EHE relies on 4 key strategies:

- Diagnose
- Protect
- Treat
- Respond

A strengthened HIV workforce is needed to support EHE implementation.

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

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%

<table>
<thead>
<tr>
<th>Year</th>
<th>HIV Clinicians</th>
<th>HIV Visits Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4,937</td>
<td>5,451,657</td>
</tr>
<tr>
<td>2011</td>
<td>4,823</td>
<td>5,601,868</td>
</tr>
<tr>
<td>2012</td>
<td>4,724</td>
<td>5,752,708</td>
</tr>
<tr>
<td>2013</td>
<td>4,625</td>
<td>5,903,719</td>
</tr>
<tr>
<td>2014</td>
<td>4,527</td>
<td>6,054,760</td>
</tr>
<tr>
<td>2015</td>
<td>4,429</td>
<td>6,205,738</td>
</tr>
</tbody>
</table>

*Updated HRSA workforce survey data coming soon

Factors Limiting Workforce Capacity:

- Aging HIV workforce
- Insufficient trainees entering HIV specialties
- Strain on the ID workforce due to COVID-19

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.

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

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**Annual HIV Infections in the U.S., 2010-2019**

- 2010: 38,400
- 2011: 38,300
- 2012: 38,300
- 2013: 37,300
- 2014: 37,000
- 2015: 37,800
- 2016: 37,900
- 2017: 36,700
- 2018: 36,200
- 2019: 34,800

**EHE 2030 Target**

- 2030: 3,000

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

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

- South (48%)
- West (31%)
- Northeast (15%)
- Midwest (5%)

Approaches for Addressing HIV Workforce Challenges

Traditional Approach

I.e.: 

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

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

Physicians (ID and other) providing HIV care (~3,900)

Nurse Practitioners and Physician Assistants providing HIV care (~500)

Data:
- HIV Specialists: 2015 estimates, HRSA, HIV Specialist

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

- RNs: ~3,050,000
- LPNs: ~650,000
- PLWHIV: ~1,200,000
- CHWs: ~61,000
- Dentists: ~109,000
- PAs: ~133,000
- Primary Care MDs: ~161,000
- Social Workers*: ~289,000
- Behavioral/Mental Health Counselors*: ~311,000
- Pharmacists: ~313,000
- NPs: ~230,000
- CHWs: ~61,000
- PLWHIV: ~1,200,000
Strategy #2: Adopting Interdisciplinary Team-Based Models for HIV Services

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

Reimagined Model for Team-Based HIV Service Delivery
Comprehensive and team-based model of whole-person care that relies on complementary skills

Case Example: The Ryan White Program
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

89.4% Ryan White Patients
64.6% National Average
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-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.

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

Sources:
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

Hospital / Clinic
Telehealth
Home-Based Services
Including assisted living facilities
Community-Based Services
Pharmacy-Based Services
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