AETC AIDS Education & Training Center Program
Southeast Regional Conference 2023

Diversity in the HIV Workforce: Addressing Challenges, Implementing Solutions

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Learning Objectives

Describe Demographics of the HIV Epidemic in the US

Identify challenges currently affecting the HIV Workforce

Recommend steps to strengthen the workforce pipeline and support current providers

Disclosures

- Scientific Advisory Board member for ViiV Healthcare
- Scientific Advisory Board member for Gilead

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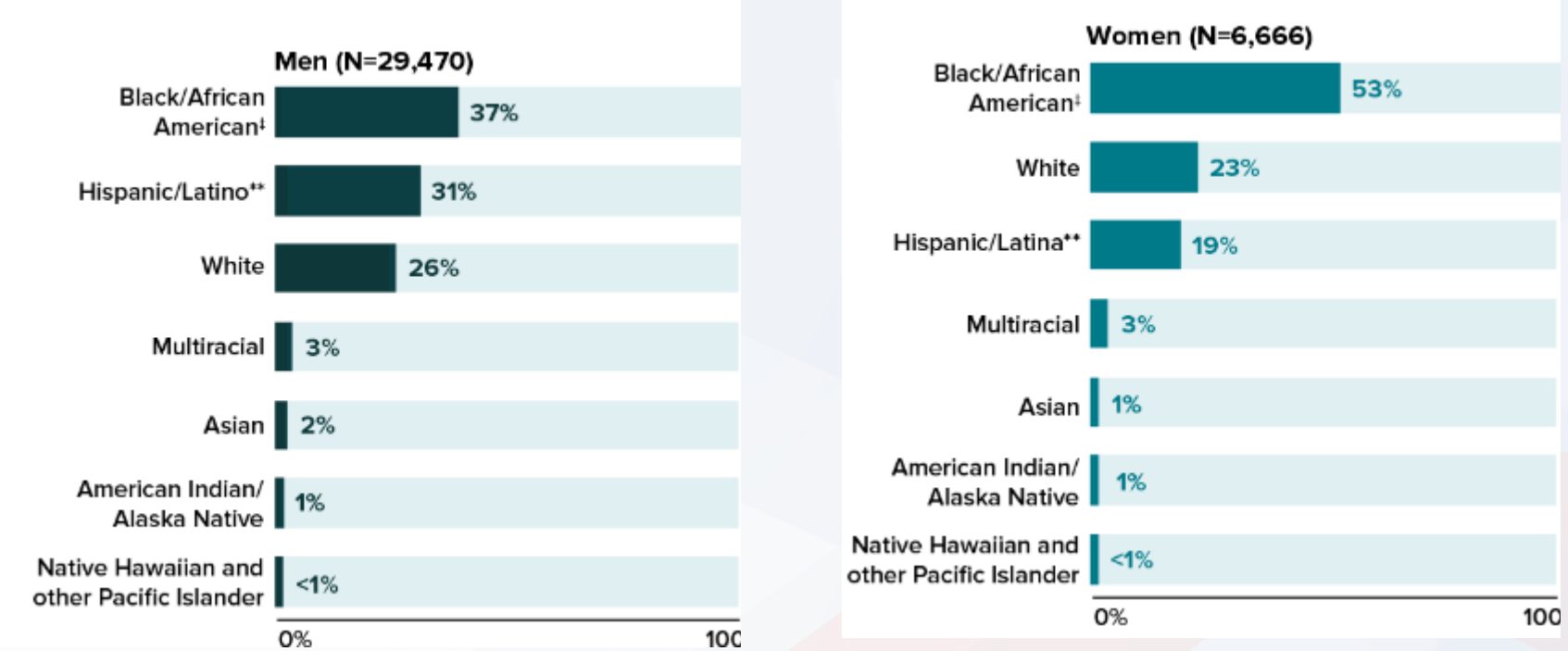
Diagnoses of HIV Infection and Population by Race/Ethnicity 2021—United States

