Abstract: 707

Hepatitis C Screening in the Emergency Department
The Multi-Center DETECT Hep C Clinical Trial

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BACKGROUND

Testing for hepatitis C (HCV) is the first step toward ultimately curing HCV infection and preventing transmission.

Emergency departments (EDs) are key clinical settings for screening given that they serve at-risk patients who commonly do not access healthcare elsewhere.

Determining the best approach to HCV screening in ED settings is imperative to maximize the benefit of this public health intervention.

METHODS

Design & Setting: Prospective multicenter randomized pragmatic trial in EDs in Baltimore, MD, Denver, CO, and Jackson, MS.

Population: Patients ≥18 years of age presenting to the ED for care.

Exclusions: Critical illness, inability to consent, prior HCV diagnosis, estimated LOS <60 minutes.

Interventions: Eligible patients underwent concealed randomization as part of routine care to either NONTARGETED screening, where all were offered HCV testing using opt-out consent, or TARGETED screening, where all were asked risk questions and any affirmative response led to an offer for HCV testing. Screening was fully integrated into ED care using opt-out consent; antibody positive tests were followed by reflex RNA testing.

Outcomes: Newly diagnosed HCV (RNA+) and elements of the HCV care continuum through 18 months of follow-up.

Analyses: Intention-to-treat; Fisher's exact test; risk ratios (RRs) with 95% confidence intervals (CIs).

GOAL

To evaluate the effectiveness of HCV screening in EDs.

HYPOTHESIS

Nontargeted screening is significantly associated with identification of new diagnoses when compared to targeted screening.

CONCLUSIONS

Nontargeted HCV screening was superior to targeted HCV screening for identifying newly diagnosed HCV in the ED. The significant decay from diagnosis to SVR12 suggests need for innovative models of HCV linkage-to-care and treatment from the ED.

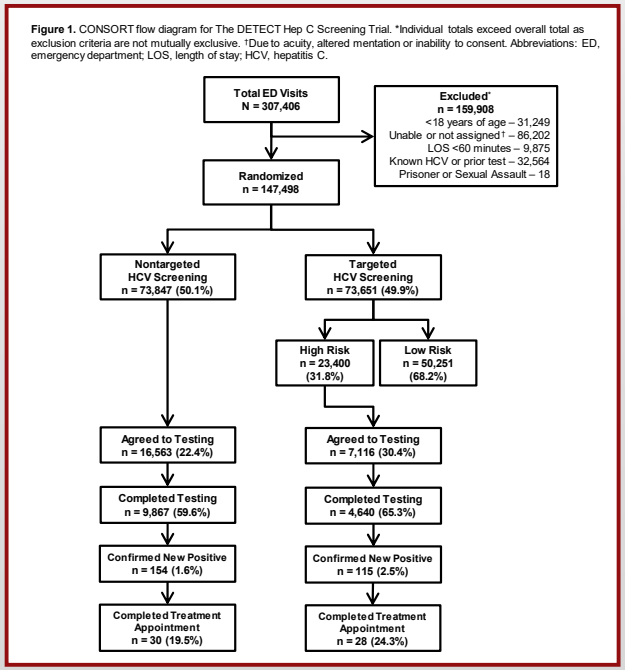

Figure 1. CONSORT flow diagram for The DETECT Hep C Screening Trial. *Individual totals exceed overall total as exclusion criteria are not mutually exclusive. †Due to acuity, altered mentation or inability to consent. Abbreviations: ED, emergency department; LOS, length of stay; HCV, hepatitis C.

RESULTS

Enrollment occurred from 11/19/2019 through 8/4/2022 with 18-month follow-up completed on 1/31/2024, resulting in 147,498 patients randomized with excellent balance (Figure 1).

NONTARGETED Screening: 73,847 allocated, 22.5% accepted testing and 59.5% completed testing, resulting in 154 (1.6%) new diagnoses.

TARGETED Screening: 73,651 allocated, 31.9% identified as high risk, 30.4% accepted testing, and 65.3% completed testing, resulting in 114 (2.5%) new diagnoses.

Nontargeted screening was significantly associated with new HCV diagnoses when compared to targeted HCV screening (Figure 2).

No differences were identified across the HCV care cascade (Figure 2).

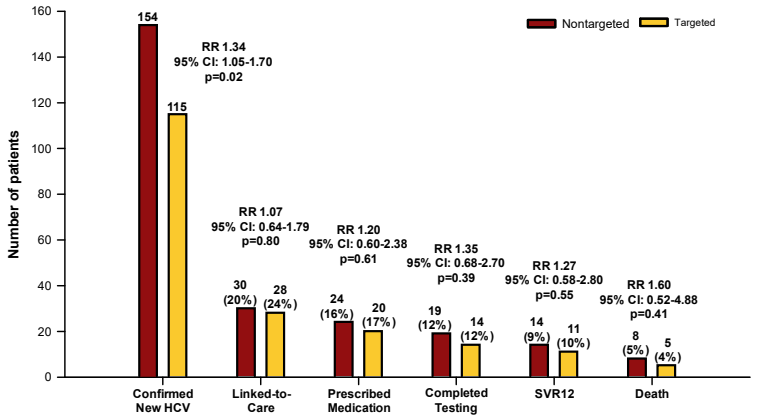

Figure 2. Hepatitis C care cascade within 18 months for newly-diagnosed emergency department patients, The DETECT Hep C Screening Trial. Abbreviations: HCV, hepatitis C; RR, risk ratio; CI, confidence interval; SVR12, sustained virologic response 12 weeks after finishing treatment.

ADDITIONAL KEY INFORMATION

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