

Achieving the Goals of the National HIV/AIDS Strategy: Implications for Low Prevalence Areas

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Epidemiology of HIV in the U.S.

- Estimated HIV incidence: 50,000
- Estimated HIV prevalence: 1.2 million
- Approx. 20% unaware of their infection
- 33% rate of late diagnosis (AIDS w/in 1 yr.)
- Nearly half of persons who are diagnosed positive not engaged in regular HIV care
- Approx. 17,300 deaths due to HIV in 2008



Rates of AIDS Diagnoses in the United States, 2009

- Overall rate: 11.2 per 100,000
- Black/African American: 44.4 per 100,000
- Multiple Races: 15.1 per 100,000
- Hispanic/Latino: 13.9 per 100,000
- Native Hawaiian/Pacific Islander: 11.2 per 100,000
- American Indian/Alaska Native: 6.6 per 100,000
- White: 4.7 per 100,000
- Asian: 3.1 per 100,000

(CDC. HIV Surveillance Report; 2009 vol. 21. Feb 2011)



Estimates of New HIV Infections in the U.S., 2006-2009

- “relatively stable,” approx. 50,000 annual infections
- 61% MSM, 27% heterosexual, 9% IDU
- Blacks: 44% new HIV infections vs. 14% of population
- Hispanics: 20% of new HIV infections vs. 16% of population
- Black women (15X) and Hispanic women (4X) HIV infection rates compared to white women
- Young black MSM only group with sig. increase in HIV infections (06-09)

(Prejean et al. PLoS One, vol. 6, 2011)



Iowa and U.S. Comparison

	Iowa	U.S
Est. rate HIV dx, 2009	4.6 per 100,000	17.4 per 100,000
Est. rate AIDS, 2009	3.4 per 100,000	11.2 per 100,000
Est. cum. AIDS as of 2009	2,042	1,142,714

HIV Surveillance Report 2009, vol. 21, CDC, February



Adults and Adolescents Living with AIDS in Iowa, Year End 2008

- Total estimated number: 967
- Distribution by race/ethnicity (estimated):
 - White: 672
 - Black: 187
 - Hispanic: 88
 - Multiple Race: 11
 - Asian: 9



U.S. HIV Prevention Funding in 2007: NASTAD and Kaiser Family Foundation Report (2009)

HIV Prevention Funding		
	per capita	per living HIV/AIDS case
Iowa	\$ 0.57	\$1267.00
Low PrevInc. States**	\$ 0.94	\$1617.00
National	\$ 1.93	\$802.00

** low prevalence states: Alaska, Idaho, Iowa, Maine, Montana, Nebraska, New Hampshire, North Dakota, South Dakota, Utah, Vermont, West Virginia & Wyoming



Goals of the U.S. National HIV/AIDS Strategy (NHAS)

- Reduce new HIV infections
- Increase access to care and improve health outcomes for people living with HIV
- Reduce HIV-related disparities and health inequities
- Achieve a more coordinated national response to the HIV epidemic



Reduce HIV Incidence

- Intensify HIV prevention efforts in hard-hit communities
- Expand (“scale-up”) combinations of effective approaches
- Educate all Americans about HIV



HPTN 052: Preventing Sexual Transmission of HIV with ARVs

- Phase III RCT
- 1,763 serodiscordant couples (890 HIV+ men and 873 HIV+ women)—Africa, Asia, South America and US
- Immediate ARV rx vs delay until CD4+ fell below 250
- Follow-up median 1.7 yrs.
- 39 incident infections among partners: 28 genetically linked to + partner
- 27/28 were among delayed ARV group
- Earlier ARV initiation = 96% reduction in transmission

(M. Cohen et al. NEJM, vol 365, 2011)



HIV Testing and Diagnosis among U.S. Adults, 2001-2009

- Data from National Health Interview Survey
- Persons aged 18-64 years who'd "ever" been tested for HIV
- Between 2001 and 2006, stable at 40% "ever" tested
- Increase to 45% "ever" tested in 2009
- Rate of late dx decreased from 37% (2001-04) to 32% (2007)
- 55% of U.S. adults have never been tested and 1/3 of diagnoses are "late"

