

Structural Factors and the HIV Continuum of Care

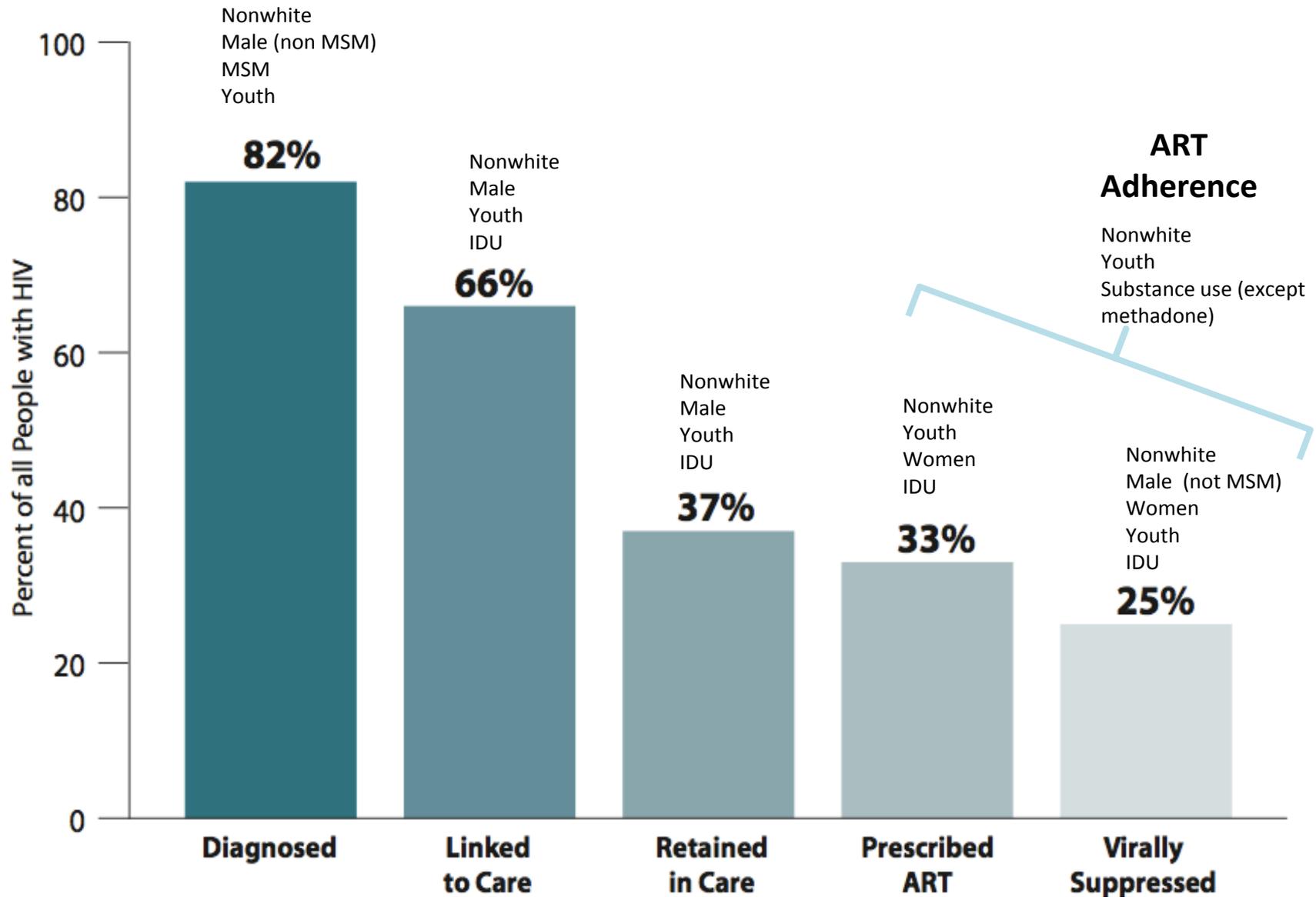
Gregorio Millett

Vice President and Director of Public Policy, AmFAR

Housing and HIV/AIDS Summit

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Disparities by Demographic Group Across Treatment Cascade



