



# 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

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## 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)**  
{MHAFF Funding}

**National Clinician Consultation Center (NCCC)**

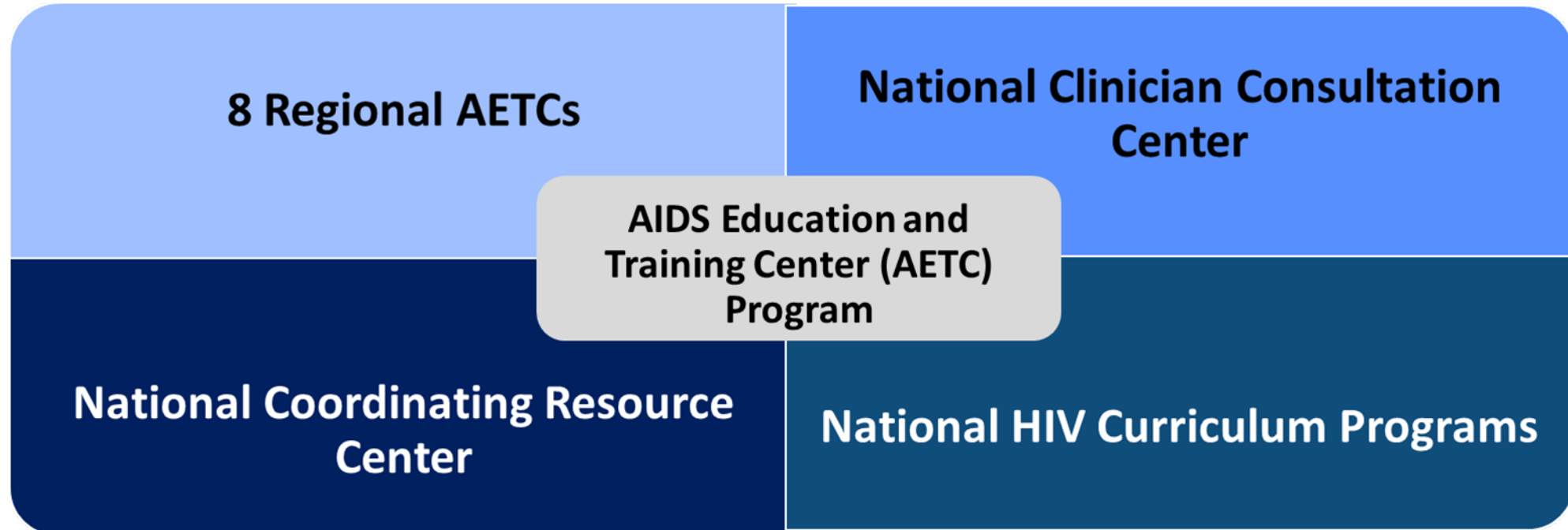
**National Coordinating Resource Center (NCRC)**

**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



# Regional AETCs: Overview

## Eight Regional AETCs:

New England

Northeast/Caribbean

MidAtlantic

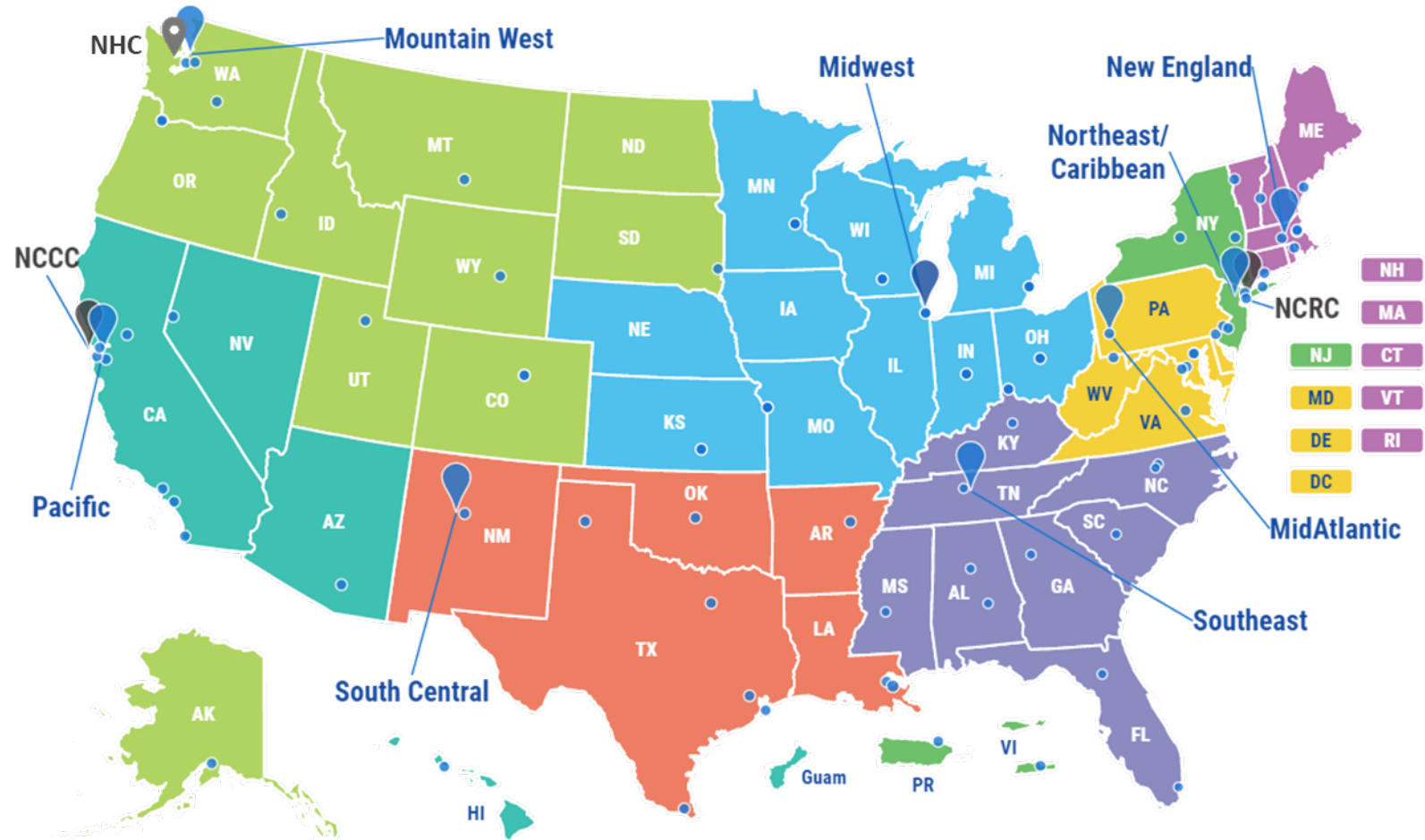
Southeast

Midwest

Mountain West

South Central

Pacific



View the interactive map at: <http://aidsetc.org>



# Regional AETCs: Training Types

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



# Regional AETCs: Overview

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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



# NOFO 19-035: Regional AETCs

- 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)



# NOFO 19-035: Regional AETCs

- 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>



# 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

# National Coordinating Resource Center (NCRC)

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## What Does the NCRC Do?

