

5-31-2017

Obstacles and Challenges to Implementing Multi-departmental QI at a Large, Academic Training Center-Lessons Learned from a HCV Screening Program

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Kasprowicz, MD, MPH, Eric M.; Arastu, MD, S.; Yalamanchili, MD, Silpa; Javia, MD, Amy; Zale, MPH, Madalene; Mammen, MD, MPH, Priya; and Fenkel, MD, Jonathan M., "Obstacles and Challenges to Implementing Multi-departmental QI at a Large, Academic Training Center-Lessons Learned from a HCV Screening Program" (2017). *House Staff Quality Improvement and Patient Safety Conference (2016-2019)*. Poster 28.

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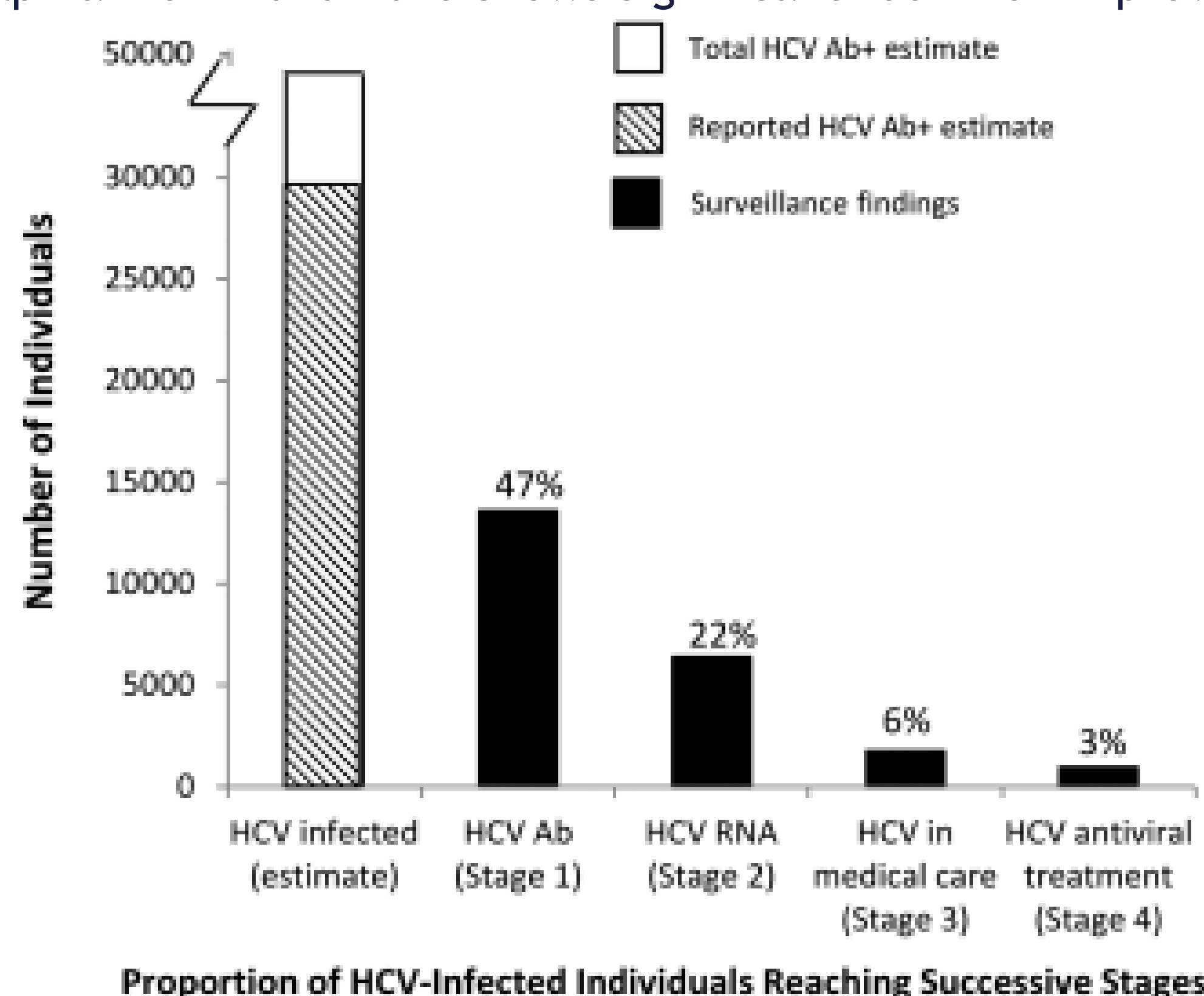
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Obstacles and Challenges to Implementing Multi-departmental QI at a Large, Academic Training Center - Lessons Learned from a HCV Screening Program

