Published in final edited form as:

J Acquir Immune Defic Syndr. 2014 December 1; 67(4): 409–413. doi:10.1097/QAI.0000000000000317.

Clinic-based routine voluntary HIV testing in a refugee settlement in Uganda

Kelli N. O’Laughlin, MD, MPH^{1,2,3,4}, Julius Kasozi, MD, MPH⁵, Rochelle P. Walensky, MD, MPH^{2,3,6,7,8,9}, Robert A. Parker, ScD^{2,3,6,8,10}, Zikama M. Faustin, BBA, MA, Dvt¹¹, Sathyanarayanan Doraiswamy, MD¹², Chris Omara Owino, MD¹³, and Ingrid V. Bassett, MD, MPH^{2,3,7,8}

¹Department of Emergency Medicine, Brigham & Women’s Hospital, Boston, Massachusetts, USA ²Medical Practice Evaluation Center, Department of Medicine, Massachusetts General Hospital, Boston, Massachusetts, USA ³Harvard Medical School, Boston, Massachusetts, USA ⁴Harvard Humanitarian Initiative, Cambridge, Massachusetts, USA ⁵United Nations High Commissioner for Refugees, Representation in Uganda, Kampala, Uganda ⁶Division of General Medicine, Massachusetts General Hospital, Boston, Massachusetts, USA ⁷Division of Infectious Disease, Massachusetts General Hospital, Boston, Massachusetts, USA ⁸Harvard University Center for AIDS Research (CFAR), Boston, Massachusetts, USA ⁹Division of Infectious Disease, Brigham and Women’s Hospital, Boston, Massachusetts, USA ¹⁰MGH Biostatistics Center, Massachusetts General Hospital, Boston, Massachusetts, USA ¹¹Bugema University, Kampala, Uganda ¹²United Nations High Commissioner for Refugees, Geneva, Switzerland ¹³Medical Teams International, Mbarara, Uganda

Abstract

We implemented and evaluated a clinic-based routine voluntary HIV testing intervention in Nakivale Refugee Settlement in Uganda. Comparing the SOC period (40 days) to the Intervention period (168 days), the mean HIV-infected clients identified per week increased from 0.9 to 5.6, and there was no significant difference between the HIV prevalence in the two periods (standard of care: 3.3%, intervention: 4.5%; $p > 0.5$). Clinic-based routine HIV testing in a refugee settlement is effective and should be considered for implementation in refugee settlements in other high prevalence regions in sub-Saharan Africa.

Keywords

HIV testing; refugees; routine testing; Uganda; Africa; HIV

Corresponding author: Kelli N. O’Laughlin, MD, MPH, Brigham & Women’s Hospital, 75 Francis Street, Boston, MA 02115, Tel: + 1 617 525 9316, kolaughlin@partners.org.

Presentation of results: This work was presented in part at IDWeek 2013, San Francisco, CA, October 5, 2013.

Conflict of Interest: The authors have no conflicts of interest to disclose.

INTRODUCTION

There are 2.8 million refugees in sub-Saharan Africa, and the majority come from African countries where 71% of adults living with HIV/AIDS worldwide reside.^{1, 2} However, HIV prevalence in refugee settlements in sub-Saharan Africa is frequently unknown. Although refugees often arrive to their country of asylum with lower rates of HIV infection and fewer risk behaviors,³ the instability of their situation places them at increased peril of exposure to HIV infection and results in greater hardships accessing HIV related services.^{4–10} Context-specific strategies are needed to address HIV prevention and care in refugee populations.^{4, 11, 12}

Routine HIV testing has been successful in non-refugee clinical settings in sub-Saharan Africa.^{9, 13–15} Prior research suggests the hardships faced by refugees in meeting daily survival needs limit HIV testing in this population.¹⁶ Refugees face additional burdens that hinder HIV testing including: remoteness of refugee settlements limiting access to host country health services, low resources of host countries and refugee relief organizations to dedicate to health services, and limited availability of clinic staff who understand HIV/AIDS and the languages and customs of refugees pertaining to the disease.¹⁷ No published studies have been conducted evaluating HIV testing strategies in this challenging setting.

We aimed to evaluate the current standard of care for HIV testing in the outpatient department (OPD) in Nakivale Health Center in Nakivale Refugee Settlement in southwestern Uganda. We then implemented and investigated the feasibility, uptake and impact of a clinic-based routine testing intervention in Nakivale.

