Screening for Hepatitis C as Part of an Opioid Stewardship Initiative: Identifying Infected Patients and Analyzing Linkage to Care

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NOVANT HEALTH

BACKGROUND

- Hepatitis C (HCV) remains a major cause of liver-related morbidity and mortality even though direct-acting antiviral drugs (DAAs) are increasingly accessible and have cure rates approaching 100%.[1]
- Approximately 40% of persons with HCV don't know they are infected.[2]
- The demographics of HCV have shifted to younger patients, primarily due to the opioid epidemic and associated increased numbers of people who inject drugs (PWID).[3] Often, the only touch point this population has with the medical system is in the acute care setting.
- Therefore, a robust screening program targeting patients with opioid use disorder (OUD) can potentially identify patients with HCV and present opportunities for linkage to care, cure, and disease prevention by breaking the chain of transmission in high-risk groups.

OBJECTIVE

This project aims to analyze the disposition of patients with OUD with encounters across our organization from May 2018 to November 2020 who were screened for hepatitis C.

Demographics, total population (N=5560) and positive screens (N=1494)

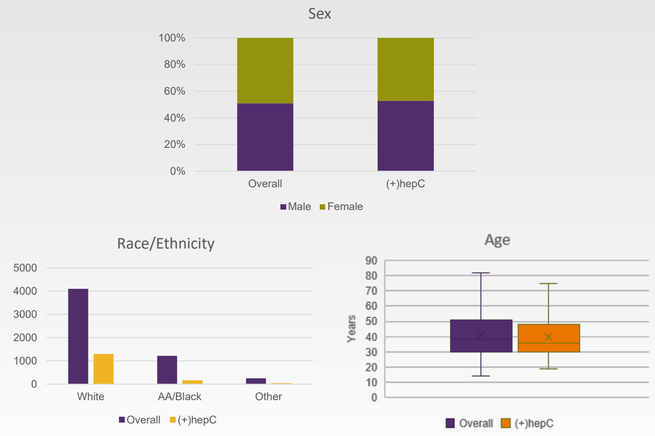

Figure 2

METHODS

As part of an organizational opioid stewardship long-term goal (2018-2020), Novant Health screened patients with OUD for HCV. A best practice alert (BPA) in the electronic health record (EHR) prompted providers to order HCV antibody. Management of positive tests was left to the discretion of the ordering provider.

The disposition of patients with a positive HCV antibody was evaluated by retrospective chart review with patients categorized as: (a) known spontaneous virus clearance (b) linked to care with HCV specialist (c) previous treatment (d) not appropriately linked to care (e) not linked to care due to patient-directed discharge or nonadherence.

This project was part of a quality improvement initiative and reviewed by local IRB.

Inclusion criteria

- Diagnosis of OUD as defined by one of 19 ICD-10 codes either historically or at the point of encounter
- No HCV antibody within the previous 12 months

Exclusion criteria

- Oncologic comorbidity
- Patient death in the interval between testing and chart review

RESULTS

Patients encountered with OUD, N=5560

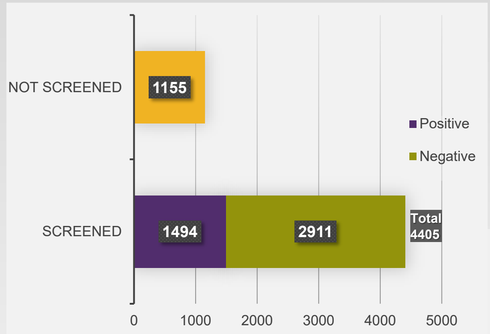

Figure 1

- 5560 patients with OUD were encountered (**Figure 1**):
  - 4405 were screened
  - 1155 were not screened
- Average age 40.9, 49% female, 73.7% White/Caucasian, 21.8% AA/Black (**Figure 2**)
- Potential reasons for declining screening are patient refusal, previously known HCV status, or provider deferral
- Of the patients screened, 1494 (33.9%) were positive

- Of the 1494 patients who screened positive for HCV (**Figure 3**):
  - 355 (24%) had known spontaneous viral clearance
  - 1,105 (73.9%) had actionable findings, defined as needing linkage to care or follow up bloodwork
  - Of eligible patients, 27.2% were linked to care

Positive Hepatitis C Screens, N=1494

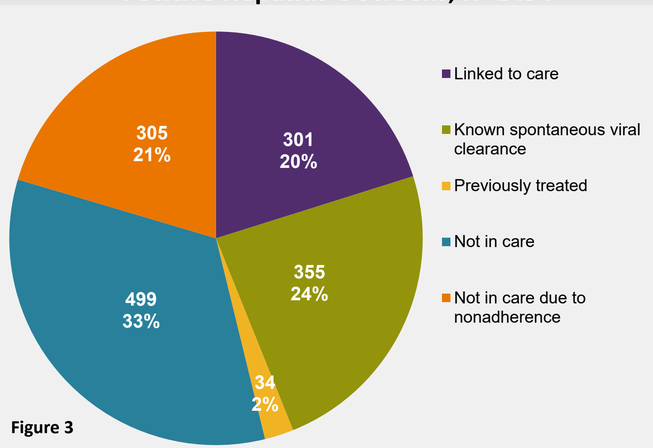

Figure 3

SUMMARY & IMPACT

- We found that **33.9%** of screened patients tested positive for HCV, identifying a need for ongoing screening efforts in this population.
- Of the seropositive cohort, **24%** had known spontaneous viral clearance, consistent with reported statistics in PWID from 2016 (24.4%).[4]
- Despite a BPA intervention to prompt screening, a large percentage of positive patients were not appropriately linked to care. Barriers include a lack of provider education on HCV referral and treatment concurrent to the BPA rollout, as well as psychiatric comorbidities and social vulnerabilities more prevalent in patients with OUD.
- As a result of our intervention, **301 patients** were linked to care. With cure rates > 90% with DAAs, at least 270 patients have the potential for cure.
- Successful HCV treatment has substantial public health impact, with evidence that "even modest increases in successful HCV treatment among PWID can decrease prevalence and incidence."[5]
- Treatment and cure of HCV is associated with a 76% reduction in risk for hepatocellular carcinoma[6] and have shown a significant decrease in mortality, ranging from 46 to 71% across studies.[7]

OPPORTUNITIES

- Improving linkage to care for HCV patients by leveraging pre-existing patient/provider relationships with primary care providers, gastroenterology, or infectious disease
- Provider education efforts should be targeted to high-yield specialties such as behavioral health, emergency medicine, and obstetrics, and should include information on HCV testing, treatment, and referral. For example, active or recent drug use or concern for reinfection is not, by itself, a contraindication to HCV treatment.

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Disclosure: Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.

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