Partnerships to Increase Success in the Continuum of HIV Care in Houston, TX

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ECHPP-1





Key Personnel

Baylor College of Medicine Health Services Research and Development Center of Excellence

Tom Giordano, MD, MPH (Lead Investigator)

Jessica Davila, PhD (Epidemiologist)

G. John Chen, MD, PhD (Health Economist)

Monisha Arya, MD, MPH (Routine HIV Testing) **City of Houston** Bureau of HIV/STD and Viral Hepatitis Prevention

Marlene McNeese-Ward (Bureau Chief)

Camden Hallmark, MPH (Data Analyst)

Christina Shaw (Sr. Health Planner)





Aims

- Conduct a local resource capacity survey on HIV prevention and linkage to care activities
- Assess effectiveness and cost effectiveness of local HIV testing activities
- Establish a Scientific Advisory Council to advise the City of Houston (COH) on HIV activities





Local HIV Survey: Goals

Broad survey of organizations funded and <u>not</u> funded by COH

- Regional snapshot of testing and linkage to care activities
- Find out *how much* HIV testing is conducted
- Understand the *current methods* of HIV testing and linkage to care in a wide spectrum of organizations
 - Who tests with what kind of test, and where do they test?
 - How are positive patients linked to care?
 - Policies, procedures, protocols
- Identify possible areas of further collaboration to improve HIV Prevention and Care
 - Barriers in providing testing and linkage





Survey Methodology & Participants

Organization identification

- Exhaustive list of known HIV testing organizations, substance abuse treatment centers, homeless shelters, universities
 - List prioritized using stakeholder input

Organizational-level survey participants

- Included CBOs, clinics, hospitals, universities, substance abuse treatment centers, and homeless shelters
- Private and public entities
- Multiple funding sources:
 - COH, SAMHSA, DSHS, private grants, etc.
- In-person interviews using standardized survey tool with scripted probing
 - Initial contact was with HIV Program Directors, Nurse Managers, and/or Lab Directors
 - Phone as alternative to in-person interview
 - All surveys conducted by one interviewer





Goal 1: How Much Testing?

- Attempted to reach 84 organizations
- Survey completed by 55 organizations (65%) that represent at least 131 facilities
- 115 of 131 facilities (88%) conduct HIV testing
- 43 of 55 organizations (78%) conduct HIV testing
- Number of HIV tests performed in 2011
 - 210,565 total tests
 - COH-funded organizations conducted 114,286 tests (54% of all tests)
 COH funded 94% (107,237) of these tests
 - Organizations <u>not</u> funded for testing by COH conducted 96,279 tests (46% of total tests in survey)
 - 40,910 rapid tests (23 organizations; data from 21)
 - Mean= 1948.1 (min. 4, max. 9945)
 - 169,635 standard tests (36 organizations; data from 34)
 - Mean= 4989.3 tests (min. 1.5, max. 46590)





Goal 2: Current Methods of HIV Testing and Linkage

Approaches for Consent

- Opt-in only= 49%
- Both opt-in and opt-out= 44%
- Opt-out only= 7%
- 5 of 22 (23%) who use both optout and opt-in <u>only</u> use opt-out during pregnancy, as required by TX statute
- After reclassifying them as opt-in:
 - 40% use opt-out in non-pregnant populations
 - 60% use only opt-in approach





Goal 2: Current Methods of HIV Testing and Linkage

Facilitate linkage into HIV medical care?

Active linkage= 50

Passive linkage= 3

No linkage= 2

60% of organizations use social workers/case managers to facilitate entry







Goal 3: Possible Areas of Further Collaboration to Increase Testing

Barriers to Providing HIV Testing

N	o barrier				Major barrier
11a. Amount of dedicated funding	-{ 1	2	\bigcirc	4	5 }-
11b. Ability to charge/reimburse	$\{\mathbf{O}\}$	2	3	4	5
11c. HIV not a problem in our client population	$\{\mathbf{O}\}$	2	3	4	5
11d. Client refusal	$\{\mathbf{O}\}$	2	3	4	5
11e. Facility doesn't want to be known as HIV prov		2	3	4	5
11f. Facilities/space		2	3	4	5
11g. Availability of Laboratory services	{ O }	2	3	4	5 — Madian
11h. Leadership Resistance	-{ O }	2	3	4	5 e Median
 Unsure where to refer clients identified as HIV 	+-{ D }	2	3	4	5 = IQR
11j. Obtaining informed consent	-{ O }	2	3	4	5
11k. Negative experience with testing	$\{\mathbf{O}\}$	2	3	4	5
111. Requirement to provide counseling with testing	s -{ D	2	3	4	5
11m. Requirement to notify clients of results	-{•	2	3	4	5
11n. Staff time	$\{\mathbf{O}\}$	2	3	4	5
11o. Staff size	-{①	2	3	4	5
11p. Staff knowledge/skill/experience		2	3	4	5
11q. Staff cultural competency/comfort with issue	-{ D _	2	3	4	5
11r. Staff resistance	$\{\mathbf{O}\}$	2	3	4	5
11s. Other, specify	1	2	3	- 4	(n= 24)

