



HIV TESTING IN A CANCER CENTER

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ABSTRACT

Background: Since 2006, routine HIV testing has been recommended by the Centers for Disease Control and Prevention (CDC) for those between 13 and 64 years of age. HIV is associated with various cancers, including classically AIDS-related cancers (e.g. Kaposi's sarcoma, non-Hodgkin's lymphoma, and cervical cancer) and non-AIDS-associated malignancies (e.g., lung, liver, anal). HIV testing practices in cancer patients have not been well characterized. We describe the screening pattern and the impact of CDC recommendations on HIV testing at a major cancer center.

Methods: Retrospective data was obtained on HIV testing performed between 2000 and 2011 from a laboratory database. Testing of all patients presenting to a major cancer center for evaluation and those who underwent treatment with radiation, surgery, and/or chemotherapy is described. Chi-square statistic was used to compare patients tested before and after 2006, when the CDC recommended routine HIV testing for cancer patients.

Results: HIV testing among all patients evaluated at the cancer center ranged from 24.2% in 2000 to 19.9% in 2006 to 21.5% in 2011. HIV testing among those receiving cancer treatment (e.g., radiation, chemotherapy, and/or surgery), ranged from 48.9% in 2000 to 35.8% in 2006 to 40.6% in 2011. Patients evaluated or treated at our center were significantly ($p < 0.001$) more likely to be tested in 2011 compared to 2006. Of note, however, the peak HIV testing was in 2000 compared to other years (48.9% 2000 vs. 40.6% 2011, $p < 0.0001$). In comparison, for the US population over 18 years of age, HIV testing ranged from 32.1% in 2000 to 35.8% in 2006 to 35.9% in 2011.

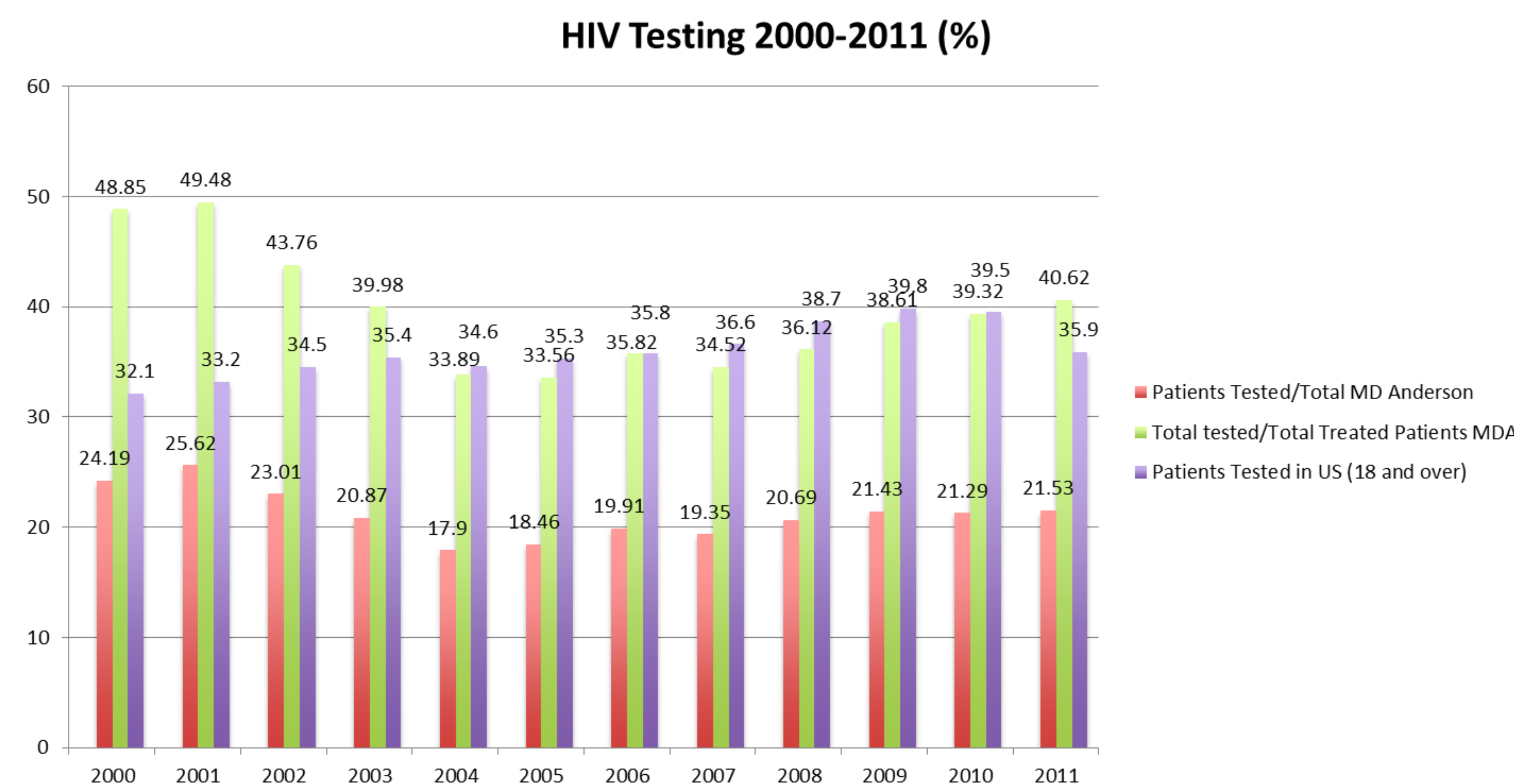
Conclusion: Despite CDC recommendations since 2006 to conduct routine HIV screening and the significant association between HIV and various malignancies, HIV testing is not consistently performed at a major cancer center. The impact of the US Preventive Services Task Force issued in April 2013 joining CDC in recommending routine testing for those between 15 and 65 years of age remains to be determined. In addition, endorsement of the American Society of Clinical Oncology regarding routine HIV testing may be helpful. Other barriers to testing in this population require further exploration.

