OPS Workforce Development and Training Team

Presented to CHAC
November 2, 2022

Ronald D. Wilcox MD
Chief Medical Officer, Team Leader of Workforce Team
HIV/AIDS Bureau (HAB)

Vision: Healthy Communities, Healthy People
Program Mission

AETC Program Mission:
Strengthen the HIV workforce by increasing the number of health care professionals who are effectively educated and motivated to counsel, diagnose, treat, and medically manage people with HIV and by helping prevent HIV transmission among high-risk patients.
AETC Program

8 Regional AETCs
National Evaluation Contractor (NEC)
Building the HIV Workforce and Strengthening Engagement in Communities of Color (B-SEC) {MHAF Funding}
National Clinician Consultation Center (NCCC)
National Coordinating Resource Center (NCRC)

National HIV Curriculum (NHC) Programs:
(1) NHC e-Learning Platform: Enhancements and Operations
(2) Integrating the NHC e-Learning Platform into Health Care Professions Programs
AETC Program Overview

8 Regional AETCs

National Coordinating Resource Center

AIDS Education and Training Center (AETC) Program

National Clinician Consultation Center

National HIV Curriculum Programs
Regional AETCs: Overview

Eight Regional AETCs:

- New England
- Northeast/Caribbean
- MidAtlantic
- Southeast
- Midwest
- Mountain West
- South Central
- Pacific

View the interactive map at: http://aidsetc.org
# Regional AETCs: Training Types

<table>
<thead>
<tr>
<th>TRAINING TYPES</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Didactic Presentations</td>
<td>Didactic presentations, panel discussions, journal clubs, teleconferences and other formats</td>
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<tr>
<td>Interactive Presentations</td>
<td>Interactive learning through discussion of cases supplied by a trainer, role play, simulated patients, and train-the-trainer and other skill building activities</td>
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<tr>
<td>Communities of Practice</td>
<td>Collaborative networks working together to improve organizational operations</td>
</tr>
<tr>
<td>Clinical Preceptorships</td>
<td>Preceptorships, &quot;mini-residencies,&quot; or observation of clinical care at either the AETC training site or the trainee's workplace</td>
</tr>
<tr>
<td>Clinical Consultation</td>
<td>Consultation, case-based discussion with cases supplied by trainee, or on-site clinical consultation at trainee’s clinical setting</td>
</tr>
<tr>
<td>Coaching for Organizational Capacity Building</td>
<td>Organizational technical assistance and capacity building</td>
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</table>
Regional AETCs: Overview

To strengthen the HIV workforce, AETCs provide:

- **Core training** courses on a wide range of topics from HIV care and treatment to organizational development

- **Interprofessional education** through partnerships with schools of medicine, nursing, pharmacy, and behavioral health to foster an interdisciplinary HIV care team

- **Training for minority providers and minority-serving providers** to increase the number of health care providers equipped to provide quality HIV care to people of color

- **Practice transformation** support to facilitate organizational change so practices/organizations can begin to provide HIV care or enhance their current HIV care and treatment services
Core training

- “increase the number of HIV providers who intend to counsel, diagnose, treat, and medically manage PLWH, particularly by reaching novice and low-volume HIV clinics and providers in an effort to increase the size of the HIV workforce and patient access to quality HIV care”
- Work with Parts A and B to “Identify those clinics and clinicians providing care to few or no PLWH in order to increase workforce capacity. Develop and implement the core training work plan”
- increase awareness and uptake of replicable HIV service delivery mode, ie SPNS
- collaborate with other federal training programs and stakeholders
- promote and implement innovative training techniques to engage rural or clinically isolated health care professionals
- support the cultural and ethnic diversity among trainees and patients served
- align training plans with the National HIV/AIDS Strategy and the HIV care continuum
NOFO 19-035: Regional AETCs

• Minority AIDS Initiative
  ▪ “to increase the capacity of minority providers and minority-serving providers to provide HIV care, increase access to HIV care, and decrease disparities in outcomes along the HIV care continuum among minority PLWH”
  ▪ “Note that while MAI funds are for innovative projects, they are not limited solely to new projects. These funds may complement current activities involving training and/or capacity building that target racial and ethnic minorities”
  ▪ Emphases:
    ✓ (1) HIV testing and risk counseling;
    ✓ (2) patient navigation and medical case management;
    ✓ (3) adherence assessment and counseling;
    ✓ (4) alternative models for delivering HIV care (task shifting, telemedicine, emerging technologies, etc.); or
    ✓ (5) cultural competency (racial/ethnic, gender, and sexual orientation)
• Practice Transformation (PT) Project
  ▪ “minimum of six eligible HRSA-funded community health centers (CHCs), of which three (3) must be Ryan White funded and three (3) must be non-Ryan White funded. Practice transformation activities are derived from the principles of the Patient Centered Medical Home (PCMH) model. Through coaching and practice facilitation, the goal is for the AETCs to assist the selected CHCs in enhancing outcomes along the HIV care continuum”
  ▪ RWHAP funded clinics had to be chosen in collaboration with Part A or Part B Directors
  ▪ Non-RWHAP funded centers
    ✓ Not funded under RWHAP Part C
    ✓ Not under restrictions from BPHC
    ✓ Utilize an EHR at all sites
    ✓ Serve at least 30% racial or ethnic minorities
    ✓ Within 30 miles of a primary care health professional shortage area
NOFO 19-035: Regional AETCs

