

Track A: Routine/Expanded HIV Testing Models & Systems Development



Predictors of Discussing HIV Testing with Customers among Pharmacy Staff Registered in the New York State Expanded Syringe Access Program: Preliminary Findings from the Pharmacies as Resources Making Links to HIV Testing (PHARM-HIV) Study

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OBJECTIVE: HIV burden is high among injection drug users (IDUs), especially black and Hispanic IDUs. Pharmacies in New York State (NYS) play an important role in HIV prevention among IDUs through their involvement in the NYS Expanded Syringe Access Program (ESAP). Since 2001, ESAP has allowed pharmacies to sell sterile syringes without a prescription to IDUs to prevent the transmission and acquisition of blood borne pathogens. ESAP has opened the door for pharmacy staff to develop relationships with IDU with pilot studies suggesting feasibility of delivering pharmacy-based HIV prevention services (i.e. syringe disposal, safe injection, medical referrals) to IDUs. However, the ability and ease in discussing HIV testing services with IDU syringe customers in pharmacy settings has not been explored, and could be a potential barrier to offer HIV testing in pharmacies. We used baseline pharmacy staff data (pharmacists, technicians and clerks) from our current Pharmacists as Resources Making Links to HIV Testing (PHARM-HIV) study to examine the staff and pharmacy characteristics associated with ever discussing HIV testing with syringe customers among ESAP-registered pharmacy staff in Harlem.

METHODS: Eighteen ESAP-registered pharmacies were selected from ethnographically-mapped high drug activity areas in Harlem, NY. Pharmacies were considered eligible if they sold syringes via ESAP without additional

requirements and had regular and new ESAP customers. A 10-minute baseline survey was administered to syringe selling pharmacy staff. Bivariate analyses were conducted using chi square tests.

RESULTS: Of 79 pharmacy staff, 68.4% were non-pharmacists (managers, technicians, clerks) and female. Overall, 30.4% had discussed HIV testing with their customers, 91.4% supported providing HIV testing referrals, and 70.9% supported in-pharmacy HIV testing. Those who had ever discussed HIV testing with customers were more likely to be male (p=0.0205), pharmacists (p=0.0045), work more years in pharmacies (p=0.0326), supportive of ESAP (p=0.0083), and provide daily in-pharmacy counseling on prescription medications (p=0.0016), medical conditions (p=0.0051), and other products (p=0.0318).

CONCLUSIONS: This data shows that not only is there support for in-pharmacy HIV testing services among pharmacy staff in ESAP-registered pharmacies located in disadvantaged neighborhoods, HIV testing can also be discussed by pharmacists. Structural intervention research targeting pharmacies that have well established syringe access programs in disadvantaged communities, and that provide daily advice on prescriptions/medical/other products should be explored, namely those that include expansion of pharmacy-based HIV prevention services.

ABSTRACT 2

Non-targeted Rapid HIV Screening in the Pediatric Emergency Department

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OBJECTIVE: The Center for Disease Control and Prevention's (CDC) 2006 recommendations called for routine opt-out HIV screening patients 13 – 64, in all health care settings, including emergency departments (EDs). Few institutions have implemented routine screening in a pediatric ED setting. The primary objective of this project was to evaluate routine HIV screening among 13 to 18 year olds who presented to an urban pediatric ED. The secondary objective was to evaluate staff acceptance of rapid HIV testing using a brief self-administered survey.



METHODS: Design: Prospective cohort study. Setting: An urban, inner-city teaching hospital with an annual pediatric ED census of approximately 7,500 patients between the ages of 13 and 18 years. Program: Non-targeted rapid HIV screening was performed in October and December 2009, and February and April 2010. Patients between the ages of 13 and 18 were offered rapid HIV screening during the medical screening process. Testing processes were fully integrated into pediatric ED operations. Survey: A closed-response self-administered survey was distributed to the pediatric ED staff. Outcomes: Number of patients tested, demographics of those tested, HIV prevalence and staff acceptance.

RESULTS: During the four non-targeted rapid HIV screening months, a total of 2,305 eligible patients presented to the pediatric ED, of which 215 (9%) completed testing. The demographics of tested patients were: 61% female, 67% Hispanic, 15% White, and 13% Black. Most of the tested patients were between 16 and 18 years old. Of the 215 patients who completed testing, none were identified with HIV infection. Out of 43 pediatric ED staff who were approached, 31 (72%) completed the survey. The majority of respondents were supportive of rapid HIV screening in the pediatric ED: 93% agreed that HIV testing should be performed in their department; and 95% agreed that their department is not too busy to perform routine HIV screening. Respondents were also given the opportunity to provide additional comments. Staff comments identified barriers to offering routine HIV screening within the pediatric ED, including parental involvement in the consent process, confidentiality, staff comfort level, staff perceived risk for HIV infection among pediatric patients and patient understanding.

CONCLUSIONS: Non-targeted rapid HIV screening performed in this pediatric ED resulted in a modest number of patients tested. Tested patients were more likely to be older, female and Hispanic. Overall, the pediatric ED staff supported rapid HIV screening. Staff identified specific barriers that should be further investigated relating to routine HIV screening in the pediatric ED.

ABSTRACT 3

Results of a Local Initiative to Increase HIV Screening among Urban Adolescents

PE AS ST

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OBJECTIVE: CHRCO serves as the pediatric safety net hospital for Alameda County, in which Oakland is the largest city. Many of the area's adolescents are seen at one of six CHRCO outpatient locations. Oakland has an HIV/AIDS case rate of 50.4/100,000, and about 40% of all AIDS cases in Oakland were late testers. About 1/2 of adolescents and young adults living with HIV are unaware of their condition, accounting for about 60% of new infections. In 2006, the CDC issued revised recommendations for HIV testing designed to make testing a routine part of medical care for all patients between 13-64. Opt-in HIV testing had been standard at the six CHRCO locations. In order to adhere to CDC recommendations and increase the number of local adolescents (ages 13-18) getting HIV tested regularly, we began an initiative to increase HIV testing at four of these locations by introducing routine, opt-out testing.

METHODS: Electronic medical records were used to identify the number of visits, patients, HIV tests given, percent of patients with prior HIV test, and testing outcomes for each of the locations. We compared data collected in 2009 to data collected in 2007, prior to the initiation of the initiative. Qualitative data was also obtained through key informant interviews at each location.

RESULTS: A total of 1612 HIV tests were done among teens in these locations in 2007 and 1941 in 2009. The percentage of visits in which an HIV test was performed in 2007 and 2009 are as follows: 1) Teen Clinic--(16% and 20%); 2) High School Based Health Clinic #1— (9% and 24%); 3) High School Based Health Center #2— (17% and 25%); 4) Juvenile Justice Center Clinic— (43% and 23%). The percentage of tests given to adolescents at the Emergency Department was 0.4% in 2009.



CONCLUSIONS: Adolescents will accept routine, opt-out HIV screening. A concerted effort to increase HIV testing can improve screening rates. Based on this success, CHRCO will begin implementing HIV screening of all adolescents by expanding opt-out testing to the Emergency Department (ED) in 2011. Additional barriers identified for expansion to the ED include: presence or absence of guardians in the ED, billing issues, time limitations, oral swabs vs blood tests, and confidentiality. CHRCO is currently working out on the details of the ED expansion to address these barriers and maxmize testing.

ABSTRACT 4

Barriers and Facilitators to Salivary Rapid HIV Testing in African Americans



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OBJECTIVE: To identify barriers and facilitators of voluntary Salivary Rapid HIV testing decisions (SRT) among African Americans in order to develop interventions to improve HIV testing rates and care entry if HIV positive.

METHODS: This first phase of a two-phase study used a Comprehensive Health Seeking and Coping Paradigm-based semi-structured interview guide (SSIG) to conduct 10 focus groups of 2-5 African Americans recruited from a large STI Clinic. Content analysis of the focus group transcripts was done using line-by-line analysis, and reviewing sentences and phrases for patterns or core meanings. Patterns were refined and synthesized into descriptive statements. An iterative process of comparison was used to further analyze the data, moving between individual elements of the text specific to participant responses. Meanings that were implicit rather than explicit in the text; and of one whole account with another were used to identify overall patterns of meaning.

RESULTS: Of the 38 African American adults recruited, 16 were female with ages 18-49 (M=23) and 22 were male with ages 18-49 (M=29.5). All self identified as heterosexual with most reporting low income and no health insurance. Within

the context of barriers and facilitators to SRT, eight themes emerged: Familiarity, Stigma, Fear, Access, Immediacy, Ease, Degree of Responsibility, and Trust. Each theme was not seen exclusively as a barrier or facilitator but was interpreted to be one or the other depending on the aspect of HIV testing being discussed. A gender sub analysis revealed themes of health maintenance and illness management for females and males respectively.

CONCLUSIONS: Since there has not been an increase in HIV testing rates in AA's even with newer SRT technology. The findings support the need to assess barriers and facilitators to testing decisions in order to increase testing rates. The themes also suggest the need for tailored community based interventions that decrease fear, stigma and increase trust in testing methods and providers for HIV and STI screening.

ABSTRACT 5

Evaluation of Readiness to Implement Nurse-initiated Rapid HIV Testing at High Prevalence Primary Care Settings within the US Department of Veterans Affairs

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OBJECTIVE: Subgroups of US veterans are at high risk of HIV infection, including minorities, substance users, the mentally ill, and homeless. HIV is a treatable chronic disease and more attention has been directed to barriers associated with current screening/testing methods. This project is qualitatively evaluating the barriers and facilitators regarding the implementation of nurse-initiated HIV rapid testing (NRT) at two high HIV prevalence VA primary care (PC) clinics.

METHODS: At initiation of a multi-year staggered rollout at two VA Medical Centers (VAMC), semi-structured



qualitative interviews with key and frontline informants were conducted using convenience sampling and snowball nomination strategy to identify interview participants prior to implementation. Thematic analysis performed from interview field notes.

RESULTS: Interviews with 60 stakeholders from a mid-Atlantic urban VAMC and an urban Southwest VAMC revealed widespread concern among informants on the extra time NRT will add to patients' visits especially when nurse's are already overburdened and short staffed. Further, many voiced worry over the logistics related to NRT including waiting space and delivery of results. But as a whole, we found that most informants see a need for an increase in HIV testing because of their area's high HIV prevalence and were generally in favor of NRT in PC as a means to reach that goal.

CONCLUSIONS: While the results garnered from these sites suggest support for NRT, its potential as a routine part of care is uncertain. Workload and staffing issues in PC may require additional novel approaches to testing (e.g., designated HIV testing days over routine testing). To elicit buy-in from frontliners, efforts to increase nurses' positive engagement in NRT will likely be necessary. Site-specific data and comparisons between sites will guide future VA HIV testing efforts and elucidate NRT feasibility in such settings.

ABSTRACT 6

Implementing a Rapid HIV Testing/ Linkage to Care Project Among Homeless Individuals in Los Angeles County: A Collaborative Effort between Federal, County, and City Government

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OBJECTIVE: The homeless population, though vulnerable to HIV infection, traditionally lacks access to HIV testing diagnostics and linkage to care (LTC). This project, an ongoing collaborative effort involving Gilead Sciences, the US Department of Veterans Affairs (VA); County of Los Angeles, Department of Public Health, Office of AIDS Programs and Policy; and City of Los Angeles AIDS Coordinator's Office, is evaluating barriers and facilitators to 1) providing HIV rapid testing to homeless shelter clients; 2) linking HIV-positive individuals to care through a) the VA, or b) Los Angeles County Department of Health Services, depending on veteran status.

METHODS: HIV oral rapid tests are offered by HIV counselors. In cases with (preliminary) positive test findings, a confirmatory test and clinic appointment is arranged, and taxi voucher is provided. Summary sheets are kept including tests conducted and client's veteran status. Data analysis is ongoing to review performance.

RESULTS: A year of data indicates significant progress in testing — 706 clients tested (31 veterans), 7 preliminary positives (7 confirmed positive; 1 did not receive confirmation). LTC confirmed for 5 clients; One client did not return for confirmatory results and was not LTC; other client refused LTC. Challenges included development of confirmatory test procedures, gap between confirmation and LTC, LTC follow-up.

CONCLUSIONS: This collaboration between governmental agencies has been successful, and can be used



as a model for future collaborative efforts of this type. Efforts are ongoing to better track clients by the use of a new linkage to care model. It is hoped that this new model of linking immediately upon preliminary reading will expedite LTC.

ABSTRACT 7

Results from a Rapid HIV Testing and Counseling Program in a New York City Pharmacy



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OBJECTIVE: The New York City Department of Health developed an aggressive HIV testing initiative to address the disproportionate number of Bronx residents diagnosed concurrently with AIDS at the time of HIV testing and the estimated 250,000 Bronx residents aged 18 to 64 who have never been tested for HIV. This study seeks to determine the feasibility and receptiveness of expanding this initiative to a non-conventional community setting in a high prevalence area of the Bronx.

