

Hepatitis C Baby Boomer Inpatient Screening Program in South Texas



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Program Goals



- To identify baby boomers admitted to a safety net hospital in South Texas who are eligible for HCV screening
- To exclude patients with prior HCV testing and/or diagnosis by a screen in the electronic medical record
- To order the HCV screen for all eligible patients automatically on admission
- To inform patients about the HCV screening program and allow them to opt out
- To provide bundled HCV antibody testing and reflex HCV RNA
- To provide test results for all tested subjects

Objectives for Antibody Positive Patients



- To provide a culturally competent educational program for newly diagnosed HCV patients
- To educate HCV Ab+, RNA negative patients about HCV and reducing risk of reinfection
- To educate HCV Ab+, RNA positive patients about HCV, transmission, health effects, approaches to reduce disease progression, and treatment options
- To screen for alcohol consumption and offer brief counseling intervention
- To provide information about needed tests and interventions (immunizations) to the patient

Objectives for Linkage to Care



- To arrange follow-up primary care for initial follow-up testing and interventions (immunizations)
- To schedule and facilitate hepatology care
- To address barriers including homelessness, lack of insurance, lack of transportation
- To provide all materials and services in Spanish and English

Posters hung throughout the Hospital



If you were born between 1945 and 1965, we will include the hepatitis C test with your other lab work. If you have questions or concerns, please talk with your nurse.

Millones de Americanos tienen hepatitis C. La mayoría no lo saben.

Si usted nació entre los años 1945 y 1965, incluiremos la prueba de detección de hepatitis C con el resto de sus análisis de laboratorio. Por favor diríjase a su enfermero(a) si tiene preguntas al respecto.



EARLY DETECTION CAN SAVE LIVES.
DETECCIÓN TEMPRANA PUEDE SALVAR VIDAS.
www.cdc.gov/KnowMoreHepatitis



