

Effect of an Online Medical Record Prompt on HIV screening

The Problem

- HIV affects approximately 1.2 million people in the United States, yet it is estimated that 16% of people infected with HIV remain undiagnosed.¹
- Opportunities for early intervention for treatment and prevention of spread of the disease are therefore being missed.
- To tackle this problem, the United States Preventive Services Task Force made a recommendation in 2013 for screening of all people age 13-65 at least once in their lifetimes.²
- It was unclear how many patients were actually being tested for HIV at Healthcare Associates (HCA).

Aim/Goal

- To assess impact of OMR prompt by determining the number of patients at HCA that had been tested for HIV before and after the OMR prompt was initiated.

The Team

- Colleen Kershaw, MD, Department of Medicine
- Gila Kriegel, MD, Department of Medicine
- Howard Libman, MD, Department of Medicine
- Jessica Taylor, MD, Department of Medicine
- Gary Horowitz, MD, Department of Pathology/Laboratory Medicine
- Long Ngo, PhD, Department of Medicine
- Diane Brockmeyer, MD, Department of Medicine

The Interventions

- In October 2013, an online medical record (OMR) prompt was put in place at BIDMC, reminding providers to test all patients for HIV.
- Recognizing the potential for so-called "alarm fatigue" in regards to electronic prompts and the increasing demands on primary care practitioners in each visit, we set forth to determine the effectiveness of the new OMR prompt at Healthcare Associates.
- Online medical record, billing, and laboratory data were collected on every visit within HCA from January 1, 2012 through October 31, 2014, encompassing 38,573 patients.

References

1. CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 U.S. dependent areas—2011. *HIV Surveillance Supplemental Report* 2013;18(No. 5). Published October 2013.

2. Screening for HIV: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med.* 2013;159(1):1-36.

The Results/Progress to Date

- Testing for HIV increased significantly after the OMR prompt was put in place. In the study period prior to the prompt, on average, 254 tests were being performed per month, versus 462 tests per month in the year after the prompt.
- 23.3% of HCA patients with visits prior to the OMR prompt date had been tested for HIV, compared to 36.6% after the prompt.
- The probability of getting tested for patients who had a visit before the OMR prompt was 11.8%, versus 22.8% after the prompt.

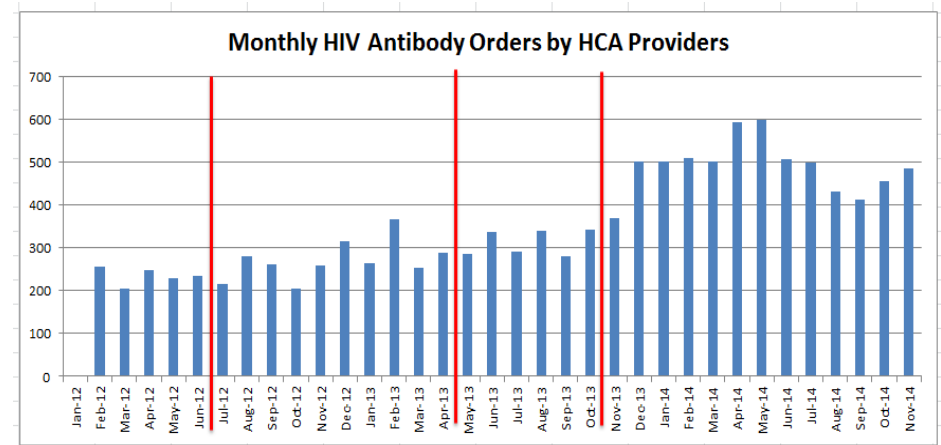


Image courtesy Gary Horowitz, MD

Lessons Learned

- The OMR prompt for universal HIV screening was effective at HCA, but there is still room for improvement.
- The OMR, billing repository, and laboratory data can be mined to evaluate performance and effectiveness.

Next Steps/What Should Happen Next

- The data will be further analyzed to examine whether patient characteristics such as age, gender, race and socioeconomic status were predictors of better or worse screening rates.
- OMR prompts should be used with confidence as a means to improve rates of screening in many aspects of primary care.