• Inter-Professional Education (IPE) Project
  ▪ “faculty of health professions schools and graduate departments or programs are able to teach students how to provide high quality HIV care to PLWH incorporating a hands-on, team-based learning approach ... The goal of this initiative is to increase and strengthen the HIV workforce, thus contributing to improved outcomes along the HIV care continuum”
  ▪ Relates to students by:
    ✓ Cohort-based training where an interdisciplinary group of students receives a defined HIV IPE curriculum with specified start and end dates
    ✓ Hands-on clinical learning opportunities, with placement of students in partnering clinical sites
    ✓ Integrating an HIV curriculum or other HIV IPE trainings that students may receive at different or unspecified time points during their course of study
  ▪ Required to partner with accredited schools of, and graduate departments or programs of, medicine, nursing, pharmacy, and behavioral health (e.g. clinical counselors specializing in opioid treatment, psychiatrists, and social workers). Partners may also include but are not limited to accredited schools of, and graduate departments or programs of, dentistry, behavioral health, social work, public health, and allied health
National Clinical Consultation Center (NCCC)

What Does the NCCC Do?

• Provides **free expert clinical advice** to health care professionals on HIV prevention, care, and treatment and related topics (e.g., hepatitis C) through telephone and e-consultation

• Manages the following **call centers**:
  1. HIV/AIDS Management Warmline
  2. Perinatal HIV Hotline (open 24/7)
  3. Hepatitis C Management Warmline
  4. Substance Use Management Warmline
  5. PEPline Warmline
  6. PrEPline Warmline

**Did You Know:**

A **warmline** is a telephone line that provides assistance to people who need advice or have questions that are not urgent. Warmlines are typically not 24/7.

Learn more: [https://nccc.ucsf.edu](https://nccc.ucsf.edu)
National Coordinating Resource Center (NCRC)

What is the NCRC?
• A central repository for AETC training and capacity building resources

What Does the NCRC Do?
• Collects and maintains a virtual library and program directory for the AETC Program
• Fosters collaboration and group facilitation among AETCs and with external partners
• Provides marketing and communications services
• Coordinates the annual Ryan White HIV/AIDS Program Clinical Conference
What Does the NCRC Do?

- Provides **free, self-directed or downloadable resources** for education of health care providers working with people with or at-risk of HIV
- Serves as the **central web-based repository** for AETC Program training and capacity building resources
- Fosters **communities of practice, collaboration, group facilitation, and resource development** among AETCs and with external partners
- Coordinates the annual **Ryan White HIV/AIDS Program Clinical Conference**
- Coordinates and facilitates **national AETC Program webinars**
National Coordinating Resource Center (NCRC)

NCRC website aidsetc.org includes:

- **Free virtual library** with training and technical assistance materials
- **Program directory** for AETCs
- **Calendar** of AETC trainings and other events
- **Online learning** and training tools
Overview

The HRSA-funded BAI LEAD is a training and leadership program that focuses on developing students from Historically Black Colleges and Universities (HBCUs) into a strong workforce of advocacy and leadership in ending the HIV epidemic.

Program Objectives:
- Effectively discuss the influence of structural and social determinants on HIV-related health outcomes
- Design culturally-relevant initiatives for HIV prevention, screening, diagnosis, treatment, and care
- Discuss stigma reduction, empowerment, and community engagement among Black people living with HIV (PLWH), and Black Americans, overall

BHIVE Curriculum: Tailored to reflect the cultural competency needed to effectively engage with Black communities. Curriculum will be integrated into existing courses or created as a new course to provide comprehensive HIV/AIDS education to a variety of majors.

BHIVE Mentorship: An opportunity for HBCU students to connect with members of the HIV workforce for professional development.

BHIVE Internship: A paid opportunity for students who have taken the BHIVE course to work in various areas of the HIV workforce.

BHIVE Ambassador Program: An HIV/AIDS “Street Team”, who participate in community mobilization efforts on campus and in their local community to promote HIV Treatment and Prevention as well as combatting HIV-related stigma.
AETC Program – PCHP Projects

7 Regional AETCs

National Clinician Consultation Center (NCCC)

Assist HRSA-funded health centers in addressing additional technical assistance needs to expand HIV prevention services to support the Ending the HIV Epidemic plan
Contact information

• Ronald Wilcox MD

• rwilcox@hrsa.gov

• 301-443-3132 office phone
Thank you!
Connect with HRSA

Learn more about our agency at:

www.HRSA.gov

Sign up for the HRSA eNews

FOLLOW US:
AETC National HIV Curriculum

David Spach, MD
Editor-in-Chief, National HIV Curriculum
Professor of Medicine
Division of Infectious Diseases
University of Washington

