



The Third Wave of HIV Infection in an Urban Hospital



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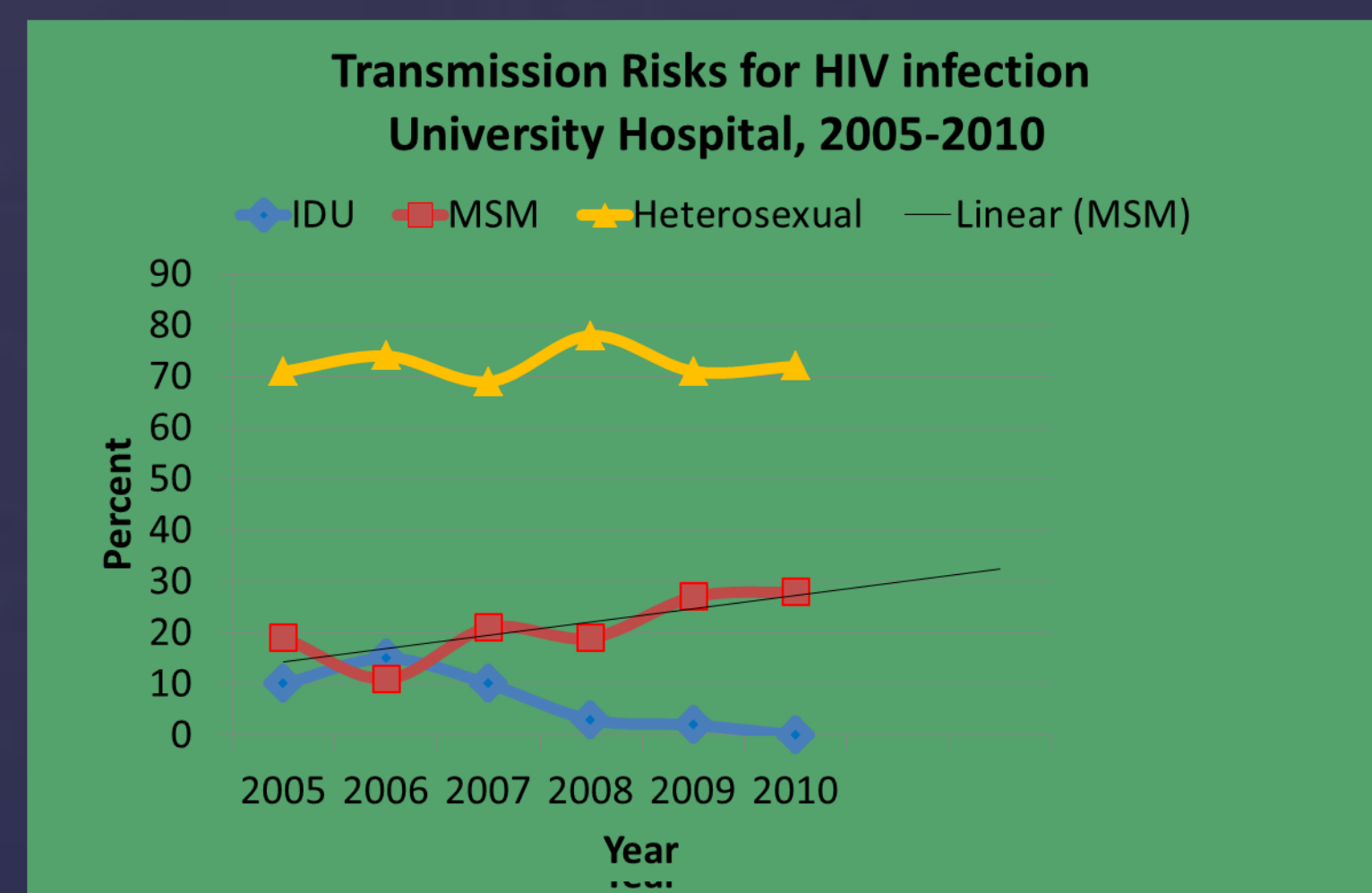
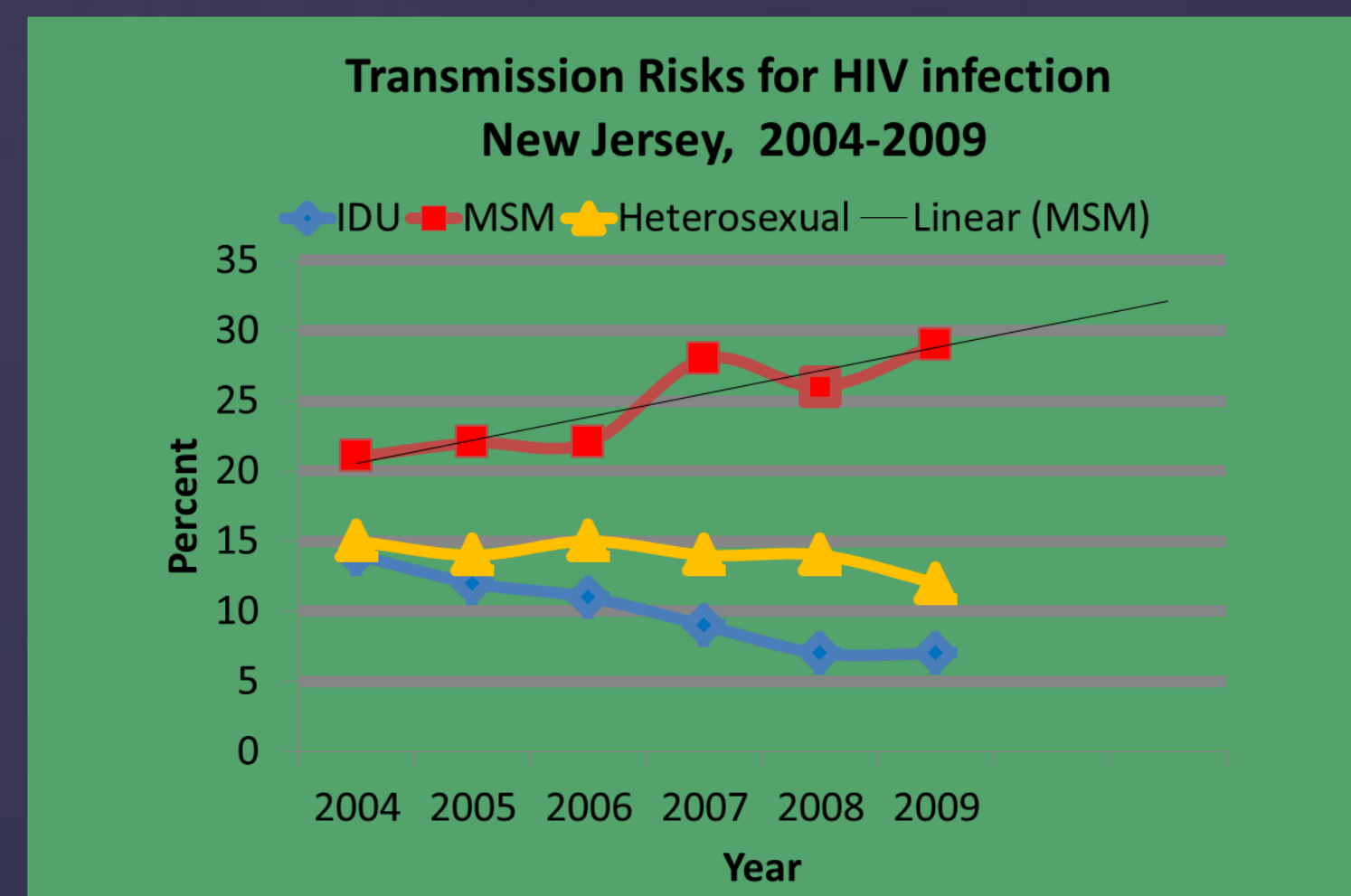
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Background