METHODS: A prospective study was conducted on a convenience sample of customers at a community pharmacy from 10/26/09-1/29/10. Demographics, sexual history and HIV risk factors were collected. The number of patients tested, identified HIV infections and patient satisfaction were evaluated to assess the acceptability of this testing model. Data were analyzed using SPSS software.

RESULTS: In 41 days of testing, 584 patients were approached. Of the 380 eligible patients, 284 (75%) agreed to test. Most (95%) ineligible patients were unable to test because of prior HIV testing within one year. Demographics: 41.3% male, 64% Hispanic, 30% black. Mean age was 36.8 years ± SD 16.3. Patients reported significant risk factors for HIV: 11.2% were MSM, 35.2% reported multiple partners, 55.1% described condom use as inconsistent, and 34.9% reported 3+ drinks before sex. HIV prevalence was less than 1% and 74% reported a previous HIV test. All patients felt

that rapid HIV testing in the pharmacy is helpful and 82.2% learned new information.

CONCLUSIONS: Feasibility, receptiveness and satisfaction with HIV testing in the setting of a Bronx community pharmacy were high. Conducting HIV tests in community pharmacies provides the opportunity to reach individuals that might not otherwise seek testing. Expanding HIV screening initiatives to pharmacies and other nonconventional sites can effectively increase access to HIV testing for an at-risk population.

ABSTRACT 8

The Use of Technology to Increase HIV Testing Among African American Men – A Statewide African American Video Forum To Engage African American Men



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OBJECTIVE: HIV continues to disproportionately affect African Americans in Louisiana, especially African American men. In 2009, 75% of newly diagnosed HIV cases and 76% of newly diagnosed AIDS cases were among African Americans, yet African Americans make up only 32% of Louisiana's population. In 2008, the HIV diagnosis rate in black males was over 5.5 times greater than the rate for white males and 1.2 times greater than the rate for Latino males. Additionally, many African Americans are testing late in the course of their infection. In 2008, Louisiana CTRS sites conducted nearly 68,000 HIV tests, but only 44% of those tests were provided to men and just fewer than 10% were given to men who reported having sex with other men. In an effort to understand the testing habits, including facilitators and barriers, among African American men, a statewide video-forum was conducted.

METHODS: The Louisiana Office of Public Health-HIV/AIDS Program (HAP) identified an African American staff person to coordinate the statewide video-forum. The Coordinator of the video-forum, along with regional staff,

identified African American men throughout the state to participate in the planning of this video-forum. These men served as captains and were responsible for advising HAP staff on key questions to ask during the video-forum, recruiting men to attend the video-forum, and leading discussions during the video-forum. Three questions asked were: Why Haven't African American Men Gotten Tested? What Are Some of The Barriers For African American Men Getting Tested, and What Would Make It Easier For You To Get Tested? HAP staff served as recorders, a project officer from the Center for Disease Control and Prevention (CDC) served as the facilitator, and a Capacity Building Assistance (CBA) Provider served as a consultant.

RESULTS: A total of 70 African American men attended the video-forum in December 2009 and all public health regions in the state were represented. Major challenges or barriers to testing were found to be stigma, lack of information, transportation, and fear. Facilitating factors were offering testing in alternative locations, targeted education and community awareness, and respect for privacy.

CONCLUSIONS: The use of this technology proved to be an effective and cost savings method to gather valuable information regarding HIV testing from African American men. As a result of the video-forum, strategies were identified and implementation has begun to reach and engage African American men to be tested for HIV.

ABSTRACT 9

HIV Testing In VHA 2009: Implications for Routine Screening

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OBJECTIVE: The Veterans Health Administration (VHA) is the largest provider of HIV care in the US, with over 24,000 HIV positive Veterans in care. Since 1992, VHA has been collecting comprehensive data on performance measures for Veterans with known HIV infection. However, less was

known about HIV testing rates in VHA. In 2007, a baseline survey of VHA clinical laboratories was conducted to determine the volume and location of HIV testing. In 2009, the Public Health Strategic Health Care Group (PHSHG) developed a mechanism to collect data on the number of those tested for HIV ever, number tested for HIV in 2009, and the number of positive HIV test results.

METHODS: A routine data extract was developed that generated a report from the electronic medical record that captured all HIV tests and positive results entered into the laboratory package at each VHA facility for calendar year 2009. Data were analyzed at the facility level and geographic region using CDC categorization (Northeast, Midwest, South, and West).

RESULTS: We found that less than 10% of Veterans had ever been tested for HIV in the VHA system. In 2009, 142,577 (2.5%) Veterans in care were tested for HIV, ranging from 0.2% to 11.9% at individual facilities. By region, 2.4% of patients in care in the Northeast were tested for HIV, 1.64% in the Midwest, 3.1% in the South, and 2.7% in the West. Of those tested for HIV in VHA in 2009, 1.2% had a positive test result. The HIV sero-positivity at each VHA medical facility ranged from 0% to 3.4%. The 2009 sero-prevalence of HIV varied by region: 1.15% in the Northeast, 0.86% in the Midwest, 1.4% in the South, and 0.94% in the West.

CONCLUSIONS: Although only a small percentage of Veterans were screened for HIV in 2009 (2.5%), the sero-prevalence in the tested population (1.2%) exceeded the CDC's threshold for routine HIV testing (0.1%). Prevalence of HIV was highest in the South, and lowest in the Midwest, which is similar to the current trend in the general population. Overall, testing rates were lower than anticipated and VHA has taken several steps to increase testing. In August of 2009, VHA eliminated the requirement for written informed consent, and changed the HIV testing policy from risk-based testing to routine, voluntary testing of all Veterans at least once in a lifetime. It is anticipated that HIV testing rates will increase in subsequent years.



Routine HIV Screening in Clinical Settings in Massachusetts: Determining Best Practices



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OBJECTIVE: Between 2008 and 2010, the Massachusetts Department of Public Health (MDPH) Office of HIV/AIDS (OHA) piloted routine HIV screening initiatives in a variety of clinical settings to establish effective models for service delivery, identify previously undiagnosed HIV infections among patient populations and, over time, decrease the rate of concurrent diagnoses. Various models and strategies for implementing effective routine HIV screening practices were identified and employed.

METHODS: With CDC Expanded Testing Initiative funds, OHA supported eight routine screening initiatives in varying urban clinical settings that included one hospital, five community health centers, and two emergency departments. Guidance was provided to determine a model for service delivery that best fit the clinical environment, available resources, and needs of the facility while encouraging widespread HIV screening practices among providers and consenting patients. Two screening models were employed among the pilot sites- a provider-initiated model in which clinicians recommend an HIV test to all patients; and a dedicated counselor model in which trained counselors approach patients and offer an HIV test. Specifics regarding written informed consent procedures, choice of test technologies, and test result delivery strategies were determined by the pilot sites.

RESULTS: Routine HIV screening practices at the eight pilot sites were minimal prior to MDPH collaboration and CDC funding. Screening volumes increased annually, with new sites initiating routine screening practices throughout the three-year pilot period. Routine screening increased from 3,056 tests in 2008, to 11,363 routine tests in 2009, and to 8,882 tests thus far in 2010 (January – July). During the pilot period of January 2008 through July 2010, 24,708 patients

accepted an HIV test via routine screening practices across the eight clinical sites, of which 120 patients were diagnosed with HIV. Approximately five patients were known positives and re-engaged in care.

CONCLUSIONS: Once an effective model for routine screening is identified, an increased number of providers offer HIV screening to patients, resulting in growing patient acceptance, testing volume, and the number of newly diagnosed individuals identified and linked to specialty care. Determining an effective and sustainable routine screening model requires buy-in, support, and collaboration among facility executives, medical directors, clinicians, laboratory staff, point-of-care service staff, legal and risk management staff, counselors, HIV program staff, and health department partners. Clinical settings must develop a unique model for routine screening implementation that addresses the needs of the patient population, facility staff, and available resources to ensure comprehensive buy-in and effective service delivery.

ABSTRACT 11

Overcoming Obstacles to Late Presentation for HIV in Europe



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OBJECTIVE: The overall objectives of the HIV in Europe Initiative are to: (1) ensure that people living with HIV enter care earlier in the course of their infection than is currently the case; (2) study the decrease in the proportion of HIV-positive persons presenting late for care; and (3) advocate for comprehensive HIV policies to be implemented throughout the European region in order to reduce the number of people living with HIV being diagnosed late.



METHODS: HIV in Europe is a pan-European initiative launched in 2007. The initiative has developed concrete projects in order to provide evidence and recommendations on the key barriers to testing in Europe and beyond.

RESULTS: Key barriers to earlier diagnosis and care

- 1. A lack of understanding of what is meant by "a person presenting late for care".
- 2. Great uncertainty with regard to the number of people living with HIV in the European Region.
- 3. No list of HIV indicator diseases across Europe.
- 4. Stigma as one of the major barriers for both early HIV testing and earlier initiation of HIV treatment.
- 5. Criminalisation of HIV.

How it is addressed by the initiative

- A consensus definition of late presentation has been developed.
- Preparation of a document to provide guidance to countries on methods and data requirements for the estimation of the number of people with HIV.
- A pilot study will assess HIV prevalence in eight indicator diseases in specific populations. The project plans to screen 7000 persons with an indicator disease for HIV.
- 4. Support for the People Living with HIV Stigma Index in five European countries.
- 5. A review of how criminalisation of HIV can deter people from seeking HIV testing and have other negative consequences for public health.

CONCLUSIONS: The final results will be published and widely disseminated in 2010 and beyond. However, already now HIV in Europe recommends:

- The initiation of audits to evaluate whether testing is being conducted in situations where there is an obvious medical indication;
- Increased interaction and awareness raising among clinicians within different specialities and implementation of indicator disease guided testing;
- Collection of key additional surveillance data for more reliable estimations of the size of the infected but not yet diagnosed population;

- Development and implementation of evidence-based strategies to reduce the barriers to testing due to stigmatisation, discrimination and criminalisation;
- Collaboration and coordination across borders and cross-sectoral collaboration between clinicians, affected communities, program implementers and policy makers;
- Evidence-based testing and treatment guidelines across Europe.

ABSTRACT 12

Routine Voluntary HIV Testing in the Emergency Room - Making the 'Routine' a Reality

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OBJECTIVE: In response to increased local testing initiatives, updated CDC guidelines and changes to New York State laws mandating routinely offered voluntary HIV testing in medical care settings, a Bronx hospital emergency department (ED) expanded their video enhanced HIV rapid testing (RT) model. This study compares differences in the ED patient populations accepting video enhanced RT to those with blood drawn for routine, non-HIV related purposes and estimates the additional patients that could be reached if testing were expanded to include every individual with blood drawn.

METHODS: Standard bivariate methods were used to compare characteristics of patients accepting HIV RT vs. patients with blood drawn in the ED from December 1, 2009-January 20, 2010.

RESULTS: 8,347 unique individuals aged 13+ made 9,674 visits to the ED during the analysis period with 60% of patients approached for RT. 197 (2.4%) of patients matched to the NYC HIV registry indicating previous diagnosis, with enhanced RT newly diagnosing 5 patients during the analysis. 21% (1,724) accepted RT; 43% (3,597) had blood drawn. 27% (974/3,597) of patients with blood

drawn also accepted RT. Rapid testers were more likely to have chief complaints of allergy (1.4% v. 0.6%), injury (12.9% v. 9.3%) and pain (21.0% v. 12.9%) than patients with a blood draw, while phlebotomized patients were more likely to have cardiac (8.6% v. 5.1%), metabolic (1.8% v. 0.5%), neurological (8.2% v. 4.6%), and psychological (7.0% v. 1.7%) chief complaints when compared to rapid testers. There were significant differences by race/ethnicity and age between rapid testers and those with blood drawn (p<0.0001). Among rapid testers, 52% were Hispanic and 6.7% were white, compared to 44.8% and 10.1% respectively among patients with blood drawn. Patients with blood draws were significantly older (51.4% over 44 years old) than persons accepting RT (25.6% over 44).

CONCLUSIONS: While expanded voluntary RT in the ED tested a significant proportion of patients, blood draws represented an important adjunct opportunity to reach older, sicker patients. In NYC, 25% of new concurrent (i.e. late) HIV/AIDS diagnoses occur among persons over 50. This combined with the high known ED HIV prevalence and the 5 new positives found by RT indicate that the ED is an important venue for diagnosing HIV. Utilizing both enhanced RT and voluntary testing of remnant serum from routine blood draws in EDs could potentially double voluntary testing in this setting, reaching previously untested patients, and further normalizing HIV testing.