Last Updated: October 24, 2022
Objective 1: Understand what the National HIV Curriculum is
Objective 2: Describe role of *National HIV Curriculum* in building HIV workforce.
Introduction to the *National HIV Curriculum*
• Created at University of Washington
• Component of AETC Program
• Supports Integrating the National HIV Curriculum e-Learning Platform into Health Care Professions Programs
Objective 1: Understand what the National HIV Curriculum is
National HIV Curriculum: Main Features

- **Antiretroviral Medications**: 50 Medications
- **Tools and Calculators**: 17 Tools/Calculators
- **Symptom Guides**: 5 Symptom Guides
- **Mini Lectures**: Building Out

- **Course Modules**:
  - 6 Modules
  - 37 Lessons
  - 51.5 CE Credits

- **Question Bank**:
  - 462 Questions
  - 46 CE Credits

- **Total CE Credits**: 97.5

- **Maintenance of Certification (MOC) Points**: + 97.5
National HIV Curriculum

The National HIV Curriculum is an AIDS Education and Training Center Program and led by the University of Washington.

Funded by Health Resources and Services Administration (HRSA)

Information Resource
Quick Reference
- Immediate access to all content
- Highly organized interface
- On demand topics
- Ideal for staying updated

Self-Study (Modular)
- Sequential (Step-by-Step)
- Flexible modular options
- Certificate program
- Ideal for courses & training programs

All Learners

Registered Learners (PFs)
- Free CME
- Free CNE
- Free MOC
Role of *National HIV Curriculum* in Building HIV Workforce
NHC: Ideal E-Learning Platform for Capacity Building

- Free resource with unlimited access and free support
- Formal tracking system and certificate program
- Accessible interprofessional content
- Learning group functionality
- Free teaching resources for instructors
Lesson 3: HIV Diagnostic Testing

Screening and Diagnosis
You are just a few steps away from free CE credits!

1. Sign in or Register
  A free account is required.
2. Study the Material
  An entire module, or just a few topics at a time.
3. Take the CE Quiz
  5 questions covering the topics in each module.
4. Claim CE Credit
  Free CNE and Free CME available!

HIV Diagnostic Testing Overview

About this Lesson
Last Updated: May 15th, 2020

CNE/CME Continuing Education
This lesson qualifies for:
- 1 CME AMA PRA Category 1 Credits™, or
- 1 CME contact hour (does not qualify for pharmacology CE for advanced practice nurses)
CNE and CME Origin: May 1st, 2017
CNE and CME Reviewed: February 14th, 2020
CNE and CME Expiration: August 31st, 2020

Steps to Acquire CE for this Activity:

Lesson Plan

Topic 1
Background

Topic 2
Timing of Laboratory Markers following HIV Infection

Topic 3
Tests Used for the Diagnosis of HIV

Topic 4
Laboratory HIV Testing Algorithm as Recommended by CDC/APHIL
## Basic HIV Primary Care

### Progress Tracker

<table>
<thead>
<tr>
<th>Topic</th>
<th>Initial Evaluation</th>
<th>Oral Manifestations</th>
<th>Cutaneous Manifestations</th>
<th>Immunizations in Adults</th>
<th>Primary Care Management</th>
<th>Screening for Mental Disorders</th>
<th>Substance Use Disorders</th>
<th>Retention in Care</th>
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<tr>
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**Self-Study Learning Modules**

- Initial Evaluation
- Oral Manifestations
- Cutaneous Manifestations
- Immunizations in Adults
- Primary Care Management
- Screening for Mental Disorders
- Substance Use Disorders
- Retention in Care

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**Progress Tracker**

- Click on the progress tracker to view and mark topics as completed.
Certificate of Completion

University of Washington and the National HIV Curriculum certify that

[Name]

has completed the

Epidemiology of HIV, HIV Screening Recommendations, HIV Diagnostic Testing, Acute and Recent HIV Infection, and Linkage to HIV Care

lessons of the

Screening and Diagnosis Self-Study Module (2nd Edition)

[Signature]

David H. Spach, MD
Professor of Medicine
University of Washington
Editor-in-Chief
National HIV Curriculum
National HIV Curriculum
Learning Groups

Director/Group Leader

Director/Administrator/Leader

Group
Group Leader can assign topics
Is NHC Reaching Right Audience?
HIV Prevalence and NHC Registered Learner Location
2018 HIV County-level Prevalence from AIDSVu, PF data for U.S.-based learners Aug 2018-May 2022

Learners distributed across the U.S., including areas with greatest burden of HIV

Darker red represents higher county-level HIV prevalence rates. Each blue dot represents ≥1 learner located in that ZIP code. Map not to scale.
HIV Prevalence and NHC Registered Learner Location

2018 HIV County-level Prevalence from AIDSVu, PF data for U.S.-based learners Aug 2018-May 2022

Learners distributed across the U.S., including areas with greatest burden of HIV