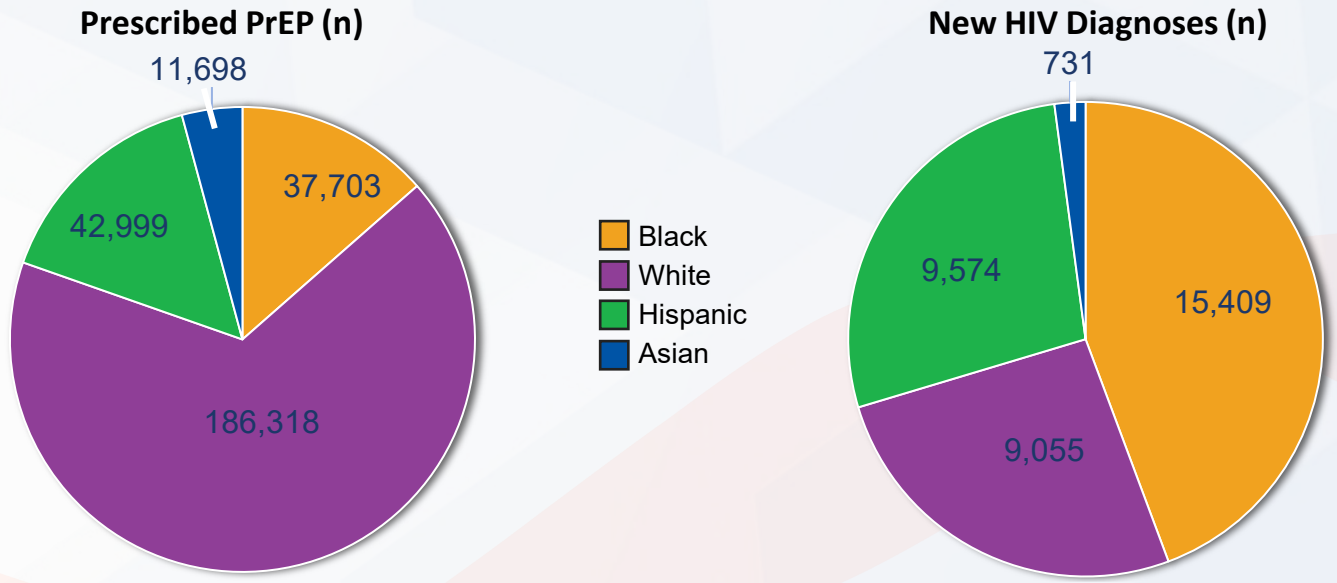


Despite representing ~25% of the US population, Black and Latinx people represent 69% of new HIV infections

CDC, HIV Surveillance Report 2023;34

HIV Prevention in Black and Hispanic People

- Black and Hispanic people accounted for 70% of new HIV diagnoses but only 18% of people prescribed PrEP in the US

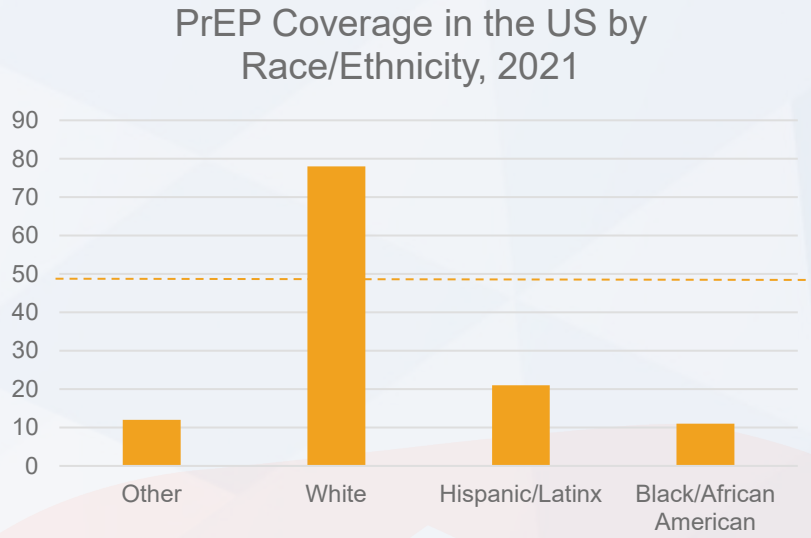


cdc.gov/hiv/library/reports/surveillance-data-tables/vol-1-no-7/index.html

Slide credit: clinicaloptions.com

PrEP Use to Need Ratio

- Goal by 2030 is that 50% of people who meet criteria for PrEP to be prescribed
- Only 11% of eligible African Americans are utilizing PrEP, compared to 78% of eligible Whites
- Females, adolescents / individuals ≤24, and residents of the South had lower levels of PrEP use relative to epidemic need

