



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

## 2020 National Ryan White Conference



## **H-NIP – Priming the HIV Clinical Workforce Pipeline**

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*Department of Internal Medicine*

# Disclosures

Goulda Downer, has no relevant financial or non-financial interest to disclose.

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*Commercial support was not received for this activity.*

# Learning Objectives

**At the conclusion of this activity, the participant will be able to:**

- 1. Illustrate awareness of the HIV clinical workforce shortage**
- 2. Recognize the historical contributions of minority serving institutions in improving HIV clinical care**
- 3. Explain innovative approaches to HIV workforce development**



2020 National Ryan White Conference

**H-NIP – Priming the HIV Clinical Workforce Pipeline**

**Friday, August 14, 2020**

**10:00 a.m. - 10:50 a.m.**

abstract 15585

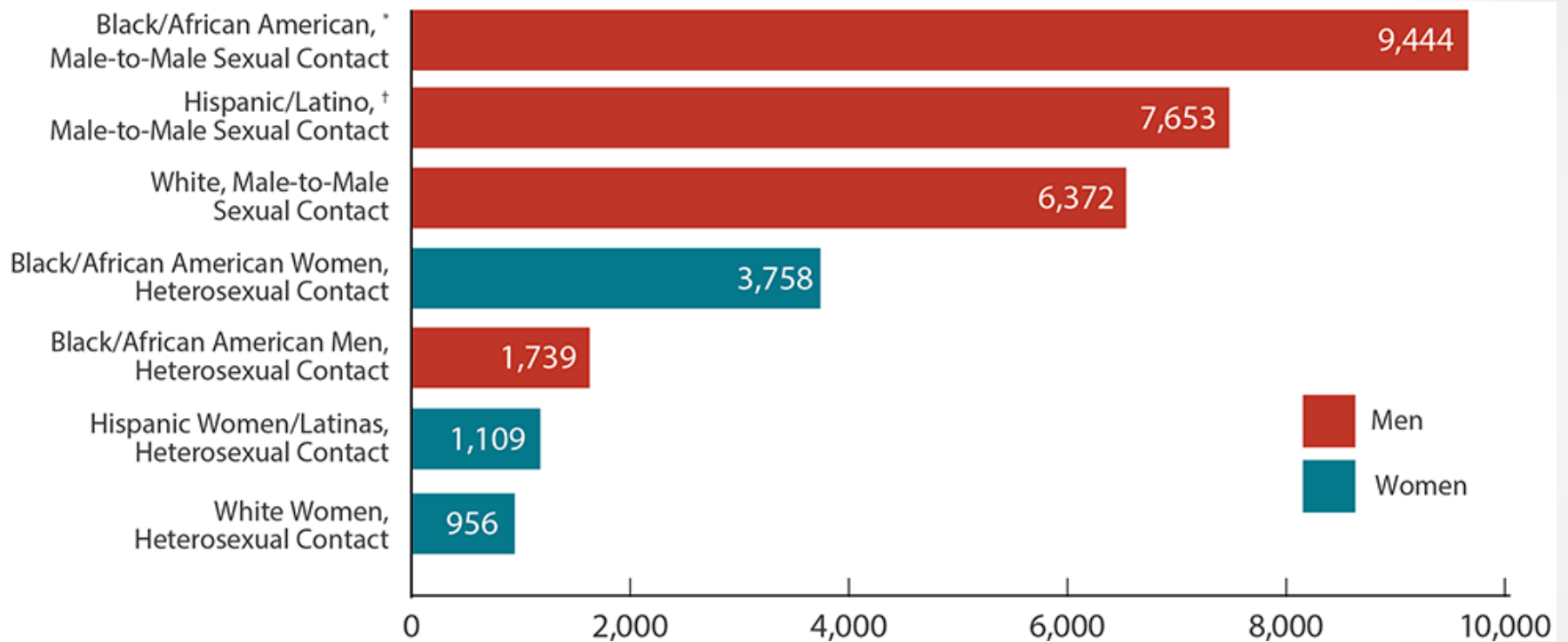


PART I

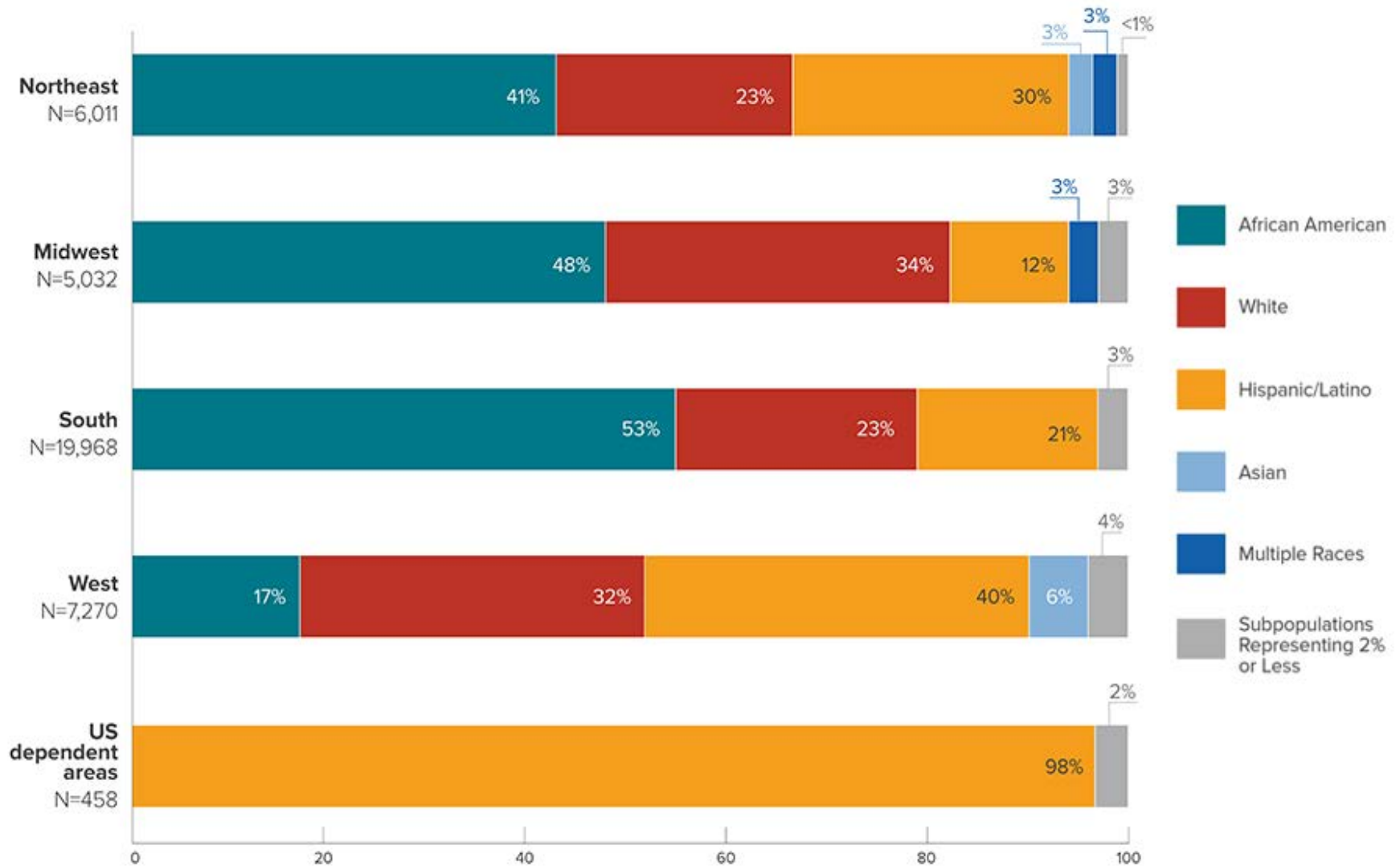
THE HIV

DISPARITY BURDEN

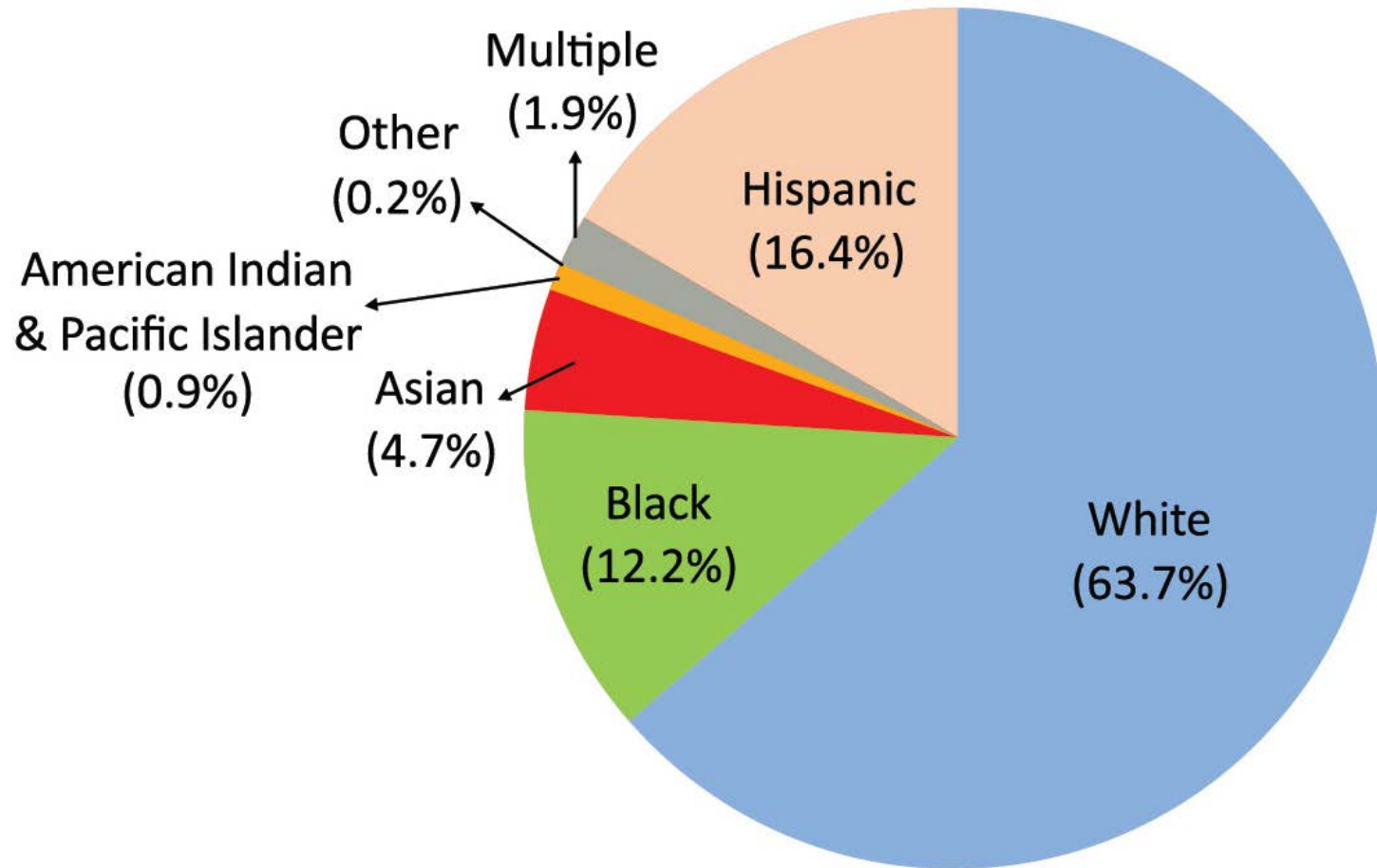
# New HIV Diagnoses in the US and Dependent Areas for the Most-Affected Subpopulations, 2018