ABSTRACT 13

ACTS: The Right Tool for the Job How Streamlining HIV Screening and Engaging Providers to Test is Helping the Western Cape of South Africa Routinize HIV Testing

PE AS

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OBJECTIVE: HIV/AIDS is South Africa's greatest health scourge yet HIV testing is not routinely offered in the clinics where most South Africans access care. Instead, HIV testing is tasked to counsellors using a 20-45 minute pre-test

procedure that limits productivity to about 8 patients tested/day. In the United States, HIV testing in clinical settings is often delivered in a similar manner. In both countries, marginalizing providers from HIV testing causes countless missed opportunities to identify HIV+ individuals and link them to care. An innovation in HIV testing that streamlines the process so providers could integrate it into routine care dramatically improves HIV diagnosis and treatment and could reduce further growth of the epidemic.

METHODS: ACTS (Advise, Consent, Test, Support) is an HIV testing innovation that features: streamlined HIV counselling, task-shifting that engages providers to test, and comprehensive practice change support. In partnership with health department and clinic level management, ACTS is systematically changing the way HIV screening is delivered in public health facilities through innovative buy-in (district-wide ACTS working groups); implementation planning (site-specific plans); trainings (peer-led learning and multimedia tools); on-site mentoring; and better analysis and use of existing HIV testing data.

RESULTS: A 2008 pilot of ACTS in Cape Town's Tygerberg sub-district achieved a doubling of the proportion of adult population tested (11% to 24%). Consequently, in June 2009 the Western Cape Province Department of Health rewrote its HIV testing policy to encourage provider-initiated counselling and testing (PICT) and chose ACTS to lead the implementation of PICT in all 480 of its public health facilities. Within a year, the five of eight Cape Town Metro sub-districts implementing ACTS increased numbers tested by an average of 39% (greatest gains from nurses newly offering HIV testing) and identified 11,379 HIV positive clients versus 9,115 diagnoses the year before, a 25% increase. HIV positive patients diagnosed by a provider showed better linkage to care than patients diagnosed by a counsellor.

CONCLUSIONS: Despite initial fears of more work (providers) and obsolescence (counsellors), the public health sector can embrace a paradigm shift in HIV screening. Patients visiting clinics for other services overwhelmingly agree to HIV testing when their provider recommends and delivers it. As national policies in South Africa change to support routine screening, ACTS provides a successful and highly-adaptable model for achieving this goal using existing



clinical resources. These lessons are applicable to HIV testing practice change initiatives in the United States.

ABSTRACT 14

Will Patients Perform a Self-test for HIV in an Emergency Department Setting? Feasibility, Acceptability and Accuracy



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OBJECTIVE: To evaluate the feasibility, acceptability, and accuracy of having Emergency Department (ED) patients perform a rapid, point-of-care (POC) self-test for HIV before routine HIV testing.

METHODS: In an ongoing study, beginning July 2010, patients attending the ED were recruited to volunteer to perform a rapid POC HIV self-test in conjunction with the standard-of-care HIV POC test, as part of routine ED screening. The self-test offered was the OraQuick Advance (oral fluid) test, OraSure Technologies, Inc. Consented patients were offered the self POC HIV test prior to the confirmatory routine standard-of-care HIV test to eliminate bias from prior testing experience in having the test performed by a health-care professional. Patients aged 18-64 years without a previous HIV diagnosis were eligible. Acceptability and ease of use was assessed by a questionnaire.

RESULTS: We approached 143 patients approached for testing, 138 (96.5%) consented to perform a self POC HIV test. Of 138 patients performing a self-test, 100% had concordant results with those obtained by the health-care professional. Three were newly found to be HIV positive. Three did not complete questionnaires. The median age was 40.0 yrs, 61% of patients were female, 82% % were African American, and 17 % were White. 99% of patients believed the rapid POC self-test was "definitely" or "probably" correct, 94% of patients "trusted the results" of the self-test

"very much". Interestingly, 100% reported that "overall" it was "easy or somewhat easy" to perform the test. When asked "Do you think you would recommend to a friend that he/she test himself/herself for HIV?", 98% reported they would "definitely" or "probably" recommend self-testing. Of patients, 99% would "probably" or "definitely" test themselves at home if the rapid HIV test were available over-the-counter for purchase. Approximately 50% of patients were willing to pay up to a maximum of \$10 for the test, whereas only 18% would pay up to a maximum price of \$30. Overall, 53% of patients preferred self-testing and 35% preferred health care professional testing, (p<0.05). For location of testing, 42% preferred home self-testing and 48% preferred clinic/ED testing.

CONCLUSION: A significant proportion of patients offered POC testing in the ED agreed to perform a self HIV test. Patients' results were concordant with those obtained by research assistants; 2.2% were HIV positive. The majority of participants believed their results. A greater number of patients preferred self-testing. There was no significant difference for preference of self-testing location.

ABSTRACT 15

Using Point of Care HIV Testing Technologies to More Rapidly Detect HIV Infection and Link Clients to Primary Care

PE AS ST

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OBJECTIVE: Utilize advances in HIV testing technologies and improve the ability of point of care testing sites to detect HIV infection, including acute infection, and link persons with HIV to primary care settings.

METHODS: Working in collaboration with the San Francisco Department of Public Health, the Centers for Disease Control and Prevention, and private corporations, Magnet—a program of SFAF— has implemented a



number of new and emerging HIV testing technologies into a community-based sexual health center for gay men to maximize detection of new HIV infections and to optimize linkage to care. Magnet provides rapid oral fluid using Ora-Quick Advance to more than 4,000 clients annually. Magnet and SFDPH have implemented a Rapid Test Algorithm to provide same-day verification for persons with a preliminary positive diagnosis and to link persons immediately to care. Men presenting with recent and elevated behavioral risk are offered an HIV RNA test with specimens collected on site and processed at the SFDPH Laboratory. Magnet is also one of six sites nationwide participating in a Randomized Clinical Trial to assess the feasibility of providing 4th generation rapid HIV antibody and antigen testing (Determine) at point of care testing sites. Additionally, Magnet is one of the sites participating in a study with the SFDPH titled "Screening Targeted Populations to Interrupt On-going Chains of Transmission with enhanced Partner Notification," funded by the CDC.

RESULTS: Uptake in HIV testing at Magnet has far exceeded expectations and capacity. Consumer interest and demand for point of care testing remains very high. Magnet provides over 4,000 HIV Ora-Quick antibody tests annually with an annual incidence rate of 1.5% - 2.0%. In 2009, 840 clients were screened using HIV RNA testing and 8 (.95%) were identified as acute or recent infections. More than 70% of HIV-positive clients were successfully linked with a primary care provider.

CONCLUSIONS: Point of care testing at community-based HIV testing sites is an effective means of identifying persons with HIV infection and linking them into care. Advances in HIV testing technologies increase the uptake in testing and can more rapidly diagnose persons with HIV than can conventional delay-based testing.

ABSTRACT 16

Expanded HIV Rapid Testing in Emergency Departments (ED) – Chicago, Illinois 2007-2008

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OBJECTIVE: The Chicago Department of Public Health initiated an expanded HIV testing project in 4 urban EDs in October 2007. Objectives were to increase routine HIV testing, increase the number of people aware of their HIV status, identify persons with HIV infection, and facilitate linkage to care to reach Blacks living in high incidence communities.

METHODS: Project implementation was facilitated in EDs with prior HIV testing experience; two EDs initiated new testing programs. HIV testing integration relied on engaging key organizational stakeholders and working closely with ED and hospital staff at all stages of project development. Hospitals selected the HIV rapid test administered by health educators in the ED. Health educators provided pre-test information, administered the test, provided test results, and facilitated confirmatory testing, referral and linkage services.

RESULTS: In the first 2 years, more than 44,000 HIV tests were performed. In year two, 32,269 tests were done, and identified 195 (0.6% positivity) confirmed HIV cases. Persons tested were 48% were female, 72% Black, and median age was 56 (range 11-101). Among HIV-infected persons where risk was known, 38% (46/120) were MSM, 38% (46/120) female, 23% (28/120) heterosexual male, and 7% (14/195) reported IDU. Implementation themes were integrating testing into ED flow and working with hospital departments. Training, TA, and continuous quality improvement were integral to successful project implementation.



CONCLUSIONS: Implementation of routine rapid HIV testing programs in ED settings is feasible, and reaches a population at risk. Programs identify a large number of HIV infected persons in emergency medical care who might have been missed if testing were not available, and create opportunities for HIV prevention education, awareness, and early disease intervention that facilitate efforts to increase the number of people who know their status.

ABSTRACT 17

Effect of Implementing Rapid HIV Antibody Testing Instead of Initial Conventional EIA Testing in a Clinical Laboratory

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OBJECTIVE: In 2007, the San Francisco General Hospital Clinical Laboratory changed methods for initial screening of patient specimens for HIV-1 antibody from a conventional enzyme immunoassay (EIA) to a rapid assay. This change was prompted by requests for a faster turn-around-time (TAT) for results from clinics and hospital locations, particularly the emergency department (ED), and, also, in anticipation of a large increase in test volume from the ED in response to the 2006 CDC recommendations.

METHODS:

- In February 2007, the Clinical Laboratory switched from a conventional tray EIA method (Vironostika, bioMerieux) to a rapid, immunochromatographic test (Uni-Gold Recombigen, Trinity Biotech) for initial HIV antibody testing.
- The rapid test takes approximately 15 minutes to complete while the EIA method took several hours to complete.
- Instead of EIA testing, which was performed 3 days/ week, rapid testing is currently performed every 2 hours (24 hours/day, 7 days/week.).

- Due to simplicity of rapid testing, clinical laboratory scientists on all shifts have been trained to perform the test.
- Initial reactive EIA results were not reported until the EIA was repeated in duplicate with immunofluorescent antibody confirmatory testing. Reactive rapid test results are immediately reported as "preliminary positive".

RESULTS:

- For the six months prior to the change from conventional EIA to rapid HIV antibody testing, an average of 573 specimens were tested per month (31 confirmed positive/month).
- For the first six months after the change to rapid testing, an average of 882 specimens were tested per month (47 confirmed positive/month). This represented a 54% increase in total HIV testing.
- Continued use of the rapid test has led to further expansion of testing. In the first 6 months of 2010, an average of 1767 specimens were tested each month.

CONCLUSIONS: By changing the screening method for HIV-1 antibody from a conventional EIA test to a rapid test, the SFGH Clinical Laboratory has been able to 1) significantly decrease TAT (receipt of specimen in the lab to test results in the computer) from 2-5 days to 2 hours, and 2) increase test volume from approximately 600 specimens/month to over 1700 specimens/month without additional laboratory staffing. Reporting reactive HIV antibody results as 'preliminary positive' facilitates patient notification and improves linkage to care.

ABSTRACT 18

Successful HIV Testing Models From a Large Public Hospital System



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OBJECTIVE: In 2006, following changes to HIV counseling regulations, funding reimbursement, advancements in rapid test technology, and a pilot test within Emergency Departments in five public hospitals, the New York City



Health and Hospitals Corporation (HHC) established the HIV Testing Expansion Initiative (HTEI). The HTEI was initiated across 17 HHC facilities, representing the largest single HIV testing campaign within a U.S. public hospital system. HHC facilities were provided planning support and partial funding, HIV testing targets were established, and financial incentives distributed based on target achievement. Facilities were required to report monthly and provide testing in outpatient, inpatient, and emergency venues. The process of implementation was not prescribed and facilities established individual implementation plans based on the specific needs and factors of the care sites. This study reviews a sample of the more successful testing models established, provides flow charts detailing the testing process, and trends the achievement over four years.

METHODS: The HTEI required HHC facilities to expand testing to three venues – inpatient, outpatient and emergency departments. This study reviewed processes from seven facilities, representing large and small acute care hospitals as well as community diagnostic and treatment centers. Within these facilities, sample testing models for two inpatient and emergency departments are reviewed, along with four outpatient care sites, including specialty and primary care clinics. The following information was evaluated for each site: patient flow; consent process; process for recommending an HIV test to the patient; administering HIV test; provision of results; and documentation. The roles and connections between staff throughout these processes are also examined.

RESULTS: Across HHC, the number of unique individuals tested grew annually; from ~50,000 to 92,123 in FY06, and 187,732 in FY09. From FY06 to FY09 over 3,000 persons were newly diagnosed and over 60% of all diagnosed patients were linked to HIV primary care within the month of diagnosis; over 90% within 90 days of diagnosis. In FY09: 31.14% of unique inpatients were tested for HIV at Harlem Hospital; 15.73% of unique patients visiting the Emergency Department were tested for HIV at Elmhurst Hospital; and an overall average of 22% of unique patients visiting the Outpatient Department at Harlem, Kings County Hospital, and Coney Island Hospital were tested for HIV.

CONCLUSIONS: Expanded HIV screening can be incorporated into a variety of care venues and sites. Successful HIV screening programs incorporated testing

into the established facility processes utilized existing staff and provided supplemental HIV expertise from the HIV Service to support efforts.

