Title: Effectiveness of Rapid HIV Testing at Detecting HIV Infections and in Linking the Newly Diagnosed Patients to Care in an Urban Emergency Department in New Orleans

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Background: The purpose of this study is to determine the prevalence of HIV infection in a patient population accepting voluntary HIV testing during their visit to the Emergency Department of a tertiary care hospital and determine whether these patients were successfully linked to sub-specialty care. Our hypothesis is that the majority of these newly diagnosed patients will be successfully linked to care and that the majority had been seen in Medical Center of Louisiana (MCL) in the previous five years which represents missed opportunities for diagnosis.

Methods: A retrospective review was conducted of the medical records of adult patients who agreed to a rapid HIV test in the Emergency Department of University Hospital part of MCL from February 2008 through August 2008.

Results: Sixty three patients out of 3,418 patients tested positive for HIV in the first six months of the institution of the rapid HIV test. Two (3.2%) were false positives and twenty (31.7%) had a previous diagnosis of HIV. Forty one patients (65%) were newly diagnosis with HIV, resulting in a 1.2% prevalence of new HIV infections in our population. Among the patients with a new diagnosis of HIV, 27 (65.9%) were male, 31 (75.6%) were African-American. The average age was 38.2 years, (95% CI 34.6 to 41.8). About half (48.8%) of the patients with a new diagnosis of HIV had been seen in the MCL system in the 5 years prior to their diagnosis. Nineteen of the patients had a documented risk factor for HIV and unprotected heterosexual contact was the documented risk factor in the majority (79%) of these patients. Thirty seven (88%) had a documented referral to the infectious disease clinic, and twenty nine (70.7%) had a documented visit to an HIV specialist within 1 year of diagnosis. Initial CD 4 counts ranged from 2 to 715, (mean 239.5, 95% CI 167 to 312). Forty three percent of the patients met the diagnostic criteria of AIDS, with CD 4 counts less than 200. Twenty one were started on HAART, with a fixed dose combination pill that included tenofovir, emtricitabine and efavirenz, being the most common regimen (57%).

Conclusion: Rapid HIV testing in the Emergency Department at University Hospital in the first six months successfully identified 41 patients with a new diagnosis of HIV and linked the majority of these patients to an HIV specialist. Less than half of these patients had been seen by the MCL in the past five years, which demonstrates less missed opportunities than predicted.