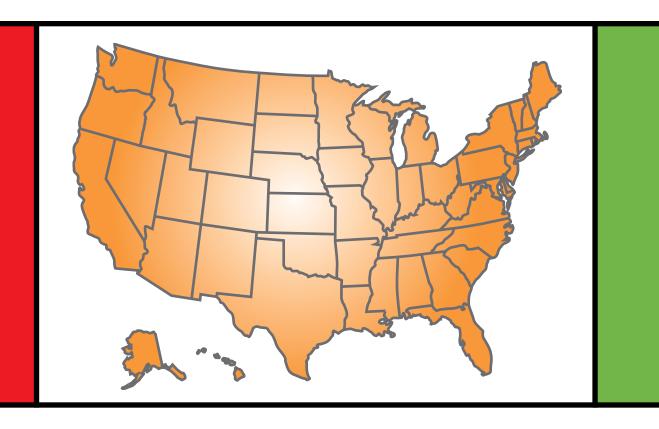
2012 National Summit

ON HIV AND VIRAL HEPATITIS DIAGNOSIS, PREVENTION AND ACCESS TO CARE



FINAL PROGRAM AND ABSTRACT BOOK





2012 National Summit

ON HIV AND VIRAL HEPATITIS DIAGNOSIS, PREVENTION AND ACCESS TO CARE

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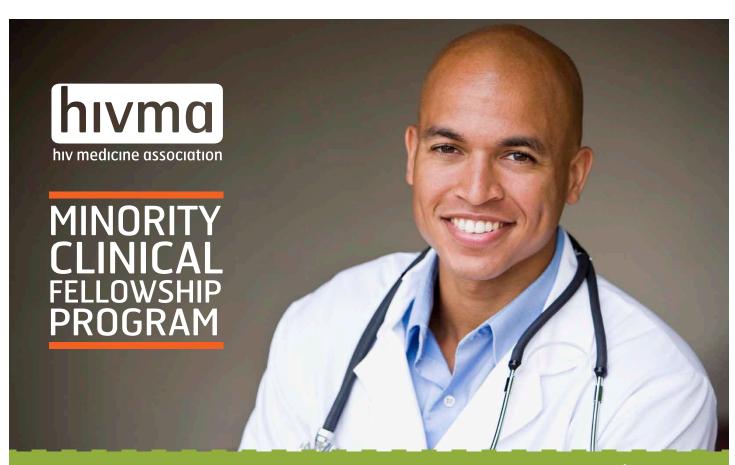
HIVMA SCHOLARSHIP OPPORTUNITY

Thanks to support from the HIV Medicine Association, HIVMA and the Forum for Collaborative HIV Research provided four scholarships to individuals working with underserved populations and whose attendance will contribute to the mission of the Summit and further their work in HIV medicine.

Recipients of the 2012 HIVMA Scholarship Awards are:

- LaToya Darden, Central Care CHC, Houston TX
- Ingrid Hansen, Central Care CHC, Houston TX
- Susana Keeshin, MD, University of Cincinnati, Cincinnati OH
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Category B: Prevention Models

Daniel Raymond Sheryl Zwerski, RN, MSN, CRNP

Category C: Outcomes and Impact Evaluation

Daniel Church, MPH Daniel Seekins, MD

Category D: Access, Linkage and Retention in Care

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ON HIV AND VIRAL HEPATITIS DIAGNOSIS, PREVENTION AND ACCESS TO CARE

PROGRAM

4:00 PM	REGISTRATION	Grand Ballroom Foyer
5:00 PM	OPENING PLENARY	Grand Ballroom
	Welcome	
	Veronica Miller, Forum for Collaborative HIV Research	
	Kenneth H. Mayer, The Fenway Institute John G. Bartlett, Johns Hopkins University School of Medicine	
		G 17.11
5:15 PM	State of the Epidemics: Viral Hepatitis and HIV in the U.S	Grand Ballroom
5:45 PM	HRSA and the National HIV/AIDS Strategy and Viral Hepatitis Action Plan Sarah Linde-Feucht, Health Resources and Services Administration	Grand Ballroom
6:15 PM	KEYNOTE ADDRESS	Grand Ballroom
	Secretary Kathleen Sebelius, Department of Health and Human Services	
7:00 PM	DINNER	Grand Ballroom
TUESDA	Y NOVEMBER 27, 2012	
7:00 AM	REGISTRATION	Grand Ballroom Foye
7:00 AM	BREAKFAST	Grand Ballroom
8:00 AM	BREAKOUT SESSIONS	
	A. Routine and Expanded Testing: HIV Diagnostics and Testing	Promenade Room
	B. Prevention Models: Pre-Exposure Prophylaxis for HIV Prevention	Senate Room
	C. Outcomes and Impact Evaluation: Surveillance, Observational Databases, and Coho	rts Chinese Room
	D. Access, Linkage and Retention in Care: Access to Care for Persons with HIV and Viral Hepatitis: Policy Forum	Colonial Room
9:30 AM	BREAK	Grand Ballroom Foye
9:45 AM	BREAKOUT SESSIONS	
	A. Routine and Expanded Testing: HCV Diagnostics and Birth Cohort Testing	Promenade Room
	B. Prevention Models: Population Approaches to Prevention	
	C. Outcomes and Impact Evaluation: Clinical and Cost-Effectiveness Research	
	D. Access, Linkage and Retention in Care: HCV Workforce Capacity: Models and the HCV Workforce	
11:20 AM		
1 1 • / 1 1 A /\/I	AWARD PRESENTATION	Grand Ballroom
11.20 1111	/III / L HVereft K OOD H I V / A I I I N PIIDIIC Health Leadership Award	
11.20 1111	2012 C. Everett Koop HIV/AIDS Public Health Leadership Award Veronica Miller. Forum for Collaborative HIV Research	
11.20 AW	Veronica Miller, Forum for Collaborative HIV Research Anthony S. Fauci, National Institute of Allergy and Infectious Diseases	

12:15 PM

1:00 PM	AFTERNOON PLENARY	Grand Ballroom
	PANEL DISCUSSION: The Affordable Care Act, Opportunities and Challenges	
	at the State and Local Level	
	Moderator: Jeffrey S. Crowley, O'Neill Institute for National and Global Health Law, Georg	etown Law
	Panelists:	
	Steve Boswell, The Fenway Institute	
	Lynda Dee, AIDS Action Baltimore	
	Jennifer Kates, Kaiser Family Foundation Donna Sweet, University of Kansas Medical Center	
	·	
1:55 PM	BREAKOUT SESSIONS	
	A. Routine and Expanded Testing: Models for HIV and HCV Testing	Promenade Room
	Cross-Cutting Session: Viral Hepatitis and HIV Prevention, Diagnosis and Access to Care and Correctional Settings	Senate Room
	C. Outcomes and Impact Evaluation: Outcomes and Epidemiology	Chinese Room
	D. Access, Linkage and Retention in Care: HIV Care and Treatment: Who are and	
	Who will be the Providers?	Colonial Room
3:15 PM	BREAK	Grand Ballroom Foyer
3:30 PM	BREAKOUT SESSIONS	
	A. Routine and Expanded Testing: Testing Integration in the Primary Care Setting	Promenade Room
	B. Prevention Models: Focus on HIV Prevention for Most-At-Risk Populations	Senate Room
	A. Routine and Expanded Testing: Policy Issues Affecting HIV and HCV Testing	Chinese Room
	D. Access, Linkage and Retention in Care: Care Models that Support Linkage and	
	Retention in Care	Colonial Room
5:00 PM	POSTER SESSION	State/East Room
	5:00 PM Session A: Odd Numbered Posters	······································
	6:00 PM Session B: Even Numbered Posters	
7:00 PM	DINNER	Grand Ballroom
0.00 DM		
8:00 PM	THE MEDEA PROJECT: THEATER FOR INCARCERATED WOMEN	Grand Ballroom
WEDNE	SDAY NOVEMBER 28, 2012	
7:00 AM	REGISTRATION	Grand Ballroom Foyer
7:00 AM	BREAKFAST	Grand Ballroom
8:00 AM	RAPPORTEUR SESSION	Grand Ballroom

9:10 AM Federal Response to the Viral Hepatitis and HIV Epidemics in the U.S.Grand Ballroom Moderators: Henry Masur, National Institutes of Health Kenneth H. Mayer, The Fenway Institute Implementation of the Viral Hepatitis Action Plan John Ward, Centers for Disease Control and Prevention The National HIV/AIDS Strategy at Two Years Grant Colfax, Office of National AIDS Policy, The White House Monitoring the Impact of the NHAS and ACA on Improving HIV Care Jennifer Kates, Kaiser Family Foundation **PANEL DISCUSSION: Federal Response** Grant Colfax, Office of National AIDS Policy, The White House Jennifer Kates, Kaiser Family Foundation John Ward, Centers for Disease Control and Prevention 10:15 AM 10:30 AM Moderators: John G. Bartlett, Johns Hopkins University School of Medicine Veronica Miller, Forum for Collaborative HIV Research A New Look at Treatment as Prevention Myron Cohen, University of North Carolina School of Medicine Behavioral Economics: A Role in HIV and Viral Hepatitis Treatment and Prevention? Kevin Volpp, Perelman School of Medicine, University of Pennsylvania PANEL DISCUSSION: Myron Cohen, University of North Carolina School of Medicine Jag Khalsa, National Institute on Drug Abuse Henry Masur, National Institutes of Health Clinical Center Daniel Raymond, Harm Reduction Coalition David Thomas, Johns Hopkins Center for Global Health Kevin Volpp, Perelman School of Medicine, University of Pennsylvania 11:45 AM Closing Remarks......Grand Ballroom Kenneth H. Mayer, The Fenway Institute John G. Bartlett, Johns Hopkins University School of Medicine

Veronica Miller, Forum for Collaborative HIV Research

BREAKOUT SESSIONS

Tuesday November 27, 8:00-9:30 AM

CATEGORY A. ROUTINE AND EXPANDED TESTING

HIV Diagnostics and Testing

Moderators: Bernard Branson, Centers for Disease Control and Prevention

Jenny McFarlane, Texas Department of State Health Services

HIV DIAGNOSTICS AND TESTING UPDATE

Bernard Branson, Centers for Disease Control and Prevention

Internal Evaluation of the Bio-Rad GEENIUS HIV 1/2 Supplemental Assay

Christopher Bentsen, Bio-Rad Laboratories

Performance Characteristics of ADVIA Centaur HIV Ag/Ab Combo (CHIV) Assay for the Simultaneous Detection of HIV p24 Antigen and Antibodies to HIV-1 (groups M and O) and HIV-2 in Human Serum or Plasma Lawrence Baker, Siemens Healthcare Diagnostics

SCALING UP COMMUNITY-BASED HIV ANTIBODY AND RNA TESTING AMONG GAY MEN IN SAN FRANCISCO Steve Gibson, San Francisco AIDS Foundation

An Algorithm Using Electronic Medical Record Data Accurately Identifies Patients with Unknown HIV Status in a Large, Urban Healthcare System

Uriel Felsen, Albert Einstein College of Medicine/Montefiore Medical Center

ROUTINE OPT-OUT HIV SCREENING ON THE U.S. – MEXICO BORDER, OPPORTUNITIES FOR DIAGNOSIS AND PREVENTION Robert Woolard, Texas Tech University Health Sciences Center

Novel Emergency Department Registration Kiosk for HIV Screening Increases Engagement of High Risk Patients

Yu-Hsiang Hsieh, The Johns Hopkins University

Point-of-Sex Testing: Intentions of Men Who Have Sex with Men to Use Home-Use HIV Tests with Sex Partners David Katz, University of Washington

CATEGORY B. PREVENTION MODELS

Pre-Exposure Prophylaxis for HIV Prevention

Moderators: Kenneth H. Mayer, The Fenway Institute

Sheryl Zwerski, Division of AIDS, National Institutes of Health

OVERVIEW OF PREP

Kenneth H. Mayer, The Fenway Institute

Development of a PrEP Candidate Screening Tool: An Assessment of PrEP Knowledge and Health Behaviors Among Individuals at High-Risk for HIV

Amanda Castel, George Washington University School of Public Health & Health Services

Provider Knowledge, Use, and Barriers to the Uptake of PEP and PrEP

Amanda Castel, George Washington University School of Public Health & Health Services

HIV Pre-Exposure Prophylaxis (PrEP): Knowledge and Attitudes Among a New York City Emergency

DEPARTMENT PATIENT POPULATION

Ethan Cowan, Jacobi Medical Center, Einstein Medical Center

How to Implement PrEP

Sean Cahill, The Fenway Institute

NEAR-PERFECT ADHERENCE IN US IPREX RCT SITES: FREQUENCY AND CORRELATES

K Rivet Amico, Applied Health Research; Center for Health Intervention and Prevention

BUILDING A CULTURALLY TAILORED PREP DEMONSTRATION PROGRAM FOR YOUNG MEN WHO HAVE SEX WITH MEN OF COLOR: LESSONS LEARNED FROM THE CRUSH PROJECT IN OAKLAND, CALIFORNIA

Kimberly Koester, University of California, San Francisco

CATEGORY C. OUTCOMES AND IMPACT EVALUATION

Surveillance, Observational Databases, and Cohorts

Moderators: Daniel Church, Massachusetts Department of Public Health

Veronica Miller, Forum for Collaborative HIV Research

Follow-Up Testing for Hepatitis C Virus Infection: An Analysis of Massachusetts Surveillance Data

FROM 2007-2010

Daniel Church, Massachusetts Department of Public Health

CHRONIC HEPATITIS COHORTS STUDY (CHECS)

Scott Holmberg, Centers for Disease Control and Prevention

VA CLINICAL CASE REGISTRY OF HCV PATIENTS

Lisa Backus, Department of Veterans Affairs

Kaiser Permanente Viral Hepatitis Registry

M. Michele Manos, Kaiser Permanente

Longitudinal Cohorts of Alaska Native and American Indian Persons with Chronic Hepatitis B or Hepatitis C Lisa Townshend-Bulson, Alaska Native Tribal Health Consortium

Mapping the Co-Occurrence of HIV, Hepatitis C, and Chlamydia in New York City (NYC) to Support Targeted Testing at Federally Qualified Health Centers (FQHCs)

Jennifer Fuld, New York City Department of Health and Mental Hygiene

STATE OF THE ART: CHARACTERISTICS OF HIV INFECTED PATIENTS RECEIVING CARE IN MISSISSIPPI (MS), USA FROM THE MEDICAL MONITORING PROJECT, 2009–2010

Arti Barnes, University of Mississippi Medical Center

Using Cross-Matched HIV and Sexually Transmitted Disease Registry Data to Estimate Adherence to Dual Screening Recommendations in New York City

Colin Shepard, New York City Department of Health and Mental Hygiene

CATEGORY D. ACCESS, LINKAGE AND RETENTION IN CARE

Access to Care for Persons with HIV and Viral Hepatitis: Policy Forum

Moderators: Andrea Weddle, HIV Medicine Association

Seiji Hayashi, HRSA, BPHC

Expanding Access to Care for Persons with HIV and Viral Hepatitis: Opportunities and Challenges for Health Centers

Seiji Hayashi, HRSA, BPHC

HIV/AIDS and Hepatitis Health Department Collaborations with Community Health Centers: Successes and Challenges

Liisa Randall, National Alliance of State and Territorial AIDS Directors

Opportunities for Improving Access: Ryan White Reauthorization

Bill McColl, AIDS United

Streamlining and Improving Access to Industry Patient Assistance Programs — A Collaboration Between Harbor Path, NASTAD and the Clinton Health Access Initiative (CHAI)

Murray C. Penner, National Alliance of State and Territorial AIDS Directors

Ken Trogdon, HarborPath

The State Healthcare Access Research Project on Access to Care for Persons Living with Hepatitis C in Massachusetts

Malinda Ellwood, Harvard Law School Center for Health Law and Policy Innovation

Patterns and Correlates of Linkage to Appropriate HIV Care following HIV Diagnosis in the U.S. Medicaid Population

Timothy Juday, Bristol-Myers Squibb

Impact of Payer Type on HIV Stage of Illness at Time of Initiation of Antiretroviral Therapy in the United States

Timothy Juday, Bristol-Myers Squibb

Tuesday November 27, 9:45-11:15 AM

CATEGORY A. ROUTINE AND EXPANDED TESTING

HCV Diagnostics and Birth Cohort Testing

Moderators: Chong-Gee Teo, Centers for Disease Control and Prevention Jane Getchell, Association of Public Health Laboratories

HCV DIAGNOSTICS AND TESTING UPDATE

Chong-Gee Teo, Centers for Disease Control and Prevention

CDC's Evidence-Based Recommendations for the Identification of Hepatitis C Virus (HCV) Infection Among Persons Born during 1945–1965 in the United States

Bryce Smith, Centers for Disease Control and Prevention

Indications for Testing Among Reported Cases of Hepatitis C Virus Infection from Enhanced Hepatitis Surveillance Sites — United States, 2004–2010

Reena Mahajan, Centers for Disease Control and Prevention

Rates of Hepatitis C Virus Testing Among US Veterans in Department of Veterans Affairs Care, 2011 Lisa Backus, Department of Veterans Affairs

 $Testing\ Preferences\ and\ Knowledge\ of\ HBV\ and\ HCV\ Among\ a\ New\ York\ City\ Emergency\ Department\ Patient\ Population$

Ethan Cowan, Jacobi Medical Center, Einstein Medical Center

HEPATITIS C ANTIBODY TESTING AND FOLLOW-UP IN PRIMARY CARE SETTINGS: A RETROSPECTIVE STUDY OF FOUR LARGE, PRIMARY CARE SERVICE CENTERS

David Rein, NORC at the University of Chicago

CATEGORY B. PREVENTION MODELS

Population Approaches to Prevention

Moderator: A. Cornelius Baker, National Black Gay Men's Advocacy Coalition

Preparing for and Conducting a Successful HCV Vaccine Trial with Injection Drug Users Alice Asher, University of California, San Francisco

Young Adults at Risk for HCV: Meeting Their Needs Through the UFO Model Prevention Program Alice Asher, University of California, San Francisco

HEPATITIS OUTREACH NETWORK: A PRACTICAL STRATEGY FOR HEPATITIS SCREENING WITH LINKAGE TO CARE IN FOREIGN BORN COMMUNITIES

Ponni Perumalswami, Mount Sinai School of Medicine

SUSTAINING VITAL LINKAGES BETWEEN COMMUNITY AND CLINICAL SETTINGS FOR MSM James Murphy, AIDS Action Committee of Massachusetts

A BEST-PRACTICE COMMUNITY-BASED APPROACH TO HEPATITIS PREVENTION FOR AT-RISK IMMIGRANT AND REFUGEE COMMUNITIES

Mona El-Shamaa, Asian Health Coalition

CATEGORY C. OUTCOMES AND IMPACT EVALUATION

Clinical and Cost-Effectiveness Research

Moderators: Rochelle Walensky, Harvard Medical School and Massachusetts General and Brigham & Women's Hospitals

Bruce Schackman, Weill Cornell Medical College

COST-EFFECTIVENESS ANALYSES OF ARV GENERICIZATION IN HIV CARE

Rochelle Walensky, Harvard Medical School/Massachusetts General and Brigham & Women's Hospitals

Cost-Effectiveness and HCV

Bruce Schackman, Weill Cornell Medical College

A Cost-Effectiveness Analysis of the Washington, D.C. Department of Health's HIV/AIDS Testing and Linkage to Care Programs

John Wedeles, George Washington University School of Public Health and Health Services

Cost Analysis of Positive Charge, a Multi-Site Linkage to Care Program

J. Janet Kim, Johns Hopkins Bloomberg School of Public Health

Persons Diagnosed and Living with HIV/AIDS (PDLWH/A) who can Potentially Transmit HIV Through Heterosexual Contact in Pennsylvania, 2010

Benjamin Muthambi, Pennsylvania Department of Health

Persons Diagnosed and Living with HIV/AIDS (PDLWH/A) who can Potentially Transmit HIV Through Men having Sex with Men (MSM) in Pennsylvania, 2010

Benjamin Muthambi, Pennsylvania Department of Health

Linkage, Engagement and Viral Suppression Rates Among HIV-Infected Persons Receiving Care at Medical Case Management Programs in Washington, DC

Sarah Willis, The George Washington University

Sustained Virologic Response and the Development of Hepatocellular Carcinoma (HCC) Among Persons with Chronic Hepatitis C Virus (HCV) Infection: A Meta-Analysis of Observational Studies Rebecca Morgan, Centers for Disease Control and Prevention

Estimating Averted HIV-Related Medical Costs on the Path to Eliminating Mother-To-Child Transmission Among HIV-Infected Pregnant Women in New York State: 1998-2010

Franklin Laufer, AIDS Institute, New York State Department of Health

CATEGORY D. ACCESS, LINKAGE AND RETENTION IN CARE

HCV Workforce Capacity: Models and the HCV Workforce

Moderators: David Thomas, Johns Hopkins School of Medicine

Sanjeev Arora, University of New Mexico Health Sciences Center

PROJECT ECHO: OUTCOMES OF HEPATITIS C TREATMENT BY PRIMARY CARE PROVIDERS

Karla Thornton, University of New Mexico Health Sciences Center

Who's Providing HCV Care at Kaiser

M. Michele Manos, Kaiser Permanente

Increasing the Capacity to Treat Hepatitis C and HIV in Primary Care Using the Project ECHO Model in a FQHC

Khushbu Khatri, Community Health Center, Inc.

ALASKA LIVERCONNECT: PROVIDING REMOTE SPECIALTY LIVER DISEASE EDUCATION

James Gove, Alaska Native Tribal Health Consortium

Panelists: David Ross, Department of Veterans Affairs

Colleen Flanigan, New York State Department of Health

CATEGORY A. ROUTINE AND EXPANDED TESTING

Models for HIV and HCV Testing

Moderators: Ryan Clary, National Viral Hepatitis Roundtable

Joanne Stekler, University of Washington & Public Health — Seattle King County HIV/STD Program

FEEDBACK FROM HIV/HCV DX ROUNDTABLE

Nivedha Paneer, University of California, Berkeley

ACCEPTABILITY AND IMPLICATIONS OF RAPID HCV TEST AMONG HIGH RISK YOUNG INJECTION DRUG USERS Kimberly Page, University of California, San Francisco

THE IMPACT OF HCV RAPID TESTING ON INDIVIDUALS KNOWLEDGE OF THEIR HCV STATUS

 $Colleen\ Flanigan, New\ York\ State\ Department\ of\ Health$

ROUTINE HIV TESTING AT MONTEFIORE MEDICAL CENTER: SCALE-UP CASE STUDIES FROM NEW YORK CITY'S SECOND LARGEST HOSPITAL SYSTEM

Donna Futterman, Montefiore Medical Center

BUILDING SUSTAINABLE UNIVERSAL HIV SCREENING PROGRAMS IN PEDIATRIC EMERGENCY DEPARTMENTS: A COMPARISON Jun Payne, Children's National Medical Center

 $Preliminary\ Results\ from\ `Do\ One\ Thing':\ A\ comprehensive\ Neighborhood-Based\ HIV\ and\ HCV\ Testing,$

PREVENTION AND MEDIA CAMPAIGN IN SOUTHWEST PHILADELPHIA

Stacey Trooskin, Drexel University College of Medicine

Transmission Network Targeting: Incorporating Social Network and Partner Testing with an Emergency Department HIV Screening Program

Robbie Paulsen, University of Cincinnati College of Medicine

CROSS-CUTTING SESSION

Viral Hepatitis and HIV Prevention, Diagnosis and Access to Care and Correctional Settings

Moderator: Barry Zack, The Bridging Group

Feasibility and Acceptability of Hepatitis C Virus Counseling and Rapid Testing in a Criminal Justice Setting Curt Beckwith, Alpert Medical School of Brown University & The Miriam Hospital

Who Better than Us? Recruiting Individuals with Histories of Incarceration and Substance Abuse to Increase Access to HIV and HCV Testing and Linkage to Care

Terrence Young, Community Education Group

Project ECHO's (Extension for Community Health Outcomes) Prisoner Health is Community Health: The New Mexico Peer Education Project (NM PEP)

Karla Thornton, University of New Mexico Health Sciences Center

HIV and Viral Hepatitis Prevention and Screening in Correctional Settings James Sosman, University of Wisconsin

CATEGORY C. OUTCOMES AND IMPACT EVALUATION

Outcomes and Epidemiology

Moderators: Daniel Seekins, Bristol-Myers Squibb

Amy Lansky, Centers for Disease Control and Prevention

Estimating the Number of Injection Drug Users in the United States to Calculate National Rates of

HIV Infection

Amy Lansky, Centers for Disease Control and Prevention

Newly Diagnosed Positives Identified by HIV Testing Programs in New York City

Andrea King, New York City Department of Health and Mental Hygiene

MISSED OPPORTUNITIES IN HIV TESTING IN NEW YORK CITY

Andrea King, New York City Department of Health and Mental Hygiene

ENDOCARDITIS AS A SENTINEL MARKER FOR NEW EPIDEMICS OF INJECTION DRUG USE AND HEPATITIS C VIRUS INFECTION Susana Keeshin, University of Cincinnati

ROUTINE HIV TESTING AS A VITAL SIGN — TWO YEARS' EXPERIENCE

Gebeyehu Teferi, Unity Health Care

ROUTINE HIV TESTING AND LINKAGE TO CARE SERVICES OFFERED AT PUBLIC AID OFFICES CAN HELP IDENTIFY UNDIAGNOSED HIV INFECTIONS AND FACILITATE LINKAGE TO HIV CARE IN URBAN HIGH RISK MINORITY COMMUNITIES Tomas Soto, AIDS Foundation of Chicago

MORTALITY TRENDS AMONG PEOPLE REPORTED WITH HEPATITIS C VIRUS INFECTION: MASSACHUSETTS, 1992–2009 Daniel Church, Massachusetts Department of Public Health

Dynamic Trends in HIV/AIDS Diagnoses and Related Biological, Sexual, and Drug Use Risk Factors Among Adolescents in Washington, DC

Yujiang Jia, HIV/AIDS, Hepatitis, STD and TB Administration, DC Department of Health

CATEGORY D. ACCESS, LINKAGE AND RETENTION IN CARE

HIV Care and Treatment: Who Are and Who Will Be the Providers?

Moderators: John G. Bartlett, Johns Hopkins University School of Medicine Steve Boswell, The Fenway Institute

Current estimates are that only 37 to 50 percent of people with HIV are in regular care. While the National HIV/AIDS Strategy and the Affordable Care Act provide the opportunity to significantly increase the number of people with HIV who enter the care system, workforce and care capacity constraints may continue to limit access to effective HIV care. The goal of this panel is to discuss opportunities for, and challenges to, expanding HIV care capacity. Issues such as the role of primary care providers, federally-qualified community health centers, academic health centers and community-based providers will be discussed along with the with the sustainability of the comprehensive HIV care model in a new health care financing environment.

PANELISTS

Kathy McNamara, National Association of Community Health Centers Michael Horberg, Kaiser Permanente Lisa Fitzpatrick, United Medical Center Donna Sweet, University of Kansas School of Medicine Brian Toomey, Piedmont Health Services Joe Burrage, American Academy of Nursing

Tuesday November 27, 3:30-4:50 PM

CATEGORY A. ROUTINE AND EXPANDED TESTING

Testing Integration in the Primary Care Setting

Moderators: Judith Feinberg, University of Cincinnati College of Medicine

James Sosman, University of Wisconsin

TESTING AMONG PRIMARY CARE PROVIDERS

James Sosman, University of Wisconsin

PRIMARY CARE PHYSICIAN IMPLEMENTATION OF ROUTINE HIV SCREENING IN WASHINGTON, DC: AN ASSESSMENT OF

Perceptions, Challenges and Barriers

Lisa Fitzpatrick, United Medical Center

 $HIV\,Testing\,Practices\,Differ\,Among\,Black\,Primary\,Care\,Physicians\,in\,the\,US\,According\,to\,Physician$

CHARACTERISTICS AND PATIENT DEMOGRAPHICS

Bryan Baugh, Janssen Therapeutics

Integrating Routine HIV Testing in Primary Care

Vanessa Rodriguez, Urban Health Plan, Inc.

HEPATITIS C VIRUS SCREENING PRACTICES AMONG PRIMARY CARE PHYSICIANS IN FOUR LARGE PRIMARY CARE SETTINGS Amy Jewett, Centers for Disease Control and Prevention

CATEGORY B. PREVENTION MODELS

Focus on HIV Prevention for Most-at-Risk Populations

Moderators: Greg Millett, Centers for Disease Control and Prevention

Victoria Cargill, Office of AIDS Research, National Institutes of Health

HIV and African American Men who Have Sex with Men

Greg Millett, Centers for Disease Control and Prevention

HIV and Women

Sally Hodder, New Jersey Medical School

HOME: A HOLISTIC APPROACH TO HIV PREVENTION AND PROGRAM EVALUATION FOR YOUNG MSM OF COLOR IN NEW YORK CITY

Sherry Estabrook, Harlem United Community AIDS Center

 $Racial\ Disparities\ in\ Unprotected\ Sex, HIV\ Infections, and\ Engagement\ in\ Care, Viral\ Load\ Suppression$

Among Individuals living with HIV in Hyperendemic MSM Community of Washington DC

Yujiang Jia, HIV/AIDS, Hepatitis, STD and TB Administration

CATEGORY A. ROUTINE AND EXPANDED TESTING

Policy Issues Affecting HIV and HCV Testing

Moderators: Corinna Dan, Department of Health and Human Services

Lindsey Dawson, The AIDS Institute

HIV TESTING IN THE EMERGENCY DEPARTMENT (ED): FINANCING AND REIMBURSEMENT

Richard Rothman, Johns Hopkins University

ROUTINE HIV TESTING IN THE US DEPARTMENT OF VETERANS AFFAIRS (VA): IMPACT OF NATIONAL POLICY CHANGE

AND OPERATIONAL INTERVENTIONS 2009–2011

Maggie Czarnogorski, Department of Veterans Affairs

INCREASING ROUTINE VIRAL HEPATITIS TESTING: TECHNICAL CONSULTATION REPORT FINDINGS

Corinna Dan, Department of Health & Human Services

Opportunities for Expanding HIV Testing Through Health Reform

Lindsey Dawson, The AIDS Institute

Expanding Our Reach: State and Local Health Department Efforts to Increase Access to and Utilization of HIV and HCV Testing

Liisa Randall, National Alliance of State and Territorial AIDS Directors

EXTENT OF HEPATITIS C SCREENING AND HIV TESTING AND LINKAGE TO CARE SERVICES AMONG SUBSTANCE USE

Treatment Programs in New York City

Sreeja Ramachandran, NYC Department of Health and Mental Hygiene

Reducing Barriers to HIV Testing — What Influences Testing Offer and Uptake? Lessons Learned from the HIV in Europe Initiative

Dorthe Raben, Copenhagen HIV Programme

Barriers and Facilitators to HIV and Hepatitis C Testing Among Active Intravenous Drug Users Joshua Barocas, University of Wisconsin-Madison

CATEGORY D. ACCESS, LINKAGE AND RETENTION IN CARE

Care Models that Support Linkage and Retention in Care

Moderators: Julie Dombrowski, University of Washington and Public Health — Seattle & King County HIV/STD Program Carol Brosgart, Division of Global Health, UCSF and the VHAC at the CDC Foundation and the DVH, CDC

TESTING, LINKAGE AND RETENTION IN CARE: GETTING CONTROL OF THE CASCADE IN SEATTLE, WA Julie Dombrowski, University of Washington

REACHING AND RETAINING CO-INFECTED HIV/HCV RESIDENTS IN UNDERSERVED COMMUNITIES Kimberly Gilgenberg, Tenderloin Area Center of Excellence

Utility of Identifying out of Care HIV-Infected Patients in a Hospital Setting and Enrolling Them in a Retention Intervention

Jessica Davila, Baylor College of Medicine

IN+CARE CAMPAIGN: A NATIONAL VIRTUAL COLLABORATIVE TO IMPROVE RETENTION

Michael Hager, New York State Department of Health AIDS Institute

Linkage to HIV Care in the VA Healthcare System

Thomas Giordano, Houston VAMC and Baylor College of Medicine

INCREASING RETENTION IN CARE FOR HIV+ HOMELESS INDIVIDUALS: HARLEM MODEL IMPLEMENTATION Expedito Aponte, Harlem United Community AIDS Center, Inc.

CHECK HEP C: A DEMONSTRATION PROJECT FOR PROVIDING COMPREHENSIVE COMMUNITY-BASED SCREENING, LINKAGE AND MEDICAL SERVICES TO NEW YORKERS WITH OR AT RISK FOR CHRONIC HEPATITIS C INFECTION Ashly Jordan, NYC Department of Health and Mental Hygiene

Using Surveillance Data to Identify HIV-Infected Persons Out-Of-Care in New York City and Offer Linkage to Care and HIV Partner Services

Colin Shepard, NYC Department of Health and Mental Hygiene

Engagement in Care Applied to US Department of Veterans Affairs (VA): HIV Virologic Outcomes in an Integrated Health Care System

Maggie Czarnogorski, Department of Veterans Affairs

page	session	title and author	abstract	poster
	Category A	A: Routine and Expanded Testing		
37		In a High HIV Prevalence Area, Are African-American and Hispanic Patients Aware of Who Should be Tested for HIV in the Routine Opt-Out HIV Testing Era $MArya$	1	
37		Chief Complaints of Newly Diagnosed HIV Patients versus Negative Controls in Two Urban Emergency Departments Conducting Routine Opt-Out HIV Screening $MArya$	2	
38		Rates of Hepatitis C Virus Testing Among US Veterans in Department of Veterans Affairs Care, 2011 $\it LBackus$	3	
39		Performance Characteristics of ADVIA Centaur HIV Ag/Ab Combo (CHIV) Assay for the Simultaneous Detection of HIV p24 Antigen and Antibodies to HIV-1 (Groups M and O)and HIV-2 in Human Serum or Plasma L Baker	4	
39		Barriers and Facilitators to HIV and Hepatitis C Testing Among Active Intravenous Drug Users <i>J Barocas</i>	5	
40		Low Rates of Screening for HIV and Hepatitis C Among Injection Drug Users Not Engaged in Primary Care: A Community-Based Survey <i>J Barocas</i>	6	
41		HIV Testing Practices Differ Among Black Primary Care Physicians in the US According to Physician Characteristics and Patient Demographics <i>B Baugh</i>	7	
42		Feasibility and Acceptability of Hepatitis C Virus Counseling and Rapid Testing in a Criminal Justice Setting C Beckwith	8	
42		Syringe Access and Clinic Based Routninized Outreach, Testing, and Linkage to Care <i>J Benitez</i>	9	
43		Internal Evaluation of the Bio-Rad Geenius $^{\text{\tiny M}}$ HIV 1/2 Supplemental Assay C Bentsen	10	
44		Barriers and Facilitators to Universal HIV Screening Among Internal Medicine Residents M Brennan	11	

page	session	title and author	abstract	poster
45		Hepatitis Education and Testing in Rural Missouri B Burkett	12	
45		Routine HIV Testing: The Teen Health Clinics' Experience R Buzi	13	
46		Synergizing HIV Testing and Viral Hepatitis B Screenings Amongst Hard to Reach Asian & Pacific Islander Populations through Non-Traditional Approaches B Cabangun	14	
47		Making HIV Testing a Routine Component of Gynecologic Care for All Women R Carlson	15	
47		Structural Modifications Allowing for Efficient Implementation of Routine Opt-Out Testing in Community Health Settings M Chapman	16	
48		Engaging Stakeholders in the Development of a Comprehensive Manual for Hepatitis C Counseling and Testing <i>G Chovnick</i>	17	
49		Routine HIV Testing in Emergency Departments: Capturing Missed Opportunities in Texas I Clark	18	
49		Performance Characterization of the Second Generation COBAS® AmpliPrep/COBAS® TaqMan® HCV, v2.0 Quantitative Test Incorporating a Novel Dual-Probe Assay Design B Cobb	19	
50		Increasing Hepatitis B Screening in Asian and Pacific Islander Communities: Best Practices and Lessons Learned in Philadelphia C Cohen	20	
51		Barriers to On-Site Rapid HIV Testing in New Jersey Substance Abuse Treatment Programs N Cooperman	21	
51		Testing Preferences and Knowledge of HBV and HCV Among a New York City Emergency Department Patient Population E Cowan	22	
52		Routine HIV Testing in the US Department of Veterans Affairs (VA): Impact of National Policy Change and Operational Interventions 2009–2011 M Czarnogorski	23	

page	session	title and author	abstract	poster
53		Increasing Routine Viral Hepatitis Testing: Technical Consultation Report Findings <i>C Dan</i>	24	
53		Opportunities for Expanding HIV Testing Through Health Reform $L\ Dawson$	25	
54		Mandatory HIV Testing in the Emergency Department: An Evaluation of Statewide Testing in NY Since the 2010 Legislation Making it Law $D\ Egan$	26	
55		Blood or Swab? Effect of Changing from an Oral Swab to a Whole Blood Finger Stick HIV Test on Rates of Acceptance A Fatima	27	
55		An Algorithm Using Electronic Medical Record Data Accurately Identifies Patients with Unknown HIV Status in a Large, Urban Healthcare System <i>U Felsen</i>	28	
56		Primary Care Physician Implementation of Routine HIV Screening in Washington, DC: An Assessment of Perceptions, Challenges and Barriers L Fitzpatrick	29	
57		Implementation of an Emergency Department HIV Routine Screening Program in Inner City Washington, DC: Lessons Learned and New Frontiers. L Fitzpatrick	30	
58		The Impact of HCV Rapid Testing on Individuals Knowledge of Their HCV Status <i>C Flanigan</i>	31	
58		Mapping the Co-Occurrence of HIV, Hepatitis C, and Chlamydia in New York City (NYC) to Support Targeted Testing at Federally Qualified Health Centers (FQHCs) J Fuld	32	
59		Routine HIV Testing at Montefiore Medical Center: Scale-Up Case Studies from New York City's Second Largest Hospital System D Futterman	33	
60		Self-Testing in the Emergency Department (ED) by Kiosk C Gaydos	34	
60		Scaling Up Community-Based HIV Antibody and RNA Testing Among Gay Men in San Francisco S Gibson	35	

page	session	title and author	abstract	poster
61		Impact of Electronic Medical Record and Revised Triage Process on Routine HIV Screening in the Emergency Department. P Green	36	
62		Comparison of Enhanced Targeted Rapid HIV Screening Using the Denver HIV Risk Score to Nontargeted Rapid HIV Screening in an Urban Emergency Department and Urgent Care Setting J Haukoos	37	
63		Novel Emergency Department Registration Kiosk for HIV Screening Increases Engagement of High Risk Patients Y Hsieh	38	
63		Kiosk-Facilitated Patient Self Testing for HIV in an Emergency Department Rapid HIV Screening Program Y Hsieh	39	
64		Undiagnosed HIV Infection in an Urban Emergency Department: A Blinded, Cross-Sectional Serosurvey <i>M Iscoe</i>	40	
65		Implementing a Rapid HIV Testing Program in a New York City Hospital-Based Dental Clinic <i>M Iscoe</i>	41	
65		Increasing HIV Testing Among African-Born Immigrants in Dublin, Ireland: A Qualitative Study of Challenges and Opportunities in the Irish Health Service M Iscoe	42	
66		Hepatitis C Virus Screening Practices Among Primary Care Physicians in Four Large Primary Care Settings A Jewett	43	
67		Acceptability and Ease of Use of Home Self-Testing for HIV Among Men Who Have Sex with Men $D\ Katz$	44	
67		Point-of-Sex Testing: Intentions of Men who Have Sex with Men to Use Home-Use HIV Tests with Sex Partners D Katz	45	
68		Endocarditis as a Sentinel Marker for New Epidemics of Injection Drug Use and Hepatitis C Virus Infection <i>S Keeshin</i>	46	
69		Missed Opportunities in HIV Testing in New York City A King	47	

page	session	title and author	abstract	poster
69		HIV Testing in Free, Mobile Dental Clinics in North Carolina P Klein	48	
70		Culture Change and Expanded HIV Testing K Koechlin	49	
71		The Implementation of Hepatitis C (HCV) Rapid Testing Technology in HCV Counseling and Testing Sites in Ohio K Koechlin	50	
71		HIV Risk Screening Practices Among Internal Medicine Residents in 2012 D Krakower	51	
72		Engaging Philadelphia's Immigrant African and Caribbean Communities in HIV Testing: Lessons Learned H Kwakwa	52	
73		Back to Basics: A Model for Ensuring Consistent HIV Screening and Testing in Multi-Service CBOs $\it DLopez$	53	
73		A Comparison of Time Requirements for Targeted and Non-Targeted Counselor-Based Emergency Department HIV Screening <i>M Lyons</i>	54	
74		Indications for Testing Among Reported Cases of Hepatitis C Virus Infection from Enhanced Hepatitis Surveillance Sites — United States, 2004–2010 R Mahajan	55	
75		Texas' Experience with Routine HIV Testing in Healthcare Settings. J McFarlane	56	
75		Can a Video Substitute for An In-Person Discussion in Delivering HIV Pre- Test Information to Spanish-Speaking Latinos and Better Serve Those with Lower Health Literacy? R Merchant	57	
76		What Affects Acceptance of Routine HIV Screening in Pediatric Emergency Departments by Adolescents? N Messenger	58	
77		National Hispanic Hepatitis Awareness Day (NHHAD): Adapting a Highly Effective Community Mobilization Model and Social Marketing Campaign B Morales-Reid	59	
77		Assessment of Need for Targeted Acute HIV Screening in the Emergency Department L Moreno-Walton	60	

page	session	title and author	abstract	poster
78		Fostering International Collaborations to Improve HIV Testing and Linkage to Care in a Randomised Study: The Mater-Bronx Rapid HIV Testing (M-BRiHT) Project. G O'Connor	61	
79		Acceptability and Implications of Rapid HCV Test Among High Risk Young Injection Drug Users $\it KPage$	62	
80		Three Years of Routine Screening for HIV in a Large Urban Hospital System: What has Been Achieved? S Pasalar	63	
80		Transmission Network Targeting: Incorporating Social Network and Partner Testing with an Emergency Department HIV Screening Program R Paulsen	64	
81		Building Sustainable Universal HIV Screening Programs in Pediatric Emergency Departments: A Comparison <i>J Payne</i>	65	
82		From Recommendation to Implementation: the Long Road to Routine HIV Screening $\it TPenrose$	66	
82		A Qualitative Exploratory Study of Social Network Testing Among Three High Risk Populations J Peterson	67	
83		Integrating Hepatitis C Risk Assessment into HIV Counseling, Testing, and Referral Data Collection Systems T Pham	68	
84		Never-Testing for HIV Among New York City (NYC) Adults Aged 18–64 Years, 2010 C Philippou	69	
85		Reducing Barriers to HIV Testing — What Influences Testing Offer and Uptake? Lessons Learned from the HIV in Europe Initiative D Raben	70	
85		Extent of Hepatitis C Screening and HIV Testing and Linkage to Care Services Among Substance Use Treatment Programs in New York City S Ramachandran	71	
86		Expanding Our Reach: State and Local Health Department Efforts to Increase Access to and Utilization of HIV and HCV Testing L Randall	72	

page	session	title and author	abstract	poster
87		Hepatitis C Antibody Testing and Follow-Up in Primary Care Settings: A Retrospective Study of Four Large, Primary Care Service Centers D Rein	73	
87		Educational Tools to Enhance Routine HIV Testing in Adolescents and Young Adults C Rodriguez	74	
88		Integrating Routine HIV Testing in Primary Care V Rodriguez	75	
89		A Qualitative Assessment of Facilitators and Challenges to the Scale up of HIV Testing in the District of Columbia <i>J Skillicorn</i>	76	
89		CDC's Evidence-Based Recommendations for the Identification of Hepatitis C Virus (HCV) Infection Among Persons Born During 1945–1965 in the United States B Smith	77	
90		Routine HIV Testing and Linkage to Care Services Offered at Public Aid Offices can Help Identify Undiagnosed HIV Infections and Facilitate Linkage to HIV Care in Urban High Risk Minority Communities <i>T Soto</i>	78	
91		Oral Fluid is Inferior to Fingerstick Point-of-Care HIV Tests Among Seattle MSM J Stekler	79	
92		HIV Testing in US Emergency Departments, Outpatient Ambulatory Medical Departments, and Physician Offices, 1993–2010 $\it MTai$	80	
92		Routine HIV Testing as a Vital Sign — Two Years' Experience G Teferi	81	
93		Preliminary Results from "Do One Thing": A Comprehensive Neighborhood-Based HIV and HCV Testing, Prevention and Media Campaign in Southwest Philadelphia S Trooskin	82	
94		Using Conventional HIV Tests for HIV Diagnosis on Oral Fluid Specimens. $T\ Vermoesen$	83	
94		Creating, Sustaining, and Expanding a Comprehensive HIV Program in an Emergency Department and Community Health Center Setting. L Wilbur	84	
I				

page	session	title and author	abstract	poster
95		A Review of HIV Home Self-Testing: Issues and Implications from a Global Perspective V Wong	85	
96		Routine Opt-Out HIV Screening on the U.S. — Mexico Border, Opportunities for Diagnosis and Prevention R Woolard	86	
96		Status of HIV Diagnostic Testing in U.S. Public Health Laboratories K Wroblewski	87	
97		Who Better than Us? Recruiting Individuals with Histories of Incarceration and Substance Abuse to Increase Access to HIV and HCV Testing and Linkage to Care T Young	88	
98		Umndeni Care Program (UCP): Lessons Learned from Home HIV Testing and Linkage to Care in the South African Generalized Epidemic <i>B Zanoni</i>	89	

page	session	title and author	abstract	poster
	Category B:	Prevention Models		
100		Near-Perfect Adherence in US iPrEx RCT Sites: Frequency and Correlates. $KAmico$	90	
100		HOME: A Holistic Approach to HIV Prevention and Program Evaluation for Young MSM of Color in New York City $\it EAponte$	91	
101		Preparing for and Conducting a Successful HCV Vaccine Trial with Injection Drug Users A Asher	92	
102		Young Adults at Risk for HCV: Meeting Their Needs through the UFO Model Prevention Program A Asher	93	
103		Circle of Life — Multimedia Curriculum for Native American Youth E Bennett-Barnes	94	
103		How to Implement PrEP S Cahill	95	
104		Provider Knowledge, Use, and Barriers to the Uptake of PEP and PrEP $A\ Castel$	96	
105		Development of a PrEP Candidate Screening Tool: An Assessment of PrEP Knowledge and Health Behaviors Among Individuals at High-Risk for HIV A Castel	97	
105		HIV Pre-Exposure Prophylaxis (PrEP): Knowledge and Attitudes Among a New York City Emergency Department Patient Population <i>E Cowan</i>	98	
106		A Best-Practice Community-Based Approach to Hepatitis Prevention for At-Risk Immigrant and Refugee Communities $\textit{MEl-Shamaa}$	99	
107		High School Health Education Classes Remain Inadequate in Providing HIV Prevention Information C Fichtenbaum	100	
107		Comprehensive Community Prevention Models: HIV Prevention on Hispanic Serving Universities in South Texas E Haggerty	101	

page	session	title and author	abstract	poster
108		HIV Providers' Perceived Barriers and Facilitators to Implementing Treatment as Prevention in Clinical Practice: A Qualitative Study D Krakower	102	
109		Sustaining Vital Linkages Between Community and Clinical Settings for MSM J Murphy	103	
110		HIV Prevention in Black Churches: the Healing Faith Model R Newells	104	
110		Development and Implementation of a Clinic-Based, Provider-Driven Prevention with Positives (PwP) Pilot Program in New York City (NYC). S Ramachandran	105	
111		Project ECHO's (Extension for Community Health Outcomes) Prisoner Health is Community Health: The New Mexico Peer Education Project (NM PEP) K Thornton	106	

page	session	title and author	abstract	poster
	Category C	: Outcomes and Impact Evaluation		
114		State of the ART: Characteristics of HIV Infected Patients Receiving Care in Mississippi (MS), USA from the Medical Monitoring Project, 2009–2010 A Barnes	107	
114		Strengthening the Circle with Tribal Initiatives on HIV/AIDS E Bennett-Barnes	108	
115		Dynamic Trends in HIV/AIDS Diagnoses and Related Biological, Sexual, and Drug Use Risk Factors Among Adolescents in Washington, DC Y Jia	109	
116		Longitudinal Viral Load Predicts Mortality Among a Cohort of 3850 HIV-Infected Individuals $Y Jia$	110	
116		Cost Analysis of Positive Charge, a Multi-Site Linkage to Care Program $J\mathit{Kim}$	111	
117		Newly Diagnosed Positives Identified by HIV Testing Programs in New York City $A\ King$	112	
117		Impact of Expanded HIV Testing in New York City A King	113	
118		Building a Culturally Tailored PrEP Demonstration Program for Young Men who Have Sex with Men of Color: Lessons Learned from the CRUSH Project in Oakland, California K Koester	114	
119		Estimating the Number of Injection Drug Users in the United States to Calculate National Rates of HIV Infection A Lansky	115	
119		Estimating Averted HIV-Related Medical Costs on the Path to Eliminating Mother-to-Child Transmission Among HIV-Infected Pregnant Women in New York State: 1998–2010. F Laufer	116	
120		HIV/AIDS-Related Hospitalization Rates in US Short-Stay Hospitals, 1982–2010 R Merchant	117	

page	session	title and author	abstract	poster
121		Sustained Virologic Response and the Development of Hepatocellular Carcinoma (HCC) Among Persons with Chronic Hepatitis C Virus (HCV) Infection: a Meta-Analysis of Observational Studies R Morgan	118	
121		Persons Diagnosed and Living with HIV/AIDS (PDLWH/A) who can Potentially Transmit HIV through Heterosexual Contact in Pennsylvania, 2010. B Muthambi	119	
122		Persons Diagnosed and Living with HIV/AIDS (PDLWH/A) who can Potentially Transmit HIV through Men having Sex with Men (MSM) in Pennsylvania, 2010. B Muthambi	120	
123		Clinical Differences Between Black and White MSM Newly Diagnosed with HIV Disease in the District of Columbia $JOpoku$	121	
124		Using Cross-Matched HIV and Sexually Transmitted Disease Registry Data to Estimate Adherence to Dual Screening Recommendations in New York City C Shepard	122	
124		A Cost-Effectiveness Analysis of the Washington, D.C. Department of Health's HIV/AIDS Linkage to Care Programs J Wedeles	123	
125		Linkage, Engagement and Viral Suppression Rates Among HIV-Infected Persons Receiving Care at Medical Case Management Programs in Washington, DC. S Willis	124	

page	session	title and author	abstract	poster
	Category D	: Access, Linkage and Retention in Care		
128		Increasing Retention in Care for HIV+ Homeless Individuals: Harlem Model Implementation <i>E Aponte</i>	125	
128		A Qualitative Assessment of Facilitators and Challenges to HIV Linkage to Care Models in Washington, DC <i>M Bennett</i>	126	
129		The Use of Person-Locating Software to Improve Surveillance-Based Estimates of HIV Prevalence and Retention-in-Care in New Mexico <i>T Bryant</i>	127	
130		To Link or Not to Link: That is the Question J Carrel	128	
130		Follow-Up Testing for Hepatitis C Virus Infection: An Analysis of Massachusetts Surveillance Data from 2007–2010. D Church	129	
131		Mortality Trends Among People Reported with Hepatitis C Virus Infection: Massachusetts, 1992–2009 D Church	130	
132		Engagement in Care Applied to US Department of Veterans Affairs (VA): HIV Virologic Outcomes in an Integrated Health Care System. M Czarnogorski	131	
132		Routine Testing, Linkage and Retention in Care: A Federally Qualified Health Centers' (FQHC) Implementation Experience. L Darden	132	
133		Utility of Identifying Out of Care HIV-Infected Patients in a Hospital Setting and Enrolling Them in a Retention Intervention <i>J Davila</i>	133	
134		The State Healthcare Access Research Project on Access to Care for Persons Living with Hepatitis C in Massachusetts M Ellwood	134	
134		Epidemiological Characterization and Linkage to Care of Newly-Diagnosed HIV-Positive Persons at an Urban Hospital in Washington, DC $\it L$ Fitzpatrick	135	
135		Exploring the Perceptions of HIV and HIV Clinical Research Among Urban Native Americans in Order to Empower the Community to Participate in the Research Process. R Foley	136	

page	session	title and author	abstract	poster
136		Integrating HIV Prevention with Hepatitis C Programs Targeting HIV Service Providers, LGBT Service Providers, Substance Use Centers, Correctional Facilities, and Criminal Justice Entities L Frederick	137	
137		The New York State Center of Expertise on Aging, HIV, Hepatitis and STIs (Center of HIV and Aging) L Frederick	138	
137		Reaching and Retaining Co-Infected HIV/HCV Residents in Underserved Communities K Gilgenberg	139	
138		Linkage to HIV Care in the VA Healthcare System T Giordano	140	
138		Navigating HIV Positive Clients to Care from an Integrated Routine HIV Testing Program in an Urban Hospital N Glick	141	
139		Alaska Liver Connect: Providing Remote Specialty Liver Disease Education $\it JGove$	142	
140		in+care Campaign: a National Virtual Collaborative to Improve Retention $\it MHager$	143	
141		Racial Disparities in Unprotected Sex, HIV Infections, and Engagement in Care, Viral Load Suppression Among Individuals Living with HIV in Hyperendemic MSM Community of Washington DC Y Jia	144	
141		The State of HIV in Primary Care: A Fractured Landscape A Johnson	145	
142		Influencing Blacks and African Americans' Decision to Provide HIV Care: Greater Focus on Medically Underserved Communities and Health Equity A Johnson	146	
143		Check Hep C: A Demonstration Project for Providing Comprehensive Community-Based Screening, Linkage and Medical Services to New Yorkers with or at Risk for Chronic Hepatitis C Infection A Jordan	147	
143		Patterns and Correlates of Linkage to Appropriate HIV Care Following HIV Diagnosis in the U.S. Medicaid Population <i>T Juday</i>	148	

page	session	title and author	abstract	poster
144		Impact of Payer Type on HIV Stage of Illness at Time of Initiation of Antiretroviral Therapy in the United States <i>T Juday</i>	149	
145		Increasing the Capacity to Treat Hepatitis C and HIV in Primary Care Using the Project ECHO Model in a FQHC K Khatri	150	
146		Understanding Barriers to Linking Persons Living with HIV to Care in the United States: Findings from the Positive Charge Initiative $JKim$	151	
146		Intervention Using Motivational Interviewing Improves Retention in HIV Care D Konkle-Parker	152	
147		Responding to HIV stigma and Lack of Data Collection within African Immigrant and Refugee Communities in the US $M\ Korto$	153	
147		I. Bridging Cultural Competency with Comprehensive Sexual Health Services for African Clients $M\ Korto$	154	
148		Assessing Organizational and Network Change for a Linkage to Care Intervention in Louisiana <i>C Maulsby</i>	155	
149		Emergency Department Utilization and Hospital Admissions after a New Diagnosis of HIV $\it NNguyen$	156	
149		Increasing Access to Hepatitis and HIV Testing, Care and Treatment: Identifying Provider Training Needs and Services Provided <i>J Orose</i>	157	
150		Hepatitis Outreach Network: A Practical Strategy for Hepatitis Screening with Linkage to Care in Foreign Born Communities <i>P Perumalswami</i>	158	
150		HIV/AIDS and Hepatitis Health Department Collaborations with Community Health Centers: Successes and Challenges <i>L Randall</i>	159	
151		Evaluation of a Highly Intensive, Comprehensive, and Individualized Linkage to Care Pilot Intervention in an Emergency Department HIV Screening Program A Ruffner	160	

page	session	title and author	abstract	poster
152		Using Surveillance Data to Identify HIV-Infected Persons Out-of-Care in New York City and Offer Linkage to Care and HIV Partner Services <i>C Shepard</i>	161	
153		Support for the Information, Motivation, Behavioral Skills-Model Situated to Retention in HIV-Care (sIMB) in Identifying Theory-Based Intervention Targets to Provide Point-of-Care Support for Sustained Retention in HIV Medical Care. L Smith	162	
153		An Innovation in Provider HIV Education: University of New Mexico (UNM) Project ECHO (Extension for Community Healthcare Outcomes) Telehealth & New Mexico AIDS Education and Training Center (NM AETC) HIV Clinic. K Thornton	163	
154		Project ECHO: Outcomes of Hepatitis C Treatment by Primary Care Providers <i>K Thornton</i>	164	
155		A Comprehensive, Multilevel Approach to Engaging and Retaining Marginalized Heterosexual Black Males in Wards 6, 7, and 8 of the District of Columbia in HIV Care A Young	165	



Category A: Routine and Expanded Testing



In a High HIV Prevalence Area, Are African-American and Hispanic Patients Aware of Who Should be Tested for HIV in the Routine Opt-Out HIV Testing Era

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OBJECTIVE: To better understand the ongoing low HIV testing prevalence in community health centers implementing routine opt-out HIV screening, the objective of this study was to determine if African-American and Hispanic patients are aware of the CDC recommendations for routine HIV testing of all persons ages 13–64. The findings of this study will guide the development of HIV testing campaigns to improve HIV testing in these clinical settings.