METHODS

Study Setting

Nakivale Refugee Settlement hosts approximately 64,000 refugees from 12 countries of origin, the predominant countries being the Democratic Republic of the Congo (49%), Somalia (19%), Burundi (15%) and Rwanda (14%). Nakivale Health Center, the primary health center in the settlement, is in the middle of the long and narrow 71 square mile settlement and is operated by the non-profit organization Medical Teams International. The population attending Nakivale Health Center includes refugees in the settlement and Ugandan nationals living in and around the settlement. Nakivale Health Center includes an Outpatient Department (OPD) that sees approximately 80 adult patients per day for acute and chronic illnesses.

HIV testing is free to clients and is conducted using serial rapid HIV tests outlined in the Uganda HIV Rapid Test Algorithm.¹⁸ Anti-retroviral therapy (ART) is free for eligible patients. Pre-ART clients have monthly clinic visits and co-trimoxazole prophylaxis.¹⁹ Three smaller clinics throughout the settlement provide free HIV testing, pre-ART clinics, and ART for HIV-infected pregnant women. In late 2013, these satellite clinics began distribution of ART to non-pregnant clients as well. The HIV prevalence in Nakivale is unknown, but the prevalence from the refugees' countries of origin range from 1.1%–6.3%²⁰ and the prevalence in the surrounding region of Uganda is 7.3%.²¹ As of July 2013,

there were 2,047 clients enrolled in HIV clinical care in Nakivale, including many Ugandan nationals living in and around the settlement.

Standard of Care (SOC) Period

The standard of care (SOC) period was from January 15, 2013 to March 13, 2013. Study staff prospectively tracked the number of client visits to the OPD, the number of HIV tests performed, and the HIV test results during general OPD operating times. The OPD was open Monday through Friday, 8 am until approximately 4 pm. Clients tested for HIV were referred by the clinician either based on clinical suspicion or at the clients' request. HIV testing was performed by technicians in the Nakivale laboratory, located in the same building as the OPD. There was no stand-alone HIV testing clinic available at Nakivale Health Center. The test results were given to the clinician, and the client was asked to meet with the clinician later the same day to obtain the results.

Intervention Period

The SOC period was immediately followed by the Intervention period. For purposes of comparing results to the 40 day SOC period, we separated the intervention period into "Early Intervention" (March 14, 2013 until May 13, 2013, exactly 40 days in length to match the SOC period), and "Extended Intervention". The intervention continued until November 15, 2013 (data cut-off). There were no changes in the intervention between the two periods. The study days and hours were the same as during the SOC period. Study recruitment, consent, surveying and rapid HIV testing were performed by 4 research assistants hired specifically for this study. Research assistants had prior experience in HIV counseling and attended a course in rapid HIV testing led by the Center for Disease Control and Prevention (CDC) in Uganda. Research assistants recruited participants with HIV-related educational announcements made twice each morning to clients in the OPD waiting area. Eligibility criteria included: 1) 18 years or older; 2) ability to provide informed consent; and 3) not already known to be HIV-infected. Clients were invited to obtain a free rapid HIV test while waiting for their OPD clinic visit. There was no process to confirm concurrent OPD visit registration for those enrolled during the intervention period.

Information on the testing process was provided to clients and informed consent was offered in Swahili, Kinyarwanda, Runyankore, and English. Participants were tested in a semi-permanent two-room tent approximately 25 meters from the OPD building. While the HIV test was conducted, research assistants collected basic information including age, gender and refugee status. Study participants were given the results by the research assistants prior to leaving the testing area. Participants identified as not infected with HIV were counseled regarding HIV prevention strategies and were encouraged to continue to test every three months. Participants identified as HIV-infected were counseled regarding the diagnosis, given advice to attend Nakivale Health Center's HIV Clinic, and if willing, were introduced to an HIV Clinic counselor. Data collected during the Intervention period included the number of clients in the OPD, the number of clients tested for HIV and their HIV test result.

This study was approved by the Makerere University School of Health Sciences Institutional Review Board (Kampala, Uganda), the Uganda National Council of Science and

Technology (Kampala, Uganda), and the Partners Human Research Committee (Boston, MA, USA).