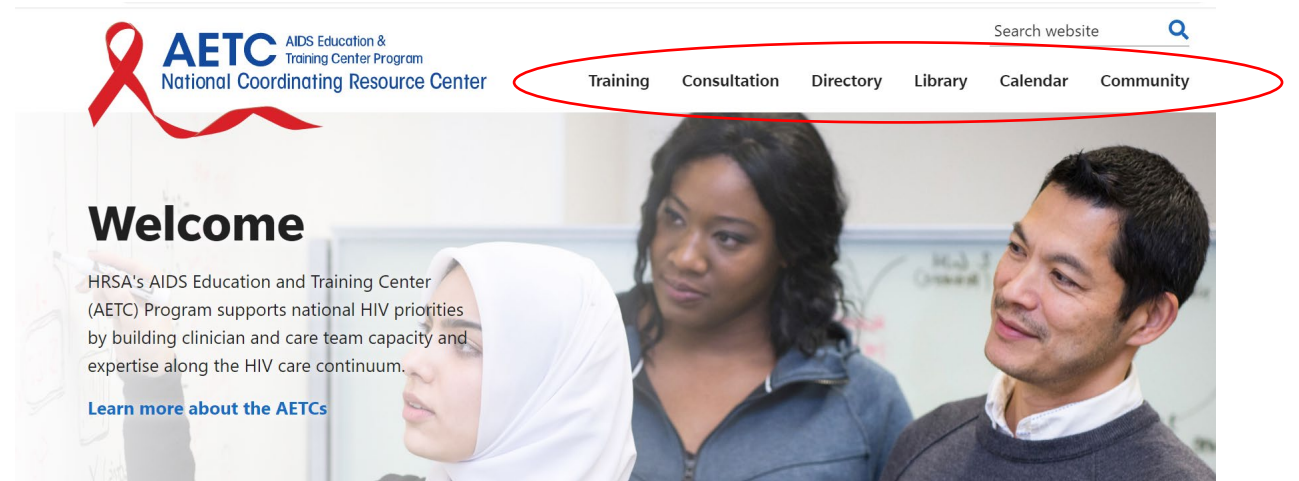
- Provides **free, self-directed or downloadable resources** for education of health care providers working with people with or at-risk of HIV
- Serves as the **central web-based repository** for AETC Program training and capacity building resources
- Fosters **communities of practice, collaboration, 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](http://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



# B-SEC BHIVE



Our People • Our Problem • Our Solution

**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.

## 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



# 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

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- Ronald Wilcox MD
- [rwilcox@hrsa.gov](mailto:rwilcox@hrsa.gov)
- 301-443-3132 office phone



Thank you!



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# 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

# National HIV Curriculum

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

 Contributors

 Site Overview


Funded by  
Health Resources and Services Administration (HRSA)

**Objective 1:** Understand what the *National HIV Curriculum* is

# National HIV Curriculum

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

 Contributors

 Site Overview

Funded by  
Health Resources and Services Administration (HRSA)


**Objective 2:** Describe role of *National HIV Curriculum* in building HIV workforce


# Introduction to the *National HIV Curriculum*



# National HIV Curriculum

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Health Resources and Services Administration (HRSA)

[www.hiv.uw.edu](http://www.hiv.uw.edu)

# National HIV Curriculum

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 Contributors

 Site Overview

Funded by  
Health Resources and Services Administration (HRSA)

- Created at University of Washington
- Component of AETC Program
- Supports Integrating the National HIV Curriculum e-Learning Platform into Health Care Professions Programs


Free CME


Free CNE

Free MOC

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Information Resource and Learning Portal

# National HIV Curriculum: Main Features

Antiretroviral Medications

50 Medications

Tools and Calculators

17 Tools/  
Calculators

Symptom Guides

5 Symptom Guides

Mini Lectures

Building Out

New

New

Course Modules

6 Modules  
37 Lessons

51.5  
CE Credits


Question Bank


462 Questions


46  
CE Credits


**97.5**  
**Total CE Credits**


**+ 97.5**  
**Maintenance of**  
**Certification (MOC)**  
**Points**

 Antiretroviral Medications >

 Course Modules >

 Question Bank

 Tools & Calculators >

 Clinical Consultation

 HIV Resources >

# National HIV Curriculum

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 Contributors  Site Overview


Funded by  
Health Resources and Services Administration (HRSA)

Information Resource

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 Site Overview

Funded by  
Health Resources and Services Administration (HRSA)

Self-Study Learning Portal

# Course Modules and Question Bank: Dual Functionality

National HIV Curriculum Sign In or Register

**Antiretroviral Medications** | **Course Modules** | **Question Bank** | **Tools & Calculators** | **Mini-Lectures** | **Symptom Guides** | **HIV Resources** |

View all Course Modules

- 1 **Screening and Diagnosis**
- 2 **Basic HIV Primary Care**
- 3 **Antiretroviral Therapy**
- 4 **Co-Occurring Conditions**
- 5 **Prevention of HIV**
- 6 **Key Populations**

*Juluca*  
Prescribing information >  
Clinical Trials >  
References >  
Slide Deck >

**Quick Reference** 2nd Edition  
Rapidly access information in this module

**Screening and Diagnosis: Overview**

**LESSONS**

1. Epidemiology of HIV
2. HIV Screening Recommendations
3. HIV Diagnostic Testing
4. Acute and Recent HIV Infection
5. Linkage to HIV Care

**Self-Study Module** 2nd Edition CNE/CME Available  
Track your progress and receive CE credit

**Screening and Diagnosis: Self-Study** CNE/CME

**LESSONS**

1. Epidemiology of HIV
2. HIV Screening Recommendations
3. HIV Diagnostic Testing
4. Acute and Recent HIV Infection
5. Linkage to HIV Care

**Certificate Requirements** CNE/CME

# Course Modules and Question Bank: Dual Functionality

## Quick Reference

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

All Learners

## Self-Study (Modular)

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

Free  
CME

Free  
CNE

Free  
MOC

Registered Learners (PFs)



# **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

## 1 Screening and Diagnosis

## Self-Study



Epidemiology of HIV

HIV Screening Recommendations

Diagnostic Testing

Acute and Recent HIV Infection

Linkage to Care

Certificate of Completion

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!

## New Users

Create a free account to get started.

**Required for CE**

Register &gt;

## Returning Users



Email Address

Password

[Forgot password?](#)

Sign in &gt;

## HIV Diagnostic Testing Overview

## About this Lesson

Last Updated: May 15th, 2020

**CNE/CME** Continuing Education

This lesson qualifies for:

[View CE Notices](#)

- 1 CME AMA PRA Category 1 Credits™, or
- 1 CNE contact hour (does NOT qualify for pharmacology CE for advanced practice nurses)

CNE and CME Origination: 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/APHL

[Initial Evaluation](#)
[Oral Manifestations](#)
[Cutaneous Manifestations](#)
[Immunizations in Adults](#)
[Primary Care Management](#)
[Screening for Mental Disorders](#)
[Substance Use Disorders](#)
[Retention In Care](#)
[Certificate of Completion](#)

Progress Tracker

CNE Certificate »

	Initial Evaluation	Oral Manifestations	Cutaneous Manifestations	Immunizations in Adults	Primary Care Management	Screening for Mental Disorders	Substance Use Disorders	Retention In Care
Topic 1	✓	✓		✓	✓	✓	✓	✓
Topic 2		✓	✓	✓	✓	✓	✓	
Topic 3		✓	✓	✓	✓	✓	✓	✓
Topic 4		✓	✓	✓	✓	✓	✓	✓
Topic 5		✓	✓	✓	✓	✓	✓	✓
Topic 6		✓	✓	✓	✓	✓	✓	
Topic 7		✓	✓	✓	✓	✓	✓	
Topic 8		✓	✓	✓	✓	✓	✓	
Topic 9			✓	✓	✓	✓	✓	
Topic 10			✓	✓	✓	✓	✓	
Topic 11			✓	✓	✓	✓		
Topic 12			✓	✓				
Topic 13			✓	✓		✓		
Topic 14			✓	✓				
Topic 15				✓				
CE Quiz	✓	CNE ✓	CNE ✓	✓	CNE ✓	CNE ✓	CNE ✓	CNE ✓