METHODS: In a community health center serving predominantly African-American patients and a community health center serving predominantly Hispanic patients, a survey was given to patients in health center waiting rooms. The survey presented seven categories of people that should be HIV tested based on CDC recommendations: men who have sex with men, people who use intravenous drugs, people who have sex for money/drugs, people who have more than one sex partner, pregnant women, healthy teenagers, and healthy adults. Survey participants were asked which of these people should be HIV tested.

RESULTS: One-hundred seventy-six African-American and fifty-five Hispanic patients participated. The percentages of African-Americans versus Hispanics believing people should be HIV tested were: men who have sex with men (96% vs. 76%), people who use intravenous drugs (95% vs. 76%), people who have sex for money/drugs (95% vs. 86%), people who have more than one sex partner (94% vs. 64%), pregnant women (79% vs. 67%), healthy teenagers (74% vs. 40%), and healthy adults (73%

vs. 46%). For all categories of people except pregnant women, African-Americans were significantly more likely than Hispanics to know that they should be HIV tested (p < 0.01).

CONCLUSIONS: Knowledge of the recommendation for routine HIV testing for all persons ages 13–64 — including healthy teenagers and adults — could be improved among African-Americans and Hispanics. Our study found that African-Americans had more accurate knowledge than Hispanics. Knowledge deficits could be one reason why many patients continue to opt-out of HIV testing even when it is offered routinely in health care settings. Other research has shown that self-perceived risk is lower than actual risk. Health center campaigns focused on disseminating knowledge about HIV risk and promoting CDC HIV testing recommendations may improve HIV testing rates.

ABSTRACT 2

Chief Complaints of Newly Diagnosed HIV Patients versus Negative Controls in Two Urban Emergency Departments Conducting Routine Opt-Out HIV Screening

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OBJECTIVE: In 2008 and 2009, two emergency departments (ED) in a publically funded hospital system in a high HIV prevalence area began routine opt-out HIV testing. The objective of this study was to compare the chief complaints of patients whose HIV test was positive to the chief complaints of patients whose HIV test was negative on routine screening to determine if persons who tested positive presented with distinctive chief complaints.

METHODS: A case-control study was performed to examine the ED chief complaints reported by patients tested for HIV in a routine, opt-out HIV testing program. Cases were patients whose HIV test in that visit was positive and without a known previous HIV diagnosis (new



positive), and controls were patients (matched on gender, age, race, in a 1:1 ratio) whose HIV test in that ED visit was negative. Free text chief complaints were abstracted from the electronic medical record, and categorized into clinical categories. The relative frequencies of the complaints were calculated and ranked.

RESULTS: Between August 2008 and August 2010, there were 342 patients identified to be newly HIV positive by routine HIV screening in the EDs, among 72,922 tested. Among the persons with newly diagnosed HIV infection, the top five chief complaints were: body pain (8%), fever/chills/night sweats (5%), shortness of breath/respiratory problems (5%), vomiting/nausea (4%), and drowsiness/weakness/fatigue (4%). Among the control patients with negative HIV test results, the top five chief complaints were: abdominal pain (14%), chest pain (10%), injury/trauma (6%), kidney/urinary problems (6%), and shortness of breath/respiratory problems (6%).

CONCLUSIONS: In a routine opt-out HIV screening program in a high HIV prevalence area, it appears that there are no predominant chief complaints among those with unrecognized HIV infection compared to patients who test HIV negative. Among the newly diagnosed, even the complaint of fever — which may suggest an infectious etiology — was reported only 5% of the time. Given the low frequencies of even the top five chief complaints and the broad diversity of chief complaints of persons who tested HIV positive, our findings suggest that chief complaints in the ED should not be used to guide HIV testing strategies. Routine opt-out HIV testing as recommended by the CDC should continue to be supported.

ABSTRACT 3

Rates of Hepatitis C Virus Testing Among US Veterans in Department of Veterans Affairs Care, 2011

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OBJECTIVE: In August 2012, the Centers for Disease and Prevention (CDC) augmented its recommendations

for hepatitis C virus (HCV) testing. Specifically, it recommended "one-time testing without prior ascertainment of HCV risk for persons born during 1945–1965, a population with a disproportionately high prevalence of HCV infection and related disease." Historically, the policy for HCV testing in the Department of Veterans Affairs was based on assessing for exposure risk consistent with previous CDC recommendations. We sought to assess the extent to which veterans in recent Department of Veterans Affairs (VA) care — particularly those veterans born during 1945-1965 — have been tested for HCV.

METHODS: We used the VA's Corporate Data Warehouse (CDW) to identify the birth dates, sex, race/ethnicity and VA laboratory tests of all veterans who had at least one VA outpatient visit in 2011. For HCV testing we accepted HCV antibody (including RIBA), viral load and genotype tests as evidence of testing for HCV. We calculated rates of testing for HCV overall, by birth cohort, by sex and by race/ethnicity.

RESULTS: Overall among 5,415,084 veterans with a VA outpatient visit in 2011, 54.9% had a VA test for HCV infection. Stratified by birth cohort, the rate was 41.4% for those born before 1945, 65.1% for those born during 1945–1965 and 60.1% for those born after 1965. HCV testing rates were higher in females (59.0%) than males (54.6%). Among those with race/ethnicity identified, rates were as follows: Hispanics 69.6%, Blacks 67.0%, Asians 63.5%, American Indian/Alaskan Natives 63.0%, Hawaiian/Pacific Islanders 57.1% and Whites 53.6%.

CONCLUSIONS: Among veterans in recent VA care, rates of VA HCV testing are higher among those born during 1945–1965 than among other birth cohorts. Of note, these results are limited to VA laboratory tests so the rates may be underestimated since some veterans may have been tested at non-VA facilities. Additional work is underway to measure testing rates by geographic location in order to identify variation and to target veteran and VA provider education to increase birth cohort testing rates. Substantial numbers of veterans still require testing to meet the CDC's recommendation of one-time HCV testing for everyone in this birth cohort.



Performance Characteristics of ADVIA Centaur HIV Ag/Ab Combo (CHIV) Assay for the Simultaneous Detection of HIV p24 Antigen and Antibodies to HIV-1 (groups M and O) and HIV-2 in Human Serum or Plasma

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OBJECTIVE: The automated ADVIA Centaur HIV Ag/Ab Combo (CHIV) assay* is designed to simultaneously detect both antibody to human immunodeficiency virus (HIV) and HIV p24 antigen on the ADVIA Centaur systems. This study evaluated the sensitivity and specificity of the ADVIA Centaur CHIV assay.

METHODS: The diagnostic sensitivity of the CHIV assay was evaluated with 728 HIV-positive samples and specificity was determined by testing 9191 unique random donor samples. The results were reported in Index values as reactive (Index = 1.0) or nonreactive (Index < 1.0). A total of 326 samples from 35 disease groups of potential cross-reactants were tested on the CHIV assay. Forty-eight HIV-infected viral lysate (antigen) isotypes that included isotypes A, B, C, D, F, G, O, AE, and AG were tested on CHIV for reactivity. Forty-five commercially available HIV seroconversion panels were tested. HIV-1 p24 Antigen (1st International Reference Reagent) was used to evaluate analytical sensitivity to the p24 antigen. Precision was evaluated in a study involving 20 days, two runs per day.

RESULTS: All the positive samples showed reactivity by the CHIV assay, resulting in 100% (728/728) sensitivity. Specificity determined by testing 9191 unique random donor samples was 99.82% (9174 / 9191). Testing of the potentially cross-reactive samples (n=326) on the CHIV assay yielded no reactive samples. All HIV-infected viral lysates (n=48), including isotypes A, B, C, D, F, G, O, AE, and AG, as well as HIV-2 strain NHIZ, tested reactive on the CHIV assay. The seroconversion sensitivity of the CHIV assay on all 45 panels tested was equivalent to that of

the reference methods as per vendor certificate of analysis. The observed mean analytical sensitivity of HIV-1 p24 antigen across three lots on the ADVIA Centaur system was 1.17 IU/mL. The CHIV assay had a within-run CV of $<\!10\%$ and a total CV of $<\!12\%$ over the assay range.

CONCLUSIONS: The results of this study show that the ADVIA Centaur HIV Ag/Ab Combo (CHIV) assay is a reliable and accurate, fully automated qualitative method to simultaneously detect the presence of both HIV p24 antigen and HIV antibodies in human serum or plasma.*Not available for sale in the U.S. This assay is CE marked. ADVIA Centaur HIV Ag/Ab Combo assay is developed, manufactured, and sold by Siemens Healthcare Diagnostics Inc. for Ortho-Clinical Diagnostics Inc.

ABSTRACT 5

Barriers and Facilitators to HIV and Hepatitis C Testing Among Active Intravenous Drug Users

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OBJECTIVE: Non-sterile injection practices and unprotected sexual contact place injection drug users (IDUs) at high risk of contracting and transmitting HIV and Hepatitis C (HCV). Despite this, screening rates remain low. We explored perceived barriers and facilitators to HIV and HCV testing among IDUs utilizing a community-based needle exchange program.

METHODS: We conducted a cross-sectional, brief interview of 553 active IDUs in multiple urban settings in Southern Wisconsin who presented for free needle exchange services. Questions were developed based on the health belief model. Interviewers recorded verbatim oral responses on a standardized spreadsheet. Each participant received \$10 for compensation. Two investigators used inductive thematic analysis to code the qualitative responses line-by-line, and determined main themes by consensus. Coders achieved 81% agreement.



RESULTS: Participants were 69% male, 83% white, and had a median age of 28 (Interquartile range 23-36). Heroin was the most commonly injected drug (85%), and 68% injected drugs at least daily. IDUs reported the following barriers to HIV testing: lack of transportation, fear of a positive test, and time limitations. Comparatively, barriers to HCV testing included access to transportation, time limitations, cost of the test or lack of health insurance. Many reported that stigma associated with a positive HIV test was a significant barrier to HIV testing. Knowledge regarding testing appeared to be more of a barrier to HCV than HIV testing. The most frequent facilitators to either HIV or HCV testing included access to free testing at a supportive setting such as a communitybased organization, convenient locale (including mobile testing), linkage with the needle exchange program, and general health concerns. Barriers and facilitators identified during thematic analysis were sub-categorized within five domains of a proposed conceptual model describing HIV/ HCV screening behavior: (1) attitude toward testing, (2) access to a testing site, (3) IDU-provider communication regarding testing, (4) test performance, and (5) timely provision of results.

CONCLUSIONS: Our study offers an analysis of why active IDUs do not participate in HIV and HCV screening, and a model for future research. Most barriers to screening were related to limited access and resources such as locale, transportation, and time constraints. Stigma and fear associated with a positive test were also significant barriers to testing for HIV. Many IDUs reported concern about their overall health. This knowledge gap may be addressed through tailored education focused on their health benefits from HIV and HCV screening.

ABSTRACT 6

Low Rates of Screening for HIV and Hepatitis C among Injection Drug Users Not Engaged in Primary Care: A Community-Based Survey

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OBJECTIVE: The CDC has recommended expanded testing for HIV and hepatitis C (HCV) in health care settings to reduce the number of undiagnosed cases in the US. Injection drug users (IDUs) are at high risk for HIV/HCV, but often have poor access to health care and, therefore, may fail to receive appropriate screening. We investigated the use of community-based HIV/HCV screening among IDUs utilizing a needle exchange program.

METHODS: Lifepoint Needle Exchange is a statewide program offering free syringe exchange and HIV/HCV prevention services to IDUs in 11 cities across Wisconsin. Clients who inject drugs are encouraged to undergo HIV and HCV screening at least every six months and tests are provided free-of-charge upon request. We invited Lifepoint clients to complete an anonymous, 88-question, computerized survey that assessed frequency of HIV/HCV testing, injection-related risk behaviors, and access to medical care. Multiple logistic regression was used to identify factors associated with receiving recommended semiannual screening for HIV and HCV.

RESULTS: The survey was completed by 553 IDUs, of whom 69% were male, 83% white, 11% black and 6% Hispanic. The median age was 28. The percentage of respondents reporting they were tested for HIV in the past six and twelve months was 61.1% and 76.9%, respectively, with a somewhat smaller percentage reporting an HCV test during those intervals (55% and 69%). Of those tested for HIV during the past 6 months, 21.5% received their test at the needle exchange site, 31.7% from a primary care



provider, 8% in a correctional facility, and 38% at some other location. Respondents were more likely to report being tested for HIV in the past 6 months if they were under 30 (odds ratio (OR) 1.6, 95% confidence interval (CI) 1.2–2.3), had health insurance (OR 1.5, 95% CI 1.1–2.2), and had a primary care provider (OR 1.8, 95% CI 1.2–2.5). Adjusting for age and insurance status, IDUs who reported attending a primary care visit in the past 6 months had over four-fold increased odds of receiving an HIV test (adjusted OR 4.4, 95% CI 2.1–9.3). Parallel analyses demonstrated a similar association between primary care visits and HCV testing.

CONCLUSIONS: Despite the availability of free testing for HIV and HCV at a highly-utilized, community-based needle exchange program, a minority of IDUs receive recommended screening through this venue. Access to primary health care is a strong predictor of receiving screening for HIV and HCV.

ABSTRACT 7

HIV Testing Practices Differ Among Black Primary Care Physicians in the US According to Physician Characteristics and Patient Demographics

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OBJECTIVE: The CDC recommends routine HIV testing in all healthcare settings, but this approach has not been widely incorporated in primary care settings, partially due to inconsistent physician adoption of the recommendation. The Black community bears a disproportionate burden of HIV and Black patients may preferentially seek treatment from Black physicians, but because only about 3% of physicians in the US are Black, each patient-physician interaction is an important opportunity to discuss HIV

testing. This study evaluated the HIV testing practices, perceptions, and attitudes of Black physicians who see Black patients in the US.

METHODS: A physician survey was administered at the 2010 National Medical Association Convention, by email, and via online panels. Eligibility criteria: Black race; primary care specialty; practicing at least 1 year; practice comprised of at least 60% adults and 20% Black patients.

RESULTS: Results are physician-reported estimates. 502 physicians responded: 47% male; 73% >40 years old; 28% with a high proportion Black patients (>75%); 27% with a high proportion low-SES (>45% 'poor') patients. Specialties: Internal/General Medicine (37%); Obstetrics/ Gynecology (26%); Family Practice (25%); Emergency/ Urgent Care (13%). Demographics of patient base: 56% Black; 33% men; 31% low-SES; 24% on Medicaid. Physicians generally over-estimated local HIV prevalence rates (13%-14%), yet only 34% of patients were tested for HIV in the past year; 67% of those tested did so due to physician recommendation. "More-routine" testers were more likely to be <40 years old, female, and OB/GYNs, and had more low-SES, Black, and Medicaid patients. Differences by geography of practice had minimal impact on testing rates. Physicians primarily recommended HIV testing to at-risk patients who were: involved with multiple sex partners (89% of physicians); injecting drug users (85%); sexually assaulted (83%); suspected of prostitution (77%); homosexual (77%); previously incarcerated (70%). These all ranked above routine testing (55%). Top barriers to testing were: patient may perceive recommendation as accusatory/judgmental; patient would not want to be identified as HIV-positive; competing priorities of physician; insufficient physician time with patient; patient may get offended due to HIV stigma.

CONCLUSIONS: Physician recommendation is a key driver of HIV testing among Black physicians in the US. However, multiple barriers exist that prevent routine testing and it is concerning that reported HIV testing rates was only 34%, which indicates that this is an area of focus for future targeted testing initiatives. Training and adoption of policies around CDC guidelines may encourage routinized HIV testing practices, improve linkage to care, and reduce HIV racial disparities.



Feasibility and Acceptability of Hepatitis C Virus Counseling and Rapid Testing in a Criminal Justice Setting

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OBJECTIVE: The primary objective of this research is to assess the feasibility and acceptability of rapid hepatitis C virus (HCV) testing among correctional populations through a pilot study of rapid HCV testing among 250 short-term inmates of the Rhode Island Department of Corrections (RIDOC).

METHODS: We created a brief (<10 minute) pretest counseling informational video on HCV. This video provides a general overview of HCV and modes of transmission; the importance of getting tested for HCV/ who should be tested for HCV; an explanation of the rapid HCV test; an explanation of the meaning of reactive and non-reactive rapid HCV test results; an explanation of confirmatory testing procedures for persons with a reactive rapid HCV test; and a brief overview of HCV care and treatment. HCV-negative, short-term inmates at the Rhode Island Department of Corrections (N=250) are recruited to participate in this pilot study. Participants complete an interviewer-administered baseline assessment regarding risk behaviors and HCV knowledge, view the video, and complete an OraQuick rapid HCV test. While the rapid HCV test is being processed, participants complete a second assessment to assess post-video HCV knowledge and opinions about the video. Participants with a non-reactive rapid test result receive standardized counseling. Those with a reactive rapid test result have a blood specimen obtained and a HCV viral load PCR test conducted for confirmation. Those with a positive HCV viral load result are counseled and referred for an HCV

assessment in the community after release. Community and Department of Corrections medical records of study participants identified as having chronic active hepatitis C are reviewed to collect relevant data on viral hepatitis medical appointments, testing, and treatment. Additional data relevant to a cost analysis of rapid HCV testing within correctional facilities will also be collected.

RESULTS: To date, 41 participants have been enrolled and completed rapid HCV testing; 3 participants had reactive rapid HCV tests, confirmed with positive HCV viral load results. These participants were referred to community-based HCV assessment appointments. Overall feedback on the video has been positive, and preliminary data suggest short-term efficacy in enhancing viral hepatitis knowledge.

CONCLUSIONS: The creation of a brief video providing information on HCV and rapid testing may help facilitate HCV testing within correctional facilities. Findings from this pilot study will inform the design of larger research trials and the implementation of HCV testing efforts in criminal justice settings.

ABSTRACT 9

Syringe Access and Clinic Based Routninized Outreach, Testing, and Linkage to Care

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OBJECTIVE: Describe Prevention Point Philadelphia 's(PPP)innovative approach to its current HIV testing program, to increase the number of newly identified and linked to care HIV and Hepatitis C positive Injection Drug Users by routinizing testing within PPP's Syringe Exchange Program (SEP) and Street-side Health Project (SHP) sites, utilizing 'social networking' outreach methods.

METHODS: PPP will routinize testing within its SEP at the point of registration at all mobile sites and during in-building syringe distribution days (Mondays and Saturdays). PPP will further innovate its testing program by beginning routinized testing within PPP's Street-side



Health Project (SHP) medical clinics, which conducted 1,121 screenings last year with 724 individuals. By specifically routinizing outreach, testing, and linkage to care within the SHP clinics, PPP will be able to target high risk participants who will have a sustained interaction with PPP staff but who have avoided testing through the current counseling and testing program. By redirecting testing staff to the SEP sites with the largest number of new SEP registrations and routinizing the testing offer as opposed to simply informing all new registrants of the opportunity for an HIV test or making testing available for those who ask, PPP will be able to target high risk participants who have not previously accessed sterile syringe access and prevention services.

RESULTS: PPP is proposing to conduct 1,000 HIV tests during 2012, to identify 22 newly identified as well previously identified but naive to or lost to care HIV positive individuals, to link at least 18 of those individuals to at least one HIV primary care appointment, to link 14 of those individuals to at least two HIV primary care appointments, and to link 12 of those individuals to all three HIV primary care appointments. PPP addition ally proposes to offer a rapid HCV test in conjunction with the HIV test to all individuals receiving an HIV test, and further proposes to successfully provide a rapid HCV screening to over 50% of individuals receiving an HIV test.

CONCLUSIONS: By offering routine HIV, HCV testing opportunities at Philadelphia's Syringe Exchange Program, PPP will reach more high risk individuals and present them with an opportunity for linkage to coordinated care for HIV,/HCV. The further expansion of testing services through out the free medical clinics will increase the opportunities for testing.

ABSTRACT 10

Internal Evaluation of the Bio-Rad Geenius™ HIV 1/2 Supplemental Assay

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OBJECTIVE: The objective of this internal study was to compare the sensitivity and specificity of this new assay with HIV reference assays (Bio-Rad HIV-1 Western Blot and Bio-Rad Multispot HIV-1/HIV-2 Rapid Test) on blood bank samples, hospitalized patient samples, HIV known positive samples, and seroconversion panels. The Bio-Rad Geenius™ HIV 1/2 Supplemental Assay is a rapid test for the confirmation and differentiation of HIV-1 and HIV-2 antibodies. The Geenius™ HIV 1/2 Supplemental Assay is simple and easy to use. This immunochromatographic test utilizes HIV-1 and HIV-2 antigens on the membrane solid phase and protein A which is conjugated to colloidal gold dye particles.

METHODS: In this validation of the Geenius[™] system (test device, reader & software), the specificity was evaluated on negative blood bank samples (n=350, serum and whole blood samples) and on samples from hospitalized patients (n=100). The sensitivity was tested on HIV-1 known positive samples (n=135), HIV-2 known positive samples (n=232), 32 commercial seroconversion panels (n=154 samples) and 4 samples from well-documented HIV coinfected patients.

RESULTS: The specificity in this study was 100% (450/450, 95% CI 99.2–100%). No false positive results were found in the testing of blood bank samples and samples from hospitalized patients. Of the 135 known HIV-1 positive samples, 100% (135/135, 95% CI 97.2–100%) were positive. Of the 232 known HIV-2 samples, 100% (232/232, 95% CI 98.4–100%) were positive. The performance of the Geenius™ HIV 1/2 Supplemental Assay with seroconversion panel's demonstrated greater sensitivity than the GS HIV-1 Western Blot on 13/32 (41%) of the panels tested. The use of the automatic interpretation feature in the Geenius™ reader and software allowed differentiation of 100% of the known HIV-1 samples and



90% of the known HIV-2 samples tested. The remaining 10% of the known HIV-2 samples demonstrated cross-reactivity with HIV-1 antigens and were considered HIV positive untypable (HIV-1 and HIV-2 positive). The 4 samples from HIV co-infected patients were correctly identified as HIV-1 and HIV-2 positive.

CONCLUSIONS: The performance of the Geenius™ HIV 1/2 Supplemental Assay during internal evaluations demonstrated excellent specificity and sensitivity and allowed differentiation of 100% of HIV-1 samples and 90% of HIV-2 samples (including identification of 4 coinfected samples). The Geenius™ HIV 1/2 Supplemental assay is the first unitary assay allowing HIV-1 and HIV-2 confirmation and differentiation with automated reading and interpretation in less than 30 minutes. Bar-coding of samples and assay devices assures traceability of patient samples and results.

ABSTRACT 11

Barriers and Facilitators to Universal HIV Screening Among Internal Medicine Residents

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OBJECTIVE: Adoption of universal HIV screening by primary care physicians has been suboptimal, despite CDC and ACP recommendations. Medical residents represent the next wave of practicing clinicians. In 2010, our internal medicine residency included HIV screening to an annual self-audit focused on meeting preventive health guidelines. After its addition, resident screening rates increased from 18 to 44%. This improvement prompted us to design a qualitative study examining barriers to, and facilitators of, increased HIV screening by residents.

METHODS: Fifteen internal medicine residents, representing 20% of the training program, volunteered to participate in one of three focus groups exploring barriers and facilitators to routine out-patient HIV screening. A

trained facilitator led the groups using a standardized interview guide. Questions were formulated based on 1) a knowledge-attitude-behavior framework for physician nonadherence to guidelines, 2) existing reports of barriers, and 3) informal discussions with residents and recent graduates regarding their experiences. Focus groups were audio recorded, transcribed, and de-identified. Two investigators used a hybrid thematic analysis of 1) deductive codes from the original knowledge-attitude-behavior framework and 2) inductive, HIV-specific, codes derived from the focus groups themselves to code the transcripts line-by-line. Inter-rater reliability was 95%. Discrepancies and main themes were discussed until consensus was reached.

RESULTS: Residents were uniformly knowledgeable and displayed positive attitudes towards the 2006 CDC guidelines. However, they described three potential barriers to routine screening: 1) some patients were reluctant to accept screening because of perceived low risk and stigma, 2) HIV screening often became a low priority in time-limited encounters, and 3) approaches to screening were not standardized. Residents also described three prominent facilitators to promote screening: 1) they normalized the topic and drew analogies to other chronic disease screening, 2) they referenced expert authorities, such as the CDC, and 3) residents developed modifications to their electronic health record templates as a cue to address the topic.

CONCLUSIONS: Internal medicine residents displayed knowledge and positive attitudes toward universal HIV screening. Most barriers were behavioral and some involved a subset of patients who indicated reluctance to undergo testing. Physicians wishing to promote HIV screening in primary care should consider utilizing three facilitators in their routine: 1) normalizing the topic, 2) referring to an expert authority, and 3) employing an electronic health record reminder.



Hepatitis Education and Testing in Rural Missouri

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OBJECTIVE: The outreach programs provided by MoHepC Alliance, which brings outreach services directly to the at-risk populations, will produce a much high rate of HCV virus identification then would normally occur through regular acute care testing procedures

METHODS: This effective outreach model brings the education directly to the individuals in the at-risk populations providing education on risk factors, prevention and treatment. We reach out to substance abuse treatment centers and rural health departments to provide onsite services. The program methodology is as follows: patient attend free education programs; takes hepatitis C testing; meets with medical professional in facility offering testing and is given results and offered a confirmation test, the viral load test at reduced rates or free, to confirm if the patient has active disease or if they have cleared the virus on their own. All who test positive are referred to physicians in their area; Patients are also offered counseling on treatment options including help in accessing reduced cost drug, testing and medical treatment programs, and life style adjustments.

RESULTS: This program produces an overall infected rate of 20%, while the national rate is estimated at 2% of the general population. Between 2007 and 2011 MoHepC Alliance tested 3017 drug users for hepatitis C, 1,003, or 33% of which were identified as infected. This represent 47% of the total population tested during that time however the infected population of drug users represented 80.1% of the total positives identified. There were 3,384 people tested who were not identified as substance abusers and 247, or 7% were found to be positive. We tested a total of 6,401 people in Rural Missouri and found a total of 1,251 or 20%.

CONCLUSIONS: MoHepC Alliance's outreach programs targeting at-risk populations have a very successful

outcome for individuals with Hepatitis C. By reaching out and going to the substance abuse treatment centers we were able to find a much higher rate of infection with HCV. When we worked with the Rural Health Departments and screened people without the risk factor of IV or Drug use, the rate, 7%, was still above the CDC's published rate of infection. This program is an example of how a the time and effort of a small organization directed efficiently can resulting in higher than previously reported infection rates then through general screening methods used.

ABSTRACT 13

Routine HIV Testing: The Teen Health Clinics' Experience

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OBJECTIVE: The objective of the study was to describe the profile of young males who tested positive for HIV through routine HIV testing at the Baylor College of Medicine Teen Health Clinic, a system of seven clinics that provide family planning services to male and female adolescents.

METHODS: Since the implementation of routine HIV testing in 2008, HIV testing has increased 320%, while the numbers of new HIV cases have increased 300%. A total of 46 males tested positive for HIV during this period. A retrospective chart review was conducted in order to identify risk behaviors that can place these individuals at risk for HIV as compared to males who did not have an HIV diagnosis. Risk behaviors included condom use, type of sex, partner history, number of lifetime and recent sexual partners, drug use, history of incarceration, exchanging sex for money, past sexual assault and HIV testing history. Demographic information (ethnicity, age) of the males was also abstracted from their charts. The study was approved by the affiliated IRB.

RESULTS: The study included 92 males ages 18 to 23 (Mean=20.59). Of these, 70 (76%) were Black, 18 (20%) were Hispanic and 4 (4%) were White. A total of 46 were



HIV-Positive and 46 were HIV-Negative. Of the HIV positive males, a total of 28 (60.8%) have been tested previously for HIV. Males who had engaged in anal sex, had given or received sex for drugs or money, or were sexually assaulted were significantly more likely to test positive for HIV. Testing HIV positive was also significantly associated with the number of lifetime and past 12 months sexual partners and partners' number of lifetime sexual partners. There were no condom use differences between the groups.

CONCLUSIONS: The testing rates following the implementation of routine HIV testing have increased within some of the most vulnerable populations; young men who have sex with men (MSMs). The stigma of HIV and societal homophobia have a negative impact on the mental health of young MSMs. Studies found a correlation between internalized homophobia and overall poor sexual health. Family planning clinics are accessible and more likely to be utilized by groups where HIV risk and prevalence is high and who find these clinics accessible and safe.

ABSTRACT 14

Synergizing HIV Testing and Viral Hepatitis B Screenings Amongst Hard to Reach Asian & Pacific Islander Populations through Non-Traditional Approaches

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OBJECTIVE: Despite having similar routes of transmission, Hepatitis B enjoys relatively little stigma among hard-to-reach Asian & Pacific Islander (A&PI) communities, while HIV is highly stigmatized. In the San Francisco Bay Area, 1 in 10 A&PIs are carriers of Viral Hepatitis B. Successful community level awareness campaigns such as the San Francisco Hep B Free campaign has been effective in mobilizing A&PIs to screen, access treatment, and talk about Hepatitis B. Unfortunately, HIV testing rates among A&PIs in San Francisco are extremely

low, as they are the least likely community to test when compared to all other racial and ethnic groups.

METHODS: In a strategic attempt to increase testing and reduce stigma for HIV among hard-to-reach A&PIs in San Francisco, Asian & Pacific Islander Wellness Center (A&PIWC) developed a model using Hepatitis B as a gateway to educate A&PIs about HIV and its common risk factors. A&PIWC implemented an integrated Hepatitis B and HIV education, screening & testing, and linkage to care program through a "mobile clinic" approach — co-locating the described services in house as well as at various A&PI targeted community cultural festivals/street fairs, and A&PI community cultural centers. Community members accessing screening services for Hepatitis B complete a pre and post HIV/Hep B knowledge assessment and education session. After, they are then asked if they would like to be tested for HIV. A rapid HIV testing algorithm is then completed.

RESULTS: Through our approach from June 2007 to June 2012, a total of 1210 community members were screened for Hepatitis B. Almost 90% of those screened has never been tested for HIV. Of those screened for Hepatitis, 13% were tested for HIV at the same time as their Hepatitis screening, while 88% accepted a referral to an HIV testing clinic. We observed an 8% HIV positivity rate among those screened for HIV. A 16% Hepatitis B positivity rate was observed among those who screened for Hepatitis. Results of the post screening knowledge questionnaire indicate that 80% of respondents were not aware of the risks of HIV. 75% did not know how HIV is transmitted. 75% stated interest in being tested for HIV in the future. 60% stated they would be comfortable discussing HIV with their families moving forward.

CONCLUSIONS: This integrated approach suggests that leading prevention efforts with a less stigmatized health issue can assist in addressing barriers of discussing health issues that comprise higher cultural stigma.



Making HIV Testing a Routine Component of Gynecologic Care for All Women

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OBJECTIVE: This program's objectives are to expand HIV testing of non-pregnant women by making it a routine component of gynecologic care and educate providers about appropriate gyn care for HIV-infected patients.

METHODS: Most ob-gyns test all pregnant patients for HIV during each pregnancy. Anecdotal information suggests that most are not testing all non-pregnant patients. The American College of Ob-Gyns (the College) has recommended routine HIV screening for women ages 19-64 and targeted screening for women with risk factors outside that age range since 2008. In early 2009, the College broadly distributed routine HIV screening guidelines to all members in active practice to increase HIV testing of non-pregnant women. The College also broadly distributed educational materials for providers and patients to heighten awareness of the importance of routine HIV testing. In late 2009, the College surveyed members to assess HIV testing practices and to determine what factors influence ob-gyns to follow recommended HIV testing guidelines. To help further expand testing of non-pregnant women and educate providers about appropriate gyn care for HIV-infected women, the College launched www.womenandhiv.org, a website designed to provide ob-gyns, other women's health care providers, and consumers with a central, trusted source of up-to-date information about HIV infection in women and its impact on their reproductive health. The College also developed an interactive, web-based tutorial for providers. Gynecologic Care for Women With Human Immunodeficiency Virus is a ground-breaking companion piece to the Practice Bulletin of the same name. Free CME credits are available to anyone successfully completing this tutorial.

RESULTS: Study results published July 2012 (J Womens Health (Larchmt) 2012;21:762-8) indicate that approximately 1 in 5 ob-gyns are routinely testing their

non-pregnant patients for HIV infection. The provider's perception about the patient's risk for acquiring HIV is the number one reason for not testing non-pregnant patients. Practice type and location appear to have some influence on ob-gyn HIV testing practice, as does physician race.

CONCLUSIONS: It's likely that adequate time had not elapsed for ob-gyns to have adopted the 2008 guidelines into practice by late 2009; most changes in medical practice often take 2–5 years to become established. More studies are needed to assess ob-gyns' current HIV testing practices with non-pregnant women and identify testing barriers. The Women and HIV website and interactive tutorial are pieces of an overall strategy to fully engage ob-gyns regarding HIV infection and non-pregnant women and incorporate HIV testing as a component of routine gynecologic care for all women.

ABSTRACT 16

Structural Modifications Allowing for Efficient Implementation of Routine Opt-Out Testing in Community Health Settings

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OBJECTIVE: The CBC Initiative HIV primary program was created in 1999 in response to the severe lack of HIV primary care services on Chicago's west side. The program is collocated within the Austin Health Center. Austin Health Center is part of the Cook County Health and Hospital System (CCHHS). In 2011, CBC Initiative implemented a new HIV testing program to routinely test Austin Clinic patients. This included offering all eligible patients HIV testing in accordance with CDC's 2006 recommendation. In June, the CCHHS added an EMR pop-up to prompt lab technicians to offer HIV testing to clients receiving laboratory services. The program has resulted in substantial increase in HIV testing and a routine practice is cost effective and can be easily replicated.



METHODS: To implement the County's new opt out testing policy, CBC Austin staff met with key stakeholders to obtain buy in including administrative and medical leadership. To increase awareness of the HIV testing services and walk-in clients, we also provided HIV testing at the local Department of Human Services and utilized HIV positive peers to recruit community residents as walk-in HIV testing clients. Walk in clients received rapid HIV test from CBC staff and register clinic patients received HIV tests as part of laboratory services

RESULTS: After a 3 month assessment and training period, HIV testing increased from 7% to over 30% of all Austin Health Center clients in year 1. Created Routine Testing Videos for Providers and Patients Successfully established a regular presence at the DHS site Achieved 100% Linkage to Care Rate

CONCLUSIONS: Making structural changes to support implementation of opt-out testing in community health centers, is a cost effective method that rapidly identifies previously undiagnosed HIV positive individuals.

ABSTRACT 17

Engaging Stakeholders in the Development of a Comprehensive Manual for Hepatitis C Counseling and Testing

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OBJECTIVE: Hepatitis-C virus (HCV) infection is the most common blood-borne infection in the United States. About 18,000 individuals per year acquire new HCV infections and the current prevalence may be up to 4 million. Because of the high disease burden, low rate of testing, and high proportion of people who become ill without obvious signs, HCV infection has been described as a "silent epidemic." The CDC has recently updated the national recommendations for the prevention and control of HCV infection. The new guidelines call for one-time testing for all people born from 1945–1965, the group at highest

risk of chronic infection. To anticipate the expansion of hepatitis C testing, the CDC is developing a comprehensive manual to provide guidance for HCV counseling and testing. With the release of the new recommendations and the introduction of the rapid antibody test, hepatitis C testing may become more widespread, thus increasing the need for information and resources.

METHODS: To determine the manual's usefulness, a field assessment is being conducted among two distinct stakeholder groups: Group 1) counselors in public health venues likely to reach adults at risk for hepatitis C; and Group 2) clinicians in primary care settings that reach patients born from 1945–1965. As part of the field assessment, stakeholders from both groups are being asked to review the manual, use it with patients, and provide feedback on its applicability, functionality, and recommendations for improving it. A mix of organizations, including mobile HCV testing units and clinic-based testing sites are participating.

RESULTS: Data are currently being collected at sites in a number of cities including Seattle, Los Angeles, and New York City. Preliminary results show that the manual may be applicable under a variety of situations including traditional and rapid HCV testing. CDC will use the information from the assessment to refine the manual. The field assessment will result in a comprehensive manual that consists of four modules: 1) an introduction to HCV counseling and testing; 2) pre-test counseling; 3) post-test negative counseling; and 4) post-test positive counseling.

CONCLUSIONS: Since there are no standardized protocols for conducting HCV counseling and testing, the CDC manual will provide a useful tool to address the call for routine and expanded HCV testing. Stakeholder engagement in the field assessment is crucial to ensure that the manual reflects the priorities and needs of end-users and results in a tool that supports the expansion of HCV screening.



Routine HIV Testing in Emergency Departments: Capturing Missed Opportunities in Texas

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OBJECTIVE: The number of persons living with HIV (PLWH) in the US will continue to rise until the number of undiagnosed and untreated cases of HIV is substantially reduced. Many undiagnosed PLWH seek healthcare but are not tested for HIV. This represents missed opportunities to identify PLWH unaware of their infections and increase the number of PLWH with suppressed virus. The purpose of the Texas Department of State Health Services' (DSHS) Routine HIV Testing Project is to address missed opportunities and ultimately drive down the number of new infections.

METHODS: Emergency departments are key settings to implement routine HIV testing, being the safety net for the underserved/uninsured, and account for approximately 28% of annual acute care visits and increased healthcare costs. One of the DSHS HIV prevention strategies is to support routine testing in areas/settings with the highest prevalence of HIV. In 2011, Dallas County ranked first in Texas with a case rate of 561.8 and has the highest percentage of uninsured Texans. The Parkland Health & Hospital system in Dallas provides nearly 50% of the unfunded care in the county — there are over 2.4M residents in the Parkland service area.

RESULTS: Since 2009, DSHS has funded routine HIV testing in the Parkland emergency care system. Parkland has identified almost 1,100 HIV positive cases with a 2.3 positivity rate (23 times higher than the CDC standard of 0.1%). Prior to testing positive, 332 of the HIV positive patients had previously sought emergency services at Parkland, totaling 1,303 previous visits. The number of previous visits by individuals ranged from 1 visit to over 20. These patients represent the missed opportunities to test and identify patients earlier in the disease process.

But it also represents the high cost burden of treating persons who should have a medical home. It is estimated that over 83% of patients have been linked to HIV-related medical care in Dallas County, contributing to improved health outcomes, and decreased healthcare costs in the community.

CONCLUSIONS: It is estimated that 20% of HIV positive persons are unaware of their infection, contributing to 54% or more of new sexually transmitted infections. The identification of PLWH in emergency departments in facilities similar to Parkland has the potential to capture missed opportunities, increase the number of PLWH that know their status, drive down the number of new transmissions, and save healthcare dollars to better serve the community.

ABSTRACT 19

Performance Characterization of the Second Generation COBAS® AmpliPrep/COBAS® TaqMan® HCV, v2.0 Quantitative Test Incorporating a Novel Dual-Probe Assay Design

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OBJECTIVE: In this study, we evaluated the performance characteristics of a second generation real-time PCR assay, the COBAS® AmpliPrep/COBAS® TaqMan® HCV Quantitative Test, version 2.0 (COBAS® HCV v2 test), designed with a novel dual-probe approach.

METHODS: HCV RNA viral load (VL) monitoring has been well established as a diagnostic tool for management of chronic hepatitis C patients. HCV RNA VL results are used to guide treatment decisions with the goal of antiviral therapy to achieve undetectable VL results. Therefore, a sensitive assay with high specificity in detecting and accurately quantifying HCV RNA across genotypes is critical.

RESULTS: The new assay demonstrated a limit of detection and lower limit of quantification of 15 IU/ mL across all HCV genotypes; and was linear from 15 to 100,000,000 IU/mL with high accuracy (<0.2 log10 difference) and precision (S.D.=0.04-0.22 log10). Correlation to the COBAS® AmpliPrep/COBAS® TaqMan® HCV Test (version 1) was good among the clinical samples explored (n=412 genotype 1-6 samples, R2=0.88; R2=0.94 without n=104 genotype 4 samples). Clinical Utility was demonstrated on n= 328 subjects treated with pegylated Interferon plus ribavirin with a strong positive predictive value at week 4 (RVR = rapid virologic response) of 0.9 and an odds ratio of 10.5. Comparison of n=277 samples (109 HCV RNA negative and 168 HCV RNA positive) to two FDA-approved qualitative tests showed an overall composite concordance of 99.3%.

CONCLUSIONS: In conclusion, the COBAS® HCV v2 test demonstrated excellent performance and sensitivity across all HCV genotypes. The test demonstrated clinical utility in a treatment patient cohort and high concordance with qualitative assays due to the expanded linear range. The COBAS® HCV v2 test should is well suited for the management of HCV patients in today's treatment environment. Performance specifications are pre-commercialization and subject to regulatory approval. The CAP CTM HCV Quantitative Test, v2.0 is currently in development and not yet commercially available.

ABSTRACT 20

Increasing Hepatitis B Screening in Asian and Pacific Islander Communities: Best Practices and Lessons Learned in Philadelphia

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OBJECTIVE: Hep B United Philadelphia is a community-based coalition and citywide program led by the Hepatitis B Foundation, to address the burden and disparities of hepatitis B in Philadelphia Asian and Pacific Islander (API) communities, through improved screening, vaccination and linkage to care.

METHODS: Hepatitis B Foundation initially conducted a community-based needs assessment and local resource mapping that led to creatingthe Hep B United coalition in 2010, consisting of community, health, social service, cultural, business and research organizations. An innovative campaign and strategy to improve community awareness of HBV was executed via print, audio-visual, social media, and non-traditional components. Strategic trainings and seminars have been implemented to improve coalition partner knowledge and enhance participation. Free, community-based screening and education events are conducted in a variety of settings. A plan to improve citywide infrastructure has been developed to enhance sustainability of HBV-related screening and vaccination services.

RESULTS: The Hep B United Philadelphia coalition has over 60 organizational partners, and has participated in over 125 community and cultural events in 24 months. The awareness campaign, including social media and flash mobs resulted in greatly improved awareness of HBV as a local health priority. Strategic outreach was successful in recruiting the support of the Mayor, the Philadelphia City Council, and both the Mayor's Advisory Commission and Governor's Commission on Asian Affairs. Over 3,000 API individuals have been reached through public education and awareness. Evaluation of training and education seminars has indicated improved HBV-related knowledge among coalition partners and within the targeted API community. Over 1,200 have completed free HBV screening, and 96% of infected individuals have been successfully linked with appropriate health care. A new, free Mobile HBV Vaccine Clinic has been implemented with the Philadelphia Department of Health, to remove cultural, financial and transportation barriers and improve rates of vaccination among high-risk API adults.

CONCLUSIONS: Multiple barriers to HBV screening, vaccination and linkage to care continue to exist in urban API communities. Community-based, non-traditional strategies can be successful in addressing these gaps. These programs must be tailored to the individual needs of target communities. Additionally, multi-disciplinary collaboration, continued partner and community engagement, and support of city leadership are necessary to see sustainable improvements. Continued evaluation will



allow us to assess the long-term impact of this community coalition and HBV campaign.

ABSTRACT 21

Barriers to On-Site Rapid HIV Testing in New Jersey Substance Abuse Treatment Programs

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OBJECTIVE: The New Jersey Division of Mental Health and Addiction Services (DMHAS) provides rapid HIV testing kits and services to select substance abuse treatment programs (SATPs) in New Jersey, at no cost to the programs. However, uptake of on-site rapid HIV testing in these programs has been slow. To inform initiatives to increase on-site rapid HIV testing in substance abuse treatment, this study evaluated HIV testing and barriers to on-site rapid HIV testing in New Jersey SATPs.

METHODS: An email with a link to a secure online survey service was sent to clinical administrators at 205 New Jersey SATPs. The e-mail instructed the administrators to forward the survey link to the person most informed about HIV testing practices in their programs. Also, DMHAS data on each site's client population was linked to survey responses by a unique site identification number.

RESULTS: Surveys were completed by administrators or staff at 109 New Jersey SATPs. Thirty-nine percent of programs reported that 50% or more of their active clients have been tested for HIV. The most common reported barriers to on-site rapid HIV testing were preferring to refer elsewhere for testing (49%), inadequate staffing (33%), phlebotomy not available (44%), HIV counseling not available (33%), cost (44%), and inadequate system to handle positive results (35%). Among the programs eligible to receive rapid HIV test kits at no cost to them

(n=18), 47% reported that the number of rapid HIV tests completed is 50% or more of the number of admissions since becoming eligible for free tests. Testing 50% or more of admissions had a significant negative association with clients frequently or always refusing testing because it is not a priority to them or they don't want know if they are HIV infected, percent of clients who are male, percent of clients uninsured, and percent of clients age 19–30. Onsite rapid HIV testing had a significant positive association with percent of clients who are Black.