ABSTRACT 19

Transitioning from Risk-based to Routine Testing – A Descriptive Study of the Implementation of a Large Public Hospital System's HIV Testing Expansion Initiative (HTEI)

AS

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OBJECTIVE: Prior to 2005, the New York City Health and Hospitals Corporation (HHC), comprised of 11 municipal hospitals and 6 large community clinics which annually provides care for 1.3 million individuals, HIV tested ~50,000 individuals annually. HIV testing was offered primarily to pregnant women and individuals with perceived risk, a practice that reinforced HIV stigma. In 2006, HHC implemented the HIV Testing Expansion Initiative (HTEI), shifting testing from risk-based to routine offering. Within the first four years of the HTEI, over 500,000 individuals have been tested for HIV.

METHODS: In 2006, following changes to HIV counseling regulations, funding reimbursement, and advancements in rapid test technology, HHC conducted a testing pilot within Emergency Departments (EDs) in five public hospitals. The pilot substantiated use of routine HIV testing in EDs, the benefits of testing patients without perceived risk, and the ability to swiftly link patients to care. The following year the HTEI was initiated across 17 HHC facilities; planning support and partial funding were provided, HIV testing targets were established and financial incentives distributed based on target achievement. Facilities were required to report monthly and provide testing in outpatient, inpatient, and EDs venues.

RESULTS: The number of unique individuals tested grew annually; from ~50,000 to 92,123 in FY06, and 187,732 in FY09. From FY06 to FY09 over 3,000 persons were newly



diagnosed and over 60% of all diagnosed patients were linked to HIV primary care within the month of diagnosis; over 90% within 90 days of diagnosis.

CONCLUSIONS: Transferable lessons include, the importance of: leadership support; facility-based champions; consensus-building; financial support; and individualized facility plans within an initiative-wide structure. A standard M&E system allowed for uniform tracking of achievement. Testing targets supported by incentives allowed for innovation and success.

ABSTRACT 20

Comparison of Patient Understanding of Opt-out and Opt-in Consent for Performing Routine Rapid HIV Screening in the Emergency Department

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OBJECTIVE: The Centers for Disease Control and Prevention recommends routine opt-out HIV screening in emergency departments (EDs) where the undiagnosed prevalence is = 0.1%. Obtaining informed consent is a critical first step of HIV screening; however, the optimal method for obtaining consent remains unclear. Kiosks have been used to facilitate consent for HIV screening but patient understanding remains uncertain. The objective of this study was to assess patient understanding of opt-out and opt-in consent for rapid HIV screening when using triage-based kiosks in an ED.

METHODS: Design: Cross-sectional survey nested in a prospective cohort study. Setting: An urban ED using standardized multi-lingual triage-based kiosks to obtain opt-out or opt-in HIV consent as part of a fully-integrated non-targeted rapid HIV screening program. Opt-out and opt-in screening were performed during sequential one month time periods. Survey: A closed-response survey was developed and administered by a trained research assistant.

Population: All adult ED patients who were not critically ill, did not have altered mentation, and could provide informed consent were eligible. Sampling: Ten randomly-selected 6-hour time blocks during each study period.

RESULTS: During the opt-out period, 330 patients met eligibility and completed the survey, and during the optin period, 424 met eligibility and completed the survey. The two groups were similar with respect to age, sex, race/ ethnicity, primary language, and educational background. Opt-Out Period: Of the 330 patients, 201 (61%) agreed to HIV testing using the kiosk. Of these, 108 (54%, 95% CI 47%-61%) did not know they had been informed about testing, and of these, only 75 (69%, 95% CI 60%-78%) reported they still would have agreed to testing had they known. Of 84 patients who knew they were informed about HIV testing using a kiosk and had agreed to testing, 32 (38%, 95% CI 28%-49%) did not believe they had agreed to an HIV test. Opt-In Period: Of the 424 patients, 76 (17%) agreed to HIV testing using the kiosk. Of these, 2 (2%, 95% CI: 0%-9%) did not know they had been informed about testing, and of these patients, 72 (97%, 95% CI: 91%-100%) knew they had agreed to an HIV test.

CONCLUSIONS: Patient understanding of HIV testing consent using an opt-out approach is poor when compared to an opt-in consent approach. Use of an opt-in consent approach to HIV screening resulted in very little misunderstanding and should be adopted as the primary means for obtaining consent.



Derivation and Validation of an Instrument to Identify Patients with HIV Infection

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OBJECTIVE: In the United States, approximately 230 000 people are infected with HIV but remain undiagnosed and 56 300 new infections occur annually. Targeted HIV screening remains necessary for situations in which universal screening will not be used, and empirically-driven approaches are needed to maximize efficiency and effectiveness. The goal of this study was to derive and validate a risk-prediction instrument to help rapidly quantify patient risk for HIV infection and thus guide targeted HIV screening efforts.

METHODS: The risk score was derived from a large prospectively-collected database from the Denver Public Health STD Clinic in Denver, Colorado. Multivariable logistic regression was used to develop a risk score from 48 potential predictor variables, including historical and clinical characteristics from consecutive patients tested for HIV from 1996 through 2008, using newly-identified HIV infection as the dependent variable. The risk score was externally tested in an independent population from a large urban emergency department in Cincinnati, Ohio.

RESULTS: The derivation cohort included 92,635 patients with 504 (0.54%) diagnosed with HIV infection. The test cohort included 22,983 patients with 168 (0.73%) diagnosed with HIV infection. The derived risk score included age, gender, race/ethnicity, sex with a male, vaginal intercourse, anal intercourse, injection drug use, and a past HIV test, and ranged from -15 to +76. Internal validation and external validation resulted in excellent calibration (Hosmer-Lemeshow p-value = 0.70 and 0.47, respectively)

and discrimination (area under the receiver operating characteristics curve = 0.86 and 0.75, respectively). HIV seropositivity was 0.29% (95% confidence interval [CI]: 0.20%-0.41%) for those with a score <20, 0.47% (95% CI: 0.32% - 0.66%) for those with a score of 20-29, 1.33% (95% CI: 0.89% - 1.91%) for those with a score of 30-39, 1.64% (95% CI: 1.06% - 2.04%) for those with a score of 40-49, and 3.86% (95% CI: 2.89% - 5.05%) for those with a score =50.

CONCLUSIONS: In the test cohort, the derived risk score successfully categorized patients into groups with increasing probabilities of undiagnosed HIV infection. This score may help healthcare providers identify patients who would benefit most from directed HIV testing, thus helping to streamline HIV screening approaches.

ABSTRACT 22

Routine Testing in the Primary Care Setting in a Large Network of Community Health Centers

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OBJECTIVE: Develop a model for the integration of routine testing and post-test counseling in a primary care setting to identify infected patients more quickly and to easily link them to specialty care.

METHODS: Staff in each of 17 community health centers were trained to include HIV testing as part of their routine assessments at the beginning of a primary care and dental visits. Rapid HIV oral testing was administered by nurses and medical assistants and results were given by medical assistants, nurses, and primary care providers. Data was collected on the number of tests performed and positive results. All HIV-positive patients were linked to care and data was collected on their CD-4 count at diagnosis and the time it took until the first visit addressing the new diagnosis.

RESULTS: Quantitative Results:

 7,652 rapid tests were performed from July 2008 until July 2010



- 20 positive tests, 18 confirmed positive tests
- Average time to visit with HIV specialist after confirmatory test results received 22.4 days; median time 9 days.
- 3 patients were lost to follow up.
- Average CD4 count was 297 at diagnosis (range: 12 590)

Qualitative Results:

- Staff learned to integrate testing into routine visits and all staff became more comfortable with asking patients if they would like testing on a routine basis.
- Linkage to care was facilitated and reinforced.
- We found that performing the test in the exam room facilitated testing and reinforced that testing is another vital component to assessing their health (similar to checking BP and HR).

CONCLUSIONS:

- HIV testing in the primary care setting in a large network of community health centers was a successful way of identifying patients with HIV.
- Linkage to specialty care was facilitated by testing within a primary care setting.
- Plans for expanding rapid, community-based, walk-in and routine primary care screening for hypertension and pregnancy were also developed based on this model.

ABSTRACT 23

Understanding No: Why People Opt Out of HIV Testing in the Emergency Department

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OBJECTIVE: Twenty percent of HIV infections in the U.S. are undiagnosed. Rapid opt-out testing in the Emergency Department (ED) may help identify new cases, but relatively low seroprevalence rates have been found in this setting. Persons who opt out of testing appear to have higher

prevalence rates and therefore represent important targets for testing.

METHODS: Free, rapid opt-out HIV testing was introduced in the Duke University Medical Center ED in December, 2008. Trained counselors offer testing to persons in the ED age > 18 years who are not known to be HIV-infected using the OraQuick Advance® Rapid HIV-1/2 antibody test. Positive tests are confirmed by Western Blot. Reasons why testing is declined are categorized into 6 possible groups: too sick, recently tested, not perceived at risk, not interested/scared, other, and no reason given.

RESULTS: 1,662/2,653 (63%) of persons offered testing accepted, resulting in 4 new HIV diagnoses. Of the 991 patients who declined testing, demographic information and reason for decline was available for 902 patients (91%). Over time, being recently tested became the most common reason for declining testing (38.7%). Other reasons were: not interested/scared (23.6%); not perceived at risk (21.2%); too sick (13.3%); no reason given (1.4%); and other (1.8%). Significant differences in reasons for declining testing were identified based on gender, ethnicity, and age Men (were more likely than women to decline due to disinterest or fear of testing [104/378 (27.5%) vs. 109/524 (20.8%); p= 0.0237]. As the most common reason to decline, recent testing or perception of being not at risk were equally likely to be reported by whites [127/413; (30.7%) vs. 121/413 (29.3%)], while blacks were more likely to decline after reporting that they had been recently tested (209/450; 46.4%). Younger patients (age <45 years) were also more likely to have been recently tested (272/562; 48.4%) while older persons (age >46 years) more often declined testing because of disinterest/ fear of testing (106/340; 31.2%) or not perceiving themselves to be at risk (96/340; 28.2%).

CONCLUSIONS: Understanding why persons opt out of HIV testing is a key first step to improving HIV testing program acceptance. Reasons differ by age, gender and ethnicity, suggesting individualizing pretest counseling may address specific concerns. As testing programs mature, previous testing becomes a more common reason for declining testing. A programmatic approach should help diminish inappropriate candidate selection.



Evaluation of Kiosk-based Opt-out and Opt-in Rapid HIV Screening for Unscheduled Ambulatory Care

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OBJECTIVE: The Centers for Disease Control and Prevention recommends routine (non-targeted) optout HIV screening in most healthcare settings, including emergency departments (EDs) and urgent care centers (UCCs). A number of institutions have implemented these recommendations using a variety of operational models. Few have utilized or evaluated innovative technologies such as self-serve kiosks to offer rapid HIV testing. The purpose of this study was to assess acceptance and evaluate the performance of non-targeted rapid HIV screening using opt-out and opt-in approaches as part of multi-lingual kiosks in an ED and UCC.

METHODS: Design: Prospective cohort study. Setting: An urban teaching hospital with an annual adult ED and UCC census of 85,000 patient visits. Program: In October and December 2009, patients =13 years old presenting to the ED or UCC at Denver Health Medical Center were offered rapid HIV screening. These patients were asked to sign into a computerized kiosk during the medical screening process, and if the patient was =13 years old, an additional prompt appeared that offered a rapid HIV test using either opt-out (October) or opt-in (December) consent language. Confirmation of consent was obtained by nurses after the patient was placed in a treatment room and prior to obtaining blood for the test. Outcomes: Number of patients who accepted testing, number of patients who completed testing, and number of patients with newly-identified HIV infection.

RESULTS: During the opt-out phase, 5,790 eligible patients presented to the ED or UCC and 5,551 (96%) were offered rapid HIV testing. Of the 5,551 patients offered testing, 3,365 (61%) did not opt-out, but only 884 (26%) completed testing. Of the 884 patients who completed testing, 3 (0.3%, 95% CI: 0.1%-1.0%) were identified with HIV infection. During the opt-in phase, 5,327 eligible patients presented

to the ED or UCC and 5,127 (96%) were offered rapid HIV testing. Of the 5,127 patients offered testing, 831 (16%) opted-in to a rapid HIV testing and 389 (47%) completed testing. Of the 389 patients who completed testing, 0 (0%, 95% CI: 0%-1.0%) were identified with HIV infection.

CONCLUSIONS: More patients agreed to rapid HIV testing when using an opt-out rather than opt-in consent approach in an unscheduled ambulatory care setting. However, a larger proportion of those who accepted testing actually completed testing when an opt-in approach was used. Opt-out HIV screening may be not be well understood by patients when offered using a sign-in kiosk system.

ABSTRACT 25

Project RUSH (Routine Universal Screening for HIV) – How the Harris County Hospital District Tested 78,000 Emergency Department Patients and Found 493 New HIV Diagnoses



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OBJECTIVE: Establish a sustainable, routine HIV testing program in the two hospital emergency centers of the Harris County Hospital District and link those with positive diagnoses to primary HIV care.

