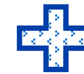
CDC/HRSA Advisory Committee (CHAC) Workforce Workgroup
November 1-3, 2022

HIV Workforce Development as a Key Pillar for Ending the US HIV Epidemic by 2030

Ending the HIV Epidemic

EHE relies on 4 key strategies:



A strengthened HIV workforce is needed to support EHE **implementation**.

Federal Implementation Plan
for the United States | **2022–2025**

The new implementation plan outlines specific action areas for federal agencies to support the National HIV/AIDS Strategy including the following workforce priorities:

- Increased workforce diversity
- Holistic care and treatment provision
- Culturally and linguistically appropriate services
- Team-based care delivery
- Community recruitment and engagement

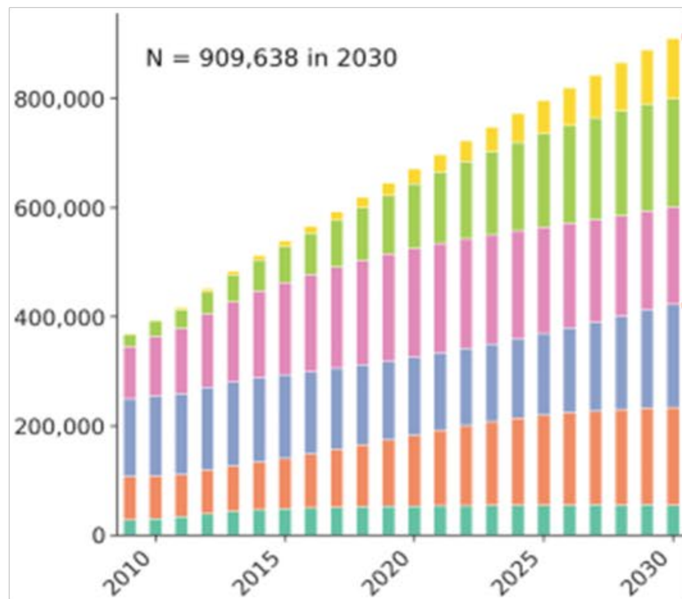
HIV Workforce Challenges: Scale, Reach, Effectiveness

Workforce Challenge #1: Scale of comprehensive HIV care delivery

- The number of people receiving HIV treatment is growing
- The cohort of PLWHIV on treatment is rapidly aging

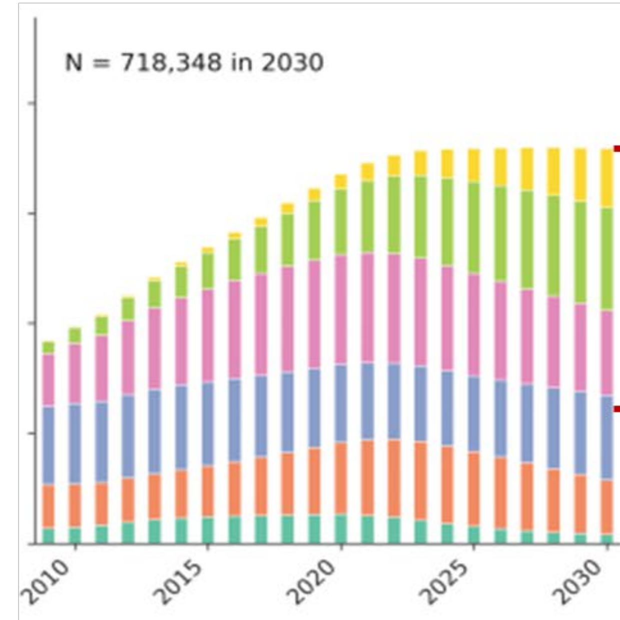
Workforce capacity for comprehensive HIV care at scale is needed

Projected number of PLWHIV on ART (Baseline scenario)



~54% of PLWHIV ≥50 yrs

Projected number of PLWHIV on ART (If EHE goal of 75% infection reduction by 2025 is attained)



~62% of PLWHIV ≥50 yrs

Source: Althoff KN et al. The shifting aging distribution of people with HIV using antiretroviral therapy in the United States. AIDS. 2022;36:459-471.