CONCLUSIONS: HIV testing is low in most SATPs in New Jersey. The most common reported barriers to on-site rapid HIV counseling are related to program resources. However, among programs that have access to rapid HIV test kits at no cost to them, client related factors significantly predict HIV testing rates. Initiatives to increase on-site rapid HIV testing in substance abuse treatment need to target both program level and client level barriers.

ABSTRACT 22

Testing Preferences and Knowledge of HBV and HCV Among a New York City Emergency Department Patient Population

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OBJECTIVE: The majority of the 4.5 million people living with hepatitis B (HBV) or hepatitis C (HCV) in the United States remain unaware of their infection. This study sought to assess patients' knowledge of hepatitis and the acceptability of hepatitis B/C screening during an emergency department (ED) or pharmacy visit.

METHODS: A prospective study was conducted on a convenience sample of New York City ED patients and pharmacy clients. Eligible participants completed anonymous written hepatitis knowledge tests and testing acceptability and preference surveys.



RESULTS: The study population (n = 2,122) was 45.3% male, 47.1% Hispanic and 42.0% black. Mean age was 38.94, SD ± 15.0 years. 72.1% (1,516/2,104) responded that they would get tested for hepatitis B/C if a free test were made available. Of those interested in testing, 56.8% (852/1500) indicated preference for a rapid oral swab, 25.5% (383/1500) for a blood draw, and 17.7% (265/1500) for a fingerprick. 69.1% (1025/1484) of those interested in hepatitis B/C testing responded that they would elect to take the test in conjunction with an HIV test. There were no differences in acceptability, testing method preference, or preference for combined hepatitis and HIV testing among racial, ethnic and gender groups. 44.8% (930/2078) of subjects correctly answered that HBV and HCV can be spread through intercourse, 59.1% (1235/2089) knew that people infected with HBV or HCV can live for years without knowing, 60.9% (1267/2081) knew that alcohol can damage the livers of hepatitis-positive people, 43.9% (913/2082) knew that there was a vaccine to prevent HBV, and only 19.8% (412/2079) knew that there was no vaccine for HCV. Subjects with self-reported knowledge of HBV or HCV and subjects who reported having been previously tested for either virus were statistically significantly more likely to answer each knowledge question correctly.

CONCLUSIONS: A free hepatitis B/C screening program could see high levels of participation in an ED setting. Patients seeking care in an inner-city ED require educational materials to increase knowledge of hepatitis B/C prior to testing.

ABSTRACT 23

Routine HIV Testing in the US Department of Veterans Affairs (VA): Impact of National Policy Change and Operational Interventions 2009–2011

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OBJECTIVE: With over 24,000 HIV+ veterans in care, Department of Veterans Affairs (VA) is the single largest provider of HIV care in the United States. Since 1988, Federal law and regulations barred widespread HIV testing

in VA and mandated signature consent and scripted pre/post-test counseling for testing. As recommended by the U.S. Centers for Disease Control and Prevention, Federal law and VA regulations were revised in mid-August 2009 to allow HIV testing in VA with verbal consent and provision of written informational material. VA monitors annual HIV testing rates to evaluate the impact of these national policy changes and operational interventions such as electronic clinical reminders to increase testing rates.

METHODS: Using a standardized electronic extract, data collected annually from all VA medical facilities included number of Veterans ever tested for HIV, number tested at the facility in the calendar year, and number with positive test results in the CY. In 2011, data collection expanded to include sex, race, ethnicity, and age.

RESULTS: Nationally, the proportion of Veterans in care in VA ever tested for HIV increased from 9.2% in 2009 to 20% in 2011. The observed seropositivity rate was 1.2% in 2009, 0.6% in 2010 and 0.4% in 2011. Among Veterans in VA care in 2011, testing was documented in 30.5% of females, 37.0% of Blacks, 26.8% of individuals aged < 30, 28.8% aged 30–49, 23.3% 50–69, and 10.1% aged >70.

CONCLUSIONS: The proportion of Veterans in VA care with documented HIV testing more than doubled from 2009–2011. The observed HIV seropositivity rate in 2011 remained above 0.1%, CDC's threshold for routine HIV testing. Elimination of policies requiring written informed consent and pre/post test counseling, operational interventions, and electronic reminders contributed to the increase in HIV testing rates. VA supports routine HIV testing as a key component of a national HIV prevention strategy.



Increasing Routine Viral Hepatitis Testing: Technical Consultation Report Findings

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OBJECTIVE: Chronic viral hepatitis affects up to 5.3 million Americans and over half of them are unaware of their infection. Accurate blood tests are available however, due to low knowledge, awareness and the reluctance of providers and patients to discuss risk factors; lack of health insurance coverage; conflicting federal guidelines regarding who should be tested; and limited resources, testing has not been effectively implemented. In order to understand how to increase routine viral hepatitis testing, it is important to examine various testing approaches to testing for hepatitis B virus (HBV) and hepatitis C virus (HCV) and to identify barriers and needs, strategies to improve testing, best practices, and models for working with specific populations.

METHODS: A technical consultation was convened by the Department of Health and Human Services on increasing routine viral hepatitis testing. Representatives were invited from federal agencies and other stakeholder groups including physician associations, state and local health departments, community health centers, community based organizations, researchers, and hepatitis advocacy organizations to develop strategies and describe approaches to viral hepatitis testing in a variety of public and private settings.

RESULTS: There is no national HBV or HCV testing program as there is for HIV and access to testing can be difficult, especially for individuals at risk. Therefore, approaches to viral hepatitis testing have focused on effectively identifying individuals at highest risk; understanding health care provider and patient attitudes about testing; and understanding the roles of health departments, community health centers and other health care providers, corrections, substance abuse treatment providers, and community-based organizations. A number of barriers and needs were identified including the need

to identify/create and disseminate best practices; educate providers; create clinical measures; address laboratory challenges; and overcome the limited resources available for testing. Strategies that emerged included facilitating closer linkage of screening programs with confirmatory testing and care; leveraging established HIV and other systems serving individuals at risk; utilization of electronic medical records to support testing through clinical decision support and patient registries; and using non-physician centered models of care or a team approach to increase routine viral hepatitis testing.

CONCLUSIONS: Routinization of viral hepatitis testing will require continued efforts in the key areas listed above and may be further supported by the identification and dissemination of best practices and by policy changes such as inclusion of consistent viral hepatitis language into grant announcements.

ABSTRACT 25

Opportunities for Expanding HIV Testing Through Health Reform

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OBJECTIVE: The Patient Protection and Affordable Care Act (ACA) includes many new opportunities to cover HIV testing. The author will provide an update on how HIV testing will be covered under ACA by Medicare, Medicaid, and private insurance, including through women's preventive services and how advocates have and can continue to impact coverage decisions. The role the U.S. Preventive Services Task Force (USPSTF) plays in coverage determinations and the essential health benefit (EHB) process will be assessed. Testing coverage variability across state Medicaid programs will also be evaluated. Finally, the author will discuss how implementation of HIV testing at state and federal levels can be improved and barriers addressed.

METHODS: The author will review how changes in ACA promote coverage of HIV testing for each payer, discussing



the implementation process, including how coverage decisions are made and how they can be affected.

RESULTS: The new opportunities in ACA that expand HIV testing have resulted from advocacy efforts and subsequent administration decisions. After years of advocacy, private insurance plans must now cover HIV screening for women. As the EHB are defined at the state and federal levels, plan selection presents opportunities to ensure HIV testing is covered by private insurance and for the expanded Medicaid population. About half of states currently do not cover routine testing in their traditional Medicaid program and there are opportunities to increase that. Decisions regarding coverage of services are still being made and continued advocacy at the federal and state levels is critical. Advocates have also been urging the USPSTF to change its grade for routine HIV screening, which impacts all payers. Many coverage determinations are guided by USPSTF grades and a positive grade change, which may come out in draft this fall, could dramatically improve access to HIV testing. Collectively, these efforts will help improve coverage of HIV testing across payers and states. Finally, even with coverage, implementation has been hampered by lack of awareness and billing issues.

CONCLUSIONS: Coverage for HIV testing is greatly enhanced through ACA implementation across all payers. However, because most coverage of preventive services is tied to USPSTF A and B grades, routine testing is not covered. A change to the USPSTF grade for routine testing, which is currently under review, would greatly enhance coverage. In addition, implementation barriers must be considered as coverage of routine HIV testing does not automatically translate to usage.

ABSTRACT 26

Mandatory HIV Testing in the Emergency Department: An Evaluation of Statewide Testing in NY Since the 2010 Legislation Making it Law

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OBJECTIVE: In 2010, NY State passed landmark legislation mandating that HIV testing must be offered to all persons between the ages of 13 and 64 receiving hospital or primary care services, including Emergency Departments (EDs). We evaluated the statewide implementation of this new testing requirement in EDs and determined whether differences existed based on HIV prevalence or site-specific designated AIDS centers (DACs). For EDs complying with the mandate, we also evaluated policies for linkage to care.

METHODS: An electronic survey was administered to all ED directors in NY excluding Veterans' Affairs hospitals. Investigators developed questions related to all provisions of the HIV testing legislation and linkage to care. ED and HIV physicians tested face validity. Basic descriptive statistics were used for analysis.

RESULTS: The response rate was 96% (183/191). All respondents were aware of the testing legislation. Of the 180 respondents who answered the question about testing, 86% reported offering HIV testing in their EDs. All EDs not currently offering testing reported plans to initiate it. EDs located in NYC, in high prevalence areas and in state DACs were more likely to offer HIV testing. Although the law eliminated the requirement for separate written consent for an HIV test, most facilities (107/159, 67%) still used this technique. Only 11% incorporated HIV testing language into the general treatment consent and 19% used verbal consent for rapid tests as allowed by the law. The testing offer was primarily performed by clinicians but also included clerical staff, public health advocates,



social workers and through written testing information. Most EDs used rapid testing (67%) including both point-of-care ED testing and rapid laboratory testing. Only 62% of EDs provided HIV test results to the patient while still in the ED. Most EDs (90%) had a linkage to care protocol in place, however only 33% of those confirm successful linkage.

CONCLUSIONS: We provide the first report of statewide ED HIV testing practices in NY since the passage of a new testing law in 2010 mandating an offer of HIV testing to all patients ages 13–64. With 96% of EDs reporting, most offer HIV testing but to varying degrees. Challenges to full implementation still exist, as many EDs are not delivering HIV test results to patients while they are still in the ED. Linkage to care protocols for patients testing preliminary positive are in place, but few EDs follow-up to determine if linkage has occurred.

ABSTRACT 27

Blood or Swab? Effect of Changing from an Oral Swab to a Whole Blood Finger Stick HIV Test on Rates of Acceptance

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OBJECTIVE: Two kinds of point of care rapid HIV tests are currently approved by the FDA. One uses whole blood obtained from a finger stick, and the other uses a swab of the oral mucosa. We hypothesized that the acceptance rates for a routine HIV test in the emergency department would be the same regardless of which kind of test was offered.

METHODS: The DC Dept. of Health has supplied point of care HIV test kits to the George Washington University Hospital Emergency Department HIV screening program since 2008, but switched the test from the oral to the finger stick test late in September 2011. We determined the acceptance rate for the finger stick test (Clearview Complete HIV 1/2) over a 6-month period, and compared it to the acceptance rate of the oral test (OraQuick Advance Rapid HIV-1/2 Antibody Test) over the same 6-month

period in the prior year. A one-month learning period (October 2011) was not included in the analysis which compared the six month period from November 1 2011– April 30, 2012 when the finger stick test was offered with the six month period from November 1, 2010–April 30, 2011 when the oral test was offered. Over the study periods there were usual turnovers in the staff that offer the test, but no other changes in the administration of the test itself.

Results: Oral swab test

Finger stick testperiod	11/1/10-4/30/11	11/1/11-4/30/12
Number approached	5938	3661
Accepted	3224	2003
Declined	1791	1259
Acceptance rate	64.3%	61.4%

A two tailed data analysis was performed using the Chisquared test with Yates' correction. X2=6.936 with one degree of freedom. The P value was 0.0084.

CONCLUSIONS: Our hypothesis that there would be no difference in the acceptance rates for the point of care test was not supported. The acceptance rate for a routine opt out HIV test in an urban emergency department showed a statistically significant decrease when the program switched from a point of care oral test to one that required a finger stick. Since the acceptance rate is critical to large scale HIV testing programs, this effect, if confirmed, should be considered when programs are determining which kind of HIV test to offer patients.

ABSTRACT 28

An Algorithm Using Electronic Medical Record Data Accurately Identifies Patients with Unknown HIV Status in a Large, Urban Healthcare System

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OBJECTIVE: Expanded routine HIV testing is a critical strategy toward improving early HIV diagnosis and preventing transmission. Designing effective HIV



testing interventions requires the ability to ascertain the proportion of patients with unknown HIV status and monitor trends over time. However, significant logistical hurdles impede the determination of these data. We sought to develop and validate an algorithm to identify patients with unknown HIV status using data from the electronic medical record (EMR) of a large, integrated, urban healthcare system

METHODS: We used HIV-related data in the EMR to develop criteria that classified patients as known HIV status (HIV infected or HIV negative) or unknown HIV status. The predictive values of individual criteria were calculated by comparing results to a chart review of patients randomly selected from each category of HIV status. This process was repeated to validate a final algorithm that included a sub-set of the most highly predictive criteria. Sensitivity of the algorithm for identifying HIV infected patients was calculated by comparing results to an independent internal registry of HIV infected patients in care.

RESULTS: The final algorithm included criteria comprising laboratory and point of care tests, inpatient and outpatient ICD9 codes, and the clinical problem list. Greater than 450 charts were reviewed as part of the validation process. The positive and negative predictive values for identifying unknown HIV status were 100% (92.9–100%) and 96.5% (94.3–98.0%), respectively. The sensitivity of the algorithm for identifying those who were HIV infected was 99.7 % (99.4–99.8%).

CONCLUSIONS: An algorithm using commonly available EMR data accurately identified patients with unknown HIV status in a large, integrated, urban healthcare system. This algorithm can be applied in diverse clinical settings to calculate baseline rates of unknown HIV status, support planning of expanded HIV testing strategies, and monitor the impact of new testing strategies over time. Furthermore, this algorithm can be integrated into EMR-based clinical decision support programs to help providers identify which patients should be offered HIV testing.

ABSTRACT 29

Primary Care Physician Implementation of Routine HIV Screening in Washington, DC: An Assessment of Perceptions, Challenges and Barriers

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OBJECTIVE: Primary care providers are critical partners for addressing the HIV epidemic. However, the implementation 2006 CDC guidelines for routine HIV screening lags considerably among these practitioners. Furthermore, HIV-positive persons in Washington DC are often diagnosed in late state disease despite having a primary care provider. Therefore, given frequent missed opportunities for early diagnosis of HIV infection in primary care, data are needed to explain challenges and barriers to integration of HIV screening as standard of care in the primary care settings.

METHODS: A database of DC-based primary care physicians was created and limited to those actively practicing medicine. Physicians were stratified and prioritized by client volume with those with >500 clients deemed highest priority. Physicians were contacted to schedule attendance at group case discussions or one-on-one discussions with an HIV-trained physician. Physicians were also invited to become a peer champion to provide assistance in garnering colleague support for routine HIV screening. Physicians were asked to respond to queries about their approach to HIV testing and to offer explanations for gaps in routine screening in the primary care setting.

RESULTS: Over 2000 physicians were identified. Of these, 375 (16%) were targeted for participation. Of these, 198 (61%) agreed to participate and 125 (63%) attended group discussion and 73 (37%) engaged in a brief one-on-one. One hundred-twenty five responded to queries. Of these, 45% were unaware of CDC testing guidelines, 71% not aware of local testing guidelines establishing routine screening as standard of care and 19% were routinely screening for



HIV. Barriers to routine screening included the perception HIV testing as too time-consuming (29%), reimbursement concerns (21%), confusion about the linkage process (14%) and limited time for counseling (21%). Other barriers to screening included discomfort returning HIV results, concerns about losing HIV-positive clients to specialists and confusion about the consent process. Three provider champions were identified to influence peers to implement screening but impact was limited due to time physician time constraints to interact with peers.

CONCLUSIONS: Despite the magnitude of the HIV epidemic in Washington, DC, HIV screening in PCP settings is low. Physician education and awareness about the need for and tailored strategies to implement routine HIV screening are imperative. Effective strategies to reach and impact physicians about their role in identifying HIV infection are also needed. Billing and reimbursement concerns for HIV screening urgently warrant further investigation and intervention. Use of a peer-based strategy may prove effective.

ABSTRACT 30

Implementation of an Emergency Department HIV Routine Screening Program in Inner City Washington, DC: Lessons Learned and New Frontiers.

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OBJECTIVE: In 2010, United Medical Center, in Washington, D a safety net hospital for residents east of the Anacostia River, implemented its first HIV screening program in the emergency department (ED). Program challenges and successes provide insights about strategic approaches needed to ensure program sustainability.

METHODS: Interviews were conducted among hospital administrators, leadership and clinical staff to gauge interest in and commitment to routine HIV screening.

Existing ED procedures and flow were reviewed. Hospital infection control and testing policies for barriers to program implementation were reviewed. Multiple recurring HIV-related educational sessions, including grand rounds and workshops were held for medical staff. A proposal was developed to request a standing HIV testing order for all admitted patients from the ED.

RESULTS: Hospital leadership including the chief medical officer and CEO supported routine HIV screening. Consequently, within 2 months HIV testing consent incorporated into the general consent for care form. Because no external funding was initially available, for four months routine screening was integrated in ED triage. Of the 1359 (~339/month) ED clients tested in triage, 31 (2.3%) were HIV-positive. Demographics for these newly-diagnosed patients included, median age 47, range (20-55). 55% were male.. When external funding was obtained, testing shifted from triage to a designated tester model. Of the 8415 (701/month) patients tested since this change, 88 (1%) were new HIV-positives. Of these, 38% were male, median age 41 (range 17–84). HIV testing volume plateaued between 600-800/monthly or 20% of ED volume. Repeat program assessment identified complete reliance on a designated tester model as the primary limitation in testing expansion. To expand testing volume, an HIV standing admission order is being reviewed by hospital leadership. Advanced HIV testing diagnostic capability including p24 Antigen testing via Abbot Architect is being explored as a mechanism to increase ED testing volume and identification of new and acute infections.

CONCLUSIONS: Early success of the new routine screening program implementation was due to leadership and healthcare team commitment and buy-in. However, in hospital settings, reliance on designated tester models as the primary mechanism for identification of HIV infection limits the ability to expand testing. In addition, dependency on external funding for testing jeopardizes long-term program sustainability. Transition to physician directed testing and integration of testing within the flow is likely more feasible than current approaches. Implementation of novel and cutting-edge testing strategies and related policies require commitment and support from hospital leadership and each member of the healthcare team.



The Impact of HCV Rapid Testing on Individuals Knowledge of Their HCV Status

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OBJECTIVE: Hepatitis C virus (HCV) infection is a major public health problem. It is estimated that over half of those infected with HCV do not know their status. The OraQuick® HCV Rapid Antibody Test is the only rapid testing technology currently available for HCV screening. It allows people to receive their screening results in 20 minutes. HCV screening tests cannot diagnosis someone with active HCV infection. To diagnose someone with HCV, a HCV RNA test must be performed. The New York State Department of Health (NYSDOH) has collaborated with OraSure Technologies, Inc. on a project to determine the impact: 1) of rapid testing on the number of people that know their HCV status, and 2) on acceptance and follow through with referrals to diagnostic testing, care and treatment.

METHODS: Eleven sites across NYS were selected to perform HCV rapid testing. Sites were selected based on their proximity to a NYSDOH funded HCV care and treatment provider. Sites included needle exchange programs, AIDS service organizations, community health centers and hospital based clinics. Each person screened received appropriate counseling messages based on screening test results and risk behaviors identified. Individuals with reactive tests either had HCV diagnostic testing performed on-site or were given a referral appointment for diagnostic testing. Client level data, including basic demographics, HCV risk, testing history, other testing conducted, rapid test result and referral outcome was reported to the NYSDOH.

RESULTS: Since February 2012, 1,568 rapid HCV screening tests have been conducted, 104 (6.6%) have had a reactive result and 1,460 (93.2%) were non-reactive. Overall, 99.2% received their test results, 100% of clients with reactive tests received their results. Of these sites

performing HCV diagnostic testing on-site (n=3), 51.5% returned for their results, 12.1% did not return, and 36.4% refused PCR testing with at least 15.2% of those refusing because they already knew their status. Of the sites referring out for HCV diagnostic testing (n=8), 30.6% kept their referral appointment, 26.5% missed their appointment, 18.4% were unknown and 24.4% refused testing with at least 7.1% stating they already knew their status.

CONCLUSIONS: HCV rapid testing technology is effective in ensuring people get screened for HCV and receive their screening results. However, more work needs to be done to motivate and educate those with reactive antibody tests to ensure they are properly diagnosed with HCV and linked to care.

ABSTRACT 32

Mapping the Co-Occurrence of HIV, Hepatitis C, and Chlamydia in New York City (NYC) to Support Targeted Testing at Federally Qualified Health Centers (FQHCs)

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OBJECTIVE: As part of the CDC-funded Program Collaboration and Service Integration (PCSI) initiative at the New York City Department of Health and Mental Hygiene (DOHMH), we aimed to use infectious disease data to better target the delivery of integrated services to the public. We analyzed surveillance data to identify neighborhoods with high rates of HIV, chlamydia, gonorrhea, syphilis, TB, hepatitis B, and hepatitis C. We sought to prioritize neighborhoods for integrated testing by mapping zip codes with co-occurring high morbidity for these diseases; and to partner with FQHCs in these areas to increase their capacity to provide integrated testing.

METHODS: We calculated diagnosis rates per 100,000 persons by zip code using data reported to DOHMH for 2010. We defined a high morbidity zip code as a rate in the top quintile (20%) of all zip codes in NYC for two or more of the diseases studied. Zip codes were scored by the number



of diseases for which they were in the top quintile, with 7 being the highest possible score. We created maps based on the zip code scores using ArcGIS. We then mapped NYC FQHCs and identified those within the highest scoring zip codes as potential partners for a targeted screening project.

RESULTS: Of 181 zip codes, 60 (33%) have more than one disease in the top quintile. Of these 60, 15 (25%) have high morbidity for HIV, hepatitis C, and chlamydia. They are located in the South Bronx, Harlem and North-Central Brooklyn. We are working with four FQHCs in these neighborhoods to evaluate current protocols for HIV, hepatitis C and STD testing, and to increase testing for individuals at risk for one or more of these diseases through staff training, technical assistance, and enhancements to electronic health records. Although the project is too new to provide data at this time, we will measure hepatitis C testing among HIV-positive patients, and the number of patients offered HIV testing upon diagnosis with chlamydia.

CONCLUSIONS: Mapping infectious disease data allowed us to identify specific neighborhoods in NYC that have high rates of infectious disease and might benefit from increased testing for HIV, hepatitis C, and chlamydia. FQHCs are important partners for health departments, because of their location in neighborhoods where infectious disease services are needed. Local health departments can use surveillance data to partner with providers in high risk neighborhoods.

ABSTRACT 33

Routine HIV Testing at Montefiore Medical Center: Scale-Up Case Studies from New York City's Second Largest Hospital System

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OBJECTIVE: Montefiore Medical Center (MMC), the 2nd largest hospital system in the New York City

area, has made numerous care, research and prevention contributions to the fight against HIV/AIDS. In response to New York State's landmark HIV test offer mandate, MMC is employing new strategies to ensure all adult and adolescent patients are offered HIV testing when they visit any inpatient, outpatient or emergency department across its three campuses. MMC's objective is to de-stigmatize HIV testing, engage more patients in HIV prevention and most importantly, identify and link HIV positive patients to life-saving care.

METHODS: MMC has built a fully integrated service delivery system informed by innovative information technology tools. In September 2010, MMC convened a routine HIV testing task force led by the System's senior medical director and comprised of the directors of the adult and adolescent HIV/AIDS programs, the medical directors of the inpatient, outpatient and emergency departments as well as representatives from key departments including information technology, laboratory medicine and risk management. Using existing personnel and data resources, the task force obtained buy-in from key sector leaders, amended testing protocols and consent processes, developed decision support applications through its electronic medical records, trained outpatient department providers and administrators and conducted a survey to inform a provider communications campaign. The outpatient department launched the routine offer of HIV testing January 2012, with training occurring between February and April 2012. The inpatient and emergency departments will launch routine testing November 2012.

RESULTS: Between February and April 2012, 31 trainings were conducted with outpatient sites, reaching 443 staff members. Trainings oriented staff on the NY State HIV test offer mandate, the new outpatient HIV testing work flow, streamlined counseling using the ACTS (Advise, Consent, Test, Support) system, linkage to care and how to navigate the HIV testing improvements made in the electronic medical record. Analysis of HIV testing in the outpatient department shows a steady increase in testing since launch/training: 12,957 tests in the three months preceding launch/training compared to 14,964 tests in the three months following training, a 15.5% increase after only three months.

CONCLUSIONS: Multi-layered approaches are needed to successfully launch practice change throughout a large medical institution. MMC's approach — obtain buy-in from key stakeholders, modify protocols, policies and systems as needed, institute electronic decision support modules in the EMR, train key staff and communicate expectations and performance — is a replicable model for facilitating routine HIV testing in other large medical institutions.

ABSTRACT 34

Self-Testing in the Emergency Department (ED) by Kiosk

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OBJECTIVE: Despite successes in nationwide efforts to integrate HIV testing as part of routine care in the emergency department (ED) challenges remain. Kiosk-directed HIV self-testing offers a novel approach to address this challenge. We conducted a pilot study to evaluate the feasibility, acceptability, and accuracy of having ED patients use a kiosk to conduct a rapid, point-of-care (POC) self testing before routine HIV testing.

METHODS: ED patients were recruited to volunteer to perform a rapid POC HIV self-test in conjunction with the standard-of-care HIV POC test. The self-test offered was OraQuick Advance (oral fluid) test. Consented patients performed the self POC HIV test prior to the routine standard-of-care POC HIV test. Patients aged 18–64 years without previous HIV diagnosis were eligible. Acceptability and ease of use was assessed by questionnaire.

RESULTS: Of 955 patients approached, 473 (49.5%) consented to perform a self POC HIV test; 467 completed the test. Of patients performing a self-test, 100% had concordant results with those obtained by health-care professionals. One newly diagnosed HIV infection was identified in a 48 year-old woman. Median age was 41 years, 59.6 % were female, 74.8% were African American, and 19.6% were White. 99.8% of patients believed the POC self-

test was "definitely" or "probably" correct, 91.7% of patients "trusted their results" "very much". Interestingly, 99.8% reported that "overall" it was "easy or somewhat easy" to perform the test. Of patients, 96.9% would "probably" or "definitely" test themselves at home if the rapid HIV test were available over-the-counter (OTC) for purchase. Approximately 33% of patients would pay up to a maximum of \$10 for the test, whereas only 32% would pay up to a maximum of \$30. Overall, 25.9% of patients preferred self-testing and 34.4% preferred health-care professional testing (p>0.05). For location of testing, 26.1% preferred home self-testing and 32.8% preferred clinic/ED testing (p>0.05).

CONCLUSIONS: Kiosk initiated testing proved to be highly feasible, acceptable, and accurate method of conducting rapid HIV self-testing in this pilot study; however rates of engagement were only moderate, with almost half of patients volunteering to perform an HIV test. Patients' results were concordant with those obtained by research assistants. Most stated they would test themselves at home if an OTC were available More research will be required to ascertain the barrier to increased engagement, as well as the practical value of more widespread kiosk-facilitated HIV testing in the ED for testing larger numbers of patients.

ABSTRACT 35

Scaling Up Community-Based HIV Antibody and RNA Testing Among Gay Men in San Francisco

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OBJECTIVE: Demand for sexual health services at Magnet continues to exceed capacity. In 2010, Magnet provided 4,174 HIV antibody tests and still was unable to accommodate an estimated 2,000 additional clients. Changes within San Francisco Department of Public Health (SFDPH) in 2011 allowed for Magnet to dramatically increase capacity. Counseling is no longer required. SFDPH now recommends that all HIV-negative MSM men test for HIV twice annually regardless of risk



behavior. This shift underscored Magnet's need to increase capacity.

METHODS: In August 2011, Magnet launched a model by which clients are triaged into either express (15-minute) or standard (30-minute) appointments. Clients are assigned to a standard session if: 1) client requests counseling, 2) client is a contact to an STI within the past 60 days, or 3) client is experiencing symptoms indicative of an STI. Others are assigned into express appointments. Magnet employs a rapid test algorithm (RTA) allowing for sameday verifications and immediate initiation of partner services and linkage to care. The Clearview HIV 1/2 Stat-Pak is the first screening tool utilized. If reactive, a second test (OraQuick ADVANCE Rapid HIV 1/2 Antibody Test) is run. If both tests are reactive, the client is informed of the positive test result. Confirmatory samples are sent to SFDPH laboratory. Previously, RNA tests were only conducted on men who had UAI within the previous 90days. Now, screening for HIV RNA is conducted on all MSM testing HIV antibody negative at the current visit. Blood specimens for RNA screening are sent to the SFDPH laboratory. When HIV RNA is detected in a specimen, SFDPH notifies Magnet, and the corresponding client is contacted and scheduled for an in-person appointment. At the time of disclosure, linkage to care and partner services are initiated; and a confirmatory specimen is collected and sent to SFDPH.

RESULTS: From August 2010–July 2011, prior to the express model, a total of 5,173 HIV antibody tests were provided with 88 (1.7%) new HIV infections diagnosed. 1,754 HIV RNA tests were conducted with 10 acute infections detected. From August 2011–July 2012, after the implementation of express testing, 8,557 HIV tests were conducted with 103 (1.2%) new antibody diagnoses. RNA testing saw the greatest increase with 7,826 tests conducted and 19 acute infections detected.

CONCLUSIONS: Streamlined approaches to offering HIV testing in a community setting can dramatically increase uptake of HIV testing among gay men and lead to an increase in HIV diagnoses,

ABSTRACT 36

Impact of Electronic Medical Record and Revised Triage Process on Routine HIV Screening in the Emergency Department.

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OBJECTIVE: As part of a CDC funded grant, PS07-768, in compliance with the 2006 CDC recommendations for HIV screening, Memorial Hermann Texas Trauma Institute Emergency Department (ED), a tertiary referral center began HIV screening 6/2008. Additional funding was received to expand testing to 6 of 8 Memorial Hermann community hospitals. All locations have positivity rates exceeding the national average with a range of 0.03% as a low to the highest of 0.11%. During the third year of funding, the electronic medical record (EMR) platform for the ED changed and a revised triage process was initiated. Formerly the HIV screening field was a mandatory requirement at triage for 7 facilities that were testing and not visible to the sites uninvolved. The previous EMR had the ability to significantly "flex" functionality from site to site by location which is not possible with the new EMR. The current EMR is an enterprise wide solution with a central server. Split flow triage provides an immediate point of entry assessment designed to reduce wait times. Split flow does not allow for department specific screening questions at triage that a comprehensive triage obtains. These changes negatively impacted the routine HIV screening process we had implemented.

METHODS: We evaluated the monthly HIV screening numbers pre and post EMR/triage implementation.

RESULTS: The number tested dropped dramatically with the new EMR. Testing decreased in all but 1 site from 20–77%. The site that increased from 211 to 385 chose to continue comprehensive triage and did not implement split flow triage. Pre change monthly average screened by location — TMC-1049, SW-1076, NW-285, NE-309, MC-



171, SE-280, Katy-211.Post change monthly total screened by location — TMC-835, SW-248, NW-155, NE-230, MC-94, SE-71, Katy-385. The HIV screening process has returned to triage at two facilities and within one month been positive by returning to near pre-implementation numbers. MC-164, SE-192.

CONCLUSIONS: While uncertain which variable had the greater impact to the HIV screening process, success with routine HIV screening is optimal when addressed at triage and when the screening tool is a mandatory field in the computer system. It assures that all patients who access the emergency department for services and are able to opt out for testing are screened for HIV. Testing has improved to near goal with addressing HIV screening during the triage process despite split flow requirements. The same implementation will begin at the remainder of the campuses to optimize HIV testing.

ABSTRACT 37

Comparison of Enhanced Targeted Rapid HIV Screening Using the Denver HIV Risk Score to Nontargeted Rapid HIV Screening in an Urban Emergency Department and Urgent Care Setting

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OBJECTIVE: The Centers for Disease Control and Prevention recommends nontargeted HIV screening in healthcare settings, including emergency departments (EDs). Since 2006, 11 studies have reported modest effectiveness of nontargeted screening in this clinical setting. Recently, a clinical risk prediction tool, the Denver HIV Risk Score (DHRS), was developed to identify high risk patients and help focus HIV screening efforts. Our goal was to compare the effectiveness of targeted HIV screening

using the DHRS to nontargeted HIV screening in an ED setting.

METHODS: Design: Quasi-experiment. Setting: Urban, academic ED and urgent care (UC) with an approximate annual combined census of 110,000 visits. Patients: All patients 13 years of age or greater who were clinically stable and capable of providing consent. Intervention: Targeted rapid HIV screening of patients identified as high-risk by nurses using the DHRS (defined as a DHRS of 30 or greater) during medical screening during a 4-month period in 2011. Control: Nontargeted rapid HIV screening offered by nurses during medical screening during a comparable 4-month period in 2010. Analysis: Association between targeted HIV screening and newly-diagnosed HIV infection, adjusting for patient demographics and payer status.

RESULTS: During the targeted phase, 28,506 eligible patients were included, 1,718 (10%) were identified as highrisk, and 551 completed HIV testing. Of these, 7 (1.3%, 95% confidence interval [CI]: 0.5%-2.6%) were newlydiagnosed with HIV infection. During the nontargeted phase, 29,510 eligible patients were included and 3,591 completed HIV testing. Of these, 7 (0.2%, 95% CI: 0.1%-0.4%) were newly-diagnosed with HIV infection. Targeted HIV screening was significantly associated with identification of newly-diagnosed HIV infection when compared to nontargeted screening (adjusted RR = 10.4, 95% CI: 3.4-32.0). The median CD4 counts for patients newly-diagnosed during the targeted phase and during the nontargeted phase were 244 cells/µL (IQR: 101–434) and 272 cell/ μ L (IQR: 254–285), respectively (p=0.8). The median viral loads for patients newly-diagnosed during the targeted and nontargeted phases were 42,435 copies/mL (IQR: 17,275-844,498) and 192,551 copies/mL (IQR: 110,681–301,223), respectively (p=0.9). Additionally, of the 14 newly-diagnosed patients, 4 (29%) had CD4 counts >350 cells/ μ L, of which 3 (75%) were identified during the targeted phase.

CONCLUSIONS: Targeted HIV screening using the DHRS was strongly associated with new HIV diagnoses when compared to nontargeted screening. Although both HIV screening methods identified the same absolute number of newly-diagnosed patients, significantly fewer



tests were required during the targeted phase to achieve the same effect.

ABSTRACT 38

Novel Emergency Department Registration Kiosk for HIV Screening Increases Engagement of High Risk Patients

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OBJECTIVE: Emergency Department (ED) HIV screening has proven critical to the national strategy for identification of unrecognized HIV cases. Unsustainable costs and low screening rates challenge sustainability. Freestanding registration kiosks could potentially reduce the marginal costs of ED HIV screening, and improve overall rates of testing. We sought to evaluate feasibility and impact of leveraging ED registration based kiosks for offering HIV screening.

METHODS: A rapid oral fluid HIV testing program was instituted in a U.S. ED since 2005. Three phase quasi experimental design. Phase I as reference examined existing testing with exogenous staff offering HIV testing at bedside; II (tablet prototype with manual login) and III (enhanced kiosk with automated login) at ED registration. Feasibility operationally assessed by rate at which HIV tests offered, accepted, completed, and resulted in new HIV-positive diagnoses. Socio-demographic data collected via staff-interview (Phase I) or kiosk-based questionnaire (Phases II & III). Descriptive statistical analysis and chisquared tests performed.

RESULTS: The numbers of eligible ED patients for screening, proportions of these tested, or sociodemographic characteristics of patients eligible for screening were similar among 3 phases. However, number and proportion of patients offered testing of those eligible for screening increased significantly across phases [I: 32% (936/2975), II: 37% (965/2605), III: 40% (1030/2571), p<0.05]; slightly higher rates of newly diagnosed HIV

positivity observed with kiosk versus bedside testing [I: 0% (0/538); II: 0.2% (1/475); III: 0.5% (2/430)]. Compared to phase I, those tested via kiosk were more likely to be younger, female, black, and report high risk sexual behaviors and/or injection drug use (age: 39 years, 35 years, 35 years for phase I, II, III; female: 55%, 63%, 62%; Black: 67%, 75%, 78%; high risk sexual behaviors: 30%, 52%, 51%; injection drug use: 1%, 8%, 7%)(all p<0.05).

CONCLUSIONS: HIV screening via registration based kiosks in an ED was feasible and yielded comparable rates of testing and increased rates of higher-risk patients engagement for testing. This novel approach may offer a solution to sustaining screening and yield more diagnoses of unrecognized HIV infection in EDs.

ABSTRACT 39

Kiosk-Facilitated Patient Self Testing for HIV in an Emergency Department Rapid HIV Screening Program

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OBJECTIVE: Innovative approaches are required to offset costs and resource of HIV screening in medical settings. Here we conduct a pilot study to evaluate utility of kiosks for patient HIV self-testing, as the routine mode of emergency department (ED) HIV screening, measuring rates of uptake and successful completion of HIV testing.

METHODS: For this program evaluation we built upon a 2-phase kiosk system integrated into ED operations in 2011 for rapid oral-fluid HIV testing which includes 'registration kiosk' (for offering HIV screening) and 'risk assessment kiosk' (for collecting demographic and risk behavior information). A series of instructional self-testing kiosk screens were added to the risk assessment kiosk which provides step-by-step instructions for self-testing. Test results were read by trained testing facilitators. We alternated 10 weekday 16-hour per day where kiosk self-testing was offered as the routine model with 10 weekday 16-hour per day where kiosk-facilitator testing was offered



for a total of 40 days. During the self-testing phase patients who accepted HIV testing but subsequently declined to perform their own test were tested via a facilitator. Testing facilitators observed how a patient performed the self-testing, and provided assistance when requested. Descriptive statistical analysis and chi-squared tests performed.

RESULTS: During the study period, ED census and numbers of eligible patients for screening were similar (kiosk self-testing: 4,241 and 2,446 patients, respectively; versus kiosk facilitator testing: 4,230 and 2,409 patients, respectively). Among them, 877 and 884 eligible patients (kiosk self-test, vs. kiosk facilitator test) were offered HIV testing; 352 and 350 of those eligible accepted and received an HIV test, respectively. During the kiosk self-testing phase, 155 (44%) patients agreed to perform self-testing while 197 patients declined self-testing and received testing by a facilitator. Among those who completed self-testing, 134 (86%) patients successfully performed the test; 33 (25%) requested assistance from the staff. One (0.3%) patient had a reactive result in each phase; 1 was newly diagnosed HIV infection in the kiosk self-testing phase and the other was false positive.

CONCLUSIONS: This is the first demonstration of kiosks for engaging patients and guide HIV self-testing in a health care setting. Notably, while rates of agreement for self-testing were similar to facilitator testing, more than half of patient declined to perform their own test; further a substantial number of patients needed assistance from staff or failed to complete self-testing. Operational and educational improvements are required prior to consider full implementation of kiosks for HIV self-testing in EDs.

ABSTRACT 40

Undiagnosed HIV Infection in an Urban Emergency Department: a Blinded, Cross-Sectional Serosurvey

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OBJECTIVE: CDC recommends routine HIV testing in Emergency Departments (EDs). Jacobi Medical Center has a well-established ED rapid testing program, however not all patients are eligible for or accept testing. We measured the prevalence of undiagnosed HIV infection in the ED.

METHODS: This blinded, cross sectional serosurvey took place in a large Bronx, NYC Adult Emergency Department. During the 8- week study, remnant specimens from all clinically indicated ED blood draws were collected. Patient identifiers were matched to the NYC HIV Registry and the ED rapid testing program database to assess previous HIV diagnosis and acceptance of HIV testing. After matching, all patient identifiers were permanently removed from study specimens and databases, and the remnant specimens were tested for HIV antibody.

RESULTS: During the study, 8,347 patients entered the ED. Of these, 3,597 had blood drawn and 1,776 accepted rapid testing. We salvaged and tested 94% (N=3,373) of available blood specimens. Of the specimens tested with a third generation EIA and confirmatory Western Blot, 111 were positive, yielding an ED prevalence of 3.3%. Fourteen (13.5%) of positive specimens came from individuals who were not in the HIV Registry. These individuals are assumed to have undiagnosed HIV infection. The prevalence of undiagnosed infection was higher than expected among those over 64 years old and whites, although these differences were not significant due to small absolute numbers. Undiagnosed infection was not associated with sex, discharge status, or inpatient admission.

CONCLUSIONS: This ED had a high rate of undiagnosed HIV. EDs and hospitals should use multiple testing



strategies targeting ED entrants and inpatients in order to capture as many patients as possible and truly routinize testing.

ABSTRACT 41

Implementing a Rapid HIV Testing Program in a New York City Hospital-Based Dental Clinic

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OBJECTIVE: This study aimed to implement and assess patients' acceptance of a rapid HIV testing program within an urban, hospital-based dental practice as part of making HIV testing a routine part of all medical care.

METHODS: A prospective cross-sectional study was conducted on a convenience sample of patients seen at the dental clinics of two urban hospitals in the Bronx, New York. Rapid oral HIV testing was offered 5 days a week, between 9am and 5pm from 08/01/2011 to 2/14/2012. Individuals aged 13 years and older were recruited by trained HIV counselors while in the dental clinic waiting room. Patients who reported testing within the previous 6 months or who reported being HIV-positive were considered ineligible for HIV testing. Patients received both pre- and post-test counseling in a screened-off area in the waiting room. Data were collected on the number of patients offered testing, the proportion accepting testing and newly diagnosed HIV infections. Population characteristics were analyzed using descriptive statistics.

RESULTS: Of 1,642 people approached, 797 (48.5%) were eligible for HIV testing, of which 430 (53.9%) accepted testing. The population of tested patients was 38.6% male, 37.2% Hispanic, and 46.3% non-Hispanic black, with a mean age of 36.7 ± 13.6 years. 76.3% (328/430) of patients tested reported prior HIV testing. Of eligible patients who refused testing, 17.4% (139/797) considered themselves at no risk for HIV. Individuals 30 years and under were more likely to accept testing (57.5%) than those over the age of

30 (51.8%). Testing acceptance did not differ by gender or race. No new HIV infections were identified.

CONCLUSIONS: Rapid HIV testing in a New York City hospital-based dental clinic resulted in modest rates of patient acceptance. Future work should concentrate on improving patients' privacy in offering testing in order to increase acceptance of testing in this non-traditional setting.

ABSTRACT 42

Increasing HIV Testing Among African-Born Immigrants in Dublin, Ireland: A Qualitative Study of Challenges and Opportunities in the Irish Health Service

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OBJECTIVE: In 2009, 31.3% of all new cases of HIV in Ireland were diagnosed in African-born immigrants. Individual and structural factors, including stigma, health system factors and socioeconomic circumstances continue to hinder access to voluntary counseling and testing (VCT) services. Existing strategies aimed at encouraging VCT are ineffective because they are culturally insensitive to the needs of this important population group. This qualitative project studied the barriers and challenges to HIV testing among African-born Immigrants.

METHODS: We utilized a qualitative study design to obtain data through focus group discussions among African-born immigrants living in Dublin Ireland to explore the challenges and opportunities to increasing VCT. Six focus groups were held: 2 male groups, 2 female groups and 2 mixed-gender groups with 25 individuals consisting of 13 males and 12 females. Prior to the discussion, participants were shown and requested to share their opinions on a video that was developed and



used to increase VCT among African migrants attending emergency room in a Bronx, US hospital. The discussion guide specifically explored issues highlighted in the video as well as opportunities for increasing VCT among migrants.

RESULTS: Widespread stigma and the belief that HIV is primarily a disease of African immigrants were identified as challenges that constrain VCT and access to care. Other factors, including the organization and location of health care and testing services, attitude of health workers- primary care physicians and nurses, and policies that mandate HIV testing for immigrants seeking to access social welfare benefits were cited as constraints to VCT. Participants indicated that a significant change in the organization of HIV testing services is needed to encourage testing among migrants- for example, including training health workers to be aware of and respect migrants' cultures, intensifying efforts at eradicating stigma as well as identifying and engaging other stakeholders- churches, social groups, immigrant councils- in the planning and provision of VCT services that target African migrants.

CONCLUSIONS: African immigrants living in Dublin, Ireland continue to face a variety of challenges with HIV, especially related to structural, cultural and personal factors that continue to hinder access to testing services and access to healthcare. Addressing these challenges will require development and implementation of strategies that acknowledges the cultures of immigrant groups.

ABSTRACT 43

Hepatitis C Virus Screening Practices Among Primary Care Physicians in Four Large Primary Care Settings

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OBJECTIVE: In 1998, CDC published Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-related Chronic Disease, recommending HCV testing for populations most likely to be infected with HCV. However, the implementation of risk-based screening has not been widely adopted in health care settings and at least one-half of infected U.S. adults remain unidentified. The goal of this study was to examine knowledge and attitudes among primary care physicians regarding HCV screening and testing practices in four, large primary care settings in the United States.

METHODS: Semi-structured interviews were conducted and data were analyzed using NVivo 9.0 by a multi-disciplinary team using Grounded Theory. Nineteen physicians: 6 Primary Care Physicians (PCP), 8 Hepatologists, and 5 Administrators (responsible for primary care policy changes) were interviewed.

RESULTS: We identified four main themes and 19 subthemes: 1) PCPs, Hepatologists and Administrators were aware that HCV screening guidelines or recommendations exist, however they were not aware of most risk factors identified within the guidelines. 2) Injection drug use was identified as the most recognizable risk factor; however PCPs were uncomfortable assessing risk for HCV. When PCPs did assess risk, they did not follow recommended screening practices. 3) PCPs, Hepatologists and Administrators reported that abnormal alanine transaminase (ALT) test results were a frequent trigger for



a HCV test. 4) PCPs, Hepatologists and Administrators reported that resource constraints (lack of time spent with patient and insurance coverage for treatment) and low PCP knowledge were barriers to linking anti-HCV positive patients to hepatitis C care and treatment.

CONCLUSIONS: PCPs are not fully utilizing the current recommended risk-based screening strategy and other strategies should be considered. PCPs require a better understanding of hepatitis C as an infectious disease as well as resources available for treatment and care. PCPs are in need of support for identifying those at risk for hepatitis C infection.

ABSTRACT 44

Acceptability and Ease of Use of Home Self-Testing for HIV Among Men Who Have Sex with Men

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OBJECTIVE: Assess the acceptability and ease of use of home self-testing among men who have sex with men (MSM).

METHODS: High-risk MSM are being randomized to have access to home self-testing using the OraQuick ADVANCE Rapid HIV-1/2 Antibody Test on oral fluids or to standard clinic-based testing for 15 months. At enrollment, subjects complete a self-administered survey, receive HIV/STI screening, and are advised to test quarterly in accordance with local guidelines. Men randomized to home self-testing are trained to use the test, receive a test kit, and can contact the study for additional kits as needed. During follow-up, men can test for HIV at any location and are then supposed to complete online surveys. A 24-hour contact is available for counseling and technical assistance. Acceptability of home self-testing is assessed at baseline. Post-test surveys describe home self-testing experiences and ease of use.

RESULTS: Of 153 enrolled subjects, 84% reported that access to home self-testing would increase how often they test for HIV. Almost half (45%) reported that the most they

would pay for a home self-test was less than \$20, 27% would pay \$20-40, 18% would pay \$40 or more, and 10% would only use one if it were free. How often men thought they would use a home self-test varied by the cost; 87% expected to test at least 4 times per year if kits cost \$5 compared to 29% if kits cost \$50.77 subjects were randomized to home self-testing and followed for a median of 14 months (IQR 10–15). These men received a kit at baseline, and 56 (73%) requested additional kits (1-5 per subject, 127 total). 51 men completed 103 surveys about testing at home. Subjects reported that the kit was 'very easy to use' in 98 (96%) of these surveys and 'somewhat easy to use' in the other 4. The 24-hour contact was used only to request new kits. All subjects reported non-reactive tests (by post-test surveys or when requesting new kits) except 1 reactive, 2 invalid, 2 misplaced, 1 incorrectly performed, and 2 damaged tests.

CONCLUSIONS: MSM are willing to use a rapid antibody test on oral fluids to test themselves at home, found it easy to use, and required little counseling or technical support. These results demonstrate that access to home HIV self-testing could increase HIV testing frequency among MSM, but this may depend on the cost of the test.

ABSTRACT 45

Point-of-Sex Testing: Intentions of Men who Have Sex with Men to Use Home-Use HIV Tests with Sex Partners

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OBJECTIVE: Examine intentions of men who have sex with men (MSM) to use home-use HIV tests with sex partners.

METHODS: The iTest Study is a randomized trial of home self-testing using the OraQuick ADVANCE® Rapid HIV-1/2 Antibody Test on oral fluids. The end-of-study survey asks questions about HIV testing during the 15-month study period and attitudes towards home testing in the future.



RESULTS: Of 69 subjects who have completed follow-up, 16 (24%) and 32 (46%) reported they would be very likely to test at home with a new partner before sex if the test took 25 versus 5 minutes, respectively (p<0.001). Men reported being very likely to test with partners when beginning new relationships (64%), in ongoing open relationships (59%), when deciding whether to use condoms (66%), or when worried a partner has HIV (61%). When asked where they would prefer to test, 60% preferred testing at home, 6% at a clinic, and 34% said it depended on the situation. When asked about preferences in specific situations, men preferred home testing before sex with a new partner (86%), when deciding whether to use condoms (75%), and for regular testing (73%). Men preferred clinic-based testing after having unprotected sex or sharing needles with an HIV-infected person (65%) or being notified of exposures by partners or public health (70%). When asked how sure they would be that a partner's negative home-use test was a true negative, 3% reported they would be very sure, 55% somewhat sure, 25% somewhat unsure, and 16% very unsure. However, subjects were twice as likely to report being very likely to have unprotected anal sex if they tested at home with a partner and both tested negative (25%) than if the partner disclosed being negative (13%) (p<0.001). Thirty-four subjects were randomized to home self-testing. We previously reported on a partner who had a reactive home test after unprotected sex with a study subject. At the end-of-study survey, one additional subject reported testing a friend who was concerned about an exposure.

CONCLUSIONS: MSM intend to use home-use tests with sex partners to inform sexual decision-making. However, approximately 25% of HIV-infected MSM using home-use tests in Seattle are likely to obtain false-negative results during the highly-infectious stage of acute HIV infection because of the test's three month window period. Efforts are needed to ensure that MSM understand the test's limitations if they will be able to test safely with partners.

