

2015

HIV-Related Health Disparities



HIV-Related Health Disparities

Special Emphasis Workgroup

Washington State Department of Health

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TABLE OF CONTENTS

Overview	2
Approach	3
Key Findings	4
Summary	11
Recommendation.....	14
Members	15
DOH Staff.....	15
References.....	16

OVERVIEW

Vision for the National HIV/AIDS Strategy

“The United States will become a place where new HIV infections are rare and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination.”

HIV-related health disparities do not exist in isolation. They are part of a larger system of inequities which exist. They are compounded and exacerbated by one’s daily experiences of injustice. As the HIV-Related Health Disparities Special Emphasis Workgroup (Health Disparities SEW) convened as part of the Washington State HIV Planning System we recognize our role in identifying and proposing strategies directly related to the provision of HIV related services. However, it is our belief that achieving the vision described in the National HIV /AIDS Strategy will require a paradigm shift. It will require a social justice approach that looks not only at specific indicators of inequality but also attempts to address issues broadly associated with the social determinants of health.

APPROACH

The HIV-Related Health Disparities SEW met three times between December 2014 and February 2015. Each meeting was held in person. Data and articles were reviewed in between meetings. This report is a summary of the group's analyses and recommendations for next steps.

HIV surveillance data were used to identify potential disparities. The analysis was limited to racial/ethnic groups that comprise at least 5% of the HIV morbidity in Washington: non-Hispanic Whites, non-Hispanic Blacks, and Hispanics. HIV-related health disparities were categorized by population and stages of the care continuum.

Topics of discussion

- Why do HIV disparities matter?
- How to define disparities?
- Which HIV disparities matter most?
- What can we do to reduce these disparities?
- How should we monitor disparities over time?

Indicators used to measure disparity

- Rate of HIV diagnoses
- Percent of new HIV cases diagnosed late
- Percent of new HIV cases interviewed by Partners Services
- Percent of new HIV cases linked to care
- Percent of prevalent HIV cases engaged in HIV care, last 12 months
- Percent of prevalent HIV cases retained in HIV, last 12 months
- Percent of prevalent HIV cases with a suppressed viral load, last 12 months

Levels of comparison

- Race/ethnicity (White, Black, Hispanic)
- U.S.-born vs foreign-born
- Gay/bisexual men vs heterosexual men and women
- Geography
- Age
- Social determinants of health (income, education, and poverty)

Once health disparities were characterized by demographic and risk category, we used U.S. Census data to evaluate the degree to which socioeconomic position affects continuum-related outcomes within each population of interest. Our methods were similar to those described in a July 2014 Supplemental HIV Surveillance Report published by CDC, which focused on social determinants of health (SDH) among PLWH across the United States. We selected three SDH indicators collected from the 2009-2013 American Community Survey:

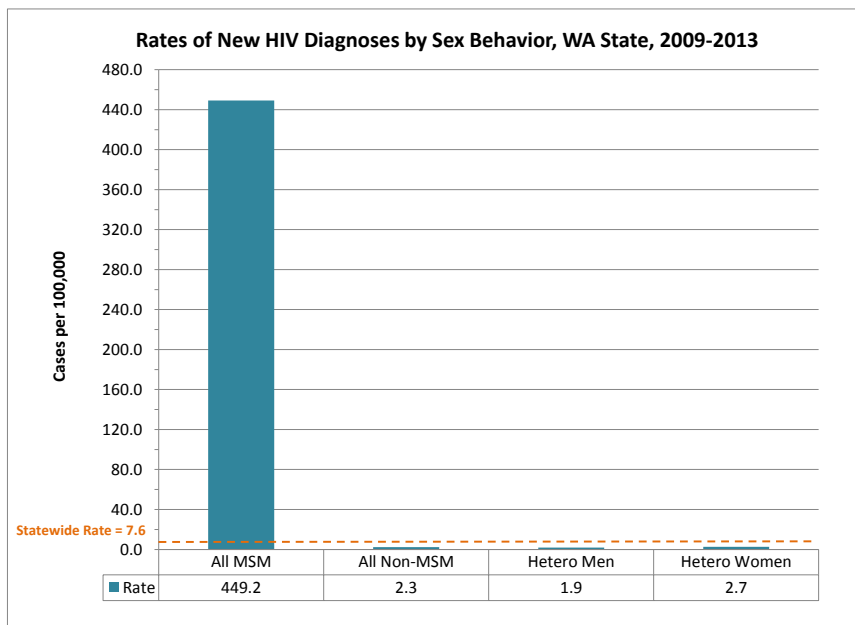
- Median household income among residents of the Census tract
- Percent of Census tract residents who had attended at least some college
- Percent of Census tract resident living below the Federal Poverty Line