Statistical Analysis

Subject characteristics were summarized as frequencies (percents) and median (inter-quartile range) as appropriate. Exact Binomial confidence limits were calculated for frequencies and Fisher's Exact test and extensions were used for comparisons of categorical data between SOC and Intervention periods. Wilcoxon rank sum tests were used for comparisons of continuous data. Because it was not possible to determine whether individuals tested during the period were registered in the OPD clinic, we combined the two groups for a conservative estimate of differences between those tested and those not tested in the intervention period and for assessing the effect of the intervention on HIV testing rate and HIV case detection. Poisson regression was used to assess differences in the rate of HIV case detection between the various study periods adjusting for the total number potentially seen. Results were considered statistically significant when $p < 0.05$ using a 2-sided test. All analyses were performed using SAS software (version 9.4, SAS Institute, Cary, NC).

RESULTS

Participant Characteristics of SOC and Intervention Periods

During the SOC period, clients seen in the OPD were 64% (95% CI: 61–66%) female, had a median age of 31 years (IQR: 24–42), and 92% (95% CI: 90–93%) were refugees (Table 1). Those tested for HIV in the SOC period were less likely to be female (56%; $p = 0.025$), were similar in age to that of the OPD population (median 30 years, IQR: 24–40, $p > 0.15$), and were less likely to be refugees (87%; $p = 0.027$) (Table 1). Characteristics of the Early Intervention and Extended Intervention periods were similar. During the Total Intervention period, clients in the OPD were 65% (95% CI: 64–66%) female, had a median age of 32 years (IQR: 25–43), and 94% (95% CI: 93–94%) were refugees. Compared to the OPD population, those tested in the Intervention period were less likely to be female (55%, $p < 0.0001$), were younger (**median: 29 years, IQR: 23–38, $p < 0.0001$**) and were less likely to be refugees (70%, $p < 0.0001$). More Ugandan nationals tested during the Intervention period than attended the OPD (1,268 vs 1,010, Table 1). Although a higher percent of those tested were Ugandan nationals in the intervention period (30% vs 13% in the SOC period), the fraction of the total population tested of both refugees and Ugandans increased with the routine testing intervention.

Clients Tested and HIV-Infected Cases Identified in SOC and Intervention Periods

Not all tested individuals were registered in the OPD during the Intervention period. Therefore, we conservatively estimated the rate of testing among the maximum number of potential individuals eligible for testing: the sum of all registered clients in the OPD plus the total tested in the Intervention period (Table 2). With this assumption, the proportion tested of all-comers to the OPD was 25.4% during the Early Intervention period, 19.8% during the Extended Intervention period, and 21.3% over the Total Intervention period. Compared to the 6.7% tested during the SOC period, the percent tested in the Early Intervention period and over the Total Intervention period were both significantly higher (both $p < 0.0001$).

Although the testing frequency was somewhat lower during the Extended Intervention period (19.8%) than in the Early Intervention period (25.4%), it was still higher than in the SOC period (6.7%, both $p < 0.0001$).

In the SOC period, 7 HIV-infected clients were identified, an average of 0.9 per week. In the Early Intervention and Extended Intervention periods, 52 and 136 HIV-infected clients were identified respectively; an average of 6.5 per week in the Early Intervention period and 5.3 in the Extended Intervention period. Over the Total Intervention period, 188 HIV-infected clients were identified, an average of 5.6 per week. The difference in the average number of HIV-infected clients identified per week comparing the SOC and the early intervention phase ($p = 0.007$), or the Total Intervention period ($p = 0.003$) was statistically significant. The difference between the two phases of the intervention period was not statistically significant ($p > 0.5$).

The prevalence of HIV of those tested in the SOC, the Early Intervention period and the Extended Intervention period was 3.3%, 3.9%, and 4.7% respectively. Differences in HIV prevalence across the three periods were not significantly different ($p > 0.25$) nor was the difference comparing the prevalence in the SOC period with the Total Intervention period ($p > 0.5$, Table 2).

DISCUSSION

Clinic-based routine HIV testing in the OPD in Nakivale Refugee Settlement was feasible, acceptable, and resulted in a 6-fold increase in mean HIV-infected cases identified each week. The observed HIV prevalence did not decrease as would be expected when implementing a screening intervention. The intervention also successfully engaged Ugandan nationals in clinic-based HIV testing.