- Behavioral transmission risk factors for HIV infection at this hospital may be changing (1) consistent with statewide trends as the proportion of new reports attributable to injection drug use (IDU) and heterosexual sex has decreased and the proportion of cases attributable to MSM has increased (2)



Objectives

- Describe characteristics of patients testing HIV positive
- Evaluate the proportion of patients successfully linking to medical care
- Describe characteristics of patients testing at University Hospital, Newark, New Jersey, 10/1/2011-8/31/2012

References

1. Mohammed Debbie. (Unpublished data). Trends in HIV Testing at University Hospital 2005-2011.
 2. New Jersey Department of Health. Division of HIV/AIDS, STB and TB Services. New Jersey HIV/AIDS Semi-annual Newsletter, 1996-2010. Available at: <http://www.state.nj.us/health/aids/aidsqtr.shtml> Accessed on November 15th 2012

Methods

- A retrospective chart review of patients receiving rapid HIV testing from 10/1/2011 to 8/31/2012 at a Newark, New Jersey, academic medical center was performed.
- Rapid HIV testing was conducted by trained counselors who routinely screen patients and provide opt-out testing in the Emergency Department (ED). Testing is provided to partners of patients who test HIV positive and to patients who request testing from the community (Walk-IN).
- After testing HIV positive, patients were referred and given an appointment to the on-site Infectious Diseases Practice.
- Reminder telephone calls are done to encourage patients to attend clinic appointments.
- Data were merged from Evaluation Web and the positive test database maintained at this site.
- Linkage to care was defined as having *kept a medical appointment*.
- This study was approved by the Institutional Review Board at UMDNJ.