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BACKGROUND

- 5+ million US adults are affected by chronic HCV infection¹, and HCV infection remains the most common cause of ESLD in the United States².
- New medications with improved tolerability and excellent cure rates have increased the imperative to diagnoses and treat HCV for individual and population health gains.
- Many studies suggest that ED and inpatient populations represent a higher-prevalence subset of the general population, with many studies finding prevalence rates of 10.3-16% in urban hospital populations^{3, 4}.
- Outpatient screening guidelines by CDC and USPSTF are well-established, but the role of screening in the hospital population remains unclear. Given the above data, effective inpatient screening programs could significantly increase the detection rate of chronic HCV in a population.
- Effective screening, however, needs to be paired with appropriate linkage to care in order to decrease chronic infection rates and decrease morbidity/mortality. The continuum of HCV care in Philadelphia from 2010-2013 shows significant room for improvement⁵.



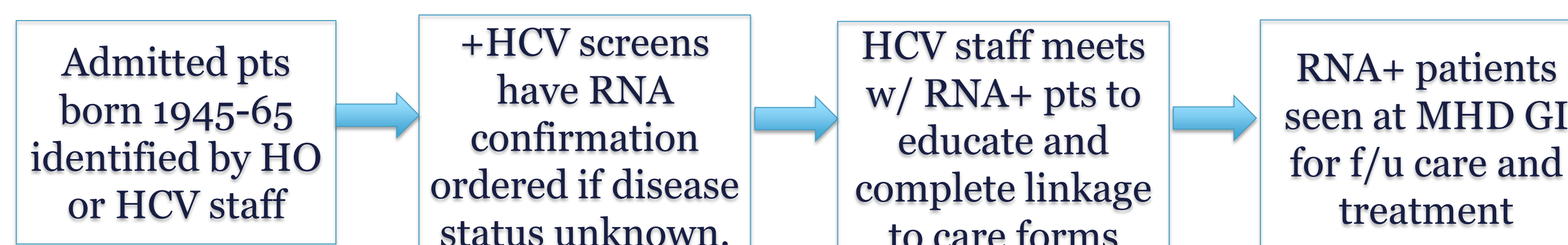
OBJECTIVES

We aimed to double the HCV screening rate of 'baby-boomers' admitted to the medicine teaching service at Methodist Hospital over the course of 6 months and demonstrate improved linkage to care for HCV RNA+ individuals.