(Sources: Rebeiro, 2013; Muthulingam, 2013; Hannah, 2013; CDC, 2012; Hall, 2012; Traeger, 2012; Dennis, 2011; Hartzell, 2011; Torian, 2011; Tripathi, 2011; Campsmith, 2010; Giordano, 2010; Knowlton, 2010; Geetanjali, 2009; Lemly, 2009; Mugavero, 2009; Weintrop, 2009; Anaston, 2005; Giordano, 2005; Klein, 2003)

Foreign-Born Latinos & HIV Outcomes

Factors in the Delayed HIV Presentation of Immigrants in Northern California: Implications for Voluntary Counseling and Testing Programs

Vivian Levy · Diane Prentiss · Gladys Balmas · Sanny Chen · Dennis Israelski · David Katzenstein · Kimberly Page-Shafer

Table 1 Demographic characteristics, CD4+ count at entry into AIDS program and prevalence of opportunistic infections (OIs) at HIV diagnosis among immigrant and U.S.-born patients in the San Mateo County AIDS program, Northern California 2000–2002 (*n* = 391)

Variable	Immigrants (<i>n</i> = 94) <i>N</i> (%) or median (IQR)	U.S.-Born ^a (<i>n</i> = 297) <i>N</i> (%) or median (IQR)	<i>p</i> -value
Male ^b	71 (75.5%)	219 (73.7%)	0.649
Median age	31 (27–38)	35 (29–41)	0.001
Hispanic ethnicity	74 (78.7%)	20 (6.7%)	<.001
Monolingual (non-English) ^c	66 (70.2%)	1 (0.34%)	<.001
Country of birth			
Mexico	57 (61.3%)		
Central America	13 (14.0%)		
Asia	12 (12.9%)		
Other	11 (11.8%)		
Mean initial CD4 + count	287 cells/mm ³	333 cells/mm ³	0.143
Prevalence of OIs	28 (29.8%)	51 (17.2%)	0.009
Hospitalizations (<i>n</i> = 59)	19 (20.2%)	37 (12.5%)	0.064

Table 2 Independent associations with opportunistic infection (OI) at first HIV diagnosis (multivariate analysis) for 391 patients entering San Mateo County AIDS Program, California 2000–2002

	Adjusted OR (95% CI)
Immigrants	2.98 (1.21–7.38) 
Monolingual status	1.17 (0.40–3.43)
Hispanic	0.51 (0.19–1.34)

US-Mexico border: 46% Latinos dx late vs. 37% Whites (Espinoza, 2009)

- higher proportion of late diagnoses among foreign-born compared to US-born Latinos (51% vs. 39%)
- increased risk of delayed diagnosis among foreign-born vs. US-born males (AOR 1.7, 95% CI 1.4–2.2)

LA County Spanish-speaking Latinos 3x more likely to present late compared to English-speaking Latinos (Wohl, 2009)

Greater mortality rates among Latinos born in Puerto Rico than mainland US (Hanna, 2008; Nash, 2005)