(MMWR 2010; 59: 1550-1555)



“Moving from a policy of providing testing to promoting testing”

- Social marketing campaign: “Come Together DC—Get Screened for HIV”
- Scale-up routine HIV testing in EDs, PC, prenatal care, and correctional settings
- Expand HIV testing in community settings
- Work with providers to incorporate routine HIV screening into practice
- Between 2007-2008: 70% increase in testing and 50% increase in initial CD4+ cell count

(Greenberg et al. *Fighting HIV/AIDS in Washington DC*, Health Affairs 2009)



Presentation with Advanced HIV in Southeastern US

- Qualitative study of 24 HIV infected persons attending SE HIV clinic with advanced disease
- 19 males and 5 females: April 2007-April 2008
- Most did not perceive themselves as susceptible to HIV (lack of perceived vulnerability)
- Few identified the benefits of seeking an HIV test
- Stigma was a “predominant” concern following dx when considering attending an HIV clinic

(Sandra McCoy et al. AIDS Care v21: 1313-1320; 2009)



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Reducing HIV Incidence: Possible Implications for Low Prevalence Areas

- Greater emphasis on targeted approaches
- Focus on interventions proven to reduce incidence
- Resource shifting
- Need to mobilize non-federal resources
- Stigma and/or low perceptions of vulnerability may impede efforts

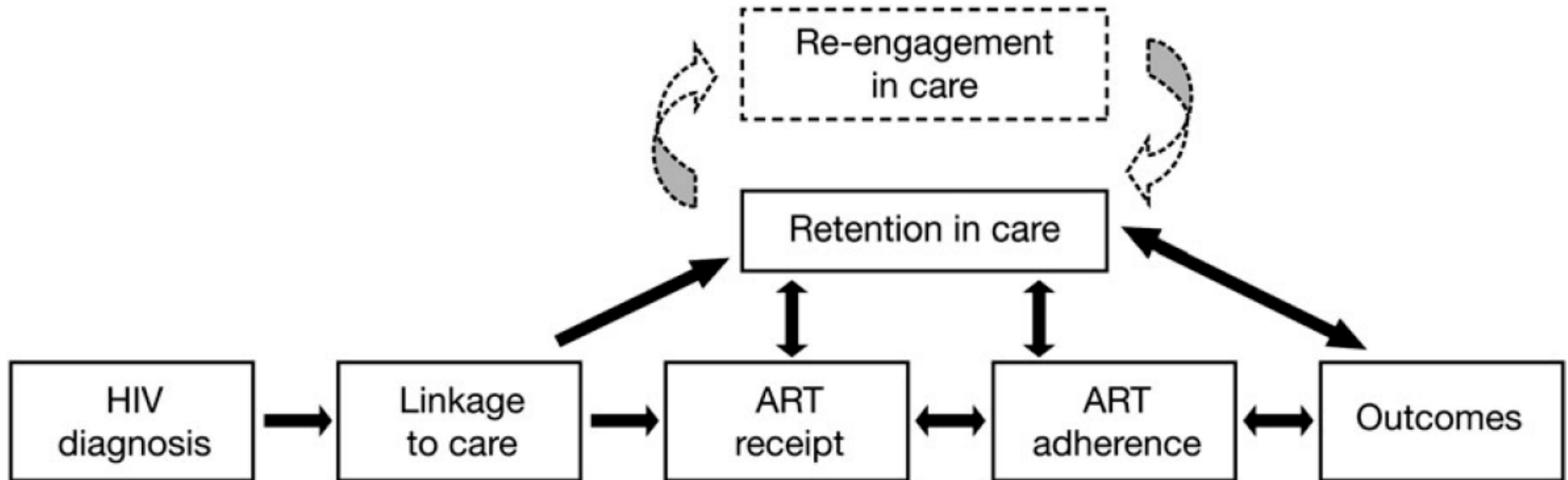


Increase Access to Care and Improve Health Outcomes

- Create and maintain effective linkages to quality care
- Increase the number and diversity of qualified providers
- Support people living with HIV with co-occurring health conditions and those who are challenged meeting basic needs