Other barriers most frequently cited:



Managing data attached to grant funding, barriers for patients (stigma, demand for test), and training staff

Houston Department of Health and Human Services

(n= 55)

Goal 3: Possible Areas of Further Collaboration to Increase Testing

Barriers to Providing/Expanding Routine, Opt-Out HIV Testing



Other barriers most frequently cited:



Managing data attached to grant funding (tied to positivity rate, managing paperwork), organization focuses on something else that is higher priority (like mental health)



Goal 3: Possible Areas of Further Collaboration to Increase Linkage

Barriers to Facilitating Linkage to HIV Medical Care

N	o barrier				Major barrier
21a. Amount of dedicated funding	\neg	2	3	4	5
for the facilitation process					
21b. Ability to charge/reimburse	\neg	2	3	4	5
for the facilitation process	_	_			
21c. Client refusal	\neg	2	3	4	5
21d. Facilities/space	$\{\mathbf{O}\}$	2	3	4	5
21e. Leadership Resistance	$\{\mathbf{Q}\}$	2	3	4	5 🔵 = Median
21f. No place to refer clients identified as HIV+	$\{\mathbf{\Psi}\}$	2	3	4	5 = IOR
21g. No established procedure or protocol in place	-{ Q }	2	3	4	5 2 3 4 2 1 2
21h. Past negative experience with linking client to	care 1	2 -	3	4	5
21i. Requirement to notify clients of HIV+ result	-{ Q }-	2	3	4	5
21j. Staff time	$\{\Psi^{}\}$	2	3	4	5
21k. Staff size	D }-	2	3 -	4	5
211. Staff knowledge/skill/experience		2 }-	3	4	5
21m. Staff cultural competency/comfort with issue	-{ Q }-	2	3	4	5
21n. Staff resistance	{ \ }	2	3	4	5
21o. Other, specify	1	2 -	_3	4	5 _ (n= 28)

Other barriers most frequently cited:



Patient readiness for care (substance abuse, denial), transportation for clients, "chronically" out of care (retention), ability to contact client, issues with sites clients referred to (wait times, eligibility, quality of care)



(n = 50)

Other Findings

- Procedures and protocols dynamic
- Some organizations have no desire for opt-out testing as it will necessitate policy and procedure change
 - Testing is important but not the agency's focus
- Definitions of testing and care terminology
 - "Routine, opt-out"
 - Routine ≠ Everyone
 - Opt-out ≠ Mandatory
 - "Rapid testing"
 - Rapid testing (kits) ≠ results rapidly from lab
 - "High risk populations"
 - High risk populations \neq all sexually active persons
 - "Pre/post-test counseling"
 - **\square** Pre/post-test counseling \neq doctor answering patient questions





Survey Limitations

Convenience sample

 Attention given to large facilities, known HIV testing sites, and substance abuse treatment centers

Self-reported data

- Understanding of survey purpose and social desirability
 - Not an opportunity for COH funding or an audit of contractors
- From the perspective of individual answering survey
- Access to central contact for HIV testing and linkage activities
 - Testing and linkage policies and procedures may vary physician to physician or department to department (or even for different funding streams!)

Willingness to participate

- 4 (5%) organizations declined: 2 major organizations, 2 small organizations
- 25 (30%) organizations did not reply to outreach





Survey Benefits

Extensive data collected

- Obtained protocols and policies for 31% of organizations
- Snapshot of jurisdictional activities for those that are not the "usual suspects"
- Learn about current collaborations in community
 - Many sites bring in another organization to conduct testing in their facility
- Identified technical assistance needs
- Better understand barriers to HIV testing/linkage
- Stimulated discussion in facilities on HIV issues and HIV testing and linkage to care capacity





- □ Goal: Inform local resource allocation
- Data Source: Summary data from COH-funded programs
- Compared targeted, community-based outreach HIV testing programs to routine, opt-out HIV testing programs
 - Effectiveness (i.e., yield of positives)
 - Cost per yield

Examined from public payer perspective (i.e., only considered COH costs, which represent CDC funds passed through COH and Texas DSHS).