Using each SDH indicator as a proxy for socioeconomic position shared by Census tract residents, we sorted all Washington Census tracts from greatest to least. We divided the sorted tracts into four equally-sized quartiles (or ‘SDH tiers’), each of which represented a progressively higher level of social advantage (Tier A being the lowest, Tier D the highest). HIV surveillance data were geocoded to determine the Census tract of residence among both newly diagnosed cases (2009-2013) and prevalent cases (2013). Cases with a geocodable, residential address were linked to SDH tiers based on the Census tracts where cases lived. Cases were excluded from the analysis if an address was non-residential, could not be geocoded at the Census tract level, or could not be matched to a Washington Census tract. Census tracts were excluded if no SDH information was available.

KEY FINDINGS

Indicator: HIV Diagnosis Rates

As expected, gay and bisexual men (also referred to as men who have sex with men or MSM) are disproportionately at risk for HIV in Washington. DOH estimates that HIV infection rates among MSM in Washington are more than 150-times higher compared to heterosexual men and women. Nevertheless, since the current DOH HIV Framework has already identified MSM as a priority and is implementing targeted prevention strategies, reducing HIV risk among MSM was not deemed a priority by the Health Disparities SEW.



Diagnosis rates are also significantly higher among (non-Hispanic) Black people compared to other racial/ethnic groups in Washington. However, the size of the disparity in HIV risk experienced by Black people is heavily dependent on country origin, or where Black people living with HIV were likely exposed to the virus. Those born within the United States are roughly 4-times more likely to be diagnosed with HIV compared to White residents, while rates among foreign-born Blacks were roughly 16-times higher. Further evaluation of both surveillance data and available research findings suggests that at least 70% and perhaps as much as 85% of HIV transmission among foreign-born Blacks living in Washington takes place outside the U.S. Hence, the Health Disparities SEW opted to prioritize reducing HIV risk among U.S.-born Black residents, but not foreign-born Blacks.

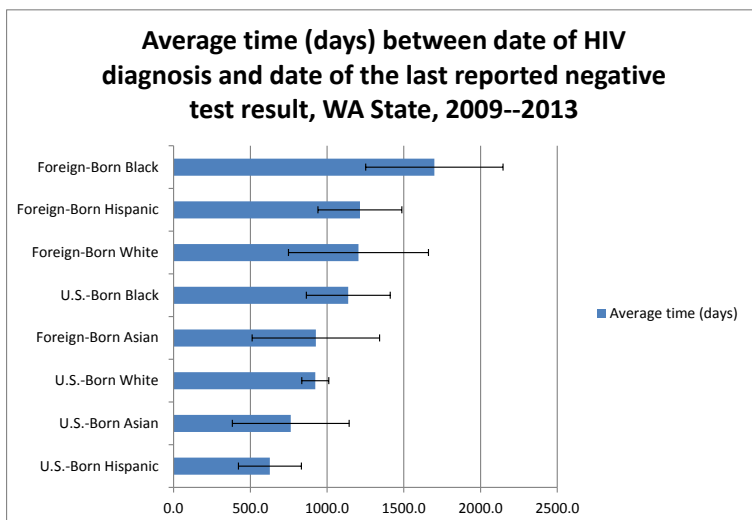
Similarly, HIV diagnosis rates among foreign-born Hispanics were more than 3-times higher compared to non-Hispanic Whites, whereas rates among U.S.-born Hispanic were not significantly different from those of Whites. Patient interviews and published research suggest that much of the HIV transmission experienced by foreign-born Hispanic appears to take place within the U.S. Therefore, the Health Disparities SEW chose to prioritize the reduction of HIV diagnosis rates among foreign-born Hispanic residents.