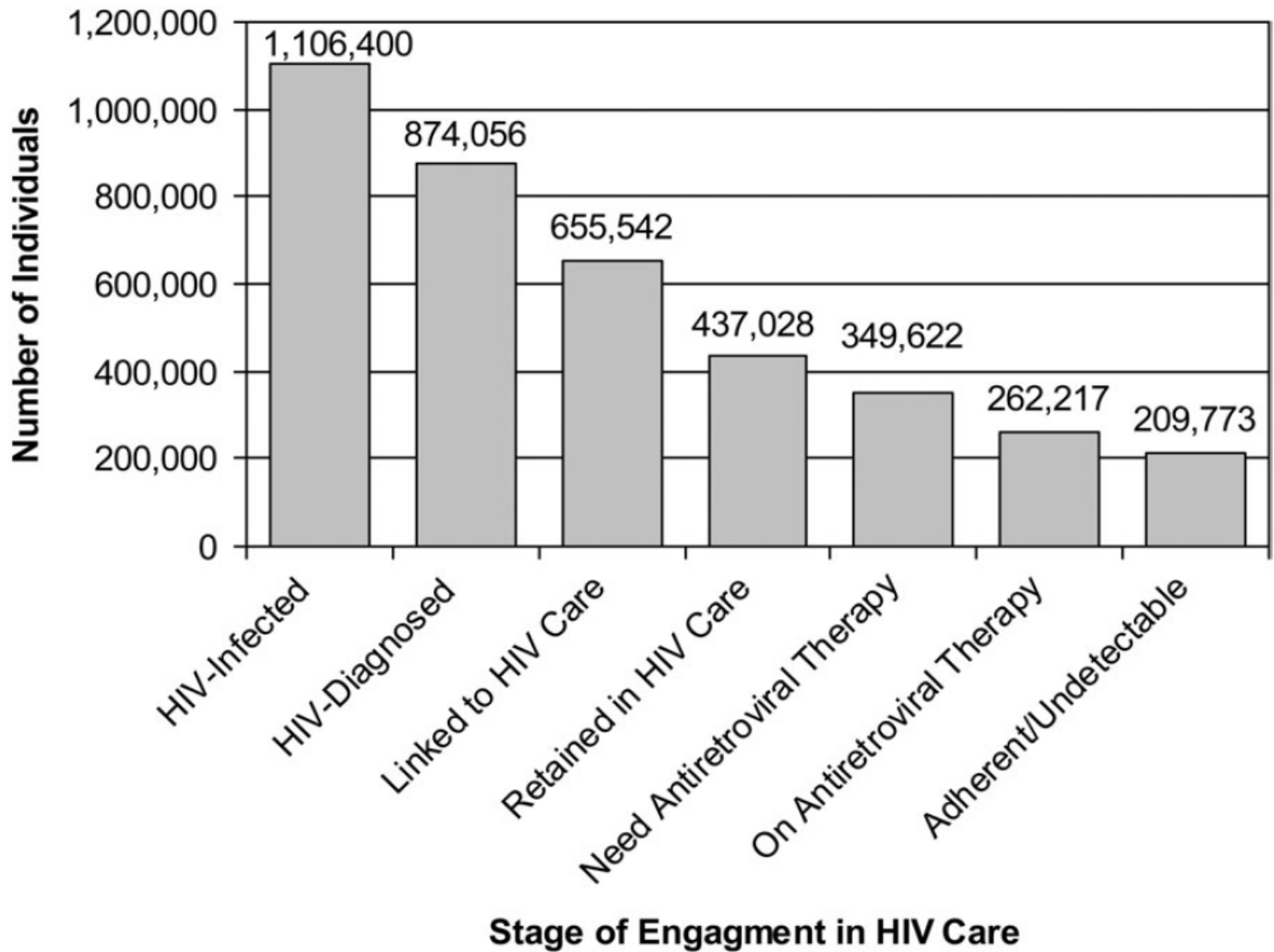


Engagement in Care



(CID 2001:52 (Suppl 2))





(Gardner et al. CID, 2011)