Limitations in HIV Workforce Capacity

Studies on HIV Workforce Supply and Demand:

HIV workforce supply was forecasted to decrease by 10%, while demand was forecasted to increase by 14%

	2010	2011	2012	2013	2014	2015
HIV Clinicians						
Total	4,937	4,823	4,724	4,625	4,527	4,429
HIV Visits Demanded						
Total	5,451,057	5,601,868	5,752,700	5,903,719	6,054,760	6,205,738

*Updated HRSA workforce survey data coming soon

Clinical Infectious Diseases

MAJOR ARTICLE

HIV/AIDS

Qualifications, Demographics, Satisfaction, and Future Capacity of the HIV Care Provider Workforce in the United States, 2013–2014

John Weiser,[1] Linda Beer,[1] Brady T. West,[2] Christopher C. Duke,[3] Garrett W. Gremel,[3] and Jacek Skarbinski[1]

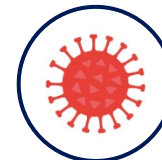
[1]Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia; [2]Survey Research Center, University of Michigan, and [3]Altarum Institute, Ann Arbor, Michigan

Care **capacity in the HIV workforce was estimated to increase by 65,000 patients by 2019**, while the number of people living with HIV in need of care was estimated to increase by **at least 100,000**.

Factors Limiting Workforce Capacity:

Aging HIV workforce

Insufficient trainees entering HIV specialties



Strain on the ID workforce due to COVID-19

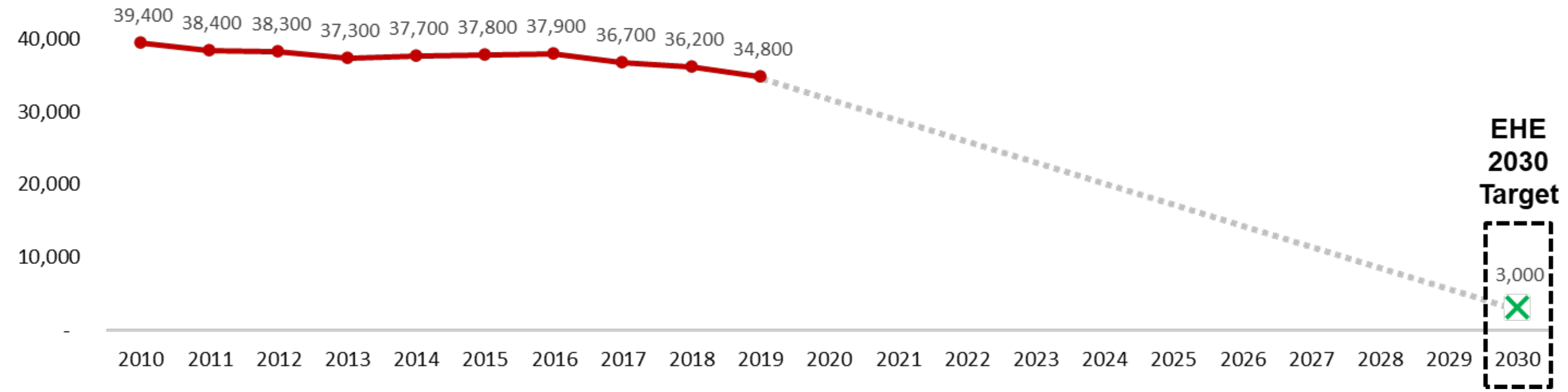
Sources: Gilman et al. HIV Specialist, August 2016.; Weiser et al. CID. 2016;63(7):966-975.

HIV Workforce Challenges: Scale, Reach, Effectiveness 1

Workforce Challenge #2: Reach of HIV prevention and treatment

- Effective tools for HIV prevention/treatment exist, but new infections have remained relatively stable
- Accelerated decreases in annual HIV infections are needed to attain EHE goals

Better reach of HIV services (testing, PrEP, treatment) among people living with or at risk of HIV is needed



Sources: HIV.gov https://www.hiv.gov/hiv-basics/overview/data-and-trends/statistics, CDC Atlas https://gis.cdc.gov/grasp/nchhstpatlas/charts.html

HIV Workforce Challenges: Scale, Reach, Effectiveness 2

Workforce Challenge #3: Effectiveness of HIV prevention and treatment delivery systems

- Gaps and failures in the systems for delivery of effective HIV prevention and treatment remain too frequent
- E.g., high transmission HIV clusters represent “breakdowns” of existing HIV prevention and treatment systems