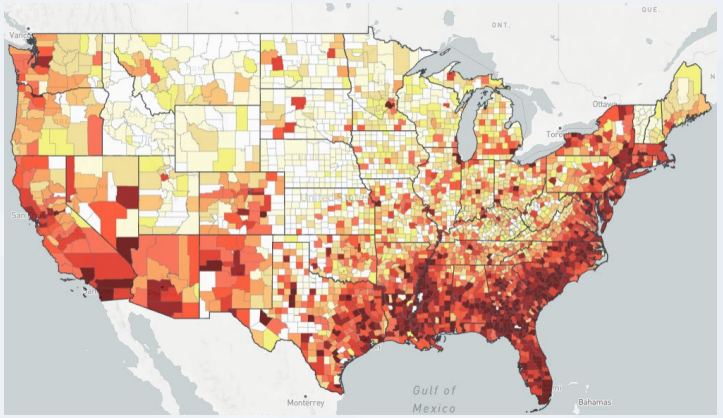


Seigler et al, *Ann Epidemiol.* 2018 Dec 28(12):841-849

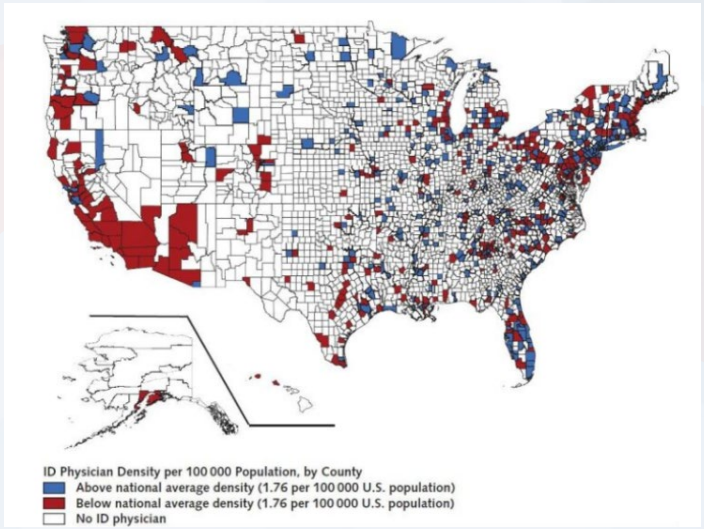
Lack of Expertise in HIV Hotspots in the US

- Southern US has the highest rate of new HIV diagnoses
- Poor access to providers with HIV knowledge
  - 80% of the counties in 14 Southern states no experienced HIV clinicians
  - Greatest disparities in rural areas

HIV Incidence by County



ID Physician by County



Bono et al, *Clin Infect Dis*. 2021 May 4;72(9):1615-1622, Ann Intern Med, 2020 173(7) 587-589

Defining Diversity

- Ideally the HIV workforce would mirror the diversity of the populations disproportionately affected by HIV
- Diversity with include not just race and ethnicity but also gender orientation.
- Disparities in HIV prevention and clinical research should also be a consideration.
  - According to the Centers for Disease Control and Prevention (CDC), in 2016, white Americans made up 26% of those who are considered at-risk for contracting HIV, yet they made up over 68 percent of those who received PrEP prescriptions that year.
  - Black Americans accounted for 43% of high-risk individuals but made up only 11% of PrEP users.

Unconscious Bias in Medical Care Delivery

- Microagressions
  - barely perceptible everyday insults or snubs
  - difficult to define but convey a negative message to a person because of their affiliation with a marginalized group
  - can be unintentional and rooted in unconscious bias
  - often delivered during one-on-one interactions

- Interplay of microagressions and patient interactions
  - Medical education and training
  - Patient care and documentation

Togioka et al. Diversity and Discrimination in Healthcare. StatPearls Publishing; 2023 Jan-. https://www.ncbi.nlm.nih.gov/books/NBK568721/ ; Torres et al. JAMA Surg. 2019 Sep 01;154(9):868-872