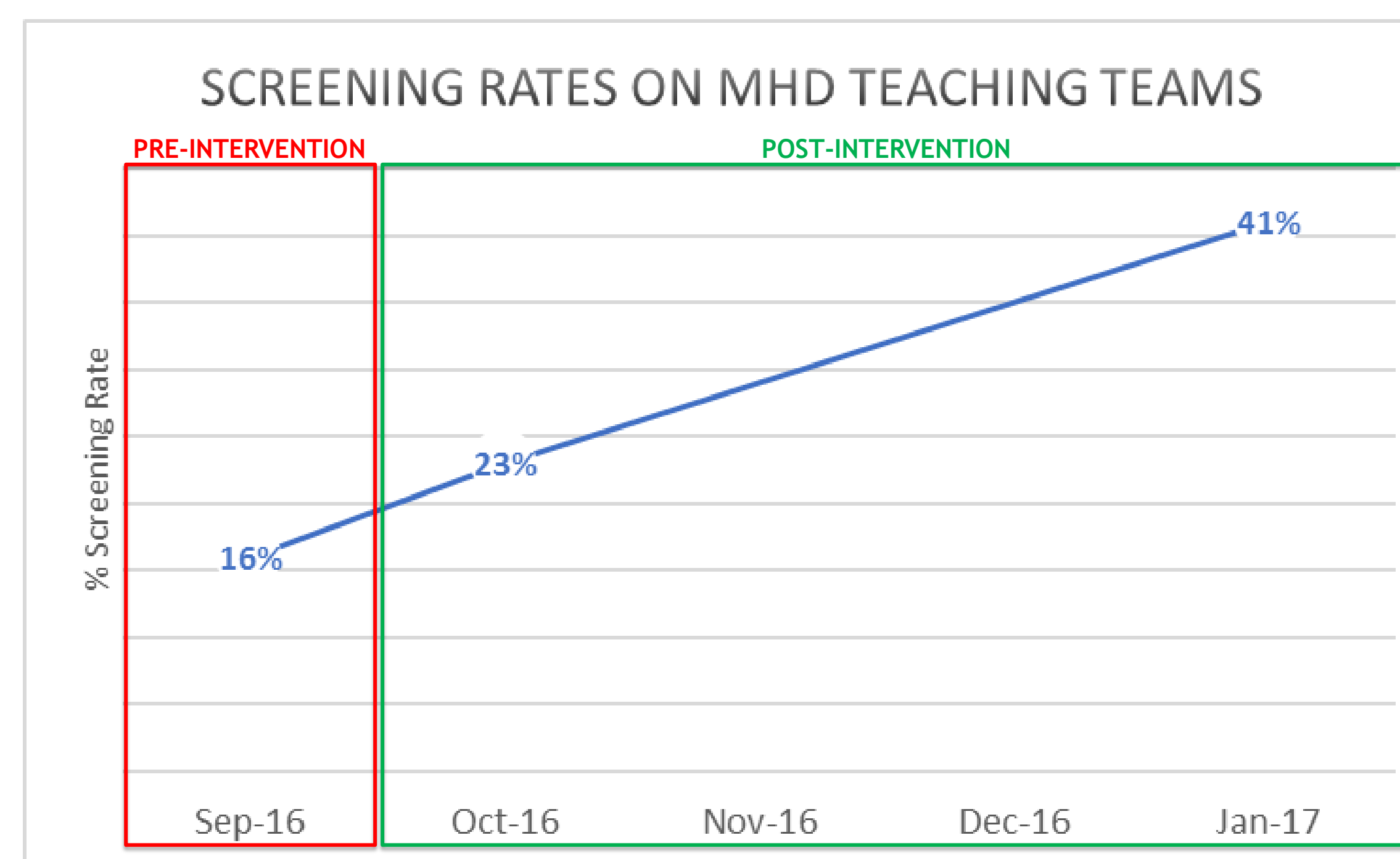
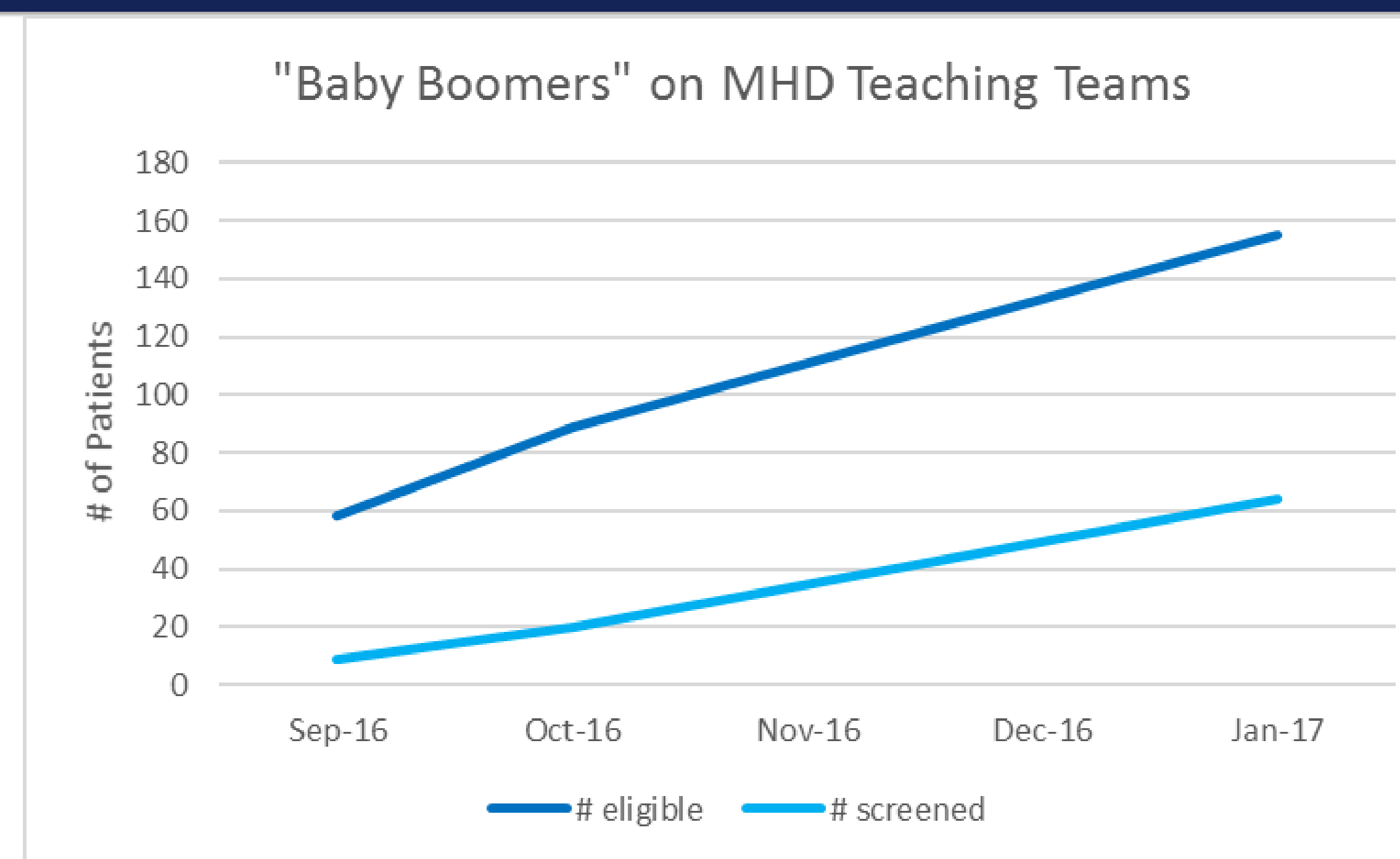
Initial efforts were a collaboration between Emergency Medicine, where faculty had experience implementing an HIV screening program, and Gastroenterology, a key stakeholder in linkage to care. Our pilot period coincided with new state regulations mandating that hospitals implement HCV screening for inpatients. These new regulations dramatically altered the scope and goals of the project.