METHODS: Using standard blood testing performed on a "rapid" basis, we tested all patients between ages 16 and 64 who did not opt out and who were having blood drawn in one of our two hospital emergency centers. HIV Service Linkage workers met with patients who tested positive to deliver their test results and to help them enroll in primary HIV care and to receive other services.

RESULTS: From October 2008 through June 2010 we tested 78,319 patients. Seroprevalence of the total population tested was 1.94% (n=1,519). Prevalence of new positives

was 0.63% (493). 965 (1.23%) opted out of testing. LBJ consistently had higher opt-out rates and higher prevalence rates than those found at Ben Taub. Opt out rates fluctuated over time at both sites. Forty-five percent of newly diagnosed patients were successfully linked to primary HIV care in an HCHD facility, with others requesting referral to outside clinics. Nine patients died or moved out of town before being linked to care. Seropositivity of new diagnoses at Ben Taub has decreased from 6.40/1000 to 3.36/1000 over the 21 months studied. At LBJ, it has decreased from 9.30/1000 to 3.33/1000.

CONCLUSIONS: Opt-out screening using standard nonrapid technology rather than rapid testing is feasible in a busy, urban ED. This method of HIV screening has cost benefits and a low false positivity rate, but aggressive followup and referral of newly diagnosed patients for linkage to care is required. Over time, the yield of new positives has decreased, indicating the effectiveness of our strategy on the communities served by our hospitals; however, it is still well above the recommended threshold for routine testing.

ABSTRACT 26

Demographic Factors Associated with Absence of HIV Testing in Emergency Department (ED) Patients with Repeat Visits, in an ED with a Nontargeted HIV Testing Program

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OBJECTIVE: To determine demographic factors associated with absence of receipt of a rapid HIV test in an academic inner city emergency department (ED) among patients with more than one ED visits/year.

METHODS: An ED-based non-targeted rapid HIV testing (OraQuick Advance, oral fluid) program using exogenous staff, i.e. facilitators, with indigenous medical staff covering off-hours was instituted in an academic inner-city adult ED which had approximately 60,000 annual visits. A retrospective matched case control study evaluating performance (or not) of HIV testing during ED visits from

September 2008 to August 2009 was conducted. A case was defined as an ED patient who tested for HIV > 1 time during the study period. A control was defined as an ED patient who visited the ED > 1 time during the study period but were not tested for HIV. Acuity level I and II patients were excluded due to our HIV program guidelines for testing. One control was systematically sampled for each case by matching the date and time (during the hours of facilitated testing) for the first ED visit of the case. A control was excluded if they were found to be known HIV positive and a new control was selected using the same method. Age, gender, and race were collected from electronic patient record system. Conditional logistic regression analysis was performed.

RESULTS: During the 1 year study period, there were 7,353 ED patients with > 1 ED visit categorized with acuity levels of III to V. One hundred and ninety-nine were tested for HIV > 1 time. The distributions of demographic variables were significantly different between subjects with multiple tests vs. controls (female: 52% versus 64%, p<0.05; 05; age < 30 years: 23% versus 36%, p<0.05). In the multivariate regression analysis, age < 30 years (OR=2.17, 95% CI: 1.31, 3.57) and female (OR=1.74, 95% CI: 1.12, 2.71) were associated with increased odds of absence of rapid HIV test performance.

CONCLUSIONS: Younger than 30 years, female noncritical ED patients who frequently visited this ED were identified as subgroups with no rapid HIV tests performed, even though a rapid HIV testing program had been in place for more than 3 years. A tailored strategy to improve testing acceptance for these groups is imperative since both groups are conventionally thought to be higher risk groups for unrecognized HIV.



Integrating HIV Clinical Services into Primary Care Settings: An Approach and Considerations

PE AS

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OBJECTIVE: To integrate HIV clinical services into primary care in non Ryan White funded settings. As HIV has moved into the chronic disease category, many primary care providers recognize that referral is not a long term solution and to ensure they can provide a medical home to clients living with HIV, they must expand their practical knowledge and service systems. Moreover, primary care settings have become the focus of federal and state health care reform efforts.

METHODS: From 2006 to 2010 HealthHIV has provided technical assistance (TA) and capacity building assistance (CBA) to over 140 organizations nationwide in clinical and infrastructure areas supporting the integration of HIV into primary care services. Organizations have included Community Health Centers, Federally Qualified Community Health Centers, AIDS Service Organizations, and others providing primary medical care to underserved populations.

RESULTS: HealthHIV has developed an approach for integrating HIV clinical services into primary care settings with tailored technical assistance to various primary care sites. HealthHIV's approach includes building key service elements, developing an HIV services integration model, and creating a work plan of potential steps for implementation. Important factors to consider during integration of these services are: characteristics of the organization integrating HIV into its service mix, existing community HIV resources, and needs of the population to be served. While each step requires the addition of clinical and support services, important factors such as stigma, cultural competency, and health literacy need to be addressed when integrating HIV clinical services into primary care settings. Without training on relevant theory, measures, and tools, primary care sites that may have the necessary clinical capacity to provide HIV

services may miss opportunities to provide culturally and clinically appropriate care to persons likely to have difficulty accessing and navigating HIV and health services.

CONCLUSIONS: HealthHIV has documented factors that facilitate and impede the development of sustainable HIV clinical services in the primary care setting. Facilitating factors include following HealthHIV's approach, full organizational buy-in, as well as understanding and providing culturally competent service to the population to be served.

ABSTRACT 28

One Model Doesn't Fit All: Implementation of Routine HIV Testing in Two South Los Angeles Clinics



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OBJECTIVE: In support of the 2006 Centers for Disease Control and Prevention (CDC) Revised Recommendations for HIV Testing, the Office of AIDS Programs and Policy (OAPP) in collaboration with UCLA implemented a routine HIV testing demonstration project. The goals of the project were to (1) implement routine, rapid HIV testing for patients presenting at two adult medicine clinics in South Los Angeles, (2) evaluate opt-in vs. opt-out models by both physicians and nurses, and (3) evaluate patient acceptance rates in each routine testing model.

METHODS: Routine, rapid HIV testing was implemented in three phases, physician initiated opt-out screening, nurse initiated opt-out screening and nurse initiated opt-in screening at two clinics that serve predominantly African-American and Latino patients. During each phase, patients were surveyed to collect information regarding HIV test offer, test acceptance, attitudes toward testing, and demographic information.

RESULTS: Between January and July of 2010, 3,412 patients were offered HIV testing of whom 1,984 accepted (58%).



Overall acceptance rates of the HIV test was lower at Clinic A (48%) compared to Clinic B (87%). Table 1 describes the number of tests performed and acceptance rate by clinic for each model.

Table 1: HIV Testing and Acceptance by Testing Model and Clinic

HIV tests offered (no.)	HIV tests accepted (no.)	Acceptance rate* (%)
796	460	57.8
851	353	41.5
885	405	45.8
2,532	1,218	48.1
391	332	84.9
319	277	86.8
170	157	92.4
880	766	87
	offered (no.) 796 851 885 2,532 391 319 170	offered (no.) accepted (no.) 796

^{*}Denominator=total number accepted by site in each phase

Three patients tested HIV+, and all three had positive confirmatory test results. Two of the 3 patients testing HIV+ were linked directly to HIV care. One patient testing HIV+ was lost to follow up.

CONCLUSIONS: Implementing routine testing at primary care clinics in an urban area of high HIV burden in Los Angeles County is feasible. Data showed that the model of testing with the highest acceptance rate varied by site. Experiences during the project revealed that clinic factors (physical space, clinic flow, staff/nurse/physician engagement and buy-in) at the leadership level have potential to influence the overall number of tests offered, as well as determine the most successful model of HIV testing at a given site. To optimize routine HIV testing in primary care settings, addressing these factors prior to and during implementation are critical to program performance and sustainability.

ABSTRACT 29

Home Self-Testing for HIV in MSM: Design of an Ongoing Randomized, Controlled Trial

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OBJECTIVE: To determine whether the availability of home self-testing for HIV using oral fluids will increase HIV testing frequency among men who have sex with men (MSM) without increasing their risk for HIV acquisition. We will also assess the acceptability, ease of use, and accuracy of home self-testing among MSM.

METHODS: 246 HIV-negative, high-risk MSM are being randomized in a 1:1 fashion either to have access to home self-testing for HIV using the OraQuick ADVANCE® Rapid HIV-1/2 Antibody Test on oral fluids or to standard, clinic-based HIV testing for 15 months. Enrollment began in September 2010. After initial screening, participants complete a self-administered computer-based questionnaire regarding HIV testing and risk behaviors, receive HIV/STI screening, and are randomized to home or standard testing. Participants are educated regarding window periods and symptoms of acute infection, encouraged to test quarterly, and offered testing reminders. Those randomized to home self-testing are trained to conduct their own tests and receive a home self-testing kit (including a rapid test, instructions, and counseling and referral materials), which can be replaced as needed over the course of the study by mail or at study offices. During follow-up, all participants test for HIV at locations of their choosing and complete brief online surveys after each HIV test. A 24-hour contact is available for counseling, referrals, and technical assistance. At 15 months, participants will return to study offices for HIV/ STI screening and end-of-study questionnaires.

RESULTS: We will compare the number of HIV tests at any site during follow-up, self-reported sexual risk behaviors at 9 and 15 months of follow-up, and the prevalence of bacterial STIs identified at 15 months between the two arms. Summary statistics of the acceptability and ease of use of OraQuick at home, as well as descriptions of calls to the 24-hour contact, will be presented. The sensitivity,



specificity, predictive values, and number of invalid tests will be reported as a measure of the performance of home self-testing.

CONCLUSIONS: Home self-testing for HIV has the potential to increase testing and therefore decrease the time HIV-infected individuals are unaware of their status and their potential for transmission; however, there are concerns about misinterpreting test results and increasing risk behaviors in the absence of counseling. This ongoing study is designed to assess the impacts of home self-testing in order to determine whether providing free access to these tests could be effectively employed as an intervention by public health HIV prevention programs.

ABSTRACT 30

Patient Perception of Whether an HIV Test Was Provided During the ED Encounter

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OBJECTIVE: Patient awareness and understanding of their own HIV testing history has broad implications. Misperception of whether an HIV test has been performed may be particularly common in emergency department (ED) settings. We investigated whether patients perceived having received an HIV test during their ED visit when in fact an HIV test had not been given. We secondarily explored factors that might be associated with misperception.

METHODS: This cross-sectional survey was conducted in an urban, academic ED housing an ongoing HIV counseling and testing program that uses trained patient counselors. The program tests about 5% of the ED population. A convenience sample of ED patients were enrolled at times when the testing program was not in operation and after the treating physician had made the disposition decision. We recorded patient demographics, medical services provided including whether the medical staff had conducted and HIV test, self-reported HIV risks and knowledge, and patient perception of whether or not they had received an ED HIV test.

RESULTS: Mean age of the 300 respondents was 41; 51% were male; 61% were Black, and 29% of patients had no high-school degree. 23 had received an ED HIV test and 276 had not. Of the patients that did not receive an HIV test, 5.8% (95% CI 3.5%-9.4%) erroneously reported that they had been tested in the ED. Of patients falsely reporting receipt of an ED HIV test, 69% were black, 19% did not have a high school degree, and 13% reported HIV risk factors occurring within the prior year. As part of their ED clinical care, all had blood drawn, and 94% had medical imaging.

CONCLUSIONS: A small but significant minority of ED patients falsely assume that they have been tested for HIV during their ED visit. Patients with these false perceptions frequently had low levels of education, were minorities, and had received multiple ED services including venipuncture. This misperception might lead to lower levels of future testing, false reassurance for patients, and inaccuracies in epidemiological estimates that rely on patient self-report of prior testing. Our findings might differ from other EDs, particularly those that do not frequently test for HIV.

ABSTRACT 31

HIV Testing in Dental Settings in North Carolina



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OBJECTIVE: To assess the feasibility and acceptability of routine, opt-out HIV testing in dental settings in North Carolina.

METHODS: Adult and adolescent patients of the Gaston Family Health Services Dental Clinic were surveyed regarding their willingness to receive HIV testing in the



dental setting and desire to learn more about HIV. The North Carolina Dental Society's Missions of Mercy (NC MOM) mobile dental clinics and the UNC Student Health Action Coallition (SHAC) are collaborating to offer routine, opt-out HIV testing in mobile dental clinic events across North Carolina. Both dental programs will begin to offer HIV testing to their patients in early Fall 2010.

