL-III)	99.5%	210
		Cirrhotic (TURQUOISE-II)	94%	86

# HCV-Infected Persons in the US: Estimated Rates of Detection, Referral to Care and Cure



# Hepatitis C Programing and Management STEPS

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- EDUCATE
- SCREEN
- CONFIRM
- PANEL
- TREAT
- CURE



# Key Points

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- Great medication is now available
  - *100% cure rates now routine*
  - *Minimal side effects*
  - *Relatively short treatment durations in many instances*
- Successful strategy now available to attain medications at little or no cost

# Current Status

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- Greater than 90% of Medical Directors and/or their surrogates received detailed briefings from experts in early May
- All clinic IT staff have received instructions for modifying RPMS to ensure each aspect of this process runs smoothly.

# Current Status (cont)

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## ○ Initial consultations

- Native American Health Center
- Northern Valley
- Sonoma

## ○ Numerous clinics have declared they intend to proceed

- Ex. – UIHS has developed a plan for implementation in November

# Summary

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- Hepatitis C infection can now be cured in the vast majority of cases
- The newest medication is also relatively free of side effects
- New strategies will enable us to get costly medications at low or no cost
- We must now work hard to ensure that at-risk patients are identified, tested and given the opportunity for treatment.

