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Student Volunteers as a Supplementary Workforce for an Integrated ED HIV Testing Model with 4th-Generation and POC Testing

Ahmed M. Saleh^{1,*}, Somiya Haider¹, Danielle Signer¹, Stephen Peterson¹, Megan Gauvey-Kern¹, Margaret Leathers¹, Boris Tizenberg¹, Shane Bryan³, Richard E. Rothman^{1,2}, and Yu-Hsiang Hsieh¹

¹The Johns Hopkins University, Department of Emergency Medicine

²Department of Medicine, Division of Infectious Diseases

³Student Outreach Resource Center (SOURCE). Baltimore, MD, USA

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To the Editor

Since the revised 2006 CDC HIV testing recommendations [1], thousands of previously undiagnosed HIV-infected patients were diagnosed in the emergency department (ED) setting [2, 3]. Prior HIV testing programs have utilized students in health sciences, nursing, and medicine as program testing and linkage-to-care (LTC) staff, which showed promising results [4]. Here, we evaluate the outcomes of an HIV screening program in an academic ED, using supplementary trained graduate student volunteers who functioned in a testing staff role.

Since July 2013, a triage-integrated HIV testing model using fourth-generation blood and point-of-care (POC) testing with an expedited LTC process has been in place at the Johns Hopkins Hospital Emergency Department to offer free HIV testing to all eligible patients. Eligibility has been pre-defined as low triage acuity level of 3 to 5 and age of 18–65 years [5]. The triage nurses offered HIV tests to eligible patients verbally and were prompted by the electronic medical record system during the triage assessment process. Testing staff (including volunteer students) were automatically paged to perform a POC test for consented patients who did not have blood drawn as part of their clinical care. Testing staff also offered bedside testing to patients who were either not offered a test at triage or those who declined testing at triage.

Please address correspondence to: Dr. Yu-Hsiang Hsieh, Johns Hopkins University Department of Emergency Medicine, 5801 Smith Avenue, Suite 3220 Davis Building, Baltimore, MD 21209, Phone: 410-735-6413, Fax: 410-735-6425, yhsieh1@jhmi.edu.

*Current affiliation: Weill Cornell Medicine, Doha, Qatar

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Johns Hopkins University Student Outreach Resource Center (SOURCE) recruits medical, nursing, and public health student volunteers at the beginning of each academic year. Of those recruited, ten students completed a series of trainings, including counseling skills training, POC device training, and an on-site ED training. Student volunteers shadowed full-time testing staff to be familiarized with the testing process before they started testing independently. Additionally, SOURCE students participated in quarterly discussion groups and reflection sessions to reflect on various aspects of their experiences from the screening program. Testing staff (including volunteer students) completed a standardized shift report at the end of each shift, reporting the numbers of ineligible patients, pages received, tests completed, positive results, and linkage opportunities. Shift reports from December 2013 through May 2015 (two full academic years) were analyzed. This study was approved as a programmatic evaluation by the Johns Hopkins Medical Institution Institutional Review Board.

During the study period, SOURCE students completed 782 hours of testing. Overall, a total of 6,178 patients were tested by POC, of which 1,341 (22%) were tested by the student volunteers. Of those, 654 (49%) were from triage-initiated pages, and 687 (51%) were offered at bedside. Of all patients tested by volunteers, 2 (0.2%) were newly diagnosed with HIV, and both were successfully linked to care. Another 2 known-positive patients who were not in care were re-linked to care.

Similar to many well-established student volunteer-run health clinics across the United States, this program provides an excellent opportunity for graduate-level students to gain valuable knowledge and work experience on HIV as certified HIV testing counselors [4, 6–9]. At the same time, the program trains students as the next generation of public health advocates and providers for HIV. Such student initiatives could serve as a seed for HIV testing programs in both the medical care and community-based settings. Incorporating student volunteers in HIV screening helps spread awareness, because they promote the importance of HIV testing and treatment beyond their program responsibilities by participating in community-based events that focus on HIV prevention, exploring the social struggles of HIV-infected individuals and stigma associated with HIV testing [10].

Additionally, this interdisciplinary program includes numerous interactions between volunteer students and clinical staff in a busy acute care setting. Thus, it provides a unique and valuable experience for medical, nursing, and public health students early on in their training that could be absent from their curricula.

One limitation of such student-volunteer program is the availability of students to cover testing shifts during academic breaks. A potential solution to this would be by recruiting more students who have different academic schedules to be part of this program, which would provide more shift coverage during finals and breaks.

In conclusion, student volunteers could supplement routine ED-based HIV testing programs to increase testing coverage, the identification of undiagnosed patients, and re-link known positive patients back into care.

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