Average Testing Cost by

Routine, Opt-out Providers, by Year					Targeted Testing Providers, by Year						
Year	# Tests	# New Pos.	\$∕ Test	\$∕ New Pos.		Year	# Tests	# New Pos.	\$/ Test	\$/ New Pos.	
2008	17,670	170	\$47	\$4,892		2008	4,821	52	\$180	\$16,713	
2009	66,010	536	\$10	\$1,230		2009	8,932	77	\$97	\$11,286	
2010	91,679	582	\$15	\$2,329		2010	4,853	74	\$179	\$11,744	
Total	175,359	1,315	\$16	\$2,190		Total	18,606	203	\$140	\$12,843	



Average Testing Cost by



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Average Testing Cost of Routine, Opt-out Providers, by Site, 2010

Average Testing Cost by Targeted Testing Providers, by Site, 2010

Site	# Tests	# New Pos.	\$/ Test	\$/ New Pos.	Site	# Tests	# New Pos.	\$ /Test	\$/ New Pos.
			••		Site 1	265	2	\$209	\$27,750
Site 1	e 1 60,881 240 \$8 \$2,111	Site 2	617	21	\$92	\$2,695			
Site 2	3,564	3,564 44	\$59	\$4,772	Site 3	1010	5	\$155	\$31,392
					Site 4	310	6	\$242	\$12,500
Site 3	ce 3 27,234 298 \$14 \$1,28	\$1,285	Site 5	839	19	\$179	\$7,895		
					Site 6	318	1	\$236	\$75,000
Total	91,679	582	\$15	\$2,329	Site 7	743	9	\$202	\$16,667
					Site 8	751	11	\$200	\$13,636
					Total	4,853	74	\$179	\$11,744



Limitations

- Any benefits of counseling provided in targeted testing are not captured
- Does not account for in-kind support (substantial at routine, opt-out sites)
- Routine, opt-out much higher volume than targeted sites, usually with greater staff support
- Only includes public payer costs
- Data show relative differences in testing strategy and sites
- Data show high yield and relative cost effectiveness of routine, opt-out approach
- Prompted COH to prioritize subsequent studies on cost effectiveness and scalability using mathematical modeling





Scientific Advisory Council

- National HIV/AIDS Strategy demands comprehensive view of HIV prevention, diagnosis, and treatment
- Currently the COH has no regular access to outside scientific expertise
 - In-house expertise includes epidemiology, public health, and HIV prevention
- Recruited external advisors to offer informal advice monthly to the COH





Scientific Advisory Council

Council members are representatives of diverse specialties

City of Houston

-HIV Prevention (8) -Laboratory Science (2) -Epidemiology (1)

Academia

- -Behavioral Science (7)
- -Infectious Disease (4)
- -Health Services Research (4)
- -Epidemiology (4)
- -Laboratory Science (2)
- -Health Economics (1)
- -Biostatistics (1)
- -Emergency Medicine (1)

Other Partners

-Local HIV Service Provider (1)-Local HIV Clinical Provider (1)-Local Government Organization (1)





Scientific Advisory Council

Council Activities

HIP HOP for HIV

- Reviewed evaluation tool (pre/post-test of knowledge and attitudes)
- Evaluated structure, consistency, and scales of questions on tool
- Suggested modifications and sources for additional questions

HIV Elimination Project

- Feedback on proposed revision to HIV diagnostic testing algorithm
- Application of strategies for National Plan to Eliminate Syphilis
- Provided guidance around future data analysis

Enhanced Linkage to Care Initiative

- Helped define roles of new staff for project activities
- Suggested models of system navigation to consider

Syphilis Outbreak Response

- Shared ways to engage providers regarding outbreak
- Proposed outreach and intervention activities for consumers (ads using social media; internet interventions; campaigns targeting MSM)





ECHPP-2





Key Personnel

Baylor College of Medicine Health Services Research and Development Center of Excellence

Tom Giordano, MD, MPH (Lead Investigator)

Jessica Davila, PhD (Epidemiologist)

Charlene Flash, MD, MPH (Underserved Populations)

Bich Dang, MD (Patient Satisfaction)

Siavash Pasalar, PhD (Data Analyst, Harris Health System) **City of Houston** Bureau of HIV/STD and Viral Hepatitis Prevention

Marlene McNeese-Ward (Bureau Chief)

Camden Hallmark, MPH (Data Analyst)





Aims

- Examine temporal changes in linkage to care, retention in care, and viral suppression of HIV-infected persons identified by the Harris Health System routine, universal, opt-out HIV testing program
 - Hypothesis: the Harris Health System routine testing program will demonstrate improvements over time in linkage and retention in care rates for HIV-infected persons
- Assess determinants of poor retention in care among patients newly entering care at Thomas Street Health Center
 - Hypothesis: Patient satisfaction with the initial clinic visit will predict early retention in care
- Maintain the Scientific Advisory Council to advise COH HIV activities





Questions ?