Key Indicators Related to Continuum of HIV Care among Newly Diagnosed Cases, by Race/Ethnicity and Country of Origin, Washington State, 2009-2013

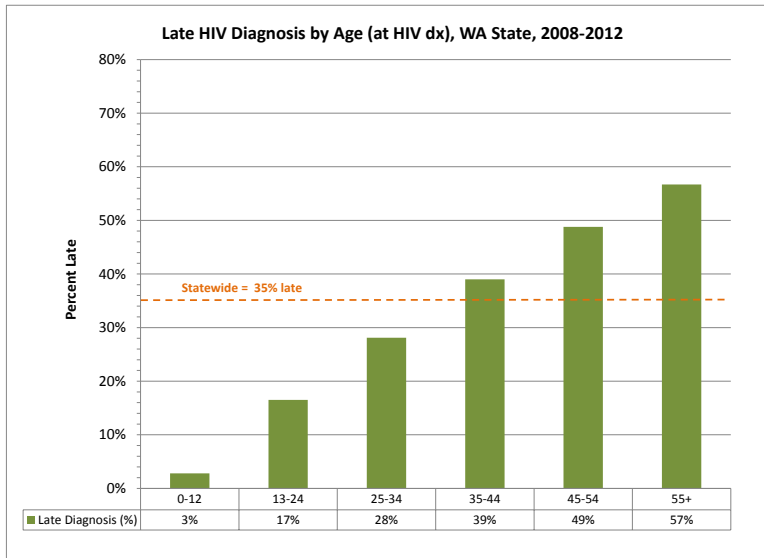
Race/Ethnicity	Country of Origin	Rate of HIV DX		Late HIV Dx, 2008-2012		Linkage to Care < 90 days	
		Cases per 100k	Significant?	% Late	Significant?	% Linked	Significant?
White		6.0	<i>reference</i>	33%	<i>reference</i>	90%	<i>reference</i>
Black		38.4	Yes	34%	No	86%	Yes
	U.S.-Born	23.6	Yes	29%	No	77%	Yes
	Foreign-Born	101.7	Yes	40%	Yes	95%	Yes
Hispanic		10.5	Yes	37%	Yes	90%	No
	U.S.-Born	5.6	Yes	24%	Yes	89%	No
	Foreign-Born	20.4	Yes	43%	Yes	92%	No

Indicator: HIV Late HIV Diagnoses

Regardless of race/ethnicity, being born outside the United States greatly increases the likelihood of late HIV diagnosis among people living with HIV in Washington. Among foreign-born Black and Hispanic residents diagnosed with HIV between 2009 and 2013, 40% and 43% were late HIV diagnoses, respectively. This outcome is more concerning among Hispanic cases since more are thought to have been infected within the U.S. However, local research on foreign-born Blacks in King County suggests that the average time between date of initial entry into the U.S. and date of HIV diagnosis is approximately 7 years. Likewise, surveillance data suggest that time between last reported negative HIV test and first positive test is nearly 5 years among foreign-born Blacks. For these reason, the Health Disparity SEW chose to prioritize the reduction of late HIV diagnosis among both foreign-born Hispanic and foreign-born Black residents of Washington.



As expected, the Health Disparity SEW also observed significantly higher rates of late HIV diagnosis among older adults diagnosed with HIV. Between 2009 and 2013, roughly half of all new HIV cases among adults ages 45 years and older were late diagnoses. The Health Disparity SEW recommends this disparity be reduced, yet recognizes that successfully increasing HIV testing with the populations already listed could go a long way towards achieving this.



Indicator: Percent Interviewed by Partner Services

The Health Disparity SEW did not observe or prioritize any disparities with regard to the percent of new HIV cases interviewed by Partner Services.