Provider Relationships and Disparities in Health Care

- Minority providers are more likely to serve in minority communities
- Minority patients report higher health care quality with racially/ethnically concordant providers
  - Decreased provider mistrust
  - increased necessary medical utilization and preventative services
- Poor outcomes for PLWH with race discordant provider
  - longer time to initiate ARV
  - decreased likelihood of receiving optimal HIV standard of care

Sohler et al, *AIDS Behav* 11:884–896; King et al, *Journal of General Internal Medicine*, 19, 1146–1153; Gebo, *JAIDS, 38:96-103,* Malat et al, *Ethnicity and Disease*, 15, 740–747

Drivers of Poor Recruitment of HIV Specialists

- Low pay for ID physicians / NP / PA compared to other specialties
- Education and training pipeline from within community that is most affected by HIV
- Syndemics
  - Low allocation of resources for “competing priorities”
  - Burden of poverty, education, substance use, unstable housing, immigration issues
- Health resources and high risk areas
- Paucity of mentors

Armstrong, CID, 2021 May 4;72(9):1627-1630.

Financial Burden of Medical Education

- Average cost of 4 year US medical school in 2023 : $230,296
  - average school loan debt >$200,000
  - 19% of graduates leave medical school with more than $300,000 in debt
  - The average medical school loan balances has doubled between 2000 and 2015 — from $124,700 to $246,000.
- Minority students may have higher burden
  - Less financial support from family
  - More likely to be immigrant / 1st generation

Medical school cost vs. debt

Year	Median four-year COA in 2019 dollars	Median education debt
2009	$227,000	$190,000
2010	$233,000	$187,000
2011	$237,000	$184,000
2012	$243,000	$189,000
2013	$250,000	$192,000
2014	$253,000	$194,000
2015	$263,000	$197,000
2016	$265,000	$202,000
2017	$265,000	$200,000
2018	$269,000	$203,000
2019	$272,000	$200,000

Hanson. https://educationdata.org/average-cost-of-medical-school Accessed July 12, 2023; AAMC Medical School Graduation Questionnaire, Tuition and Student Fee Questionnaire

Recruiting and Retaining HIV Trained Providers

- • Only 56% of ID training programs filled all their slots in 2022, while most other specialties were able to fill 90% or more of their programs.
- • An average medical student educational debt of more than $250,000 drives many physicians away from ID and toward more lucrative specialties.
- • It is estimated that 25% of health care facilities have reported a vacant infection prevention position.
  - More than half of long-term care facilities having seen an infection preventionist leave within the last 24 months.

Solutions to expanding the HIV workforce:
Increasing competence, Developing expertise

- Greater student and resident exposure to ID
- Improve financial compensation
- Inclusion of recruitment into family medicine, APP's, and ID pharmacist.
- Increase and sustained funding for one year HIV fellowships for MDs not pursuing ID subspecialty training
- ID/HIV Medicine Association support for APP's desiring focus training

Solutions to expanding the HIV workforce:
Increasing competence, Developing expertise

- Leveraging remote training and mentoring (eg HIV assist, AETC and Project ECHO)
- Salary support for mentor/preceptors
- Loan repayment
- Strengthening the pipeline by partnering with HBCUs and APP training programs

Initiatives to Support the HIV Workforce

S. 3244/H.R. 5602, *BIO Preparedness Workforce Act of 2021*

Version: Feb. 16, 2022

Request: Please cosponsor the *Bolstering Infectious Outbreaks (BIO) Preparedness Workforce Act*.

Summary: The legislation establishes a new loan repayment program with two categories of eligibility:

1. Health care professionals who spend at least 50% of their time engaged in **bio-preparedness and response** activities; and
2. Health care professionals who spend at least 50% of their time providing **infectious diseases care** in a shortage designation area, underserved community, or federally funded facility.