HIV-Related Disparities by Sex

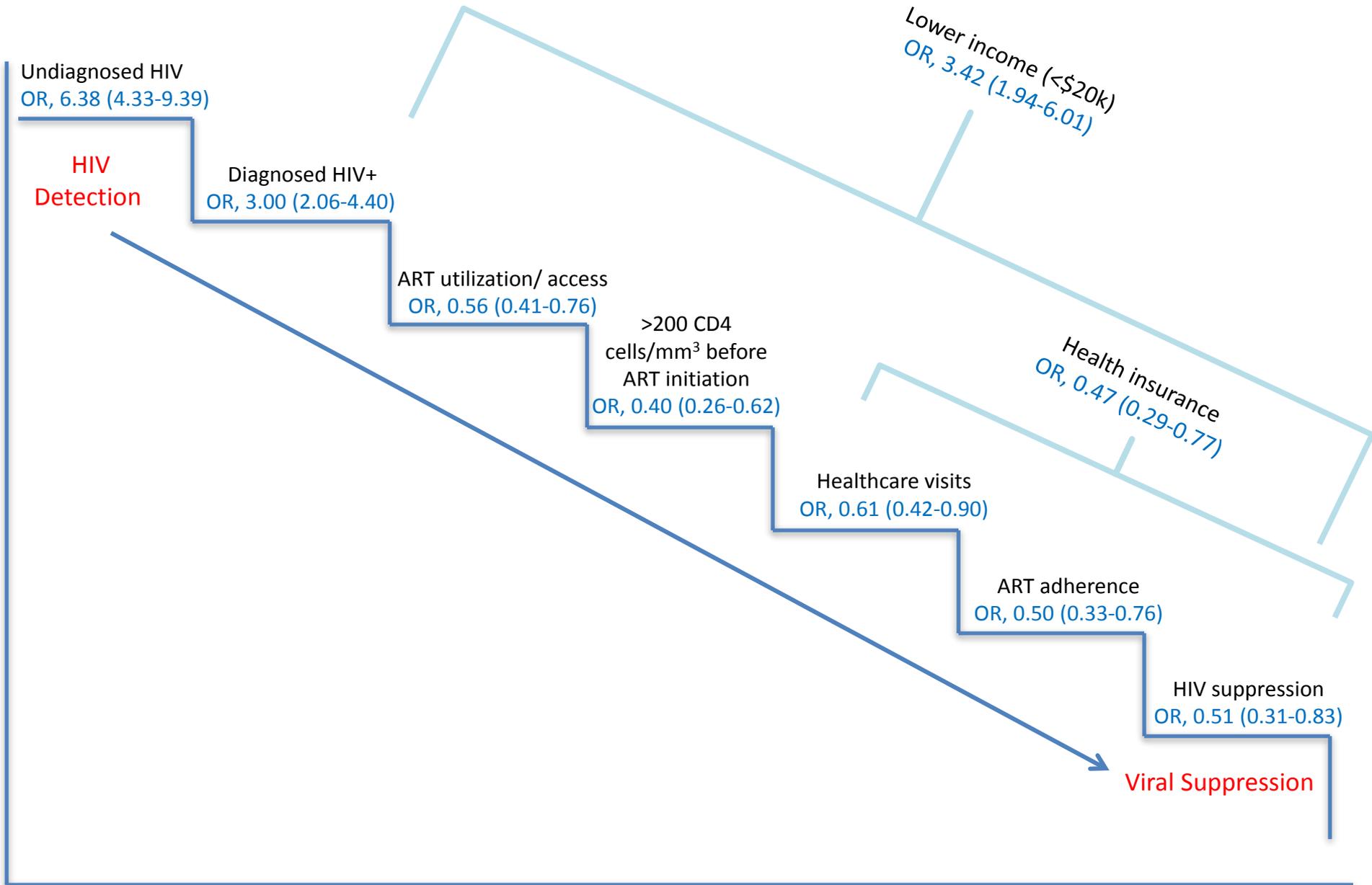
- Higher diagnosis rates and higher CD4 among women (Meditz, 2011)
- Time in care and on HAART least for
 - females than males (57% vs. 71%; $P=.01$) (Meditz, 2011)
- Women significantly
 - less likely to use HIV primary care services (OR 0.56, CI 0.35, 0.90)
 - greater use of the emergency department (OR 2.13, 1.31, 3.46) (Sohler, 2009)
- Mortality higher among women
 - Even after adjustment for the length of time on HAART (Lemly, 2009)

'She Killed Me, So I Killed Her': Man Allegedly Stabs Girlfriend to Death after She Tells Him She's HIV Positive