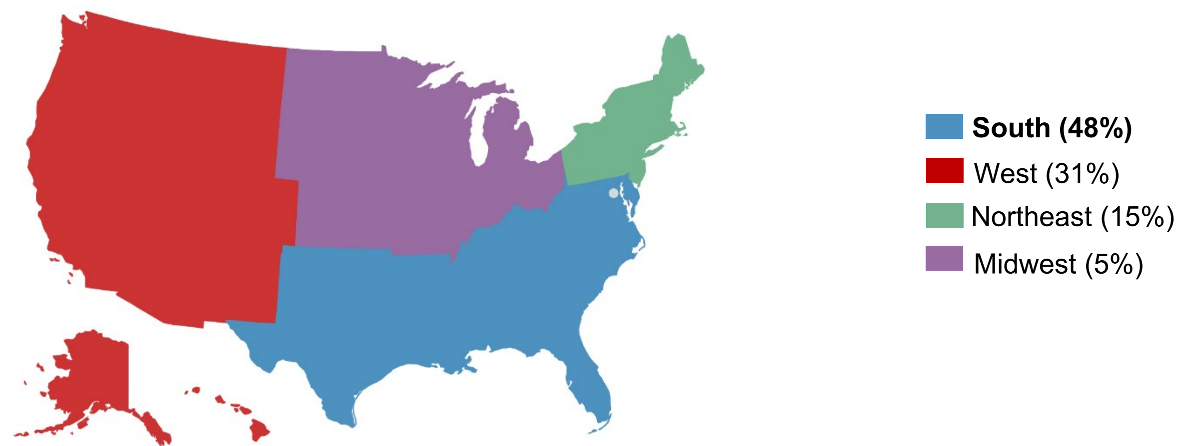
Increased effectiveness of HIV prevention and treatment delivery systems is needed

Among 136 high HIV transmission clusters first detected 2018-2019, the CDC identified 38 **large clusters** that had grown to >25 people by 2021:

29 clusters primarily involved MSM

6 clusters primarily involved PWID

People in 29 Large HIV Transmission Clusters Primarily Involving MSM by Census Region



Source: Perez SM, et al. MMWR Morb Mortal Wkly Rep 2022;71:1201–1206.

Approaches for Addressing HIV Workforce Challenges

Traditional Approach

I.e.:

Increased investment in primarily existing models of HIV workforce development, prevention, and care delivery

vs.

Reimagining the HIV Workforce

I.e.:

Adoption of new models for HIV workforce development that are designed to address gaps in scale, reach, and effectiveness of prevention and care delivery

5 Strategies for Reimagining the HIV Workforce

Broadening Definitions of the HIV Workforce

Adopting Decentralized and Differentiated Models for Service Delivery

Enabling Practice to the Highest Level of Training and Licensure

Increasing Capacity to Mitigate the Social Determinants of Health

Adopting Multidisciplinary Team-Based Models for HIV Prevention and Care

Strategy #1 Broadening Definitions of the HIV Workforce

Traditional Model for Defining the HIV Workforce

Singular focus on HIV specialty service providers

Infectious Disease Physicians who provide HIV care

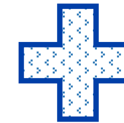
Nurse Practitioners who provide HIV care

Physician Assistants who provide HIV care

Non-ID Physicians who provide HIV care

Reimagined Model for Defining the HIV Workforce

Non-HIV specialist practitioners involved in delivery of comprehensive health and social services to people at risk of and living with HIV



PLWHIV, Primary Care Providers, RNs, LPNs, Pharmacists, Dentists, Social Workers, Behavioral/Mental Health Professionals, Community Health Workers, etc.

Strategy #1: Broadening Definitions of the HIV Workforce

Relative Sizes of the Traditional HIV Workforce vs. the Available, Qualified Workforce

Data:
HIV Specialists: 2015 estimates, HRSA, HIV Specialist;
Other workforce numbers: U.S. Bureau of Labor Statistics, Occupational Employment and Wage Statistics, 2020: HIV.gov U.S. Statistics, 2022

Notes:
* Primary Care MDs are comprised of General Internal Medicine Physicians and Family Medicine Physicians
* Social Workers are comprised of Healthcare, Mental Health, and Substance Abuse Social Workers
* Counselors are comprised of Substance Abuse, Behavioral Disorder, and Mental Health Counselors