ABSTRACT 46

Endocarditis as a Sentinel Marker for New Epidemics of Injection Drug Use and Hepatitis C Virus Infection

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OBJECTIVE: It is difficult to determine the prevalence of drug abuse, particularly that of heroin abuse, due to its social unacceptability and illegal nature. We examined admissions for infective endocarditis (IE) at a tertiary care teaching hospital over a ten-year span to evaluate if an increase in hospitalizations for IE and increase in hepatitis C virus (HCV) in patients (pts) with IE could predict a new epidemic of injection drug use (IDU). As IDU is a risk factor not only for IE, but also for HCV and HIV, we examined the screening rates for HIV/HCV of IE pts with known IDU either by their admitted current or past history of IDU or as identified by a positive toxicology (tox) screen.

METHODS: Retrospective chart review of all hospitalized pts discharged with the diagnosis of IE as defined by the modified Dukes criteria from 1999–2009 (542 confirmed cases). We used a chi-square test to calculate all p values.

RESULTS: There were 542 admissions among 392 unique pts with IE; 104 pts were readmitted 2–7 times. Of the total admissions, 304 (56%) were not screened for HCV, and of those tested, 86 (49%) were HCV+; 404 (74.5%) were not screened for HIV, and of those tested, 28 (20.3%) were HIV+. Pts asked about a current or prior history of IDU were more likely to be tested for HCV, 60% vs. 29 % (p<. 0001), and for HIV, 58% vs. 13% (p<.0001). Those with a positive tox screen for opiates were more likely to be tested for HCV, 59% vs. 21% (p<.0001), and for HIV 59% vs. 12% (p<.0001).

CONCLUSIONS: Over the ten-year period there was a 2-fold increase in IE admissions, a 4-fold increase in HCV prevalence and a 6-fold increase in known IDU by positive tox screens, but no appreciable increase in HIV positivity in this group. This is an underestimation of the actual prevalence as not all admissions were screened for IDU, HCV and HIV. As IDUs are known to have a greater



risk for HIV, HCV and IE, observation of a sharp increase in IE cases overall could be used as an indicator of a new IDU epidemic. In turn, among pts admitted for IE, IDU status needs to be assessed and screening for HCV and HIV should be performed in the inpatient setting so that linkage to appropriate outpatient care can be implemented.

ABSTRACT 47

Missed Opportunities in HIV Testing in New York City

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OBJECTIVE: In early 2006, the New York City Department of Health and Mental Hygiene (NYC DOHMH) began expanding HIV testing in NYC. Later that year, the Centers for Disease Control and Prevention (CDC) recommended routine HIV screening for individuals aged 13-64 years in healthcare settings. NYC DOHMH encouraged implementation of these recommendations through various mechanisms, from use of the contracting process to launching community-level initiatives to further expand HIV testing. In September 2010, New York State (NYS) law mandated the offer of an HIV test to all patients aged 13-64, with limited exceptions. To evaluate how well healthcare providers are implementing 2006 CDC HIV testing recommendations and 2010 NYS law in New York City, we surveyed NYC residents in 2011.

METHODS: A random telephone survey of NYC adults was conducted from June–August 2011. The survey collected information on demographics, healthcare use, and behavior and attitudes about HIV testing.

RESULTS: Overall, 2,473 NYC residents aged 18 years and older completed the survey; 84% (2,078) were aged 18–64, of whom 68% reported ever testing for HIV. Among the 32% of residents aged 18–64 years who reported never testing for HIV, 77% (475) had seen a healthcare provider in the prior 12 months. Of them, 93% were not offered

an HIV test at their last healthcare visit, although 77% of them said they would get an HIV test on their healthcare provider's recommendation.

CONCLUSIONS: While 68% of NYC residents surveyed report ever testing for HIV, NYC healthcare providers' incomplete implementation of CDC recommendations and NYS law represents missed opportunities for residents to learn their HIV status. Given these findings, we estimate that full provider implementation of an HIV test offer could lead to a) 955,000 18–64 year old NYC residents getting tested for HIV for the first time and b) 6,500 persons with previously undiagnosed HIV infection learning their HIV status and promptly linking to care.

ABSTRACT 48

HIV Testing in Free, Mobile Dental Clinics in North Carolina

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OBJECTIVE: HIV testing in dental settings can reach persons who are in need of HIV testing but may be missed by other HIV testing programs. We assessed the feasibility and acceptability of implementing a rapid, routine HIV testing program in free, mobile dental clinics in North Carolina.

METHODS: North Carolina Missions of Mercy (NC MOM), an outreach program affiliated with the North Carolina Dental Society, provides free dental services at 2-day clinics. These clinics occur monthly across North Carolina and offer a wide variety of dental services. Free, opt-out rapid HIV testing was offered to patients attending the NC MOM clinics in New London (rural setting) and Greensboro (urban setting). Patients were approached for HIV testing after clinic registration and collection of vital signs. OraQuick Advance Rapid HIV-1/2 Antibody Test



was used on oral fluid. Results were provided to patients either while waiting for, or at the completion of their dental services. Counseling for personal risk assessment and risk reduction was provided by trained counselors; opt-in counseling was performed at the New London clinic, whereas opt-out counseling was performed at the Greensboro clinic. Both testing and counseling were provided by trained graduate student volunteers. The protocol for preliminary positive results included Western Blot confirmation, syphilis testing, and referral to a local HIV provider.

RESULTS: In New London, 88% of dental patients were approached for opt-out HIV testing (n=140/160). Over 90% of these patients (n=127/140) accepted a rapid HIV test; none tested HIV-positive. Almost all patients (95%, n=120) received their test results on-site; only 28% (n=33/120) participated in opt-in risk assessment/risk reduction counseling. In Greensboro, 70% of dental patients were approached for opt-out HIV testing (n=210/300); only 75% of patients accepted a rapid HIV test (n=158/210). None of the patients tested HIV-positive. Nearly 90% of patients received their test results (n=139/158). Over 50% participated in opt-out risk assessment/risk reduction counseling. A large proportion of patients at both clinics had never before been tested for HIV (New London: 45%, Greensboro 37%).

CONCLUSIONS: The integration of HIV testing into a mobile dental clinic setting is both feasible and acceptable. HIV testing is needed in this patient population; this testing encounter was the first for 37–45% of patients. Partnerships with community-based organizations would remove the reliance on student volunteers, improving sustainability, continuity, and the ability to provide HIV testing at all NC MOM clinics across North Carolina.

ABSTRACT 49

Culture Change and Expanded HIV Testing

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OBJECTIVE: In an effort to routinize HIV testing, the Centers for Disease Control revised their recommendations for HIV testing in 2006. To support increased HIV testing in medical settings the CDC released funds to 30 jurisdictions in the United States to support the development of the Expanded HIV Testing Initiative. This poster explores the success of this initiative in one jurisdiction, focusing on the unique approach used to encourage medical providers to participate in the testing project

METHODS: Potential test sites were interviewed about their attitudes towards routinized HIV screening. Two of the primary barriers to routinizing HIV testing identified were the stigma associated with the test itself and fears about delivering positive test results. Based on these responses, the Ohio Department of Health developed social marketing supplies, training materials, webinars and other resources to address the stigma associated with the test and to alleviate provider fear of delivering positive test results. The concept behind this approach was rooted in the belief that there must be a 'culture change' around the HIV test in order to address provider apprehensions. All materials developed aimed to normalize the idea of being tested for HIV and being aware of one's status.

RESULTS: Ohio recruited and has retained 25 new HIV testing sites resulting in an annual increase of 12,000 tests conducted and the identification of 120 new positives. Additionally, with the use of social marketing materials, implementation of provider training, and a focus on linkage to care, new providers are more eager to join the testing initiative and are less fearful of giving positive results.

CONCLUSIONS: Implementing an approach to increased testing that accounts for known barriers and attempts to remove those barriers through social marketing, provider



training and program development can be an effective way to routinize administration of the HIV test.

ABSTRACT 50

The Implementation of Hepatitis C (HCV) Rapid Testing Technology in HCV Counseling and Testing Sites in Ohio

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OBJECTIVE: To assess the feasibility, acceptability, and cost-effectiveness of implementing HCV rapid testing technology into an existing HCV counseling and testing project and to create an HCV rapid testing counseling and testing protocol.

METHODS: Seven HCV counseling and testing sites in Ohio were selected to participate in a pilot project to assess the feasibility, acceptability, and cost-effectiveness of implementing HCV rapid testing technology into their existing HCV counseling and testing programs. Sites collected baseline data on time and effort spent providing counseling, testing and results under the current program which utilizes the Home Access® Hepatitis C CheckSM collection kit. A draft protocol for HCV rapid testing was developed and staff at the seven sites were trained on the use of the new HCV rapid test. Each site received a finite number of HCV rapid tests, and after they had used approximately 75 percent of their allotment, they collected data on time and effort spent providing counseling, testing and results using the HCV rapid tests. Verbal feedback was also collected from participating sites both informally and through a conference call. Positive HCV rapid test results were antibody-confirmed through the use of the Home Access® Hepatitis C CheckSM collection kit which utilizes the signal-to-cut-off ratio or RIBA for antibody confirmation.

RESULTS: Sites are currently in the process of collecting the post-implementation data and finalizing baseline data. Based on verbal feedback from sites, however, the HCV rapid test is both feasible and more acceptable than the Home Access® Hepatitis C CheckSM collection kits. A preliminary look at available baseline data show that approximately 76 to 81 percent of clients testing for HCV with the Home Access® Hepatitis C CheckSM collection kits received results with an average of 40 to 66 minutes spent following up on clients who do not return for results. Of those reactive HCV rapid tests that were antibody-confirmed using Home Access® Hepatitis C CheckSM collection kits and for which results are available, all confirmed positive.

CONCLUSIONS: HCV rapid testing technology is feasible, acceptable, and cost-effective. Sites prefer the new technology over the older technology. Clients testing HCV positive with the rapid test can bypass antibody confirmation and be referred directly for HCV-RNA testing.

ABSTRACT 51

HIV Risk Screening Practices Among Internal Medicine Residents in 2012

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OBJECTIVE: Men who have sex with men (MSM) bear a disproportionate burden of HIV disease. As novel and effective HIV prevention strategies such as PrEP become available, it is becoming increasingly important that primary care providers screen their patients for HIV risk behaviors, and that we understand if and how physicians in training are incorporating risk screening into their practice.

METHODS: Medical interns and residents who had completed at least 1 year of training, and had a primary care practice at an Academic Medical Center in the Boston area were asked to participate in an online survey to assess their attitudes, practices and education about HIV risk screening, as well as their comfort with Lesbian/Gay/Bisexual/Transgender (LGBT) health issues.

RESULTS: Fifty-seven residents provided informed consent and 53 completed the survey. The majority of the residents planned to do specialty training and did not

anticipate providing primary management of HIV infection in their clinical practice after residency. Fifty-seven percent asked most or all of their male patients if they had sex with other men, and only 49% agreed with the statement that they had the "skills to provide effective medical management to patients with LGBT identity". With regards to screening for risky behavior, only 30% stated that they had training in the screening of risky behavior in residency, and 50% felt that their clinical preceptors only had a small influence on their decision to perform risk assessments for HIV and sexually transmitted infections. Although 89% knew that guidelines recommend that HIV testing should be done at least once in a patient's lifetime, only 47% stated that every patient they see gets tested for HIV.

CONCLUSIONS: A substantial proportion of Internal Medicine residents in an urban setting do not routinely assess their male patients for HIV risk behaviors or ensure that all patients have been tested for HIV at least once. An increased focus on risk screening through both didactic and clinical mentoring in residency programs could help improve efforts to identify and test high-risk men, thereby providing enhanced opportunities to offer novel HIV prevention modalities to those individuals at greatest risk for HIV acquisition.

ABSTRACT 52

Engaging Philadelphia's Immigrant African and Caribbean Communities in HIV Testing: Lessons Learned

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OBJECTIVE: To develop a program of HIV testing and facilitated linkage to care in the immigrant African and Caribbean communities of Philadelphia, engaging the target communities in the planning and implementation of the program.

METHODS: A panel of community advisors (Advisors) was convened to determine the needs of the community

and to discuss best ways of delivering the proposed HIV testing and linkage to care service. Advisors served as a guide through the project implementation. Advisors were leaders of various religious institutions, of country associations and other organizations and businesses serving the target communities. Advisors introduced the program to their constituents in a series of Clinics Without Walls, where an integrated panel of testing for HIV, hypertension and diabetes was conducted for attendees, together with health and local resource education. Clinics Without Walls were conducted largely in churches of various denominations, mosques, community centers, and meetings of country associations.

RESULTS: Between February 2011 and July 2012, 2,114 African and Caribbean immigrants from 51 countries received HIV testing through 98 Clinics Without Walls. Among these, 35 tested positive for HIV for a rate of 1.7%. With a median time to initial appointment of 3 days, all of the identified HIV-positive individuals were successfully linked to care. Lessons learned include the importance of having community leaders support the project, introduce the Clinics Without Walls to their respective communities, and provide ongoing feedback about emerging and newly identified needs, and improved strategies to achieve project goals. In addition to the introducing Advisor, determining a Project Champion within each community has been invaluable. These Project Champions work closely with project staff to provide insight into the community and avoid any cultural mis-steps. They work with the target community to optimize participation in events. Offering an integrated package of health screening emerged as critical to the success of the Clinics Without Walls. Emphasizing linkage to care has been one of the strategies most wellreceived by the target communities. Topics of particular interest for discussion during Clinics Without Walls included only non-HIV related topics such as accessing health resources, patient confidentiality, maintaining health in the transition to the US, and reproductive health. HIV education was most effectively offered singly to individuals participating in screening.

CONCLUSIONS: In conducting HIV testing in immigrant African and Caribbean communities, incremental success has depended largely on the advice and support of community leaders and project champions, and



on integrating lessons learned during the implementation process.

ABSTRACT 53

Back to Basics: A model for Ensuring Consistent HIV Screening and Testing in Multi-Service CBOs

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OBJECTIVE: The burden of HIV morbidity within Central and East Harlem is among the highest in the United States; new HIV diagnoses are the second- and third-highest, respectively, in Manhattan— far above the national and NYS averages. To address these needs, Harlem United provides services through its Federally Qualified Health Center (FQHC), dental clinic, and substance use recovery programs. Although the offer of HIV and STI screenings is standard throughout Harlem United's programs, some of our high-risk and homeless clients are inconsistently screened at intake to new services. The goal of the Rapid Testing Integration Project is to ensure clients are offered HIV screening at every entry point to the agency.

METHODS: To engage individuals at the highest risk, Harlem United is taking a safety net approach, offering an HIV test to people who test STI-positive and integrating HIV testing into our clinics in a more systematic way. To this end, we now offer integrated HIV/STI screenings as follows: 1.At entry and 6-month follow-up points for medical care 2.At the entry point for dental 3.At entry point for recovery services 4. To all STI positives with unknown HIV status Through these strategies, we aimed to screen an additional 1650 unique clients per year, with 1430 (87%) receiving a rapid HIV test.

RESULTS: We have made significant strides toward these goals by creating an opt-out system of routine screening and testing for the above programs. To build capacity for testing across programs, Harlem United provides ongoing training on HIV screening, testing procedures, and HIPAA regulations for non-traditional providers, such

as dental staff and medical office assistants. Our EMR was also adapted to host a behavioral screener that flags highrisk clients for immediate testing and issues alerts for reengagement every 3 months for those reporting high-risk behavior at intake. Through this aggressive implementation plan, since January 2012 our Rapid Testing Integration project has tested 861 patients during routine enrollment at our FQHCs, with a seropositivity rate of 5%.

CONCLUSIONS: As HIV/AIDS CBOs grow to address the full constellation of risk factors and an ageing HIV-positive population, it is easy for complementary programs such as dental or recovery services to become atomized, allocating responsibility for testing to testing programs. To address this hazard while still offering a wide spectrum of services, Harlem United has created a safety net for its most vulnerable clients by standardizing HIV screening and testing as a sa a universal service imperative.

ABSTRACT 54

A Comparison of Time Requirements for Targeted and Non-Targeted Counselor-Based Emergency Department HIV Screening

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OBJECTIVE: When considering the trade-offs between targeted and non-targeted HIV screening strategies, it is important to know how much time is spent looking for patients that meet eligibility criteria and how much time is allocated to testing itself under the two approaches. This study was designed to quantify the time spent in various component activities of HIV testing when using a targeted approach and when using a non-targeted approach.

METHODS: This was a time-and-motion study of a counselor-based HIV counseling and testing program in an urban, academic emergency department. During selected periods of time between June 2008 and September 2012,



the program 1) used conventional signed, opt-in consent, 2) alternated between targeted and non-targeted patient selection, and 3) switched from conventional HIV assay with delayed result availability to rapid assay using an oral swab. During 33 six-hour observation periods, trained personnel recorded all counselor actions and timed them using a stop watch. There were 17 non-targeted and 16 targeted periods. Conventional assay was used in 21 periods and rapid assay in 12 periods. Observed activities were coded and time spent on each activity was calculated.

RESULTS: There were 159 patients approached and 83 patients tested during observation periods. There were 61 different types of activity observed, which were grouped into 10 parent categories. The mean minutes spent per activity per patient approached for targeted and nontargeted screening was: general clinical activities (16 v 15), data management and record keeping (14 v 7), patient selection and approach (9 v 9), sample collection and assay (5 v 7), post-result counseling (7 v 2), introduction and testing offer (4 v 3), administrative and non-work activities (4 v 2), risk-assessment (3 v 2), pre-result counseling (1 v 1).

CONCLUSIONS: There was no important difference in the amount of time required to select and approach the next patient between targeted and non-targeted screening strategies. This suggests that individuals at-risk for HIV are rapidly identifiable in urban EDs and that the cognitive and informational aspects of patient selection are not the primary components of the time required to approach patients for testing. Time required for targeting should not contribute to the controversy between targeted and non-targeted patient selection strategies.

ABSTRACT 55

Indications for Testing Among Reported Cases of Hepatitis C Virus Infection from Enhanced Hepatitis Surveillance Sites – United States, 2004–2010

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OBJECTIVE: In the United States, approximately 3.2 million persons are chronically infected with hepatitis C virus (HCV); of these one-half are unaware of their infection. CDC has developed recommendations for a one-time HCV test for persons born from 1945 through 1965 (the "Baby Boom" cohort) to be used in addition to current risk-based testing recommendations. We examined indications for testing by birth cohort (before 1945, 1945–1965, and after 1965) among persons with past or current HCV.

METHODS: Cases were determined by positive HCV laboratory markers reported by four surveillance sites to health departments from 2004–2010. Health department staff abstracted demographic and indications for testing from medical records of cases and compiled this information into a surveillance database. Indications for testing data included: history of injection drug use, elevated liver enzymes, transfusion or transplant history before 1992, mother-to-child transmission, chronic hemodialysis, or healthcare exposure.

RESULTS: Of 110,223 cases of past or current HCV infection reported during 2004–2010, 74,578 (68%) were among persons born during 1945–1965. Indications for testing were abstracted for 45,034 (41%) cases; of these, 29,544 (66%) identified at least one CDC-recommended risk factor as a reason for HCV testing. Injection drug use was the main risk factor reported for persons born in birth cohorts after 1945 (60% and 80%). Overall, 74% of reported cases were born from 1945–1965 or had a history of injection drug use.



CONCLUSIONS: These data support augmenting the current HCV risk-based screening recommendations by screening those adults in the 1945–1965 birth cohort.

ABSTRACT 56

Texas' Experience with Routine HIV Testing in Healthcare Settings.

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OBJECTIVE: In 2008, Texas implemented routine HIV testing in healthcare settings according to the 2006 CDC recommendations. The program assists sites in implementing sustainable and integrated routine HIV testing to increase the proportion of Texans diagnosed early in their HIV disease and successfully link them to medical care.

METHODS: The project has focused on counties with the highest HIV prevalence counts and rates. Sites in these counties were chosen by volume of indigent patient population, leadership interest and support, and capacity to implement testing, and include: emergency departments (ED), urgent care centers (UCC), STD clinics, corrections, community health and teen clinics. Basic demographics, limited behavioral risk information, test results and linkage to care information are submitted monthly for program evaluation.

RESULTS: The sites are located within nine of the top ten counties with the highest number of infected persons and fourteen of the top twenty highest rate counties. These sites serve the populations disproportionately impacted by HIV. Currently, 12 EDs, six UCCs, five STD clinics, two local primary care health departments, 102 community health center clinics, eight corrections sites, and seven teen clinics have implemented routine HIV testing. Over 555,000 HIV tests have been performed with over 4,800 HIV positive tests including over 3,000 newly identified positives. Of those tested, over 36% are Hispanic, 33% Black, and 26% White. Men comprise 50% of those tested; the opportunity to test men during a health care encounter is essential, as they comprise of over 77% of the living HIV cases in Texas.

Of the HIV positives, over 65% have been linked to HIV care services.

CONCLUSIONS: Supported sites continue to adjust their protocols, standing delegation orders, and processes for HIV testing. Sites have experienced challenges such as; leadership and staff turnover, transition to electronic medical health records, and corporate administrative changes. It is important that 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, incorporate the testing into their quality improvement processes, and have access to peer technical assistance and guidance. Through the support of the these projects, populations with the greatest HIV prevalence have learned their HIV status and received the opportunity to be linked to medical care and prevention services. This demonstrates the value of routine HIV testing as a standard of care in healthcare settings.

ABSTRACT 57

Can a Video Substitute for an In-Person Discussion in Delivering HIV Pre-Test Information to Spanish-Speaking Latinos and Better Serve Those with Lower Health Literacy?

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OBJECTIVE: We developed an animated and liveaction short-feature video employing easy-to-understand language to inform Spanish-speaking Latinos about HIV testing. In a non-inferiority trial, we then assessed the equivalence of the video to an in-person discussion with an HIV counselor regarding patient comprehension of HIV and HIV testing fundamentals, and evaluated if the video was more effective for those with lower health literacy.

METHODS: Through a multi-step, iterative process, we created a professional quality video addressing

fundamental concepts of HIV testing. We conducted two rounds of cognitive-based assessments of the video among 120 18-64-year-old Latino patients or clients at three non-clinical community-based organization study sites (Chicago, Miami, and San Antonio), and three clinical study sites at an ambulatory medical clinic (Providence), an ED (Los Angeles), and a department of health clinic (San Juan). In addition, we conducted interviews of 30 bilingual (English- and Spanish-speaking) Latino HIV test counselors at the community-based organizations. We revised the video based upon our review of the results of the cognitive-based assessments. Next, Spanish-speaking Latinos from an emergency department, a clinic, and community-based organizations in Providence were randomly assigned in a non-inferiority trial to receive pretest information from a video or an in-person discussion prior to being HIV tested. Random assignment was stratified by health literacy level (lower vs. higher). Comprehension of the pre-test information was measured using a questionnaire, and health literacy was measured using the SAHL-S. The non-inferiority criterion for the video would be met if the 95% CI of the difference (Δ ="video"-"in-person") in questionnaire mean scores was less than a 10% decrease in the in-person discussion group's mean score. Wilcoxon rank-sum testing was used to evaluate the effectiveness of the video among lower health literacy participants.

RESULTS: Of the 150 participants, 63% were female, 78% had = 12 years of formal education, 39% met criteria for lower health literacy, and 75% had previously been tested for HIV. The mean scores on the questionnaire for the video (20.4; 95% CI: 19.5~21.3) and in-person discussion (20.6; 95% CI: 19.7~21.5) groups (Δ = -0.15; 95% CI: -1.4~1.1) were similar, which satisfied the non-inferiority criterion. However, mean scores among lower health literacy participants were not greater for the video group (18.3 (video) vs. 19.6 (in-person); p<0.30).

CONCLUSIONS: Among Spanish-speaking Latinos the video is a reasonable substitute for an in-person discussion in terms of patient comprehension of HIV pretest fundamentals, but does not demonstrate an advantage among those with lower health literacy.

ABSTRACT 58

What Affects Acceptance of Routine HIV Screening in Pediatric Emergency Departments by Adolescents?

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OBJECTIVE: Routine HIV screening of adolescents has been endorsed by the Centers for Disease Control since 2006 and by the American Academy of Pediatrics since 2011. In 2009 Children's National Medical Center, located in the area of the high HIV prevalence in Washington, District of Columbia (DC), implemented a universal optout rapid oral fluid HIV screening of adolescents =13 years old in the Emergency Department (ED). Subsequently, the HIV screening program extended to the second affiliated pediatric ED in DC. This study aimed to investigate the factors affecting the acceptance of rapid oral fluid HIV screening by the adolescents in pediatric EDs.

METHODS: A prospective, cross-sectional study of patients =13 years in two pediatric EDs was conducted over 36 months. Data on patient demographics and reasons for opting-out of screening were collected. Logistic regression was used to identify factors associated with acceptance of HIV screening.

RESULTS: A total of 13,966 HIV tests were offered, 10,508 (75%) adolescents did not opt-out, and of those 9,886 (94%) were screened. The majority of screened patients were black (83%), female (59%), with the median age of 16 years, and 68% were DC residents. The most common reasons adolescents cited for opting-out of testing included a self-reported prior negative test (39%; n=1334) and reporting being not at risk (16%; n=550). During the first 24 months of the HIV screening in EDs 686 (15%) of the patients accepted the test, but were not tested due to the guardian declining the screening. One year later (after 36 months) a significantly smaller number of adolescents (5.7%; n=734) were not tested due to a guardian declining the HIV test. Younger adolescents (13–14 yrs) were significantly more



likely to opt-out of testing than older adolescents (OR: 1.56; 95% CI: 1.36–1.8).

CONCLUSIONS: The majority of adolescents and guardians accepted routine oral fluid rapid HIV screening in the pediatric EDs. Older adolescents (=15 yrs old) were more likely to accept routine HIV screening in the EDs. During 36 months following the implementation of the HIV screening program, there has been a significant decline in the number of the guardians refusing the HIV screening of the adolescents. Further studies aimed at evaluating the factors affecting acceptance of routine HIV screening may help develop educational and programmatic interventions to increase the number of adolescents and the guardians accepting routine HIV screening as a standard of care in pediatric EDs.

ABSTRACT 59

National Hispanic Hepatitis Awareness Day (NHHAD): Adapting a Highly Effective Community Mobilization Model and Social Marketing Campaign

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OBJECTIVE: As the largest minority group in the U.S., Latinos are disproportionately affected by Hepatitis C (HCV). Latinos have a 40% increased chance of being infected with HCV as compared to whites and progress to cirrhosis faster than any other group (Stevenson, L. et al. 2004). Given the connection between HIV and HCV, NHHAD was initiated to work in synergy with National Latino AIDS Awareness Day (NLAAD), to improve the ability of community based-organizations and nontraditional partners to raise HCV awareness, provide testing, prevention and education services. Since 2003, NLAAD has demonstrated its success by solidifying support from over 800 organizations in over 45 states across the United States, Puerto Rico and the U.S. Virgin Islands. Through these efforts, tens of thousands have been tested and enabled access to care. The goal of NHHAD

is to build on the success of NLAAD and integrate HCV awareness, services and policies into the community and national conversations.

METHODS: The first NHHAD took place on May 15, 2012 and was evaluated to assess the reach and initial outcomes of the community-level intervention. All organizations that registered as NHHAD sites (n=14) were asked to complete an online survey on their specific activities and outcomes, as well as their experience being a part of the first year of this new intervention.

RESULTS: 14 organizations held NHHAD events and represented states with the largest Hispanic populations (Texas, California and New York), as well as states with emerging populations (North Carolina). Of the 14 participating organizations, 10 completed the survey. Of the 13 NHHAD participating cities, 83% reported an increase in discussion and awareness in the local Latino community about viral hepatitis. 67% conducted testing for viral hepatitis and tested over 100 individuals. The most common barriers described were lack of funding and lack of staff time.

CONCLUSIONS: There is an urgent need for a disease integrating, community-level intervention to address the need for testing and treatment using culturally-appropriate messages for the community and service providers. NHHAD is an innovative and promising approach to address this need, and is positioned through its evaluation efforts to build on these early successes to create long-term change in communities and the health systems that serve them.

ABSTRACT 60

Assessment of Need for Targeted Acute HIV Screening in the Emergency Department

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OBJECTIVE: Patients with undiagnosed Acute HIV infection (AHIV) frequently present to the Emergency



Department (ED) with symptoms of viral syndrome. During AHIV, viral load is at its highest and the patient is most infectious. Routine antibody based screening methods, commonly used in the ED; usually have a negative result during the window period. Patients are not able to begin appropriate therapy and are sent back into the community without the knowledge that they can be spreading the virus to others. We hypothesize that a significant number of patients have presented to our ED with symptoms of AHIV and have received a negative HIV screening result.

METHODS: Subjects include all patients who tested positive for HIV during a one year period. Charts were retrospectively reviewed by two independent reviewers to determine the number of patients that presented to the ED with symptoms of an acute viral syndrome and had a negative Oraquick within the 3 months prior to the positive Oraquick and reflex Western blot.

RESULTS: 20/125 subjects who tested positive for HIV in the 12 month study period had documented previous negative test(s). Prior to the visit on which they tested positive, 25% were seen in ED for viral symptoms and had a negative Oraquick and 20% were seen for complaints unrelated to viral syndrome and had a negative Oraquick. Prior to the visit on which they tested positive, 15% had a negative Oraquick followed by an ED visit(s) for viral symptoms and 35% had a negative Oraquick followed by another ED visit for complaints unrelated to viral syndrome. One outlier had no prior ED visits, and tested (+) with complaints of viral symptoms.

CONCLUSIONS: 15.2 % of all patients who tested positive for HIV antibodies during the study period had a previous negative HIV antibody test in the months prior to seroconversion. 40% were evaluated in the ED for viral symptoms prior to seroconversion, and so were probably in the AHIV phase. Antigen testing should be made available, especially in high prevalence areas, to insure early treatment and to decrease the spread of acute infection.

ABSTRACT 61

Fostering International Collaborations to Improve HIV Testing and Linkage to Care in a Randomised Study: The Mater-Bronx Rapid HIV Testing (M-BRiHT) Project

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OBJECTIVE: Up-scaling HIV testing is advocated as an approach to stemming the HIV epidemic. In Ireland almost 6,000 people have been diagnosed HIV positive, the majority residing in the greater Dublin area (estimated prevalence 1.5/1000), thus making it a suitable target region for up-scaled HIV screening. Of recent diagnoses, 63% occurred in those born outside Ireland and 5% in injecting drug users. Such patients are less likely to encounter pre-existing screening opportunities but may use the Emergency Department (ED) for primary healthcare.

METHODS: The M-BRiHT project, an international, collaborative study, has adapted the testing model used in Project BRIEF, a well-established, high-throughput HIV testing programme developed in the Bronx, New York. This program integrates video-delivered HIV counselling, rapid point-of-care HIV testing and linkage to specialist HIV care. To further explore the acceptability of HIV screening in a culturally and socially diverse population, the M-BRiHT Project randomises unselected, ED attendees in Dublin to either allocation of standard video counsellor (Project BRIEF model) versus choice of video counsellors from differing genders and ethnicities. This is coupled with detailed data collection and rapid HIV testing (oral swab).

RESULTS: Over six months (March to August 2012), the M-BRiHT project was developed and implemented according to precise timelines. Counselling videos were adapted to meet local regulatory requirements, with four videos developed with identical scripts; 2 with female counsellors (one white, one black) and two male (one white



one black). Detailed demographic, socioeconomic and behavioural data-sets are captured through direct entry on a tablet PC, with data mapping between the M-BRiHT Project and Project BRIEF to facilitate shared analyses. Staff training was coordinated centrally in New York, with rapid testing kits from a common manufacturer.

CONCLUSIONS: To our knowledge, the M-BRiHT project represents the first time automated counseling and testing for HIV has been implemented in a European ED. This ambitious collaboration demonstrates how successful, up-scaled HIV testing programmes, such as Project BRIEF, can be readily adapted for use in other acute medical environments internationally, despite very different research and regulatory requirements. These novel programmes can help realise the international goals of increasing HIV testing rates and de-stigmatise HIV testing.

ABSTRACT 62

Acceptability and Implications of Rapid HCV Test Among High Risk Young Injection Drug Users

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OBJECTIVE: In the U.S. it is estimated 50% to 75% of the those infected with hepatitis C virus (HCV) have not been tested. People who inject drugs are at highest risk of infection in the U.S., yet have limited access to HCV testing. Newly available, FDA approved, and accurate rapid point-of-care anti-HCV testing coupled with post-test counseling in community-based settings can help accelerate the identification of HCV infections and introduce risk reduction education in this high risk group. We administered a short survey to young active injection drug users (IDU) participating in an ongoing prospective study to evaluate the views toward and acceptability of HCV rapid testing.

METHODS: Data collection began in May 2012, and is ongoing. Young adult active IDU (<30 years, injected once in the last 30 days at baseline) participating in the

UFO HCV Study in San Francisco were offered rapid anti-HCV testing (OraSure Technologies: Bethlehem, PA), and then to respond to a short questionnaire assessing the participant's perception of its accuracy, their preferred testing procedures, and reasons for said preferences. Participants were given the option to undergo standard laboratory-based anti-HCV testing via venipuncture. Blood samples were collected to ascertain HCV viremia status (Procleix® HIV-1/HCV assay, Novartis, Emeryville, CA). All participants received pre- and post-test risk reduction counseling.

RESULTS: To date, a total of 54 participants (median age 25 years) completed the acceptability survey. More than half of those surveyed (56%) believe the rapid test to be just as accurate as a standard test. 40 (74%) participants opted for the rapid test; of those, 64% stated wanting a fast result as their main reason. 14 participants chose laboratory-based anti-HCV testing (14, 26%); most of whom (38%) believed it to be an older, and more trusted test. After receiving the test, 82% of rapid test takers, reported preferring the procedure to its standard counterpart, and most (97%) would recommend the procedure to others. Only 2 participants (6%) felt the results were available too quickly, preferring a one-week waiting period.

CONCLUSIONS: Point-of-care testing for anti-HCV among young IDU was well received. Rapid HCV tests have the potential to increase testing in community-based settings to screen at-risk populations for HCV in high volume and in a timely manner. This useful and practical way of informing high-risk individuals of their HCV status will help prevent the spread of HCV.



Three Years of Routine Screening for HIV in a Large Urban Hospital System: What Has Been Achieved?

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OBJECTIVE: To establish a routine HIV screening program in emergency centers of a large urban hospital system, including linkage to care for newly diagnosed patients and re-linkage for previously diagnosed individuals who were found to be out of care.

METHODS: Harris County Hospital District (HCHD; Houston, TX) started the Routine Universal Screening for HIV (RUSH) program in August 2008. Every patient 16 years of age or older presenting to the emergency center and who was having blood drawn for other reasons was tested for HIV unless the patient opted out. Positive results were checked by the City of Houston against national databases to identify new diagnoses. Newly identified positive patients as well as previously known positive patients not in care at the time of test received counseling and were offered linkage to care.

RESULTS: A total of 171,867 tests were performed by April 2012 at HCHD's two emergency centers, including 3,219 tests with a positive result, of which 589 (0.34% of total tested) were new diagnoses. Male, black, and young to middle-aged individuals had a disproportionately higher positivity rate. New positives prevalence decreased by 0.05% annually, from 0.44% in 2008 to 0.23% in 2012 (P=0.0008). Previous positives prevalence did not change significantly (P = 0.17%). Patients who had a primary care physician visit within 6 months of their positive test were considered linked to care. By October, 2011 (to allow 6 months for linkage to care), 532 new diagnoses had been made, of which 259 (49%) were linked to care. Linkage to care increased by 11.4% annually from 25% in 2008 to 62% in 2011. Linkage data include only Ryan White funded providers in the Houston area, so likely represent a lower bound for the true linkage rate.

CONCLUSIONS: The program has been highly successful in identifying positive patients, potentially reducing undiagnosed infection rates as suggested by decreasing new positive prevalence. While the new positive prevalence has been decreasing, it remains much higher than the CDC threshold of 0.1%. Linkage to care has improved over time but remains challenging.

ABSTRACT 64

Transmission Network Targeting: Incorporating Social Network and Partner Testing with an Emergency Department HIV Screening Program

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OBJECTIVE: Transmission network targeting (TNT) is a strategy that uses information from high-risk or HIV-positive individuals to access social networks and partners who are at particularly high-risk of undiagnosed HIV. Public health programs have used TNT, but require index cases from which to trace the networks. Healthcare screenings provide index cases but rarely consider TNT outside of health department notification for partner testing. We evaluated a counselor-based TNT strategy implemented within an established emergency department (ED) HIV screening program and its affiliated infectious diseases clinic (IDC).

METHODS: TNT was implemented from May 2011 to mid-August 2011 at an urban, academic ED that sees 90,000 adult visits and at the affiliated IDC serving 1,800 patients. High-risk (MSM, sex partner of HIV+, heterosexual with multiple partners, injection drug use, or exchanging sex for drugs or money) or HIV-positive patients were identified by counselors and recruited as index cases. Index cases provided access to their networks by: 1) compensated coupon-based peer-referral, 2) onsite testing of companions present with them, 3) partner notification by health department specialists. Contacts provided by indexes were offered participation as next



generation index cases if they were high risk or HIV-positive.

RESULTS: There were 181 first generation index patients in the program (121 ED, 59 IDC) leading to 443 additional TNT tests, over as many as 8 generations of recruitment. Of these, 4 people were newly diagnosed as HIV positive. Index-contact relationships were as follows: Friend (54.9%), Family (16.0%), Acquaintance (11.3%), Partner (9.0%), and Stranger (8.5%). Risks among TNT participants were: heterosexual with multiple partners (21%); HIV-positive (13%), IV drug use (13%), exchange of sex for money or drugs (10%), MSM (5%), and HIV-positive sex partner (3%). All 181 first generation index patients participated in the coupon-based peer referral program. This led to 429 additional tests and 79 participating as next generation peer-recruiters. For the companion program, 21 index patients had a companion present, resulting in 13 TNT tests, and 4 next-generation index patients. For the partner services program, 6 patients were interviewed by the health department, leading to 1 companion being tested.

CONCLUSIONS: It was possible to implement a comprehensive TNT program seeded by ED screening and IDC patient encounters, and many high risk patients were identified as a result of the program. Whether combining TNT with healthcare screening represents an opportunity to capitalize on resources expended for testing is an area of ongoing study.

ABSTRACT 65

Building Sustainable Universal HIV Screening Programs in Pediatric Emergency Departments: A Comparison

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OBJECTIVE: In 2006 the U.S. Centers for Disease Control and Prevention recommended universal optout HIV screening in healthcare settings including Emergency Departments (EDs). In 2011 the American Academy of Pediatrics endorsed routine HIV screening among adolescents. The data on developing HIV screening programs in pediatric EDs are limited. This study aimed to evaluate the implementation of HIV screening programs in two pediatric EDs of Children's National Medical Center's (Children's National's) located in the area of high HIV prevalence in Washington, DC.

METHODS: The study prospectively evaluated the implementation and performance of two different algorithms for universal opt-out HIV screening of adolescents and young adults with a rapid oral fluid test at two pediatric EDs during 18 months (October 2010–March 2012). The study compared the dedicated testers-based algorithm implemented at the Sheikh Zayed campus ED (SZED) with an ED personnel-based algorithm at the United Medical Center campus ED (UMCED). The rates of screening and staff involvement were compared between the two models.

RESULTS: During the 18 month period, 6,095 patients aged 13-24 years old were seen at UMCED; 2,875 (47%) were approached for HIV screening and 2,070 (34%) were tested. SZED had 22,722 patient visits for patients aged 13-24 years; 5,069 (22%) were approached and 3,863 (17%) were tested. The rates of testing at the SZED were completely dependent upon the presence of the dedicated testers and did not demonstrate sustainability in the absence of the funded staff. Overall, the rates of testing at the UMCED personnel-based algorithm were significantly higher (6%-53% eligible patients tested) when compared to the SZED dedicated testers-based algorithm (3%-32% eligible patients tested). Feedback on the performance of the HIV screening and enhanced education about HIV conducted at both EDs significantly improved the performance of the program at the UMCED and had little to no effect at the SZED.

CONCLUSIONS: The personnel-based algorithm for universal opt-out HIV screening of adolescents has proven to be more effective in the pediatric ED. At the current stage of weaning from funded support in the pediatric ED HIV screening program, the ED personnel-based algorithm at UMCED has become the model for sustainability. This model is being introduced to the dedicated-tester SZED program with active participation by the UMCED staff.



Ongoing implementation research will allow for evaluation of the best strategy for transitioning from funded support to standard-of-care for HIV screening in pediatric EDs.

ABSTRACT 66

From Recommendation to Implementation: The Long Road to Routine HIV Screening

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OBJECTIVE: To reduce systems barriers to routine, opt-out HIV testing in Philadelphia's healthcare settings through capacity building activities, including: skill building workshops, development of provider materials, and on-site consultations.

METHODS: Pennsylvania/MidAtlantic AIDS Education and Training Center's (PA/MA AETC's) Philadelphia performance site at the Health Federation of Philadelphia identified and engaged local HIV testing champions in Philadelphia healthcare settings. Targeted disciplines included: physicians, physician assistants, nurse practitioners, nurses, medical assistants, healthcare administrators, lab personnel, healthcare lawyers, risk managers, managed care organizations, electronic medical record system consultants, and state and local policy makers. An assessment of each healthcare system identified successes and challenges, and the PA/MA AETC provided customized technical assistance and/or clinical education.

RESULTS: Local HIV champions in Philadelphia's healthcare systems were contacted from ten hospital systems, 11 Federally Qualified Health Centers (FQHCs), and eight FQHC look-alikes. Major barriers to testing routinely for HIV include: provider education/attitudes, reimbursement, patient flow, and lack of staff time. Todate, the PA/MAAETC provided 18 customized trainings and/or technical assistance on routine HIV testing throughout Philadelphia. Two webinars were developed to educate providers about changes to Pennsylvania's HIV testing law and indications for routine HIV testing, initially reaching over 24 local champions. Philadelphia's

Health Commissioner hosted a provider meeting with Dr. Phillip Peters, Medical Officer of the Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, and Dr. Amir Qaseem, Policy Director of the American College of Physicians, to encourage primary care providers to routinely test for HIV. Since the inception of Pennsylvania's new law, four large hospital systems have changed their institutions' protocol on HIV consent, and three are in the process of changing their policy. At least two FQHCs have implemented opt out HIV testing strategies.

CONCLUSIONS: The barriers to routine HIV testing in healthcare settings are complex; however, engaging and supporting local champions to make institutional change is essential. Successful policy and practice changes originated from local champions' identification of systems barriers to routine HIV testing. Reimbursement for routine HIV tests by health insurance companies is a major barrier in all healthcare settings. A change in USPSTF recommendations to upgrade HIV screening to routine preventative care will address many of the barriers.

ABSTRACT 67

A Qualitative Exploratory Study of Social Network Testing Among Three High Risk Populations

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OBJECTIVE: Recent emphasis has been placed on identifying and testing individuals at high-risk for HIV who do not routinely access health care services. Since these individuals may not get tested for HIV, they may be unaware of their HIV status. Social network testing for HIV has emerged as a strategy to engage these hard to reach high-risk populations and has been implemented in the District of Columbia. The objective of this study was to obtain perspectives regarding the use of social network testing as an approach to increasing HIV testing among high-risk individuals.



METHODS: Qualitative data were collected during three separate focus groups which included 1) injection drug users; 2) male-to-female (MTF) transgenders; and 3) African-American men who have sex with men (MSM). Additionally, key informant interviews were conducted among relevant staff at three local community-based organizations with experience implementing social network testing as a part of their HIV screening strategies. Atlas.ti was used to code the interview and focus group data. Thematic analysis was conducted to identify relevant themes and patterns in the data.

RESULTS: Data showed common network characteristics among the three groups; however, each group discussed issues related to the types of network associates that might be able to facilitate access to HIV testing. MTF transgender participants expressed difficulty in identifying associates who were not already HIV-infected. Men who have sex with men revealed that younger MSM looked up to older mentors for guidance and assistance with life decisions and thus may serve as facilitators to encourage testing. Injection drug users provided insight regarding the difficulty of initiating conversations about HIV in general. Interviews with staff at the three community-based organizations revealed that social network testing among their service population has been replete with successes and challenges.

CONCLUSIONS: Our findings provide insightful interpersonal and contextual facilitators and challenges that characterize social network testing among specific high-risk populations. Social network testing programs may have increased efficacy when taking into account the socio-cultural and socio-contextual dynamics of high risk populations such as MSM, MTF transgender and injection drug users. The specific nuances that are inherent in each high-risk group need to be considered for implementation and conduct of a successful social network testing program.

ABSTRACT 68

Integrating Hepatitis C Risk Assessment into HIV Counseling, Testing, and Referral Data Collection Systems

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OBJECTIVE: In 2011, the Hawaii Department of Health's (DOH's) STD AIDS Prevention Branch sought to facilitate enhanced integration of hepatitis B and C testing and/or referrals at all contracted and partner agencies that offered HIV rapid testing provided through DOH. The DOH contracted with the Luther Corporation to create a modified version of EvaluationWeb to not only collect mandated CDC reportable data but also to collect hepatitis risk assessment and testing data.

METHODS: When developing the data collection form and data entry portal, the DOH included the Adult Viral Hepatitis Prevention Coordinator as well as hepatitis-focused partner agencies as part of the planning process. The resulting form MANDATED that all agencies that provide HIV testing through DOH also ask hepatitis B and C risk assessment and testing/referral questions as part of the testing session. EvaluationWeb provides an easy report generator to determine the number of hepatitis tests conducted, associated risk factors, and positivity rate for hep C antibody and/or hep B antigen tests. These measures will be compared to the previous rates from the prior risk assessment collection system to show any changes in testing rates.

RESULTS: By mandating the inclusion of viral hepatitis risk factors into the HIV testing session, the amount of hepatitis C testing increased from the average 1000 tests during the 6 months prior to EvaluationWeb implementation (on June 1, 2011) to 1360 for the 6 months after implementation. From January 1 2012–June 30 2012, the testing numbers increased to 1496 tests, most likely due to HCV rapid testing at each agency.



CONCLUSIONS: The increase in testing at the partner and contracted agencies that already were providing HIV and hep C testing indicates that streamlining, integrating, and requiring viral hepatitis risk assessment as part of HIV CTR data collection can impact viral hepatitis screening rates for at-risk individuals who present for HIV screening. By including risk factor and geographic data in data collection, the integrated EvaluationWeb model also provides enhanced program evaluation and monitoring for both HIV and viral hepatitis CTR.

ABSTRACT 69

Never-Testing for HIV Among New York City (NYC) Adults Aged 18–64 Years, 2010

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OBJECTIVE: HIV testing is central to HIV prevention in the U.S. As efforts to routinize HIV testing in NYC continue toward the National HIV/AIDS Strategy target that 90% of HIV-infected persons know their status by 2015, clear understanding of the characteristics and behaviors of persons who have never tested for HIV is needed to guide ongoing testing efforts.

METHODS: Data from a 2010 telephone survey representative of NYC adults =18 years (Community Health Survey) were used to determine characteristics of New Yorkers who had never tested for HIV. Analysis was restricted to adults aged 18–64 years (n=8,665) to align with 2006 HIV screening recommendations from CDC. Data were weighted to account for unequal selection probabilities and nonresponse; analyses were ageadjusted to the 2000 U.S. Standard Population. Prevalence estimates and 95% confidence intervals (95%CI) of nevertesting were calculated. Multivariate logistic regression model was used to determine independent correlates of never-testing; adjusted odds ratios (aOR) were reported with corresponding 95%CI.

RESULTS: One-third of NYC adults aged 18-64 years (33.2%; 95%CI: 31.5, 35.0) had never tested for HIV with wide variation, from black females aged 25-44 years (4.3% never tested; 95%CI: 2.6, 6.9) to Asian-Pacific Islanderother race/ethnicity males aged 18-24 years (78.7% never tested; 95%CI: 54.9, 91.8). Groups with high never-tested proportions (>40%) were persons aged 18-24 and 45-64 years, those of non-black or Hispanic race/ethnicity, and Queens and Staten Island residents. The most significant independent correlates of never-testing were not having a provider recommend an HIV test in the past year (aOR 6.7; 95%CI: 3.9, 11.5) and not being sexual active in the past year (aOR 4.1, 95%CI: 2.3, 7.1). Among the nevertested population, 57.9% (95%CI: 54.4, 61.4) received preventive care in the past year (cholesterol measurement, influenza vaccination, mental health treatment) suggesting engagement in primary care, yet only 2.3% (95%CI: 1.0, 5.4) received a provider recommendation to test.

CONCLUSIONS: The proportion of all NYC adult residents who are unaware of their HIV serostatus is small, with wide variation by demographic subgroup. Never-testing generally tracked with risk behavior, yet the strongest independent correlate of never-testing was lack of provider recommendation to test. Many of those not yet tested have had recent clinical encounters. This analysis suggests that support for further implementation of provider offer to HIV test, now mandated by New York State law (Chapter 308, Laws of 2010), can play an important role in reducing the size of the never-tested population.



Reducing Barriers to HIV Testing – What Influences Testing Offer and Uptake? Lessons Learned from the HIV in Europe Initiative

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OBJECTIVE: HIV in Europe is a pan-European initiative providing a platform for activities aiming to increase early diagnosis and care for people living with HIV across Europe. Research includes investigating indicator conditions associated with a risk of HIV and encouraging testing as a strategy within healthcare systems and investigating the impact of stigma on HIV test uptake.

METHODS: Through collaborative projects, conferences and advocacy, barriers to testing on provider, client and administrative levels are investigated. The HIDES study (HIV Indicator Diseases Across Europe Study) investigated HIV prevalence within possible indicator conditions in health care settings across Europe. Through the implementation of the People living with HIV Stigma Index, reasons for delay in HIV test seeking were investigated in 5 Eastern European countries.

RESULTS: The strategy to increase HIV testing through indicator condition guided HIV testing is feasible and (cost)-effective. Among a 3588 individuals in 17 clinics routinely offered testing in 14 countries, eight indicator conditions associated with HIV were investigated and demonstrated an HIV prevalence of > 0.1%. Healthcare professional related barriers were concerned with time limitations, perception of HIV as exceptional in regard to consent process, and lack of training. Respondents from Eastern Europe (n participants = >2500), reported in The Stigma Index, many fears that could delay uptake of both testing and care.

CONCLUSIONS: Indicator condition guided HIV testing is a feasible and effective strategy to reduce the level of undiagnosed HIV infection in Europe. A strategy led by the

HIV in Europe initiative is being developed to implement this novel public health initiative across Europe. Expanding HIV testing in health care settings requires training — including on stigma as a barrier to testing, political support on the national and European levels as well as auditing, monitoring and evaluation for impact. The results of the research are a good basis for advocacy.