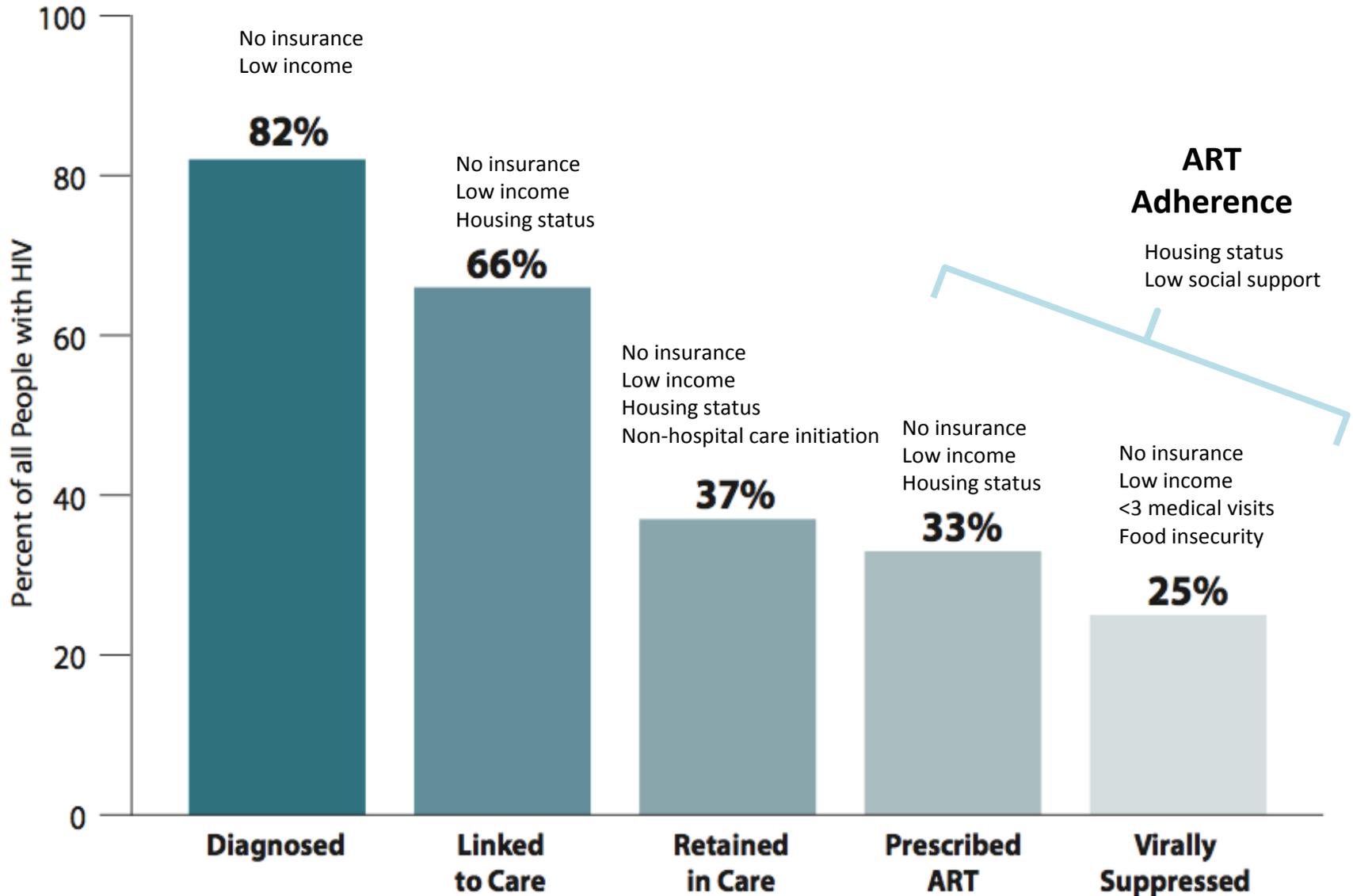


- Domestic violence (Machtinger, 2012)
 - Meta-analysis: 29 US studies women PLWHIV
 - 30% PTSD (5x times national rate)
 - 55.3% intimate partner violence (>2x the national rate)
 - Recent trauma associated with 4x odds of ART failure
 - Domestic violence doubled risk of death

Disparities persist between black and other MSM throughout treatment cascade (24 comparative studies)