Despite implementation of a routine screening intervention, the HIV prevalence in the intervention period was actually higher than during the SOC periods, although this difference was not statistically significant. In the SOC period, provider-initiated counseling and testing was more heavily emphasized compared to voluntary counseling and testing, resulting in the testing of clients that may have been more sick appearing and at higher risk of having advanced disease. The fact that during the routine testing intervention period, those tested had as high a prevalence as those for whom there was a high clinical suspicion suggests that the pool of patients tested during the intervention were also at high-risk. This may reflect the high prevalence of undiagnosed people living with HIV within the settlement.

This clinic-based routine testing intervention attracted a larger relative proportion of Ugandan nationals to test for HIV than the proportion of nationals represented in the total OPD population. Enhancing the ease of testing not only benefits refugees, but also the nationals from the host country living within or in close proximity to the refugee settlement. In Nakivale, this is critical as the HIV prevalence in the surrounding population (7.3%²¹) is likely higher than that of the refugee population based on prevalence rates in their countries of origin.²⁰

Given the extreme resource constraints in refugee settlements, it is important to consider the additional personnel used for this routine testing intervention in assessing the feasibility of this intervention in other settings. We executed this intervention with an average of 2–3 actively working staff solely devoted to this project. Our experience suggests similar routine testing interventions, without the research components, could be conducted with 2 dedicated clinic personnel. The cost of hiring additional personnel and using more clinic supplies (i.e. HIV test kits, gloves, lancets) may be a barrier to implementation in some settings. It is important to note, however, that these costs are small compared to the costs of a lifetime of care for an HIV-infected individual.

This study should be considered in view of some limitations. It was conducted in a single refugee settlement in sub-Saharan Africa. Differences should be considered when assessing other locations for a clinic-based routine testing intervention. If HIV stigma is more pronounced in other settings compared to Nakivale, refugees and nationals living in the area may be less willing to test for HIV regardless of the testing intervention. Our inability to link OPD clients with those tested for HIV meant we could not analyze differences between the population that attended the OPD and the population that came solely for HIV testing. As we could not exclude these individuals from the analysis, we did an analysis conservatively assuming that none of those tested were a part of the standard OPD population, but nonetheless the proportion tested was significantly higher during the Intervention period than during SOC. In our SOC period we may have missed longer periods of more intense testing as this period was only 40 days. This is particularly true as seasonal variations may have affected clinic attendance and this may have differentially affected the demographic characteristics of who presented for care and therefore who tested for HIV in the SOC period. Regardless, the change in proportion of clients tested was so large that it is unlikely that seasonal changes would greatly alter the value of the intervention. Finally, the similar prevalence of HIV in the SOC and Intervention periods could be because participants were self-selecting and as such may have had higher risk sexual behaviors.^{22–24} In addition, the fact that study participants were not required to register in the clinic to obtain HIV testing may have been particularly inviting for high-risk participants. Despite this, there is clearly an unmet need for enhanced HIV testing at Nakivale Health Center.

This is the first study to prospectively assess a clinic-based routine HIV testing intervention in a refugee settlement. We found the intervention to be feasible and to yield important results, most notably, diagnosing more HIV-infected clients per week using routine clinic-based routine testing rather than standard of care. Expanding such clinic-based, routine HIV testing services in refugee settlements in Sub-Saharan Africa is important to ensure access to treatment for this vulnerable population but must be done by first assessing each site for potential limitations to implementation unique to that setting. While clinic-based interventions are a feasible and useful starting point, additional investigations to assess other HIV testing strategies in refugee settings must follow.

Acknowledgments

Funding: This work is supported by the National Institutes of Health: Harvard University Center for AIDS Research NIH/NIAID 5P30AI060354-08; R01 MH090326; R01 AI058736.

The authors are grateful for the compassionate and diligent work conducted by the following research assistants: Kamaganju Stella, Mbabazi Jane, and Muhongayire Bernadette. The authors thank the medical staff at the Nakivale Health Center for their support during this study and for their ongoing dedication to clients. We thank the Nakivale Health Center laboratory technicians, the HIV Clinic counselors, the Clinical Officers, and the Medical Teams International leadership. We sincerely thank the study participants for their willingness to help us to improve access to HIV testing and care for refugees and Ugandan nationals accessing care in Nakivale Refugee Settlement.