ABSTRACT 71

Extent of Hepatitis C Screening and HIV Testing and Linkage to Care Services Among Substance Use Treatment Programs in New York City

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OBJECTIVE: The historic overlap between substance use, HIV and hepatitis C in NYC has necessitated co-location of drug treatment and HIV and hepatitis prevention, testing and care services. Nevertheless, rates of on-site testing among drug treatment providers have increased slowly. A 2010 New York State law requires the routine offer of HIV testing in clinical settings, including substance use treatment programs. State law also requires agencies offering methadone maintenance treatment to screen clients for hepatitis C. In 2011, the NYC Department of Health and Mental Hygiene (DOHMH) undertook an online survey to assess the extent of hepatitis C screening and HIV testing and linkage to care services at licensed substance use treatment programs across NYC.

METHODS: We asked 395 licensed substance use treatment programs in NYC (detox, residential, out-patient and methadone maintenance) to complete an online survey, and received 154 responses that provided data from 225 (57%) of 395 licensed programs. The survey assessed hepatitis C and HIV testing (available on site, via referral, or not offered), aspects of linkage to care, and program characteristics, including program affiliation and types of drug treatment offered.

RESULTS: Hepatitis C screening was available at 42% of programs; agencies offering methadone maintenance treatment were significantly more likely to offer on-site screening (80% vs. 27%, p< .0001). For HIV, 49% of programs provided testing on-site; 36% reported off-site referral for testing and 17% did not offer HIV testing. On-site confirmatory HIV testing was offered by 29% of programs. Including sites that did not offer testing, 80% had an established method for linking clients to HIV primary care, including 38% that linked to an on-site facility. Programs affiliated with a hospital or community health center were significantly more likely to offer HIV testing on-site than programs affiliated with a communitybased organization (82% vs. 38%, p< .0001); outpatient programs were significantly less likely to offer HIV testing on-site than all other program types (p<.0001).

CONCLUSIONS: Less than half of substance use treatment programs in NYC offer on-site screening for hepatitis C or HIV. The absence of accessible HIV testing is especially widespread among community-based organizations and outpatient treatment programs, while hepatitis C screening is offered by few treatment programs beyond those providing methadone maintenance. Findings will be used by NYC DOHMH to provide technical assistance to drug treatment programs to expand onsite hepatitis C and HIV testing and linkage to care in accordance with New York State law.

ABSTRACT 72

Expanding Our Reach: State and Local Health Department Efforts to Increase Access to and Utilization of HIV and HCV Testing

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OBJECTIVE: The release of the National HIV/AIDS Strategy, the National Viral Hepatitis Action Plan, and implementation of the Affordable Care and Patient Protection Act are having marked impact on health department HIV and HCV portfolios. Throughout 2012–2013, NASTAD will assess the current state of health

department supported HIV and HCV testing programs, including examining the impact of federal policy and funding; adoption of new testing strategies; efforts to enhance revenue through third-party reimbursement; and efforts to improve linkage to and retention in care. Assessment activities will also identify structural and operational challenges and opportunities associated with expansion of testing and improved access to care.

METHODS: Through a series of self-administered questionnaires, NASTAD will survey all state and local health department HIV and HCV program managers. The first survey conducted in May of 2012 addressed HIV testing. In September 2012, NASTAD will conduct two additional surveys: one will address third party billing and reimbursement practices and capacities for HIV and HCV services. The second will address HCV, including testing programs, integration of services, funding, and capacity to expand testing and linkage to care services.

RESULTS: The HIV testing survey had an 84 percent response rate. The volume of health department HIV tests increased between 2009 and 2011 by 12 percent. Rapid HIV tests accounted for 58 percent of tests. Multi-rapid test algorithms are used by 21 percent of health departments. Health departments support integrated HIV and STD testing (89 percent) and HIV and HCV testing (45 percent). Only 31 percent reported that Medicaid reimburses for routine HIV testing. Health departments rely heavily on federal prevention funds to support linkage to care efforts; 93 percent use CDC HIV prevention funding. Seventy percent of health departments' project more tests will be performed in clinical settings in 2012 compared with 2011; and 27 percent project fewer tests conducted on a targeted basis. Provisional findings from the two surveys on hepatitis C and reimbursement will be presented.

CONCLUSIONS: Health departments have been successful in strengthening HIV and HCV testing and linkage to care programs through strategies such as integration of services, adoption of new and emerging testing strategies, and leveraging multiple sources of funding. Financing HIV and viral hepatitis testing remains a serious challenge due to barriers to obtaining third-party reimbursement and shifting federal grant funds.



Hepatitis C Antibody Testing and Follow-Up in Primary Care Settings: A Retrospective Study of Four Large, Primary Care Service Centers

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OBJECTIVE: The Centers for Disease Control and Prevention has published a new recommendation for one-time HCV testing of persons born from 1945–1965. In this study, we collected data on the effectiveness of CDC's 1998 risk of exposure based recommendations to establish a baseline of service utilization information for comparison with the birth cohort recommendation.

METHODS: We retrospectively collected electronic medical data on hepatitis C antibody (anti-HCV) testing and subsequent within–system HCV RNA testing, genotyping, and biopsies from all newly enrolled patients who utilized at least 1 primary care outpatient service over a five-year period.

RESULTS: We collected data from 209,370 individuals over a total of 467,821 outpatient visits. A total of 17,468 (8.3%) of those observed received an HCV antibody test of whom 1,123 (6.4%) of those tested were anti-HCV positive. Of those who tested anti-HCV positive, 759 (67.5%) received a HCV RNA test, of whom 548 (72.2%) were RNA positive. Of the 548 confirmed with HCV infection, 436 (79.5%) received a genotype test of whom 72.2% were genotype 1, 20.4% were other genotypes, and 7.3% had missing or inconclusive results. We observed 98 biopsy stage results among the 436 patients who were RNA positive for HCV. Of these, 37 results indicated the patient was pre-cirrhotic but did not otherwise provide a stage, 9 were in stage zero, 35 in stage 1, 22 in stage 2, 10 in stage 3, and 18 in some form of cirrhosis. A total of

27,778 individuals were indicated for screening based upon the 1998 screening guidelines. Of these 2,750 (16.7%) received anti-HCV testing. By risk factor, 14.3% of those with elevated liver enzymes, 52.8% of people with HIV, 13.4% of people with hemophilia, 54.6% of those who had undergone hemodialysis, and 21.5% of those with indicators of injecting drug use received HCV testing. This compares to 5.5% of those without risk factors and 8.47% of those born during 1945–1965.

CONCLUSIONS: Limited implementation of CDC's 1998 screening guidelines resulted in a low level of anti-HCV testing in the settings observed. Only 8.3% of individuals with a primary care visit were screened for HCV. Screening rates were also low for individuals with possible clinical indicators or prior risks of exposure to HCV, although patients with HIV and those who received hemodialysis experienced higher rates of testing. Less than ideal numbers of patients who were positive for anti-HCV received HCV RNA testing and genotyping.

ABSTRACT 74

Educational Tools to Enhance Routine HIV Testing in Adolescents and Young Adults

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OBJECTIVE: Approximately 25 percent of Americans with HIV are unaware of their infection but more significantly, this percentage increases to 48 percent for HIV infected youth. Current recommendations include routine HIV testing of youth ages 16–18 however awareness of the routine HIV testing in several medical settings and the community is lacking. Pediatricians can play a key role in preventing and identifying HIV infection by promoting risk-reduction counseling and offering routine testing to the youth. Resources, knowledge, and tools to implement routine HIV testing in primary care pediatric settings is limited.



METHODS: A broad team of experts including clinicians, peer educators, nurse educators, and a statistician reviewed current policies, guidelines and existing materials on HIV testing in youth. Emphasis was placed on current knowledge, attitudes, and beliefs of providers and youth regarding HIV testing.

RESULTS: Educational materials were designed and produced to assist youth, parents and providers in implementing routine HIV testing in medical settings. Information on HIV infection, types of testing and local resources was included as well as legal terms related to HIV testing, counseling, and consent. Youth and adult surveys were created to be administered at community events, youth clinics, and primary care offices to assess efficacy, accuracy, and impact of educational materials on the willingness and interest in seeking, offering, and/or providing HIV testing.

CONCLUSIONS: Despite great progress in treatment and continued efforts to increase HIV testing, only a portion of pediatricians are aware and implement current recommendations for routine HIV testing in youth. Educational materials targeted towards youth, adults and providers may facilitate increase in awareness of the recommendations for routine HIV testing in youth and can serve as a tool to facilitate HIV testing at the pediatric office setting.

ABSTRACT 75

Integrating Routine HIV Testing in Primary Care

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OBJECTIVE: Efforts to diagnose people with HIV have been mostly risk based, however, the 2006 CDC recommendations for routine HIV testing has prompted many states to revisit and change their HIV testing laws, and health institutions to rethink how they approach HIV screening. Utilizing the Institute for Healthcare Improvement (IHI) Learning Model, Ed Wagner's Chronic Care Model, and The Model for Improvement (PDSA)

Urban Health Plan (UHP), a Federally Qualified Health Center (FQHC) providing primary and specialty care in the South Bronx and Corona Queens, New York, integrated routine HIV screening into regular primary care. By implementing an internal multi site interdisciplinary team learning collaborative driven by the effective use of health information technology-the electronic health record (EHR) HIV testing is incorporated as a component of standard medical care helping to capture people who are undiagnosed and enhancing opportunities for early treatment and engagement in care.

METHODS: UHP transformed its system from a counselor driven/dedicated tester model to a primary care data driven model in which the primary care provider and medical assistant are responsible for offering HIV testing to patients 13 to 64 years old. As part of this shift, the EHR was modified adding a prompt to offer the HIV test to eligible patients, test orders and order documentation was simplified, and systems were put in place to track provider level offer and acceptance rates. Monthly data reports are shared with all team members. The strategy for successfully implementing routine HIV testing across all community health center sites include: forming an Expert Panel to engage in program planning for implementation of routine HIV testing; setting up a multi site Learning Collaborative; deploying a training program across all sites; monitoring the results through a provider data feedback system; standardizing the system across all sites through the development of policies and procedures, flow charts, decision support tools in the EHR, and ongoing data monitoring.

RESULTS: UHP internal learning collaborative comprised of primary care provider and medical assistant teams resulted in a successful scale up to 84% HIV test offer rates, and an increase in HIV testing rates from a baseline of 8% to 51%.

CONCLUSIONS: Routine offering in the primary care setting may help to normalize and de-stigmatize screening in impoverished communities. Awareness of HIV status should result in improved linkage to care for positives and changes in risk behavior. The ultimate public health benefit is early treatment and reduction of HIV transmission.



A Qualitative Assessment of Facilitators and Challenges to the Scale up of HIV Testing in the District of Columbia

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OBJECTIVE: Since the release of the 2006 CDC HIV testing recommendations, the District of Columbia Department of Health (DOH) has supported the implementation of routine HIV testing in addition to more targeted strategies. Despite its success in increasing testing, data suggest that missed opportunities persist. This qualitative study assessed current scale-up efforts of HIV testing in the District through a review of current programming and policies, an assessment of how testing is being implemented amongst providers, an exploration of different models of testing, and the identification of barriers and facilitators associated with HIV testing.

METHODS: Semi-structured interviews were conducted with seven testing coordinators from six DOH-supported testing sites, including two community-based organizations (CBO), two health clinics, and two hospital emergency departments (ED). Interviews were also conducted with four DOH staff. Atlas.ti was used to conduct the qualitative data analysis and coding. Thematic analysis was conducted to identify relevant themes and patterns.

RESULTS: Qualitative data analysis revealed the following: favorable understanding and perceptions of the importance of testing, existence of evidence-based policies and procedures, a variety of implementation strategies ranging from routine testing in EDs and health clinics to testing in venue-based and outreach settings, as well as social/sexual network testing. Different testing technologies were utilized based on the testing environment. Rapid test technology was used in all settings while conventional testing was conducted in primarily health clinic settings. Variation was evident in regard to opt-out versus opt-in testing, consent practices, pre/post

test counseling, confirmatory testing, and linkage to care strategies. Facilitators to testing included: a favorable policy environment that does not require signed consent or pre/post test counseling, enactment of legislation mandating reimbursement for ED testing, receipt of free rapid tests kits from DOH, and strong testing staff commitment. Barriers to testing included: difficulty in securing full or partial reimbursement for routine HIV testing by third party payers, the requirement to track and report on testing efforts, competing priorities amongst providers, and limited resources for continued scale up and sustainable testing programs.

CONCLUSIONS: This study identified varying approaches, practices, and strategies to the implementation of HIV testing by DOH-supported providers in addition to shared barriers and facilitators. Identifying best practices and sharing lessons learned may facilitate the continued scale up of HIV testing in the District.

ABSTRACT 77

CDC's Evidence-Based Recommendations for the Identification of Hepatitis C Virus (HCV) Infection Among Persons Born During 1945–1965 in the United States

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OBJECTIVE: In the United States, 3.2 million persons are living with HCV infection. In 2007, HCV-related deaths surpassed those from HIV. HCV therapies can clear (i.e., cure) HCV in > 70% of persons treated. However, up to 75% of HCV-infected persons are unaware of their infection. CDC recommends HCV testing based on transmission risks; however, prevalence data suggest that regardless of risk, persons born during 1945–1965 are five times more likely to be HCV-infected than other adults. CDC recently issued evidence-based recommendations for testing persons born during 1945–1965 to improve



identification of persons chronically infected with HCV and linkage to appropriate care and treatment.

METHODS: A work group followed the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework to develop research questions, determine critical decision-making outcomes, assess the quality of evidence, and determine the strength of the recommendations. Systematic reviews were conducted on critical patient-important outcomes: treatment failure, severe adverse events (SAEs), mortality, hepatocellular carcinoma, and brief alcohol interventions (BAIs). Recommendations were determined by considering quality of evidence, values and preferences, benefits and harms, and resource implications. The recommendations were vetted through external peer review, the US government clearance process, and public comment.

RESULTS: HCV treatment with triple compared to dual therapy reduced risk of treatment failure (RR=0.53; 95% CI=0.47, 0.60) but increased SAEs (RR=1.34; 95% CI=0.95, 1.87). Sustained virologic response (i.e., virologic cure) was associated with decreased mortality (RR=0.70; 95% CI=0.59, 0.83) and hepatocellular carcinoma (RR=0.24; 95% CI=0.18, 0.31). When provided to a general population, BAIs reduced drinking by a mean of 38.42 grams/week (65.44–30.91 g/w). The work group determined that benefits of testing outweighed the harms, was acceptable among the target population, and was cost effective.

CONCLUSIONS: The use of GRADE was appropriate for assessing the quality of public health data and strengthened the evidence base for these recommendations. The new CDC recommendations will be discussed in the context of other HCV testing recommendations in the US and CDC's implementation plan will be presented. CDC recommendations for the identification of persons infected with HCV: Recommendation 1: Adults born during 1945 to 1965 should receive one-time testing for HCV without prior ascertainment of HCV risk. (Strong recommendation; moderate-quality evidence). Recommendation 2: All persons with identified HCV infection should receive a brief alcohol screening and intervention as clinically indicated, followed by referral to appropriate care and treatment services for HCV infection and related conditions. (Strong recommendation; moderate-quality evidence).

ABSTRACT 78

Routine HIV Testing and Linkage to Care Services Offered at Public Aid Offices can Help Identify Undiagnosed HIV Infections and Facilitate Linkage to HIV Care in Urban High Risk Minority Communities

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OBJECTIVE: Strategies to expand HIV testing and facilitate linkage to HIV care services are needed to reduce HIV infection. We evaluated the impact of offering HIV testing and linkage to care services at public aid offices in minority Chicago neighborhoods with high HIV prevalence rates. Our primary objectives are to describe the key components of our intervention model, share lessons learned, and report process and outcome evaluation findings.

METHODS: As part of a national initiative to increase routine HIV testing (HIV Focus), we formed a collaboration of 4 organizations (1 lead and 3 minority-based agencies) and developed a coordinated HIV screening and linkage to care program model entitled the Bridge Project. Using HIV surveillance data, we identified 3 low-income community neighborhoods with high HIV prevalence rates. We then partnered with public aid offices located in these neighborhoods to provide HIV prevention services across settings. From May 2011 through July 2012, the testing collaborative provided 199 days of HIV testing and linkage to care services and administered 6,182 HIV screenings.

RESULTS: Of those screened, 47.7% were first time testers, 63.5% women, 84.7% African American, 10.9% Hispanic, and 3.2% white, with an average of 34. We identified 35 positives for an overall seropositivity rate of 0.6%. HIV seropositivity rates varied by gender (1.0% for males vs. 0.3% for women, p = .001). Of those positive, 24 (68%) self-reported being newly diagnosed and 51.4% were successfully linked to HIV primary care services.



Contextual factors at sites (e.g. client volume and space) impacted HIV testing acceptance rates, yet across sites, 90.5% reported being "very satisfied" with services. Linkages to care activities proved more challenging to initially implement without established mechanisms to quickly link clients to HIV primary care services. We also found that the presence of these services can serve as outreach mechanism to "re-link" those HIV+ individual disengaged from HIV care.

CONCLUSIONS: Routine HIV testing and linkage to care services in public aid offices can reach high numbers of first-time testers and at risk individuals who might otherwise not be tested. Evaluation findings suggests that with administrative buy-in from public aid offices it's feasible to implement routine community based HIV testing and linkage to care programs in non-clinical settings. Established processes and working relationships with area HIV primary care providers are essential to facilitate quick linkage of HIV+ clients screened at non-clinical settings with medical services.

ABSTRACT 79

Oral Fluid is Inferior to Fingerstick Point-of-Care HIV Tests Among Seattle MSM

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OBJECTIVE: The Rapid Test Study is an ongoing, real time comparison of four point-of-care (POC) HIV tests designed to determine their relative abilities to detect early HIV infection.

METHODS: HIV-negative men who have sex with men (MSM) and transgender persons seeking HIV testing were recruited at the Public Health — Seattle & King County (PHSKC) STD Clinic, Gay City Health Project Wellness Center, and University of Washington Primary Infection Clinic (PIC). Study procedures included one POC test performed on oral fluids (OraQuick, Orasure

Technologies) and two or three POC tests performed on finger stick whole blood specimens: OraQuick (5µL), Uni-Gold Recombigen HIV Test (Uni-Gold, Trinity Biotech, 50µL), and Determine HIV-1/2 Ag/Ab Combo (Determine, Alere Inc., 50µL). Serum specimens from subjects with negative POC results were sent for EIA and pooled nucleic acid amplification testing (NAAT). McNemar's exact tests were used to compare the numbers of HIV-infected subjects detected by the different POC HIV antibody tests.

RESULTS: Between February 2010 and June 2012, 1822 subjects were enrolled. Of 1806 MSM seen at the STD Clinic and Wellness Center, 64 (3.5%) were newly diagnosed with HIV infection. Only 48 (75%) had reactive results on all POC tests, and 4 (6%) additional subjects had discordant results with at least one reactive and one nonreactive POC test. Data comparing test performance were analyzed for these 64 HIV-infected subjects plus 16 HIVinfected men enrolled at the PIC. Of these 80 total subjects, 57 (71%) had concordant reactive POC test results, 5 (6%) had concordant non-reactive POC tests but a reactive 3rd generation EIA, and 8 (10%) of subjects had acute HIV infection. Ten (12%) subjects had discordant POC test results, including one subject with a reactive Determine p24 antigen and an HIV RNA level of 5.7 million copies/ mL. OraQuick performed on oral fluids identified fewer men with discordant results compared to both OraQuick performed on fingerstick (0 versus 6, p=.03) and Uni-Gold (1 versus 7, p=.07).

CONCLUSIONS: Our data show that oral fluid POC testing is inferior to finger stick and should be the specimen collection method of choice only in rare circumstances. These data also reinforce published data from the PHSKC Pooled HIV NAAT Program that have shown that rapid HIV antibody tests correctly diagnose fewer than 80% of HIV-infected MSM in Seattle. In high HIV incidence populations like ours, currently approved POC tests are inadequate and must be supplemented with pooled NAAT or 4th generation assays.



HIV Testing in US Emergency Departments, Outpatient Ambulatory Medical Departments, and Physician Offices, 1993–2010

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OBJECTIVE: Since 1993, the US Centers for Disease Control and Prevention (CDC) has issued a series of recommendations advocating for a progressive expansion of HIV diagnostic testing and screening in healthcare settings. The aims of this study were to: (1) estimate the rates of HIV testing among 13–64-year-old patients in three US healthcare settings: emergency departments (EDs), outpatient ambulatory medical care departments (OPDs), and physician offices from 1993 to 2010; (2) determine the responsiveness on a national level of these healthcare settings to CDC recommendations to expand HIV testing, particularly in light of the growing HIV epidemic and advances in HIV testing and medical care over this time period.

METHODS: ED and OPD visits from the National Hospital Ambulatory Medical Care Survey (NHAMCS) and physician offices visits from the National Ambulatory Medical Care Survey (NAMCS) were analyzed using data collected for 1993–2010. HIV testing rates were estimated for each healthcare setting. Logistic regression models were constructed to evaluate trends in HIV testing for each healthcare setting over this time period. Odds ratios (ORs) with accompanying 95% confidence intervals were estimated. Student's t-tests were used to compare testing rates across healthcare settings. All analyses were adjusted per CDC recommendations for the multi-stage sampling design of the surveys.

RESULTS: From 1993 to 2010, HIV testing rates in OPDs ranged from 0.65% to 1.63%, and were significantly greater than HIV testing rates in EDs (p < 0.0001), which ranged 0.19% to 0.55%; and were higher than rates in physician offices (p < 0.0001), which ranged 0.29% to 0.56%. Logistic regression tests of trend for the entire study period did not

demonstrate significant increases in testing rates at any of these three healthcare settings: EDs (OR 1.02 [0.99-1.05]), OPDs (OR 1.12 [0.33-3.81]), and physician offices (OR 0.94 [0.89-1.00]).

CONCLUSIONS: As estimated using national probability surveys, US HIV testing rates did not change significantly from 1993 to 2010 in the three healthcare settings: EDs, OPDs, and physician offices. There was no demonstrable increase in testing rates according to these data despite recommended expansion of HIV testing by CDC through successive revisions of US HIV testing recommendations. Furthermore, HIV testing did not increase significantly even with a growing HIV epidemic and improvements in HIV testing technologies over this period, breakthroughs in antiretroviral medications to combat HIV, reductions in AIDS-related mortality, and recent efforts by CDC to streamline HIV testing methods.

ABSTRACT 81

Routine HIV Testing as a Vital Sign – Two Years' Experience

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OBJECTIVE: HIV prevalence in the District of Columbia (DC) is high at 3.2%. Following CDC recommendation and the DC HIV testing initiative Unity Health Care Inc. (UHC) serving 80 000 patients in 24 health care sites throughout Washington city implemented a program called "5th vital sign". In this program rapid HIV testing is offered to patients once a year at vital sign intake. The objective is to integrate routine HIV testing to existing health care system. We present our experience for the years 2010 and 2011.

METHODS: Health care sites posted signs about routine HIV test offers. Written consent by patients and pre-test counseling was not required. When patients age 13–84 years old present for primary care visit the medical assistant offers rapid HIV test as part of the vital sign. If patient declines the testing, provider discusses importance of testing and offers to add HIV test to the blood work.



This is called the "double knock" approach. All rapid HIV test results are delivered by providers. Data was collected from electronic medical record. HIV tests made on clinical indications are excluded.

RESULTS: In 2010 and 2011 total of 45532 HIV tests (29414 females and 16118 males) were made of these 23020 were rapid oral swab tests. Of those tested by oral swab test 36 women and 71 men have confirmed positive results. Of those tested by serum HIV test (ELISA) 25 women and 45 men have confirmed positive results. 38 patients had CD4 count below 200.

CONCLUSIONS: Routine HIV testing is feasible and acceptable to both patients and health care workers. It does not require extra personnel and space. Routine testing independent of presumed risk factors should identify patients who are not aware of their HIV status. Our approach is replicable, and serves as a model for health facilities.

ABSTRACT 82

Preliminary Results from "Do One Thing": A Comprehensive Neighborhood-Based HIV and HCV Testing, Prevention and Media Campaign in Southwest Philadelphia

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OBJECTIVE: Philadelphia's HIV infection rate is five times the national average. African Americans represent 70% of new infections and 2% of African Americans in Philadelphia live with HIV/AIDS. Limited HIV testing and care services in Philadelphia neighborhoods with the highest infection rates may contribute to racial disparities in HIV infection, including in Southwest Philadelphia. Home-based HIV testing programs in Africa have successfully diagnosed and linked individuals to HIV care

services early in the course of their infection. We developed a neighborhood-based HIV and HCV testing, awareness and media program entitled "DO ONE THING" to stimulate demand for and provide HIV and HCV testing across zipcode 19143 in Southwest Philadelphia.

METHODS: DO ONE THING's primary components include: 1) routinely offering HIV testing at the Health Annex, a FQHC, and maintaining those who test positive in care; 2) a door-to-door HIV testing and linkage to care campaign in four census tracts in zipcode 19143; 3) a large-scale social marketing campaign promoting testing that includes billboards, texting, digital media, business posters, yard signs, door knockers, phone apps and other media; 4) massive mobilization of community leaders, block captains, clergy and businesses; 5) training health professional students and local residents in community outreach and HIV counseling and testing protocols.

RESULTS: We more than quintupled HIV testing rates at a FQHC in six months by transitioning from risk-based to routine testing; 850 individuals were tested at the Health Annex, of whom four tested positive. All have been retained in care. Thirty new health professions students and residents have been trained in HIV testing and counseling. In the first six weeks of door-to-door and community-based testing, we tested 212 individuals, of whom four tested positive and are currently being linked to care. In fall 2012, we will begin offering HCV testing along with HIV testing in non-clinical settings.

CONCLUSIONS: We have expanded HIV testing in this neighborhood over 7-fold by combining routine HIV testing in clinical settings with a media campaign, doorto-door outreach, community mobilization and HIV testing in non-clinical settings. Pairing HCV testing with our HIV testing model may also help diagnose HCV in this neighborhood with high rates of HCV infection. This comprehensive, neighborhood-based testing and linkage to care program is a novel model for addressing racial disparities in HIV and HCV infection and may provide important lessons for other urban areas.



Using Conventional HIV Tests for HIV Diagnosis on Oral Fluid Specimens.

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OBJECTIVE: There is a need for more tests using non-invasive specimen collection. This will be helpful to broaden the reach of testing programs and to perform large scale epidemiological studies. In this study three different ELISA assays (Vironostika HIV Ag/Ab, Enzygnost Anti-HIV ½ Plus and Genscreen HIV ½ v2) were optimized for the detection of HIV antibodies in oral fluid specimens collected with the Oracol device.

METHODS: Firstly we optimized three HIV screening tests (ELISAs). Secondly we assessed the stability of the specimen and thirdly we elaborated a testing algorithm for use in epidemiological studies and for diagnosis. Three oral fluid swabs were taken from 302 HIV positive and HIV negative individuals. The specimens were kept for three different time points (day 0-1, day 3-5 and day 7) at ambient temperature before processing the specimens and were kept at -20°C until testing. Optimization of the protocol was done by doubling the sample volume for Vironostika and Enzygnost and kept the same for Genscreen. The optimal cut-off for each of the tests was assessed. Sensitivities and specificities were calculated by comparing the oral fluid tests with the gold standard testing on a paired blood sample. Testing algorithms were elaborated with a lowest misclassification rate for surveillance studies and with a highest sensitivity for diagnosis.

RESULTS: Based on day 7 data we obtained a sensitivity of 97.8% (95% CI:92.3–99.4) and a specificity of 100% (95% CI:98.2–100) for Vironostika HIV Ag/Ab, a sensitivity of 97.8% (95% CI:92.3–99.4) and a specificity of 99.5% (95% CI:97.3–99.9) for Enzygnost Anti-HIV $\frac{1}{2}$ Plus and a sensitivity of 100% (95% CI:95.9–100) and a specificity of 97.6% (95% CI:94.5–99.0) for Genscreen HIV $\frac{1}{2}$ v2.

CONCLUSIONS: The present study has demonstrated that different ELISAs can be used with oral fluid after adaptation of the sample input and calculation of the cutoff. A serial algorithm with two tests should be used in order to obtain correct prevalence data in epidemiological studies and only one test (Genscreen) can be used to screen individuals for further testing on blood. Therefore the oral fluid collection becomes a more useful tool for outreach HIV testing and anonymous sentinel surveillance in community settings.

ABSTRACT 84

Creating, Sustaining, and Expanding a Comprehensive HIV Program in an Emergency Department and Community Health Center Setting

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OBJECTIVE: To describe the performance characteristics and process to create, sustain, and expand a HIV screening and outreach program from the Emergency Department (ED) into community health centers (CHCs).

METHODS: • An inner-city ED-based HIV program offers non-targeted and targeted screening programs, outreach services, and mechanisms for linkage to care. The electronic medical record determines known HIV status or patient eligibility (based upon the 2006 CDC criteria) for HIV screening upon ED registration and certified HIV Counselors schedule those with known HIV with our Program Manager (PM) or perform screening tests on eligible patients. Confirmatory testing is obtained in the ED on reactive patients and appointments are scheduled with the PM within 1–2 weeks. The PM integrates patients into the Infectious Disease (ID) clinic. • A description of our budget details the funding sources for sustaining the ED-program and expansion into the CHCs. • An electronic notification system also alerts the HIV PM of known positive patients that are seen in the ED and of all HIV tests sent from the ED. The patient records are reviewed by



the PM and integrated into care if no ID visit has occurred in the previous 6 months.

RESULTS: • Since 2008, the program has performed over 13,000 tests with .4% confirmed newly HIV positive and 58% identified with CD4 counts above 200. 9 patients confirmed positive had a prior diagnosis. 81% of the newly diagnosed have been linked to care and 58% of those patients were linked in less than 30 days. The consent rate for screening is 87%. The outreach program has linked over 70% of our patients to ID care. • The program has received over \$1.2 million in grant awards and inkind donations. Staff position/ hourly wages include: PM (social work)/\$22.65; Counselor/\$13.14 (8 counselors); data specialist \$11.05. Testing hours are from 10a to 10p 7 days a week. 6 testers are assigned to the ED and 2 to the CHC. The program tests approximately 300–400 patients monthly in the ED. • A 5-year renewable \$90,000 grant funds the CHC expansion. The model for screening and outreach mirror the ED-based program. The plan for CHC sustainability is to train the CHC staff to be self-sustaining after 1 year.

CONCLUSIONS: We describe a model for a comprehensive HIV program in a resource limited hospital that is feasible, effective, and cost-efficient thereby allowing expansion into community health centers.

ABSTRACT 85

A Review of HIV Home Self-Testing: Issues and Implications from a Global Perspective

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OBJECTIVE: Recent pilot studies in HIV Home-Self-Testing (HST) and the upcoming release of the FDA-approved OraQuick In-Home HIV Test in October 2012, has introduced self-screening as an emerging testing approach. This literature review of HST research over the past decade aims to inform HIV planning and policy.

METHODS: A literature review was performed of articles, abstracts, and a convenience sample of gray literature using keyword searches 'HIV Self-Testing' and 'HIV Home-self-testing' across the following databases: Google Scholar, Academic Elite, Medline; public FDA OraQuick In-Home HIV-Test documents were included. Out of 42 publications identified, we included 22 studies comprising rapid field assessments, clinical trials, acceptability/feasibility studies, mathematical models, systematic reviews, prospective/retrospective cohort studies, and cross-sectional studies using primary data. Home-based collection studies were excluded.

RESULTS: 22 studies were included across multiple countries. A recommendation and/or conditional recommendation for HST based on study findings was included for 15 studies, eight of which recommend were US-based with five among MSM populations. The four studies in African countries all recommend and/or conditionally recommend HST (two studies are among predominately female health care workers). Three key gap areas were identified across included studies: testing accuracy (6 studies), the need for a target population in a low-prevalence setting (regarding studies with specific sample populations, e.g. health workers, MSM) (5 studies); and need for guidelines (3 studies). Of six studies which recorded findings on telephone counseling services, all six found that HST users generally used the service for procedural and interpretation questions rather than counseling. Only one Singapore study (using a bloodbased test kit) did not recommend HST; despite nearly 90% acceptance rates, , 85% performed operational errors, 56% had invalid results.

CONCLUSIONS: A majority of studies made a recommendation for HST. Studies varied by geographic location and population: US-based studies were conducted among MSM populations; 50% of Africa-based studies involved primarily female healthcare workers. Despite differences, US-based and Africa-based studies reported underutilization of counseling through 24/7 hotline services. Key gaps/issues identified involve quality assurance/testing accuracy (for users and tests), lack of national guidelines/frameworks, lack of evidence among general populations and non-MSM, key populations, and the need for further evidence on telephone counseling.



As self-screening expands, domestic and developing country implementation research is needed to address key concerns, assess use in diverse populations and settings, understand the implications of HST on current prevention and treatment practices, and inform policy and practice.

ABSTRACT 86

Routine Opt-Out HIV Screening on the U.S. – Mexico Border, Opportunities for Diagnosis and Prevention

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OBJECTIVE: Currently the U.S. Centers for Disease and Control and Prevention is recommending routine 'opt out' HIV testing in emergency departments, in April, 2010 the Texas Department of Health and Human Services implemented an HIV Opt-Out screening program in El Paso, Texas with the collaboration of Texas Tech University Health Sciences Center and the University Medical Center serving the El Paso County residents.

METHODS: University Medical Center is funded publicly and serves as an academic hospital for Texas Tech University Health Sciences Center. It is the only Level 1 trauma center within 280 miles of El Paso, Texas. The ER sees an average of 4500 patients per month with high volume reaching 6000 plus, including residents living across the border in Juarez, Mexico. Since April 2010, all patients between the ages of 18-64 who presented to the ER of the University Medical Center were eligible for routine opt-out HIV Screening. Screening tests were performed on blood samples using chemo-luminescent batch analyzer at low cost (reagent est.\$3.50/test); hence only patients having blood drawn as part of their workup are screened. On-call counselors are advised by UMC lab 24/7 of any positive patients. Patients with positive results are referred to community resources and treatment after receiving a confirmatory Western Blot.

RESULTS: For the program period of April 2010–April 2012 there have been 23,942 HIV tests through the ER

of UMC. Testing averages > 1,100 per month. There have been 39 total number of positive results and 118 identified previous positive from April 2010–April 2012, and of those confirmed positive 85% are confirmed and linked to care. Tests by gender include 46.7% Male and 53.3% female. Test by race include 10.8% White, 3.% Black, 80.9% Hispanic and 5.3% unidentified.

CONCLUSIONS: The implementation of the HIV optout screening program at University Medical Center/Texas Tech appears to be successful in detecting new cases with a case finding rate of 2.7/1,000. Of those new cases found, the majority are early in their disease course. Further efforts are ongoing to increase compliance with screening and reach a goal of screening >85% of patients 18–64 who have blood drawn. This is a low cost program with a total PROGRAM cost per patient screened of \$25 and cost of finding a new case \$9,090. To establish the program as sustainable (self funded through billing collections), UMCEP/TTUHSC plans transitioning payment to insurance and private payment.

ABSTRACT 87

Status of HIV Diagnostic Testing in U.S. Public Health Laboratories

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OBJECTIVE: In 2012 APHL in collaboration with the Centers for Disease Control and Prevention (CDC) launched the fourth HIV Testing Survey to determine the capability, capacity and test methods used in U.S. Public Health Laboratories. Data were compared with that from previous APHL surveys conducted in 2004, 2005 and 2009 to identify trends in testing volume and methodology.

METHODS: A 20-question electronic survey instrument was created by the APHL/CDC HIV Steering Committee and administered through Qualtrics, a web-based survey instrument. The survey was sent to 130 state and local public health laboratories. Sixty-five (50%) laboratories responded: 44 of 51 (86%) state public health laboratories and 21 of 79 (27%) territorial and local public health laboratories.



RESULTS: From 2005 to 2011 the volume of specimens tested for HIV infection in U.S. public health laboratories decreased by more than 30%. The survey also indicated that public health laboratories are rapidly implementing fourth generation HIV antibody/antigen immunoassays. At the time the survey was conducted 37% of responding laboratories had implemented or were completing verification studies on an HIV antibody/ antigen testing platform and an additional 34% were expecting to purchase a fourth generation immunoassay platform in the next 12 months. Respondents were less likely to be in the process of moving away from using Western blot (WB) or IFA as their supplemental test. Nearly 80% of respondents are still using WB or IFA as the supplemental assay, with more than 60% of those laboratories citing the lack of formal recommendations as their main reason for delaying the switch.

CONCLUSIONS: The widespread use of rapid HIV assays available at the point of care has had a significant impact on the volume of HIV diagnostic testing conducted at Public Health Laboratories and the way that HIV testing services are delivered over all. However, despite the decrease in workload, public health laboratories continue to be eager and rapid adopters of the latest HIV testing technologies. Regulatory requirements and the need for formal testing recommendations were cited as the most common reasons for public health laboratories to continue to use WB and IFA as the supplemental test, rather than adopting newer strategies for supplemental testing — such as HIV-1/HIV differentiation assays.

ABSTRACT 88

Who Better than Us? Recruiting Individuals with Histories of Incarceration and Substance Abuse to Increase Access to HIV and HCV Testing and Linkage to Care

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OBJECTIVE: In Washington DC's Wards 6, 7 and 8, the Community Education Group (CEG) faced the challenge of addressing service gaps for a community of African Americans suffering from 5 times the US national per capita rate of HIV/AIDS. Researchers questioned if CEG's intervention using the social networks and skills of community health workers (CHW) with histories of incarceration and substance abuse could increase counseling, testing and linkage to care outcomes in Wards 6, 7, and 8?

METHODS: CEG recruited, retained, trained and hired Ward 6, 7, and 8 community members to provide HIV/HCV prevention outreach, testing and linkage to care activities. Individuals recruited participated in a 90-day program to increase their capacity to provide venue based HIV/HCV prevention outreach, testing and linkage activities to high risk African Americans in Wards 6, 7, and 8 of Washington, D.C. Mixed methods were employed for efficacy test. Data was obtained from interviews, program outcomes, and health records with a target population of heterosexual males and females at high risk for HIV/AIDS, HCV and other concurrent issues such as substance abuse and homelessness over the past 3 years. Multi-theoretical research design was based on CHW model, social network theory, and stages of change.

RESULTS: Between 2009 and 2011, CEG provided outreach and risk behavior counseling to over 4.31% of the population. HIV testing increased overall by 371%; HCV testing increased overall by 158%; 361 % in males; 380% in females. Of those tested in 2011: 99% received counseling, 93% received confirmatory testing and linkages to care; and 23% received substance abuse treatment; up from 0% in 2009. Interview data attributes outcomes to service mix;



organizational culture; reentry citizen's communication, familiarity, advocacy, and community investment.

CONCLUSIONS: The results of this targeted yet holistic approach add clarity to the surmounting efficacy evidence supporting CHW strategies and emphasize the need for dual targeted programs such as this reentry and HIV/AIDS and HCV intervention. As in most multifaceted approaches, the relative strength of any individual strategy can't be enumerated. Yet, engaging disadvantaged groups in the community to use their community knowledge and social networking skills has shown to drastically increase HIV/AIDS and HCV counseling, testing and linkage to care outcomes among high risk African American in Wards 6, 7, and 8 of Washington, D.C. These outcomes are attributed to a comprehensive strategy that was developed to address community health disparity in an innovative way.

ABSTRACT 89

Umndeni Care Program (UCP): Lessons Learned from Home HIV Testing and Linkage to Care in the South African Generalized Epidemic

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OBJECTIVE: The Umndeni Care Program (UCP) focuses on providing community-based, in-home HIV testing, linkage to care and treatment, social support, tuberculosis screening, adherence monitoring, HIV prevention and health care professional training in rural KwaZulu-Natal (KZN), South Africa.

METHODS: UCP uses an incentive-based system of community health care workers to perform community-based in-home HIV counseling, testing, prevention education, tuberculosis screening, adherence monitoring and linkage to care. Community health workers are given incentives for successful linkages to care and additional bonuses for continued adherence in their patients.

RESULTS: In the first seven months of 2012, our counselors tested 1,118 (87%) individuals of the 1,289 who were offered confidential in-home point-of-care HIV testing. From those who tested, we found 149 (13%) new HIV infections. Ninety-two (62%) of the newly diagnosed received their CD4 results and 53 (57%) met national criteria for initiation of antiretroviral therapy (ART). Of the UCP patients newly diagnosed as HIV infected by rapid testing, 56 initiated ART. Only five (9%) patients who qualified for ART did not initiate therapy as of July 31, 2012. In addition, we detected 25 cases of sputum positive tuberculosis from random home visits. Acceptance rates for in-home HIV testing have risen from 64% in 2010 to 87% in 2012.

CONCLUSIONS: With the recent approval of home self-testing and increasing access to point-of-care diagnostics for HIV in the United States, using similar methods developed in Africa could potentially increase the number of newly identified cases. Using community health care workers to facilitate testing and linkage to care has shown to be a powerful method of detecting early, asymptomatic patients as well as patients less inclined to access the health care system.



Category B: Prevention Models



Near-Perfect Adherence in US iPrEx RCT sites: Frequency and Correlates.

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OBJECTIVE: Exposure to daily oral pre-exposure prophylaxis (PrEP) in randomized controlled trials (RCTs) among diverse populations has varied widely (from <26% to >80%), suggesting that adherence to open-label PrEP may also vary by region, community, or cohort. We aimed to characterize adherence amongst US (Boston, San Francisco) participants in the iPrEx RCT among MSM and transgender women.

METHODS: We used drug detection data previously collected for analysis of drug detection at week-24 study visit amongst US participants to estimate the accuracy of self-reported adherence in the US cohort in relation to drug detection, and, given support for accuracy, used self-report data collected during monthly interviews to identify baseline and time-dependent factors associated with near-perfect self-reported adherence.

RESULTS: Drug detection in the sample used to evaluate PrEP exposure suggested that 97% of the US participants included in that substudy had quantifiable levels of drug at their week 24 study visit. Amongst those who had reported using study product on >50% of the days since last study visit [~30 days], 97% had drug detected, suggesting high positive predictive value of self-report, cautioned by overall high rates of drug detection. With evidence of self-report as a valid indicator of drug exposure in the US, we then evaluated 3144 adherence assessments from

223 participants. Near-perfect self-reported adherence (>=90%) in last month was reported on 83% of the assessments, and perfect adherence was reported at 58% of visits. Multivariable adjusted analyses identified older age at enrollment, believing PrEP would be at least 60% effective in preventing HIV, and having reported unprotected receptive anal sex with an HIV-positive partner in the past 3 months as positively associated with adherence. Near-perfect adherence was less likely to be reported if the participant reported gastrointestinal symptoms in the prior month or =5 alcoholic drinks per drinking occasion in the prior month. On longitudinal analysis, adherence was consistently high throughout the study.

CONCLUSIONS: Adherence to blinded study medication was high among US participants throughout their participation in the iPrEx study and was associated with factors similar to those associated with adherence to other medication and prevention regimens. Of the mutable factors identified, side-effects management, exploring impact of alcohol use, and fostering positive beliefs about effects of PrEP and possibly one's sense of risk for infection should be included in PrEP adherence support packages.

***Note: Data from this abstract have also been presented at IAS2012**

ABSTRACT 91

HOME: A Holistic Approach to HIV Prevention and Program Evaluation for Young MSM of Color in New York City

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OBJECTIVE: HIV/AIDS rates are high and rising fastest among MSM of color. The numbers are even worse for African-American MSM: HIV infection rates rose 66% in just three years between 2004 and 2007. Even in New York City, where transmission is more "diverse," MSM still account for 48% of new HIV infections as of 2010. To address the prevention needs of young MSM of color, Harlem United created HOME, or the "Helping Our Men



Evolve" Program. The purpose of the present study was to design an evaluation approach to assess the needs and outcomes of HOME clients, and provide information integral to continuous program quality improvement.

METHODS: HOME uses multiple behavioral theories and comprehensive HIV/STI prevention strategies in a drop-in space setting. Interventions include but are not limited to: Many Men, Many Voices (3MV), RESPECT, Comprehensive Risk Counseling Services (CRCS) and The Volunteer Leadership Program (VLP). Members also have access to in-house psychological counseling, healthcare, housing, and other supportive services. HOME's health counselors conduct risk assessments on intake and 90 day reassessments to tailor clients' service plans to their needs. In 2010, HOME enrolled 84 members, of which n=25 received a reassessment within the year.

RESULTS: For those members who received reassessments, a paired-samples t-test revealed a statistically significant reduction in reported sexual risk behaviors (t=5.48, p=.00). As a result of these findings, HOME designed an assessment tool, called the Outcomes Matrix, which measures changes in Education, Employment, Income, Housing, HIV Risk, and Mental Health status on a 10-point scale. In a pilot of the Matrix with n=21 clients in 2011, clients evidenced increases in mean scores across 4/5 domains.

CONCLUSIONS: YMCSM who consistently engaged in mental health and risk reduction services for 90 days or more reported reduced HIV-risk factors and improved overall quality of life. HOME's range of services and evaluation capacity support its clients in making informed decisions about their sexual health, with far reaching positive implications for their health, relationships, and community.

ABSTRACT 92

Preparing for and Conducting a Successful HCV Vaccine Trial with Injection Drug Users

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OBJECTIVE: Conducting successful clinical trials of biomedical prevention interventions in high-risk groups, including injection drug users (IDU), requires community involvement and a supportive clinical infrastructure. The Vaccination Is Prevention (VIP) Study is a phase I/ II clinical trial testing a preventive HCV vaccine in San Francisco and Baltimore. We discuss preparatory and ongoing work in San Francisco to conduct this study in a population normally excluded from clinical trials.

METHODS: In preliminary work, IDU were surveyed to assess understanding of clinical trials and willingness to participate in a trial testing an experimental HCV vaccine. To meet identified gaps, information sessions with IDU and community-based providers working with IDU were held prior to initiating the trial. Key concepts such as blinding, randomization, the VIP Study objectives and protocol, and the properties of the experimental vaccine were discussed. The teams' experience with conducting research, HCV counseling/ testing, and health care resource/referral networks was also highlighted. Trial staff were trained and sensitized to issues impacting safety monitoring and long-term retention of IDU participants, including psychosocial factors and difficulty with venous access.

RESULTS: Enrollment in the VIP Study is ongoing and IDU are willing to participate. 68 participants are targeted for phase I. Enrollment is meeting targets and has slightly exceeded the projected loss, requiring a minor upward adjustment of sample size. Factors contributing to the early success of the VIP Study include use of an Informed Consent (IC) Comprehension tool reviewed with participants prior to enrollment to ensure that essential trial concepts are understood; a case-management approach to track participants with phone, social media and personal visits that facilitates attendance at study



visits and strengthens relationships between study staff and participants; and a memory aid tool designed for the population, to assist in identification of adverse events. Outreach to local community providers and stakeholders is ongoing; the response has been positive, and many participants come via referrals from community-based providers. The clinical trial site, while a recognized entity of the University, is an outpatient research clinic catering to low-income and marginalized communities. Training for clinical staff has resulted in improved cultural sensitivity, phlebotomy and a referral system that meets the physical and social service needs of IDU.

CONCLUSIONS: Conducting a successful clinical trial for an HCV vaccine with IDU requires strong internal and external support. Essential components include educational activities, community buy-in, a culturally-competent staff, an accessible clinic and aggressive outreach strategies to meet recruitment and retention goals.

ABSTRACT 93

Young Adults at Risk for HCV: Meeting Their Needs through the UFO Model Prevention Program

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OBJECTIVE: High HCV incidence and rapidly increasing HCV prevalence have been observed among young adults who inject drugs. HCV infection most often occurs 2–5 years after initiating injection drug use (IDU). Prevention and education programs must target young people who are most likely to be initiates to IDU and therefore at highest risk for HCV infection.

METHODS: The UFO Model is an HCV prevention strategy based on 15 years of research and services with young adults who inject drugs in San Francisco, CA (UFO Study). With support from the CDC Viral Hepatitis Division, the UFO strategy has been documented and developed into a model HCV education and prevention

program that can be adapted by agencies working with young adults at risk for HCV. The UFO Model is informed by the needs of young adults and works on the individual, group and community level to educate and support those most at risk for HCV infection. We have developed a Replication Manual for the UFO Model along with training and technical assistance (TA) products (www.ufomodel. org).

RESULTS: Two agencies are currently testing the usability of UFO Model materials and TA products in Sacramento, CA and Newark, NJ. We conducted site visits at each agency at the beginning and during implementation of the program, and interviewed young adult participants at each site. In addition, we have conducted interviews with organizations across the US who serve young adult IDU. Three common issues have emerged while adapting the UFO Model:1) HCV testing. HCV testing and test counselor training are rare at agencies and local health departments due to lack of funding.2) **Hepatitis** education. Most agencies are funded through HIV money and knowledge of viral hepatitis transmission is lacking. Many HCV materials available are out of date or inaccurate.3) Outreach. As young adults are a new population for many agencies, conducting effective outreach requires different approaches.

CONCLUSIONS: Young IDU are increasingly emerging as the population at highest risk for HCV, and their service and preventive needs differ from their older counterparts. The UFO Model offers essential information and TA to agencies who want guidance in working with young adults and HCV. Ongoing evaluation of the UFO Model will help identify factors that will increase adaptability and usability of the model. A significant next step will be to assess outcomes, including service access, HCV testing and HCV infection reduction in the growing yet underserved population of young adult IDU.



Circle of Life – Multimedia Curriculum for Native American Youth

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OBJECTIVE: The Circle of Life multimedia curriculum draws on American Indian/Alaska Native concepts of the medicine wheel. The curriculum engages youth to make healthy decisions in order to prevent HIV/AIDS/STIs and viral Hepatitis. Requirements of the program included: Integration of health with culture Emphasis on de-linking associations and stereotypes Strong messages about caring, empathy and respect Material and activities enhancing both knowledge and skills of youth, not just didactic content Given this new media rich platform for teaching, the Circle of Life program is flexible and adaptable to different settings and uses repetition through animation to reinforce the content to help reinforce healthy behaviors and decision-making.

METHODS: Pilot study to determine if the curriculum would include knowledge change and behavior change. 18 sites were chosen to participate and each site held a 1–2 day pilot of the curriculum that lasted 1–7 weeks, depending on location and time. Evaluation included surveys, interviews, observation and online metrics (completed and repeated program chapters).

RESULTS: Increased knowledge levels about HIV/AIDS Demonstrated Increased understanding of healthy and risky behaviors Substantial reduction in fears about HIV Teachers responded positively to the materials Curricula seen as culturally appropriate and sensitive to cultural issues

CONCLUSIONS: As a conclusion, the pilots have indicated that the multimedia platform was effective and easy to use. All participants had an increase in HIV knowledge and learned key concepts to preventing HIV/AIDS/STIs and viral Hepatitis.

ABSTRACT 95

How to Implement PrEP

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OBJECTIVE: Understand implementation and cost effectiveness research on PrEP for HIV prevention in order to guide roll-out by health care providers, community-based organizations, and public health departments.

METHODS: Review published research and interview key stakeholders — researchers, policymakers, providers, advocates, funders.