RESULTS: At the Gaston Dental Clinic, 142 adult and 25 adolescent dental patients were interviewed about HIV testing in the dental clinic setting. Many dental patients self-reported that they had never been tested for HIV (35% of adults, 52% of adolescents). Nearly 70% of both adults and adolescents were interested in receiving a rapid HIV test within the dental clinic. Only 6% of adults were opposed to HIV testing in the dental clinic; over 70% believed HIV testing in the dental clinic was a good idea and 24% were neutral. Over 40% of adults and 60% of adolescents expressed a desire to learn more about HIV.Both testing programs will perform routine rapid, opt-out HIV testing and will collaborate with the local and state health departments to provide confirmatory testing and linkage to HIV medical services. At the Gaston Dental Clinic, existing clinic and county health department staff will conduct all testing; at the NC MOM clinics, SHAC student volunteers will provide testing. It is expected that approximately 850 dental patients will receive HIV tests per month at the Gaston Dental Clinic; for a one-day NC MOM clinic in Greensboro, NC, up to 300 dental patients could receive HIV tests.

CONCLUSIONS: There is a need for increased HIV testing and education among dental patients in North Carolina. Dental patients appear to be accepting of HIV testing in the dental setting and expressed a strong desire to learn more about HIV. Collaborations between the HIV and dental communities can provide opportunities to offer HIV testing in unique clinical settings.

ABSTRACT 32

HIV Integration Project - Vista Community Clinic

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OBJECTIVE: In accordance with the CDC "Revised Recommendations for HIV testing of Adults, Adolescents and Pregnant Women in Health-Care Settings", Vista Community Clinic (VCC) implemented the Integration of HIV/AIDS Prevention Project in February 2008. VCC offered routine rapid HIV testing to all adolescent and adult patients ages 13-64 seeking family planning services in six clinic sites in order to foster earlier detection of HIV infection; identify and counsel persons with unrecognized HIV infection; and link them to clinical and prevention services.

METHODS: Prior to implementation of testing, VCC HIV testing procedures and clinic flow were reviewed. Rapid HIV testing was selected to ensure that patients received test results. During year one, routine opt-out HIV testing was pilot tested at one clinic site and then expanded to two additional sites. The VCC HIV testing Policy and Procedures, clinic flow, billing and testing procedures and documentation were revised. A data collection form and database were created to collect and report on data variables for patients who are offered an HIV antibody test. Training on "ABC" skill-building, cultural/linguistic competency, age appropriateness, and HIV prevention skill-building was conducted for family planning clinical staff at each site. Routine HIV testing was initiated at the remaining sites during year two.

RESULTS: Since implementation of routine opt-out testing, there has been a 62% increase of HIV tests performed, with over 6,500 rapid and standard HIV tests performed annually. To date, 24 confirmed HIV positive individuals have been identified through this project resulting in a higher than expected positivity rate of 0.15%. All confirmed HIV positive patients have been successfully linked to HIV Care Services.

CONCLUSIONS: The large number of confirmed HIV positive individuals indicates the continued need for routine HIV testing of family planning patients. Routine HIV testing



reduces the stigma associated with HIV testing and targets those who would otherwise never seek HIV testing. There is a need to improve the acceptance rate of HIV testing. It is necessary to continue to work with patients and clinical staff to further normalize HIV testing. In addition, the promotion of rapid HIV testing versus standard HIV testing is needed to ensure that patients receive their test results. The expansion of routine HIV testing to other patient populations, e.g. Family Medicine, would be extremely beneficial in fostering earlier identification and treatment of HIV infection.

ABSTRACT 33

Point-of-Care HIV Screening in an Urban, Safety-net Emergency Department: Implementation and Maintenance Costs

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OBJECTIVE: The Centers for Disease Control and Prevention recommends routine HIV screening for all patients presenting for medical care, including those presenting to emergency departments (EDs). Few reports enumerate costs of point-of-care (POC) HIV screening in the ED. The objective of this report was to detail the costs of implementing and maintaining an ED-based, POC HIV screening program, while also carrying out a sensitivity analysis, allowing our cost analysis to be more broadly applied.

METHODS: This descriptive cost analysis describes startup, operational and variable costs for an ED-based, POC HIV screening program; all aspects of testing were carried out by health educators on patients aged 18 to 64. We report our total program costs, cost per test, cost per new HIV case identified and cost per newly identified HIV patient linked to ambulatory care. In addition, we estimate these costs for varying rates of HIV prevalence, testing efficiency, successful linkage to care, and geography-related cost differences.

RESULTS: During the 2 year testing period 19,845 patients were tested and 132 (0.67%) were newly identified as HIV positive. 57% of the newly identified HIV patients had a CD4

count less than 200 cells/ml3 (mean CD4 233 cells/ml3, std 251). We linked 81% of the patients to outpatient care. Over 2 years, the average cost for the study hospital was \$37.19 per test, \$5,617 per new HIV case detected, and \$6,923 per new HIV positive patient linked to care. The total 2 year program cost was \$738,093. In the sensitivity analysis, when the HIV prevalence was varied from 3% to 0.1%, the cost per newly identified HIV patient ranged from \$1,325 to \$36,930. In the different geographic area scenarios the cost per new positive ranged from \$1,450 to \$30,356.

CONCLUSIONS: Compared with the high costs associated with missed and late HIV diagnoses, we believe our findings support the economic feasibility of ED-based, POC HIV screening in most settings.

ABSTRACT 34

Expanded HIV Testing: What is a Community to Do?



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OBJECTIVE: Municipalities across the US are scaling up HIV testing/screening. Several US cities have experiences in launching and managing large scale testing campaigns and implementing HIV testing routinization strategies. This session will present findings from five US cities: Houston, TX, Bronx, NY, Miami, FL, Oakland, CA and Washington, DC.

METHODS: Utilizing a mixed method approach, the scale up initiatives and expanded HIV testing/screening efforts undertaken have combined print and media campaigns, think tanks and focus groups, celebrity and physician ambassadors, philanthropic and corporate leaders, pharmaceutical representatives, persons living with HIV, community health centers, emergency rooms, COBs and



ASOs combined with special concerts, public venue testing and high profile community/civic and religious leaders to garner attention and support for broad-based HIV testing implementation.

RESULTS: HIV testing rates have increased from between 20-58 percent across the cities. Individuals with HIV are identified, diagnosed and linked to care earlier in HIV disease progression. The health sector (hospitals, community health centers/clinics and private practitioners) has increased its participation in HIV testing initiatives.

CONCLUSIONS: HIV testing/screening programs have been effective in reaching HIV positive individuals and linking them to care. Expanded HIV testing/screening programs that utilize a municipal model have been successful in identifying traditional and non-traditional partners. Finally, municipal HIV testing initiatives reach those who would not 'normally' think HIV is anything to be concerned about, thereby helping to expand awareness and address stigma. HIV testing is for everyone.

ABSTRACT 35

Texas' Experience with Routine HIV Testing in Health Care Settings



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OBJECTIVE: In October 2008, Texas implemented routine in clinical settings as recommended by the CDC's 2006 Recommendations for Routine HIV Testing in Health Care Settings for individuals 13 through 64 years old. The main goals of the program have been to assist sites in creating and implementing sustainable and integrated routine HIV testing in medical care settings. The long-term goals of the project are to increase the proportion of Texans diagnosed early in their HIV disease and successfully linked into care.

METHODS: The sites involved with the project were chosen by their volume of patient visits, high HIV morbidity, leadership interest in implementation, and capacity to implement the program. A variety of sites were recruited

for the project including emergency departments (EDs), STD clinics, correctional facilities, community health clinics, and family planning clinics. Basic demographics, limited behavioral risk information, test results and linkage to care information were collected from each site for program evaluation. In addition, The Test Texas HIV Coalition was created to bring stakeholders together to promote, educate, and support the implementation of routine testing.

RESULTS: Since the beginning of the project, eight emergency departments, five STD clinics, two local primary care health departments, fourteen community health centers, eight corrections sites, and one family planning clinic began routine HIV testing. Over 150,000 HIV tests have been performed with nearly 1,700 HIV positive tests including over 1,000 newly indentified positives. Of the positives, over 75% have been linked to medical care or case management. During implementation, sites adjusted their protocols, standing delegation orders, and processes for HIV testing. In addition, they created promotional materials to educate and market testing among their internal staff and patient population. The Test Texas HIV Coalition has about 250 members and has held five meetings, resulting in peer to peer training and technical assistance. Recruiting leaders through the Test Texas HIV Coalition has assisted with enlisting new sites and inspiring confidence in the new sites' capacity for implementing routine testing.

CONCLUSIONS: It is essential that routine testing sites identify internal champions, create cross-disciplinary teams to plan and monitor implementation, choose the appropriate test technology to build a sustainable testing model, create protocols that are specific to their system, and have access to peer technical assistance and guidance.



Creating and Sustaining a Routine HIV Screening Program in a Large, Public Healthcare System



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OBJECTIVE: Establish routine HIV screening throughout a large, municipal health care system: emergency centers, community clinics and hospitals, and test at least 100,000 patients annually.

METHODS: We utilized funding from multiple sources – CDC, Texas Department of State Health Services, and Ryan White Parts A and C – to design and implement the Routine Universal Screening for HIV program (RUSH) within the Harris County Hospital District (HCHD). Key steps of our program are: Access/availability, Consent, Testing, and Service Linkage. Our project began with recruitment of a senior level steering committee, review of other HIV screening programs, selection of testing technologies, program design, and development of comprehensive informed consent materials. Implementation included intensive training and promotion, restructuring of service linkage activities, development of data management systems, and continual efforts to achieve and maintain sustainability. Using standard blood testing performed on a "rapid" basis, we test all patients between 18 and 64 who do not opt out and who are having blood drawn in one of our two hospital emergency centers or in one of the two HCHD community health centers currently designated as pilot sites for the program. HIV Service Linkage workers contact patients with HIV+ results to deliver their test results and to help them enroll in primary HIV care and to receive other services.

RESULTS: Since August 2008, more than 90,000 individuals have been screened for HIV. 1,015 positives were identified, with 463 of those being newly diagnosed. Linkage to care has increased to over 80%. Ryan White funds support linkage to care and return to care activities. Once all sites are operative,

which is anticipated by mid-2011, we anticipate reaching our objective of 100,000 tests annually.

CONCLUSIONS: Multidisciplinary clinical and administrative support is essential for starting and maintaining a successful large scale HIV testing program. Comprehensive HIV screening in a large health care system is feasible and can be sustainable by coordinating multiple funding sources. Without Ryan White grant resources, the barriers to successfully linking newly diagnosed patients to primary care would be so great as to threaten the benefit of diagnosing large numbers of new cases via routine screening.

ABSTRACT 37

Creation of a Toolkit to Estimate the Financial Impact of HIV Testing and Screening



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OBJECTIVE: Currently there is a lack of resources in the public domain for clinicians and hospitals to assess the cost of and reimbursement for HIV testing and screening. However, this information is important as hospitals implement changes to comply with testing guidelines advocated by the Centers for Disease Control and Prevention. Our goal was to develop a free online toolkit with information and resources for providers to estimate the financial impact of HIV testing and screening.

METHODS: In 2009 and 2010, we consulted 20 experts for advice, including clinicians, administrators, public health officials, and HIV test kit vendors. We supplemented this information with a literature review. The aim was to identify what information the toolkit should contain and locate resources to meet the stated needs.

RESULTS: HRET created a free online toolkit accessible at: www.hret.org/hiv-cost to provide the information needed by hospitals and clinicians. The toolkit contains three components: a summary of key issues (e.g., information on test kits, coding, quality improvement, and insurance



coverage provisions under the Patient Protection and Affordable Care Act); guidance on Medicare, Medicaid, and private insurance coverage for routine HIV screening, diagnostic testing, and perinatal testing; and a cost calculator to estimate expenses and revenue, considering labor expenses, supply costs, testing volume and reimbursement rates. The information is applicable to primary care clinics, inpatient units, emergency departments, specialty clinics, physician offices, ancillary services, and outpatient services.

CONCLUSIONS: This publicly available toolkit is a new resource for providers to analyze financial implications as they start or expand targeted or universal HIV testing and screening programs.

ABSTRACT 38

Adolescent HIV Testing Rates After the 2006 CDC Testing Recommendations and Implementation of Rapid Testing

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OBJECTIVE: To examine changes in rates of HIV testing among sexually experienced adolescents receiving care in an urban hospital-based clinic 1) following release of the revised Centers for Disease Control and Prevention (CDC) HIV testing recommendations for adults and adolescents in 2006 and 2) following implementation of rapid HIV testing in the clinic in 2007.

METHODS: Three consecutive one-year time phases were defined to coincide with 1) the year prior to release of the 2006 CDC HIV testing recommendations (Phase 1), 2) the year following release of those recommendations (Phase 2), and 3) the year following the addition of rapid HIV testing in the clinic (Phase 3). Computerized laboratory billing data were queried to obtain records for sexually transmitted infection (STI) testing, as well as demographic information. Records were included for patients 13-22 years of age who had any gonorrhea (GC) or chlamydia (CT) testing performed in any phase. For each phase, the

primary outcome variable, rate of HIV testing, was defined as the number of adolescents who had GC and/or CT testing AND received HIV testing during the same phase, divided by the total number of adolescents who were tested for GC and/or CT. A secondary outcome variable was percentage of HIV tests in Phase 3 that were rapid tests vs. traditional venipuncture enzyme immunoassay. Chi-square analyses were performed to compare rates of testing between the phases.