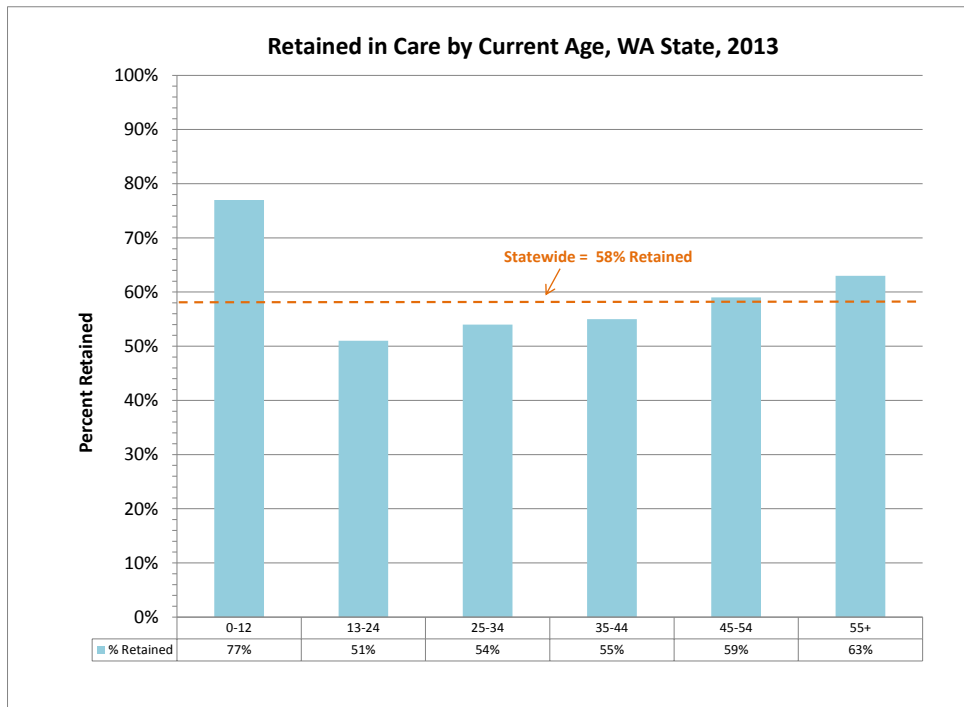
Indicator: Linkage to Care

Overall, 89% of Washington residents newly diagnosed with HIV between 2009-2013 were successfully linked to HIV medical care within 90 days of diagnosis. In contrast, linkage to care among U.S.-born Black residents diagnosed during the same time frame was 77%, substantially lower than the 90% among Whites and 95% among foreign-born Blacks. The Health Disparity SEW strongly recommends reducing this disparity by increasing linkage to care among U.S.-born Blacks in Washington.

Indicator: Engagement/Retention in Care

Since the nature and degree of observed disparities (as well as factors influencing them) are likely very similar, the Health Disparities SEW opted to combine these two care-related indicators into one category: engagement/retention. Again, foreign-born status appears to strongly influence these outcomes among Black and Hispanic PLWH, yet the association seem to proceed in opposite directions. U.S.-born Blacks were significantly less likely to be engaged/retained in HIV care compared to Whites, while differences between Whites and foreign-born Blacks were smaller. The reverse was true among Hispanic residents, for which U.S.-born individuals were more likely to be engaged/retained vs. their foreign-born counterparts. Hence, the Health Disparity SEW recommends increasing engagement/retention among both foreign-born Hispanic and U.S.-born Blacks.

In addition, younger adults living with HIV in Washington appear to be substantially less likely to engaged/retained in care vs. older adults. The Health Disparity SEW recommends increasing levels of engagement/retention among HIV-positive adults between the ages of 18 and 35 years old.



Indicator: VL Suppression

Similar to engagement/retention, the Health Disparity SEW would like to see increases in viral suppression among both U.S.-born Black residents and foreign-born Hispanic residents living with HIV in Washington. While these two populations are clearly very different with regard to language, country of origin, neighborhood, and other cultural characteristics, the group reviewed research evidence suggesting that disparities in viral suppression could be largely the result of similar political and socioeconomic circumstances shared by both populations (different pathways leading to the same destination). In addition, group members found some evidence indicating that there might also be biological factors which explain lower viral suppression among Blacks vs. Whites in the United States.