RESULTS: PrEP must be accompanied by sustained care, regular HIV and STI testing, and behavioral interventions to ensure adherence, minimize risk compensation, and monitor side effects and drug resistance. Modeling of PrEP implementation coupled synergistically with scaled-up treatment — focusing on MSM in San Francisco, adults in Botswana, and serodiscordant couples in South Africa — predicts that PrEP could significantly reduce HIV incidence. If targeted to the highest risk populations including serodiscordant couples, MSM, sex workers, and young women in hyperendemic countries — and if adherence and efficacy is high enough, PrEP can be cost effective. While clinical settings are the most feasible sites for PrEP implementation, alternative arrangements should be explored, such as substance use treatment sites. Training of health providers and non-clinicians in PrEP delivery is a key component of PrEP scale-up. Research shows widespread willingness to use PrEP among most vulnerable populations, such as MSM in the U.S. and globally. However, concerns are widespread that PrEP may lead to risk compensation, which should be monitored and challenged through social marketing and behavioral interventions. Many gay men are unaware of PrEP. Many confuse PrEP and PEP, or are unaware of either. PrEP offers a teachable moment to increase knowledge of and access to PEP. Among the greatest barriers to accessing PrEP is cost. The CDC estimates TDF-FTC would cost \$8,030 a year; generic TDF-FTC is available in the global south for \$108 a year. Currently a number of private insurers and some Medicaid programs are covering PrEP for patients. The Affordable Care Act mandates coverage of "Essential



Health Benefits" by insurance offered in state Health Insurance Exchanges; these include prescription drugs and prevention and wellness programs, which could cover PrEP.

CONCLUSIONS: Given approval of TDF-FTC for use as PrEP by the U.S. FDA, and interim guidance by the U.S. CDC and WHO, providers can make PrEP available to highly vulnerable individuals as an additional tool in the fight to stay HIV-uninfected. We know how to make PrEP available in ways that can maximize its effectiveness and minimize risk compensation, poor adherence, and drug resistance. Demonstration projects underway in the U.S. and Africa can increase this knowledge and improve the impact of PrEP in the epidemic.

ABSTRACT 96

Provider Knowledge, Use, and Barriers to the Uptake of PEP and PrEP

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OBJECTIVE: Although use of non-occupational post exposure prophylaxis (nPEP) among individuals at highrisk for HIV has been recommended by the Centers for Disease Control and Prevention (CDC) since 2005, this prevention strategy has not been widely implemented in the District of Columbia (DC). More recently, the CDC also issued guidance on the use of pre-exposure prophylaxis (PrEP) as another HIV prevention method. As part of the CDC's Enhanced Comprehensive HIV Prevention Planning Initiative, the DC Department of Health (DOH) will conduct a demonstration project to increase utilization of nPEP as an HIV prevention intervention. In preparation for this project, we sought to determine knowledge, use, and barriers to nPEP and PrEP uptake among healthcare providers in DC.

METHODS: A survey of all licensed infectious disease (ID) and HIV providers in DC was conducted. Provider

knowledge, attitudes, use, and perceived barriers to nPEP and PrEP were assessed and descriptive statistics were calculated.

RESULTS: Forty six providers responded to the survey of which 42% were ID physicians. Over 30% had been in practice for at least 20 years and 73% had cared for 20 or more HIV-infected patients in the last three months. Knowledge of CDC recommendations was high with 82% and 59% of providers being aware of the nPEP AND PrEP guidelines, respectively. A majority (64%) of providers had ever prescribed nPEP with 40% prescribing it 10 or more times in the last year. Fewer providers had prescribed PrEP (24%). Providers were more likely to prescribe nPEP and PrEP to persons who had an HIV-infected partner (98% and 95%, respectively) and less likely to prescribe nPEP and PrEP to persons who did not return for medical visits (16% and 34%, respectively) and those with a history of medication non-adherence (27% and 10%, respectively). Eighty six percent and 65% of providers agreed that it was feasible to provide nPEP and PrEP, respectively, in their practice. The greatest barriers to providing nPEP and PrEP were development of HIV resistance (25% and 28%, respectively) and cost reimbursement (21% and 28%, respectively).

CONCLUSIONS: Providers in DC are familiar with and currently prescribing nPEP and PrEP to select highrisk populations. Similar barriers to providing nPEP and implementation of PrEP were identified with HIV resistance and cost reimbursement posing the largest barriers. The DC DOH should focus on patient education and collaborating with health insurers to ensure the maximum uptake and success of implementing these HIV prevention methods in DC.



Development of a PrEP Candidate Screening Tool: An Assessment of PrEP Knowledge and Health Behaviors Among Individuals at High-Risk for HIV

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OBJECTIVE: Recent studies have shown that using antiretrovirals as pre-exposure prophylaxis (PrEP) for HIV prevention is effective in reducing HIV incidence among MSM, heterosexuals, and serodiscordant couples. Given the high HIV prevalence in the District of Columbia (DC), PrEP has the potential to make a significant impact in reducing HIV incidence; however, its use will be predicated on adequate knowledge, health care access and use, and optimal adherence. This study's objective was to evaluate PrEP knowledge, experience, acceptability and potential uptake among high-risk populations in DC. This baseline information will be utilized to develop a clinical screening tool to assist health care providers identify potential candidates for PrEP use based on risk, health-seeking behaviors, and potential levels of adherence.

METHODS: A self-administered survey was conducted among high-risk populations attending three DC clinics: the DC Department of Health Southeast STD clinic, the Whitman-Walker Health Gay Men's Health and Wellness Clinic, and the Children's National Medical Center Goldberg Adolescent Clinic. The survey captured information on demographics, HIV risk behaviors, health-seeking behaviors, and PrEP knowledge, experience, and acceptability. Descriptive statistics are reported here.

RESULTS: Between February and June 2012, 293 clinic attendees completed the survey. Participants had a median age of 26 (range: 14–66), were majority non-Hispanic

Black (72.4%) and male (56.3%). Few participants (2.4%) had injected drugs in the past year, 48.4% reported frequent condom use with recent sex partners, and 52.9% knew the HIV status of their recent sex partners most or all of the time. Only 61.1% of participants had a regular healthcare provider. Of the 97 participants who were prescribed a daily medication, 65.0% sometimes forgot a dose, and they reported an average of two missed doses in the past two weeks. Few survey participants had heard of either PEP (23.6%) or PrEP (10.6%), but 77.5% said they would take PrEP if it were proven safe and effective. One-fourth (24.9%) thought people would stop using condoms if they were taking PrEP, 72.6% thought they could follow a healthcare provider's instructions regarding PrEP usage, and 82.2% reported they would get HIV-tested regularly.

CONCLUSIONS: Our findings suggest that high-risk populations in DC are generally accepting of PrEP. Potential obstacles for these populations may include low levels of PrEP awareness, lack of a regular healthcare provider, and difficulty taking medications as prescribed. As such, the identification of candidates willing and able to adhere to PrEP requirements remains the most important step in effective PrEP delivery.

ABSTRACT 98

HIV Pre-Exposure Prophylaxis (Prep): Knowledge and Attitudes Among a New York City Emergency Department Patient Population

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OBJECTIVE: This study assessed knowledge and attitudes towards PrEP within a demographically-mixed community with high HIV prevalence. The study provides information useful for implementing PrEP into existing clinic-based HIV testing and prevention programs.



METHODS: A cross-sectional study was conducted from a sample of Emergency Department (ED) patients at two NYC municipal hospitals. Eligible participants completed an anonymous written survey about knowledge and acceptability of PrEP. Means, standard deviations, and proportions were calculated. Standard bivariate methods were used to compare acceptability and knowledge by race, ethnicity and gender.

RESULTS: The study population (n=474) was 40.9% male, 40.7% Latino and 38.2% non-Hispanic Black. 13.3% reported knowledge of either the term "PrEP" or the use of antiretroviral medications to prevent HIV acquisition. More people indicated they were unlikely or extremely unlikely to use PrEP (40.1%) than indicated they would likely take PrEP if available (32.2%). Many (27.7%) were unsure if they would or would not take PrEP. 44.4% thought that individuals would stop using condoms if on PrEP, while 27.0% thought that individuals would continue using them. Some participants (28.4%) incorrectly thought that PrEP needed to be taken only prior to sex. There were no differences by gender. Latinos were more likely (17.6%) than blacks (8.8%) and others (12.4%) to report knowledge of PrEP.

CONCLUSIONS: Potential providers of PrEP must consider limitations in acceptability to this HIV prevention strategy. Future administration of PrEP must incorporate patient education to ensure user understanding of the technology, its correct usage, and potential limitations.

ABSTRACT 99

A Best-Practice Community-Based Approach to Hepatitis Prevention for At-Risk Immigrant and Refugee Communities

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OBJECTIVE: Chicago has the largest Asian American population in the Midwest with over 600,000 individuals. More than two-thirds were born outside the United States and come from countries with high hepatitis B (HBV)

endemicity. The Chicago Asian American immigrant and refugee (CAAIR) communities make up a vulnerable population for viral hepatitis infections due to the lack of access to adequate health care primarily attributable to low socioeconomic background, limited English proficiency, residential location, and stigma. A fundamental problem exists with the lack of funding for HBV in Illinois and there are presently no core public health services for viral hepatitis nor is there any federally or state funded chronic HBV surveillance system. The Asian Health Coalition initiated the community-based Hepatitis Education and Prevention Program (HEPP) in 1997 with an overall to reduce the morbidity and mortality associated with HBV and liver cancer disparities.

METHODS: The HEPP model's innovation lies in close partnerships that have been developed among community-based organizations (CBOs) and health care providers. This distinguishes HEPP from other community approaches by providing guideline-based, evidence-based education with linkage to care opportunities. Many other community programs fail to utilize a strong collaboration with a physician provider and therefore, misinformation can be communicated. Bilingual bicultural community health workers (CHWs) were recruited from partnering CBOs and trained to conduct culturally sensitive and language-concordant education and outreach using a trainthe trainer methodology. CBOs served as central venues for screening events and relationships were further established with providers including local safety-net clinics, hospitals and private physicians to serve as pathways for culturally competent linkage-to-care for those individuals found to be in need of the HBV vaccine series or in need of medical care for chronic infections.

RESULTS: Over a 5-year period, HEPP provided culturally tailored education and outreach to more than 32,000 AAIR community members, and screened 2,500 people for HBV. 1,490 individuals were linked to follow-up care, either to receive the three-series vaccination or medical services for chronic HBV infection.

CONCLUSIONS: HEPP has successfully demonstrated how community—level prevention activities in a non-clinical setting can increase the uptake of testing and improve access to care services to address HBV disparities among vulnerable immigrant and refugee communities.



Our agency has created an easily replicable model for addressing chronic conditions in vulnerable populations by working closely with the community-based organizations to provide culturally tailored outreach and screenings, and health care providers to assure appropriate medical followup to the screenings.

ABSTRACT 100

High School Health Education Classes Remain Inadequate in Providing HIV Prevention Information

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OBJECTIVE: While the HIV epidemic has been stable in the United States, increasing numbers of new diagnoses are in persons younger than 30 years of age. The objective of this study was to survey patients, high school students and educators about the utility of health education classes.

METHODS: A knowledge and attitudes survey of HIV risk and prevention behaviors of three populations: HIV-infected persons between the ages of 18–30 (Patients), high school seniors (Students) and health class teachers (Teachers) from area high schools. Standard analytic methods were used with P<0.05 considered significant.

RESULTS: A convenience sample of 79 patients from the waiting room of a large academic HIV practice were surveyed based upon attendance of area high schools: 75% male; 75% African American, 17% White, 8% Other; and 58% were between 18–24 years of age. 124 students, 18 years of age or older, who attended five area high schools were surveyed during lunch: 44% male; 65% African American, 27% White, and 8% Other. Compared to students, fewer patients reported learning about HIV prevention from health class (81% vs. 61%, p=0.002) or their family (52% vs. 29%, p=0.001). There were no significant differences in learning about HIV prevention from a doctor (48% vs. 53%), a friend (27% vs. 19%), or the Internet (27% vs. 19%). Compared to students, fewer patients believed HIV-prevention information from a health

class was very useful (59% vs. 33%, p<0.001). Compared to students, more patients reported latex condoms as an effective means of preventing HIV infection (62% vs. 87%, p<0.001). Role-play was infrequently reported as a method of instruction in health class by patients and students (18% vs. 26%, p=ns). 64% of students reported that they were shown how to use a condom in health class compared to 45% of patients (p=0.009). However, only 1 of 16 teachers reported showing how to use a condom in health class. Of 84 area high schools, only 14 schools participated in the health class teacher survey.

CONCLUSIONS: Health class continues to be a primary source of information for adolescents about preventing HIV infection. Reliance on a friend or the Internet as a source of knowledge about HIV remains relatively low. Active learning methods like role-play are rarely used in health classes. Lasting prevention messages are not in place to help protect adolescents. Broader campaigns and reexamination of health class curriculum should be explored to help prevent the spread of HIV infection.

ABSTRACT 101

Comprehensive Community Prevention Models: HIV Prevention on Hispanic Serving Universities in South Texas

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OBJECTIVE: The HIV/AIDS Partnership ("Partnership") is a three year demonstration project working with two Hispanic Serving Institutions in South Texas. The primary objective of the partnership is to implement a culturally relevant and community based HIV prevention program to improve HIV knowledge and attitudes among college students. In order to achieve this objective, the partnership employs a three pronged approach that involves fostering



a supportive campus environment; HIV peer education; and targeted outreach.

METHODS: Program evaluation of the Partnership involves a mixed-methods approach to capture the scope of the Partnership's activities. However, this analysis focuses primarily on the impact of HIV peer education on HIV knowledge and student awareness of available services. Change in knowledge is measured through pre and posttest surveys administered to students participating in HIV peer education seminars. HIV knowledge is measured using the HIV Knowledge Questionnaire (HIV-KQ-18) and knowledge of services is measured by three questions asking about awareness of HIV testing on campus, HIV testing in the community and behavioral health services. Descriptive statistics were produced for the entirety of the Partnership's activities. Paired sample t-tests and chi-square tests were used to assess changes in levels of knowledge for those students participating in peer education sessions.

RESULTS: Nearing the end of its second year, the Partnership has reached over 2,175 students through targeted outreach and peer education. The mean age of students is 22.42 (sd=6.97). The majority of participants (62%) were female. Approximately 62% indicated they were single and 54% identified as Hispanic/Latino. For those students who participated in peer led presentations and completed pre and post-test surveys (n=951), significant changes in HIV knowledge is suggested through paired sample t-tests (t=21.915, p<=0.000). Additionally, students who participated in peer led presentations indicated increased knowledge about campus HIV testing services (chi-square=7.440, p=0.010), community HIV testing services (chi-square=31.951, p<=0.00), and behavioral health services available (chi-square=40.042, p<=0.000).

CONCLUSIONS: Comprehensive community prevention models can reach large numbers of Hispanic college students, particularly through peer education. While peer education has been examined with various populations, peer education among Hispanic college students has not been explored. Initial findings from the Partnership suggest peer education is effective at increasing HIV knowledge and awareness of services with this population.

ABSTRACT 102

HIV Providers' Perceived Barriers and Facilitators to Implementing Treatment as Prevention in Clinical Practice: A Qualitative Study

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OBJECTIVE: Administration of antiretroviral therapy (ART) to HIV-infected persons before immunologic decline reduces HIV transmission to their sexual partners. "Treatment as Prevention," a strategy of prescribing ART to all HIV-infected persons to decrease the spread of HIV, has great potential to impact the HIV epidemic. However, optimizing this strategy in clinical settings will depend on whether HIV providers are willing to prescribe ART to all of their HIV-infected patients. Therefore, it is critical to understand HIV providers' perceived barriers and facilitators to implementing Treatment as Prevention.

METHODS: In May-June 2012, 39 HIV providers from 6 clinics (4 hospital-based practices, 2 community health centers) in Boston participated in focus group discussions centered on perceived barriers and facilitators to prescribing ART to all of their HIV-infected patients. Fifty-six percent of participants were women, 66% were White, 77% were Infectious Diseases specialists, and 62% had > 5 years of experience providing HIV care. Discussions were audio recorded, transcribed, and analyzed for themes relating to provider practices, attitudes, and intentions regarding the implementation of Treatment as Prevention.

RESULTS: Providers expressed positive attitudes towards a policy of prescribing ART to all of their HIV-infected patients. However, they asserted that patient readiness to start treatment and provider perceptions of each patient's capacity to adhere to lifelong therapy would be the strongest determinants of whether providers would actually prescribe ART. Providers believed that some patients would not want to start treatment due to the absence of symptoms, a desire not to be defined as unhealthy, and mistrust of the medical and pharmaceutical communities,



but they anticipated that strong, trusting relationships with their patients could overcome these barriers. Providers believed that initiation of ART before immunologic decline would confer individual health benefits as well as prevent HIV transmission. Additional data to support the individual health benefits of this strategy would encourage them to initiate treatment discussions with patients and would increase their willingness to prescribe ART to all patients. Factors that would further enhance providers' prescribing intentions include long-term data on the safety of ART, perceptions that treating all patients would not divert resources from patients with advanced disease, and guidelines that endorse universal initiation of therapy.

CONCLUSIONS: HIV providers express positive attitudes towards Treatment as Prevention, but they report concerns about the practical aspects of prescribing ART to all of their HIV-infected patients. Understanding ways to address provider concerns will be critical to implement this strategy in clinical settings.

ABSTRACT 103

Sustaining Vital Linkages Between Community and Clinical Settings for MSM

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OBJECTIVE: The MALE (Men's Action Life Empowerment) Center is a storefront HIV prevention program serving gay, bisexual and other MSM in the South End of Boston, a neighborhood which has the city's highest rates of HIV, syphilis and hepatitis B infection. The program is designed to increase testing among MSM by making it easily accessible in a community setting, ensuring connection to care and treatment for those infected, and engaging those at risk in services that can help prevent new infections.

METHODS: Core strategies currently being implemented at the MALE Center include the following: 1) Create inviting, positive, easily accessible environment for MSM to get tested and connected to care and treatment as necessary.

2) Through clinical partnerships provide integrated STI and viral hepatitis screening and vaccinations by expanded hours of operation to nights and weekend. 3) Immediate on-site linkages to mental health program with no-co pay, flexible meeting times and clinicians specializing in gay and bisexual men's health. 4) Create community support network for high risk MSM who are not consistently engaged in the health care system.

RESULTS: • The MALE Center has the highest seroincidence rate of all Massachusetts Department of Public Health funded community-based and clinical providers. • 1,740 MSM have learned their HIV status at AAC between 2010–2012. 90% of men confirmed positive were linked to medical care and attended their first appointment within three months. • 436 HIV positive MSM have been linked to case management and ancillary support services. 95% of those men have been linked to HIV-related health care.

CONCLUSIONS: Massachusetts has reduced new HIV infections by 54% in the last 10 years, saving \$2B in projected health care costs through these combined strategies: 1) Access to care and treatment (HIV as a disability under Medicaid plan and statewide health care reform legislation). 2) A robust community based support service network. 3) Evidence based behavioral intervention programs. The MALE Center implements these strategies by offering easily accessible testing, strong linkages to clinical settings and on-site support services designed to increase the well-being of our clients and reduce risky behaviors. The Center is the link between community and clinical settings for MSM who are not ready, willing, or able to access services in larger healthcare systems and helps reduce new infections and maximize health outcomes. It is also uniquely positioned to increase our understanding of service utilization patterns and preferences among MSM.



HIV Prevention in Black Churches: The Healing Faith Model

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OBJECTIVE: Healing Faith is the HIV prevention program of the Life Care Ministry at Imani Community Church. The program objective is to increase access to HIV treatment, prevention, care, and support services for all Oakland residents by raising awareness, providing culturally relevant HIV education, and eliminating stigma.

METHODS: Healing Faith works with the congregation, community, and collaborative partners using a combination of engagement methods. (1) Within Imani Community Church, the Life Care Ministry provides comprehensive health education, which includes sexual and mental health, on the fourth Sunday of each month during the worship service. A health information table is maintained in the fellowship hall with male and female condoms, resources, and other material. Weekly bible study has been used as an opportunity to explore how the church addresses gender and sexual identity through a targeted curriculum from the Umoja Project. (2) In the local community, Healing Faith participates alongside the Life Care Ministry as exhibitors at the annual Laurel Street Fair, providing HIV prevention information and general health screenings. (3) In collaboration with other churches, advocates, and AIDS service providers, Healing Faith uses the National Week of Prayer for the Healing of AIDS to engage the faith community in addressing the local epidemic. Through training and advocacy programs with the Black AIDS Institute, AVAC (AIDS Vaccine Advocacy Coalition), and the National Minority AIDS Council, Healing Faith ensures that the most current information is being shared with the community.

RESULTS: After Year One, the congregation of Imani Community Church demonstrated increases in health literacy, HIV literacy, and knowledge of available community resources. After Year Two, there was an increase in collaboration between Healing Faith and community partners. During Year Three, Healing Faith has become a resource used by members of the congregation

to locate HIV prevention, treatment, and support services. New volunteers are engaged in HIV prevention activities and have requested training as HIV test counselors.

CONCLUSIONS: Change takes time. More HIV prevention advocates who are also clergy in black churches are needed to engage black faith leaders in open dialogue about the relationship between HIV/AIDS, sexuality, and stigma using a peer-to-peer approach. Incorporating HIV prevention education into comprehensive health education programs and utilizing existing congregational and community events reduces resistance to addressing HIV/AIDS in African American faith communities. Normalizing HIV prevention education within worship services and other church activities increases the overall health literacy and engagement of new HIV advocates and activists.

ABSTRACT 105

Development and Implementation of a Clinic-Based, Provider-Driven Prevention with Positives (PwP) Pilot Program in New York City (NYC)

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OBJECTIVE: Prevention with positives (PwP) programs attempt to reduce secondary HIV transmission by decreasing ongoing risk behavior. The NYC PwP Pilot, developed by the NYC Department of Health and Mental Hygiene (DOHMH), aims to determine the feasibility and optimal implementation parameters for future citywide scale-up of a clinic-based HIV prevention intervention.

METHODS: Using existing PwP programs as well as models for behavior change related to other diseases, we developed a primary care approach that integrates routine sexual risk screening coupled with evidence-based, ultrabrief provider-delivered risk reduction counseling. We recruited two large HIV primary care clinics to participate; working closely with DOHMH, each pilot site identified a PwP champion, customized their electronic health



records system (EHR) to monitor screening and document counseling, and received on-site training about screening and counseling. Baseline data for the first three months of the pilot were extracted from the EHR of all HIV-positive patients from each site and analyzed to assess completeness of initial implementation. DOHMH staff then used the information to provide data-driven technical assistance and deliver site-specific booster trainings.

RESULTS: In January 2012, two HIV primary care sites (Site A and Site B), serving a total of 1,200 HIV positive patients, began implementation of the pilot program. Over the first quarter, of 836 (70%) patients screened, 207 (25%) reported one or more sexual risk behaviors. Of those with one or more sexual risk behaviors, 90 (43%) received provider counseling but the counseling rate varied widely between the two sites: 89% for Site A and 21% for site B. Examination of the disparity between sites revealed that documentation of counseling at Site B lagged behind actual provision of counseling, but that counseling was actually being provided.

CONCLUSIONS: Preliminary baseline data suggest that 25% of clients in NYC primary care HIV clinics are engaged in one or more high-risk behaviors. We have demonstrated that our screening and brief clinic-based, provider-counseling model can be operationalized in a busy urban HIV primary care setting. Additional efforts are needed to ensure screening and counseling are appropriately provided and documented. Future pilot data will be analyzed to determine the effectiveness of this model in reducing self-reported sexual risk behaviors among HIV-positive patients. Best practices will be documented to shape and support planned scale-up.

ABSTRACT 106

Project ECHO's (Extension for Community Health Outcomes) Prisoner Health is Community Health: The New Mexico Peer Education Project (NM PEP)

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OBJECTIVE: In 2009, over 7.2 million adults were under some form of correctional supervision in the United States. Prisoners have high rates of communicable diseases. The prevalence of hepatitis C (HCV) in the New Mexico Corrections Department (NMCD) is 40% upon entry into prison. It is estimated that persons released from the criminal justice system account for up to 29% to 43% of all persons infected with HCV in the United States. Most prisoners are incarcerated for relatively short periods of time and 95% of prisoners are released back into their communities. Providing health education to inmates before they are released from prison offers an opportunity to establish disease control in the outside community. The purpose of the NM PEP is to increase knowledge of HCV and other relevant health issues in the New Mexico prison population and to help prisoners identify and reduce risk behaviors for HCV and other infectious diseases.

METHODS: Prisoners selected to become peer educators receive a 40-hour intensive training developed using national evidence-based standards, and presented by Project ECHO health experts and training staff. After training, peer educators go on to conduct 10 hour health education sessions with small groups of their fellow inmates. Peer educators attend monthly videoconferences with Project ECHO and peer educators from other sites to receive continuing education. These videoconferences allow peer educators to have training related questions answered, and to address barriers to teaching their own peers.

RESULTS: Since July 2009, a total of 188 peer educators have been trained. These peer educators have facilitated 10-hour health workshops to reach a total of 1,246 inmates. In addition, peer educators have conducted a 2 hour workshop



focusing on HCV and hand-washing for 4,206 recently incarcerated inmates. Thirty videoconferences have been held. A formal evaluation of the project began in January 2012. Questionnaires measuring knowledge, self-efficacy and behavioral intention are given to the peer educators before and after their 40 hour training. Qualitative data is obtained through focus groups and individual interviews. By November 1, 2012, 5 additional training sessions will have been completed.

CONCLUSIONS: The NM PEP is an innovative way to provide high quality health education to a large number of inmates in a short period of time. Peer educators have a unique capacity to deliver factual, relevant information to their peers. Prisons provide a rare opportunity to reach a disenfranchised, at-risk, underserved population and improve public health.



Category C: Outcomes and Impact Evaluation



State of the ART: Characteristics of HIV Infected Patients Receiving Care in Mississippi (MS), USA from the Medical Monitoring Project, 2009–2010

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OBJECTIVE: Mississippi, the poorest state in the US also ranks the worst for health care overall. Less than 50 percent of people known to be HIV infected are in care. Also, African Americans, who suffer the worst health care disparities in the US, account for 78% of people with HIV in MS. The purpose of this study is to describe the patients in care and determine the factors associated with anti-retroviral treatment (ART).

METHODS: The CDC's Medical Monitoring Project collects surveillance data from 23 project areas in the US, including Mississippi, using annual probability sampling of persons in care for HIV. Data were collected from in-person interviews and HIV-related medical record abstraction. The surveillance period was the 12 months prior to the interview date. Data were collected from 212 randomly selected individuals, representing a locally representative weighted sample of 3190.4. Rao-Scott Chi-square test was used to look for relationship between variables and ART.

RESULTS: 80.98% of PLWHA in care were African American, 62.28% men and 28.35% MSM. Mean age was 43 years. Patients had a mean of 3.71 visits to the provider during the surveillance period. Mean of Geometric mean for CD4 count = 438.91 (95% CI 402.25–475.56). Overall 80.80% (95% CI 75.30%–86.29%) were on ART, and 68.12% (95% CI 62.69%–73-56%) had undetectable recent viral load status. Males (65.15%) are less likely to achieve undetectable viral load compared to females (78.30%) after controlling for individuals who are on ART (p=0.01). Viral suppression was not associated with age, race or sexual risk factors. No statistically significant difference was found in age, gender race, sexual risk factors or CD4 count groups with regard to ART prescription.

CONCLUSIONS: In MS, majority of the patients in care are on ART and most of them have suppressed viral loads highlighting the importance of linkage and retention in care. Nevertheless, males are less likely to achieve viral load suppression on ART than females.

ABSTRACT 108

Strengthening the Circle with Tribal Initiatives on HIV/AIDS

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OBJECTIVE: The TIHA project goal is to strengthen HIV/AIDS programs, and services responding to HIV/AIDS that target the American Indians/Alaska Native community at large through small grant awards. Four main objectives of TIHA were determined: 1.Enhance or support HIV/AIDS/STD education, awareness, antistigma and testing in the community 2.Provide funding for HIV/AIDS/STD related activities and services 3.Pass official tribal resolutions, policies or codes that support HIV/AIDS/STD Tribal programs, HIV screening or other HIV services and include LGBT and Two-Spirit communities 4.Expand the HIV/AIDS infrastructure and network for all American Indians/Alaska Natives through collaborative and transparent Tribal and Federal partnerships.

METHODS: There was a mixture of data collection processes and tools used at each of the various sites to demonstrate performance and outcomes measures across the project. This included summarizing data with percentage changes over a period of 12 months. Each site provided these monthly reports that included unduplicated testing numbers, presentations conducted, presentation attendees, HIV sites and events, how many resolutions or policies passed and how many tests were conducted at permanent sites and off sites.

RESULTS: Over a two year period, 11 Tribes and Tribal organizations were awarded funds in the amount of \$13,500 and \$20,000 to conduct this program at the local level. Across all sites, the programs conducted



233 presentations and directly reached a total of 8,512 participants. The sites reported that 4,515 HIV tests were performed in connection with their activities. Specific to community-based outreach, a total of 110 HIV testing events were held, with a total of 1,318 additional HIV tests provided to community members

CONCLUSIONS: In addition to HIV testing, presentations and an increase in events and establishing new policies and resolutions, the overall number of people that were either educated about HIV/AIDS or tested for HIV/AIDS by these four tribes represents over 20,954 people or contacts.

ABSTRACT 109

Dynamic Trends in HIV/AIDS Diagnoses and Related Biological, Sexual, and Drug Use Risk Factors Among Adolescents in Washington, DC

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OBJECTIVE: Although HIV incidence in the U.S. has been relatively stable in the past years, it has increased among adolescents, who remain at high risk for HIV. This study's objectivewas to assess the dynamic trends of HIV/AIDS diagnoses and biological, sexual, and drug use risk factors among adolescents (13–24 years) in Washington, D.C.

METHODS: Diagnoses of HIV/AIDS and other sexually transmitted diseases (STDs) were analyzed using HIV/AIDS and STD surveillance data from 2001 to 2009. To explore trends in diagnoses over time, we estimated the annual percent change (EAPC) with Poisson regression. Sexual and drug use risk factors were developed from five serial DC-based Youth Risk Behavior Surveillance (YRBS) Surveys from 1999 to 2009.

RESULTS: A total of 419 participants aged 13-24 years were diagnosed with HIV in 2009 in DC; 67% were male; 90% black, the major transmission categories were maleto-male sexual contact (51.8%), heterosexual (36.7%), and injection drug use (7%). The rate of new HIV diagnoses increased significantly (EAPC=10%) from 0.3% (95%CI: 0.2%-0.3%) in 2000 to 0.5% (95%CI: 0.4%-0.5%) in 2009. The overall rates of new diagnoses from 2000 to 2009 were contributed mainly from male (EAPC=30%), black/ African American (EAPC=15%), and MSM (EAPC=32%). From 2000 to 2009, the number of primary and secondary syphilis diagnoses increased significantly among male and black youths (p-value and comparison %s), and remained stable among other subgroups. Chlamydia (5%) and Gonorrhea (2%) diagnoses are common among youths with most of them occurring among females and blacks. Serial YRBS surveys from 1999 to 2009 suggested that high school students had sex (48%-65%), multiple sexual partners (23%-40%), sex in the past 3 months (34%-48%), unprotected sex in the last act (75%-82%), and participated in drug/alcohol use before sex (12%-16%) , with significantly higher rates among males than that among females (need to show comparison data). High proportions (25%-41%) of high school students were involved in the offering or selling drugs. Among middle/ high school students, alcohol use was common (38%-67%); marijuana (11%-45%) and inhalants (6%-16%) were the most commonly used drugs, followed by Ecstasy (4%-9%), cocaine (2%-7%), methamphetamine (2%-6%), and heroin (2%-5%).

CONCLUSIONS: There is a continuing increase in new HIV diagnoses among DC's adolescents. Multiple sex partners, unprotected sex, substance use are common. Structural interventions that address access to health care and stigma as well as individual prevention interventions that address sexual/drug use risk behaviors are needed to reduce HIV transmission and racial disparities among adolescents.



Longitudinal Viral Load Predicts Mortality Among a Cohort of 3850 HIV-Infected individuals

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OBJECTIVE: Cross-sectional HIV viral load (VL) measurement provides invaluable information for care/treatment and research, but the nature of cross-sectional measures preclude the assessment of longitudinal cumulative plasma HIV burden. We examined the association of longitudinal viral load and mortality in a cohort of HIV infected individuals in Washington DC.

METHODS: HIV-infected individuals diagnosed and reported before 2007 to 2011 in Washington DC were included. Longitudinal viral load, a time-associated measure of cumulative plasma HIV, was calculated for each patient using the area under the VL curve. Cox Proportional model was constructed to analyze the independent association of longitudinal viral load for all-cause of mortality.

RESULTS: Of 3,850 patients contributing 13,079 personyears of this 4-year longitudinal cohort, the median of the longitudinal viral load was 2.59 log10 copies/mL and 275 patients (7.14%) died. When evaluated separately, the 4-year longitudinal viral load (hazard ratio [HR]=2.16 per log10 copies/mL, 95% CI, 1.92-2.43 per log10 copies/ mL), the first VL in 2007 (HR=1.43; 95% CI, 1.29-1.58 per log10 copies/mL) and most recent VL (HR=1.69; 95% CI: 1.56-1.82 per log10 copies/mL) were associated with increased mortality, other statistically significant factors include age (HR=1.56; 95%CI: 1.22-2.00), Black (HR=3.74; 95%CI: 2.26–6.21; versus White), other racial/ ethnic minorities(HR=2.1; 95%CI:1.01-4.37; versus White), injection drug user (HR=2.43; 95%CI:1.81–3.26; versus men who have sex with men), in-patient facilities (HR=4.17; 95%CI: 2.74–6.35; versus out-patient facilities/ private physicians); not engaged in care (HR=2.89; 95%CI: 1.97-4.22), first (HR=8.11; 95%CI:6.39-10.31; <200 versus =200 cells/mm3) and most recent CD4 cell counts (HR=8.99; 95%CI:7.06-11.44 cells/mm3). When

simultaneously evaluating VL measures and controlling for other covariates, both longitudinal viral load (HR=1.55, 95%CI: 1.27–1.90 per log10 copies/mL) and most recent VL (HR=1.37; 95% CI: 1.22–1.154 per log10 copies/mL), along with Blacks (HR=1.86; 95%CI: 1.11–3.12), not engaged in care (HR=1.8; 95%CI: 1.23–2.64), and recent CD4 cell counts (HR=4.47; 95%CI: 3.31–6.03; <200 versus =200 cells/mm3), were associated with increased mortality, whereas no cross-sectional first VL measure was independently associated with mortality.

CONCLUSIONS: Longitudinal VL and most recent viral load predicted mortality independently, suggesting cumulative HIV replication causes harm independent of its effect on the degree of immunodeficiency. Longitudinal VL will be a valuable indicator in assessing the disease progress, impact of care program, and dynamics of HIV transmission. Further research is needed to better understand the use of the longitudinal viral load.

ABSTRACT 111

Cost Analysis of Positive Charge, a Multi-Site Linkage to Care Program

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OBJECTIVE: Supported by AIDS United, Positive Charge (PC) is an evidence-based linkage to care initiative with sites in New York, California, Chicago, Louisiana and North Carolina. Although each of the five interventions is unique, all five sites are implementing evidence-based strategies. We conducted an economic evaluation of four PC interventions to assess the cost saving threshold and the cost effectiveness threshold of linkage to care programs.

METHODS: Using standard methods of cost and threshold analyses as recommended by the U.S. panel on cost-effectiveness in Health and Medicine (Gold, 1996), and as adapted to HIV/AIDS programs by Holtgrave (1998) and the U.S. Centers for Disease Control and Prevention, we conducted a cost and threshold analysis to locally assess the: • Cost per client and cost per contact of



delivering the program, • Economic threshold for the cost per HIV infection averted compared to current standard of care, and • Economic threshold for cost per disability-adjusted life years (QALYs) averted.

RESULTS: In Chicago, the cost-per-client was \$2,726 and the cost-per-contact was \$909. Only 0.83 HIV transmissions need to be averted in Chicago for the intervention to be cost-saving and only 2.92 QUALYs need to be saved for cost-effectiveness. In New York, the cost-per-client was \$517 and the cost-per-contact was \$85. The cost-saving threshold in New York was 1.03 HIV transmissions averted and the cost-effectiveness threshold was 3.65 QUALYs saved. In California, the cost-per-client was \$3,186 and the cost per contact was \$491. One HIV transmission needs to be averted for the intervention to be cost-saving and 3.57 QUALYs need to be saved for the program to be cost-effective. In Louisiana, the cost-per-client is \$1,870 and the cost-per-contact is \$455. The cost-saving and cost-effectiveness thresholds are 1.20 transmissions averted and 4.26 QUALYS saved, respectively.

CONCLUSIONS: The study found that PC's four unique evidence-based linkage to care programs appear to have highly achievable cost-saving and cost-effectiveness thresholds. There is a great need to scale-up successful HIV linkage to care programs and their economic benefits appear promising.

ABSTRACT 112

Newly Diagnosed Positives Identified by HIV Testing Programs in New York City

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OBJECTIVE: In the United States, an estimated 21% of persons with HIV are unaware of their status. In 2006, the New York City Department of Health and Mental Hygiene (NYC DOHMH) began expanding HIV testing in NYC. One of the goals of expanded HIV testing is to identify

HIV-positive persons who are unaware of their status and link them to care. This abstract characterizes the new HIV cases diagnosed by DOHMH-funded testing programs.

METHODS: DOHMH analyzed preliminary positive cases identified by funded contracts between January 2006 and December 2010. Cases were matched against the NYC HIV registry and categorized as newly or previously diagnosed. We reviewed CD4 and viral load (VL) levels and time intervals from testing to first CD4 and viral load.

RESULTS: Total HIV testing increased from 28,000 tests in 2006 to 166,000 in 2010. Overall, 2,350 new cases were identified. New diagnoses increased significantly from 2006–2010 (p<0.001). The proportion of persons concurrently diagnosed with AIDS within 31 days of their new HIV diagnosis also significantly declined 21% (p<0.001) from 34% to 27%. During 2006 to 2010, the overall median time to linkage to care was 9 days. In this same period, the median first CD4 count and viral load post-diagnosis were 328 and 35,055 respectively.

CONCLUSIONS: Expanded HIV testing led to yearly increases in the number of newly diagnosed cases identified. Early detection of HIV infections rose, while late diagnoses fell. Most new cases are linked to medical care in under 30 days. In NYC, expanded testing activities allowed more people to be diagnosed earlier in the course of their infection and promptly linked to care.

ABSTRACT 113

Impact of Expanded HIV Testing in New York City

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OBJECTIVE: In 2006, the New York City Department of Health and Mental Hygiene (NYC DOHMH) began expanding HIV testing services in NYC to increase HIV diagnosis and linkage to care. This abstract characterizes findings from expanded HIV testing service in NYC.

METHODS: We analyzed HIV testing data reported from January 2006 to December 2010, including changes in



testing volume, seroprevalence, identification of new and previously diagnosed positives, and linkage of HIV positive persons into medical care. We matched those diagnosed as HIV positive to the NYC HIV registry to determine whether diagnoses were new. The date of the client's first post-test CD4 or viral load determined linkage to care.

RESULTS: The number of HIV tests conducted increased by more than 400% (p<0.001) from 2006 to 2010. Testing programs identified both newly and previously diagnosed positives. The proportion of positive results declined as the number of tests increased. The number of new positives identified increased yearly, with significant increases in 2007 compared with 2006 (p<0.001) and 2008 compared with 2007 (p<0.001). Of all HIV diagnoses, 47% were new. The number of clients linked to care within 90 days also increased significantly during the period (p<0.001). Overall, 81% of clients were linked within 90 days, and 90% within 365 days.

CONCLUSIONS: From 2006 to 2010, DOHMH dramatically increased the number of HIV tests performed in NYC, the number of new diagnoses, and the number of persons linked to care. The large proportion of patients linked to care demonstrates that active case finding for HIV may increase the number of patients receiving treatment.

ABSTRACT 114

Building a Culturally Tailored PrEP Demonstration Program for Young Men who Have Sex With Men of Color: Lessons Learned from the CRUSH Project in Oakland, California

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OBJECTIVE: In March 2012, the California HIV/AIDS Research Program funded three demonstration projects to study the implementation of medical prevention strategies, including PrEP, among communities in California. The

CRUSH project is located in northern California and is specifically focused on young men who have sex with men of color (YMSMC). The demonstration project is located within an HIV care clinic, the East Bay AIDS Center's Downtown Youth Clinic (DYC). We plan to enroll at least 600 HIV-negative YMSMC at increased risk of HIV infection in an ongoing clinic program of sexual health services, including access to PrEP. Our experience as 'early adopter' PrEP prescribers will allow us to formulate tools and strategies for overcoming obstacles to implementation, particularly barriers to payment for medical prevention services.

METHODS: The formative research will investigate what at-risk people know and think about health, sexuality, HIV and STI testing and prevention, with a particular emphasis on PrEP through 20 in-depth interviews and 3 focus group discussions. We are documenting the implementation challenges associated with prescribing PrEP in an HIV care-focused healthcare system.

RESULTS: Our clinic has cared for uninsured HIV positive patients for years, drawing upon categorical funding for HIV care through the Ryan White Care Act and other sources. A large proportion of patients we hope to serve with PrEP are uninsured, and funding sources to provide them care within our non-profit health system are much more limited. In addition, the administrative complexity of managing eligibility assessments, enrollment, and reenrollment in separate health coverage products in the era of health care reform, creates an additional barrier to serving this new population.

CONCLUSIONS: The young men we plan to target are exceedingly vulnerable. Nationwide, although HIV incidence was stable among most groups from 2006 to 2009, there has been a 48% rise in new infections among African American MSM between ages 13 and 29. Our experiences suggest that the same trend is occurring in the East Bay. Providing PrEP to these youth requires building culturally sensitive sexual health services as well as a clinical infrastructure that supports the delivery of PrEP. We will present findings and conclusions based on forthcoming formative data collection activities.



Estimating the Number of Injection Drug Users in the United States to Calculate National Rates of HIV Infection

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OBJECTIVE: In the United States (U.S.), injection drug users (IDUs) accounted for approximately 9% of all new HIV infections in 2009 and 16% of persons living with HIV infection. The disparity in disease rates among IDUs compared to their population size has been difficult to quantify, as no census estimates exist for the number of IDUs in the U.S. We conducted meta-analysis of national survey data to estimate the number of persons in the U.S. who have injected drugs to use as a denominator to calculate HIV diagnosis and prevalence rates for IDUs.

METHODS: We conducted a systematic literature search and identified 4 national probability surveys providing data on lifetime (ever) or past-year injection drug use. Data for each recall period were combined using meta-analysis. We applied the proportion of men and women reporting lifetime drug use and past-year drug use to census data to produce population size estimates. We then used the lifetime population size estimate to calculate HIV rates among IDUs using surveillance data on HIV diagnoses (for 2009) and persons living with a diagnosis of HIV (for 2008).

RESULTS: Meta-analysis estimated that lifetime IDUs comprise 2.6% (95% confidence interval (CI): 1.8%–3.3%) of the U.S. population age 13 years or older, representing 6,483,280 IDUs (range: 4,482,581–8,458,655) aged 13 years or older in 2009. The past-year IDU estimate was 0.30% (95% CI: 0.19 %–0.41%) or 759,759 IDUs (range: 481,181–1,038,338). Using the lifetime population size estimate, the HIV diagnosis rate was 77 per 100,000 IDUs and the rate of persons living with a diagnosis of HIV infection was 2,429 per 100,000 IDUs. Rates of IDUs living with a diagnosis of HIV infection among blacks and

Hispanics were higher than those among whites (8 to 38 times and 6 to 22 times as high, respectively).

CONCLUSIONS: The estimate of the number of IDUs (lifetime and past year) in the US and burden of disease among IDUs can be particularly important for planning and optimizing the allocation of limited resources to programs serving disproportionately affected populations and addressing health inequities. The estimate of the number of IDUs in the U.S. and resulting rates are important additions to cost effectiveness and other data used to make critical decisions about resources for prevention of HIV and other bloodborne infections.

ABSTRACT 116

Estimating Averted HIV-Related Medical Costs on the Path to Eliminating Mother-to-Child Transmission Among HIV-Infected Pregnant Women in New York State: 1998–2010

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OBJECTIVE: By achieving a 0.7 percent rate of mother-to-child transmission (MTCT) of HIV in 2010, New York State (NYS) achieved one of the two CDC goals for eliminating MTCT. We estimate the number of MTCTs averted during the 1998–2010 period and the HIV-related medical costs for these averted cases that were saved.

METHODS: MTCT surveillance data was used to estimate averted cases, based on expected cases of MTCT assuming the 11.5% NYS transmission rate experienced in 1997. Averted HIV-related medical treatment costs for perinatally-infected children were estimated using a previously-published cost that assumes a 25-year survival horizon for this population. Medical costs



incurred to achieve these savings were limited to HIV-related testing, counseling, and pharmaceuticals for both expectant mothers and their newborns. Costs unrelated to the treatment of HIV, such as those incurred for social, psychological, or developmental conditions or caregiver expenses were not considered.

RESULTS: At least 749 cases of MTCT were averted between 1998 and 2010, an 85% reduction in the number of transmissions assuming the rate of MTCT had continued at its 1997 level. This reduction resulted in a projected savings of over \$267.9 million in averted lifetime HIV-related medical treatment costs. An estimated \$70.6 million in costs for services to HIV-infected mothers and their newborns to prevent MTCT were incurred for a net savings of \$197.3 million or a savings of almost \$4 for every \$1 spent. (All in 2010 US\$)

CONCLUSIONS: Aside from the human suffering from MTCT that is averted, the costs of treatment protocols and interventions to prevent MTCT are relatively inexpensive and can result in as much as four times their value in HIV treatment cost savings realized.

ABSTRACT 117

HIV/AIDS-Related Hospitalization Rates in US Short-Stay Hospitals, 1982–2010

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OBJECTIVE: (1) Estimate hospitalization rates and trends for HIV/AIDS-related conditions in US short-stay hospitals from 1982 to 2010, in light of the advances of HIV/AIDS care over this time period; and (2) Compare hospitalization rates and trends for HIV/AIDS-related conditions by gender and race.

METHODS: Data from the 1982–2010 National Hospital Discharge Survey (NHDS) were analyzed. The NHDS is a national probability sample survey conducted by the National Center for Health Statistics that reports hospitalizations according to medical conditions,

demographic characteristics, and other features. Hospitalizations for HIV/AIDS-related conditions were identified using ICD-9 codes, and rates were calculated as a function of all hospitalizations for any condition by each year. Differences in HIV/AIDS-related hospitalization rates (Δ) by gender and race also were estimated. Linear regression models were constructed to test for differences in trends of HIV/AIDS-related hospitalizations by race and gender. All analyses were adjusted for the multi-stage sampling design of the surveys.

RESULTS: Among all patients, HIV/AIDS-related hospitalization rates increased rapidly from 0.02 per 1000 hospitalizations in 1982 to a peak of 6.3 per 1000 in 1995, fell sharply by 58% to 4.0 per 1000 by 1997, and then decreased steadily to 3 per 1000 by 2010. From 1982 to 1995, HIV/AIDS-related hospitalization rates among males grew much more rapidly than among females $(\Delta=0.05 \text{ per } 1000 \text{ to } \Delta=8.6 \text{ per } 1000; \text{ p}<0.001). \text{ As HIV}/$ AIDS-related hospitalizations reached a steady state among females and decreased by 55% among males after 1995, the gender gap narrowed to Δ =3.5 per 1000 by 2010. HIV/ AIDS-related hospitalizations were similar among blacks and whites from 1982 to 1985 (p<0.26), then increased much more among blacks from 1986 to 1995 (Δ =0.06 per 1000 to Δ =17.0 per 1000; p<0.001). The difference in HIV/ AIDS-related hospitalizations between blacks and whites remained steady from 1996 to 2007 (Δ =16.9 per 1000 to 17.6 per 1000; p<0.40), then decreased 51% by 2010 (Δ =8.7 per 1000).

CONCLUSIONS: HIV/AIDS-related hospitalization rates increased dramatically from 1982 to 1995, and have fallen substantially since then, likely as a result of advances in HIV/AIDS care. Although HIV/AIDS-related hospitalization rates remain higher among males, the gender gap has narrowed substantially. Blacks who are hospitalized remain much more likely to have an HIV/AIDS-related condition compared with whites, although reductions in the differences in rates are apparent.



Sustained Virologic Response and the Development of Hepatocellular Carcinoma (HCC) Among Persons with Chronic Hepatitis C Virus (HCV) Infection: A Meta-Analysis of Observational Studies

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OBJECTIVE: HCV is a leading cause of hepatocellular carcinoma (HCC), which occurs in approximately 15,000 persons annually in the United States. We conducted two meta-analyses of existing literature to determine the association between response to therapy and HCC development among persons infected with HCV.

METHODS: Using MEDLINE, EMBASE, CINAHL, the Cochrane Library, Sociological Abstracts, and DARE, meta-analyses were conducted to compare response to therapy (achieving sustained virologic response [SVR] or not responding to treatment) in the development of HCC among two groups of HCV-infected persons, i.e., those at all stages of fibrosis and those with advanced liver disease (i.e., Metavir F3-F4 or Ishak 4-6). Two investigators independently reviewed and abstracted full articles to determine inclusion in the meta-analyses. Studies, published in English, must have reported HCV testing and exclusion of HCC at study inception, measured SVR with undetectable HCV RNA = 12 weeks post treatment, and followed-up study subjects for a period of = 2 years. Annual incidence of HCC development was calculated from included studies. The Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework was used to determine overall quality of evidence.

RESULTS: The analysis included 30 observational studies. Pooled annual incidence of HCC development among

persons at all stages compared with advanced liver disease achieving an SVR was 0.3% (95% CI: 0.2%–0.5%) vs. 1.0% (95% CI: 0.7%–1.5%) and not responding to treatment 1.7% (95% CI: 1.2%–2.4%) vs. 3.3% (95% CI: 2.6%–4.2%), respectively. Pooled adjusted effect estimates suggest that among HCV-infected persons at all stages of fibrosis and with advanced liver disease, achievement of an SVR was associated with significant reductions in the risk of HCC development of more than 75% (all HCV-infected persons HR=0.24 [95% CI: 0.18–0.31]; moderate quality evidence; advanced liver disease HR=0.23 [95% CI: 0.16–0.35]; moderate quality evidence).

CONCLUSIONS: HCV-infected persons with advanced liver disease are less likely than persons at all stages of fibrosis to achieve an SVR in response to treatment. Because the baseline risk for developing HCC among HCV-infected persons with advanced liver disease is approximately three times greater than that of those at all fibrosis stages, early treatment is critical. However, once patients at all stages of fibrosis and advanced liver disease achieve an SVR, the likelihood of developing HCC decreases by approximately 75%, highlighting the importance of testing and successful therapy. Resources should be applied to the treatment and achievement of a successful response among all persons identified with HCV infection.