Progress Tracker



# Certificate of Completion

University of Washington and the National HIV Curriculum  
certify that



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

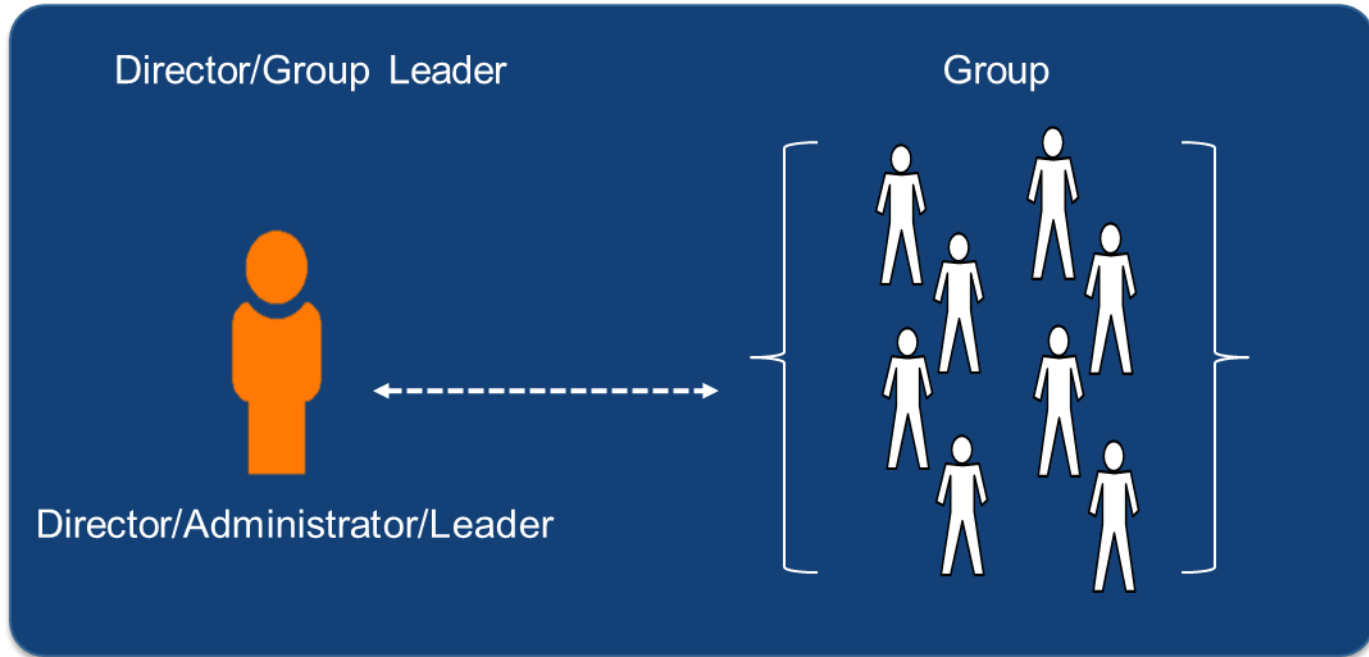
**Screening and Diagnosis Self-Study Module (2nd Edition)**

A handwritten signature in black ink, likely belonging to David H. Spach.

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

# National HIV Curriculum

## Learning Groups





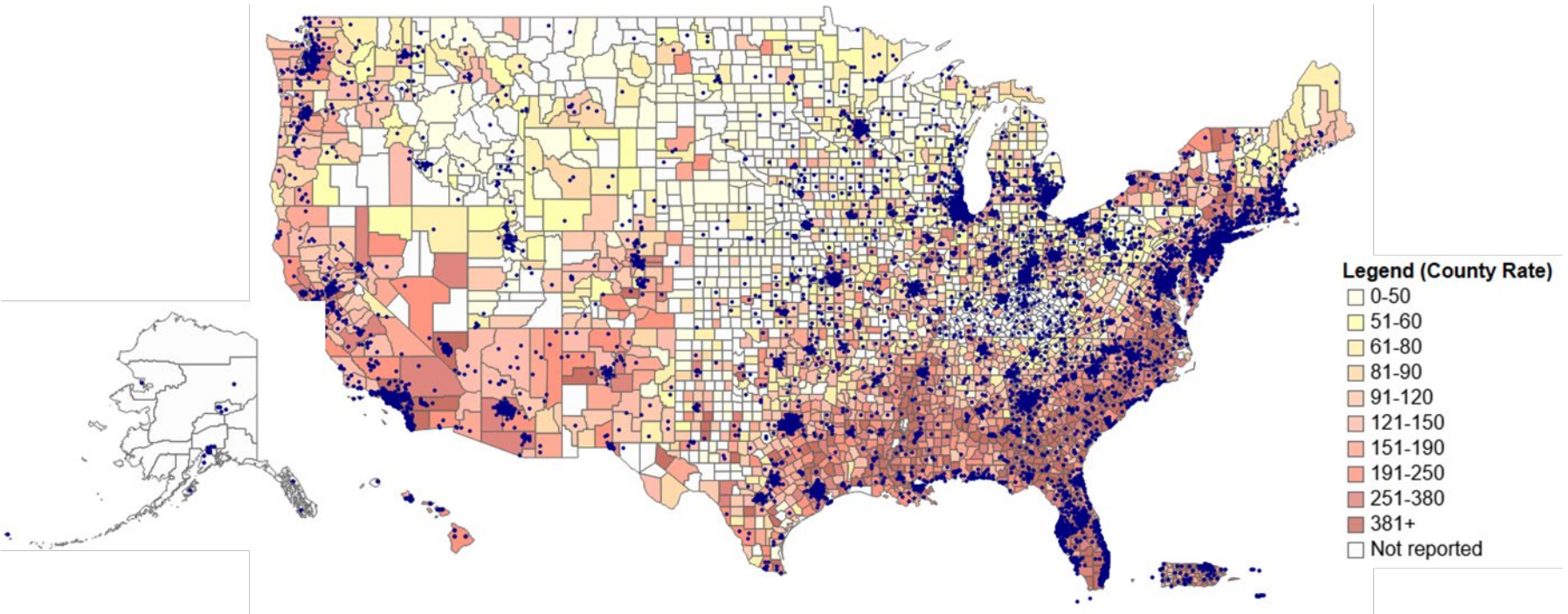
# Is NHC Reaching Right Audience?



# HIV Prevalence and NHC Registered Learner Location

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

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

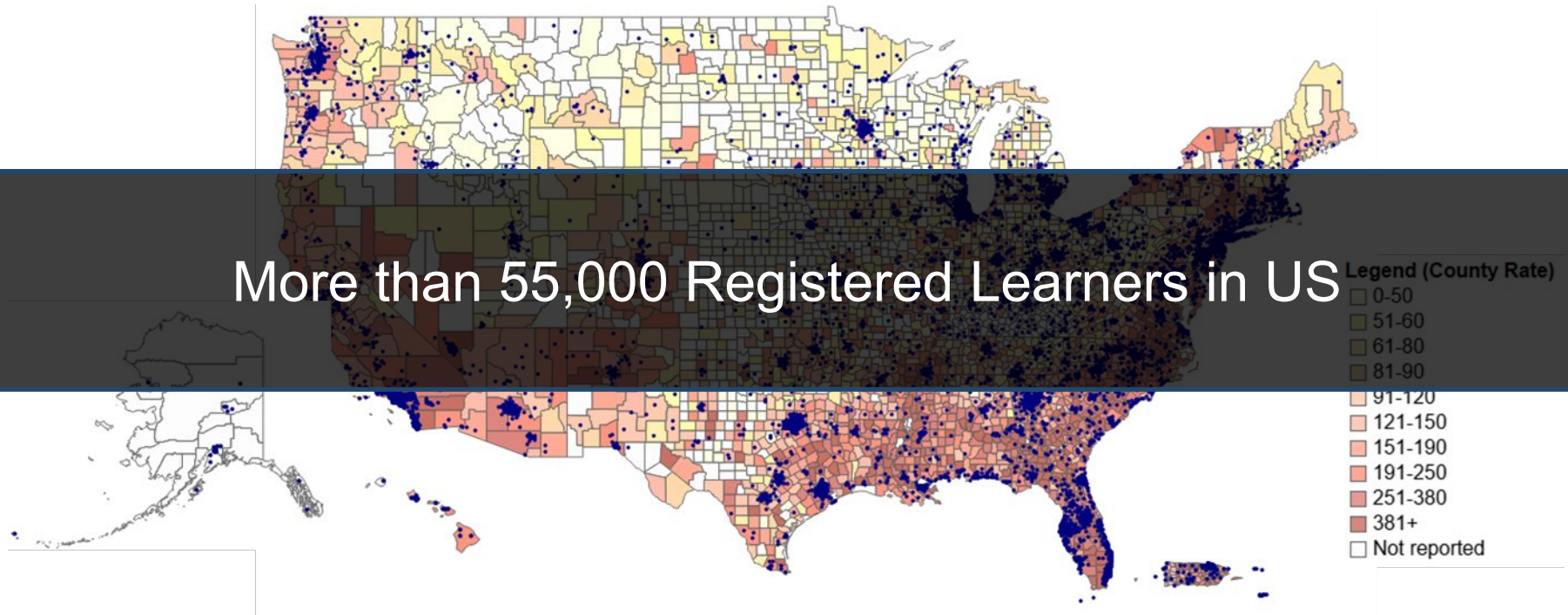


Darker red represents higher county-level HIV prevalence rates. Each blue dot represents  $\geq 1$  learner located in that ZIP code. Map not to scale.