Key Indicators Related to Continuum of HIV Care among Prevalent Cases, by Race/Ethnicity and Country of Origin, Washington State, 2013

Race/Ethnicity	Country of Origin	Engaged in Care		Retained in Care		Suppressed Viral Load	
		% Engaged		% Retained		% Suppressed	
White		82%	<i>reference</i>	60%	<i>reference</i>	70%	<i>reference</i>
Black		77%	Yes	55%	Yes	62%	Yes
	U.S.-Born	76%	Yes	55%	Yes	58%	Yes
	Foreign-Born	79%	Yes	56%	No	69%	No
Hispanic		70%	Yes	53%	Yes	58%	Yes
	U.S.-Born	79%	No	59%	No	64%	Yes
	Foreign-Born	65%	Yes	51%	Yes	55%	Yes

Social Determinants of Health

Overall, among new HIV cases diagnosed between 2009 and 2013, 78% were successfully geocoded and matched to an SDH Tier. Among prevalent HIV cases reported to be residing in Washington as of year-end 2013, 67% were geocoded and matched to an SDH Tier. Regardless of demographic or risk characteristics, Tier A residents consistently had higher rates of new HIV diagnosis, suggesting that lower socioeconomic position (SEP) is strongly associated with risk for HIV (Table 1). Likewise, Tier A residents were more frequently categorized as late HIV diagnoses, meaning they developed AIDS within 12 months of their HIV diagnoses. This suggests that lower levels of social advantage could result in (or be accompanied by) barriers that prevent people at risk for HIV from getting screened for HIV as often as they should.

While social determinants clearly affect both HIV risk and testing behavior, relationships between levels of social advantage and HIV care-related outcomes were less clear. We observed no discernable patterns between SEP and linkage to care. Yet, HIV-positive residents of SDH Tier C, or those living in tracts with median to higher levels of SEP, were frequently the least likely to be either engaged or retained in HIV care within the past 12 months (Table 2). Although we can't say for certain, conversations with program staff at DOH suggest that this outcome might be due to the fact that many HIV-positive people living in Tier C tracts are too affluent to qualify for publicly-supported health insurance programs, yet are not affluent enough to overcome the sizeable cost burden of paying for their own HIV care, either out-of-pocket or via private health insurance (premiums, copays, etc.).

Table 1. SDH Tiers with the Least Desirable Outcomes, Based on Residents Newly Diagnosed with HIV, 2009-2013

	Matching N	HIV Diagnosis Rate			Late HIV Diagnosis			Initial Linkage to Care		
		Income	Poverty	Education	Income	Poverty	Education	Income	Poverty	Education
Overall	2016	A	A	A	A	A	D	A + B	C	C
Racial/ethnic group										
White, NH	1155	D	B	A	A	D	D	A	C	D
Black, NH	345	A	A	A	A	A	D	B	C	D
- U.S.-born	162	A	A	A	A	A + B	A + B	C	C	D
- Foreign-born	168	A	A	B	A	A	D	B	B	A
Hispanic	311	A	A	A	A	A	C + D	B	A + C	D
- U.S.-born	91	A + C	A + C	A	A + C	A + C	C	C	C	D
- Foreign-born		A	A	A	A	A	C	A	A	D
Age group										
13-24	289	A	A	A	A	A	C	B	A	B
25-34	607	A	A	A	A	A	C	C	A + C	C
35-44	551	A	A	A	B	C	D	C	D	D
45-54	361	A	B	A	A	A	C	A	B	B
55+	176	B	B	A	C	C	D	D	D	A
Risk group										
All MSM	1531	N/A			A	A + D	D	B	C	D
All IDU	274	N/A			C	C	D	A + D	D	D
Hetero male	189	N/A			C	C	C	A	B	D
Hetero female	296	N/A			D	A	A	A + B + D	C	D

 Tier A = Residence in Census tracts with Lowest SEP
 Tier B = Residence in Census tracts with Lower to Median SEP
 Tier C = Residence in Census tracts with Median to Higher SEP
 Tier D = Residence in Census tracts with Highest SEP

Regardless of demographic or risk characteristics, residents of Tier A Census tracts (labeled in green above) consistently had higher rates of new HIV diagnosis, suggesting that lower socioeconomic position is strongly associated with risk for HIV infection. Likewise, Tier A residents were more frequently categorized as late HIV diagnoses, meaning they developed AIDS within 12 months of their HIV diagnoses.