# Diagnoses of HIV Infection in the United States & Dependent Areas



# US Race and Ethnicity Combined





# Percentage of All Active Physicians by Race/Ethnicity, 2018

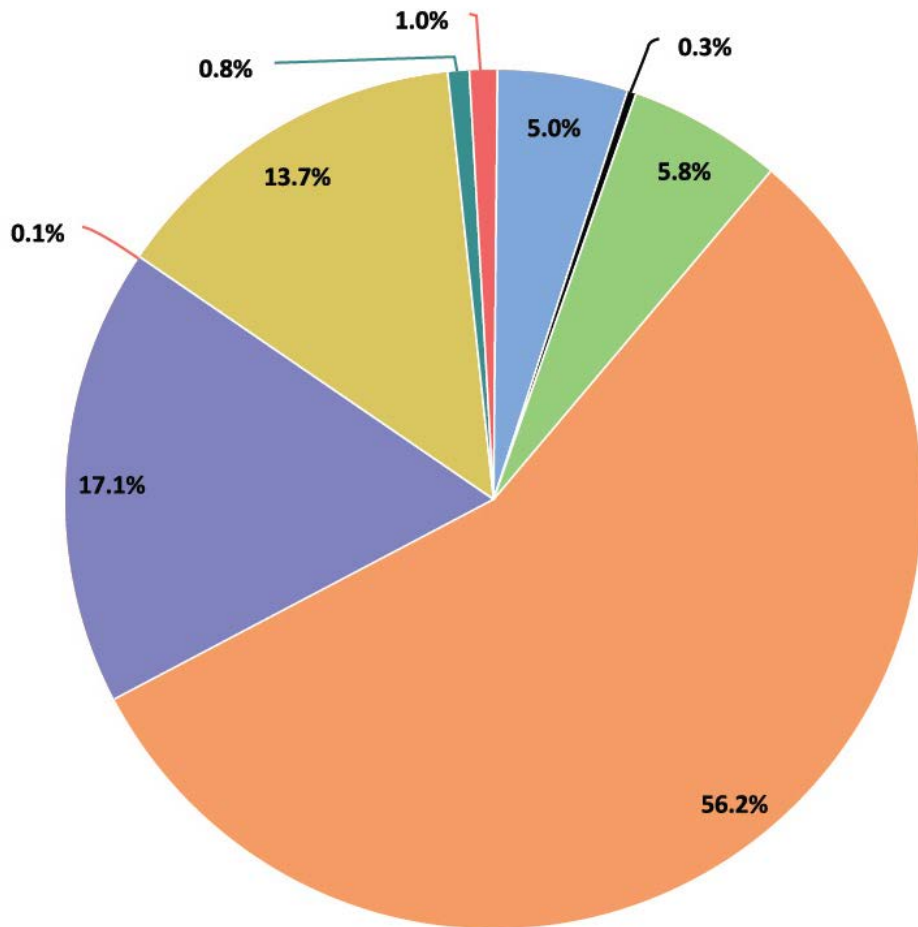


Figure shows the percentage of active physicians by race/ethnicity. Among active physicians:

- 56.2% identified as White,
- 17.1% identified as Asian,
- 5.8% identified as Hispanic, and
- 5.0% identified as Black or African American.

