

# Importance of Providers and Nurses in HIV Screening Decisions

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The Center for Disease Control and Prevention (CDC) estimates that of the 1.1 million people living with HIV/AIDS in the U.S., an estimated 18% do not know they are infected. This issue is of utmost importance since an early diagnosis results in both improved outcomes and reduced HIV transmission. For these reasons, the CDC recommended a voluntary opt-out (patients are notified that the test will be performed and consent is inferred unless the patient declines) screening for all individuals aged 13-64 presenting to health care settings where the prevalence of HIV is higher than 0.1%.

To nail down factors that influence HIV-screening uptake, Dr. Rachel Bender Ignacio from the Vaccine and Infectious Disease Division (VIDD) at Fred Hutch, together with coinvestigators from Massachusetts General Hospital, designed a four-month pilot study, conducted at the Massachusetts General Hospital-Chelsea Urgent Care unit, which serves a high-risk community with significant socioeconomic instability.

Free HIV screening was offered to all patients aged 18-65 following a new screening protocol implemented in the urgent care unit, in which patients answered two brief questions in triage regarding whether they had recently taken an HIV test and if they were available to testing during their current visit. Nursing staff and providers including physicians, nurse practitioners and certified physician assistants were requested to offer each patient an HIV test and then complete patient tracking forms for the encounter.

Both the visit provider and the triaging nurse interacting with the patient were highly associated with acceptance of HIV screening, with a 8.7-fold difference in testing rates among distinct providers and 2.6-fold difference among nurses. Various patient variables were also associated with the completion of the screening: younger patients, men and Hispanics or African-Americans were more likely to complete HIV screening, but none of these characteristics accounted for the differences observed for the providers.

Moreover, the provider approach strongly influenced whether the patient completed HIV screening. In fact, a screening cascade was observed in the study, with drops-off at each phase, from the entry to the clinic to retrieval of results. Only half of the visits led to the initiation of the screening

questionnaire by triage nurses, 36% of the patients accepted to go through the screening process, which was completed in 23% of the cases. The main reasons that accounted for such losses were due to the provider not offering the screening or postponing it to a following visit, or to visit acuity. Once again, factors linked to the provider explained much of the missed opportunities to screen.

This study reports the influence that providers and nurses have in the completion of HIV screening and is of great importance in HIV prevention, since it focuses on the fundamental fact that when HIV screening involves human decision making to initiate, both patients and providers are still performing risk assessments about whether to screen for HIV. In contrast, the CDC recommends conducting the screening process as a non-risk-based strategy within the appropriate age range. Additionally, this study highlights the fundamental role that the providers and healthcare personnel can play in determining whether patients accept HIV screening as routine, and demonstrates the importance of improving provider education, as well as implementing process improvements that facilitate HIV screening in a truly opt-out manner. This study also shows the need to implement non-targeted HIV screening across different settings.

"HIV infection is one of the biggest drivers of increasing cancer prevalence in Sub-Saharan Africa", explains Dr. Bender. "While previously undiagnosed HIV in cancer patients at the Fred Hutch is likely infrequent, HIV screening is not uniformly performed in all cancer patients at this time. HIV-infected cancer patients will likely benefit from further research on treatment of HIV and co-morbid cancers performed with our global oncology partnerships".

[Bender Ignacio RA, Chu J, Power MC, Douaiher J, Lane JD, Collins JP, Stone VE.](#) 2014. Influence of providers and nurses on completion of non-targeted HIV screening in an urgent care setting. *AIDS research and therapy*. 11:24-35. PMID: PMC4130435.

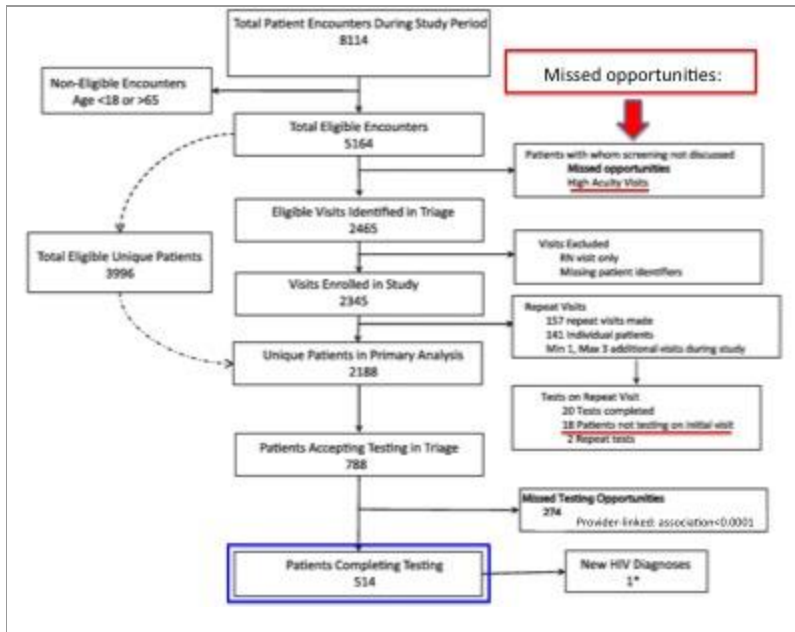


Image modified from the publication.

Patient flow during the study period: Schematic shows the number of patients in the different stages of the study (middle column) and the main reason for missed testing opportunities (right column)