Factors Predicting Failure to Establish HIV Care

- Retrospective med record analysis of 404 new patients from a clinic in Texas for indigent HIV infect persons
- 191 (48%) failed to establish regular care
- Factors associated with failure to establish care (multivariate):
 - IDU
 - Admitted current alcohol use
 - Admitted former drug use
 - Younger age
- Successful HIV management requires retention in care

(Giordano et al AIDS Care 2005; 17: 773-783)



HIV System Navigation: An Emerging Model to Improve HIV Care Access

- Navigators help patients make better use of resources, improve communication with providers, sustain HIV care over time
- 437 patients: 77% male, 44% Black, 23% Hispanic & 31% less than HS educ.
- 37% reported at least one missed HIV visit in past 6 mos
- All received intervention: non-clinical staff who served as navigators and “coaches”
- Proportion with undetectable VL increased by 50% at 12 mos
- Proportion reporting no care in past 6 mos ↓ from 12% at baseline to 8% at 12 mos ($p < .001$)

(Bradford et al. AIDS Patient Care, 2007)



Health Impact of Supportive Housing for HIV Positive Homeless Patients

- 105 HIV positive, homeless inpatients at a public hospital in Chicago
- Randomized to usual care* (n = 51) or permanent housing with intensive case mgmt. (n = 54)
- Outcomes available on 90% (94/105) of enrollees
- Outcome measures at 1 yr: alive, CD4+ \geq 200 and VL < 100,000
- 55% intervention vs 34% in usual care (p= .04)

* discharge planning including referrals to overnight shelters or interim housing

(Buchanan et al. Am Journ Public Health, 2009)



Interventions Delivered in Clinical Settings are Effective in Reducing Sexual Risk

- HRSA-funded research initiative
- 3,556 HIV infected persons in care (13 demo sites) randomized to one of 4 interventions
- All interventions associated with decreased unprotected vaginal and anal sex with neg/unknown status partners
- Participants who received interventions from medical care providers reported significant decreases at 12 mos. OR 0.55; $p < .03$

(Myers et al. AIDS Behav 2010; 14: 483-492)



Improving Access to/Retention in Care: Possible Implications for Low Prevalence Areas

- Fewer medical experts may require alternative care systems (e.g. ECHO)
- Increased need to leverage care resources across public sector and other programs
- Greater need to mobilize community awareness of & support for vulnerable populations



Reduce HIV-related Health Disparities

- Reduce HIV-related mortality in high-risk communities
- Adopt community-level approaches to reduce HIV infection
- Reduce stigma and discrimination against people living with HIV/AIDS



Life Expectancy after HIV Diagnosis, U.S. 1996-2005

- Data from 25 states with name-based HIV surveillance
- Average life expectancy increased (by 12 years) but remains shorter than general population
- Improvements seen in both males/females and in all R/E groups, but disparities persist:
 - 15 yr. increase LE for white males, compared to 13 yr. for Hispanic males and 10 yr. for Black males
 - Among females, greatest increase in LE seen among Hispanic females (13 yr.) compared to 9 for white females and 8 for black females
- Life expectancy worse for persons diagnosed at later stage of HIV disease (CD4+ < 200)

(Harrison et al. JAIDS 2010; 53: 124-130)