RESULTS: Records for 3002 patients in Phase 1, 3213 patients in Phase 2, and 3276 patients in Phase 3 met inclusion criteria. Of these patients, 82.2% were female, 69.4% Black, 26.6% White, and 57.8% had public insurance. The mean age was 17.5 years (SD 1.9). Rates of HIV testing among those tested for GC and/or CT significantly increased between Phase 1 vs. Phase 2 (12.6% vs. 27.7%, p<0.001), Phase 2 vs. Phase 3 (27.7% vs. 44.6%, p<0.001), and Phase 1 vs. Phase 3 (12.6% vs. 44.6%, p<0.001). In Phase 3, the proportion of rapid HIV tests was significantly greater than the proportion of traditional venipuncture tests (53.1% vs. 46.9%, p=0.013).

CONCLUSIONS: In this adolescent practice, the rate of HIV testing significantly increased following release of the 2006 HIV testing recommendations and further increased following the addition of rapid HIV testing. These data suggest that prevention efforts targeting identification of previously undiagnosed HIV-positive youth may benefit from routinely offering adolescents their choice of HIV testing methods, including rapid methods with less invasive sampling.

Findings from this study were published in Archives of Pediatrics and Adolescent Medicine: 164(9):870-874. Copyright 2010 American Medical Association. All rights reserved.



Status of CDC's 2006 HIV Testing Recommendations and State HIV Testing Laws – September 2010

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OBJECTIVE: Human immunodeficiency virus (HIV) testing laws are under the jurisdiction of each state. They are also influenced by the 2006 national CDC recommendations on HIV testing in health-care settings. State laws and national recommendations can be disparate, presenting conflicting information to clinicians. The Compendium of State HIV Testing Laws is a living, online document that serves as a national resource to help clinicians understand their state HIV testing laws and the CDC revised recommendations. This abstract presents the current status of state HIV testing laws in relation to the 2006 CDC recommendations.

METHODS: The Compendium consists of frequently updated profiles for each state that summarize current HIV testing laws pertinent for clinicians. Information sources include state legislative websites. To assess the current status of state HIV testing laws and compare these laws before and after the issuance of the 2006 CDC recommendations, the Compendium was screened for updates that concern consent and counseling between September 2006 and September 2010. These laws were assessed for compatibility with the CDC recommendations based on the following sub-parameters: specific consent vs. general consent, written consent vs. oral or written consent, opt-in consent vs. opt-out consent, and prevention counseling vs. test counseling. Compatibility was defined as not conflicting with CDC recommendations.

RESULTS: Currently, 45 states (including the District of Columbia) have laws compatible with CDC recommendations on the consent and counseling subparameters evaluated. Of these 45, 15 states' laws specify testing through the opt-out process, 35 do not specify either opt-in or opt-out, and one requires opt-in testing. State laws in six states are not compatible with CDC recommendations on at least one sub-parameter. For some states, new legislation designed to be more compatible with CDC

recommendations on some sub-parameters has created an internal conflict within that state's HIV testing laws. At least 24 states have passed legislation making their laws more compatible with the CDC recommendations on one or more sub-parameters of consent and counseling, and five states have similar legislation pending in their 2009-2010 sessions.

CONCLUSIONS: The majority of states have HIV testing laws that are compatible with CDC recommendations. Some states have laws that directly conflict with the CDC recommendations; other states have multiple HIV testing laws that are internally inconsistent. The Compendium at www.nccc.ucsf.edu can be a valuable tool for clinicians in understanding HIV testing laws, especially as changes in state laws and national recommendations occur.

ABSTRACT 40

The ARCHITECT® HIV Ag/Ab Combo Assay for Use in Pregnant Female and Pediatric Populations and in the Detection of Acute and Primary Infection

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OBJECTIVE: Demonstrate the capability of ARCHITECT HIV Ag/Ab Combo assay to aid in the diagnosis of HIV-1/HIV-2 infection in pregnant women and pediatric subjects and to detect acute and primary HIV infection.

METHODS: ARCHITECT HIV Ag/Ab Combo is a chemiluminescent microparticle immunoassay for the simultaneous qualitative detection of HIV-1 p24 antigen and antibodies to HIV type 1 (HIV-1 group M and group O) and/or type 2. Sensitivity and specificity were evaluated in a US population of 453 pregnant females and 591 pediatric subjects, ages 2 to 21 years, from the US and Côte d'Ivoire;

these included subjects at low and increased risk for HIV infection. In addition, a group of 60 pregnant females and 61 pediatric subjects known to be HIV infected were evaluated. To demonstrate the assay's ability to detect acute infection, 31 seroconversion panels and a population of 7,120 individuals at low and increased risk for HIV infection from the US and an HIV-2 endemic area were tested. Overall specificity and sensitivity of the assay was determined from 6,164 individuals at low risk for acquiring HIV in a low prevalence setting and 1,267 positive specimens that were comprised of HIV-1 antigen (n=63), anti-HIV-1 (n=1003), and anti-HIV-2 (n=201).

RESULTS: Five specimens from pregnant females at increased risk and three from pediatric subjects at risk for HIV infection were repeatedly reactive by the Combo assay and confirmed positive by HIV-1 Western blot. Overall sensitivity for the pregnant females was 100% (65/65; 95%CI: 94.48-100) and 100% (64/64; 95%CI: 94.40-100) for pediatric subjects. Specificity was 100% (448/448; 95% CI: 99.18–100) for pregnant females and 99.8% (587/588; 95% CI: 99.06–100) for pediatric subjects. The median reduction in time to detection of HIV in the seroconversion panels was 7 days (range: 0-20 days) when compared to another HIV antibody assay. Of the 7,120 specimens from the low and increased risk populations, two specimens were found to be recently infected (negative by HIV-1 Western blot and positive for both HIV-1 p24 antigen and HIV-1 RNA PCR). The overall specificity was 99.77% (95% CI: 99.62-99.88) and the sensitivity was 100% (95% CI: 99.71-100).

CONCLUSIONS: This data demonstrates the capability of the ARCHITECT HIV Ag/Ab Combo assay to detect HIV infection in pregnant women and pediatric subjects and during the acute stage of infection before antibodies are detected. The benefit to the patient and clinical laboratorian is accurate diagnosis during the acute and chronic stages of HIV infection.

ABSTRACT 41

CIHR CTN I SP243 Trial: Simultaneous Timed Triple Screening (SiTTS) for HIV, Hepatitis B, and Syphilis with Rapid Tests in Pregnant Women



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OBJECTIVE: In many resource-limited settings (RLS) globally, triple infections (i.e., HIV, Syphilis and Hepatitis B) contribute majorly to maternal and infant morbidity. A timely diagnosis in first and second trimester with early treatment initiation in pregnancy can facilitate reduction in transmission. However, inconsistent screening, and inadequate synergy of resources delay care. In this context, to all rural pregnant women presenting for ante-natal care at Mahatma Gandhi Institute of Medical Sciences (MGIMS), Sevagram, India, we offered a Simultaneous Timed Triple Screening (SiTTS) strategy prospectively and evaluated its feasibility, acceptability, preference and impact.

METHODS: SiTTS consisted of: i) combined pre/post test pre-counseling, ii) timed (<15minutes) simultaneous triple screening for HIV, Hepatitis B and Syphilis with blood-based Determine® point-of-care (POC) tests, iii) confirmatory testing and triage of positive women to early treatment, and, lastly iv) timely diagnosis and prophylaxis of infants.

RESULTS: Of 1066 women participants approached, 1003 (94%) completed SiTTS, of which only 90 (9%) were ever screened for triple infections, and 652 (65%) were in first and second trimester. SiTTS was accepted by1003 (100%) and preferred by 812 (80.6%) study participants. SiTTS identified 13 preliminary positive and 990 preliminary negative participants for triple infections at POC. SiTTS was feasible- median time 40 minutes (35-45min); sample collection with 1 finger stick possible in 857 (86%) participants. Of 13, 6 HIV positive, 5 HBV positive and



2 Syphilis positive, were confirmed and initiated early on treatment. Infants were prophylaxed for Hepatitis B and confirmed negative for Syphilis and HIV at 2 months and 4 months.

CONCLUSIONS: SiTTS facilitated timely knowledge of sero-status in all pregnant women, and rapid initiation of treatment in confirmed positives. SiTTS was accepted, preferred and feasible to operationalize in this setting. As part of expanded HIV testing initiatives, outreach settings in US could implement this strategy to optimize care for marginalized populations.

ABSTRACT 42

Jail-based Rapid HIV Testing: Is it Feasible and Who are We Reaching?

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OBJECTIVE: More than two million people are currently incarcerated in the United States. Many individuals entering correctional facilities have a history of high-risk sexual behaviors, substance abuse, or mental illness, resulting in high rates of HIV and sexually transmitted diseases. The prevalence of HIV/AIDS among inmate populations is an estimated five times higher than in the general U.S. population, yet routine HIV screening in jails is rare. The publication of the Centers for Disease Control and Prevention's Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings (2006) provided the opportunity to revisit the current policies and procedures for HIV screening among inmates.

METHODS: The Wayne County (MI) Jail Opt-out HIV Testing (OHT) Program examined whether a novel HIV screening strategy for jail inmates, based on both recent CDC recommendations, could provide a more accurate account of HIV prevalence, effectively increase the opportunities for prevention counseling, and improve current screening, treatment, and referral activities. This program anticipated that screening rates would be improved by offering opt-out testing that utilizes rapid screening technology.

RESULTS: Over the study period, the OHT Program tested 10,260 inmates for HIV and provided new HIV diagnosis to 39 inmates (0.4%). Half of all the inmates with HIV-negative test results indicated that this was their first HIV test, while just over half of the newly diagnosed inmates had not had a previous HIV test. During this period, 153 inmates self-disclosed their history of HIV-positive status to their counselor, yielding an overall prevalence of 1.9%. The OHT Program resulted in a 30-fold (2,918.0%) increase in HIV testing and provided valuable data for HIV incidence calculations.

CONCLUSIONS: The Wayne County Jail OHT Program demonstrated that the implementation of opt-out HIV testing was feasible and well received by inmates. The public health implications of this program suggest that opt-out HIV screening in large urban jails is transferable to other settings. This program contributes to the knowledge base of HIV prevention programming for inmates and the feasibility of implementing opt-out HIV testing in large urban jails.

ABSTRACT 43

Reasons for Accepting vs. Opting Out of HIV Testing at a City-run STD Clinic, District of Columbia, 2010

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OBJECTIVE: In 2006, CDC revised its routine HIV screening recommendations for medical settings to incorporate an opt-out testing approach. The District of Columbia Department of Health (DOH) implemented this approach in a variety of medical settings, including the District's DOH-run sexually transmitted disease (STD) clinic to effectively identify HIV-infected persons. STD clinic patients may not seek HIV testing due to a combination of several factors. This study examined reasons clients visiting the DC DOH STD Clinic either accepted or opted-out of HIV testing and aimed to determine whether those patients declining testing reported higher levels of individual-level



risk behaviors compared to those individuals who were tested.

METHODS: A cross-sectional survey was conducted from March through May 2010 among clients who visited the DC DOH STD Clinic. Participants completed the survey using handheld assisted personal interview devices. Survey results were linked to an individual's OraQuick Rapid® ADVANCETM HIV test result. Univariate, bivariate and multivariable analysis was conducted to identify factors associated opting out vs. accepting HIV testing.

RESULTS: Of the 721 participants surveyed on HAPIs, 583 (80.8%) accepted testing. HIV test results were available for 402, of which six (1.5%) participants screened HIV positive. The most commonly cited reasons for accepting HIV testing were because it was provider-initiated (51.1%), followed by personal motivation (8.7%) and recognition of risk (8.5%). Among those respondents who opted-out of HIV testing (n=183), the most commonly cited reasons for declining testing were because the test was not offered (2.7%), recent HIV testing (1.8%), and knowledge of one's HIV status (1.6%). Men were more likely to opt-out of testing (aOR 0.20, 95%CI: 0.09-0.45, p=0.0001). Men who have sex with men were 5.7 times more likely to opt-out of HIV testing than the heterosexual population (95%CI: 2.5-12.9, p<0.0001). Participants who reported having 'sex with someone who was HIV positive' and/or 'sex with someone whose HIV status was unknown' were more likely to report low condom use than participants that did not report those sexual practices (aOR 5.1, 95%CI: 1.4-19.0, p=0.01 and aOR 1.4, 95%CI: 0.8-2.6, p=0.01, respectively).

CONCLUSIONS: Although the majority of persons visiting the DOH STD clinic are getting tested for HIV, significant barriers to HIV testing among those at highest risk for infection still persist. These data can be used by providers to develop strategies that may increase uptake of HIV testing in high-risk populations.

