

Does brief intervention in the form of a lecture improve resident knowledge about Hep-C screening?

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Background

According to the CDC, the prevalence for hepatitis C (Hep-C) during 2013-2016 was about ~2.4 million.

Screening helps to prevent chronic Hep-C or and start early intervention, if needed.

Updated guidelines in 2021 for Hep-C screening to now include all asymptomatic patients from ages from 18-79 years old without liver disease

Screening includes the Hep-C Antibody test. Further testing includes Hep-C mRNA PCR if screening test is positive. High risk patients should have periodic screening

Quality improvement initiative was created to ensure the appropriate screening, communication with patients, and documentation among residents

Objective

1. Update residents on new USPSTF Hep C screening guidelines
2. Increase resident understanding on appropriate Hep C screening methods
3. Improve in preventive care for patients

Methods

- Baseline knowledge was established using a pre-lecture quiz
- A 15-minute lecture was given to residents; lecture included information on purpose for Hep-C screening, new USPSTF recommendation, who should be screened, initial screening test, and follow-up testing for positive results
- Immediately after this intervention the same quiz was given again
- A post lecture quiz was given 6 weeks later to assess retention.
- No additional educational intervention was performed.

Multiple Choice Questions included:

1. What is the USPSTF recommendation for Hep C screening?
2. Which of the following does not qualify for Hep C screening per USPSTF guidelines?
3. What is the appropriate initial test to order for HCV screening?
4. Which is the most significant risk factor for Hep C infection?
5. Should pregnant women be screened for HCV, based on USPSTF guidelines?
6. Which of the following is inconsistent with the frequency of screening for HCV?
7. Which of the following is true for a patient with positive Hepatitis C antibody test?

Results

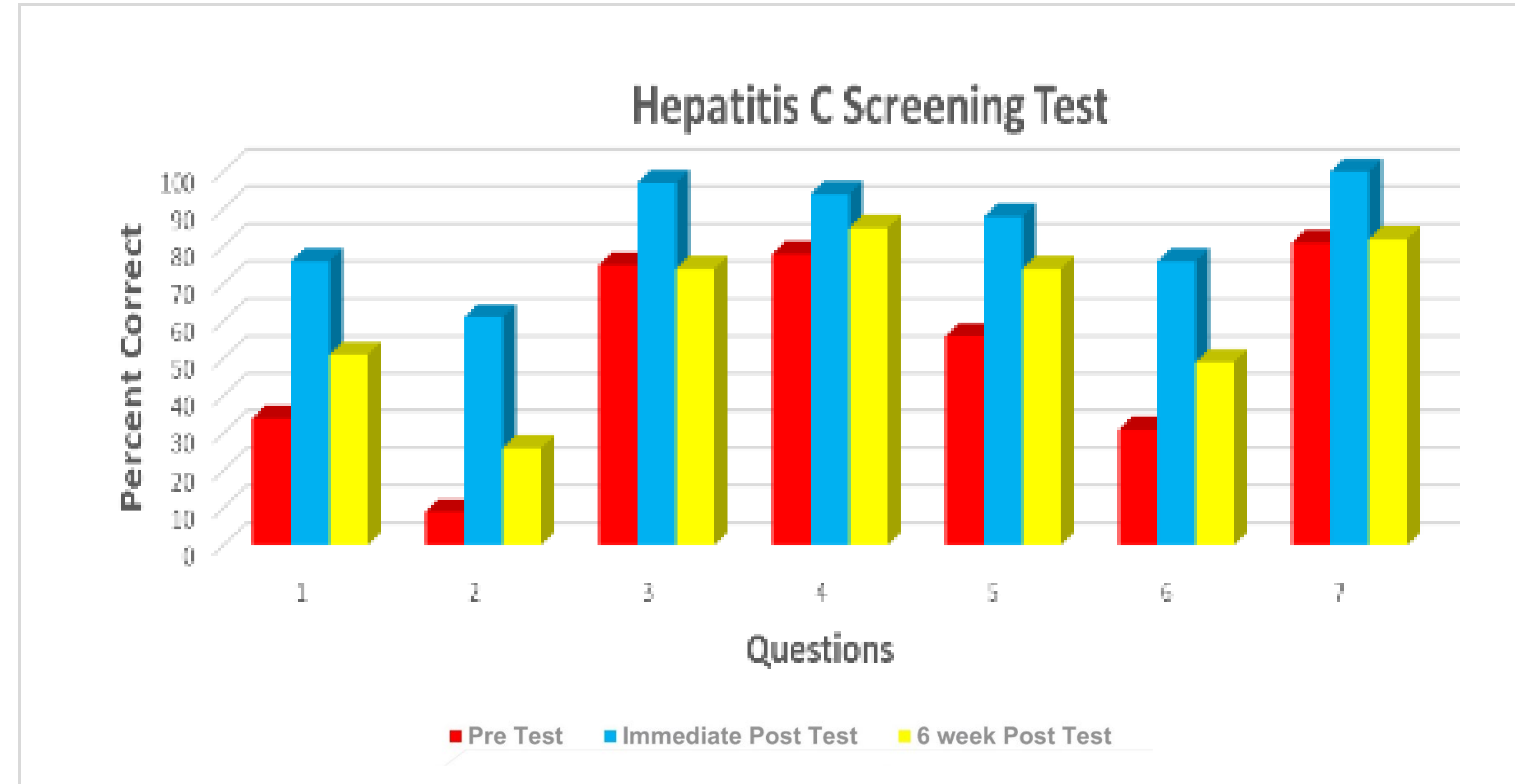
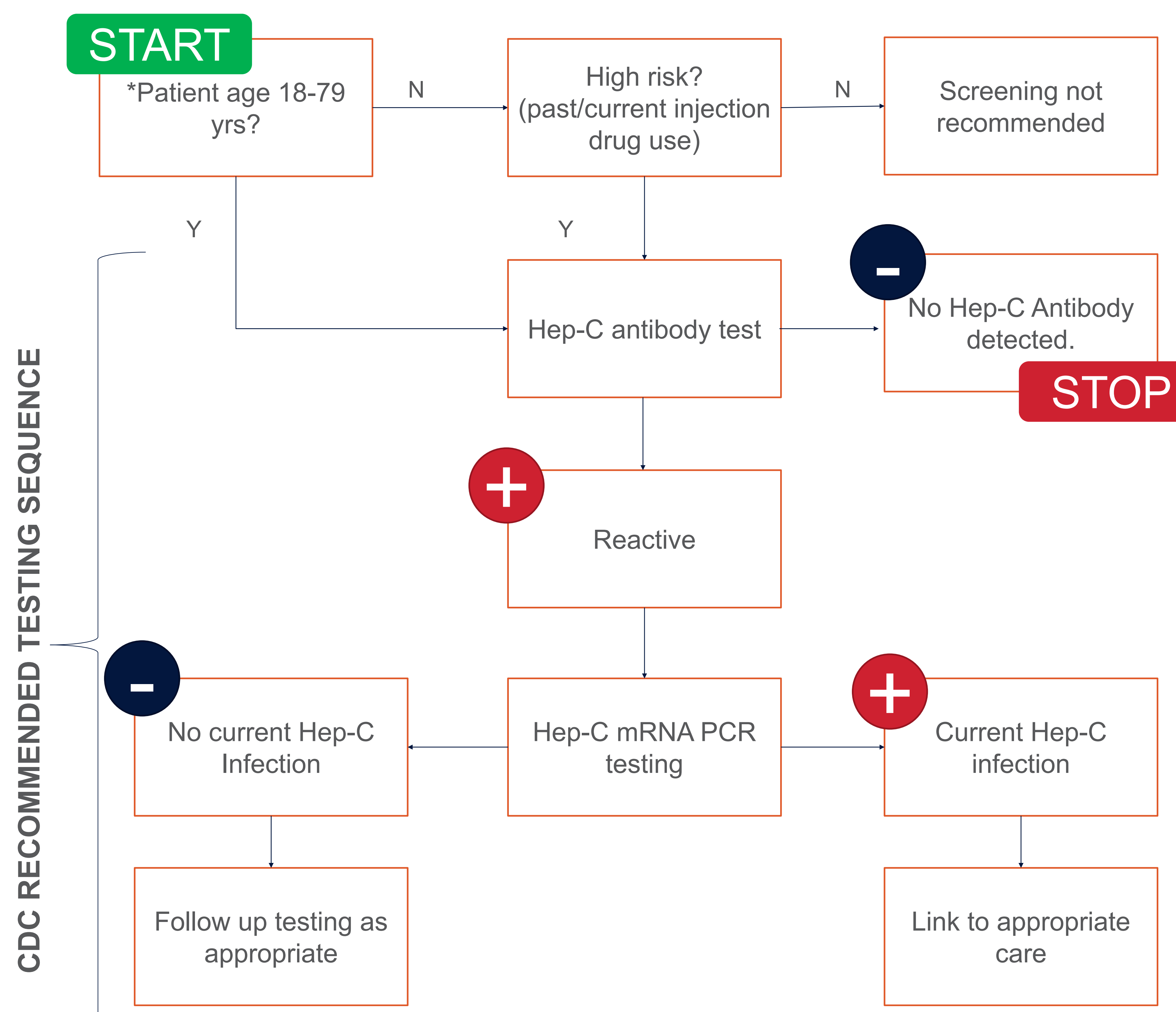