Disparities by Structural Factors Across Treatment Cascade



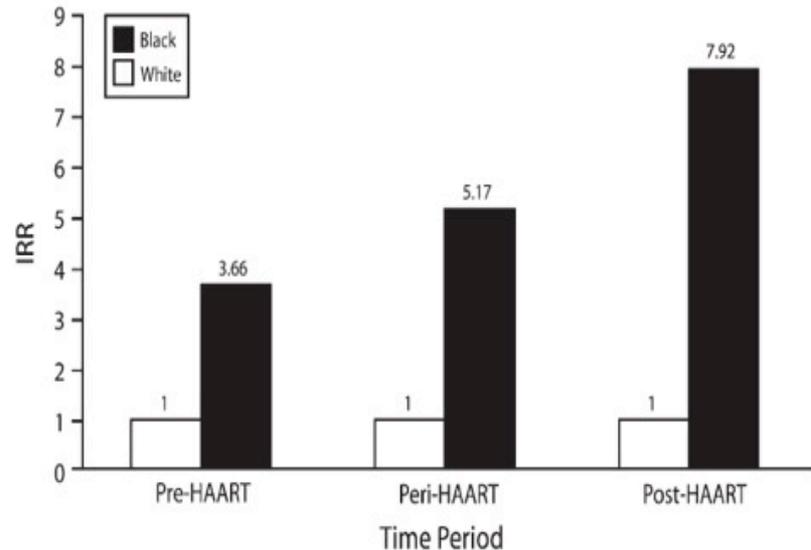
(Sources: Muthulingam, 2013; Hannah, 2013; CDC, 2012; Hall, 2012; Traeger, 2012; Torian, 2011; Knowlton, 2010; Meade, 2009; Mugavero, 2009; Weiser, 2009; Kidder, 2007; Bell, 1999)

AIDS Mortality Disparities

- AIDS deaths have declined least in the ART era
 - Among PWAs living in the South (Prejean et al, 2012)
 - Among black and Latino MSM relative to white MSM (Blair et al., 2002; Hall et al., 2007)
 - Among black women compared to white men (44% vs. 79%, respectively CDC 2009)
 - Among Latinos compared to blacks or whites (Cunningham et al., 2010)

Mortality incident rate-ratios between blacks and whites have **increased** since availability of ART

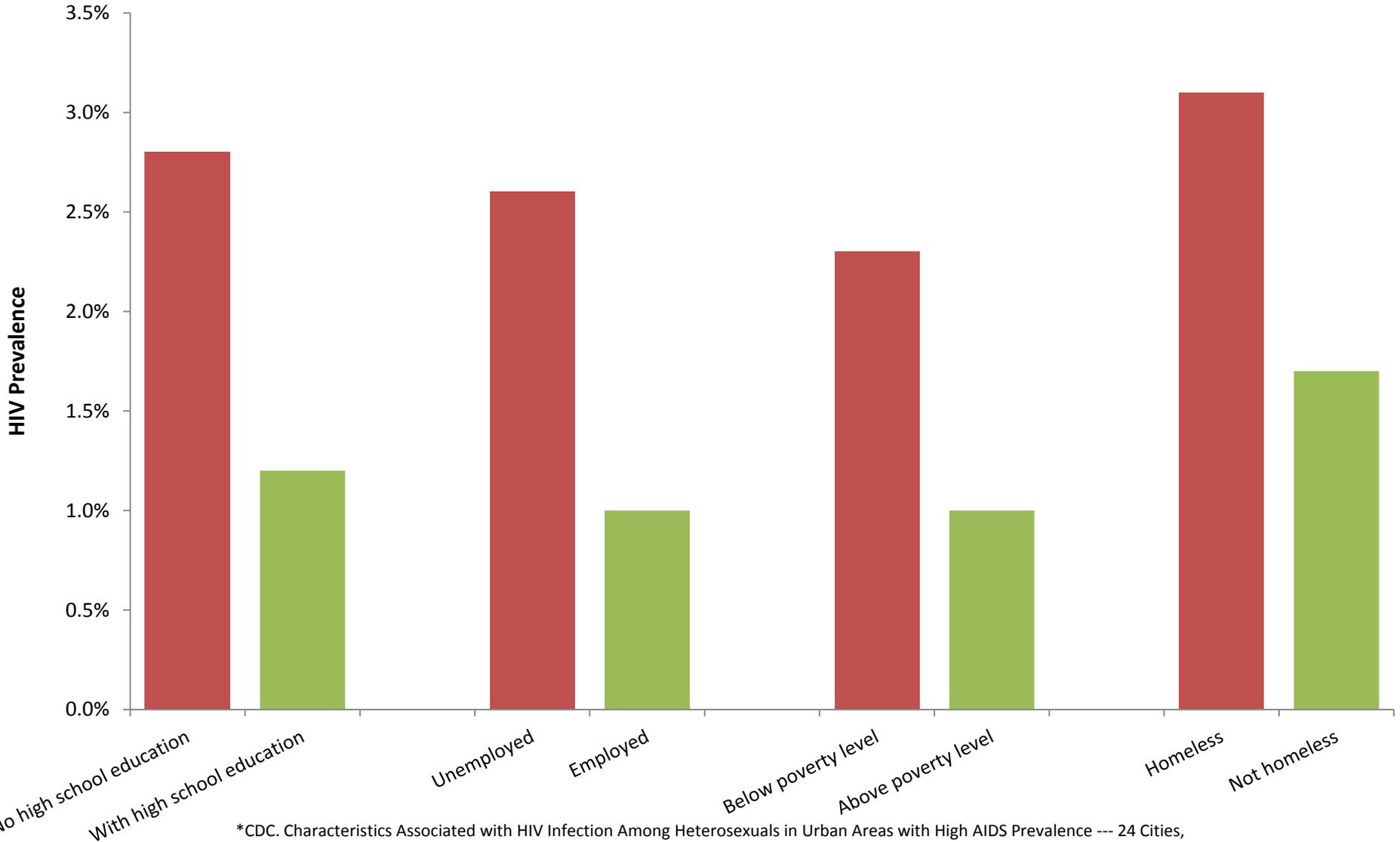
- Reason: Less access to healthcare in racial minority communities