Literature Cited

1. WHO. HIV/AIDS: Adult HIV prevalence (15–49 years). WHO region; 2011. <http://www.who.int/gho/hiv/en/> [Accessed May 28, 2014]
2. UNHCR. [Accessed May 28, 2014] UNHCR global trends 2012: Displacement, the new 21st century challenge. http://unhcr.org/globaltrends/june2013/UNHCR%20GLOBAL%20TRENDS%202012_V05.pdf
3. Spiegel PB. HIV/AIDS among conflict-affected and displaced populations: Dispelling myths and taking action. *Disasters*. Sep; 2004 28(3):322–339. [PubMed: 15344944]
4. UNAIDS. [Accessed May 28, 2014] UNHCR. Strategies to support the HIV related needs of refugees and host populations. http://data.unaids.org/publications/irc-pub06/jc1157-refugees_en.pdf
5. Dahab M, Spiegel PB, Njogu PM, Schilperoord M. Changes in HIV-related behaviours, knowledge and testing among refugees and surrounding national populations: A multicountry study. *AIDS Care*. Aug; 2013 25(8):998–1009. [PubMed: 23305523]
6. Tanaka Y, Kuni O, Hatano T, Wakai S. Knowledge, attitude, and practice (KAP) of HIV prevention and HIV infection risks among Congolese refugees in Tanzania. *Health Place*. Sep; 2008 14(3):434–452. [PubMed: 17954034]
7. Angotti N, Bula A, Gaydos L, Kimchi EZ, Thornton RL, Yeatman SE. Increasing the acceptability of HIV counseling and testing with three C's: Convenience, confidentiality and credibility. *Soc Sci Med*. Jun; 2009 68(12):2263–2270. [PubMed: 19375208]
8. de Dye TV, Apondi R, Lugada E. A qualitative assessment of participation in a rapid scale-up, diagonally-integrated MDG-related disease prevention campaign in Rural Kenya. *PLoS One*. 2011; 6(1):e14551. [PubMed: 21267452]
9. Nuwaha F, Kabatesi D, Muganwa M, Whalen CC. Factors influencing acceptability of voluntary counselling and testing for HIV in Bushenyi district of Uganda. *East Afr Med J*. Dec; 2002 79(12):626–632. [PubMed: 12678445]
10. UNHCR, WHO, UNAIDS. [Accessed May 28, 2014] Policy Statement on HIV Testing and Counselling in Health Facilities for Refugees, Internally Displaced Persons and other Persons of Concern to UNHCR. <http://www.unhcr.org/4b508b9c9.pdf>
11. Rowley EA, Spiegel PB, Tunze Z, Mbaruku G, Schilperoord M, Njogu P. Differences in HIV-related behaviors at Lugufu refugee camp and surrounding host villages, Tanzania. *Confl Health*. 2008; 2:13. [PubMed: 18928546]
12. International Rescue Committee. [Accessed May 28, 2014] Protecting the Future: A guide to incorporating HIV prevention and care in refugee settings. <http://www.unhcr.org/403a0ed12.html>
13. Bassett IV, Giddy J, Nkera J, et al. Routine voluntary HIV testing in Durban, South Africa: The experience from an outpatient department. *J Acquir Immune Defic Syndr*. Oct 1; 2007 46(2):181–186. [PubMed: 17667332]
14. Introduction of routine HIV testing in prenatal care--Botswana, 2004. *MMWR Morb Mortal Wkly Rep*. Nov 26; 2004 53(46):1083–1086. [PubMed: 15565017]
15. Ramirez-Avila L, Nixon K, Noubary F, et al. Routine HIV testing in adolescents and young adults presenting to an outpatient clinic in Durban, South Africa. *PLoS One*. 2012; 7(9):e45507. [PubMed: 23029060]
16. O'Laughlin KN, Rouhani SA, Faustin ZM, et al. Testing experiences of HIV positive refugees in Nakivale Refugee Settlement in Uganda: informing interventions to encourage priority shifting. *Confl Health*. 2013 Feb 14;7(1):2. [PubMed: 23409807]
17. Centers for Disease Control and Prevention. [Accessed May 28, 2014] Report on Refugees and Internally Displaced Persons. <http://www.state.gov/s/gac/progress/creports/63587.htm>