HCV Screen Applied to All Admissions



Screen for prior diagnosis

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'V02.62'  
, '070.41'  
, '070.44'  
, '070.51'  
, '070.54'  
, '070.7'  
, '070.70'  
, '070.71'  
, 'B17.1'  
, 'B18.2'
```

Screen for prior HCV test

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'Hepatitis C Antibody RIBA'  
'Hepatitis C Virus PCR'  
'Hepatitis C Antibody'  
'Hepatitis C Genotype'  
'Hepatitis C PCR, Quantitative'
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Daily Admission List Generated for Baby Boomers



Patient Name	MRN (fake)	Admit Date	Age	Gender	Status	
Mary Doe	1234567	2013-02-15	62	Female	Has Hep C	
John Deo	1234568	2013-02-15	47	Male	Has Hep C	
	1234560	2013-02-15	49	Male	Has Hep C	
	1234571	2013-02-15	64	Female	No Hep C or no test for Hep C	For 2-17
	1234571	2013-02-15	51	Male	No Hep C or no test for Hep C	For 2-16
	1234572	2013-02-15	48	Male	No Hep C or no test for Hep C	Hep screen done - nonreactive
	1234573	2013-02-15	62	Male	No Hep C or no test for Hep C	Hep screen done- negative
	1234574	2013-02-15	53	Male	No Hep C or no test for Hep C	For 2-16
	1234545	2013-02-15	53	Male	No Hep C or no test for Hep C	For 2-17
	1234543	2013-02-15	48	Male	No Hep C or no test for Hep C	For 2-17
	1234547	2013-02-15	64	Male	No Hep C or no test for Hep C	For 2-17
	1234548	2013-02-15	55	Female	No Hep C or no test for Hep C	Brain mass confused no test
	1234559	2013-02-15	63	Male	No Hep C or no test for Hep C	For 2-16
	1234558	2013-02-15	62	Female	No Hep C or no test for Hep C	For 2-16
	1234557	2013-02-15	47	Female	No Hep C or no test for Hep C	For 2-16
	1234556	2013-02-15	59	Female	No Hep C or no test for Hep C	Hep c screen done non react
	1234593	2013-02-15	58	Male	No Hep C or no test for Hep C	Head injury no test
	1234599	2013-02-15	56	Female	No Hep C or no test for Hep C	Patient has HCV known with cirrhosis no test
	1234586	2013-02-15	65	Female	No Hep C or no test for Hep C	Hep C screen negative
	1234576	2013-02-15	64	Male	No Hep C or no test for Hep C	For 2-16
	1234587	2013-02-15	56	Female	Tested for Hep C	
	1234589	2013-02-15	54	Male	Tested for Hep C	
	1234540	2013-02-15	54	Male	Tested for Hep C	
	1234531	2013-02-15	61	Female	Tested for Hep C	
	1234533	2013-02-15	65	Male	Tested for Hep C	
	1234534	2013-02-15	59	Male	Tested for Hep C	
	2123457	2013-02-15	50	Male	Tested for Hep C	

Message to All Staff Physicians

Message from the
Chief Medical Officer



Dear Colleagues,

In collaboration with University Health System, the ReACH Center at UTHSCSA has received funding from the Centers for Disease Control and Prevention (CDC) to increase screening of baby boomers for hepatitis C. In 2012, the CDC recommended that all U.S. baby boomers should get a one-time test for the hepatitis C virus (HCV). One in 30 baby boomers – the generation born from 1945 through 1965 – has been infected with hepatitis C, and most don't know it. Hepatitis C causes serious liver diseases, including liver cancer (the fastest-rising cause of cancer-related deaths) and is the leading cause of liver transplants in the United States. Specific components of this project include the following:

- All patients admitted to UH born between 1945 and 1965 will be offered opt out screening for HCV.
- There are signs around the hospital announcing the initiative. Information is also being included in baby boomers' admission packets and project health educators are distributing flyers to eligible admitted patients.
- Sunrise is being modified to include an order for the HCV screen (HCV antibody screen and reflex HCV RNA for all positives) to all qualifying admission orders. The order will be triggered only if the patients meet the recommended screening age and have not previously been tested for HCV.
- Nurses may remove the order if the patient chooses to opt out.
- Patients diagnosed with chronic HCV infection (positive HCV Antibody and positive HCV RNA) by the screening initiative will be educated about this condition with an interactive application on a tablet computer that has been developed along with counseling by a trained health educator. A study team member physician will be available as backup in case patients have questions or concerns that the health educator cannot address.
- Health educators will provide documentation informing the attending physician and residents about the diagnosis and counseling. The health educator will arrange follow-up with a PCP, unless already done by the discharging team, and HCV specialty care.
- A community based promotora will follow up after the patient has been discharged to ensure that patients diagnosed with chronic HCV are linked to care and services.

This is an important local community initiative given the known high prevalence of HCV in Bexar County and among the population of patients that we serve.

If you have any questions, please contact Barbara J. Turner, MD, MSED at turner@uthscsa.edu (210-562-5550); Joshua Hanson MD, MPH at hansonj4@uthscsa.edu (210-203-3503); or Barbara S. Taylor MD, MS at taylorbs4@uthscsa.edu (210-567-4661).