Note. HAART = highly active antiretroviral therapy; IRR = incident rate ratio. For each period, the results from the model were adjusted for age, gender, and urbanicity. Whites were the reference group.

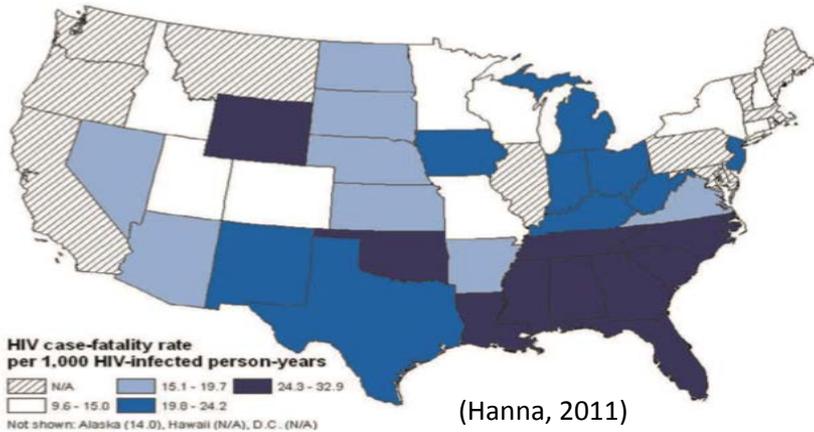
(Levine, 2007)

HIV Infection Among Heterosexuals in Urban Areas, by Socio-Economic Indicators, 2006-2007, N=14,837- Structural/Environmental



*CDC. Characteristics Associated with HIV Infection Among Heterosexuals in Urban Areas with High AIDS Prevalence --- 24 Cities, United States, 2006--2007. MMWR 2011;60:1045-1049.

