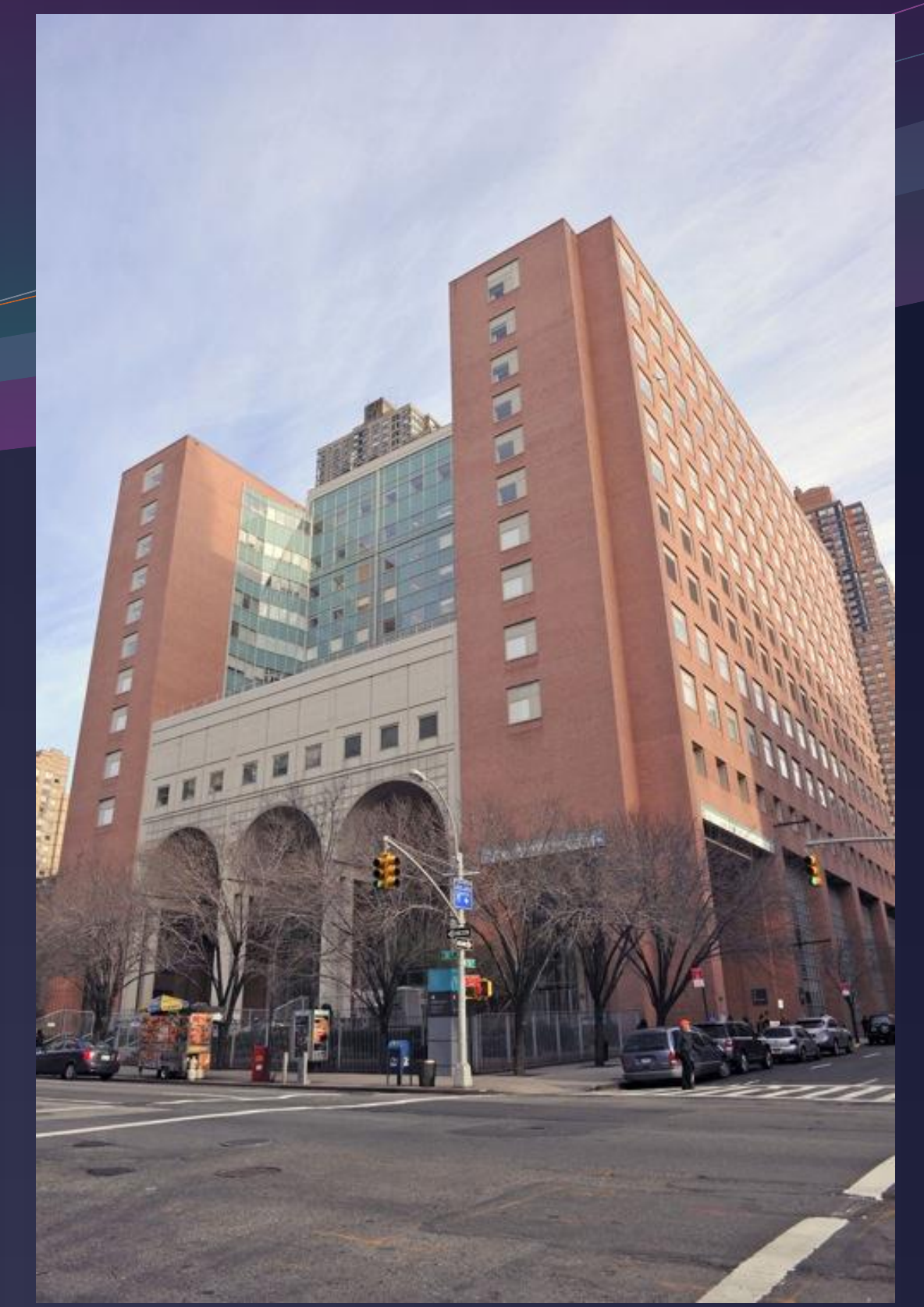


Emergency Department Utilization and Hospital Admission After a New Diagnosis of HIV



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Background

- ❖ Rapid HIV testing in the ED has been supported by the CDC since 2006 and mandated by New York State legislation since 2010.
- ❖ Minimal data exists on subsequent hospital utilization after a new diagnosis of HIV infection in the ED

Objectives

- ❖ To evaluate the number of ED presentations and hospital admissions to St. Luke's Roosevelt Hospital Center subsequent to new ED HIV diagnosis during the study period.
- ❖ To evaluate whether CD4 count at diagnosis correlates with future admissions.