Figure 1: Prior to our lecture, resident average score on hepatitis c screening knowledge was 52%. Immediately after our lecture, residents scored 84%. Post-lecture survey results completed 6 weeks later resulted in decreased retention but improvement overall from the initial pretest scores.

USPSTF Screening Algorithm



*Note: Replaces 2013 guideline recommending testing for individuals born between 1945-1969

Discussion

- Pre and Immediate Post Lecture: Results of the quiz greatly improved indicating the lecture provided high-yield information that was relatively easy to retain short-term.
- Pre and 6 weeks Post Lecture: Results declined but were still above baseline pre-lecture. This indicates frequent re-education on this subject is necessary.
- Limitations:
 - Residents who were on night float or PTO were not present for our lecture and did not participate in the pre and initial post-survey. The post-survey 6 weeks out from our lecture was sent to all residents. As a result, 32 residents participated in our pre and immediate post-survey and 39 residents responded to our 6 week post survey.
 - An additional confounding factor is the fact that four of the presenters were residents and were unable to participate

Conclusion

- Residents who were educated on the recent screening guidelines for Hep-C set by USPSTF retained this knowledge to a satisfactory degree immediately after a 15-minute lecture
- Resident knowledge was still baseline 6 weeks later when compared to pre-test results though below immediate post-lecture results.
- Follow-up education, more interactive education, and informational flyers may be warranted to increase long term retention of information regarding Hep-C screening guidelines.

Next Steps

- Informational flyers on Hep-C screening may serve as a reminder on these guidelines and improve knowledge long term
- Interactive repeat lectures may also help knowledge retention and engage trainees.

References

- Hepatitis C Questions and Answers for Health Professionals. (2019). <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section>
- Recommendation | United States Preventive Services Taskforce. (2020, March 2). <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hepatitis-c-screening>
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