Table 2. SDH Tiers with Least Desirable Outcomes, Based on Residents Living with HIV, Year-end 2013

	Matching N	<u>Engaged in Any Care</u>			<u>Retained in Care</u>			<u>Virally Suppressed</u>		
		Income	Poverty	Education	Income	Poverty	Education	Income	Poverty	Education
Overall	8205	C	C	C	C	C	B + C	A	A	C
Racial/ethnic group										
White, NH	5221	C	C	C	C	C	C	A	A	C
Black, NH	1343	B	C	C	D	C	A + C	A	A	C
- U.S.-born	791	B	C	A	D	C	A	A	A + D	C
- Foreign-born	513	B + C	C	A + B + C	B	C	C	A	A + C	A
Hispanic	1033	C	C	A + B	C	C	B	D	C	B
- U.S.-born	381	A	A + C	C	B	B	C	B	C	C
- Foreign-born	548	C	C	A	D	C	A + B	A + C	C	A
Age group										
13-24	220	B	A	C	C	C	C	B	C	C
25-34	1306	C	C	C	C	C	B	C	C	C
35-44	2052	B	A	C	B + C	C	C	A + B + C	A	C
45-54	2840	C	C	D	C + D	D	B	A	A	C
55+	1747	A	A	D	A	C	B + D	A	A	B
Risk group										
All MSM	6290	A + B + C	C	C	C	C	C	A	A	C
All IDU	1355	A + B	C	C	C	C	C	A + C	A + C	C
Hetero male	806	C	C	A + B + C	D	C	D	A + C	C	D
Hetero female	1110	B + D	D	B	B	D	B	B	A	A

 Tier A = Residence in Census tracts with Lowest SEP
 Tier B = Residence in Census tracts with Lower to Median SEP
 Tier C = Residence in Census tracts with Median to Higher SEP
 Tier D = Residence in Census tracts with Highest SEP

Although they live in areas characterized by relatively higher levels of social advantage, residents of Tier C Census tracts (labeled in orange above), were often the least likely to be engaged or retained in HIV medical care. Many of these individuals earn too much money to qualify for public assistance, and likely shoulder a higher proportion of their own health care costs.

Summary of Key HIV-Related Health Disparities, by Indicator and Population

Select Population	HIV Diagnosis Rates	Late HIV Diagnosis	Linkage to Care	Engagement/Retention	Viral Suppression
U.S.-Born Black	X		X		X
Foreign-Born Black	X	X			
Foreign-Born Hispanic	X	X		X	X
Adults ≥ 45 years old		X			
Adults < 35 years old				X	

SUMMARY

These are the top findings. The Health Disparity SEW proposes using the following indicators to measure progress toward eliminating disparities. The success of a strategy will be determined by its ability to create positive change in its associated indicator.

HIV Diagnosis Rates

- Rates of new HIV diagnosis among native-born Blacks
- Rates of new HIV diagnosis among foreign-born Hispanics

Late Diagnosis

- Late HIV diagnosis among foreign-born Hispanics
- Late HIV diagnosis among older persons (ages 45 yrs. and older)
- Late HIV diagnosis among foreign-born Black

Linkage

- Initial linkage to care (within 90 days of diagnosis) among native-born Blacks

Engagement and Retention in Care

- Retention in care among younger people (current ages < 35 yrs.)
- Engagement and retention in care foreign-born Hispanics

Viral Suppression

- Viral suppression among native-born Blacks
- Viral suppression among foreign-born Hispanics

Overview

Engagement and Retention in Care was identified as the point of emphasis in developing strategies. Black and Hispanic populations both US and foreign-born were identified as prioritized populations.

Engagement and Retention in Care

1. **Provider training for medical providers:** Providers may overestimate their cultural competency in providing services to these demographics and need tools and skills to increase their efficacy in working with these populations
2. **Health Literacy for PLWH in the target population:** PLWH may lack basic knowledge regarding HIV and the necessary skills to navigate the health care system. This lack of knowledge and skills is compounded by the negative experiences many people in the target populations have experienced within the medical and social service systems.
3. **Stigma:** Addressing stigma directly is a difficult task. Black & Hispanic PLWH experience stigma in both the Gay Community as well as Black/Hispanic communities. This dual expression of stigma may make engagement and retention in HIV care particularly difficult. A three prong approach was discussed
 - a. **Community Capacity** – Focus on community engagement strategies designed to address stigma
 - b. **Rubric** – Develop a rubric which uses existing knowledge to link stigma to stress measures
 - c. **Research/Needs Assessment** – Conduct further assessments on the specific needs of young Black and young Hispanic individuals (with a focus on MSM) to direct programming.