More than 55,000 Registered Learners in US

Darker red represents higher county-level HIV prevalence rates. Each blue dot represents ≥1 learner located in that ZIP code. Map not to scale.
Years providing services to clients/patients living with HIV (n=19,786)
PF data for US-based learners who interact with clients/patients Aug 2018-Aug 2022

75% of registered NHC learners are novice providers*

*Defined by HRSA HAB as a provider with <6 years experience providing services to people with HIV
Years providing services to clients/patients living with HIV (n=19,786)
PF data for US-based learners who interact with clients/patients Aug 2018-Aug 2022

50% of learners serve populations where ≥25% clients/patients identify as racial/ethnic minorities

<table>
<thead>
<tr>
<th>Percent of clients/patients with HIV infection who are racial/ethnic minorities</th>
<th>Number of Registered Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>4,747</td>
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<tr>
<td>1-24%</td>
<td>5,063</td>
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<tr>
<td>25-49%</td>
<td>3,085</td>
</tr>
<tr>
<td>50-74%</td>
<td>3,882</td>
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<tr>
<td>75-100%</td>
<td>3,003</td>
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</tbody>
</table>
Major Programs that Utilize NHC for Capacity Building

- Regional AETC programs
- Integrating NHC into Health Professions programs
- Association of Nurses in AIDS Care (ANAC)
- Residency HIV pathway programs (FM/IM)
- Chamberlain College of Nursing/Chamberlain University
The IDEA platform is utilized by four national infectious disease curricula:

- **National HIV Curriculum**: Provides ongoing, up-to-date information needed to meet the core competency knowledge for prevention, screening, diagnosis, and ongoing treatment and care of HIV. [VISIT HIV SITE](#)

- **National STD Curriculum**: Addresses the epidemiology, pathogenesis, clinical manifestations, diagnosis, management, and prevention of STDs. [VISIT STD SITE](#)

- **Hepatitis C Online**: A comprehensive resource that addresses the diagnosis, monitoring, and management of hepatitis C virus infection. [VISIT HCV SITE](#)

- **Hepatitis B Online**: A comprehensive resource that addresses the diagnosis, monitoring, and management of hepatitis B virus infection. [VISIT HBV SITE](#)
Thank you!
The National HIV Curriculum is an AIDS Education and Training Center (AETC) Program supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $1,016,660 with 0% financed with non-governmental sources. This project is led by the University of Washington’s Infectious Diseases Education and Assessment (IDEA) Program.

The content in this presentation are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government.
National HIV Residency Pathway Community of Practice

Presentation to the CDC/HRSA Advisory Committee on HIV, Viral Hepatitis and STD Prevention and Treatment
November 2, 2022
Introductions

- Philip Bolduc, MD
  - Associate Professor of Family Medicine, University of Massachusetts Medical School

- David Spach, MD
  - Professor of Medicine/Infectious Diseases, University of Washington Medical School

- Other working group members:
  - Jehan Budak, MD
    - Assistant Professor of Medicine, University of Washington Medical School
  - Christopher Bositis, MD
    - Assistant Professor of Family Medicine, Tufts University School of Medicine
  - Lydia Aoun Barakat, MD
    - Associate Professor of Medicine, Yale School of Medicine
Role of Primary Care HIV Residency Pathways

- **High Impact of HIV Residency Pathways**
  - Develop trainees from large pool of FM/IM trainees with skills to match needs of PWH (integrated HIV + primary care)
  - Longitudinal training fosters high competence
  - Connections with persons in HIV care community
  - Good yield for graduates entering HIV primary care

- **Opportune Time for HIV Residency Program Expansion**
  - National HIV Curriculum lowers barriers for program start up
  - HIV pathway group provides guidance and mentorship
  - Young trainees interested in diversity/equity/inclusion
HIV Residency Pathway Data

- 25 residency HIV pathways
  - 14 FM, 11 IM

- Of 228 HIV pathway graduates, 90 (39%) provide primary care to people with HIV (PWH)
  - FM 38/77 (49%)
  - IM 52/151 (34%)

- Most HIV pathway graduates providing primary care to PWH work in the West (41%) and Northeast (34%)
HIV Residency Pathway & EHE Map, 2019
Potential Solutions

- Expand residency pathways in EHE areas

- Connect and incentivize graduating pathway residents to jobs in the South

- Initiate a community of practice between existing pathways and create a pairing/mentorship model for new pathways
National HIV Residency Pathway Working Group

- **Goal:** Increase the number of internal and family medicine physicians who will provide HIV primary and specialty care upon completion of GME residency HIV training pathways.