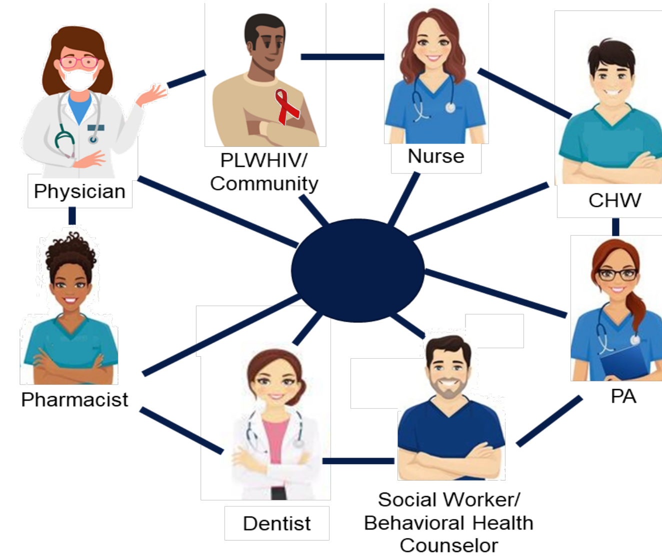
Strategy #2: Adopting Interdisciplinary Team-Based Models for HIV Services

Physician-centered model focused on delivery of clinical prevention and treatment services

Physician

Reimagined Model for Team-Based HIV Service Delivery

Comprehensive and team-based model of whole-person care that relies on complementary skills



The HIV workforce should have expertise in caring for aging PLWHIV.

Case Example: The Ryan White Program

HRSA
Ryan White & Global HIV/AIDS Programs

Reliance on coordinated, interdisciplinary care teams for comprehensive HIV services represents a key characteristic of Ryan White funded care settings

Viral Suppression among People Living With Diagnosed HIV, United States, 2020

Ryan White Patients	National Average
89.4 %	64.6 %

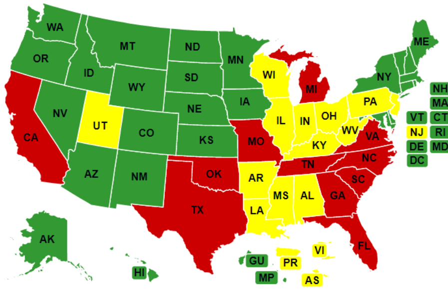
Strategy #3: Enabling Practice to the Highest Level of Training and Licensure

Traditional Model

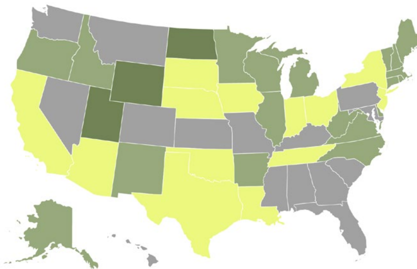
State-level regulatory restrictions preventing practice to the highest level of training/licensure for key members of the HIV care team

E.g.:

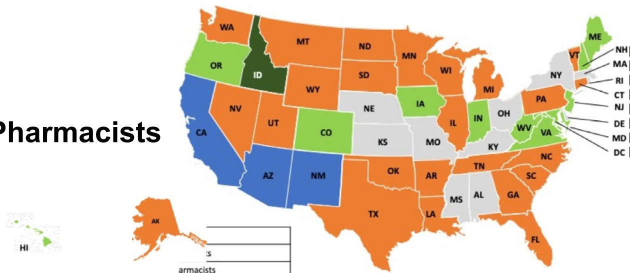
Nurse Practitioners



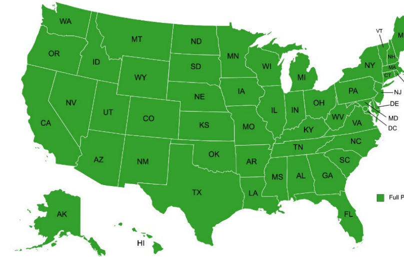
Physician Assistants



Pharmacists



Reimagined Model



Ability to practice to the highest level of license and training

Making the Case for Removal of Practice Restrictions:

Nurse Practitioners

Nurse-delivered primary care results in **comparable patient outcomes** relative to physician-delivered care, **including for HIV treatment**

If full NP SOP were adopted nationally, the number of U.S. residents living in a county with primary care shortages would decrease by **70%**

APRNs/PAs are **~50%** more likely to prescribe PrEP than physicians

Physician Assistants (PAs)

Advancement in pharmacist **certification** and **training** has vastly expanded prevention and treatment services delivered by pharmacists

Pharmacists

Sources:
Campaign for Action; American Academy of Physician Assistants; National Alliance of State Pharmacy Associations: Sources: The Future of Nursing: 2020-2030, National Academies of Science, Engineering, and Medicine, 2021; Laurant, M, et al. Cochrane Database Syst Rev. 2018;7(7); Kurtzman ET, Barnow BS. Med Care. 2017;55(6):615-622; Zhang C, et al. AIDS patient care and STDs. 2019;33(12):507-527.; Owen JA, Skelton JB, Maine LL. Pharmacy. 2020;8(3):157.