Methods

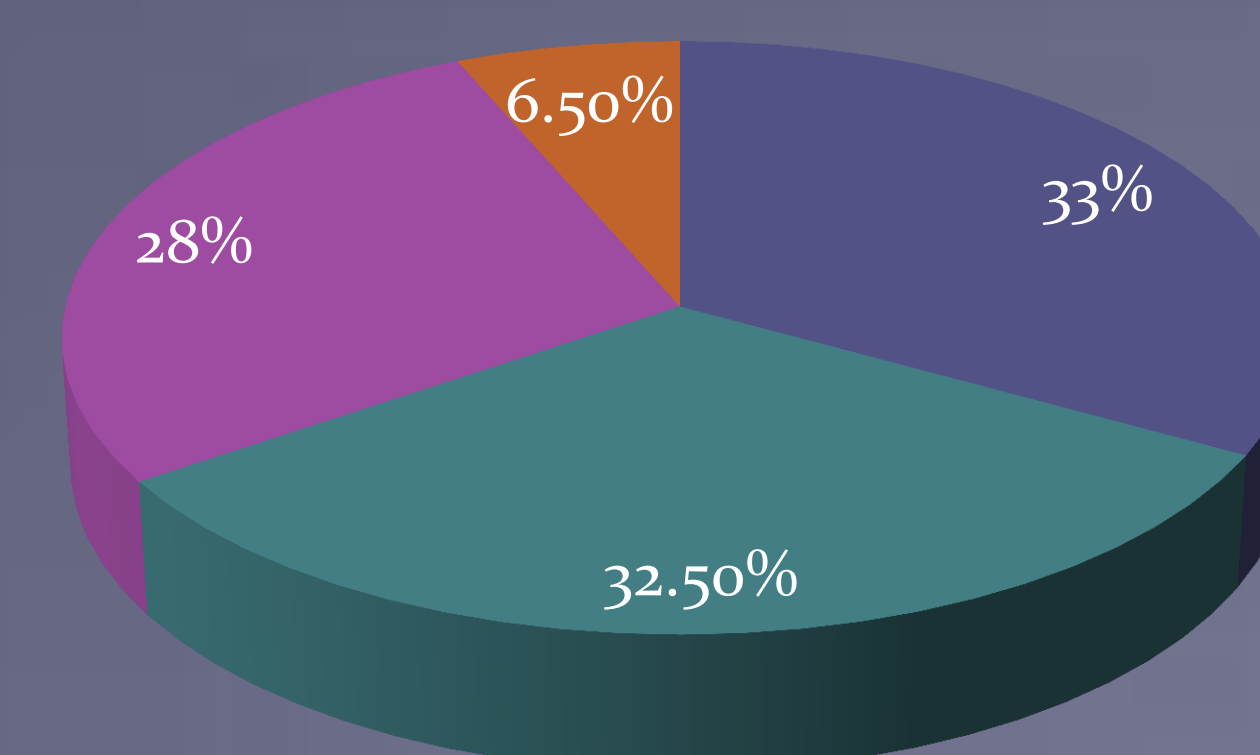
- ❖ All patients who tested newly positive for HIV in an urban ED between 05/31/06 and 12/31/10 were identified.
- ❖ Demographic information including ED chief complaints, admission diagnoses, and CD4 counts/viral loads when available was collected.
- ❖ Electronic medical records were queried for the total number of subsequent ED visits and hospital admissions after the initial diagnosis.
- ❖ Investigators used common descriptive statistics for analyses.

Results

Total of 124 patients newly diagnosed	Mean CD4 on Diagnosis	226 (3-1385)
Average Age 39.5 (18-79)	Mean Viral Load on Diagnosis	114,541 (76-750,000)
Majority Minority: 57.6% Black, 28% Hispanic	Percentage with AIDS on diagnosis (CD4 < 200)	63%