# HIV Prevalence and NHC Registered Learner Location

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

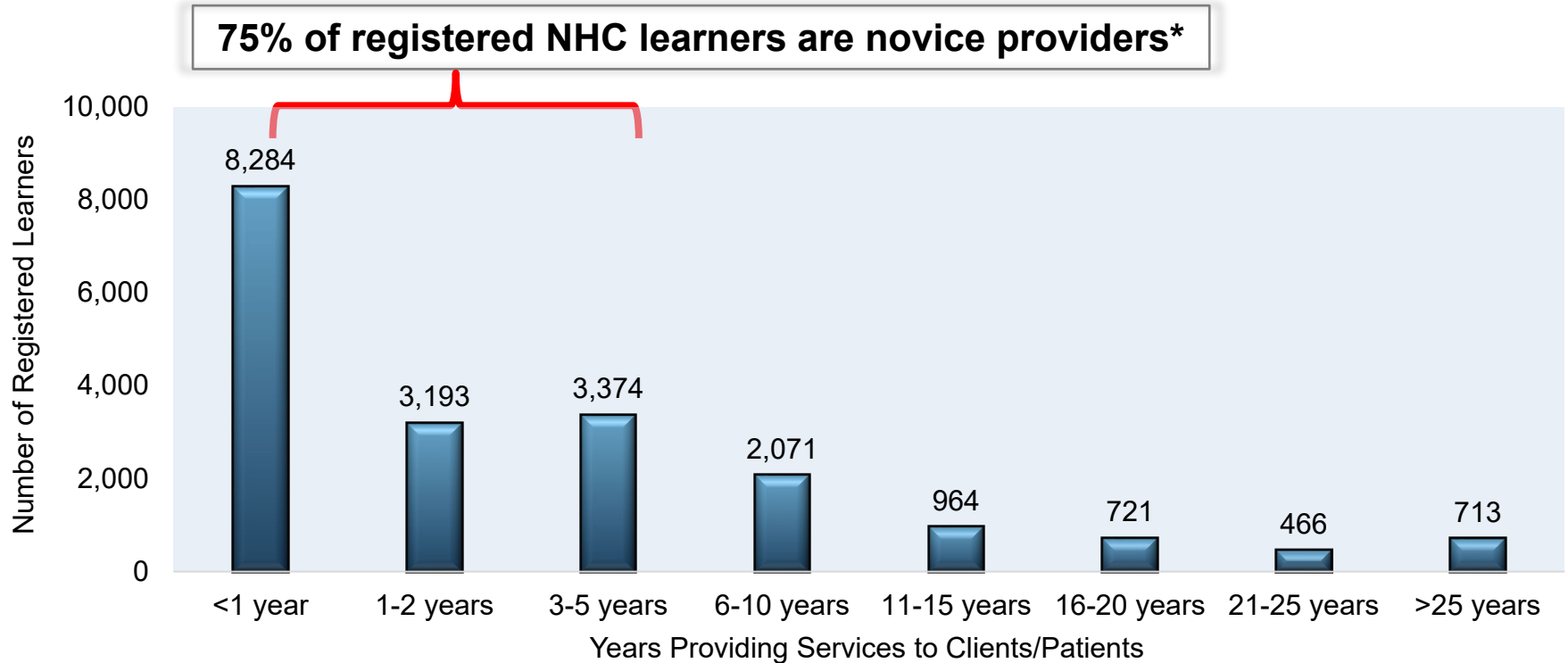
**Learners distributed across the U.S., including areas with greatest burden of HIV**



Darker red represents higher county-level HIV prevalence rates. Each blue dot represents  $\geq 1$  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

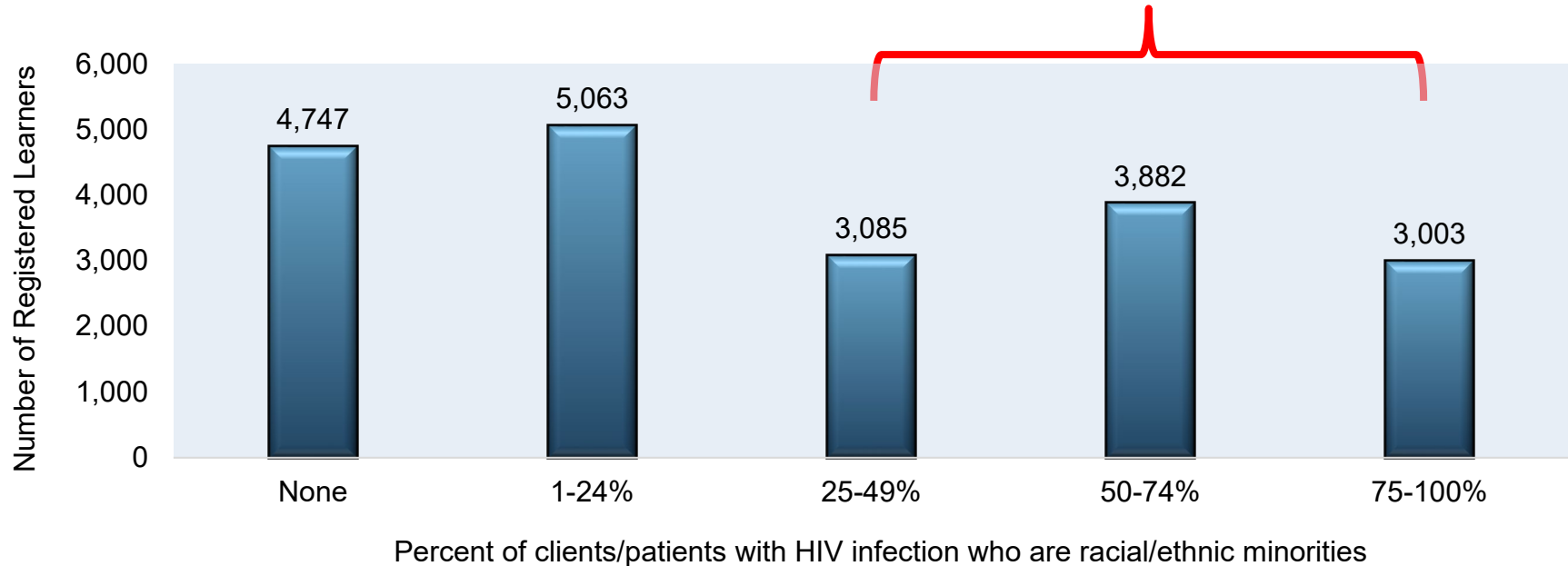


\*Defined by HRSA HAB as a provider with <6 years experience providing services to people with HIV

# 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  $\geq 25\%$  clients/patients identify as racial/ethnic minorities**



