Success and Limitations of Hepatitis C Screening in the Inpatient Setting

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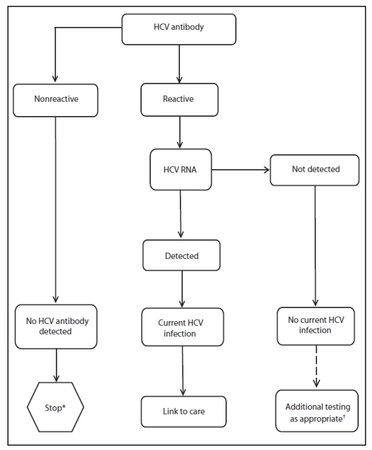
Background:

- An estimated 3.5 million people in the United States are living with Hepatitis C (HCV)
- 75% are Baby Boomers (Born between 1945-1965)
- Hepatitis C kills more Americans than any other Infectious Disease, including HIV
- Aligned with CDC recommendations, The Jefferson Emergency Opt-Out Program included Hepatitis C screening as part of its programmatic efforts in late 2016
- Underlying goal: to increase HCV screenings among those patients in the age cohort, admitted to the hospital from the Emergency Department
- PA Act 87: Passed on July 20, 2016 and requires any hospital inpatient Baby Boomer admission be offered a HCV screening test or HCV diagnostic test
- Follow-up health care under Act 87: If the screening test is reactive, the health care provider shall either offer the individual follow-up health care OR refer the individual to a health care provider who can provide follow-up health care. The follow-up health care shall include a hepatitis C diagnostic test

Ab+ indicates one of the following: 1) current HCV infection, 2) past HCV infection that has resolved, or 3) false positive. A reactive result should be followed by a confirmatory RNA test. If HCV RNA is detected, that indicates current HCV infection. If HCV RNA is not detected, that indicates either past, resolved HCV infection, or false HCV antibody positivity.



Source: CDC, 2013

Specific Aim & Hypotheses:

This study evaluates the outcomes that a state level mandate for HCV screening with HCV-Antibody-only has on linkage to care and access to treatment, compared to a specific programmatic effort, which includes HCV confirmation.

The Emergency Opt-Out Program is a grant recipient of FOCUS from Gilead Sciences.

Methods:

- Retrospective study
- Data collection through chart review of age cohort patients admitted to medical inpatient service in an urban, academic hospital
- Pre-post design in relation to implementation of a state level mandate for HCV screening
- Descriptive Analysis
- Focus placed on number of eligible patients:
  - 1) screened
  - 2)confirmed
  - 3) linked to care

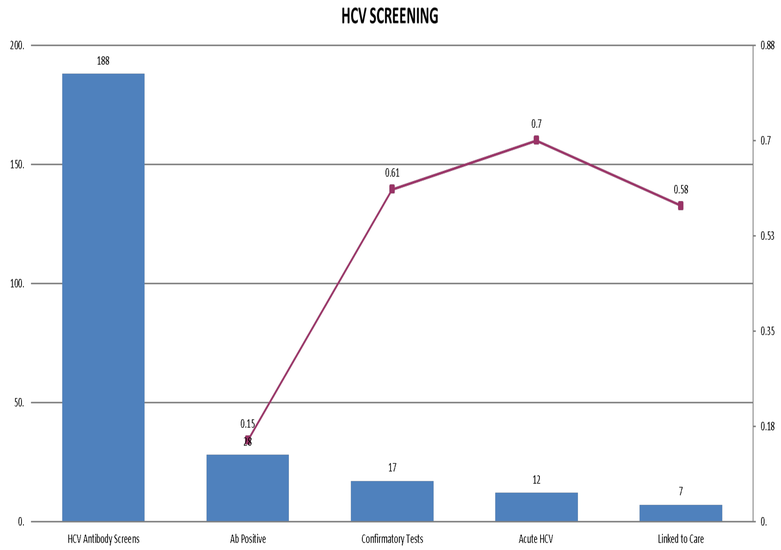
Results:

1) Programmatic efforts: Oct 2016- Jan 2017

- Among the patients we screened, we found a seroprevalence rate of 15% (Ab+). Of those, 61% received confirmatory testing while still inpatient, and 71% of those patients were confirmed positive with a RNA test. We were successfully able to link 58% of these patients to care.

2) Act 87 implemented: Dec 2016- April 2017

- TJUH implemented Act 87 requirements for ALL inpatient services in December 2016. Seroprevalence was 9.5% . By policy mandate, confirmation was not done inpatient and instead linkage to care fell to the PCP.



Evidence Base:

RE-AIM (Reach, Efficacy, Adoption, Implementation, and Maintenance) Framework:

- **R**each: The target population of Baby Boomers
- **E**fficacy: The impact of our intervention and how many baby boomers were screened and linked to care
- **A**doption of our intervention by the institution and staff in our ability to inform formal institutional policy
- **I**mplementation of the intervention in terms of consistency of delivery and how to streamline our programmatic efforts aligned with best clinical practices
- **M**aintenance of the intervention becoming routinized over time in how to make our program a permanent fixture within the institution

This framework acknowledges the need for research methods that evaluate the significance of interventions like ours.

Discussion:

- Data shows patients with confirmatory testing were more likely to be linked to care compared to those with Ab-only results
- In the months following Act 87 being implemented, which did not include confirmatory testing, we saw a decline in linkage to care rates
- Programmatic efforts can inform an institutional approach with evidence based practices and continuous quality improvement
- Predominant barriers remain, including confirmatory testing, insurance status, and access to specialty care
- Data illustrates the fragmentation of care in the health system, and a potential health disparity in access to confirmatory testing and treatment for a highly curable infection

Conclusions:

- Unfunded mandates may not have intended outcomes
- Results reflect the importance of confirmatory testing with HCV screening to facilitate linkage to care

Limitations:

- Act 87 implemented at Jefferson as policy in December 2016
- Under Act 87, unable to determine how many patients received confirmation as outpatients if not in Jefferson system