18. Ugandan Ministry of Health. [Accessed May 28, 2014] Uganda national policy guidelines for HIV counselling and testing. http://www.who.int/hiv/pub/guidelines/uganda_art.pdf
19. Ugandan Ministry of Health. [Accessed May 28, 2014] National antiretroviral treatment guidelines for adults, adolescents, and children. 3Jun. 2009 <http://www.idi-makerere.com/docs/guidelines%202009.pdf>
20. UNAIDS. [Accessed May 28, 2014] Report on the global AIDS epidemic. http://www.unaids.org/globalreport/HIV_prevalence_map.htm
21. Uganda Ministry of Health and ICF International. [Accessed May 28, 2014] Uganda AIDS Indicator Survey: Key findings. 2011. http://health.go.ug/docs/UAIS_2011_KEY_FINDINGS.pdf
22. Isingo R, Wringe A, Todd J, et al. Trends in the uptake of voluntary counselling and testing for HIV in rural Tanzania in the context of the scale up of antiretroviral therapy. *Trop Med Int Health*. Aug; 2012 17(8):e15–25. [PubMed: 22943375]
23. Johnston L, O'Bra H, Chopra M, et al. The associations of voluntary counseling and testing acceptance and the perceived likelihood of being HIV-infected among men with multiple sex partners in a South African township. *AIDS Behav*. Aug; 2010 14(4):922–931. [PubMed: 18270809]
24. Peltzer K, Matseke G, Mzolo T, Majaja M. Determinants of knowledge of HIV status in South Africa: results from a population-based HIV survey. *BMC Public Health*. 2009; 9:174. [PubMed: 19500373]

Table 1

Characteristics of OPD Population and Clients Tested for HIV in Standard of Care and Intervention Periods

	Standard of Care (40 days)		Intervention (168 days)	
	Total OPD Population (%)	Tested Population (%) [*]	OPD Population (%)	Tested Population (%)
Total clients ^{**}	3,113	209	15,572	4,207
Ave clients/ days	78		93	
Gender				
Female	1,972 (64)	116 (56)	10,110 (65)	2,308 (55)
Male	1,133 (36)	91 (44)	5,450 (35)	1,895 (45)
Missing	8	2	12	4
Age in years				
18 to 29	1,191 (43)	88 (44)	6,062 (41)	2,124 (50)
30 to 39	734 (26)	61 (30)	3,953 (26)	1,149 (27)
40 to 49	426 (15)	26 (13)	2,546 (17)	604 (14)
50	434 (16)	25 (12)	2,380 (16)	330 (8)
Missing	328	9	631	0
Refugee status				
Refugee	2,846 (92)	181 (87)	14,549 (94)	2,925 (70)
Ugandan national	259 (8)	26 (13)	1,010 (6) ^{***}	1,268 (30) ^{***}
Missing	8	2	13	14

^{*} Percentages in table exclude missing values

^{**} The percent of total numbers tested out of the total OPD population is excluded because some participants tested during the Intervention period were not registered in the OPD

^{***} Number of clients tested > OPD total

AVE: average

Table 2

Outcomes of Standard of Care and Intervention Periods in Routine HIV Testing Cohort in Nakivale

	Standard of Care (40 days)	Early Intervention (first 40 days)	Extended Intervention (128 days)	Total Intervention (168 days)
OPD Clients	3,113	3,874	11,698	15,572
Potential Additional Individuals Who May Have Been Tested in Addition to OPD Clients	0	1,320	2,887	4,207
Maximum Number Eligible for Testing	3,113	5,194	14,585	19,779
Total Tested (% of Maximum Number Eligible for Testing)	209 (6.7%, 95% CI: 5.8%–7.7%)	1,320 (25.4%, 95% CI: 24.2%–26.7%)	2,887 (19.8%, 95% CI: 19.1%–20.5%)	4,207 (21.3%, 95% CI: 20.7%–21.9%)
Refugees Tested (% of all tested, missing excluded)	181 (87.4%, 95% CI: 82.1%–91.7%)	995 (75.7%, 95% CI: 73.3%–78.1%)	1930 (67.0%, 95% CI: 65.2%–68.8%)	2925 (69.8%; 95% CI: 68.3%–71.2%)
HIV-Infected (HIV prevalence among those tested)	7 (3.3%, 95% CI: 1.3%–6.8%)	52 (3.9%, 95% CI: 2.9%–5.2%)	136* (4.7%, 95% CI: 3.9%–5.6%)	188* (4.5%, 95% CI: 3.8%–5.2%)
Mean HIV-Infected Cases Identified/Week	0.9	6.5	5.3	5.6

* One patient with an indeterminate diagnosis was excluded from this analysis