# 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!**

# Acknowledgment

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

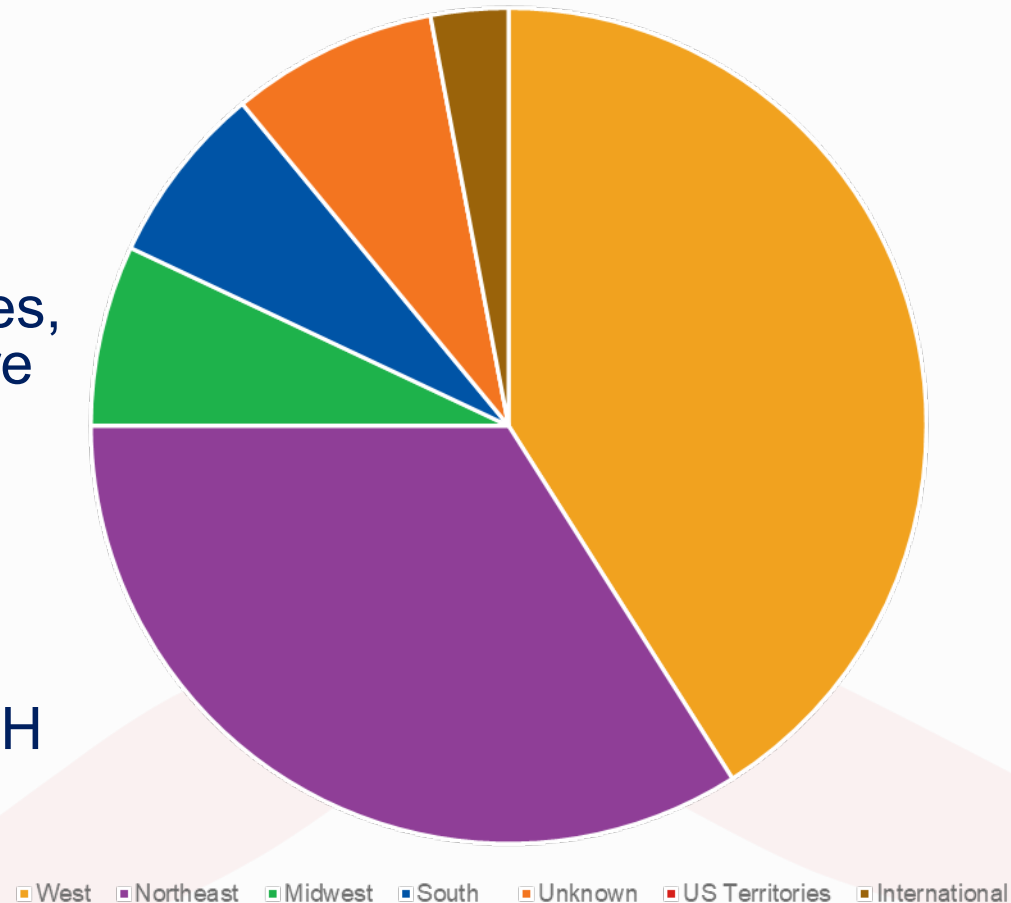
- **Philip Bolduc, MD**
  - Associate Professor of Family Medicine, University of Massachusetts Medical School
- **David Spach, MD**
  - Professor of Medicine/Infectious Diseases, University of Washington Medical School
- **Other working group members:**
  - **Jehan Budak, MD**
    - Assistant Professor 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



Image adapted with permission from the National Institute of Allergy and Infectious Diseases

# 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?

# National HIV Residency Pathway Working Group

## 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>



*Barakat et al: "The Changing Face of HIV Care: Expanding HIV Training in Internal Medicine Residency Program". Academic Medicine 2018*

# 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*

*Dunne, Barakat et al: "Development of a Novel Competency-Based Evaluation System for HIV Primary Care Training: the HIV Entrustable Professional Activities", JGIM: 2019*

# 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



November 2, 2022

# Developing the HIV Workforce: The MATEC Clinician Scholars Program

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**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

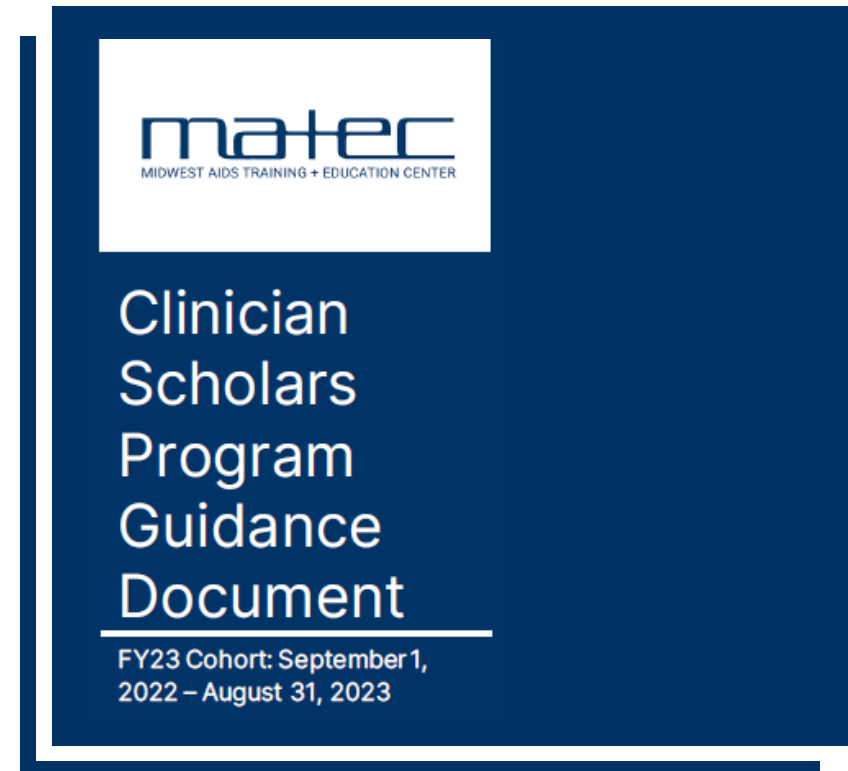
- Currently provide direct clinical care in one of the following settings:
  - Clinics funded under the **HRSA Ryan White HIV/AIDS Program**
  - **Correctional settings** (County, State, or Federal)
  - **Rural and Community Health Centers**
  - Other **federally supported health care facilities**, such 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

\*Boehler M, Schechtman B, Rivero R, et al. Developing the HIV workforce: the MATEC Clinician Scholars Program. *J Assoc Nurses AIDS Care*. 2016;27:246–260.



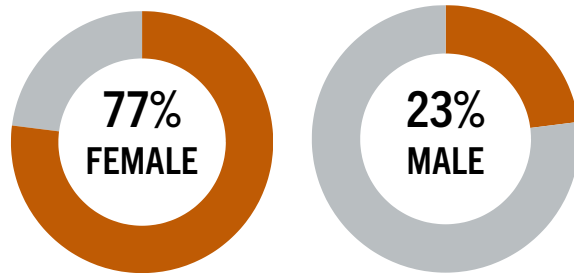
## PROGRAM REQUIREMENTS

- 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

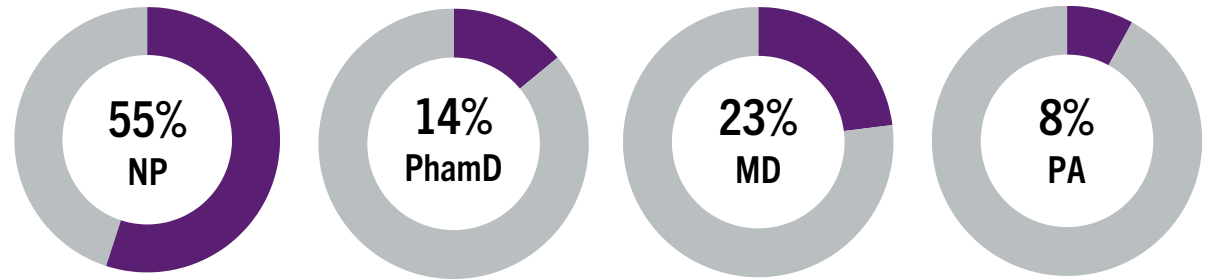
# SCHOLARS DEMOGRAPHICS (2011-2023)