- Is it needed?
- Is it wanted? (Fam Med. 2014 Jul-Aug;46(7):527-31)
- Why isn’t it happening?
- What do we need to make it happen?
Objectives
The NHRP Community of Practice (CoP) will create:

1. **HIV Pathway Toolkit** of standards for HIV education: curricula, clinical requirements, competencies, supervision and evaluation methods

2. **Mentorship** for new and existing HIV Pathway directors

3. **Monthly HIV case conferences** for residents and faculty, a forum to build connections and the CoP

4. **Career development** for Pathway graduates through linkages to HIV employment and mentoring

5. **Improvement in healthcare disparities** by developing HIV Pathways in EHE target areas
Yale HIV Primary Care Pathway

- Established in 2012 with the support of a 4-year HRSA grant
- 3-year Track within the Yale Primary Care Residency Program.
- 2 residents per year with an interest in HIV training – Total 6 residents

https://medicine.yale.edu/intmed/hivtraining

Entrustable Professional Activity (EPA)

- Response to concerns that evaluation systems do not reflect real world practice
- Routine professional-life activities of physicians based on their specialty and sub-specialty
  - Be part of essential professional work
  - Require adequate knowledge, skill, and attitude
  - Should reflect one or more competencies.
- They developed 12 HIV-specific EPAs
  - Encompassing 6 ACGME competency areas
  - Mapped to all 155 curricular milestones

Ten Cate et al. Academic Medicine 2007; 82
What can we offer?

Coaching and Mentorship

Planning  Implementation  Evaluation
National HIV Residency Pathway (NHRP) Working Group Summary

- HIV workforce problem demands a solution based on training primary care clinicians
- HIV Training Pathways are high-yield, high-impact
- NHRP Community of Practice will help start, grow, strengthen and evaluate pathway programs

- Toolkit (curricula, training, supervision, evaluation guides)
- Resident and faculty forums, mentoring
- Networking, job connections
- Focus on EHE areas of need, reducing disparities
National HIV Residency Pathway (NHRP) Working Group Summary

- HIV workforce problem demands a solution based on training primary care clinicians
- HIV Training Pathways are high-yield, high-impact
- NHRP Community of Practice will help start, grow, strengthen and evaluate pathway programs
- NHRP Working Group brings years of multifaceted expertise, professional connections and demonstrated commitment to HIV workforce development
Thank you / Discussion
Developing the HIV Workforce: The MATEC Clinician Scholars Program

Ricardo Rivero, MD, MPH
Principal Investigator, Midwest AIDS Education and Training Center (MATEC)
Clinical Assistant Professor, University of Illinois College of Medicine at Chicago,
Dept. of Family and Community Medicine
DISCLAIMER

This program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $3,803,158.00 with zero percent financed by nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official view of, nor an endorsement by, HRSA, HHS, or the U.S. Government.
LEARNING OBJECTIVES

1. Describe *key elements* of the Clinician Scholars Program (CSP)

2. Describe the *demographic characteristics* of CSP participants

3. Describe the *impact* of CSP

4. Describe the *long-term outcomes* of CSP
WHAT IS THE CLINICIAN SCHOLARS PROGRAM?

- Twelve-month mentoring and training program designed to strengthen the HIV clinical workforce in the Midwestern U.S.
- Open to minority and/or minority serving Physicians, Physician Assistants, Advance Practice Nurses and Clinical Pharmacists
- Build skills and knowledge across 11 Core Capabilities and 33 learning objectives
PRIMARY ELIGIBILITY

- Actively licensed as physicians, physician assistants, nurse practitioners, advance practice nurses, or pharmacists
- **Minority:** Black/African American, Alaska Native, American Indian, Asian American, Native Hawaiian, and/or Pacific Islander, and/or who identify their ethnicity as Hispanic/Latino
- **Minority Serving:** Currently providing direct clinical care to a patient population of racial and/or ethnic minorities that is greater than or equal to 50% of their total patient population
- Less than 5 years of experience in HIV care
- Foundational knowledge of HIV care and prevention
SECONDARY ELIGIBILITY

• Currently provide direct clinical care in one of the following settings:
  • Clinics funded under the **HRSA Ryan White HIV/AIDS Program**
  • **Correctional settings** (County, State, or Federal)
  • **Rural and Community Health Centers**
  • Other **federally supported health care facilities**, such as Indian Health Service and Veterans Administration
  • Currently **prescribe antiretroviral medications** under the AIDS Drug Assistance Program (ADAP)
  • Currently **provide clinical care** in an area that has been impacted by a public health emergency related to the spread of hepatitis C and HIV infection
KEY ELEMENTS OF THE CLINICIAN SCHOLARS PROGRAM*

- Ongoing local recruitment strategy
- Local mentoring and close monitoring
- Individualized approach
- Standardized learning components
- Personal connections and relationships
- Longitudinal approach
- Localized context with regional support

PROGRAM REQUIREMENTS

- Participate in both days of the Clinician Scholars Program Immersion Institute

- **12 hours** minimum clinical preceptorship in HIV care

- **40 hours** minimum of skills-building training:
  - Participate in at least five sessions of the monthly Collaborative Learning Series
  - Present a case for discussion during one of the aforementioned activities
SCHOLARS DEMOGRAPHICS (2011-2023)