Thank you for your continued dedication to take excellent care of our patients.

Regards,

Bryan J. Alsip, MD, MPH
Executive Vice President/Chief Medical Officer
University Health System

Community Appropriate Mobile App



- Patients newly diagnosed with chronic HCV receive face to face counseling aided by App on a tablet computer
- This bilingual App provides:
 - An introduction to hepatitis, the liver, and how HCV spreads
 - Screening for use of alcohol and drugs
 - Prompted to answer questions at several points to reinforce learning points
- Content developed with a local Latina owned web development company

Example of Slide from HCV Educational Program on Mobile App

Home

University of Texas Health Science Center

What is Hepatitis?



Your liver is an important organ located in the upper right part of your abdomen.

Your liver helps your body use the food you eat.

It filters and helps your blood clot.

It also fights infections.

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Question and Answer Prompts



• Home University of Texas Health Science Center

Quick Question

What part of your body can Hepatitis C hurt?

Stomach Bones Liver Eyes

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Pop up appears with correct answer. Incorrect answers are redirected back to the question.

Which organ?

That's right!

Hepatitis C harms your liver.

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Slide from Spanish version of Mobile App



Home University of Texas Health Science Center

¿Cómo puedo proteger a mi hígado?



- Elimine el alcohol. La cerveza, el vino, el licor o cualquier otra forma de alcohol puede aumentar el daño a su hígado.

Dígale a su doctor o especialista de salud :



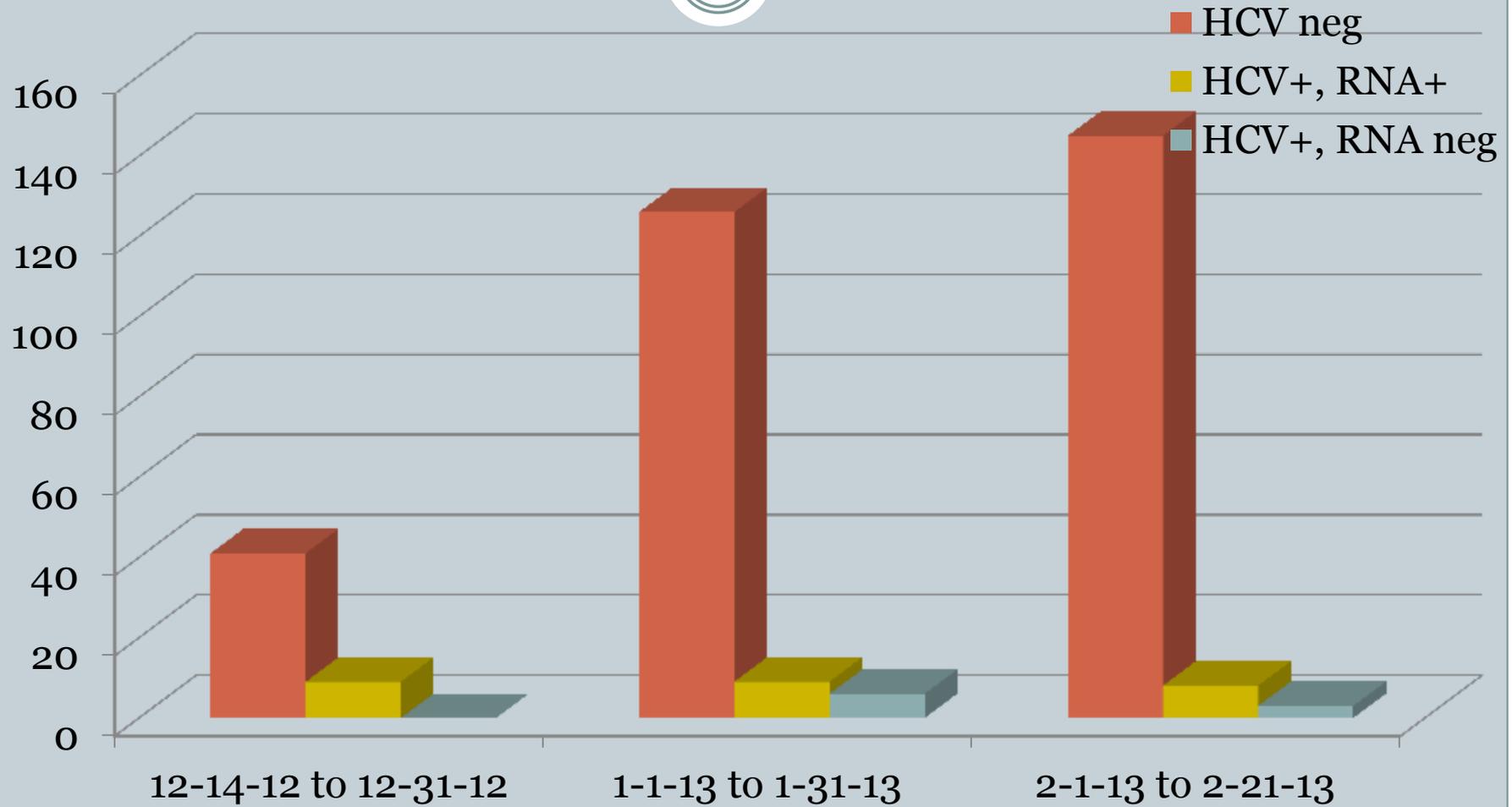
- Que lo vacune contra otros virus que puedan causar hepatitis (A y B)
- Que se asegure que sus medicamentos no van a afectar a su hígado.
- Que revise las pastillas que usted compra por su cuenta como tylenol, advil, ibuprofen o remedios naturales porque esos también le pueden causar daño.

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Patient Tracking in REDCap

Form ID	11
Patient interested in treatment? <small>* must provide value</small>	<input checked="" type="radio"/> Yes <input type="radio"/> No <small>reset value</small>
Would the patient be interested in HCV clinical trial? <small>* must provide value</small>	<input type="radio"/> Yes <input checked="" type="radio"/> No <small>reset value</small>
What type of specialty referral? <small>* must provide value</small>	<input type="radio"/> AMR <input type="radio"/> Private specialist <input checked="" type="radio"/> UH hepatology clinic <small>reset value</small>
Follow-Up Ordered By Hanson or Taylor? <small>* must provide value</small>	<input checked="" type="radio"/> Yes <input type="radio"/> No <small>reset value</small>
Date and Time UH Hepatology Ordered by Hanson or Taylor? <small>* must provide value</small>	<input type="text" value="02-05-2013 10:30"/> <small>Now</small> M-D-Y H:M
Specialist Name: <small>* must provide value</small>	<input type="text" value="Dr. Ramirez"/>
Specialist Phone Number <small>* must provide value</small>	<input type="text" value="2103583333"/>
Specialist Fax Number <small>* must provide value</small>	<input type="text" value="2103582323"/>
PHI form signed? <small>* must provide value</small>	<input checked="" type="radio"/> Yes <input type="radio"/> No <small>reset value</small>
Information sent to specialist? <small>* must provide value</small>	<input checked="" type="radio"/> Yes <input type="radio"/> No <small>reset value</small>
Specialist appointment date and time <small>* must provide value</small>	<input type="text" value="02-25-2013 17:00"/> <small>Now</small> M-D-Y H:M
Specialist appointment location <small>* must provide value</small>	<input type="text" value="UHS downtown"/>

Progress in HCV Screening



Advances in Screening Program



- No longer involve nurses in asking opt out
- Promotoras hand out informational flyers to all eligible patients with option to opt out
- Ordering screening test shortly after admission
- All patients receive information about negative test either in person or by mail
- All positive patients personally contacted and counseled while in hospital

Ongoing Challenges Being Addressed



- Patients without insurance
- Homeless
- No transportation
- Need a primary care provider then specialty care
- Specialty clinic appoint delays but now offering intake educational program with nurse practitioner
- Patients not answering phone
- Patients with poor prognosis (eg metastatic cancer) need to be excluded
- Getting automatic ordered for HCV screen in all admission order sets

Future Opportunities



- Approximately 1/3 of baby boomers admitted to hospital have been screened but many lack documentation of follow-up evaluation
- Need to develop a program to review all tested patients to insure that they have had RNA and other follow-up done
- Extend testing program to emergency department in parallel with HIV testing program for boomers