*Note that the race for 13.7% of active physicians is Unknown, making that the largest subgroup after White and Asian.*

- American Indian or Alaska Native (2,570)
- Black or African American (45,534)
- Multiple Race, Non-Hispanic (8,932)
- Other (7,571)
- White (516,304)
- Asian (157,025)
- Hispanic (53,526)
- Native Hawaiian or Other Pacific Islander (941)
- Unknown (126,144)

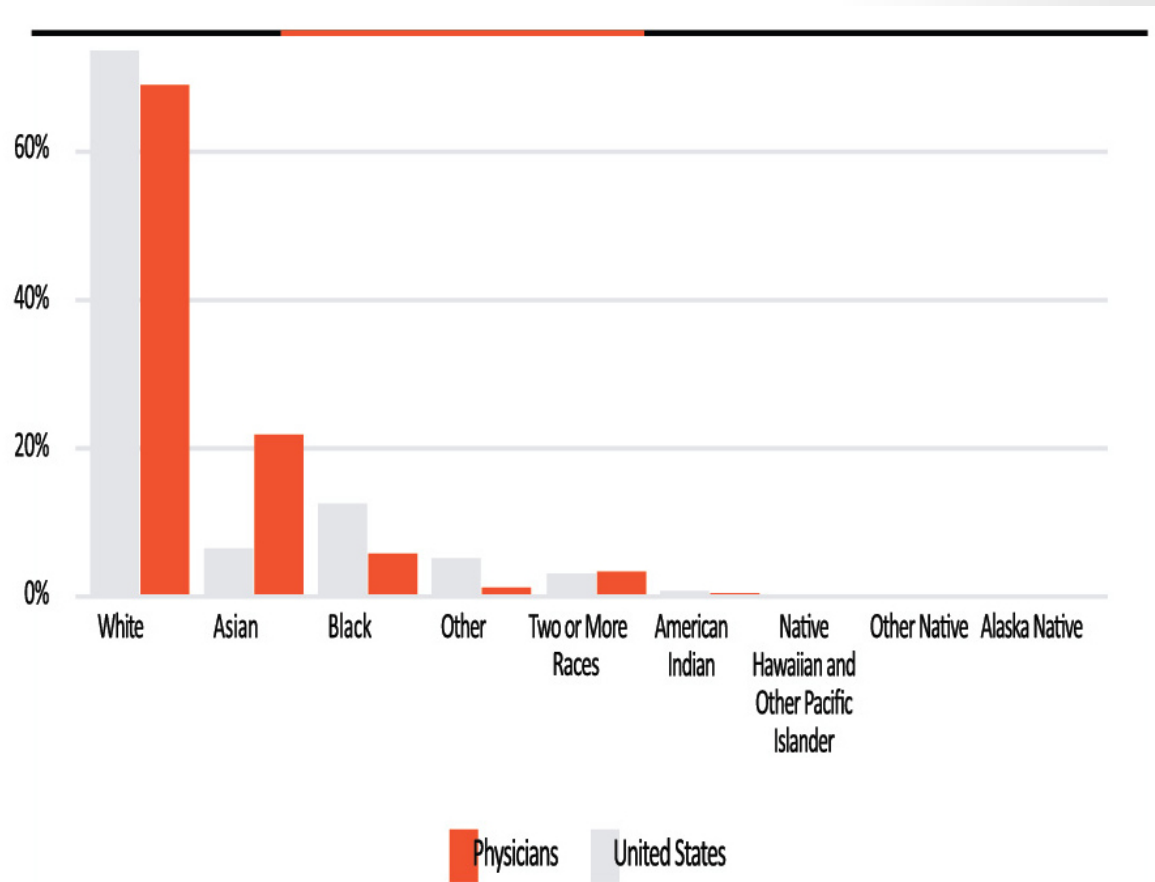
# Most Common Race or Ethnicity of Physicians