 **213**  
CLINICIANS

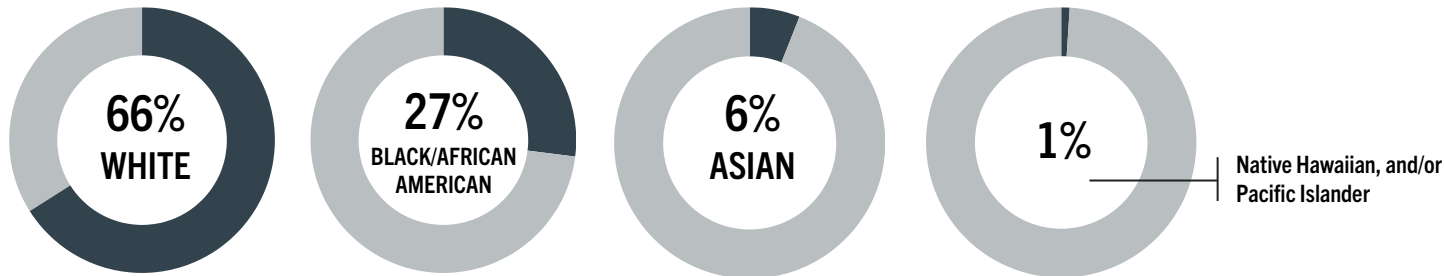
## GENDER:



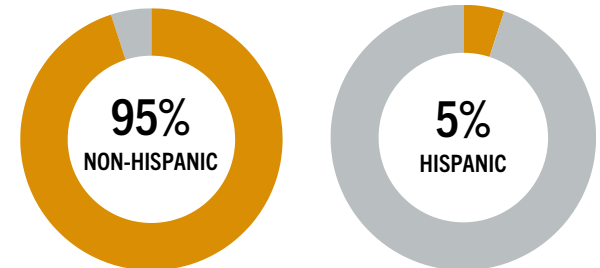
## DISIPLINE:



## RACE:



## ETHNICITY:



## RACIAL & ETHNIC MINORITY PATIENTS SERVED BY SCHOLARS (2012 – 2015)

% of Racial & Ethnic Minority Patients Served	% of Scholars (N= 50)
None	1
1 – 24	4
25 – 49	14
50 – 74	43
≥ 75	36