ART Initiation and Survival, Southern US vs. Other Regions

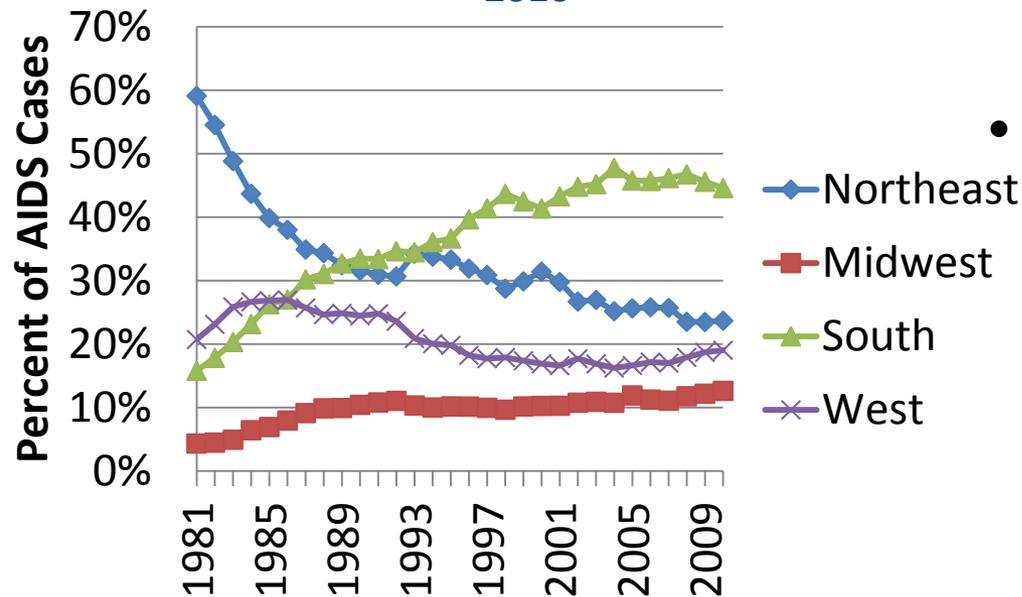


- Compared to South, PWAs from other regions more likely to initiate treatment (Hazard Ratio [HR], 1.26, 95% CI, 1.0–1.57; P= .004 (Meditz, 2011)

- Among blacks and Latinos, survival after HIV dx worse in the South than other regions (Prejean, 2012)

- Within the South
 - survival at 36 months after HIV dx best for whites vs blacks or Latinos
 - males in urban areas at HIV dx had higher survival rates at 36 months vs males in suburban or rural areas

Figure 1. Percent of estimated diagnoses^a of AIDS by region^b and year, United States, 1981-2010



Housing and the Continuum

- HIV in homeless/marginally-housed populations is 5-10x than among housed (Robertson, 2004)
- Being marginally-housed is a risk factor for shorter time to seroconversion (Bruneau, 2011)
- Homeless PWAs less likely to have CD4>200 or undetectable VL compared to housed PWAs (Kidder, 2007)
- Homeless PWAs have greater mortality rates (as high as 10x) than housed PWAs (Lieb, 2002)
- Seek, test and treat???

1. EXPENSIVE
2. HARD TO MEASURE
3. TAKE A LONG TIME TO IMPLEMENT
4. NOT A ONE-TIME INTERVENTION
5. COUNTERINTUITIVE EFFECTS
6. COMMUNITIES ARE NOT HOPELESS- RESILIENCY

**BUT NOTHING ELSE HAS THE
POTENTIAL TO AFFECT SO MANY**

Milestones in Implementing the Strategy

September 2011:

- SAMHSA releases \$42.6M in new grants to expand primary care networks in racial minority communities impacted by HIV
- HRSA announces \$5.1M in awards to pilot HIV telehealth training, support AETCs, and bolster HIV-related medical education
- CDC provides technical guidance for calculating viral load and releases \$8.4M to support collection and reporting of CD4 and viral load, and all HIV-related electronic lab reporting of test results
- National ADAP waiting list peaks at 9,298 individuals

July 2011:

- CDC launches Enhanced Comprehensive HIV Prevention Planning, cornerstone of HHS-wide 12 Cities Project
- FDA approves 2nd Fourth Generation HIV Diagnostic Test for earlier detection of infection

December 2010:

- HRSA begins receiving client-level data from grantees to improve accuracy and reduce duplication
- CDC analysis shows 1/3 of HIV diagnoses among Americans between 2001-2009 were diagnosed late

June 2011:

- CMS releases guidance & instructions for states to apply for 1115 Medicaid waivers to cover pre-disabled PLWHAs

August 2011:

- NIH releases HPTN 052 results
- CDC revises new HIV infection estimates to 50k per year

December 2011:

- HHS announces additional \$50M (\$35M to support ADAP and \$15M for Ryan White Part C)

July 2010:

- National HIV/AIDS Strategy released and focuses on reducing prevalence of undiagnosed positives, reducing HIV transmission rate, improving linkage to care, continuous care, and viral suppression
- HHS redirects \$25M to address ADAP waiting list of 2359 persons nationally
- NIH announces CAPRISA microbicide results

November 2010:

- NIH announces iPrex results
- President Obama releases statement praising CAPRISA and iPrex results

May 2011:

