Increasing Hepatitis C Virus Screening Across Inner City Community Clinics

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INTRODUCTION

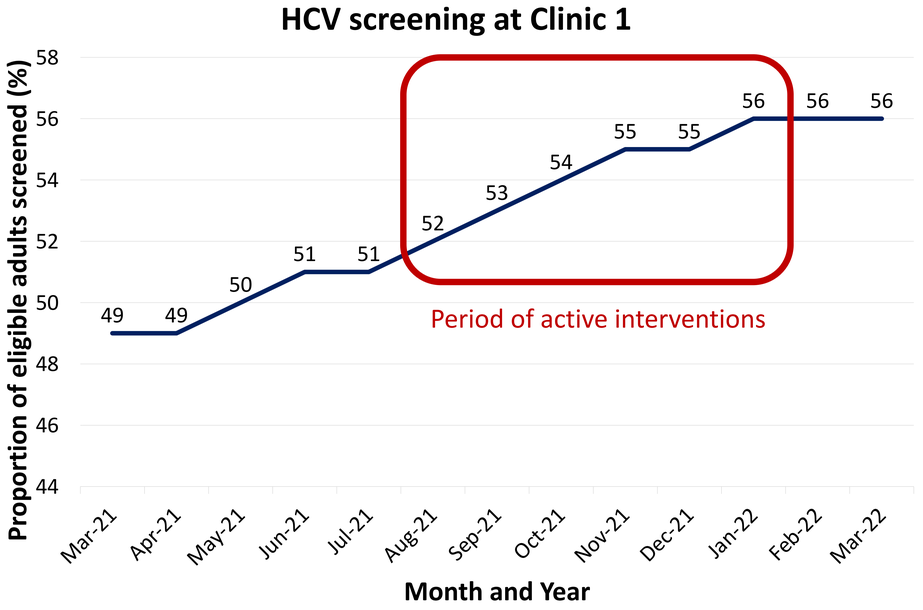
- Hepatitis C virus (HCV) infection is associated with cirrhosis and hepatocellular carcinoma (HCC).
- HCV cure is associated with lower mortality and reduced rates of HCC, but an estimated 51% of people with HCV are unaware of the diagnosis [1].
- In 2020, the United States Preventive Services Taskforce recommended universal screening for all adults aged 18 to 79 years [2].
- We conducted a quality improvement (QI) project at three federally-funded primary care clinics in New York City, to improve screening rates.

METHODS

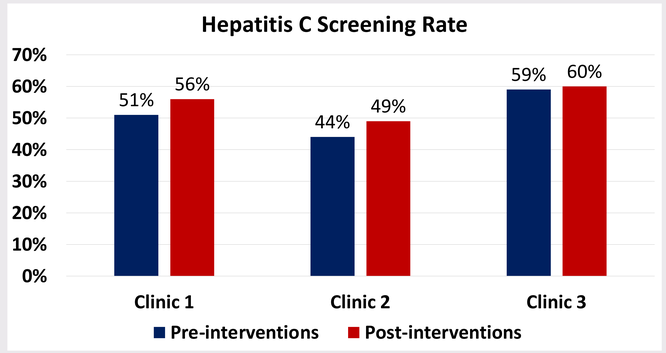
- We utilized the Plan-Do-Study-Act (PDSA) QI methodology.
- HCV screening was defined as a once-in-lifetime HCV antibody check.
- Pre-intervention data on proportion of patients screened was obtained.
- Serial interventions were deployed over 6 months:
  - Regular educational sessions for staff.
  - Informational posters in patient waiting areas.
  - Guideline reminders in consultation rooms.
  - Daily mentions at morning staff meetings.
- Screening rates were measured monthly during and after the period of active intervention.

RESULTS

- Pre-intervention (July 2021), 51% of adults at Clinic 1, 44% at Clinic 2, and 59% at Clinic 3 had been screened for HCV.
- There was an increase in screening rates from August 2021 – January 2022, when interventions were actively deployed (Graph 1).
- By February 2022, screening rates had increased at all sites (Graph 2).
- Screening seemed to plateau once interventions were no longer reinforced.
- Rates of screening improved more at Clinics 1 and 2 than Clinic 3.



Graph 1: The percentage of eligible adults with at least one lifetime HCV screening test from March 2021 – March 2022, at Clinic 1. The red box indicates the period of active interventions with regular reinforcement of guidelines amongst clinic residents.



Graph 2: The percentage of eligible adults screened for HCV before interventions (blue) and after interventions (red) at all clinic sites.

DISCUSSION

- Raising awareness about HCV screening guidelines among providers and patients was moderately effective at increasing screening rates in primarily underinsured patients in New York City.
- Our data suggests continual reinforcement is necessary to sustain increases in HCV screening.
- We continue to run PDSA cycles to improve screening rates further at all sites.
- Reasons for weaker improvement at one site despite identical interventions need to be explored.

REFERENCES

1. Edlin BR, Eckhardt BJ, Shu MA, Holmberg SD, Swan T. Toward a more accurate estimate of the prevalence of hepatitis C in the United States. Hepatology. 2015 Nov;62(5):1353-63. doi: 10.1002/hep.27978. Epub 2015 Aug 25. PMID: 26171595; PMCID: PMC4751870.
2. US Preventive Services Task Force. Screening for Hepatitis C Virus Infection in Adolescents and Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2020;323(10):970–975. doi:10.1001/jama.2020.1123