ABSTRACT 119

Persons Diagnosed and Living with HIV/AIDS (PDLWH/A) who can Potentially Transmit HIV through Heterosexual Contact in Pennsylvania, 2010

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OBJECTIVE: CDC-recommended back-calculation analyses suggest that 80% of HIV-infected persons have



been diagnosed in Pennsylvania (PA). Although PA's updated disease reporting/public health surveillance regulations/laws required HIV (non-AIDS) case-surveillance/reporting in addition to AIDS since 2002, few studies have characterized the potential reservoir of PDLWH/A who can transmit HIV through heterosexual-contact [including those who may have been infected through Injection Drug Use (IDU)].

METHODS: Design, Study Population and Ethical Considerations: The selected HIV case-reporting/ surveillance dynamic-cohort for these analyses included 34,772 adults/adolescents (>13-years old at the time of HIV-diagnosis, excluding those probably infected through mother-to-child-transmission) with a definitive HIVdiagnosis from January 1, 1980 who were longitudinally followed-up and presumed alive after death registry linkage as of December 31, 2010. PA Department of Health confidential routine surveillance to inform public health action authorized by PA regulations/law is exempt from IRB/ethics review. Statistical Analyses and Primary Outcome Measure: Simple chi-square analyses and geospatial representation of the population of interest were performed. Adjusted/multiple logistic regression analyses were performed to estimate likelihoods of PDLWH/A who can-potentially-transmit-HIV-through-heterosexualcontact (vs. all other probable modes of transmission) and how this varies by several demographic and other risk factors/covariates.

RESULTS: The proportion of PDLWH/A who can transmit HIV through heterosexual-contact was ~56% (females~46%; racial/ethnic minorities~79%). PDLWH/A who can-potentially-transmit-HIV-through-heterosexual-contact were more likely to be: a) those currently in the age-group 30–39 years (OR=2.12;95%CI:1.91–2.36) and successive older age-groups <60 years, compared to the 13–29 years age-group, b) racial/ethnic minorities [black(OR=3.13;95%CI:2.96–3.32), Hispanic (OR=4.55;95%CI:4.19–4.93)] compared to whites; c) fem ales(OR=15.11;95%CI:14.00–16.32), except white females; and were less likely to be: a) residents of six HIV Service Areas, HAS compared to AACO HSA(Philadelphia and surrounding four PA counties).

CONCLUSIONS: Given the high proportion presumed to know their HIV-status, the substantial proportion of

PDLWH/A constituting the potential reservoir of those who can-transmit-HIV-through-heterosexual-contact (almost 1/2) suggests a major opportunity for tracking referrals, linkage and retention in care to ensure sustained prevention/care for the subgroups identified as more likely to be in this risk group.

ABSTRACT 120

Persons Diagnosed and Living with HIV/AIDS (PDLWH/A) who can Potentially Transmit HIV through Men having Sex with Men (MSM) in Pennsylvania, 2010

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OBJECTIVE: CDC-recommended back-calculation analyses suggest that 80% of HIV-infected persons have been diagnosed in Pennsylvania(PA). Although PA's updated disease reporting/public health surveillance regulations/laws required HIV(non-AIDS) case-surveillance/reporting in addition to AIDS since 2002, few studies have characterized: a) the potential reservoir of PDLWH/A who can-transmit-HIV-through-MSM, including MSM who are also Injection drug Users (MSM-IDU), and b) the opportunity for prevention/care in this population.

METHODS: Design, Study Population and Ethical Considerations: The selected HIV case-reporting/surveillance dynamic-cohort for these analyses included 34,772 adults/adolescents (>13-years old at the time of HIV-diagnosis, excluding those probably infected through mother-to-child-transmission) with a definitive HIV-diagnosis from January 1, 1980 who were longitudinally followed-up and presumed alive after death registry linkage as of December 31, 2010. PA Department of



Health confidential routine surveillance to inform public health action authorized by PA regulations/law is exempt from IRB/ethics review. Statistical Analyses and Primary Outcome Measure: Simple chi-square analyses and geospatial representation of the population of interest were performed. Adjusted/multiple logistic regression analyses were performed to estimate likelihoods of PDLWH/A who can-potentially-transmit-HIV-through-MSM (vs. all other probable modes of transmission) and how this varies by several demographic and other risk factors/covariates.

RESULTS: The proportion of PDLWH/A who canpotentially-transmit-HIV-through-MSM was ~37% (racial/ethnic minorities~49%). PDLWH/A who canpotentially-transmit-HIV-through-MSM were more likely to be: residents of the Southwest HIV Service-Area, HSA(OR=1.79;95%CI:1.65-1.93) compared to AACO HSA (Philadelphia and surrounding four PA counties): and were less likely to be: a) those currently in the age-group 50-59 years (OR=O.38;95%CI:0.35-0.41) and retrospective age groups, compared to the 13-29 years age-group, b) racial/ethnic minorities [blacks (OR=0.28; 95%CI:0.20-0.23), Hispanics (OR=0.22;95%CI:0.20-0.23)] and other (OR=0.37;95%CI: 0.30-0.46) compared to whites; c) AIDSNET (Lehigh valley and surrounding areas) HSA (OR=0.53;95%CI:0.48-0.58), Northcentral HSA (OR=0.85;95%CI:0.73-0.998), Northeast (OR=0.61;95%CI:0.52-0.71), and South-central HAS (OR=0.84;95%CI:0.78-0.91).

CONCLUSIONS: Given the high proportion presumed to know their HIV-status, the substantial proportion of PDLWH/A constituting the potential reservoir of those who can-transmit-HIV-through-MSM (almost 2/5) suggests a major opportunity for tracking referrals, and linkage and retention in care to ensure sustained prevention/care for the subgroups identified as more likely to be in this risk group.

ABSTRACT 121

Clinical Differences Between Black and White MSM Newly Diagnosed with HIV Disease in the District of Columbia

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OBJECTIVE: Black men who have sex with men (MSM) continue to be disproportionally impacted by HIV among MSM in the District of Columbia (DC). Several studies have explored HIV-related behavioral differences among Black and White MSM, yet there is little research that examines other disparities between these groups. This analysis investigates clinical differences between Black and White MSM newly diagnosed with HIV/AIDS in DC.

METHODS: Surveillance data from the enhanced HIV/ AIDS Reporting System (eHARS) were analyzed from 2005 to 2009. Age at diagnosis, late testing, linkage to care, retention in care, and initial median viral load (VL) and CD4 counts after diagnosis were evaluated. Late testing was defined as an AIDS diagnosis less than a year after HIV diagnosis. Retention in care was defined as having at least two laboratory tests 3 months apart within 12 months of initial linkage laboratory test date. Multivariate logistic regression was performed.

RESULTS: From 2005–2009, 1,660 Black and White MSM were newly diagnosed with HIV/AIDS. Compared to White MSM, Black MSM were more likely to be late testers (OR: 2.49, CI: 1.91–3.25) and less likely to be linked to care (OR: 0.50 CI: 0.33–0.74). Black MSM were no different than White MSM in age at diagnosis and retention in care. Lab results revealed initial median VL and CD4 counts were 19,710 c/ml and 176 respectively for Black MSM and 17,568 c/ml and 315 respectively for White MSM.

CONCLUSIONS: This analysis reveals clinical disparities among Black and White MSM. Black MSM are diagnosed at later stages of disease with higher VL and lower CD4 counts and are also less likely to be linked to care. Though there have been efforts in expanding HIV testing and linkages to care, specific programs are needed for Black



MSM. Further research is needed to understand barriers of HIV testing and care services among Black MSM.

ABSTRACT 122

Using Cross-Matched HIV and Sexually Transmitted Disease Registry Data to Estimate Adherence to Dual Screening Recommendations in New York City

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OBJECTIVE: Persons diagnosed with HIV and sexually transmitted diseases (STD) in temporal proximity have particular importance to public health because of the likelihood that they contribute disproportionately to overall transmission of STD and HIV.

METHODS: The New York City (NYC) HIV Surveillance Registry includes all reported HIV diagnoses in NYC since 2000 and the NYC STD Surveillance Registry includes all reports of syphilis, gonorrhea, and chlamydia in NYC. Cases reported to these registries with diagnosis dates from 2000–2009 were matched using a deterministic algorithm followed by manual review of marginal matches. For 2005–2009, descriptive analyses examined persons diagnosed with HIV and STD during the same calendar year (HIV/STD coinfection). If a person had multiple STD diagnoses in one calendar year, the first diagnosis in that year was analyzed. To examine trends in the proportion of HIV/STD coinfections likely made in the same clinical encounter ("joint diagnoses"), we analyzed diagnoses made in the same calendar month.

RESULTS: Among 4,301 persons newly diagnosed with HIV in 2005, 7% also had an STD diagnosis in 2005. This percentage increased to 13% (480/3724) in 2009. The proportion of joint diagnoses among all coinfection diagnoses increased from 39% in 2005 to 53% in 2009 (chi square for trend, p<0.05). Most HIV/STD coinfections were reported among men who have sex with men (MSM)

and persons aged 20–29 years (70% and 49% in 2009, respectively).

CONCLUSIONS: Much of the increase in the number of same-year HIV/STD coinfection diagnoses can be accounted for by joint diagnoses, suggesting greater dual HIV/STD screening in NYC from 2005–2009. This may reflect more complete adherence to screening recommendations. The concentration of HIV/STD coinfections among young MSM is consistent with recent epidemiologic trends in NYC in which HIV and syphilis diagnosis rates have increased in this population subgroup.

ABSTRACT 123

A Cost-Effectiveness Analysis of the Washington, D.C. Department of Health's HIV/AIDS Linkage to Care Programs

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OBJECTIVE: The District of Columbia Department of Health (DC DOH) has actively scaled-up routine testing and linkage to care programs since 2006. Although these efforts have proven successful in identifying HIV-infected persons and linking them to care, a systematic analysis of the cost-effectiveness of these programs has not been conducted to date. This study's objective was to evaluate the cost-effectiveness of 1) routine and targeted HIV testing and 2) linkage to care programs administered by the DC DOH. Additionally, we estimated the number of HIV transmissions averted due to both low-risk, routine testing in medical settings and high-risk, targeted testing in non-clinical settings.

METHODS: Cost and utilization data were collected through interviews with DC DOH staff, surveillance reports, and document review. For routine and targeted testing, analyses compared low-risk, routine testing in medical settings with high-risk, targeted testing in non-



clinical settings. For the evaluation of linkage to care programs, analyses compared the effectiveness of three DC DOH funded programs funded: 1) a navigator program targeting the Latino population; 2) a program specifically serving District residents living in Wards 7 and 8; and 3) a program focusing on high-risk adolescents and persons engaging in sex work. Estimates for HIV transmissions averted due to both routine and targeted testing were calculated using reported national transmission rates for HIV-infected individuals both aware and unaware of their seropositivity. The study period was April 2010–March 2011 for the testing analysis and October 2011–March 2011 for the linkage to care analysis.

RESULTS: Results of the cost-effectiveness analysis comparing routine and targeted testing are forthcoming. However, when estimating transmissions averted, low-risk, routine testing in medical settings was estimated to avert 24 transmissions compared to 16 transmissions for highrisk, targeted testing in non-clinical settings. With regard to the linkage to care programs, the Latino-focused program was more cost-effective for referrals to care (\$803 per referral compared to \$1,378 for the Ward-focused program and \$10,417 for the adolescent/sex worker program), while the Ward-focused program was more cost-effective for linkages to care (\$1,879 per linkage to care compared to \$4,000 for Latino-focused and \$12,500 for adolescent/sex worker program).

CONCLUSIONS: Although preliminary, our findings suggest that in urban settings, low-risk, routine testing in medical sites may avert more HIV transmissions compared to high-risk, targeted testing in non-clinical sites. Further analyses, including calculating incremental cost-effectiveness ratios and additional factors related to infections averted, will assist in determining whether these findings persist.

ABSTRACT 124

Linkage, Engagement and Viral Suppression Rates Among HIV-Infected Persons Receiving Care at Medical Case Management Programs in Washington, DC

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OBJECTIVE: The District of Columbia Department of Health (DCDOH) currently funds facilities to provide medical case management (MCM). This funding is used to immediately link and engage persons in care and improve treatment adherence. The objective of this study was to determine whether differences in clinical outcomes exist among HIV-infected persons diagnosed and receiving care at MCM-funded facilities vs. non-MCM-funded facilities.

METHODS: Newly diagnosed and prevalent HIV-infected persons were identified from the DCDOH surveillance system. Clinical outcomes of interest were linkage to care within 3 and 6 months of diagnosis; engagement in care (2 visits 3 months apart within 12 months); and viral suppression (a viral load < 200 copies/mL). Bivariate analyses were performed to identify differences in demographics and clinical outcomes of persons newly diagnosed between 2009 and 2010 at MCM-funded facilities compared to non-MCM-funded facilities. Bivariate analyses were also performed to examine differences in clinical outcomes among all HIV-infected persons receiving care at 13 MCM-funded facilities compared to those receiving care at 63 other providers/facilities in 2010.

RESULTS: 1,549 HIV-infected persons were diagnosed between 2009 and 2010 and 603 (38.9%), were diagnosed in MCM-funded facilities. In comparison with non-MCM-funded facilities, a significantly greater proportion were black (80.1% vs. 75.8%, p<0.0001), MSM (45.4% vs. 29.8%, p<0.001) or heterosexual (41.0% vs. 25.4%, p<0.0001). Persons diagnosed in MCM-funded facilities were also younger, with mean age at diagnosis 36.9 years vs. 40.1 years



at non-MCM-funded facilities (p<0.0001). Although the proportion of persons diagnosed in MCM-funded facilities linked to care within 3 months was less (71.5% vs. 77.4% in non-MCM, p=0.01), similar proportions were linked to care within 6 months in both settings (80.3% vs. 82.5%, p=0.28). Persons diagnosed in MCM-funded facilities were more likely to be in engaged in care (39.8% vs. 31.4% in non-MCM, p<0.01) and achieve viral suppression (56.2% vs. 49.1% in non-MCM, p=0.01). 7,611 HIV-infected persons were receiving care in DC during 2010 and 4,034 (53.0%) were at MCM-funded facilities. These individuals were more likely to be engaged in care (51.5% vs. 36.3% in non-MCM, p<0.01). Similar proportions of these persons were virally suppressed in 2010 (69.4% vs. 69.8% in non-MCM, p=0.09).

CONCLUSIONS: This study provides evidence that medical case management services are beneficial to HIV-infected persons in DC, resulting in improved engagement in care and clinical outcomes. Further exploration is needed to determine how these services could be scaled-up to include more facilities across DC.



Category D: Access, Linkage and Retention in Care



Increasing Retention in Care for HIV+ Homeless Individuals: Harlem Model Implementation

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OBJECTIVE: Engagement in Primary Care for people living with HIV/AIDS (PLWH/A) contributes to better health outcomes. Unfortunately, structural barriers such as stigma and discrimination based on race/ethnicity or socio-economic factors prevent PLWH/A from accessing care and engaging in care. One of the emerging models of care coordination that has been frequently advocated is the patient navigation system. At Harlem United (HU), a community-based organization in Harlem, New York, a program called "Access to Care" (ATC) employs a continuum of care, addressing the need to link and retain PLWH/A in care, and provide effective support services. The program aims to provide supportive case management, patient navigation and re-engagement services, and supportive services, such as treatment adherence counseling, housing support, benefits enrollment, and mental health services.

METHODS: Unlike other case management programs that rely on referrals and verification of services received, ATC is unique due to its ability to link patients to a navigator who provides advocacy, education, supportive counseling, escorts, and connection to supportive services after case management assessments. ATC facilitates re-entry into care for PLWH/A, high-risk homeless individuals, high utilizers of emergency rooms and detox facilities, and individuals with co-occurring substance use and mental health disorders.

RESULTS: In 2011, a comparative study was conducted to evaluate ATC program efficacy. HIV+ clients receiving ATC services (ATC group, n=78) were compared to HIV+ clients not receiving ATC services (non-ATC group, n=78) on retention in care and Antiretroviral Therapy (ART) status. Sample size and demographics distribution in each group, such as gender, race/ethnicity, and homeless status, were ensured to be comparable. Findings showed that:- Of

the 78 clients in ATC group, 89% were retained, compared to 74% in non-ATC group. — Among ATC clients who were retained in care, 61% were on Antiretroviral Therapy (ART). On the contrary, only 29% of non-ATC clients who were retained in care were on ART.

CONCLUSIONS: Although there have been efforts to reduce health disparities in the US health care system, the underserved population still experience limited access to medical care, fewer treatment options, and higher rates of disease. Patient navigation model such as the ATC program plays a fundamental role in reducing barriers to care and improving health outcomes. Considering patient navigators' unique and integral position in health care delivery, they can help clients break the barriers to entry by providing assistance in insurance enrollment, build clients' trust, help clients adhere to medication, and improve client-provider communication.

ABSTRACT 126

A Qualitative Assessment of Facilitators and Challenges to HIV Linkage to Care Models in Washington, DC

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OBJECTIVE: The importance of linkage, engagement, and retention in care to achieve viral suppression and prevent HIV transmission is well documented. However, successful models for linking HIV-infected persons into care are not clearly defined. This qualitative study aimed to identify and define the linkage to care strategies implemented within multiple types of HIV care and service organizations in Washington, DC, as well as identify challenges and facilitators to the models' successes.

METHODS: Semi-structured interviews were conducted with 14 key informants identified as providers of HIV clinical care and social services. Participants were selected from 10 organizations that provided HIV testing and



linkage to care. Among these organizations there were six community-based primary care clinics; one community-based HIV/AIDS clinical care and social service provider; one community-based non-clinical care provider; and two hospital-based providers. Atlas.ti was used to conduct the qualitative data analysis and coding. Thematic analysis was conducted to identify relevant themes and patterns.

RESULTS: Participants defined their individual roles within their organization as 1) Infectious Disease Nurse Case Manager; 2) Linkage to Care Coordinator, 3) Program Manager, 4) Physician's Assistant, 5) Director of Social Programs, 6) Systems Navigator, and 7) Hospital Emergency Department Physician. Several themes emerged to describe the linkage process: 1) organizational definition of linkage to care, 2) variations in staff involved in the linkage process, 3) effect of HIV testing venue on the linkage process, 4) linkage processes for newly diagnosed individuals, and 5) linkage and tracking processes for persons previously diagnosed who were reengaging in care. Facilitators to HIV linkage to care included a strong patient-provider relationship, patient advocacy, and an organization's ability to provide other medical and social services beyond HIV care, as well as serve as the patient's medical home. Limited program and patient resources and perceived stigma associated with HIV were commonly reported barriers to successful linkage. Other challenges included co-occurring conditions such as mental illness diagnoses and social issues including poverty and homelessness. HIV testing outside of a clinical setting was also mentioned as posing more of a challenge for successful linkage to care.

CONCLUSIONS: This study identified multiple models of linkage to care for HIV-infected persons. Despite the diverse set of approaches and settings for providing linkage to care and services, common facilitators and barriers were identified. System-wide challenges must be addressed in order to improve the health outcomes of HIV-infected individuals, as well as prevent future infections.

ABSTRACT 127

The Use of Person-Locating Software to Improve Surveillance-Based Estimates of HIV Prevalence and Retention-in-Care in New Mexico

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OBJECTIVE: The National HIV Surveillance System is the only population-based source for information to track the HIV epidemic in the United States. The surveillance process, in part, entails interstate case information reconciliation of individuals monitored throughout the course of their HIV infection; this interstate data sharing allows each state to better estimate HIV prevalence. Also, state-based surveillance data have been used recently to estimate retention in HIV care. To improve our state-based estimates of HIV prevalence and retention in HIV care, we determined to obtain up-to-date vital status and address information for persons reported to our surveillance program with HIV infection.

METHODS: We selected 348 persons who had been diagnosed with HIV in New Mexico and for whom we hadn't received a laboratory or other report in least 10 years. To obtain up-to-date residency and vital status data, we utilized Accurint®, an online locate-and-research tool. Accurint is a subscription-based, internet database that uses proprietary data linking and analysis technology to analyze billions of partial and complete demographic records from a variety of public sources to provide complete current residence information and vital status.

RESULTS: Of the 348 persons for whom we searched, 250 persons (72%) were identified as having a current address in a U.S. state other than NM. An additional 19 persons (5%) were identified as being deceased. Removal of these 269 out-of-state and deceased persons from our HIV registry improved our 2010 year-end prevalence estimates as well as estimates of those retained in HIV care.

CONCLUSIONS: Application of high-quality, up-to-date person-locating software enables more accurate estimation of state-based prevalence and retention in HIV care.



These prevalence and retention measures are important to measure the successful implementation of the National HIV/AIDS Strategy. Further, our approach can be used in other surveillance programs which monitor chronic diseases in a prevalence population.

have actively facilitated their clients' readiness to access care. Variations in linkage rates between testing sites are reflective of the client's readiness to access care and the intensity and type of linkage support must be tailored to the testing venue to ensure optimal linkage.

ABSTRACT 128

To Link or Not to Link: That is the Question

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OBJECTIVE: To link newly identified HIV positive individuals within 72 hours of receiving a positive result and to study success rates based on testing modality.

METHODS: Linkage to care is crucial to improving patient outcomes among newly diagnosed HIV-positive clients. AHF's Linkage Program assists newly positive clients from a variety of sources with accessing free or low-cost HIV care. The linkage rate was compared among four different sources: a mobile unit, storefront testing sites, wellness centers (STD clinics); and referrals from partner agencies. AHF's intense linkage protocol attempts to ensure HIV positive individuals are linked to care (two appointments) within 72 hours of learning of their positive status.

RESULTS: Out of 1449 positive individuals identified from January 1, 2010 to December 31, 2011, clients who tested positive at a mobile unit (N=185) had the lowest linkage percentage at 50%. Clients who tested positive at storefront testing sites (N=355) had a linkage percentage of 63%. Wellness clients (N=234) were linked 86% of the time, while referral clients (N=675) had the highest linkage percentage with 90%.

CONCLUSIONS: Individuals who tested at storefront locations or wellness centers had sought out services and thus were more emotionally and mentally prepared to enter care. Those testing at mobile testing units were less prepared for their results, less emotionally and mentally prepared to enter care. Clients coming from referral agencies have been sent to us through case managers who

ABSTRACT 129

Follow-Up Testing for Hepatitis C Virus Infection: An analysis of Massachusetts Surveillance Data from 2007–2010

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OBJECTIVE: Determine the proportion of hepatitis C virus (HCV) antibody positive cases reported to the Massachusetts Department of Public Health (MDPH) that have had at least one HCV nucleic acid test (NAT) reported and analyze the demographics of cases that did not have this type of follow-up testing reported from 2007 through 2010.

METHODS: Surveillance data for HCV cases were extracted from the MDPH surveillance system, MAVEN (Massachusetts Virtual Epidemiologic Network), and analyzed using SAS v9.2. Cases with an event date between January 1, 2007 and December 31, 2010 were analyzed and followed through February 10, 2012. MDPH regulations require all HCV diagnostic laboratory tests to be reported, with the majority of laboratory test results reported electronically. The time between the first reported antibody test and the first reported NAT was determined for each case, as applicable. A multivariate logistic regression model was developed in order to analyze demographic determinants of cases having a NAT.

RESULTS: A total of 34,005 cases of HCV infection were reported to MDPH from 2007–2010. Thirty-five percent (n=11,863) had only an antibody test reported, while 53% (n=18,004) had an NAT reported. Of those with a reported NAT, 8,274 (46%) had a NAT reported after an antibody test and could be analyzed for chronological order of report. Sixteen percent of these cases (n=1,313) had a reported



NAT within one week of their antibody test, 25% (n= 2,068) within one month, 16% (n= 1,284) within one to three months, 9% (n= 734) within three to six months, 10% (n= 865) within six to twelve months, and 24% (n= 2,010) a year or more later. Age (p<0.0001), race (p<0.0001), and region of the state (p<0.0001) were found to be significant predictors of having a reported NAT compared to having only an antibody test reported. Younger, non-white, non-urban populations in the state were less likely to have a reported NAT compared to older, white, urban residents.

CONCLUSIONS: The high number of HCV infections reported to MDPH indicates substantial screening and testing efforts by medical providers. However, for 35% of reported cases a NAT was not reported, indicating that these cases may not have received appropriate follow-up confirmatory testing for HCV infection. Demographic analyses suggest that there are disparities among populations across the state. HCV provider education is needed, with a focus on appropriate diagnosis to address disparities related to age, race and geography.

ABSTRACT 130

Mortality Trends Among People Reported with Hepatitis C Virus Infection: Massachusetts, 1992–2009

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OBJECTIVE: Hepatitis C virus (HCV) infection causes significant morbidity and mortality. Research indicates a substantial and rising burden of premature mortality due to chronic HCV infection and that HCV-positive individuals are also at higher risk of non-liver-related mortality. Despite effective treatments, most people living with HCV infection have not been diagnosed. An analysis was conducted to explore mortality trends among people reported with evidence of HCV infection in Massachusetts and to compare mortality trends among HCV-infected and HIV-infected Massachusetts residents

METHODS: Data from 1992 through 2009 were extracted from the Massachusetts Department of Public Health (MDPH) electronic surveillance system, MAVEN (Massachusetts Virtual Epidemiologic Network), and matched to the state's death certificate records. A total of 103,385 HCV cases were matched against 1,107,544 people in the death records on first name, last name, and date of birth using SAS approximate matching procedures and analyzed using SAS 9.3 software.

RESULTS: Between 1992 and 2009, 8,499 reported HCV-positive individuals died in Massachusetts. The mean age of death was 75 years among individuals not reported with HCV infection, compared to 53 years in the HCV positive individuals (including deaths related to HCV and to other causes). The mean age of HCV diagnosis was 43 years. The highest average annual mortality rate for those with HCV was among the 50 to 54 year age group, with 38 deaths per 100,000. Starting with cases reported in 2002, the number of HCV related deaths (n=616) within 3 years of a HCV diagnosis greatly surpassed that among those diagnosed with HIV infection (n=75).

CONCLUSIONS: The analysis suggests that many HCV infections are likely diagnosed late, after disease has progressed. These results highlight the substantial burden of HCV infection in MA and the need for early detection. This analysis found that individuals with a known HCV infection die an average of 22 years younger than MA residents not known to be infected. This suggests that people living with HCV infection are not entering care at an optimal time and are therefore missing life-extending liver health interventions and treatment opportunities.



Engagement in Care Applied to US Department of Veterans Affairs (VA): HIV Virologic Outcomes in an Integrated Health Care System

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OBJECTIVE: Many HIV-infected individuals receiving antiretroviral therapy (ART) can achieve undetectable viral loads and avoid or delay progression to acquired immune deficiency syndrome (AIDS). However deficits in the engagement in HIV care can pose significant barriers to realizing optimal treatment outcomes. The Department of Veterans Affairs (VA), the largest HIV health care provider in the US sought to measure the engagement in HIV care continuum in clinical practice to identify targets for improvement and to determine the proportion of HIV-infected individuals with an undetectable HIV load.

METHODS: Using the VA's Clinical Case Registry (CCR) — a database extracted from the VA's electronic medical record — HIV infected patients in VA care with laboratory diagnosed HIV by 30 June 2011 and alive through 31 December 2011 were identified. Measure definitions for engagement in care were: (1) "linked to care" — at least one outpatient visit in 2011 (2) "retained in care" — at least two outpatient visits to a primary care or infectious disease clinic at the same facility with at least one visit in each six-month period of the year with a minimum of 60 days between visits (3) "needed ART" — nadir CD4<500 or a history of an AIDS opportunistic infection (4) "on ART" — outpatient prescriptions filled for ART in the year including at least two drug classes and (5) "undetectable" — HIV RNA below the limit of detection on the most recent HIV RNA test in the year.

RESULTS: Nationally, VA had 23,863 with diagnosed HIV infection in 2011. Of those, 23,761 (99.6%) were linked to care, 20,282 (85.0%) were retained in care, 18,536 (77.7%) needed ART, 17,685 (74.1%) were on ART and 13,163 (55.2%) were undetectable. Among the patients on ART, 74.4% were undetectable.

CONCLUSIONS: Previous analysis of the engagement in care cascade in the US primarily relied on estimates from data collected from relatively small studies and concluded that less than 25% of patients diagnosed with HIV were undetectable largely because of deficits in linkage and retention to care. In the VA health care system, in contrast, the retention in care rate was extremely high (85%). As a result, over 55% of all HIV patients in care and over 74% of HIV patients on ART were undetectable indicating that extremely high rates of HIV viral suppression can be achieved in comprehensive integrated health care systems

ABSTRACT 132

Routine Testing, Linkage and Retention in Care: A Federally Qualified Health Centers' (FQHC) Implementation Experience

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OBJECTIVE: The objective is to describe the FQHC experience in the implementation of routine HIV testing at Central Care Community Health Center (CCCHC), the oldest FQHC in Houston, Texas that provides primary and preventative care for the residents of Sunnyside/South Park which has the highest HIV rate in the city.

METHODS: Implementation of routine HIV testing began in 2010, and since has been part of the primary care protocol for all patients. Because of leadership buy in at all levels of the system (CEO to Lab Director), the offer of testing has been fully integrated into the clinic flow, and is included in the Electronic Medical Record system. All medical providers (MD, RN, and PAs) offer the test as opt-out. Since Texas is an Opt-out state the test can be administered without a separate consent and is included in the general consent; the provider informs the patient know this is part of clinical protocol and will be tested unless otherwise declines. Patients are offered a rapid test and if of the patient has an appointment for labs, a conventional blood draw is used.. Because of the significant distances a patient may have to travel for HIV testing in Houston (the US' least dense urban center), providing testing is vital



to reach the undiagnosed. In addition, Central Care has initiated the implementation of the "medical home" model for providing HIV care through its primary care services.

RESULTS: From October 2010—until present, 7,296 people were offered routine HIV screening; 68% of clients offered testing have accepted resulting in seven newly diagnosed. Of these, 4 are under the care of CCCHC for their HIV care and treatment. The majority of patients accepts the test (or do not opt-out) and Central Care has found the test is positively received by most patients. All three sites (2 currently phased in and a new clinic opening in Fall 2012 will also provided integrated routine screening) were phased in to HIV screening program simultaneously.

CONCLUSIONS: Routine HIV screening was successfully implemented in a high volume FQHC and did not disrupt the clinic flow. Incorporating routine HIV testing and care into a FQHC destigmatizes the association people have with HIV and where patients do not need to go to designated HIV testing sites. Most importantly, linkage to care is critical once the patient is first diagnosed as positive at the same site. The FQHC model plays an important role

ABSTRACT 133

Utility of Identifying Out of Care HIV-Infected Patients in a Hospital Setting and Enrolling Them in a Retention Intervention

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OBJECTIVE: New strategies for finding and engaging HIV-infected patients who are out of care are needed. The hospital setting provides an opportunity to re-engage patients in HIV care. As part of a randomized intervention trial, we report the feasibility of identifying hospitalized HIV-infected patients who were out of care or newly diagnosed and offering them a retention intervention though enrollment into our study.

METHODS: Between July 2010 and June 2012, we identified hospitalized HIV-infected patients at a large publically-funded hospital for recruitment into a randomized intervention trial. Patients were identified by routine medical record review and clinician referral, and completed an in-person screening interview to confirm study eligibility. Eligibility criteria were: HIV-infected, age >17, able to provide informed consent and complete a baseline survey in English or Spanish, expected to spend at least one more night in the hospital, referred for follow-up care at Thomas Street Health Center instead of other HIV clinics, and either out of care or newly diagnosed with HIV infection. Out of care was defined as having a VL>400 and completed HIV primary care visits in 2 or fewer of the last 4 quarter-year periods.

RESULTS: 1,274 HIV-infected patients were identified. 83% (n=1,056) met the criteria for out of care based on medical record review. Of these, 22% (n=261) were reclassified as receiving care at another clinic based on the screening interview. Of the 795 remaining patients, 29% (n=228) were deemed ineligible, most commonly because they were cognitively unable to complete informed consent or the baseline survey (n=86), were discharged before the screening interview was completed (n=50), or were not expected to remain hospitalized at least one more night (n=44). Of the 567 eligible patients, 56% (n=318) were enrolled, 3% (n=16) declined enrollment, and 37% (n=209) were discharged before enrollment. Median viral load (VL) was higher in patients who were enrolled (VL=69,250 IU/mL) than all others not enrolled (VL=18,700 IU/mL) (p<0.01).

CONCLUSIONS: Targeting hospitalized populations is a useful and productive approach for finding and engaging HIV-infected patients who are newly diagnosed or out of care in retention interventions. Over 60% of all hospitalized patients (795 out of 1274) were recently diagnosed or out of care, and of those who were eligible for the study, more than half enrolled in the study. Efforts towards identifying and engaging hospitalized HIV-infected patients in retention in care activities should be considered.



The State Healthcare Access Research Project on Access to Care for Persons Living with Hepatitis C in Massachusetts

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OBJECTIVE: (1) To identify challenges to access to care and treatment faced by people living with or at risk for Hepatitis C (HCV) in Massachusetts, (a post health care reform state in a pre-reform country); (2) to identify successful policies that facilitate access to care; and (3) to identify opportunities for improving access to care for persons living with HCV.

METHODS: Our law and policy research involved a threepronged approach: (1) met with state government officials to review state epidemiological data and state-run HCV testing, care, treatment and prevention initiatives; (2) facilitated focus groups, meetings and individual interviews with people living with HCV and their health and support service providers; and (3) conducted independent research on the HCV epidemic nationally and in Massachusetts.

RESULTS: Almost universal access to health coverage in Massachusetts has reduced barriers to treatment related to lack of health insurance. Among other initiatives Massachusetts has: integrated HCV testing and prevention into its existing HIV and STD testing, referral, and counseling centers; funded medical management sites to provide enhanced case management to those living with HCV; and increased access to care and treatment through the ECHO model and use of telehealth initiatives. However, barriers to prevention, testing, care and treatment remain. Challenges include the need for: (1) greater prevention and screening efforts targeted to youth and adults at risk for HCV, to increase knowledge, decrease stigma, and promote testing and linkage to care; (2) stronger care coordination to support treatment and retention in care for individuals with mental illness and/or active substance use; (3) development of training models to support primary care providers in screening patients and/or providing treatment; and (4) increased funding to support education and

treatment in correctional institutions. Recommendations to address these challenges include: development of a statewide HCV education strategy (particularly for youth); implementation of broad based rapid testing initiatives; utilization of federal health reform opportunities to increase funding of coordinated care models; increased funding for treatment of incarcerated persons; expansion of telehealth models; and greater coordination with substance abuse and mental health providers.

CONCLUSIONS: Massachusetts provides an important example of how federal health care reform could increase access to care, treatment and support services for persons living with HCV. However, opportunities to increase HCV prevention, screening, linkage to and retention in care still exist, and can be addressed through effective implementation of health reform and other initiatives on the state and local level.

ABSTRACT 135

Epidemiological Characterization and Linkage to Care of Newly-Diagnosed HIV-Positive Persons at an Urban Hospital in Washington, DC

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OBJECTIVE: Southeast Washington, DC east of the Anacostia River has the highest HIV prevalence in the city. A new HIV testing and linkage to care program was initiated to serve patients east of the river. Data are needed to understand HIV risk behaviors, demographics and initial disease severity in this population. We describe the population of newly-diagnosed persons who were identified at an emergency department routine screening program and linked to care in 2011 at a new infectious diseases care site in Southeast Washington, DC.

METHODS: A clinical database was established and populated prospectively from clinical charts with demographic, clinical and socio-behavioral data. Data were



analyzed to characterize the population and assess trends in clinical presentation and behavioral risk factors.

RESULTS: Of 195 patients referred from the emergency department screening program in 2011, 119 (76%) were linked for HIV care. Of linked cases the median age was 31 (range 22–78). 99% were black and 52% were male, 83% were single and 76% were heterosexual. 54% reported being sexually active and of these, 21% reported condom usage always. 56% were unemployed, 89% were either uninsured or publically-insured. 40% were smokers, 51% reported mild or moderate alcohol use and 38% reported a substance use history. Six people were simultaneously diagnosed with syphilis and 4 of these were MSM. Median CD4 count and viral load at diagnosis were 245 (range 2-1614) and 139,270 (30-2x106, respectively. Median CD4 at diagnosis for men and women were similar at 259 and 266, respectively. 69% had a CD4 count less than 500 cell/mm3 at diagnosis. Thirteen percent had at least one major resistance mutation and 23% were co-infected with either Hepatitis B or C. Less than 20% reported a history of or active mental disorder.

CONCLUSIONS: The newly-diagnosed population identified was largely black, heterosexual, single and publically-insured. Despite knowledge of serostatus, the majority remained sexually active and reported inconsistent condom usage. The median CD4 count at diagnosis was low and the majority were treatment eligible which suggests a need for earlier testing interventions. Sexual risk reduction and HIV prevention interventions are urgently warranted in this population. The rates of ongoing alcohol and substance use were high and also warrant intervention.

ABSTRACT 136

Exploring the Perceptions of HIV and HIV Clinical Research Among Urban Native Americans in Order to Empower the Community to Participate in the Research Process.

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OBJECTIVE: Native American Engagement in HIV Clinical Research (NAEHCR) is an NIH-funded collaborative research project between the National Native American AIDS Prevention Center (NNAAPC), Legacy Project, and selected urban Native American communities that aims to increase Native American awareness of and engagement in HIV clinical research.

METHODS: This project utilized a participatory research framework in order garner input, stimulate interest, and encourage action among Native Americans living in Seattle, WA and Denver, CO. NAEHCR project staff identified key stakeholders to serve on formal advisory bodies in each city to provide feedback on all aspects of the project. One focus group was held in both Denver and Seattle with members of the advisory boards to explore perceptions of HIV and clinical research (n=24). Surveys were collected from Native persons in both cities to assess levels of awareness and experiences with HIV clinical research (n=115). Individual interviews were also conducted with clinical research staff to assess their perceptions and experiences with local Native communities (n=4).

RESULTS: Initial analysis of the quantitative surveys revealed that the majority of participants seek care from an Indian Health Service clinic, and health information is sought out first from friends/family, then doctors, elders, and web-based resources. Only 33% of respondents indicated that HIV/AIDS had a significant impact on the Native community; 40% of respondents had not been tested for HIV within the previous 12 months. 56% had not heard about the local HIV or vaccine research sites. 42% agreed that clinical researchers in their area respect the concerns of community residents, while 46% indicated



that clinical researchers care more about profit than the health of community members. 78% agreed, however, that the Native community would benefit from participation in the HIV clinical research efforts.

CONCLUSIONS: As biomedical interventions are becoming important components of HIV prevention, it is important that Native peoples have the opportunity to voluntarily participate in the research process. The results highlight mistrust and low awareness of research efforts. Yet a high number of participants indicate that they see vaccine research as valuable. Given these findings, researchers need to work with Native community members to address mistrust, misinformation, and increase awareness of HIV clinical research. Research staff would benefit from training to learn to approach and work with culturally distinct Native communities, and community-based education efforts need to continue — both around HIV and the efforts that are being undertaken locally to end the epidemic.

ABSTRACT 137

Integrating HIV Prevention with Hepatitis C Programs Targeting HIV Service Providers, LGBT Service Providers, Substance Use Centers, Correctional Facilities, and Criminal Justice Entities

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OBJECTIVE: Many U.S. HIV treatment and prevention education programs focus entirely on HIV, even as HIV and hepatitis C virus (HCV) co-morbidity prevalence rises. Because HIV/HCV co-infection requires specialized attention, ACRIA developed a curriculum addressing the specialized needs of people living with both infections. About 25% of people with HIV in the U.S. also have HCV. Studies indicate that 80–90% of active or former substance users with HIV are co-infected with HCV, and injection drug use continues to play a significant role in the transmission of these diseases. As needle exchange

programs have increased the availability of clean needles, risky sexual behavior is emerging as a more common means of transmission. The incidence of HCV among men who have sex with men is on the increase.

METHODS: A CDC-funded project initiated by the NYS Department of Health and ACRIA was designed to reach a variety of social service-providers that target communities at high risk for HIV and HCV: These included HIV service organizations, LGBT organizations, criminal justice agencies and programs, aging service providers, and substance using centers. An HIV/HCV co-infection curriculum was developed, addressing such issues as signs and symptoms of infection, treatments, and safer injection practices. This curriculum was used as the basis for several "Train the Trainer" seminars, peer education workshops, and education/treatment counselor trainings.

RESULTS: The development of an HIV/HCV co-infection curriculum is essential to meeting the special needs of people with both HIV and HCV. Programs specializing in HIV treatment and prevention education can enhance their services and better meet the needs of co-infected clients through the adoption and integration of a co-infection curriculum.

CONCLUSIONS: Creating HIV programs that include information on HCV and other STIs is critical. Presenting the information in understandable terms is essential in helping non-medical service providers to become part of the prevention/treatment/care continuum. Developing the capacity of non-medical service providers to speak to clients about hepatitis is essential to improving access to care and services, and to developing points of care in non-traditional sites.



The New York State Center of Expertise on Aging, HIV, Hepatitis and STIs (Center of HIV and Aging)

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OBJECTIVE: Many U.S. HIV treatment and prevention education programs focus entirely on HIV, even as HIV and hepatitis C (HCV) co-morbidity prevalence rises. Because HIV/HCV co-infection requires specialized attention, ACRIA developed a curriculum that addresses the needs of people with both infections, and also develops the ability of aging service providers and those serving adults over the age of 50 to speak with clients about viral hepatitis. More than 75% of adults with HCV are "baby boomers" (born between 1945 and 1965). Baby boomers are five times more likely to be infected with HCV than any other group. The incidence of HCV among men who have sex with men is increasing, including among older MSM. Hepatitis A and B also affect a significant portion of the older population and could increase the damage to the liver caused by HCV or other causes. Testing people from this generation will make them aware of their HCV status and connect them with lifesaving care and treatment.

METHODS: The Center of Expertise is a NYS Department of Health program that funded ACRIA's HIV Health Literacy Program and our Center of HIV and Aging to reach a variety of HIV service providers, aging service providers, senior centers, and social service agencies that target older adults at risk for HIV and HCV. The purpose was to provide onsite training and capacity-building services, as well as web-based trainings, to providers throughout New York State. An HIV/HCV co-infection curriculum was developed, addressing such issues as signs and symptoms of infection, treatments, and safer injection practices. This curriculum was used as the basis for several "Train the Trainer" seminars, peer education workshops, and education/treatment counselor trainings. The objective was to create awareness about HIV, HCV, and other STIs among aging service providers, to improve or create working networks among HIV, hepatitis and

aging service providers, and to develop points of contact for people living with and at risk for HIV and HCV.

RESULTS: The development of an HIV/HCV co-infection curriculum is essential to meeting the needs of co-infected individuals. Programs specializing in HIV treatment and prevention education can enhance their services and better meet the needs of co-infected clients through the adoption and integration of such a curriculum.

CONCLUSIONS: Creating HIV programs that include information on HCV and other STIs is critical. Presenting the information in understandable terms is essential in helping non-medical service providers to become part of the prevention/treatment/care continuum.

ABSTRACT 139

Reaching and Retaining Co-Infected HIV/HCV Residents in Underserved Communities

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OBJECTIVE: An estimated 30% of people living with HIV are also co-infected with HCV. Untreated co-infection increases viral loads, predicting higher likelihood of transmission and disease progression. Communities of poverty are among those with the highest concentration of HIV/HCV cases and viral loads. Homelessness, substance use, and severe mental health needs are just a few of the challenges that limit engagement in care. In response, Tenderloin Area Center of Excellence (TACE) has developed a model of integrated care to provide culturally competent services to one of San Francisco's most impacted neighborhoods.

METHODS: In collaboration with the SFDPH Tom Waddell Health Center, TACE's model combines onsite medical care with behavioral health and social work services that address physical, psychological and environmental barriers to care. TACE augments medical services with a daily nutritional program, drop in counseling, peer advocacy, social opportunities and access to affordable



housing. Utilizing a client-centered, harm reduction approach, TACE serves the hardest to reach individuals and effectively retains them in care and treatment.

RESULTS: Utilizing HAB Quality Measures, the Tenderloin Area Center of Excellence outcomes from Jan.—July 2012 are higher the average in key indicators such as number of medical visits, HEP C screening, prophylaxis and ART. Undetectable HIV viral load currently at 56% with a target of 85%.

CONCLUSIONS: Developing an integrated, culturally sensitive model of care to address the psychosocial needs of co-infected individuals improves engagement in medical treatment, reduces mortality rates, and risk for new infections.

ABSTRACT 140

Linkage to HIV Care in the VA Healthcare System

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OBJECTIVE: Timely linkage to HIV care after diagnosis is critical for achieving optimal health outcomes from antiretroviral therapy (ART). The National HIV/AIDS Strategy seeks to improve linkage to care in the US from 65% to 85% by 2015. Our objective was to examine rates and predictors of linkage to care in VA, one of the largest HIV providers in the US.

METHODS: Retrospective cohort study, using the Clinical Case Registry (a national VA database of all HIV-infected veterans who received care at all VA facilities), including veterans identified with HIV in the VA for the first time (VA HIV date) from 1/1998 through 12/2008. The VA HIV date was the earliest VA date of: HIV ICD-9 code, antiretroviral medication (ART) prescription, positive HIV antibody or Western blot test, CD4 count, or HIV viral load (VL). Age, sex, race/ethnicity, first VA CD4 count, and prior outpatient VA use were abstracted. Transfer to VA care with viral suppression (VS) was defined

as first ART within 30 days of VA HIV date and VL<500c/mL before/within 30 days of ART. Linkage to care was defined as a clinic visit in an Infectious Diseases, Internal Medicine, or Primary Care clinic (as appropriate in each facility) within 90 days of VA HIV date. Multivariate logistic regression models of linkage were constructed.

RESULTS: 20,363 veterans were identified; 97.3% male; 35.1% white, 50.1 % black, 5.3 % Hispanic, and 8.9% other/unknown race/ethnicity; mean age 47.2 years (SD 10.5); median first CD4 cell count 315 (IQR 132, 522); 10.7% were transfers with VS. Overall, 75.7% linked to HIV care. Transfers with VS were more likely to link to care (91.9% vs. 73.8%; p<0.001); other variables were statistically significant predictors but absolute differences in linkage were =6%. In multivariate analysis, predictors of linkage were age, race/ethnicity, year of VA HIV date, prior VA outpatient visits, and baseline CD4 cell count, but only transfer with VS had an adjusted OR>2 (3.65 [3.1, 4.3]; p<0.0001).

CONCLUSIONS: Linkage to HIV care within the VA, where both HIV care and medications are readily available, is below goal. VA will need effective interventions to increase access to HIV care and linkage to care to meet the National HIV/AIDS Strategy goal. These interventions should target all HIV-infected veterans with the possible exception of transfers with suppressed VL, since no readily clinically available characteristics or CD4 cell count was a clinically useful predictor of linkage to care.

ABSTRACT 141

Navigating HIV Positive Clients to Care from an Integrated Routine HIV Testing Program in an Urban Hospital

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OBJECTIVE: HIV testing programs have been very successful at diagnosing unknown HIV infected people, but linkage to care remains a challenge. We hired a patient



navigator to successfully link patients who were newly diagnosed and previously known positive but not in HIV

METHODS: Mt. Sinai is a 350-bed, inner city, level one, trauma center and is the largest Medicaid Hospital in Illinois which has offered HIV testing through the emergency department for over 10 years and in 2011 began offering routine testing throughout the hospital. A patient navigator attempts to link newly diagnosed and known HIV positive patients who are not in care to care with intensive post-test counseling, identification of barriers to care, providing reminder calls, and escorting the individual to appointments. Data were analyzed amongst all individuals who were diagnosed at Sinai as of MONTH 2011 to MONTH 2012 and connected with the navigator.

RESULTS: From January 2012 to June 2012 we tested 1479 patients for HIV and found 20 to be infected. Thirteen were newly diagnosed and 7 were previously known. Fifteen met with the patient navigator. Eight of the 15 were linked to care, 1 was in care, 3 refused linkage to care, and 3 are lost to follow up. A time analysis was done in June 2012 for the then 17 navigated patients to examine time from the first visit where someone was identified as positive to the first attended medical appointment. Among the 17 patients who were linked to care there was an average of 45 days from diagnosis to the first attended ID visit. For those navigated the average was 41 days, if not navigated it was 59 days. New positives were linked in about a month if navigated and if not about 2 months. Those who self-identify took longer than those not navigated and known positives took the longest to get back into care.

CONCLUSIONS: At Sinai patient navigation has been successful at linking HIV infected clients to care, but success varies depending on whether the person is a new or known positive. The patient navigator model is improving Sinai's linkage to care system for all HIV infected clients. Finding out more information about why success in patients previously positive via completed risk assessments, medical records, and other information would be useful to develop strategies to engage them into care more quickly and increase their retention in care, resulting in better clinical outcomes.

ABSTRACT 142

Alaska LiverConnect: Providing Remote Specialty Liver Disease Education

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OBJECTIVE: In Alaska, more than 3,000 Alaska Native/ American Indian persons are infected with hepatitis B or C. These patients are at increased risk of developing cirrhosis or hepatocellular carcinoma. Rural providers need guidance from specialists on management of patients with abnormal liver function tests, cirrhosis, or liver failure. Vast distances between roadless communities create significant obstacles to care. Providers are dependent on remote specialty care and consultation from Anchorage. LiverConnect, a video-teleconference we developed, provides a critical link between frontline rural providers and hepatology specialists, improving access and quality of care to underserved communities. This bi-monthly program featuring up-to-date specialty education and case reviews enhances coordination among levels of care and regions of the state. Providers exchange information and learn techniques to improve patient diagnosis, shorten delays in receiving appropriate care, and better manage treatment.

METHODS: Continuing education through LiverConnect is offered to providers, nurses, and community health aides. The bimonthly video-teleconference features liver disease, HIV, and behavioral health specialists offering guidance and training through didactic presentations and case discussions. Patient confidentiality is protected. PowerPoint presentations are emailed to participants prior to the scheduled event and are archived online, along with video recordings of each LiverConnect program. Participants are emailed evaluation forms for each session. Evaluations include 7 indicators ranked on a 5-point Likert scale from Strongly Agree to Strongly Disagree.

RESULTS: Since March 2011, a total of 32 LiverConnect programs have focused on liver disease with more than half of the topics highlighting viral hepatitis and HIV prevention, diagnosis, and treatment. Participants have



joined the network from as far as Atka on the Aleutian chain, to Kotzebue in the north and Sitka to the south, distances of over 1100 miles. In the first 9 months of 2012, 12 programs drew a total of 259 participants. Sixty-eight CMEs were awarded to physicians and mid-level providers; 99 CEUs were awarded to nurses, and 92 participants did not request educational credit. Evaluation results indicated 67 percent of participants strongly agreed that LiverConnect objectives were met and the content was helpful to their practice.