## WORKPLACE OF SCHOLARS (2012 – 2015)



**Community Health Center:**  
**32% of Scholars**



**Academic Health Center:**  
**18% of Scholars**

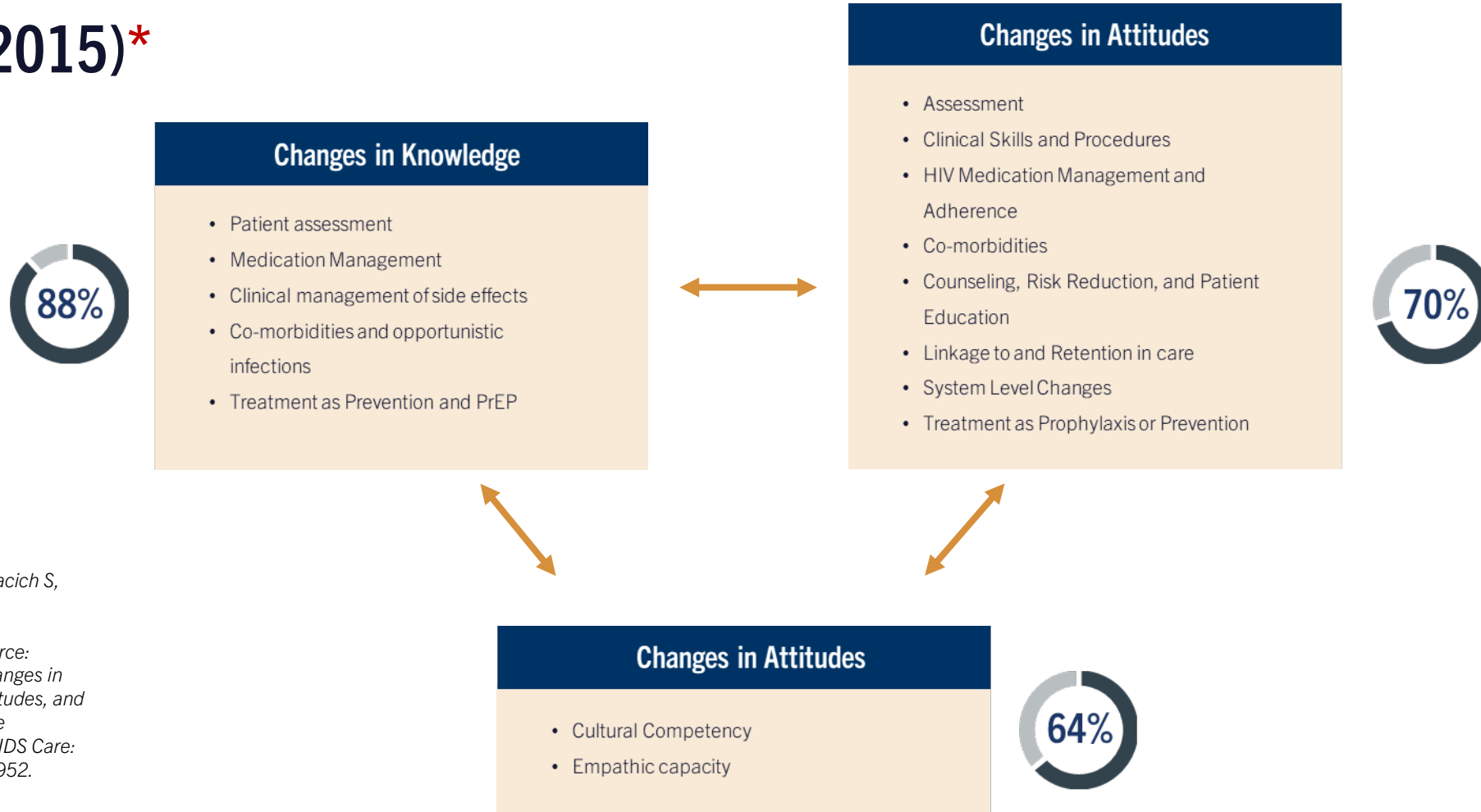


**HIV Clinic:**  
**22% of Scholars**



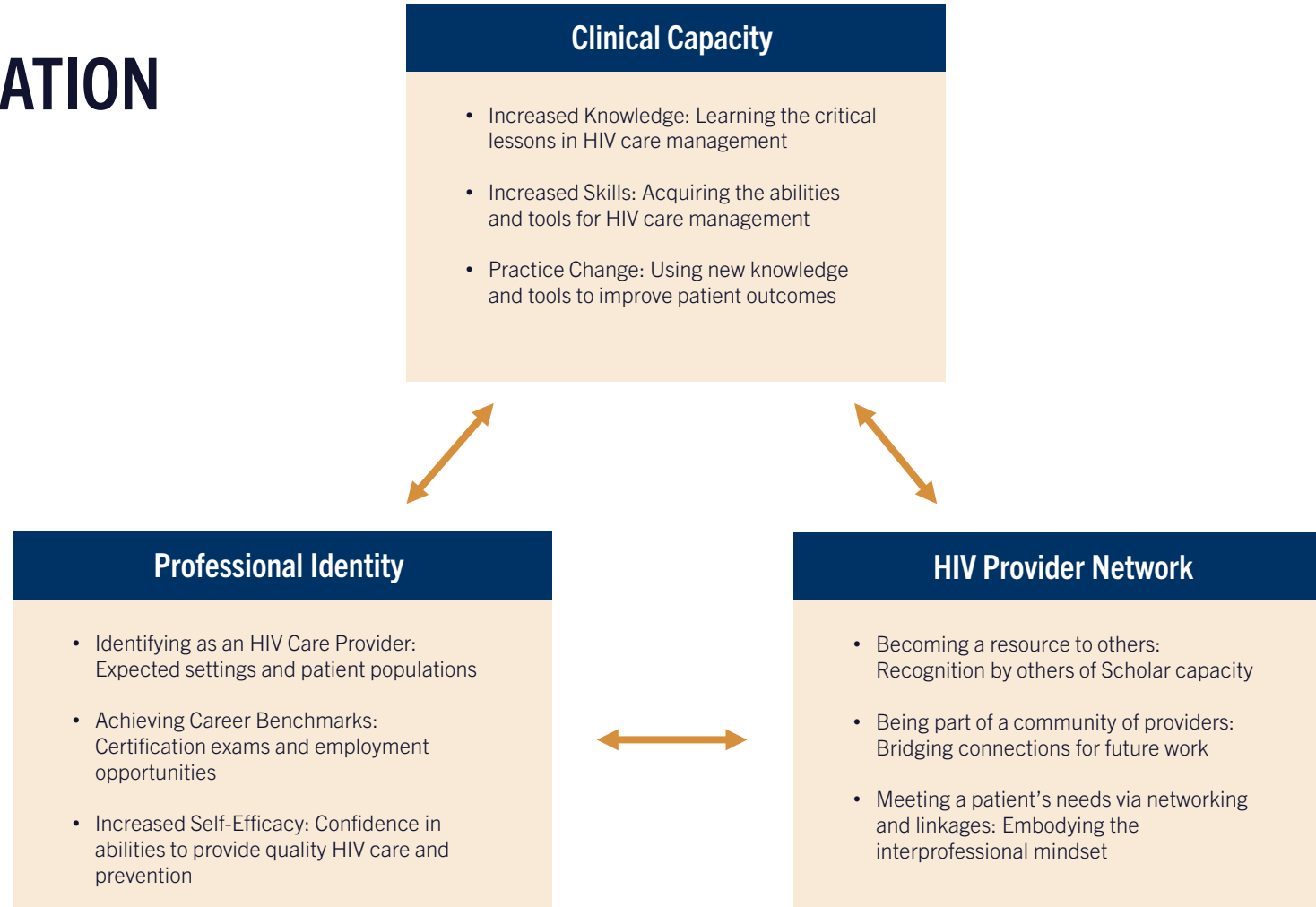
**Other:**  
**28% of Scholars**

# IMPACT OF CLINICIAN SCHOLARS PROGRAM (2012 – 2015)\*



\* Wagner CMJ, Carlberg-Racich S, Linsk NL, et al. Impacts of Longitudinal Mentorship to Strengthen the HIV Workforce: Qualitative Evidence of Changes in Clinicians' Knowledge, Attitudes, and Practice. *The Journal of the Association of Nurses in AIDS Care: JANAC*. 2017;28(6):938–952.

# PROFESSIONAL IDENTITY FORMATION (2012 -2015)\*



\* Carlberg-Racich S, Wagner C, Alabduljabbar S, et al. Professional Identity Formation in HIV Care: Development of Clinician Scholars in a Longitudinal, Mentored Training Program. *Journal of Continuing Education in Health Professions: JCEHP*. 2018;38(3):158–164.

## 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

## Continuum of Care Stage

	Diagnosed						Linkage to Care		Engaged/Retained in Care		Prescribed Anti-Retroviral Therapy				Viral Suppressed	
																
	Screening		HIV Testing		Diagnosis						Overall		Adherence Support			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Prevalence</b>	8	5.0	12	10.0	11	9.1	29	24.1	31	25.8	33	27.5	31	25.8	12	10
<b>Voices</b>	5	12.1	8	19.5	9	22.9	15	36.5	27	65.8	18	43.9	17	41.4	9	21.9

## 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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Using the National HIV Curriculum  
e-Learning Platform to strengthen the  
Nation's HIV Clinical Workforce



# **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

Practitioner	Race/ethnicity, % (SE) [95% CI]			
	White	Black	Native American	Hispanic
Advanced practice registered nurse	79.4 (1.10) [77.15-81.47]	7.3 (0.87) [5.80-9.22]	0.3 (0.16) [0.12-0.84]	5.5 (0.58) [4.45-6.74]
Dentist	68.7 (1.52) [65.60-71.56]	4.4 (0.88) [2.95-6.49]	0.1 (0.05) [0.01-0.29]	5.7 (0.72) [4.43-7.28]
Pharmacist	65.4 (1.09) [63.22-67.51]	7.5 (0.72) [6.23-9.07]	0.2 (0.08) [0.07-0.45]	3.7 (0.41) [2.99-4.63]
Physician	62.4 (0.65) [61.06-63.63]	5.2 (0.37) [4.50-5.96]	0.1 (0.05) [0.047-.26]	6.9 (0.35) [6.27-7.65]
Physician assistant	75.9 (1.46) [72.97-78.68]	4.5 (0.82) [3.11-6.39]	0.5 (0.24) [0.23-1.29]	7.3 (0.87) [5.77-9.21]
Occupational therapist	80.5 (1.42) [77.60-83.16]	6.1 (1.03) [4.35-8.45]	0.2 (0.17) [0.02-1.19]	5.2 (0.78) [3.90-7.0]
Physical therapist	76.7 (1.06) [74.54-78.71]	3.3 (0.48) [2.50-4.41]	0 (0.02) [0-0.16]	3.3 (0.42) [2.62-4.27]
Respiratory therapist	66.3 (2.03) [62.19-70.16]	11.4 (1.48) [8.81-14.66]	0.9 (0.56) [0.29-2.98]	10.8 (1.34) [8.45-13.73]
Speech-language pathologist	84.4 (1.15) [82.00-86.52]	4.7 (0.78) [3.37-6.47]	0.5 (0.28) [0.20-1.48]	6.4 (0.74) [5.10-8.03]
Registered nurse	68.9 (0.38) [68.17-69.64]	11.3 (0.29) [10.75-11.91]	0.4 (0.05) [0.29-0.47]	7.8 (0.22) [7.33-8.21]

