Hepatitis C Virus Screening Test Compliance at Primary Care Clinic

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Learning Objectives

- Improve the adherence to the USPSTF Hepatitis C screening guidelines.
- Assess the improvement medical residents' compliance for Hepatitis C Virus screening at their primary care clinic.

Introduction

- Hepatitis C Virus (HCV) is the most common cause of liver cirrhosis and hepatocellular carcinoma, and is the leading cause of liver transplantation in the US.
- About 3.2 million individuals are chronically infected with HCV
- Most of these patients are unaware of their infection because they are largely asymptomatic.
- Approximately three-fourths of them were born between 1945-1965.
- Furthermore, with the advances in HCV treatment, it is imperative to identify chronically infected individuals in order to avert the long-term, costly, sequelae of the virus.
- The U.S. Preventive Services Task Force recently recommended a one-time screening test for HCV for those individuals born in that time-frame.
- Given that the recommendation just came about in July 2013, we hypothesize that the rates of screening among IM residents at primary care clinic is low.
- This study sets out to first assess a baseline current rate of HCV screening among a selected group of residents, and subsequently, assess changes in practice behavior after various educational sessions.

References

- Chou, R., Cottrell, E. B., Wasson, N., Rahman, B. and Guise, J. M. Screening for hepatitis C virus infection in adults: a systematic review for the U.S. Preventive Services Task Force 2013
- 2. Moyer, V. A., U.S. Preventive Services Task Force. Screening for hepatitis C virus infection in adults: U.S. Preventive Services Task Force recommendation statement 2013
- 3. Smith, B. D., Morgan, R. L., Beckett, G. A., et al. Recommendations for the identification of chronic hepatitis C virus infection among persons born during 1945-1965 2012

Methods

- The patient panels being taken care of by the 20 resident physicians comprising Cohort 2 will be evenly divided among the four research residents.
- The included patients will be those who have undergone a complete Health Maintenance Exam visit by the respective residents.
- Each research resident will review the electronic charts of the patients to determine if the patient has Hepatitis C screening. (Those patient's being those who were born between 1945 and 1965)
- All retrospective data will be coalesced into a baseline rate of adherence to this guideline.
- Short educational sessions will be performed to outlining the Hepatitis C screening age guideline.
- Additionally, a text-page and an email will be sent stating the importance of adhering to the guideline.
- Over a subsequent one month period, all of the HME visits will be assessed for adherence to Hepatitis C screening age guideline.
- At the end of one month, prospective data will be compiled, and the rate of adherence will be assessed and compared to the baseline.

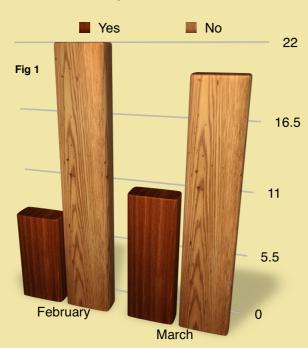


Fig 1: This shows improvement in the screening compliance rate in March in comparison to February.

Results

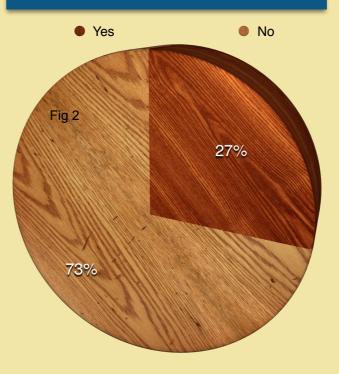


Fig 2: This figure shows the baseline screening rate.

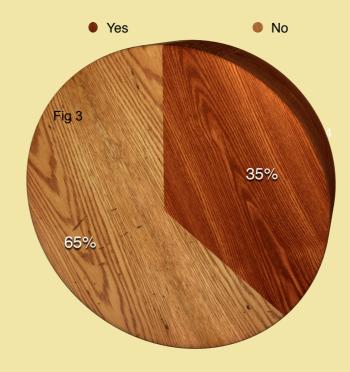


Fig 3: This shows the screening rate after education.

Discussion

- Our data shows a few things very clearly. Firstly, as was hypothesized, the baseline screening rates among the selected residents was low. The initial screening rate was 27%. We suspect that this is in large part due to the relative recency of the guideline change. As such, no specific Hepatitis C screening lectures had been done up to that point. Conversely, topics such as mammography, screening colonoscopy, and even the controversial PSA screening test had been taught consistently.
- The second result showed an increase of 8% in the rate of Hepatitis C screening (35%). This was achieved though resident education; specifically, through email and informal mentions. Despite the lack of true rigorousness in educating the resident cohort on the guideline, there was an appreciable increase in the screening rates.
- Finally, our study shows that the rates of screening, although increased, still show that only roughly 1/3 of the residents in the cohort are adherent. This is likely due to a multitude of factors. Most importantly, resident education on the matter is the most crucial factor. As we have shown, even the most rudimentary educational materials can have a large effect on the outcome.
- We suggest that there are other important contributing factors as well. The workflow of the clinic can make it more difficult to address all of the patient's relevant matters each time. Workflow issues such as patient's having multitudes of complaints as well as the patient volume can make it difficult to address all screening needs. Further study into these specific factors could help illuminate further ways of addressing the problem of screening.

Conclusion

- The most important factor in increasing resident adherence to screening guidelines is education. We propose that Hepatitis C screening guidelines, along with all other new USPSTF guidelines should be taught rigorously.
- Another way to help with guideline adherence is incorporating the actual guidelines into the medical record software. Having a tab for "Screening" in the patient's "History and Physical Note" template can help physicians address these matters on a more consistent basis.