Foreign-born Status

Foreign-born status was identified as a unique circumstance impacting HIV outcomes. Foreign-born Hispanics experienced poorer outcomes in most categories. Foreign-born blacks experience significantly higher rates of late diagnosis. Many factors may be contributing; including immigration status, language barriers, cultural norms and the assimilation paradox. An over-simplified definition of the paradox is that someone immigrating to the US may experience poorer outcomes than they would have if they were born in the US *or* if they had stayed in their country of origin. It seems that they may lose some of the protective factors of their original culture in addition to not benefitting fully from those of the dominant culture within the US.

1. **Village:** Convene villages within foreign-born Hispanic and foreign-born Black communities to gain perspective from people within those communities.
2. **Special Emphasis Workgroups;** Convene SEW to determine strategies specific to foreign-born Hispanic and foreign-born Black communities

Themes to address while developing strategies

Engagement in Care		
Foreign-born Black	Native-born Black	Foreign-born Hispanic
Capacity/rubric to measure stigma to stress	Capacity/rubric to measure stigma to stress	Capacity/rubric to measure stigma to stress
Provider training – (↓ stigma)	Provider training – (↓ stigma)	Provider training – (↓ stigma)
Health literacy	Health literacy	Health literacy
System navigation	System navigation	System navigation
↑ Community awareness about HIV	↑ Community awareness about HIV	↑ Community awareness about HIV
Build community (↓ stigma)	Build community (↓ stigma)	Build community (↓ stigma)
Population specific Villages & SEW	Population specific Villages & SEW	Population specific Villages & SEW
↓internalized stigma	↓internalized stigma	↓internalized stigma
↑ testing upon entry to US	↑ value appreciation of health wellness ↑ access/utilization of healthcare especially among men (trust in medical community)	↓machismo perceptions that need for medical care is weakness

RECOMMENDATION

HIV-related health disparities are inextricably linked to the social determinants of health. Eliminating new HIV infections and optimizing the health outcomes for people living with HIV requires a concerted systematic approach. This approach must use data to determine where disparities exist and the most appropriate types of interventions. It must be responsive to the communities experiencing the disparities. Effective implementation requires DOH to allocate resources to all components. It is only through this investment of time; resource and effort that we hope to reduce HIV-related disparities.

Specific recommendations:

1) **DOH to use indicators to routinely measure progress toward reducing HIV-related health disparities.**

The indicators we have prioritized are currently utilized by DOH. Our specific request is that they be used to measure progress toward reducing disparities.

2) **DOH allocate resources to decrease key HIV-related health disparities as detailed in this report.**

3) **DOH and HPSG to ensure meaningful participation opportunities from Black & Hispanic communities on all taskforces, workgroups etc.**

People of color have historically lacked access to and power within the institutions that develop and administer services to them. Significant inclusion of groups of people who have been historically marginalized will increase the proficiency in developing culturally relevant service models.

4) **HPSG to actively recruit members from Communities of Color in order to increase diversity of the HPSG.**

Recruitment strategies should specifically target communities experiencing HIV health related disparities. The lived experiences of these individuals are an integral component of the planning process.

5) **DOH and HPSG to develop collaborative funding opportunities that address how social determinants of health affect HIV-related health outcomes.**

The social determinants of health are often experienced as layers of inequity. The most effective strategies to address these layers require collaboration across domains. Issues include, but are not limited to, mental health and substance use. Models which encourage integrated as opposed to discrete funding mechanisms may encourage the innovation needed to address these complex issues.

6) **DOH to provide targeted programming for access and utilization PrEP in Communities of Color.**

PrEP offers a unique opportunity in reducing new HIV infections. Many communities have a mistrust of the health care system in addition to a history of substandard service delivery. These unique circumstances create negative perceptions of medical interventions in these communities. Programming should be developed that directly addresses these cultural issues.