## **% 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%

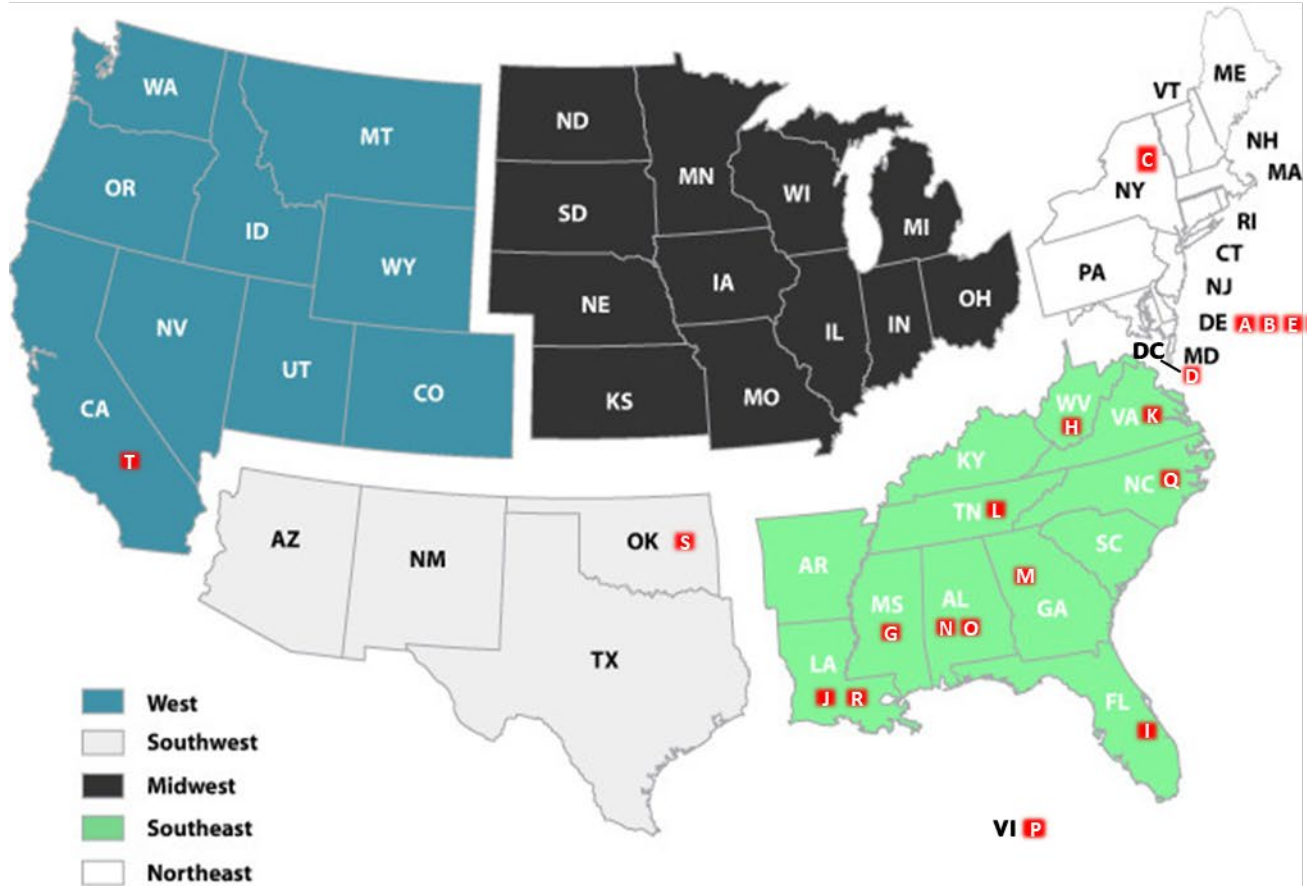
# HIV & AIDS Epidemiology by State and H-NIP Partners

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

*Data compiled by HU-TTC Howard University College of Medicine 2022*

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>

# H-NIP: Geographic Diversity Map



## Northeast

- A** Bowie State University
- B** Coppin State University
- C** CUNY- Medgar Evers College
- D** Howard University
- E** Morgan State University
- F** University of Maryland Eastern Shore

## Southeast

- G** Alcorn State University
- H** Bluefield State College
- I** Florida A&M University
- J** Grambling University
- K** Hampton University
- L** Meharry Medical College
- M** Morehouse School of Medicine
- N** Talladega College
- O** Tuskegee University
- P** University of the Virgin Islands
- Q** Winston-Salem State University
- R** Xavier University

## Southwest

- S** Langston University

## West

- T** Charles R. Drew University

## 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

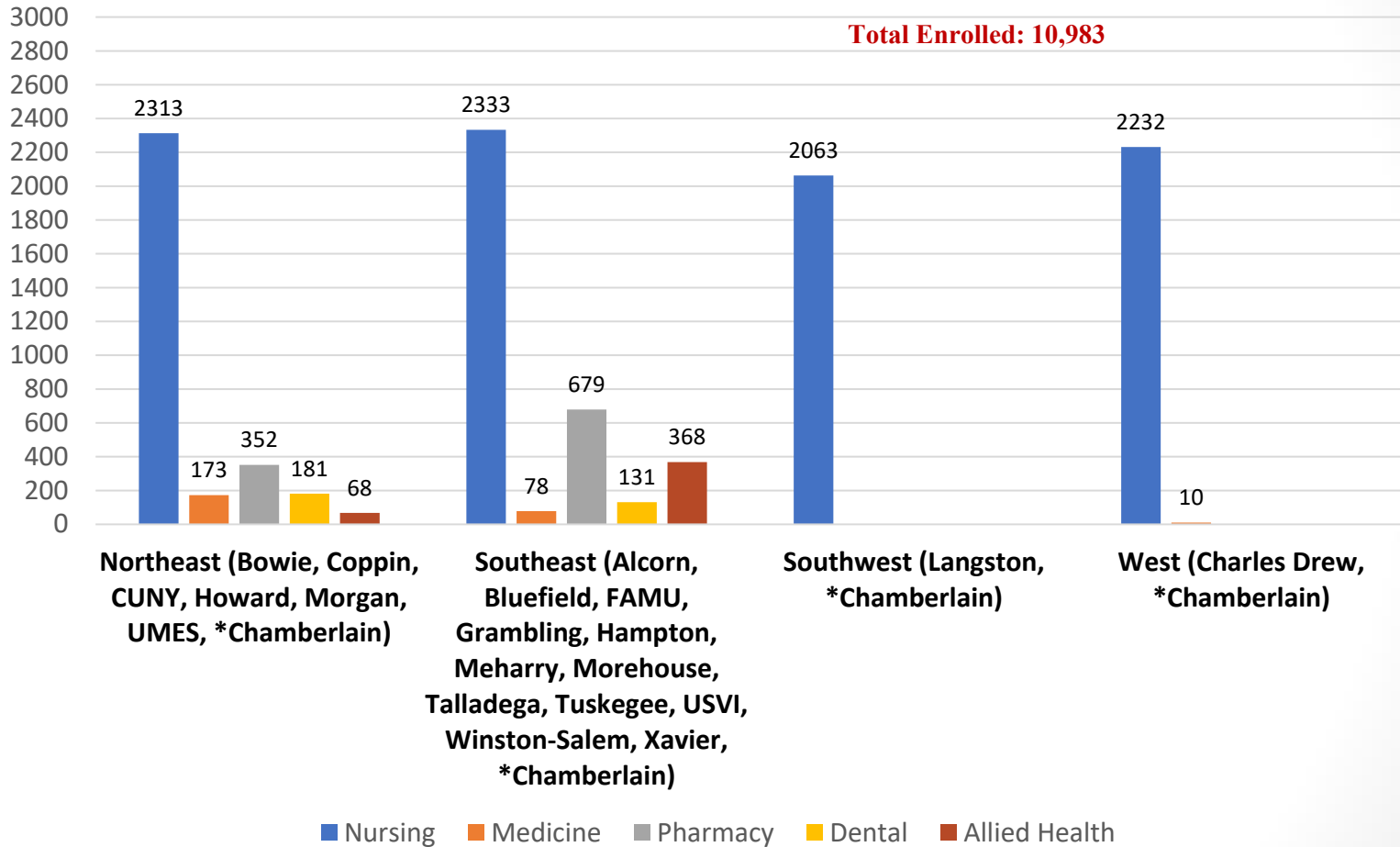
- Support from our Project officer (*Federal Agency & Collaborative Partners*)
- Partners institutions' leaders (*President, Provost, Department Chair, Faculty, Student Leaders, etc.*)
- Program Champion for each institution (*faculty & student*)
- Curriculum Technology Integrator
- Curriculum Evaluator
- 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

## Trained by Disciplines and Regions September 2018 – August 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

# 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

# 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





HOWARD UNIVERSITY  
NATIONAL HIV CURRICULUM  
INTEGRATION PROJECT



# CALLING ALL Physicians

SIGN UP AND TAKE  
**THE NATIONAL  
HIV Curriculum**



Get **FREE** CMEs and other CEUs

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:** <https://www.huttc.org/h-nip/>



This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U09CE002100; Howard University: Integrating the National HIV Curriculum's Learning Platform into Health Care Provider Professional Education (H-NIP) in the amount of \$2.4M and with 40% financed with non-governmental sources. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

Email [HNIP@howard.edu](mailto: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



# BESAFE

# Published Models



# BESAFE

A Cultural Competency Model for Asians and Pacific Islanders  
National Minority AIDS Education and Training Center  
Howard University College of Medicine





## 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.