Strategy #4: Adopting Decentralized and Differentiated Models for HIV Service Delivery

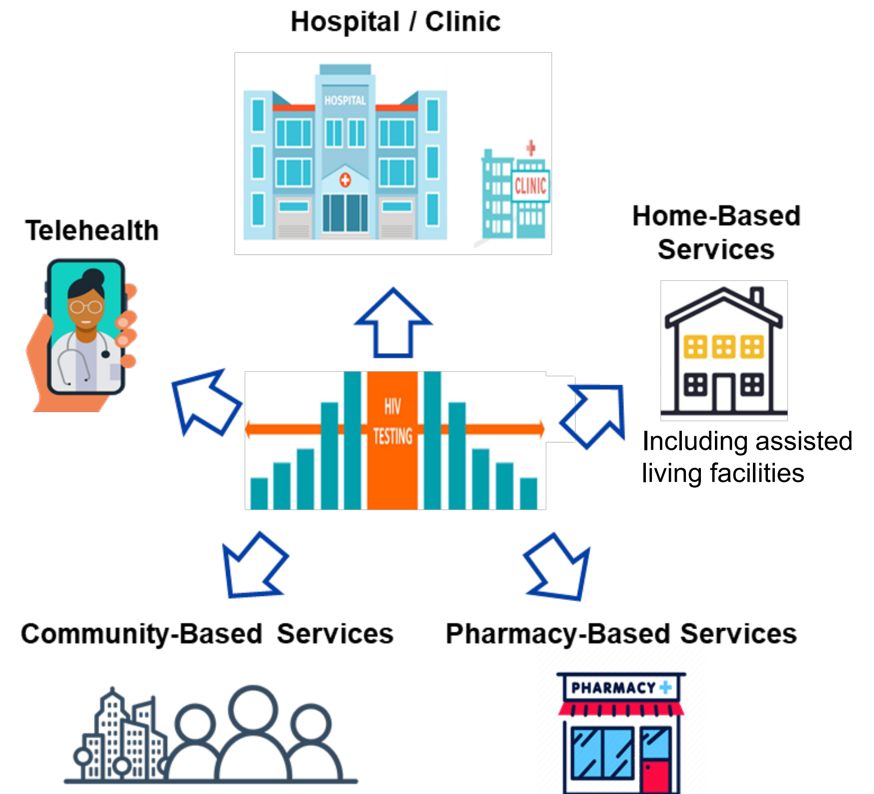
Traditional Model for HIV Service Delivery

Delivery of one-size-fits-all HIV services across the status-neutral care continuum within traditional, centralized clinical settings

One-size-fits-all, centralized clinical care

Reimagined Model for HIV Service Delivery

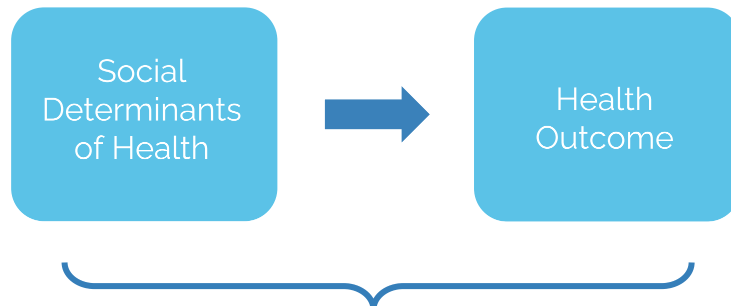
Differentiated and decentralized models that tailor HIV service delivery across the status-neutral care continuum to the needs of patients



Strategy #5: Increasing Workforce Capacity to Mitigate the Mechanisms of Social Determinants of Health (SDOH)