**Gender:**
- 77% Female
- 23% Male

**Discipline:**
- 55% NP
- 14% PharmD
- 23% MD
- 8% PA

**Race:**
- 66% White
- 27% Black/African American
- 6% Asian
- 1% Native Hawaiian, and/or Pacific Islander

**Ethnicity:**
- 95% Non-Hispanic
- 5% Hispanic

<table>
<thead>
<tr>
<th>% of Racial &amp; Ethnic Minority Patients Served</th>
<th>% of Scholars (N= 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>1 – 24</td>
<td>4</td>
</tr>
<tr>
<td>25 – 49</td>
<td>14</td>
</tr>
<tr>
<td>50 – 74</td>
<td>43</td>
</tr>
<tr>
<td>≥ 75</td>
<td>36</td>
</tr>
</tbody>
</table>
WORKPLACE OF SCHOLARS (2012 – 2015)

Community Health Center: 32% of Scholars

Academic Health Center: 18% of Scholars

HIV Clinic: 22% of Scholars

Other: 28% of Scholars
IMPACT OF CLINICIAN SCHOLARS PROGRAM (2012 – 2015)*

Changes in Knowledge
- Patient assessment
- Medication Management
- Clinical management of side effects
- Co-morbidities and opportunistic infections
- Treatment as Prevention and PrEP

Changes in Attitudes
- Assessment
- Clinical Skills and Procedures
- HIV Medication Management and Adherence
- Co-morbidities
- Counseling, Risk Reduction, and Patient Education
- Linkage to and Retention in care
- System Level Changes
- Treatment as Prophylaxis or Prevention

PROFESSIONAL IDENTITY FORMATION (2012 -2015)*

**Clinical Capacity**

- Increased Knowledge: Learning the critical lessons in HIV care management
- Increased Skills: Acquiring the abilities and tools for HIV care management
- Practice Change: Using new knowledge and tools to improve patient outcomes

**Professional Identity**

- Identifying as an HIV Care Provider: Expected settings and patient populations
- Achieving Career Benchmarks: Certification exams and employment opportunities
- Increased Self-Efficacy: Confidence in abilities to provide quality HIV care and prevention

**HIV Provider Network**

- Becoming a resource to others: Recognition by others of Scholar capacity
- Being part of a community of providers: Bridging connections for future work
- Meeting a patient’s needs via networking and linkages: Embodying the interprofessional mindset

LONG-TERM WORKFORCE IMPACT

46 Scholars were interviewed at least two years post-program (range 2-4 years)

Scholars included advanced practice nurses (43%), pharmacists (26%), and physicians (24%)

Over 90% providing direct HIV services or care

Over 50% of Scholars reported an increase in the percentage of HIV patients served since graduation, while 25% maintained a steady percentage of HIV patients
## Long-term Workforce Impact: Scholar Follow-up Activities Along Continuum of Care

<table>
<thead>
<tr>
<th>Continuum of Care Stage</th>
<th>Diagnosed</th>
<th>Linkage to Care</th>
<th>Engaged/Retained in Care</th>
<th>Prescribed Anti-Retroviral Therapy</th>
<th>Viral Suppressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Screening</td>
<td>HIV Testing</td>
<td>Diagnosis</td>
<td>Overall</td>
<td>Adherence Support</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Prevalence</td>
<td>8</td>
<td>5.0</td>
<td>12</td>
<td>10.0</td>
<td>11</td>
</tr>
<tr>
<td>Voices</td>
<td>5</td>
<td>12.1</td>
<td>8</td>
<td>19.5</td>
<td>9</td>
</tr>
</tbody>
</table>
LONG-TERM WORKFORCE IMPACT: SYSTEM CHANGES

- Expanding services for HIV care and prevention
- Educating other clinicians in their clinics to increase capacity for HIV care
- Implementing policies and procedures around HIV care
CONCLUSIONS

CSP is succeeding in engaging minority and minority-serving clinicians and improving their abilities to diagnosis, treat, manage, and prevent HIV disease.

CSP is a promising model for filling critical gaps in the HIV workforce in underserved communities in a variety of geographic areas.
Acknowledgments

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Renslow Sherer, MD
Cornelia M. J. Wagner, MBA, Med
CDC/HRSA Advisory Committee on HIV, Viral Hepatitis and STD Prevention and Treatment

November 2, 2022
12:45-1:45 PM

Goulda A. Downer, PhD, FAND, CNS, LN, RD
Associate Professor/Project Director
Telehealth Training Center/Center of Excellence
Howard University College of Medicine, Department of Internal Medicine
# Workforce Estimates of Health Diagnosing and Treating Practitioners Based on 2019 American Community Survey Data