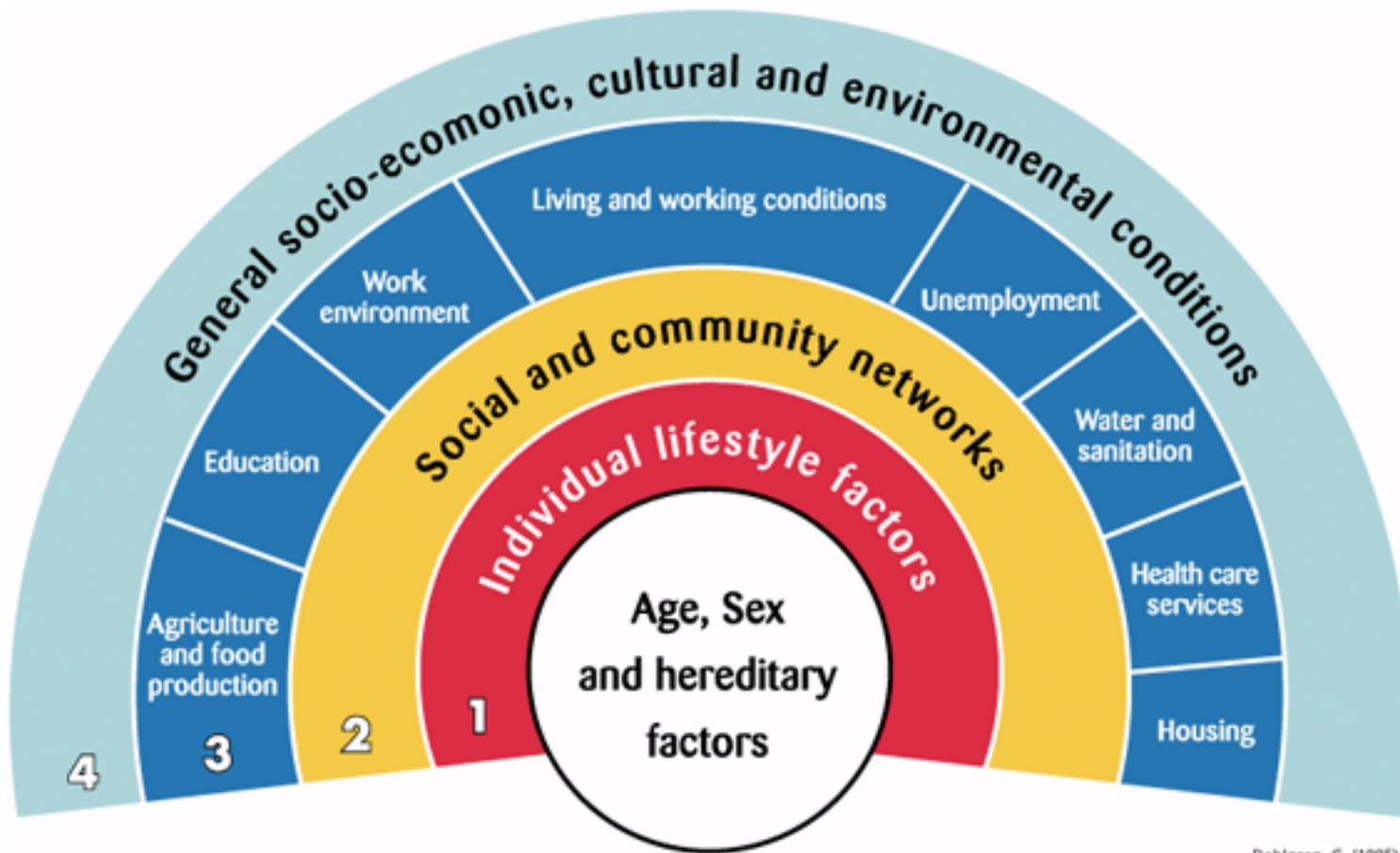
“...much of what humans do, think, and desire is influenced, if not determined, by key elements of social life including norms, values, networks, structures, and institutions.”

Auerbach et al. “Addressing the Social Drivers of HIV/AIDS” Global Public Health 2011



U.S. Department of **Health & Human Services**

Social Determinants of Health



Dahlgren, G. (1995)
European Health Policy Conference:
Opportunities for the Future. Vol 11 - Intersectoral Action for Health.
Copenhagen: WHO Regional Office for Europe

(Dahlgren European Health Policy Conference 1995)



Reducing HIV Disparities: Possible Implications for Low Prevalence Areas

- HIV/AIDS stigma is NOT exclusive to low prevalence or rural areas but...
- Limited HIV/AIDS specific resources may enhance or facilitate stigma
- Need to “Break the Silence!”



NHAS: A Programmatic Perspective

- Set clear goals
- Evaluate current priorities
- Re-evaluate deployment of resources
- Ensure accountability—at all levels (local, state, & federal)



Vision of the NHAS

“The United States will become a place where new 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.”