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REFERENCES

- Amy Rock Wohl, W. H.-W.-D. (2011). A youth-focused case management intervention to engage and retain. *Psychological and Socio-medical Aspects of AIDS/HIV*, 23:8, 988-997.
- Ana Penman-Aguilar, P. A.-A. (2013). Identifying the Root Causes of Health Inequities: Reflections on the 2011 National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Health Equity Symposium. *Public Health Reports*, Supplement 3 / Volume 128 29-33.
- Centers for Disease Control and Prevention. Social determinants of health among adults diagnosed with HIV infection in 20 states, the District of Columbia, and Puerto Rico, 2010. *HIV Surveillance Supplemental Report* 2014; 19 (2). Revised edition. <http://www.cdc.gov/hiv/library/reports/surveillance/>. Published July 2014.
- E Shacham, M. L. (2013). Are neighborhood conditions associated with. *HIV Medicine*, 14, 624–632.
- George PhD, S., Garth PhD, B., Rock Wohl PhD, A., Galvan PhD, A., Garland MPH, W., & Myers PhD, H. (2009). Sources and Types of Social Support that Influence Engagement in HIV Care among Latinos and African Americans. *Journal of Health Care for the Poor and Underserved*, Volume 20, Number pp. 1012-1035.
- Hazel D. Dean, S. M. (2013). FROM THEORY TO ACTION: APPLYING SOCIAL DETERMINANTS OF HEALTH TO PUBLIC HEALTH PRACTICE. *Public Health Reports*, Supplement 3 / Volume 128 1-4.
- Hazel D. Dean, S. M. (2013). Integrating a Social Determinants of Health Approach into Public Health Practice: A Five-Year Perspective of Actions Implemented by CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. *Public Health Reports*, Supplement 3 / Volume 128 5-11.
- Hightow-Weidman M.D. M.P.H., L., Jones M.S., K., Wohl Ph.D., A., Futterman M.D., D., & Outlaw Ph.D, A. (2011). Early Linkage and Retention in Care: Findings from the Outreach, Linkage and Retention in Care Initiative Among Young Men of Color WHO Have Sex with Men. *AIDS PATIENT CARE and STDs*, s31-S37.
- Kathryn Pitkin Derose, L. M.-D. (2014). An Intervention to Reduce HIV-Related Stigma in Partnership with African American and Latino Churches. *AIDS Education and Prevention*, 26(1), 28–42.
- Kerani, R., Buskin, S., Dombrowski, J., Bennett, A., Barash, E., & Golden, M. (2015). *Evidence of Local HIV Transmission in the African Community of King County Washington*. Seattle.
- Lisa B. Hightow-Weidman, M. M. (2011). Keeping Them in "STYLE": Finding, Linking, and Retaining Young HIV-Positive Black and Latino Men Who Have Sex with Men in Care. *AIDS PATIENT CARE and STDs*, Volume 25, 37-45.
- Marguerite S. Keesee PhD, A. P. (2012). HIV Positive Hispanic/Latinos Who Delay HIV Care: Analysis of Multilevel Care Engagement. *Social Work in Health Care*, 51:5, 457-478.
- Martinez JD, MPH, MSc, O., Wu PhD, E., Shultz MA, A., & Capote BA, J. (2014). Still a Hard-to-Reach Population? Using Social Media to Recruit Lation Gay Couples for an HIV Intervention Adaption Study. *Journal of Medical Internet Research*, Published online Aor 24,2014 16(4)e113.

Rajabiun S, R. M., J, F., A, F., & G, R. '. (2008). The Impact of Acculturation on Latinos' Perceived Barriers to HIV Primary Care. *Ethnicity & disease*, 403-408.

Shehadeh, PhD, CHES, N., & McCoy, PhD, H. (2014). Risky Sexual Behaviors: The Role of Ethnic Identity in HIV Risk in Migrant Workers. *JOURNAL OF THE ASSOCIATION OF NURSES IN AIDS CARE*,, Vol. 25, No. 4, July/August 2014, 330-340.