<table>
<thead>
<tr>
<th>Practitioner</th>
<th>Race/ethnicity, % (SE) [95% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
</tr>
<tr>
<td>Advanced practice registered nurse</td>
<td>79.4 (1.10) [77.15-81.47]</td>
</tr>
<tr>
<td>Dentist</td>
<td>68.7 (1.52) [65.60-71.56]</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>65.4 (1.09) [63.22-67.51]</td>
</tr>
<tr>
<td>Physician</td>
<td>62.4 (0.65) [61.06-63.63]</td>
</tr>
<tr>
<td>Physician assistant</td>
<td>75.9 (1.46) [72.97-78.68]</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>80.5 (1.42) [77.60-83.16]</td>
</tr>
<tr>
<td>Physical therapist</td>
<td>76.7 (1.06) [74.54-78.71]</td>
</tr>
<tr>
<td>Respiratory therapist</td>
<td>66.3 (2.03) [62.19-70.16]</td>
</tr>
<tr>
<td>Speech-language pathologist</td>
<td>84.4 (1.15) [82.00-86.52]</td>
</tr>
<tr>
<td>Registered nurse</td>
<td>68.9 (0.38) [68.17-69.64]</td>
</tr>
</tbody>
</table>

% of African Americans in the Health Workforce with Degrees from HBCUs

- Nursing 46.9%
- Pharmacy 46.2%
- Dentistry 38.4%
- Public health 16.1%
- Medicine 14.6%

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3673489
## HIV & AIDS Epidemiology by State and H-NIP Partners

<table>
<thead>
<tr>
<th>Location</th>
<th>Population</th>
<th>HIV Prevalance</th>
<th>Clinical Providers/HIV&amp;AIDS Services (City/County)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>5,024,279</td>
<td>13,875</td>
<td>22</td>
</tr>
<tr>
<td>Tuskegee, AL</td>
<td>9,181</td>
<td>NA</td>
<td>2</td>
</tr>
<tr>
<td>California</td>
<td>39,237,836</td>
<td>132,911</td>
<td></td>
</tr>
<tr>
<td>Los Angeles, CA</td>
<td>3,849,297</td>
<td>49,678</td>
<td>92</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>670,050</td>
<td>12,408</td>
<td>63</td>
</tr>
<tr>
<td>Florida</td>
<td>21,781,128</td>
<td>113,478</td>
<td>186</td>
</tr>
<tr>
<td>Tallahassee, FL</td>
<td>192,885</td>
<td>1,379</td>
<td>12</td>
</tr>
<tr>
<td>Georgia</td>
<td>10,799,566</td>
<td>56,446</td>
<td>125</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>497,642</td>
<td>37,244</td>
<td>65</td>
</tr>
<tr>
<td>Louisiana</td>
<td>4,665,000</td>
<td>21,289</td>
<td>199</td>
</tr>
<tr>
<td>New Orleans, LA</td>
<td>391,249</td>
<td>7,117</td>
<td>56</td>
</tr>
<tr>
<td>Maryland</td>
<td>6,165,129</td>
<td>31,676</td>
<td>558</td>
</tr>
<tr>
<td>Baltimore, MD</td>
<td>602,274</td>
<td>18,276</td>
<td>71</td>
</tr>
<tr>
<td>Bowie, MD</td>
<td>58,158</td>
<td>7,820</td>
<td>16</td>
</tr>
<tr>
<td>Mississippi</td>
<td>2,961,279</td>
<td>9,832</td>
<td>NA</td>
</tr>
<tr>
<td>Lorman, MS</td>
<td>2,338</td>
<td>350</td>
<td>NA</td>
</tr>
<tr>
<td>New York</td>
<td>19,835,913</td>
<td>126,630</td>
<td>1904</td>
</tr>
<tr>
<td>Brooklyn, NY</td>
<td>2,736,074</td>
<td>26,539</td>
<td>225</td>
</tr>
<tr>
<td>North Carolina</td>
<td>10,551,162</td>
<td>34,963</td>
<td>75</td>
</tr>
<tr>
<td>Winston-Salem, NC</td>
<td>245,787</td>
<td>1,730</td>
<td>17</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>3,959,840</td>
<td>6,351</td>
<td>26</td>
</tr>
<tr>
<td>Langston, OK</td>
<td>1,432</td>
<td>NA</td>
<td>1</td>
</tr>
<tr>
<td>Tennessee</td>
<td>6,910,840</td>
<td>19,214</td>
<td>125</td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>692,587</td>
<td>3,803</td>
<td>28</td>
</tr>
<tr>
<td>St. Thomas, Virgin Islands</td>
<td>42,261</td>
<td>798</td>
<td>1</td>
</tr>
<tr>
<td>Virginia</td>
<td>8,631,393</td>
<td>23,691</td>
<td>733</td>
</tr>
<tr>
<td>Hampton, VA</td>
<td>135,169</td>
<td>750</td>
<td>8</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1,793,716</td>
<td>1,986</td>
<td>4 (Bluefield)</td>
</tr>
</tbody>
</table>

Source: Census for population totals - https://www.census.gov/topics/population.html. Used for Disease burden (State and County) - https://aidsvu.org/local-data/#/states
Used for locating providers - https://locator.hiv.gov/map
## Training Needs: Primary Challenges

1. Lack of knowledgeable HIV faculty to teach the course
2. Existing packed curricula
3. Lack of faculty capacity to teach the NHC
4. Students’ lack of awareness of HIV care and treatment as an important current clinical topic
5. Lack of interest by institutional administration for this specialized training
6. Technological challenges
7. Inadequate compensation after matriculation (*Student loans, internships, fellowships, employment*)
INTEGRATION APPROACH