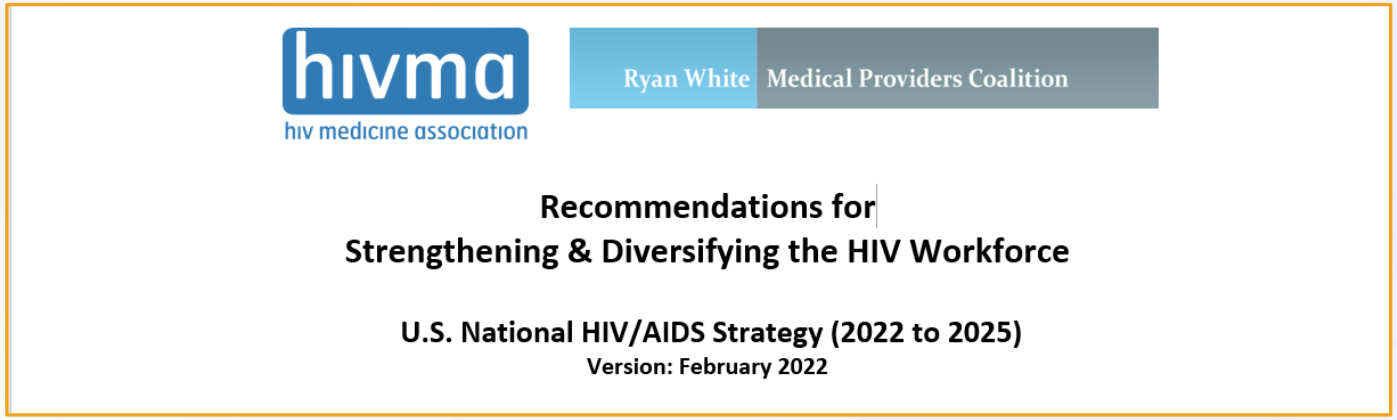
A qualified individual will serve for 3 years, or such longer period of time as determined appropriate by the Secretary and the individual. For each year of service, a qualified individual entering a contract with the Secretary may receive up to $50,000 in loan forgiveness. $50 million would be authorized for fiscal years 2023-2027.

Problem: The COVID-19 pandemic exposed gaps and weaknesses in our nation's preparedness for public health emergencies related to infectious disease outbreaks, including insufficient preparedness and response workforce capacity at health care facilities. Infectious diseases (ID) physicians are one key component, and often leaders of health care facility preparedness and response teams. ID specialists are also needed to care for patients with serious infectious diseases and are critical to prevent the spread of infectious diseases. A June 2020 study in the Annals of Internal Medicine found that 208 million Americans live in areas with little or no access to an ID physician.

Data published by Medscape in 2020 indicate that average annual salaries for ID physicians are below all other medical specialties except pediatrics, family medicine, endocrinology and public health, and even below the average salary for general internal medicine, although ID training and certification requires an additional two to three years of study and training. Given that the average medical student debt is $200,000, the ID specialty is a financially infeasible choice for many.

https://www.idsociety.org/policy--advocacy/bio-preparedness-workforce-act/ Accessed 2/9/2023

Sustaining and Building a Robust, Diverse & Culturally Responsive HIV Workforce



Recommendations Include:

- Leveraging community health workers to support linkages to HIV, STI and viral hepatitis screening
- Enhancing support for community health workers -- support higher base salary levels and a pathway for professional support, job placement and advancement

Summary

- A HIV workforce that reflects the populations most heavily affected by HIV and other infectious diseases must be a top priority
- To make meaningful progress towards Ending the HIV Epidemic, efforts must be made to address the pipeline of providers and to prevent burnout
- The COVID-19 pandemic, M-pox, poor funding for DOH/STD sites placed additional strains on the HIV workforce, as many providers are also the ID experts in their communities.
- Incentives, such as the loan repayment proposed by the BIO Preparedness Work Force Act, will be critical to drawing experienced HIV clinicians to communities and health care settings where they are most needed.

Thank You

AETC Program National Centers and HIV Curriculum

- **National Coordinating Resource Center –** serves as the central web –based repository for AETC Program training and capacity building resources; its website includes a free virtual library with training and technical assistance materials, a program directory, and a calendar of trainings and other events. Learn more: https://aidsetc.org/
- **National Clinical Consultation Center –** provides free, peer-to-peer, expert advice for health professionals on HIV prevention, care, and treatment and related topics. Learn more: https://nccc/ucsf.edu
- **National HIV Curriculum –** provides ongoing, up –to-date HIV training and information for health professionals through a free, web –based curriculum; also provides free CME credits, CNE contact hours, CE contact hours, and maintenance of certification credits. Learn more: www.hiv.uw.edu