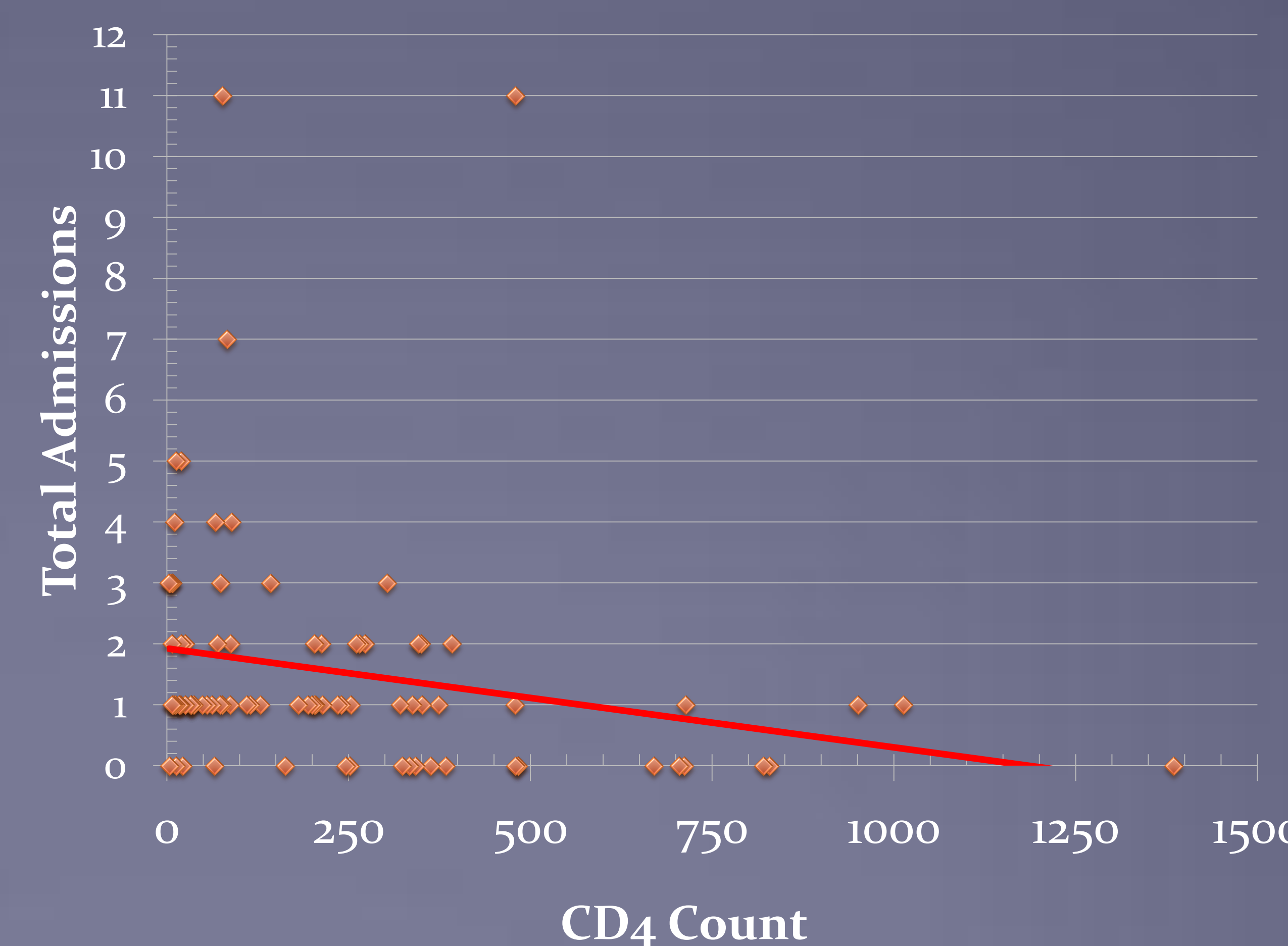
- ❖ During the study period, 62.4% of newly diagnosed patients had at least 1 visit to the ED and 60% had at least 1 hospital admission
- ❖ Out of 107 admissions in the year following diagnosis, 31 (29%) were for pneumonia and 14 (13%) were for fever

Insurance Types



- Self Pay
- Medicaid
- Commercial
- Medicare

CD4 Count is Inversely Related to Number of Yearly Admissions (r= -0.22)



- ❖ During the study period, AIDS patients had more total admissions (mean 1.9) than patients with CD4 >200 (mean 1.1), p<0.001. However, AIDS patients had less ED visits (mean 2.9) than patients with CD4 >200 (mean 4.6), p<0.001

Conclusions

- ❖ To our knowledge, we present the first data on ED utilization and hospital admissions for patients newly diagnosed with HIV as a result of an ED rapid HIV testing program.
- ❖ The inverse correlation between CD4 count and rates of hospitalization as well as the correlation between a diagnosis of AIDS and hospitalization provide a public health and economic incentive for early diagnosis.
- ❖ With linkage to outpatient services, newly diagnosed patients may have decreased ED utilization which is an area for future research.
- ❖ Hospitals may use this information to support a business model for the establishment of HIV testing in EDs as it may increase reimbursements for linkage to care and subsequent hospitalizations.