ABSTRACT 44

Opportunities for Expanding HIV Testing Through Health Reform

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OBJECTIVE: In addition to expanding access to care and treatment, the Patient Protection and Affordable Care Act presents an opportunity for coverage of preventive services, including HIV testing. The author will review the Affordable Care Act and highlight how HIV testing can be covered under the various programs and payers. Additionally, for each payer the author will determine if it can cover routine HIV testing or HIV testing only for high risk individuals or settings. He will conclude by suggesting steps that should be taken to ensure maximum coverage of routine HIV testing as the law is implemented.

METHODS: The author will review the Affordable Care Act and for each payer or program (Medicaid, Medicare, Private Insurers and the Exchanges), review how they will cover preventive services and how this will impact HIV testing. For each payer or program he will discuss the implementation process and how coverage decisions will be made and how they can be affected.

RESULTS: Under Medicaid, which will greatly expand under the Affordable Care Act, routine HIV testing can be covered, but the decision rests with the states. The new health reform law allows an enhanced federal match of 1 percent for prevention services that receive a Grade A or B by the US. Preventive Services Task Force (USPSTF). Therefore, that would impact at risk HIV testing, which has received a grade of A, and not routine HIV testing, which has a grade C rating. For Medicare, each beneficiary will receive an annual wellness visit, which opens the opportunity to HIV testing, and preventive services that receive an A or B grade will be covered. For private insurance, plans will have to cover Grade A and B preventive services. The exchanges, which go into effect in 2014, can cover preventive services as determined by the Secretary of Health and Human Services. There is a rulemaking process for each of the payers with public comment opportunities.



CONCLUSIONS: Coverage for HIV testing will be greatly enhanced under health reform since prevention services will be covered. However, since most payers can only cover preventive services that receive a grade A or B by the USPSTF, routine testing will not be covered. There are ways in which the process can be affected through regulation, but a change to the USPSTF grade for routine testing would greatly enhance coverage.

ABSTRACT 45

HIV Testing at Essence Music Festival

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OBJECTIVE: Given the disproportionate impact HIV is having on the African American community and the need to increase awareness of HIV status, new methods of reaching African Americans were identified. A large community event, the Essence Music Festival in New Orleans, was targeted to 1) raise awareness about HIV and modes of transmission,

- 2) increase acceptance of routine HIV testing, and 3) reduce stigma associated with HIV testing.

METHODS: The testing event occurred at the 2010 Essence Music Festival, which is an annual festival that occurs over the Fourth of July weekend and attracts thousands of primarily African American concert goers. The testing event was a collaboration between the Louisiana Office of Public Health HIV/AIDS Program (HAP), the Global Evaluation and Applied Research Solutions, Inc (GEARS), and the Black AIDS Institute (BAI). GEARS was engaged by the CDC Behavioral Assessment and Rapid HIV Testing Study to disburse funding to HAP and monitor the testing event. The Oraquick rapid HIV test was administered to attendees at the Essence Music Festival by certified HIV counselors. Counseling and results were given in accordance with the counseling and testing protocol, in order to ensure as much privacy and confidentiality as possible. The testing site was prominently situated in the exhibit hall and advertised by Essence and the BAI.

RESULTS: Over a 3-day period, 768 attendees were tested for HIV: 78% were African-American female and 16% were African-American male. The median age was 34 years. There were no invalid tests, 691 persons received their results, including three preliminary positives. 550 of those tested also answered the participant survey and the majority (67.1%) reported they heard about the testing event when walking by the testing booth. Most (86.3%) were motivated to be tested to learn their HIV status or to protect themselves and 80% said they would recommend that others get tested. The vast majority (71.5%) also rated the knowledge/awareness they gained as "excellent" or "good". "Accessibility/convenience" was the most common response when asked what participants liked most about the testing event.

CONCLUSIONS: HIV testing at a large-scale event, such as the Essence Music Festival, is an effective method to increase acceptance of routine HIV testing among African Americans who are disproportionately affected by the HIV/ AIDS epidemic. Collaboration between the various partners and volunteers, as well as the logistics and location of the testing event, helped make this event a success.

ABSTRACT 46

Patient-centered Health IT Facilitates **HIV Testing in Three Acute Care Settings: Automating Testing** Consent, Education, and Evaluation

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OBJECTIVE: To determine the impact of patient-centered health IT on the acceptability, feasibility, and effectiveness of routine HIV testing programs in acute care settings.

METHODS: We conducted evaluations of patient-centered health IT interventions (Computer Assessment and Risk Reduction Education or CARE computer counseling tool) in three acute care settings (Seattle (SE), San Francisco



(SF) and San Mateo (SM)). Evaluation methods differed in each clinical setting. In Seattle a randomized trial evaluated the utility of the CARE tool for routine rapid HIV testing (n=518) as compared to standard care. In San Francisco an iterative design process was used to compare three approaches to routine HIV testing including staff offer in a private room (n=1066), the HIV CARE tool (n=382), and a General Health tool (General CARE, n=265). In San Mateo, testing outcomes were compared for use of the General CARE tool (n=196) to those achieved with a dedicated testing staff (n=241) during consecutive time periods.

RESULTS: The SE evaluation showed that 97% of clients who received the health IT intervention left knowing their HIV status and with a personal risk reduction plan as compared to 1% being referred to HIV testing in the standard clinical care arm. In SF HIV testing rates were equivalent between the General CARE Computer health tool (40%) and staff offer (43%), but significantly lower with the HIV specific CARE tool (14%), due to stigma (as described by staff). The General health tool also generated referrals for unmet preventive and chronic health needs at a higher rate than standard care. In San Mateo the rates of HIV testing acceptance were similar for the CARE tool (63%) as compared to staff offer (59%). HIV prevalence was 0.4% in SE, 1.1% in SF, and 0% in SM. In all three settings the tool received high ratings for helpfulness, ease of use, and privacy among low literacy populations.

CONCLUSIONS: Patient centered health IT tools facilitate routine HIV testing and counseling in acute care settings with limited staff involvement. Embedding the HIV test offer within the General-CARE tool may decrease stigma and improve testing uptake in some settings. The General CARE tool also adds value to patient care through education and referrals for preventive and chronic health care needs. Integration of patient history and referral data into the electronic health record in a way that improves clinic workflow as well as quality of care may improve sustainability.

ABSTRACT 47

Understanding Barriers to Routine HIV Testing: A Survey of Knowledge, Attitudes, and Practices

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OBJECTIVE: In 2006, the Centers for Disease Control and Prevention (CDC) recommended routine HIV screening in health care settings for all adults between the ages of 13 and 64. We designed this survey to ascertain the current state of HIV testing and barriers to routine screening in King County, Washington.

METHODS: Between March 23 and April 16, 2010, we recruited a convenience sample of healthcare providers to participate in an online, anonymous survey. This survey included true-false and multiple choice questions about subjects' personal HIV testing practices, policies in their primary clinical settings, and knowledge of the 2006 CDC recommendations and current Washington Administrative Code (WAC). Subjects were asked to agree or disagree whether potential barriers limited implementation of routine HIV screening in their practices.

RESULTS: There were 221 eligible responses to the survey, representing a range of clinical specialties and practice settings. Ninety-nine (45%) subjects reported that their clinical practice had a policy to target testing based on risk factors, 44 (20%) have a policy of routine HIV screening, 54 (25%) reported no official policy, and 15 (7%) did not know whether a policy existed. Only 11 (5%) subjects offer HIV testing to all patients at initial visits, and 18 (8%) offer HIV testing to all pregnant women. In the previous six months, 109 (50%) subjects had ordered ten or fewer HIV tests, 86 (39%) had ordered more than ten tests, and 26 (12%) had not ordered a single test. Of 30 subjects who reported a specialty in obstetrics and gynecology or who provide care to pregnant women, 20 (67%) ordered more than ten tests in the prior six months, but only three identified a single case of HIV infection in the prior year. When asked about potential barriers to routine screening, the greatest number (n=119, 57%) agreed that the perception that their patient



population is low risk limits the number of HIV tests they perform. Only 26 (13%) subjects reported that concern about reimbursement was a barrier to HIV testing.

CONCLUSIONS: Most providers participating in this study continue to target HIV testing, despite CDC recommendations to implement routine HIV screening. Efforts are needed in King County to encourage providers to take advantage of recent WAC changes that promote opt-out testing, which has been successfully implemented for pre-natal screening. Further education is also needed regarding the cost-effectiveness of routine screening in general populations with prevalence as low as 0.1%.

ABSTRACT 48

Increasing Physician Screening for HIV Infection: A Tool to Educate on, and Improve Payment for, Routine Screening

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OBJECTIVE: Create a tool that would not only educate primary care and other physicians on the importance of routine screening of their patients for HIV infection, but would actually facilitate routine HIV screening by assisting physicians seek reimbursement following testing.

METHODS: Two fundamental barriers exist that prevent primary care and other physicians from performing routine HIV screening of their patients. The first is a fundamental lack of awareness of the importance of routine HIV screening and of the Centers for Disease Control and Prevention's (CDC) recommendation for routine HIV screening of those between 13 and 64 years of age. The second is the impression among physicians that it is too complicated to perform a routine HIV test and that it would be too difficult to seek reimbursement for the service. Thus, in 2008, the CDC, the American Academy of HIV Medicine (AAHIVM), and the American Medical Association (AMA) collaborated to create a tool that would not only educate physicians on the

CDC's routine HIV screening recommendation, but also provide tangible guidance on how to proceed with seeking payment for the service. This tool was widely disseminated by the respective organizations to their constituents and partners. Due to continued demand for the tool, the CDC, AAHIVM, and AMA have updated the tool in 2010.

RESULTS: A hard copy and online reimbursement pamphlet was widely distributed by the respective organizations to primary care and other physicians across the United States. This pamphlet had three important features. First, it provided background information on the CDC's routine recommendation to educate physicians on the importance of routine HIV testing. Second, it detailed instructions on how to code for payment for routine HIV screening. As part of this, tables containing all the necessary coding info (eg, CPT and ICD-9 codes) were developed so that physician would have one stop to look for all the codes to seek payment. Third, the pamphlet also provides patient encounter scenarios to illustrate how the physicians might offer routine HIV screening and how to best code for the service so as to improve the likelihood that the claim will be paid the first time it is filed.

CONCLUSIONS: The AMA, AAHIVM, CDC coding pamphlet for routine HIV screening has been well received by practicing physicians. Due to persistent demand for the pamphlet, AMA, AAHIVM, and CDC have revised and updated the tool for 2010.

ABSTRACT 49

Expanded HIV Testing and Trends in Diagnoses of HIV Infection in Washington DC, 2004-2008

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OBJECTIVE: As of December 31, 2008, 3.2% (16,513) adults and adolescents aged =13 years in Washington DC were reported living with HIV/AIDS. This study is to



describe the expanded HIV testing and recent trends in diagnoses of HIV infction in Washington DC.

METHODS: Statistical analyses were pereformed using the HIV surveillance data, HIV testing data collected from the Program Evaluation and Monitoring System (PEMS) and the Behavioral Risk Factor Surveillance System (BRFSS) in DC.

RESULTS: Starting in 2006, the DC Department of Health expanded HIV testing and linkage to care by increasing education and social marketing efforts with local health-care providers; by 2008, increases were observed in DC residents who were tested for HIV within the past 12 months, and fewer AIDS diagnoses occurred over time. Data showed the improvements in the delivery of HIV testing and linkage to care services in DC. The rate of newly diagnosed AIDS cases decreased consistently, from 164 cases per 100,000 in 2004 to 107 in 2008. During 2004-2008, a total of 3,312 new AIDS cases were diagnosed among Blacks/African Americans, Hispanics/Latinos, and Whites in DC. Blacks/ African Americans accounted for the highest proportion of diagnoses overall (86%). The overall proportion of persons newly diagnosed with HIV who had a CD4 count within 3 months of diagnosis increased, from 62% in 2004 to 64% in 2008 (p<0.01). During 2004-2008, the number of publicly funded HIV tests in DC increased by 335% (from 16,748 tests in 2004 to 72,864 in 2008) among community-based and clinical providers, including a 415% increase among blacks/African Americans from 10,924 in 2004to 56,278 in 2008. The number of persons testing positive increased by 353%, from 246 in 2004 to 1,115 in 2008. The proportion of persons testing positive in 2004 and 2005 was 1.5% and 1.8%, respectively. This proportion peaked in 2006 at 2.5%, and then decreased to 1.4% and 1.7% in 2007 and 2008, respectively. During 2005-2007, BRFSS indicated that the overall proportion of persons self-reporting tests for HIV within the past 12 months increased from 14.9% in 2005 to 18.7% in 2007 (p<0.001). The highest overall testing proportions and the largest increases were among blacks/ African Americans.

CONCLUSIONS: Increased prevention efforts with social marketing and HIV education, as well as expanded HIV testing and linkage to care in areas of high AIDS and high poverty rates in DC, might counter this epidemic and decrease racial/ethnic HIV disease disparities in DC.