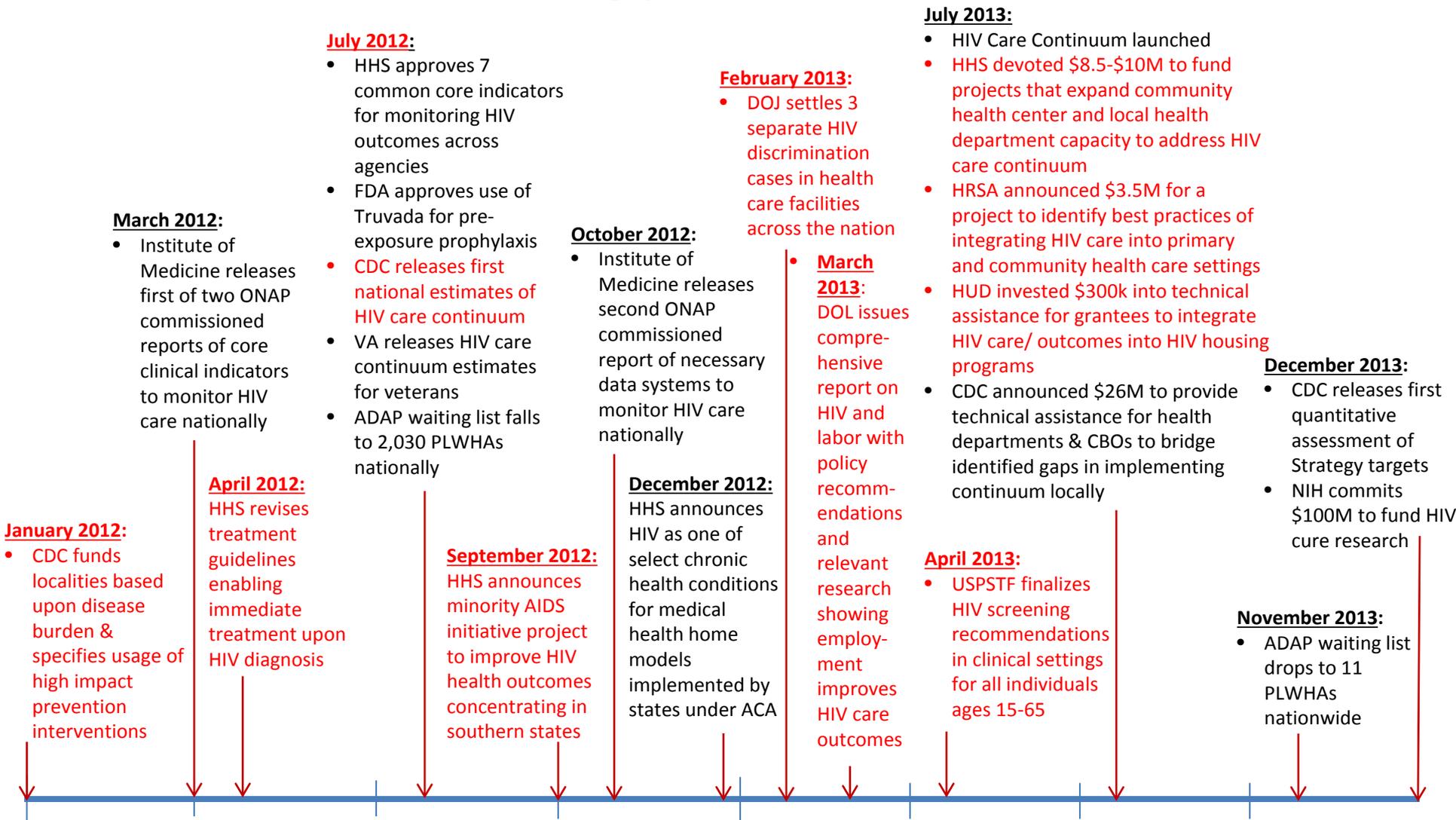
- HHS restructures the Secretary's Minority AIDS Initiative Fund to be in closer alignment with the Strategy



2010

2011

Milestones in Implementing the Strategy, cont'd



2012

2013

Policy Issues that Matter

- Minimum wage
- Equal pay for women
- Immigration reform
- Equal benefits/ rights for LGBT
- ACA implementation
- Expansion of transgender rights
- Violence Against Women
- My Brother's Keeper Initiative
- Black gay ONAP direct