

HCV confirmation testing coupled with an ED based screening program

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Background

The CDC estimates that there are 2.7 to 3.9 million people in the US living with Hepatitis C. Because of the slow progression of the disease many of these people are unaware they are infected leaving them at high risk for liver disease and hepatocellular carcinoma.

In 2012, the CDC recommended testing all individuals born 1945 to 1965 without consideration of risk for HCV. 1/2013, Memorial Hermann Hospital System partnered with Gilead-HIV FOCUS to begin birth cohort HCV testing in the emergency department (ED) at the Memorial Hermann Hospital, Texas Medical Center Campus (MHHS).

That program has now expanded to all 9 ED campuses of the Memorial Hermann System adding confirmatory RNA testing to patients identified as antibody positive.

Objective

To implement and define the feasibility of birth cohort screening in a busy urban and suburban ED's for the purpose of identifying HCV antibody positive persons, identifying active infection and linking patients to care.

Results

December 2014 - 773 screened, 59 antibody positive, 16 RNA positive, 10 RNA negative

January 2015 - 912 screened, 86 antibody positive, 36 RNA positive, 10 RNA negative

March 2015 - 766 screened, 57 antibody positive, 21 RNA positive, 5 RNA negative

		TOTAL Screened	Antibody positive	RNA positive
2014 - Antibody only, TMC location				
	Jan-14	145	11	
	Feb-14	148	19	
	Mar-14	146	17	
	Apr-14	155	8	
	May-14	87	6	
	Jun-14	193	18	
	Jul-14	217	18	
	Aug-14	178	13	
	Sep-14	138	4	
	Oct-14	221	19	
	Nov-14	112	11	
ALL 9 MH LOCATIONS + RNA Confirmatory Testing 12/17/2014				
	Jan-15	912	86	36
	Feb-15	654	67	28
	Mar-15	766	57	21

The screenshot shows a web-based screening tool for Hepatitis C. It includes a sidebar with various medical screening categories like Psychosocial, TB Screen, ED Fall Risk Tool, HIV Previously Tested, HCV Screening, etc. The main content area is titled 'Hepatitis C Testing' and contains several questions with radio button options:

- 'Was the patient born between 1945-1965?' with Yes/No options.
- 'Has the patient ever been tested for Hepatitis C?' with Yes/No/Unknown options.
- 'What was the result of the test?' with Positive/Negative/Unknown options.
- 'Testing Options' with Accept Testing/Decline Testing options.

 A note at the bottom states: 'The CDC recommends a one time test for HCV to persons born 1945-1965. If you are unaware of your HCV status, we encourage you to participate in this confidential testing opportunity. The test will automatically be ordered unless you decline testing.'

Methods

Study designs: Clinical Quality Improvement Protocol

Participants: all patients born 1945-1965 who access the ED for care and who are able to opt-out of HCV screening.

Interventions: Patients who are informed of HCV screening and given the opportunity to opt out of testing. The venous blood sample is processed by an IgG antibody methodology two was immunoassay using chemiluminometric technology for for HCV antibody positivity. Roche COBAS Ampliprep/COBAS Taqman HCV real-time RT-PCR IVD system is used to confirm the HCV genome utilizing a dual probe approach.

Conclusions

Through the process of ED based screening we have demonstrated the feasibility of testing patients for HCV and identifying HCV active infection. Patients will likely continue to access the ED as their primary healthcare location making ED's an important location for infectious disease screening. Additional attention needs to be addressed by the Centers for Medicare and Medicaid Services (CMS) to alter the current definition for reimbursement. The current definition by USPSTF of grade B clearly excludes emergency departments, inpatient hospital settings, as these locations are not considered primary care locations.

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References

<http://www.cdc.gov/hepatitis/HCV/GuidelinesC.htm>