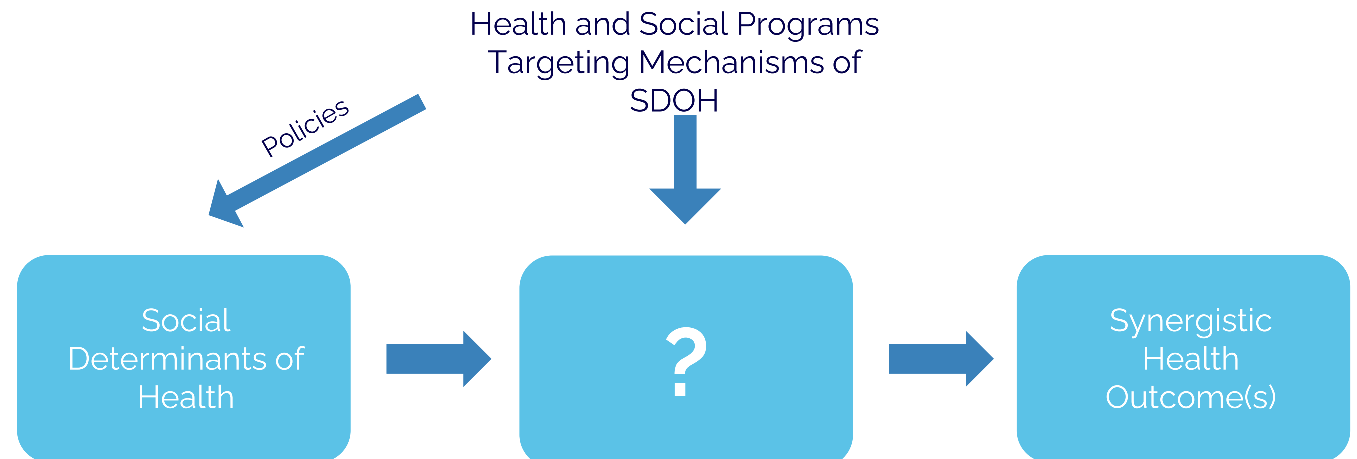
Traditional Model for Addressing SDOH in HIV Care

SDOH frameworks frequently used in healthcare and health policy rely largely on broad and static domains of SDOH.



Reimagined Model for Addressing SDOH in HIV Care

Focus on identification and understanding of specific mechanisms of SDOH impact for **targeted mitigation**



It is important to consider the unique needs of PLWHIV who are aging, particularly those who have been impacted by harmful SDOH that shape long term health outcomes.

Recommendations for Supporting a Reimagined HIV Workforce 1-5

1. Remove regulatory barriers that place restrictions on practice at the highest level of training and licensure (e.g., for nurse practitioners, PAs, medical technicians, pharmacists, etc.) and explore innovations to extend practice scope and capabilities, coupled with appropriate recognition and compensation
    a. Encourage and incentivize programs that create pathways and remove barriers for more diversity in professional careers beyond CHW (e.g., fellowship programs)
2. Ensure CMS offers reimbursement for decentralized, differentiated, and team-based whole-person, contextualized HIV prevention and care services
3. Support a shift toward education and training for the future health workforce that emphasizes key competencies of team-based, whole-person contextualized HIV care and increase funding for specialized HIV training programs (e.g., via GME, GNE, HRSA, etc.)
4. Invest in infrastructure development for delivery of decentralized, differentiated HIV prevention and care (e.g., telehealth, community-based delivery of services, etc.)
5. Allocate funding to HIV-specific demonstration projects designed to mitigate the specific mechanisms of SDOH and foster multilevel resilience (e.g., via Medicaid Section 1115)

Recommendations for Supporting a Reimagined HIV Workforce 6-9

6. Better integrate all team members (e.g. CHWs, RNs, LPNs, Social Workers, Pharmacists, Behavioral/Mental Health Professionals) into the HIV workforce in partnership with other care providers and address appropriate training standards, compensation, and paths for promotion

7. Develop a standing workgroup/committee to provide guidance and to monitor and address workforce issues, including:
   a. Recruitment of a diverse workforce adequately representing the communities most affected by the HIV pandemic
   b. Appropriate and meaningful involvement of PLWHIV
   c. Need for the HIV workforce to incorporate a syndemic approach, reflecting the intersecting epidemics of substance abuse, violence and mental health disorders and other social determinants of health affecting and compromising care for PLWH
   d. Ensuring alignment of the workforce with current and emerging needs and challenges of PLWHIV communities

8. Develop and disseminate effective targeted, multi-level interventions to mitigate the social determinants of health (SDOH)

9. Identify and support viable HIV career workforce trajectories through adequate compensation, advancement opportunities, and alignment with current and emerging workforce needs and challenges