1. Assigned faculty member
2. Department Chair
3. Division Dean
4. Provost
5. President
6. Board of Trustees
7. Registrar/Bursar
8. *Public Institutions
   a) Statewide Accreditation Board
   b) Recently Approved Curricula
EXPERTISE/PARTNERSHIPS FOR PROGRAM SUCCESS

- Support from our Project officer (*Federal Agency & Collaborative Partners*)
- Partners institutions’ leaders (*President, Provost, Department Chair, Faculty, Student Leaders, etc.*)
- Program Champion for each institution (*faculty & student*)
- Curriculum Technology Integrator
- Curriculum Evaluator
- Team of Clinical HIV Experts
- Cultural Competency Expertise
- Project Management Expertise
NHC: Student Motivation

- 82% - academic requirement
- 25% - had no interest at all in the field of HIV
- 24% - interest in HIV
- 58% - after completing NHC

Data compiled by HU-TTC Howard University College of Medicine 2020
Trained by Disciplines and Regions
September 2018 – August 2022

Total Enrolled: 10,983

Northeast (Bowie, Coppin, CUNY, Howard, Morgan, UMES, *Chamberlain)
- Nursing: 2313
- Medicine: 173
- Pharmacy: 352
- Dental: 181
- Allied Health: 68

Southeast (Alcorn, Bluefield, FAMU, Grambling, Hampton, Meharry, Morehouse, Talladega, Tuskegee, USVI, Winston-Salem, Xavier, *Chamberlain)
- Nursing: 2333
- Medicine: 78
- Pharmacy: 679
- Dental: 131
- Allied Health: 368

Southwest (Langston, *Chamberlain)
- Nursing: 2063
- Medicine: 10

West (Charles Drew, *Chamberlain)
- Nursing: 2232
- Medicine: 0
- Pharmacy: 0
- Dental: 0
- Allied Health: 0

Data compiled by HU-TTC Howard University College of Medicine 2022
H-NIP Integration Approach

• Module
  ▪ Lesson(s) within the module
• As part of a course
• As a shared course
• As an elective
• As an entire course
  ▪ Syllabus development

Data compiled by HU-TTC Howard University College of Medicine 2020
H-NIP Innovative Strategies

1. Identify and select programs in good academic standing
2. Get buy-in from University/Program leadership regarding value added by integrating the NHC
3. Review curriculum for rigor relative to HIV didactic & clinical competence
4. Identify where in the existing curriculum the NHC could be best integrated
5. Insure functional institutional LMS
6. Secure dedicated faculty for each program and compensate them
7. Structure communication channels with quick response rate
8. Provide discipline-specific mentor/champion and access to technical experts
9. Provide monthly bi-directional program progress analysis

Data compiled by HU-TTC Howard University College of Medicine 2020
HBCU PARTNERS
HIV CURRICULUM SYLLABI

2022

- Alcorn State University
- Coppin State University
- Florida Agricultural and Mechanical University (Florida A&M)
- Hampton University
- Howard University
- Meharry University
- Morgan State University
- Tuskegee University
- University of the Virgin Islands
- Winston-Salem State University
- Xavier University of Louisiana

Data compiled by HU-TTC Howard University College of Medicine 2022
CALLING ALL Physicians

The overarching goal of H-NIP is to enhance the nation’s HIV clinical workforce and in so doing, increase the number of health professional graduates who receive specialized training in the care and management of People with HIV (PWH).

Howard University Telehealth Training Center
Howard University College of Medicine
1840 7th Street NW • Washington DC 20001

SIGN UP AND TAKE THE NATIONAL HIV Curriculum
Get FREE CMEs and other CEUs

SIGN UP: https://www.huttc.org/h-nip/

Email HNIP@howard.edu https://www.hiv.uw.edu/
H-NIP Model for Strengthening the HIV Clinical Workforce

**WORKFORCE**
- Students
- Credentialed professionals
- Academic institutions
- Health Professions Associations
- Foreign trained clinicians

**PROGRAM DESIGN**
Engage HBCUs in the program planning
*and not just at the program implementation level*

**SUSTAINABILITY**
TOT; Case study; Community of learning; Resource circles; etc.

**DECLINE IN**
new HIV infections and overall burden
Published Models
How can CDC and HRSA work with HBCUs, HSIs, and similar organizations to increase the number of minorities going into the HIV care workforce?

A. **Awareness programs** during undergraduate studies, as well as awareness programs in HBCUs, HSIs, HPPs - HIV care workforce needs.
   
   I. In-person visits and/or webinars regularly presented by CDC and HRSA staff to highlight the need for HIV care and the need for providers of color to work in this field.
   
   II. Include relevant data - the number of college-age students and young people of color living with HIV vs the number of HIV care providers of color to further demonstrate a need.

B. **Financial incentives** - scholarships, grants, and/or loans may be most attractive to HBCU and HSI students.