INTERVENTION

- Ideal inpatient screening programs would be highly automated and take full advantage of the Electronic Health Record and Clinical Decision Support. Creating such a system was out of scope for a resident project.
- We attempted instead to develop a working relationship between housestaff and a HCV linkage coordinator with the goals of decreasing 'missed screens' and optimizing referral for outpatient follow up.
- Resident 'buy-in' was facilitated via education about the scope of the problem and the goals of the pilot program, and onboarding e mails for new residents rotating at the pilot site.
- Resident responsibilities were limited to the appropriate ordering of screening labs.



PRELIMINARY RESULTS - HCV SCREENING



- Over 4 months we observed that HCV screening rates more than doubled. High rates seem to be sustained despite rotation of house staff.
- The full success of the program will be contingent upon the ability to link patients to follow-up care and maintain resident awareness of their role in screening.

CHALLENGES

Despite observed success in improving screening rates at MHD, our team faced a number of challenges common at academic medical centers:

- Projects with institutional imperative, for example state law or reimbursement consequences, must progress irrespective of housestaff effort. Intermittent engagement by residents can frustrate mentors who have to meet external deadlines. Conversely, in this setting residents may not be empowered to make key decisions about project implementation.
- Fragmentation of house staff schedules makes resident leadership of QI projects difficult. Faculty mentors are similarly busy, leading to frequent starts/stops on projects.
- Clinical rotation schedules create a constant process of "onboarding" such that most interventions never move past education. Residents often lack the authority to create more substantial interventions that might require changes in staffing, interprofessional practice, or EHR functionality.
- Interventions involving novel team members, in our case the HCV linkage coordinator, create unique challenges. While interprofessional practice and effective task delegation strengthen clinical processes, it is more difficult than expected to train residents to effectively utilize and incorporate a new role.

SOLUTIONS & FUTURE DIRECTIONS

In order to improve the experience of residents on QI projects and target more ambitious learning goals we must:

- Create protected time in resident and faculty schedules for QI work
- Invest in faculty development and standardize foundational learning across the professional continuum

We believe the HCV screening initiative would benefit from:

- Novel approaches to interdisciplinary rounding structure
- Increased flexibility in development and roll-out of Information Technology (IT) solutions
- Institutional commitment to 'pilot' selected interventions and ensure their feasibility and success prior to broader roll-out

Alignment means obliterating silos on all levels:

- An institutional QI board or forum could help foster connections between departments for more effective broad-based QI, and could also improve mentoring, resource sharing, and team coordination.

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