CONCLUSIONS: LiverConnect is a valuable continuing education program, linking primary care providers over vast distances to receive specialized information and guidance to improve care of patients with liver disease and HIV.

ABSTRACT 143

in+care Campaign: a National Virtual Collaborative to Improve Retention

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OBJECTIVE: The National Quality Center, funded through the Health Resources and Services Administration HIV/AIDS Bureau, has launched a national retention campaign designed to facilitate local, regional, and statelevel efforts to retain more patients in HIV care and to prevent patients from falling out of HIV care while building and sustaining a community of learners.

METHODS: Running between October 2011 and December 2013, the in+care Campaign is a voluntary nationwide initiative to engage HIV providers, people with HIV, administrators of government HIV programs and other stakeholder groups to improve retention rates. The Campaign has five aspects: data collection (reporting of 4 standardized performance and submissions of ongoing improvement strategies to Campaign staff), webinars curricula (general content for all participants, journal club for medical providers, specific calls for consumers), coaching by quality improvement experts, local capacity building and collaboration through Local Retention

Groups, and Partners in+care, the consumer component of the initiative. Campaign activities are communicated through a monthly newsletter and a dedicated website where relevant materials and past webinar programs are saved. Performance data are submitted to a custom-made database that allows real-time, immediate benchmarking against the national

RESULTS: To date, 484 individual providers have signed up to be a part of the Campaign, representing 403 HIV programs from 47 states and territories, and 238 cities in the U.S. These providers care for an estimated 421,000 patients (not unduplicated). In addition, 592 individuals have signed up to be Partners in+care. 501 of these Partners are participating in our Facebook community and 124 interact through our listsery. Of the enrolled provider programs, nearly 65% have submitted performance data and more than 40% have submitted improvement strategy data from their practices. The Campaign has hosted 18 webinars attended by registered participants and other observers. Coaches are actively providing feedback and supports to all 403 registered programs. 70% of participating sites are engaged in the 25 Local Retention Groups that have been established by our volunteer corps of 42 Local Quality Champions.

CONCLUSIONS: Initiatives like the in+care Campaign show promise in improving patient retention in HIV care, resulting in improved health outcomes downstream. Offering a range of levels for participant engagement builds momentum behind the Campaign and increases the likelihood that innovative strategies for improvement will be spread within communities and across the nation. In addition, including the full range of stakeholders diversifies the types of improvement strategies proposed and propels community buy-in for quality improvement



Racial Disparities in Unprotected Sex, HIV Infections, and Engagement in Care, Viral Load Suppression Among Individuals Living with HIV in Hyperendemic MSM Community of Washington DC

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OBJECTIVE: After three decades of the HIV/AIDS epidemic in the United States, racial disparities among people living with HIV/AIDS continue to persist. The purpose of this study is to examine these disparities between among individuals living with HIV in hyperendemic MSM community of Washington DC namely White and Black men who have sex with men (MSM) in the areas of disease prevalence, unprotected sex, engagement in care, and viral load suppression.

METHODS: The HIV-related the National HIV Behavioral Surveillance Survey (NHBS) among MSM in 2008 and HIV diagnosed cases as of the end of 2010 were analyzed. Linkage to care and viral load suppression (<400 copies/mL) were assessed.

RESULTS: Among 500 NHBS-MSM participants in Washington DC, Black (N=146) use condoms at higher rates (receptive: 70%; insertive: 67%) than white (N=229) (receptive: 49%; insertive: 43%) (both rates, P<0.01, Black versus White), HIV prevalence rate is significant higher among Black MSM (27.4%) than that among White MSM (7.9%) (P<0.01). As of December 31, 2010, there were 5,853 adults and adolescents diagnosed and reported HIV/AIDS cases in DC among MSM with 3,299 of Black and 1,935 of White. Of the 1,095 HIV/AIDS newly diagnosed cases among Black MSM diagnosed and reported from 2005 to 2009, 88.7% of them were linked to care, and 54.1% had ever had viral load suppression, and 26.4.0% maintained viral load suppression as of the end of 2010; these rates

are statistically significant lower than that among the 567 White MSM HIV cases diagnosed and reported from 2005 to 2009, of them, 95.1% were linked to care, and 88.7% had ever has viral load suppression and maintained viral load suppressed (43.0%) (all rates, Black versus White, P<0.01).

CONCLUSIONS: Whereas higher rate of condom use among Black MSM versus White MSM is indicative of success of targeted prevention intervention, the rate of condom use however may be not high enough to curtail the epidemic and address racial gaps because of the 'sexual ecology", the dramatic racial disparities of HIV prevalence and engagement in care and treatment within the hyperendemic MSM community in DC. The findings underscore the need to intensify the effective combination of intervention measures, including continued condom promotion and prevention, novel approaches to expand HIV testing and evidenced-based prevention, improve engagement in care and adherence to antiretroviral therapy; all components needed to help reduce disparities and improve health behaviors and outcomes particularly in Black MSM.

ABSTRACT 145

The State of HIV in Primary Care: A Fractured Landscape

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OBJECTIVE: Primary care providers (PCPs) are increasingly being called upon to treat patients living with HIV. They are increasingly seeing, treating, and managing HIV as a chronic disease. Therefore, primary care providers are critical links to continuity of care and keeping patients in care.

METHODS: HealthHIV's 2nd Annual State of HIV in Primary Care survey was implemented to identify trends in the provision of HIV care among PCPs and HIV Specialists. The national survey was conducted online with respondents recruited through targeted invitations between July and October 2011. HealthHIV and Medscape fielded the 45-question instrument in Survey Monkey™. Qualitative analysis was conducted in order to code and



develop themes of participants' views of the current state of HIV in Primary Care.

RESULTS: The survey obtained 1,806 US-based respondents to the survey. The survey asked participants their views on the current state of HIV in primary care. HIV Specialists by far described the current state of HIV in primary care as "excellent" and 'good' overall. HIV PCPs stated that that although the state of HIV primary care is getting better, the current state is overall challenged by many factors including level of funding, barriers to access, and fragmentation across the health care system. Responses from primary care providers that do not provide HIV care were contradictory suggesting a chaotic and perplexing view of the state of HIV primary care.

CONCLUSIONS: Providers cited facts and other details demonstrating their current involvement and complex understanding of the political and environmental factors affecting the HIV primary care landscape. Others shared little or no additional information possibly demonstrating a lack of information or knowledge. This demonstrates a need to close the gap among HIV care providers to provide a united healthcare front against HIV/AIDS.

ABSTRACT 146

Influencing Blacks and African Americans' Decision to Provide HIV Care: Greater Focus on Medically Underserved Communities and Health Equity

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OBJECTIVE: According to the Centers for Disease Control and Prevention (CDC), African Americans are disproportionately affected by HIV/AIDS, accounting for more HIV/AIDS cases than any other racial/ethnic group in the U.S. The Association of American Medical Colleges, Diversity in the Physician Workforce publication indicates that the HIV workforce is aging, with 77.9% of Black or African American providers 35 years of age and older. Identifying motivational factors is critical to build the next

generation of providers to provide culturally appropriate HIV services to high-risk populations.

METHODS: HealthHIV's 2nd Annual State of HIV in Primary Care survey was implemented to identify trends in HIV care among primary care providers and credentialed HIV specialists. The national survey was conducted online with respondents recruited through targeted invitations between July and October 2011. HealthHIV and Medscape fielded the 45-question instrument in Survey Monkey™. Qualitative analysis, specifically deductive reasoning, was conducted in order to code and develop themes of participants' views of the current state of HIV in Primary Care.

RESULTS: There were 627 providers surveyed, 82 of which were African American or Black. The providers who specifically provide HIV care are more influenced by the needs of their communities than by training or job opportunities. African American providers specifically are more likely to live in communities highly affected by HIV (49%), and more likely than other clinicians to focus on HIV because of: 1. Interest in medically underserved communities (85%), 2. Concern about health equity and disparities (76%), 3. Significant need in the area (71%), and 4. Training and education (49%).

CONCLUSIONS: Professional and personal factors greatly influence providers' decisions to focus on HIV care. There are opportunities to increase greater mobility and influx of providers to areas of need through greater targeting of their interests.



Check Hep C: A Demonstration Project for Providing Comprehensive Community-Based Screening, Linkage and Medical Services to New Yorkers with or at Risk for Chronic Hepatitis C Infection

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OBJECTIVE: Hepatitis C virus infection (HCV) disproportionately affects marginalized and stigmatized populations such as drug users, the homeless, and immigrants from high prevalence areas, many of whom lack health insurance and social support and, thus, experience difficulties accessing and maintaining HCV-related care. To help reduce illness and death from HCV, the New York City Department of Health and Mental Hygiene developed the Check Hep C program which includes 1) community awareness, 2) expanded HCV screening and diagnosis, 3) support to link HCV RNA positive patients to services, and 4) mentoring and training of community physicians.

METHODS: Using Knowledge Translation as our theoretical framework, Check Hep C was developed to address individual and structural-level barriers to the implementation of these evidence-based HCV screening and care practices.

RESULTS: Beginning 5/2012, a diverse set of community partners located in neighborhoods with excess numbers of reported cases of HCV began collaborating on Check Hep C. Screening of high risk individuals is conducted in syringe exchange programs, a drug users' union and federally-qualified health centers (FQHCs). Each participant with a positive HCV RNA test is assigned to a patient navigator, who provides HCV education and counseling, assists with enrollment in benefits programs, accompanies patients to medical appointments, refers patients to supportive

services such as housing and substance use treatment, and facilitates effective patient-provider communication. Clinical providers at FQHCs receive in-person and telemedicine mentoring from academic HCV clinicians. A community-wide electronic medical record has been implemented to ensure continuity of care starting from initial contact with Check Hep C program providers; this system will record patient outcomes related to diagnosis, retention in care and response to treatment.

CONCLUSIONS: Although treatment of HCV can be curative and reduce morbidity and mortality, many chronically infected individuals remain undiagnosed and do not receive appropriate care or treatment. Check Hep C seeks to address these gaps at the community level by increasing the capacity to screen, diagnose and care for patients with chronic HCV and to coordinate services within a large urban area where many people are at risk of HCV and many barriers to care exist.

ABSTRACT 148

Patterns and Correlates of Linkage to Appropriate HIV Care following HIV Diagnosis in the U.S. Medicaid Population

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OBJECTIVE: Timely linkage to appropriate care after human immunodeficiency virus (HIV) diagnosis is critical for optimizing patient outcomes. A key goal of the U.S. National HIV/AIDS Strategy is to develop a "seamless system to immediately link people to continuous and coordinated quality care when they learn they are infected with HIV." Information on the patterns and correlates of linkage is prerequisite to the development of optimal linkage policies. While several studies have investigated these issues, none have focused solely on Medicaid beneficiaries — the largest segment of the insured HIV population, which will grow even larger under the Patient



Protection and Affordable Care Act. Therefore, this study examined patterns and correlates of linkage to appropriate HIV care following HIV diagnosis in the U.S. Medicaid population.

METHODS: Retrospective study using claims data from 15 U.S. Medicaid Programs. Study sample comprised patients aged 18–64 years with =1 HIV test between 1/1/2003–5/1/2010, accompanied or followed by HIV diagnosis. "Test Index" corresponded to the HIV test that was temporally proximate to first HIV diagnosis. Study endpoint was linkage to appropriate HIV care, defined as receipt of CD4 and viral load tests as per U.S. treatment guidelines; a more restrictive definition — receipt of CD4, viral load, and drug resistance testing — was developed for use in sensitivity analyses. Time-to-event and multivariable logistic regression analyses characterized patterns and correlates of linkage to appropriate care.

RESULTS: Study included 6,684 patients: mean age 35 years, 70% female, 47% black race. In the main analysis, the 1-year Kaplan Meier-estimated probability of linkage to appropriate HIV care was 21.0%, increasing to 26.4% after 5 years; in sensitivity analyses using the more restrictive definition of appropriate care, these probabilities were 9.2% after 1 year and 11.5% after 5 years. In both analyses, the majority of patients who linked to appropriate HIV care did so within 3 months after Test Index. Multivariable logistic regression analyses indicated that the odds of linkage varied significantly by sex, race/ethnicity, and clinical factors.

CONCLUSIONS: This study determined that for every 10 Medicaid patients diagnosed with HIV, only 1 to 2 linked to appropriate HIV care within 1 year of Test Index. These findings underscore the need for more effective interventions in the Medicaid HIV+ population promoting timely linkage to appropriate post diagnosis care.

ABSTRACT 149

Impact of Payer Type on HIV Stage of Illness at Time of Initiation of Antiretroviral Therapy in the United States

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OBJECTIVE: Research has linked earlier initiation of HIV antiretroviral therapy (ART) with better outcomes. Because Medicaid generally covers a population of lower socioeconomic status (SES) who experience greater barriers to care, we hypothesized that HIV severity at time of ART initiation is worse for Medicaid patients than other patients.

METHODS: US retrospective database analysis using GE Centricity Outpatient Electronic Medical Records spanning 01/01/1997 through 9/30/2009. Subjects included all adult HIV patients initiating first-line ART who had CD4+ results within 90-days pre-initiation. HIV stage was defined using CD4 ranges: >500 (n=520), 351-500 (n=379), 201-350 (n=580), or =200 (n=406) cells/ mm3, with lower CD4 count indicating increased disease severity. Payer type was defined as the patient's primary payer: Medicaid, Medicare, commercial insurance, selfpay or other/unknown. Note that many HIV patients with primary coverage through Medicare have secondary Medicaid coverage ("dual eligibles"). After controlling for significant demographic and clinical covariates, cumulative logit models assessed the effect of payer type on HIV stage at ART initiation.

RESULTS: Study included 1885 subjects with their primary payer being Medicaid (n=218), Medicare (n=330), commercial insurance (n=538), self-pay (n=159) or other/unknown (n=640). Final logit models found that, compared with Medicaid, odds of initiating ART at a higher CD4 range were similar for Medicare (odds ratio [OR]=1.11; p=0.521) and significantly greater for commercial insurance (OR=1.53; p=0.005), self-pay (OR=1.56; p=0.023), and other/unknown (OR=1.79;



p<0.001). Final logit models controlled for age, race, preinitiation office visits, days since last CD4 test before initiation, HIV category B, HIV category C, opportunistic infections, and anemia.

CONCLUSIONS: Medicaid patients initiated ART at more advanced stages of HIV than patients whose primary payer was commercial insurance, self-pay, or other/unknown. Similarity between Medicaid and Medicare patients in HIV severity at treatment initiation could reflect secondary Medicaid coverage among lower SES Medicare patients. Results warrant further study.

ABSTRACT 150

Increasing the Capacity to Treat Hepatitis C and HIV in Primary Care Using the Project ECHO Model in a FQHC

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OBJECTIVE: Nationally, 3.9 million people live with chronic Hepatitis C (HCV)1 and 1.2 million persons with HIV2. Many medically underserved HCV and HIV patients do not receive timely antiviral treatments for various reasons: predisposing socioeconomic variables, health insurance barriers, and the high cost of antiviral therapy3-6. Novel approaches are needed to ensure that all patients can access specialty care and treatment options. Conceived at the University of New Mexico to address rural access barriers, Project Extension for Community Health Outcomes (ECHOTM) is an evidence-based intervention that uses teleconferencing, disease management, and case-based learning to bridge the gap between specialty and primary care.

METHODS: To address similar barriers in a urban/suburban setting, the Community Health Center, Inc. (CHCI) studied the Project ECHO model, developed its internal capacity, implemented the necessary technological infrastructure, and adapted the model capitalize on its integrated electronic health record. To fully assess the impact of the model, clinical and operational data

was collected for all presented cases and self efficacy and knowledge questionnaires were administered to participating providers at baseline and after six months of participation. Surveys will be administered at the one-year mark as well.

RESULTS: After eight months of operation, CHCI Project ECHO has conducted 16 HCV and 13 HIV sessions, and PCPs have presented and created care plans for 54 unique HCV patients and 28 HIV patients. One PCP, whom previously never started a patient on HCV treatment, was able to do so because of Project ECHO. Survey responses showed an improvement in partipants knowledge, skill, learning, and competence in both HCV and HIV treatment after 6 months of active participation: PCPs reported "moderate degree of learning" gain in both HCV and HIV clinical content from the previous average rating of "less than average knowledge."

CONCLUSIONS: In this project, CHCI integrates the ECHO model into a medical home and uses it to bring urgently needed care to more patients with HCV and HIV. CHCI is the first Federally Qualified Health Center to replicate Project ECHO independently. Experience, although still limited, suggests that PCPs are gaining competence and confidence. Preliminary data from this project suggests that preparing a patient for treatment is a lengthy process that can take months. Further experience in the coming months will determine whether treatment outcomes of similar success to the original Project ECHO6 can be obtained in this context.



ABSTRACT 151

Understanding Barriers to Linking Persons Living with HIV to Care in the United States: Findings from the Positive Charge Initiative

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OBJECTIVE: Research suggests that approximately 50% if people living with HIV/AIDS (PLWHA) are not engaged in regular HIV care (CDC, 2011; Gardner, McLees, Steiner, Del Rio, & Burman, 2011). Hundreds of thousands of persons in the U.S. have unmet care needs, and the AIDS Drug Assistance Program waiting lists are but the mere tip of the iceberg. Understanding the barriers PLWHA who are out-of-care face in accessing regular HIV care is necessary for the development of effective linkage to and retention in care programs.

METHODS: Supported by AIDS United, Positive Charge (PC) is an evidence-based linkage to care initiative with sites in New York, California, Chicago, Louisiana and North Carolina. While interventions at each site are different, all are based on a client-centered framework. Participants are PLWHA over the age of 18 who are either out-of-care or in danger of falling out-of-care. They were recruited through outreach, in-reach and referrals. At enrollment, participants completed an interviewer-administered questionnaire that included standardized questions about barriers to HIV care.

RESULTS: During its first year, PC enrolled 1,378 participants of whom 72% were male, 49% were black, and 53% were over 40 years of age. The mean number of years from first seropositive diagnosis was seven. Across sites, patterns in barriers to care emerged. The most commonly reported barriers were structural, including transportation, homelessness, and competing priorities. Drug use was reported as a barrier by 44% of clients in California and 33% of clients in North Carolina. HIV stigma continues to be an important barrier to care with 20% of PC participants

reporting that they avoided treatment because someone might find out about their HIV.

CONCLUSIONS: Out-of-care PLWHA face a range of structural and psychosocial barriers to care. In order to be successful, linkage-to-care programs must identify and address the barriers that keep PLWHA out-of-care. This finding has important implications for sustaining the Ryan White Care Act even after the full implementation of the Affordable Care Act in 2014.

ABSTRACT 152

Intervention Using Motivational Interviewing Improves Retention in HIV Care

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OBJECTIVE: Retention in care is a necessary aspect of adherence to HIV treatment. Recent data from the National Quality Center found that only 60% of individuals seen in reporting HIV clinics had a medical visit in each half of the previous 2 years, indicating less than optimal retention. This study tested a multidimensional intervention targeting retention and adherence-related information, motivation, and behavioral skills (IMB) through in-person and phone based motivational interviewing (MI). Results presented are specific to effects on retention in care.

METHODS: 99 HIV-positive individuals who had documented difficulties with medication and/or appointment adherence were randomly assigned to the MI intervention or to continue receiving standard of care. The intervention consisted of two face-to-face sessions and six telephone calls, to make it readily transferrable to a low-resourced clinic setting. The 8 sessions included HIV education, motivational interviewing (MI) and a video to promote social motivation, and training on a variety of skills (eg., patient-provider communication, calendars and use of other reminder and organizational devices). Outcomes included appointment retention as measured by a visit in each 4-month block of the year on study.



RESULTS: While there was no significant Intent to Treat effect, subgroup analysis for those who had a history of poor retention in HIV care (<1 visit in each 4-month block of the year prior to randomization; n = 60), dose effects were noted, where those who had at least three of the eight intervention contacts (n = 27) had significantly higher rates of optimal retention (at least one visit per 4 month period on study) and also did not experience a decline in retention in comparison to those with less or no intervention exposure (X2 = 7.70, p = .05, and F = 6.41, p= .01, respectively). Motivational Interviewing Treatment Integrity (MITI) coding was used throughout for training and reinforcement, and consistently ranged from beginner to competent level. Younger intervention arm participants and males tended to engage less in the intervention than older participants or females.

CONCLUSIONS: A multidimensional intervention significantly promoted retention in HIV care and reduced declines in retention for those who received minimal exposure (at least 3 out of the 8 contacts). Strategies to promote engagement in the intervention are explored as next steps for this promising intervention.

ABSTRACT 153

Responding to HIV Stigma and Lack of Data Collection within African Immigrant and Refugee Communities in the US

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OBJECTIVE: Issues African immigrants represent one of the fastest growing groups of immigrants to the US. Recent analysis of national HIV surveillance data has revealed that the percentage of annual HIV diagnoses among foreign-born people, including African immigrants, in the U.S. is growing. However, there is paucity of data on the African immigrant and refugee population in relation to HIV/AIDS and stigma. Scattered studies have pointed to high levels of stigma and negative attitude towards HIV/AIDS and those living with the disease. But

the lack of resources has limited the capacity of service providers and community organizations to provide HIV prevention services. Sometimes agencies working with this population end up closing their doors due to inability to sustain the organization. The Office of Minority Health Resource Center (OMHRC) has initiated a new project to educate the African community on what stigma is and how to prevent it by producing culturally appropriate curricula. Two versions of the curricula exist: one tailored to the needs of community and its members, and the other focuses on community-based organizations (CBOs) and service providers working with African immigrant populations. The OMHRC's National African Immigrant Project (NAIP) strives to improve the cultural, educational & outreach to Africans who are living with HIV and their family members in the United States. OMHRC has also produced a policy paper that addresses the gaps in data and make a compelling case of the need to disaggregate African immigrant and refugee data.

METHODS: Strategies/Methods The OMHRC National African Initiative project is providing train a trainer programs for the curricula in states with the highest number of African immigrants. Contacts are being initiated throughout the US with agencies, stakeholders, OMH regional offices and institutions of higher education eager to collaborate on this initiative. Work will be conducted by the Office of Minority Health Resource Center, which has a capacity building division that offers capacity development and

ABSTRACT 154

I. Bridging Cultural Competency with Comprehensive Sexual Health Services for African Clients

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OBJECTIVE: Hennepin County Ryan White Program engaged the Office of Minority Health Resource Center (OMHRC) to close this cultural competency gap with the program objectives: 1) preserving the values of



cultural competent services 2) improving clients' health outcomes and reducing HIV transmission risks, and 3) increasing providers' understanding and recognition of the importance of engaging clients in sexual health dialogue on sexual risk behavior and sexual identity.

METHODS: 1. A series of assessment meetings, trainings, and interviews were conducted with the providers to strategically identify challenges in conducting a comprehensive health/sexual assessment among African immigrant clients, assess challenges from the provider's perspective, and identify feasible (short-term and longterm) strategies to overcome such challenges. Thirty-five providers were engaged in the first step of this technical assistance process. Data was conducted and analyzed. A survey and training was conducted to prepare providers with recruiting clients to participate in the second step client engagement. Twenty-five African clients were expert interviewed to collect information around attitudes around sexual health assessment. Input from clients was recorded for analysis. The outcome included a data analysis report, a cultural competent sexual health assessment tool, and training of providers in how to utilize this tool.

RESULTS: Input from clients was recorded for analysis. The outcome included a data analysis report, a cultural competent sexual health assessment tool, and training of providers in how to utilize this tool.

CONCLUSIONS: The result is a sexual health assessment that meets both objectives. The next steps will include evaluation of providers utilization of this tool as well as follow-up interviews with clients identify ways the tool may be improved.

ABSTRACT 155

Assessing Organizational and Network Change for a Linkage to Care Intervention in Louisiana

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OBJECTIVE: Supported by AIDS United, Positive Charge (PC) is an evidence-based linkage to care initiative with sites in New York, California, Chicago, Louisiana and North Carolina. In Louisiana, at the time of this study, PC employed three strategies to link PLWHA into care: Disease Intervention Specialists (DIS), health navigation, and a pre-post release management. The PC network in Louisiana is comprised of ten organizations that work on linkage to care in New Orleans, Baton Rouge, and Lake Charles. This study assessed structural change at the organizational level and change in network density during the first year of PC in Louisiana.

METHODS: Two individuals from each of the ten partner organization were asked to participate in the study, one individual at a managerial level and one individual at the service delivery level (N=20). An on-line survey was used to collect quantitative data on organizational ties. Semi-structured one-on-one interviews qualitatively assessed internal structural change.

RESULTS: Prior to PC, the network had 24 ties and a density of .27. Approximately one year into the implementation of PC, the network had 56 ties and a density of .62. Organizations described internal structural changes such as hiring of new staff and sharing of staff. Organizations reported improvements to their internal systems of care delivery including their systems for intake, appointment making, referrals, and identification of PLWHA how are out of care.

CONCLUSIONS: The organizations that make up the Louisiana Positive Charge network have developed a highly interconnected network of HIV organizations. The network is dense and includes strong ties with HIV care



organizations, governmental public health organizations, and community-based organizations. The high level of intra- and inter- organizational collaboration has facilitated successful linkage to care in Louisiana.

ABSTRACT 156

Emergency Department Utilization and Hospital Admissions after a New Diagnosis of HIV

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OBJECTIVE: Rapid HIV testing is performed in many Emergency Departments (EDs); however, minimal data exists on subsequent hospital utilization of those diagnosed as a result of these programs. We assess the frequency with which newly diagnosed HIV patients (as a result of ED rapid HIV testing) visit the ED and are admitted to the hospital in the year following their diagnosis.

METHODS: Patients who tested positive for HIV in an urban ED between 5/31/2006 and 12/31/2010 were identified. Patients found to be known HIV positives (repeat testers) were eliminated from the data set. We collected demographic information, ED chief complaints, admission diagnoses, and CD4 counts/viral loads. We queried hospital records for subsequent ED visits and hospital admissions after initial diagnosis.

RESULTS: During the study period, 124 patients were newly diagnosed with HIV. The average age of newly diagnosed patients was 39.5 and the majority of these were minorities (57.6% black, 28% Hispanic). Most patients (33%) identified as self pay, followed by Medicaid (32.5%), commercial insurance (28%) and Medicare (6.5%). Of the 78/124 patients in whom laboratory data was available within one month of diagnosis, the mean CD4 count was 226 and mean viral load was 114,541. Out of these patients, 49/78 (63%) had AIDS on diagnosis. CD4 counts were inversely correlated to the rates of admission (r=-0.24), and AIDS patients had more admissions (mean 1.9) than patients who had CD4>200 (mean 1.1), p<0.001. Surprisingly, AIDS patients had less ED visits (mean 2.9)

compared to those with CD4>200 (mean 4.6), p<0.001. During the study period following their diagnosis, the majority of patients (62.4%) made at least one visit to the ED and 60% had at least one hospital admission. When evaluating exclusively the first year after diagnosis, 50.4% of patients had an additional ED visit (mean 1.9 visits), and 54.4% were admitted (mean admissions 0.91), compared to an annual ED admission rate of 21.4% in 2006 and 16.8% in 2010 for our hospital.

CONCLUSIONS: To our knowledge, this is the first data on ED utilization and hospital admissions for patients newly diagnosed with HIV as a result of an ED rapid HIV testing program. Patients with new diagnoses in the ED become frequent users of the ED and hospital services. The inverse correlation between CD4 count and rates of hospitalization as well as the correlation between a diagnosis of AIDS and hospitalization provide a public health and economic incentive for early diagnosis.

ABSTRACT 157

Increasing Access to Hepatitis and HIV Testing, Care and Treatment: Identifying Provider Training Needs and Services Provided

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OBJECTIVE: To improve provider capacity to provide HIV care given the burden of hepatitis among HIV positive persons, HealthHIV includes assessments of provider competency to offer hepatitis services in its programs. Using this assessment data, the objective of this study is to compare the hepatitis training needs of two groups — providers that offer HIV care and those that do not offer HIV care.

METHODS: In order to assess the needs of individual providers (MD, DO, NP, PA), 473 completed self-assessments were analyzed to assist with the construction of organizational training plans as part of clinical capacity building for 54 Community Health Centers in the AIDS Education and Training Centers National Center for HIV



Care in Minority Communities (AETC NCHCMC). 445 prescribing providers (MD, DO, NP, PA) also answered questions about the hepatitis services they provide, confidence providing such services, and training needs as part of HealthHIV's annual State of HIV in Primary Care survey. The survey reaches both credentialed HIV specialists and PCPs that provide HIV care and was fielded in October 2011.

RESULTS: Overall, prescribing providers participating in the AETC NCHCMC reported capacity to provide basic hepatitis B and C services, but did not report an ability to perform such services independently. Findings from the State of HIV in Primary Care include that those that offer HIV care (HCV testing — 86%) generally offer more hepatitis services than providers that do not offer HIV care (HCV testing — 50%). Both groups of providers are more likely to request training on hepatitis testing and treatment as compared to vaccination recommendations. Lastly, all types of providers are seeing more HIV/HCV co-infection than HIV co-infection with either hepatitis A or B.

CONCLUSIONS: Findings highlight the need to focus trainings on hepatitis testing and treatment in order to build the workforce capacity to provide these services. Specific training on HIV/HCV co-infection should be given to all providers since all are seeing increases in HIV/HCV co-infection. Also, it is worthwhile to specifically target non-HIV care providers for hepatitis training, as they are less likely to be providing hepatitis-related services to their HIV positive clients.

ABSTRACT 158

Hepatitis Outreach Network: A Practical Strategy for Hepatitis Screening with Linkage to Care in Foreign Born Communities

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OBJECTIVE: Many foreign-born persons in the U.S. are at high risk of chronic hepatitis B (HBV) and C (HCV)

infections, yet are not aware of their infection, and lack healthcare coverage or linkage to care.

METHODS: A unique partnership, the Hepatitis Outreach Network (HONE), combines the expertise and resources of the Mount Sinai School of Medicine, the NYC Department of Health and Mental Hygiene, and community-based organizations, to provide education and screening in communities with high prevalence of chronic viral hepatitis. Importantly, HONE provides linkage to care. Comprehensive HBV and HCV viral screening identifies infected patients, who then receive further evaluation from either local or Mount Sinai physicians, combined with patient-navigators who organize follow-up visits.

RESULTS: Of 1603 persons screened, 76 had HBV and 75 had HCV. Importantly, screening for HCV based on traditional risk factors would have missed 67% of those who tested positive. Of the 76 persons with HCV infection, 49 (64%) received a medical evaluation (26 with local providers and 23 at Mount Sinai). Of the 49 HCV-infected persons evaluated, treatment was recommended in 11 and begun in 8 (73%). Of the 76 persons with HBV infection, 43 (57%) received a medical evaluation (31 with local providers and 12 at Mount Sinai). Of the 43 HBV-infected persons evaluated, treatment was recommended and begun in 5 (100%).

CONCLUSIONS: HONE has successfully established novel proof of concept for identifying HBV and HCV infections in foreign-born persons through use of several unique elements that effectively link them to care.

ABSTRACT 159

HIV/AIDS and Hepatitis Health Department Collaborations with Community Health Centers: Successes and Challenges

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OBJECTIVE: The purpose of this national assessment was to examine the level of collaborations between State



Health Department HIV/AIDS and hepatitis programs (HD) and Community Health Centers (CHCs). In light of the passage of Affordable Care Act and the release of the National HIV/AIDS Strategy, there is a need and desire to begin to focus on identifying collaborative best practices between the health departments and the CHCs, as well as with their Primary Care Associations and to identify and strategize to overcome barriers that may still exist.

METHODS: The National Alliance of State and Territorial AIDS Directors (NASTAD) examined the level of collaboration between HDs and CHCs through a one-day consultation and a nationwide online survey of all state and territorial health departments in 2011. The consultation was an opportunity for HDs, CHCs and federal partners to come together and identify "models of excellence," opportunities to collaborate, the factors driving the need for collaboration and barriers and challenges to collaboration. The online survey was designed to substantiate the themes from the consultation.

RESULTS: Out of the 54 state and territorial HDs, 43 responded (80 percent response rate). Thirty-six HDs (84 percent) reported that they are collaborating with CHCs, while seven (16 percent) stated they do not collaborate directly with CHCs. Out of the 1200 CHCs across the country, approximately 130 Ryan White Part C funded CHCs and 151 non-Ryan White Part C funded CHCs are involved collaboratively with HDs. Most collaboration is primarily focused on HIV/AIDS prevention and testing (84 percent) and HIV/AIDS treatment services (81 percent) versus hepatitis prevention and testing (56 percent) and hepatitis treatment services (25 percent). The level of collaboration varies from contractual support (69 percent), provide technical assistance (67 percent), referral system (61 percent), to data sharing (36 percent).

CONCLUSIONS: Obstacles are present that may hinder efforts to build collaborative relationships. Capacity and resources of both HDs and CHCs are central to the success or failure of most relationships. Both HDs and CHCs need continue to communicate better and build more effective relationships. With the implementation of Health Care Reform, and with the goals of the National HIV/AIDS Strategy and the Viral Hepatitis Action Plan, effective leadership and the ability to take risks are valuable principles for achieving effective collaborations.

ABSTRACT 160

Evaluation of a Highly Intensive, Comprehensive, and Individualized Linkage to Care Pilot Intervention in an Emergency Department HIV Screening Program

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OBJECTIVE: Linkage to HIV medical care is often difficult, particularly for disadvantaged populations. Emergency departments (EDs) commonly encounter disadvantaged populations without other access to healthcare, including those newly diagnosed with HIV and those previously diagnosed and not in care. We tested the acceptability and feasibility of a multi-component, comprehensive, individualized linkage intervention that was designed to overcome the multitude of barriers inhibiting linkage to care.

METHODS: The evaluation was conducted from May to November 2012 within a lower prevalence urban academic medical center at an ED with 90,000 visits annually and an infectious diseases clinic serving 1,800 patients. Program evaluation included 1) survey of HIV+ individuals about their perceptions of the proposed intervention, 2) focus groups with HIV+ persons, and 3) linkage outcomes from a pilot of the intervention. The intervention included a comprehensive needs assessment of client barriers to accessing care, including inability or unwillingness to access care, followed by a menu of component interventions selected based on need and patient willingness to participate. Intervention options, implemented by trained personnel, included motivational interviewing, case management, and support from an HIV+ peer-navigator. The intervention lasted up to 90 days or until linkage was achieved.

RESULTS: Surveys were completed by 71 HIV+ individuals of whom 68 were in care. Age range was 21–63, 63% were black. Most believed that at the time of their diagnosis they would have chosen to participate



in the intervention as follows: case management (96%), motivational interviewing (89%), and peer navigation (79%). Focus groups were also highly supportive of the proposed intervention. Ten patients participated in the intervention; 8 accepted motivational interviewing, 6 accepted case management and 6 accepted peer navigation. Age ranged from 18 to 54; 9 were black, 3 were female, 6 were previously diagnosed HIV+ but were not in care, and 4 were newly diagnosed. All faced numerous barriers to care including: homelessness, psychiatric illness, substance abuse, and rejection of the diagnosis. Eight patients were successfully linked within 90 days. One patient who had moved out of state during the linkage period was linked to care at 113 days.

CONCLUSIONS: Intensive and comprehensive linkage approaches may be efficacious for newly and previously diagnosed people living with HIV. However, linkage must be individualized as patients differ in their needs and acceptance of different linkage intervention elements.

ABSTRACT 161

Using Surveillance Data to Identify HIV-Infected Persons Out-of-Care in New York City and Offer Linkage to Care and HIV Partner Services

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OBJECTIVE: Persons living with HIV (PLWH) require regular medical care to achieve a consistently suppressed viral load (VL) and its associated benefits of reduced morbidity, mortality, and probability of sexual transmission to HIV-uninfected partners. Only 51% of PLWH in the US, however, are retained in care. In 2008, the NYC health department began using its HIV Surveillance Registry (HSR) to identify out-of-care (OOC) PLWH, re-engage them in care, and offer partner services.

METHODS: A CD4 or VL report in HSR was considered a proxy for receipt of care. PLWH were considered OOC and prioritized for outreach if lacking care during the previous 9 months and had a NYC residential address at last report in HSR. Located OOC persons were offered partner and linkage-to-care services. Reasons for OOC were ascertained, and partners were notified and tested for HIV. Return-to-care was confirmed using HSR.

RESULTS: From 7/2008 to 12/2010, 797 PLWH were prioritized for outreach; 113 (14%) were never located. Of 684 who were located, 229 (33%) were actually current to care in NYC, 30 (5%) had moved or were incarcerated, 16 (2%) had died, and 409 (60%) were verified OOC. Most verified OOC were black or Hispanic (97%), USborn (73%), male (55%), or 40-49 years old (42%). Once located, 315/414 (77%) expressed willingness to return to care and received clinic appointments; 240/327 (76%) were confirmed as having returned to care. Among the 240 returned-to-care PLWH, most (95%) had a VL and almost half (49%) had a CD4 drawn within 3 months of their first return to care visit. More than half of those with a CD4 had a value < 200 upon return-to-care, and two-thirds had a CD4 less than 350. Most PLWH LTFU who were returned to care had a VL=10,000 copies/mL upon returnto-care and 40 (18%) had an initial VL >100,000 copies/ mL. Among the 161 who provided reasons for being OOC, the most commonly reported was "felt well" (41%). Only 52/409 (13%) OOC PLWH named partners; 37 (57%) of 65 named partners were located, and 3 (20%) of 22 partners with unknown or negative HIV serostatus were newlydiagnosed with HIV.

CONCLUSIONS: Health department-based outreach initiatives utilizing surveillance registries can successfully re-engage OOC PLWH in medical care, but partner notification among OOC may yield few new HIV diagnoses.



ABSTRACT 162

Support for the Information, Motivation, Behavioral Skills-Model Situated to Retention in HIV-Care (sIMB) in Identifying Theory-Based Intervention Targets to Provide Point-of-Care Support for Sustained Retention in HIV Medical Care

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OBJECTIVE: A measure of situated Information, Motivation and Behavioral Skills retention in HIV-care (sIMB-RIC) was developed and administered to evaluate the model's ability to characterize recent gaps in HIV-care (> 3 months between medical visits) and to guide development of point-of-care intervention strategies to reduce HIV-care gaps and promote sustained retention. Point-of-care strategies to promote sustained retention in HIV-care are important additions to clinical care services.

METHODS: A cross-sectional survey of 101 HIV-positive patients (52 male, 33.7% detectable VL) experienced with HIV (M= 16.26 years HIV-positive) attending an innercity integrated primary care clinic completed the measure in English or Spanish via in-person interview. Theory-based subscales were calculated and used to test the ability of the model to characterize the total number of days spent in an HIV-care gap over the previous 18 months; 44.6% had gapped in last 18 months.

RESULTS: Evaluation of information items produced an information subscale (alpha= .773, k= 10) that assessed awareness of and knowledge about care-related resources (in general and in specific contexts such as depression or drug use), biomarkers monitored in HIV-care, accuracy (or lack thereof) of relying on subjective-physical health to signal need for HIV-care, and an HIV-diagnosis emotional adjustment process. The motivation items reflected the two theory-based factors: personal motivation (alpha= .684, k= 7) reflecting attitudes towards engaging in care under various conditions and contexts (e.g., when under emotional distress or anticipating negative outcomes from

care attendance) and social motivation (alpha= .763, k= 11), reflecting attitudes towards social facilitators and barriers to attending HIV-care. Evaluation of responses to behavioral skills items produced two scales; intrapersonal behavioral skills (alpha= .831, k= 5) reflecting strategies for managing HIV-affect, coping, and adjustment to diagnosis and interpersonal behavioral skills (alpha= .856, k= 11) reflecting strategies for navigating the care system and coordination of care in the context of competing priorities. The overall fit of these scales in characterizing recent gaps in HIV-care, where information and motivation scales are mediated by (work through) the behavioral skills scales produced a good fitting model (Chi Square(4)= 3.265, p= .5146; RMSEA= .000; CFA= 1.000).

CONCLUSIONS: Tools to prevent or reduce gaps in care are necessary clinical strategies to maximize individual and public health outcomes. Interventions targeting an individual's retention-related information, motivation and behavioral skills contextualized by the systems-, affective-, and structural-level factors influencing individual patient behavior may be very valuable as point-of-care delivered support for sustained retention in HIV-care.

ABSTRACT 163

An Innovation in Provider HIV Education: University of New Mexico (UNM) Project ECHO (Extension for Community Healthcare Outcomes) Telehealth & New Mexico AIDS Education and Training Center (NM AETC) HIV Clinic

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OBJECTIVE: The 2010 National HIV/AIDS Strategy calls for programs such as the AETCs to expand training to address provider-associated factors that affect HIV treatment adherence. To address this call, we implemented an innovative telehealth strategy to reach providers in rural and underserved areas with limited HIV specialty



training. We recruited interested providers with the goal of increasing workforce capacity of rural and underserved providers to improve health outcomes of people living with HIV/AIDS (PLWHA).

METHODS: UNM's Project ECHO model was used to reach providers throughout NM treating PLWHA with the aim to improve provider knowledge and self-efficacy to provide care to PLWHA by: using technology to leverage specialized resources; training on HIV guidelines; casebased learning, and outcomes monitoring. Guided by expert consultation from the Project ECHO-NMAETC team, community-based providers are able to treat PLWHA, while rapidly gaining working knowledge of best care practices and increasing self-efficacy to treat this chronic and complex disease. Program evaluation included pre and post-test surveys to record demographic information and to assess changes in HIV-knowledge and self-efficacy. Providers were asked to report their perceptions of the effectiveness of the program in the postsurvey.

RESULTS: From 10/2010–9/2011, 48 Project ECHO Telehealth HIV weekly clinics were held with 226 unique participants (including physicians, midlevel providers, pharmacists, nurses, counselors, social workers, community health workers), averaging 36 per session. The majority of survey responders (78%) provide direct care to PLWHA, and 67.6% presented a clinical case during a session. HIV knowledge test scores improved from 68.5% to 76.4% (p= 0.03). Ninety-five percent reported that they used the information that they received from attending the clinics and 89% reported that they believed attending the sessions influenced their practice. Participants reported increased self-efficacy to treat PLWHA. Perceived benefits of participating in the clinics included readily available expert consultation and continual practice.

CONCLUSIONS: Project ECHO Telehealth-NMAETC HIV Clinics are an effective way to increase workforce capacity to care for PLWHA in underserved areas. We continue to hold weekly clinics and have expanded the evaluation of the program to further assess health and provider education outcome measures.

ABSTRACT 164

Project ECHO: Outcomes of Hepatitis C Treatment by Primary Care Providers

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OBJECTIVE: The Extension for Community Healthcare Outcomes (ECHO) model was developed to improve access to best practice care for complex health problems such as hepatitis C virus (HCV) infection for underserved populations and minorities in rural areas and prisons. Using videoconferencing technology, best practice protocols, and case based learning, ECHO trains and supports primary care providers to develop knowledge and self-efficacy to deliver appropriate care for patients with complex diseases.

METHODS: A prospective cohort study compared the efficacy of treatment of HCV at the University of New Mexico (UNM) HCV clinic to treatment by primary care clinicians at 21 ECHO sites in New Mexico. A total of 407 treatment naive patients with chronic HCV were enrolled. The primary end point was a sustained viral response (SVR) defined as undetectable virus 24 weeks after the end of therapy.

RESULTS: The rate of SVR for UNM and ECHO sites was 57.5% (84 of 146) and 58.2% (152 of 261 patients), respectively. In genotype 1 infection the SVR rate was 45.8% (38 of 83) at UNM and 49.7% (73 of 147) at ECHO (P=0.572). More ECHO patients were minorities, 67.8% (166 of 261) versus 49.3% (72 of 146) at UNM (P=0.001).

CONCLUSIONS: This study demonstrates that the ECHO model is an effective way to treat HCV in rural and underserved communities and expands access to treatment for minorities. By implementing this model other states and nations can treat many more patients with HCV, thereby preventing an enormous burden of illness and death.



ABSTRACT 165

A Comprehensive, Multilevel Approach to Engaging and Retaining Marginalized Heterosexual Black Males in Wards 6, 7, and 8 of the District of Columbia in HIV Care

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OBJECTIVE: The Community Education Group's HIV testing and linkage program is designed to increase the proportion of individuals in high HIV prevalence neighborhoods who know their status; identify seropositive individuals who are not in care; and engage and retain seropositive individuals in HIV care.

METHODS: The model incorporates tasks associated identified as needed for successful implementation of the National HIV/AIDS Strategy (NHAS) — early identification; linking and retaining individuals in HIV care; and assessing the impact of multilevel interventions (Morin, S. 2011). Multiple partnerships are formed with agencies and organizations that serve the community. Individuals indigenous to the target communities are recruited and trained as community health workers. Behavioral theory based target outreach is used to encourage HIV testing. Social network testing using mobile units is utilized to identify individuals of greatest risk. Individuals with preliminary reactive results to rapid testing are immediately escorted by trained linkage workers to medical partner organizations for confirmatory testing and enrollment in primary medical care. Through collaborative partnerships, linkage workers receive notification of confirmed reactive results along with individuals. upon receipt of confirmed reactive results, linkage workers provide follow-up and support that includes appointment reminders and transportation to medical appointments, assistance securing necessary documents, adherence counseling, and referrals and/or linkages to other support services. Additionally, linkage workers enroll individuals in substance abuse treatment services through a partnership with the city's Addiction Prevention and Recovery Agency to improve treatment

retention.Quantitative and qualitative data were collected from collaborating medical and core service providers, testing sites, worker logs, and clients over a three year period (2008–2011). Comparative analysis of counseling and testing data, linages, positivity rates, level of effort, medical appointments kept, CD4 and viral load, and retention in HIV care to determine increases in the proportion of people with HIV identified, linked to, and retained in HIV care.

RESULTS: Incremental increases were noted in testing, linkage, and retention. Group changes noted in health indicators:

	2008-2009	2009-2010	2010-2011
Tested	2824	6487 (129.7% increase)	10,480 (61.6% increase)
Preliminary Positive	75	153 (104% increase)	175 (14.4% increase)
Confirmed Positive	43	127	146 (14.9% increase)
Linked to Primary Care ¹	113	145	120
Retained in Primary Care (90 days)	•	117 (80.7% linked)	140 (90.3% linked)

	Initial	6 month Follow-up
Total Viral Load	405,310/mL	146,263/mL (177.1% decrease)
Average CD4 Count	484	650 (34.4% increase)

Level of effort decreased 73.9%, the cost² decreased 140%.

CONCLUSIONS: Approaches that combine strategies informed by social and behavioral theories with aggressive testing, medical treatment, and tracking can be successfully implemented and can improve health outcomes of individuals living with HIV in resource poor communities.

¹ Linked to primary care numbers include individuals who presented with a confirmed positive diagnosis but had dropped out of care (or never in care) and were re-linked to primary care

² Per patient cost to link and retain individuals in care (staff effort and transportation costs)



Author Index

Author	Abstract	Page	Author	Abstract	Page
Amico, K	90	100	Fatima, A	27	55
Aponte, E	91, 125	100, 128	Felsen, U	28	55
Arya, M	1, 2	37	Fichtenbaum, C	100	107
Asher, A	92,93	101, 102	Fitzpatrick, L	29, 30, 135	56, 57, 134
Backus, L	3	38	Flanigan, C	31	58
Baker, L	4	39	Foley, R		135
Barnes, A	107	114	Frederick, L		
Barocas, J	5,6	39, 40	Fuld, J	32	58
Baugh, B	7	41	Futterman, D	33	59
Beckwith, C	8	42	Gaydos, C	34	60
Benitez, J	9	42	Gibson, S	35	60
Bennett-Barnes, E	94, 108	103, 114	Gilgenberg, K		137
Bennett, M	126	128	Giordano, T	140	138
Bentsen, C	10	43	Glick, N	141	138
Brennan, M	11	44	Gove, J	142	
Bryant, T	127	129	Green, P	36	61
Burkett, B	12	45	Hager, M	143	140
Buzi, R	13	45	Haggerty, E	101	107
Cabangun, B	14	46	Haukoos, J	37	62
Cahill, S	95	103	Hsieh, Y		63
Carlson, R	15	47	Iscoe, M	40, 41, 42	64, 65
Carrel, J	128	130	Jewett, A	43	66
Castel, A	96,97	104, 105	Jia, Y	109, 110, 144	115, 116, 141
Chapman, M	16	47	Johnson, A	145, 146	141, 142
Chovnick, G	17	48	Jordan, A		143
Church, D	129, 130	130, 131	Juday, T	148, 149	143, 144
Clark, I	18	49	Katz, D	44, 45	67
Cobb, B	19	49	Keeshin, S	46	68
Cohen, C	20	50	Khatri, K		145
Cooperman, N	21	51	Kim, J		116, 146
Cowan, E	22,98	51, 105	King, A	47, 112, 113	69, 117
Czarnogorski, M	23, 131	52, 132	K Koester, K	114	118
Dan, C	24	53	Klein, P	48	69
Darden, L	132	132	Koechlin, K		70, 71
Davila, J	133	133	Konkle-Parker, D		146
Dawson, L	25	53	Korto, M	153, 154	147
Egan, D	26	54	Krakower, D	51, 102	71, 108
Ellwood, M	134	134	Kwakwa, H	52	72
El-Shamaa, M	99	106	Lansky, A	115	119



Author Index Cont...

Author	Abstract	Page	Author	Abstract	Page
Laufer, F	116	119	Raben, D	70	85
Lopez, D	53	73	Ramachandran, S	71, 105	85, 110
Lyons, M	54	73	Randall, L	72, 159	86, 150
Mahajan, R	55	74	Rein, D	73	87
Maulsby, C	155	148	Rodriguez, C	74	87
McFarlane, J	56	75	Rodriguez, V	75	88
Merchant, R	57, 117	75, 120	Ruffner, A	160	151
Messenger, N	58	76	Shepard, C	122, 161	124, 152
Morales-Reid, B	59	77	Skillicorn, J	76	89
Moreno-Walton, L .	60	77	Smith, B	77	89
Morgan, R	118	121	Smith, L	162	153
Murphy, J	103	109	Soto, T	78	90
Muthambi, B	119, 120	121, 122	Stekler, J	79	91
Newells, R	104	110	Tai, M	80	92
Nguyen, N	156	149	Teferi, G	81	92
O'Connor, G	61	78	Thornton, K	106, 163, 164	111, 153, 154
Opoku, J	121	123	Trooskin, S	82	93
Orose, J	157	149	Vermoesen, T	83	94
Page, K	62	79	Wedeles, J	123	124
Pasalar, S	63	80	Wilbur, L	84	94
Paulsen, R	64	80	Willis, S	124	125
Payne, J	65	81	Wong, V	85	95
Penrose, T	66	82	Woolard, R	86	96
Perumalswami, P	158	150	Wroblewski, K	87	96
Peterson, J	67	82	Young, A	165	155
Pham, T	68	83	Young, T	88	97
Philippou, C	69	84	Zanoni, B	89	98