Results

- A total of 7988 patients were tested: 7307 (42.4%) of 17,241 patients screened in the ED and 681 (3.9%) patients who walked in and requested testing/partners of HIV+ persons.
- The largest category of patients tested by age group was 20-29 years (37.7%).
- Overall 73(0.95%) patients tested HIV positive, with a slightly higher positivity rate among males than females, 1.2% vs. 0.7%.
- Although only 3% of ED patients reported MSM as a transmission risk factor, 30% of positive ED patients and 39% of positive Walk-IN patients reported MSM.
- When compared to patients testing positive in the ED, a larger proportion of patients in the Walk-IN site were 13-29 years (52% versus 30%), male (70% versus 56%), and reported MSM (39% versus 26%) or sex with an HIV infected person (44% versus 22%) as transmission risk factors.
- Higher proportions of patients from the Walk-In site were successfully linked to medical care 87.0%, vs. 60.9% from the ED.

Results

Table 1: Demographics and HIV test results by Gender, University Hospital, New Jersey, 10/1/2011-8/31/2012, n=7988

Demographics	Males n (%)	Females n(%)	Total N (%)
	3585(44.9)	4403(55.1)	7988
Age			
13-19	161(4.5)	301(6.8)	462(5.8)
20-29	1288(36.0)	1724(39.2)	3015(37.7)
30-39	864(24.1)	993(22.6)	1858(23.3)
40-49	700(19.6)	783(17.8)	1484(18.6)
≥50	567(15.8)	602(13.6)	1169(14.6)
Risk Factors (not mutually exclusive categories)			
Heterosexual	3074 (85.6)	3712(84.3)	6786(85.0)
MSM	231(6.5)	0	231(2.9)
Sex without condoms	3030(85.0)	3695(83.9)	6725 (84.2)
Sex with HIV+	45(1.26)	26(0.6)	72(0.9)
Injection Drug Use	34(1.0)	18(0.4)	53(0.7)
Race			
Black	2438(68.1)	3307(75.1)	5748(72.0)
Other	1142(31.9)	1096(24.9)	2240(28.0)
Site			
Emergency Department	3191(89.1)	4113(93.4)	7307(91.5)
Walk-IN	391(10.9)	290(6.6)	681(8.5)
Rapid Test Results			
Negative	3536(98.7)	4374(99.3)	7910(99.1)
Positive	44(1.2)	29(0.7)	73(0.9)

Table 2: Demographics of HIV positive patients and Linkage to Medical care by Site of Testing, n=73

Demographics	Emergency Department n (%)	Walk-IN n (%)	Total n(%)
	50(68.5)	23(31.5%)	73
Age			
13-19	4(8.0)	0(0.0)	4(5.5)
20-29	11(22.0)	12(52.2)	23(31.5)
30-39	12(24.0)	7(30.4)	19(26.0)
40-49	13(26.0)	1(4.4)	14(19.2)
≥ 50	10(20.0)	3(13.0)	13(17.8)
Risk Factors (Not mutually exclusive categories)			
Heterosexual	30(60.0)	14(60.9)	44(60.3%)
MSM	13(26.0)	9(39.0)	22(30.0)
Sex without condoms	45(90.0)	22(96.0)	67(92.0)
Sex with HIV+	11(22.0)	10(43.5)	21(28.8)
Injection Drug Use	1(2.0)	0(0.0)	0
Race			
Black	43(86.0)	20(87.0)	63 (86.3)
Other	7(14.0)	3(13.0)	10(12.7)
Gender			
Male	28(56.0)	16(69.6)	44(60.1)
Female	22(44.0)	7(30.4)	29(39.7)
Linked			
Yes	43(86.0)	20(87.0)	63 (86.3)
No	7(14.0)	3(13.0)	10(12.7)

Conclusions

- The disproportionately high positivity rate among MSMs at this site is consistent with an increase in the percentage of cases statewide attributable to MSM and may be an indication of a transition in this population from risk factors which were previously primarily related to IDU and heterosexual contact to an epidemic concentrated among young MSM.
- Linkage to medical care was more successful among positive patients who Walked- In compared to patients in the ED. These patients were self-motivated to come in for testing and may be more knowledgeable about HIV or familiar with persons currently living with the disease.
- Strategies for improvement in linkage rates are systemic and include the introduction of Rapid-Rapid HIV testing, same day appointments for medical care, aggressive patient navigation and specialty services available in the ED after hours and on the weekends.
- This site is strategically positioned to engage and provide high impact HIV prevention services to a high risk population who choose to access services via the Emergency Department or as a Walk-IN.
- As cases reported with no risk information constitute more than half of diagnoses in recent years statewide, it is difficult to draw conclusions about trends in transmission. However, it is interesting to note that even with the increase in cases reported without risk information, cases attributable to MSM were the only group by transmission category to increase between 2004 and 2009.

Limitations

- Newly diagnosed patients were not de-duplicated using data from the electronic HIV/AIDS Reporting System
- A selection bias may be present among persons in the Walk-IN site.
- Results may not be generalizable to other test sites in NJ
- Small numbers are reflected in this 11 month period

Contact

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