Victims of Our Own Popularity: Screening Visits at New York City Sexually Transmitted Disease (NYC STD) Clinics

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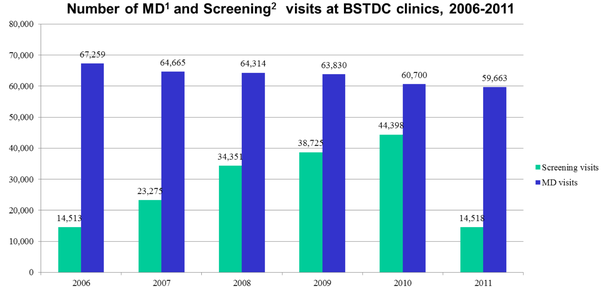
Background

The New York City (NYC) Bureau of Sexually Transmitted Disease Control (BSTDC) operates 9 STD clinics which provide free and confidential services 6 days a week on a walk-in basis. In 2006, BSTDC began screening visits for asymptomatic patients not needing an exam, which consisted of urine-based chlamydia/gonorrhea NAAT, RPR and rapid HIV antibody test.

From 2006 to 2010, visits to NYC STD clinics increased from 111,473 to 123,430 and screening visits as a proportion of all visits increased from 12% to 36%.

Number of MD[1] and Screening[2] visits at BSTDC clinics, 2006-2011



1 MD visits have an electronic MD signature
2 Screening visits have CT/GC urine NAAT testing with no physical exam and no electronic MD signature

Project Description

To respond to budget shortfalls, we evaluated the relative cost and yield of lab testing for STD and HIV screening using financial and electronic medical record (EMR) data.

Results

Visits with one of more STD (CT/GC/Syphilis) at screening and MD visits
NYC STD Clinics, July 1, 2009 - June 30, 2010

All clinics	Screening visits			MD visits		
Test	Total visits	Visits with one or more STD (CT, GC, syphilis)	%	Total visits	Visits with one or more STD (CT, GC, syphilis)	%
Visits with one or more STD (CT/GC/ syphilis)[1,2]	44,682	4,311	9.6%	61,481	14,997	24.4%

1 GC tests at screening visits include urine NAATs; GC tests at MD visits include cervical, urine, and urethral NAATs, anal, cervical, and oral cultures
2 CT tests at screening visits include urine NAATs; CT tests at MD visits include anal, cervical, urine, and urethral NAATs

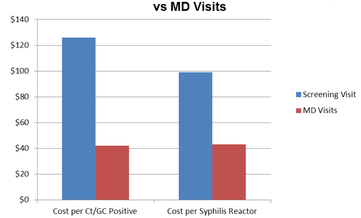
As shown above, provider visits yield more positivity than screening visits for the STD testing that is done at both types of visits (Ct/GC/Syphilis). When you include additional STD diagnoses that occur at MD visits (MPC, NGU, Trichomonasis genital warts, LGV, HSV, pediculosis pubis, and contacts to an STD), the difference is even greater - 76% of provider visits yielded at least one STD diagnosis versus 9.6% of screening visits. There was almost no difference for rapid HIV positivity in these two types of visits.

Number and positivity of HIV testing at screening visits and MD visits,
NYC STD clinics, July 1, 2009 – June 30, 2010

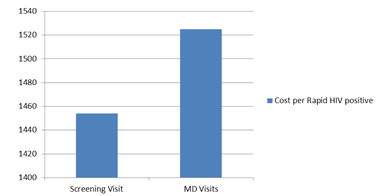
All clinics[1]	Screening visits			MD visits		
	N	Pos	%	N	Pos	%
HIV Rapids	38,474	291	0.76%	24,547	177	0.72%
HIV Standard EIA/WB	1,544	11	0.71%	610	11	1.80%
AHI	28,363	16	0.06%	19,673	15	0.08%

Results continued

Cost per Ct/GC and Syphilis reactor by Screening vs MD Visits



Cost per Rapid HIV positive by Screening vs MD Visits



Screening visit costs per Ct/GC case was $126 versus $42 for provider visits. The cost per syphilis reactor was $99 per syphilis reactor versus $43. Surprisingly, the cost per positive Rapid HIV test was lower for screening visits ($1454) as compared to provider visits ($1525).

Conclusions, Limitations and Next Steps

Screening visits increased STD clinic volumes without commensurate yield in morbidity. It costs twice as much to find one case of Ct/GC among screening visits as among provider visits. On the other hand, screening visits are slightly more cost effective in detecting rapid HIV positives than MD visits. In weighing what to cut, we calculated that screening visits including a rapid HIV test cost BSTDC approximately $800,000 annually; and those without a rapid HIV test cost $413,000 annually.

To cut costs and maintain priority services, as of March 2011, persons with no STD exposure or symptoms are offered HIV testing and a referral for screening/primary care services. Since March 2011, the number of visits without STD pathology has declined, allowing BSTDC to focus on persons most likely to have and spread disease.