BACKGROUND

- VA database study- 15% of anal cancer patients were HIV seropositive (not all patients with anal cancer were tested)
- Lung cancer patients-University of Maryland, 1.4% seropositive
- California Cancer Registry-19% of NHL patients with HIV
- Cervical cancer-10% of the 390 patients at MDACC in 2010-11 tested for HIV
- Current practice: targeted, risk-based testing, except hematologic malignancy, where testing is performed on the majority of patients.

METHODS

Retrospective data on HIV testing performed between 2000-2011 was obtained from Laboratory Information Systems (LIS) at MD Anderson Cancer Center. Data included inpatient and outpatient HIV testing. Demographic information was obtained from the Institutional Data Warehouse, LIS, and the Tumor Registry at MD Anderson.



RESULTS-Inpatient Demographics

Hospital Discharges (2009-10)

Overall 23,886
HIV 117
Average age
Overall 54.17 yrs
HIV 47.16 yrs
Gender- Male
Overall 52.7%
HIV 83.8%
Race/Ethnicity
Overall 69.5% Caucasian
10.3% AA
HIV 50.4% Caucasian
32.5% AA
Insurance- Medicaid/Medicare
Overall 38.0%
HIV 39.3%

Cancer Diagnosis	Overall	HIV
Hodgkin's Lymphoma	1.7% (397)	0.9% (1)
NHL	3.4% (824)	30.7% (36)
Cervical	1.4% (329)	2.6% (3)
Lung	4.7% (1127)	5.1% (6)
Anal	0.15% (37)	1.7% (2)

RESULTS-Overall Seropositivity

Service (2009-10)	# Patients Tested	HIV Seropositive
Emergency Center	78	3.85%
General Internal Medicine	11	9.09%
Gastrointestinal Surgery	29	3.45%
Leukemia	1485	0.74%
Lymphoma	1452	1.45%
Breast Medical Oncology	51	3.92%
Thoracic Medicine	42	2.38%
Gynecology	39	5.13%
Radiation Therapy	20	10.0%
Head and Neck Surgery	52	1.92%

CONCLUSIONS

- Despite CDC recommendations since 2006 to conduct routine HIV screening and the significant association between HIV and various malignancies, HIV testing is not consistently performed at a major cancer center.
- The impact of the US Preventive Services Task Force issued in April 2013 joining CDC in recommending routine testing for those between 15 and 65 years of age remains to be determined.
- Endorsement of the American Society of Clinical Oncology regarding routine HIV testing may be helpful.
- Other barriers to testing in this population require further exploration.