## Most Common Race or Ethnicity of Physicians

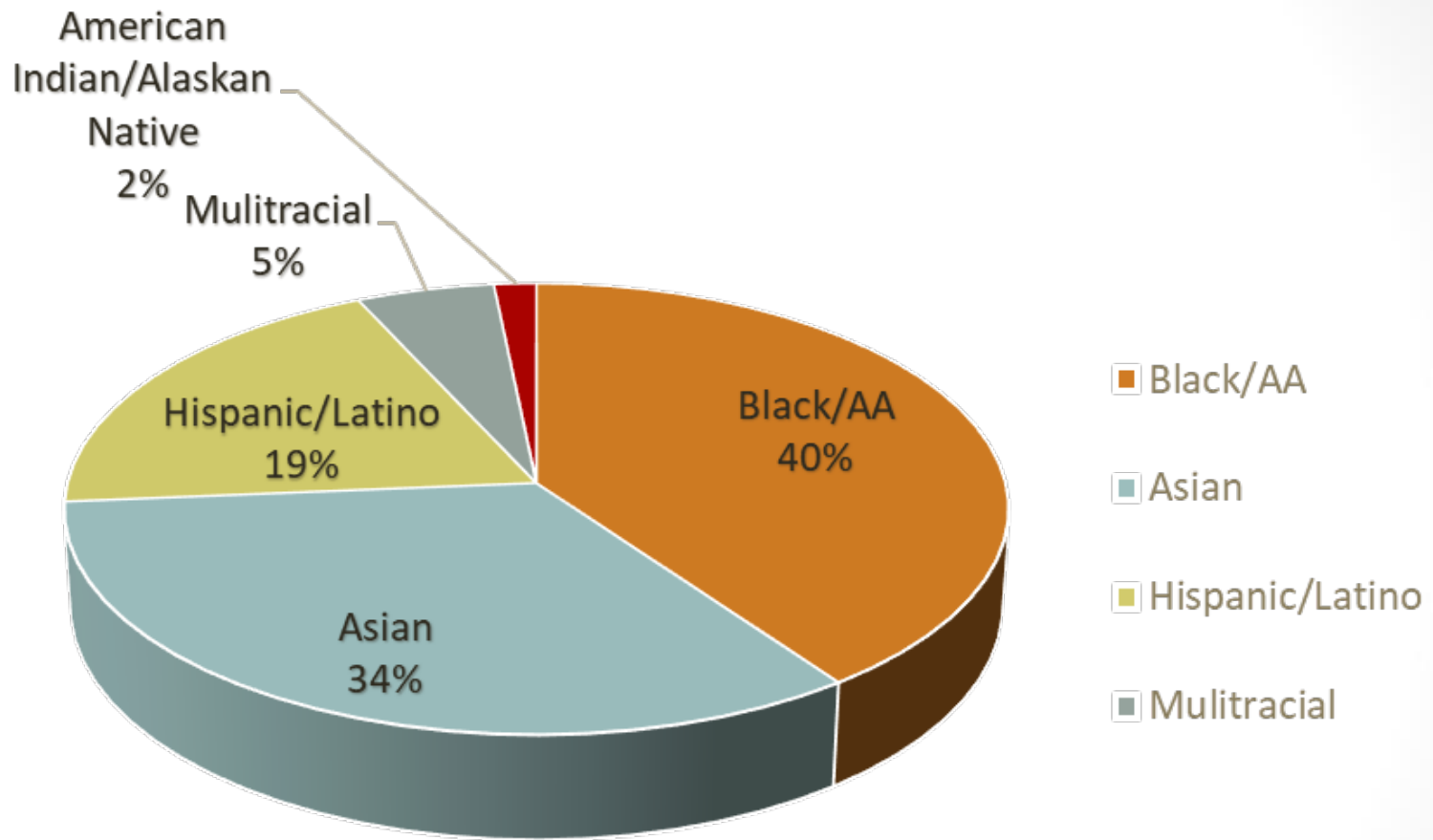
1. White
2. Asian
3. Black

68.7% of Physicians are White, making that the most common race or ethnicity in the occupation. Representing 21.6% of Physicians, Asian is the second most common race or ethnicity in this occupation. This chart shows the racial and ethnic breakdown of Physicians.

Data from [the Census Bureau ACS PUMS 1-Year Estimate](#)



# Race & Ethnicity – Nursing



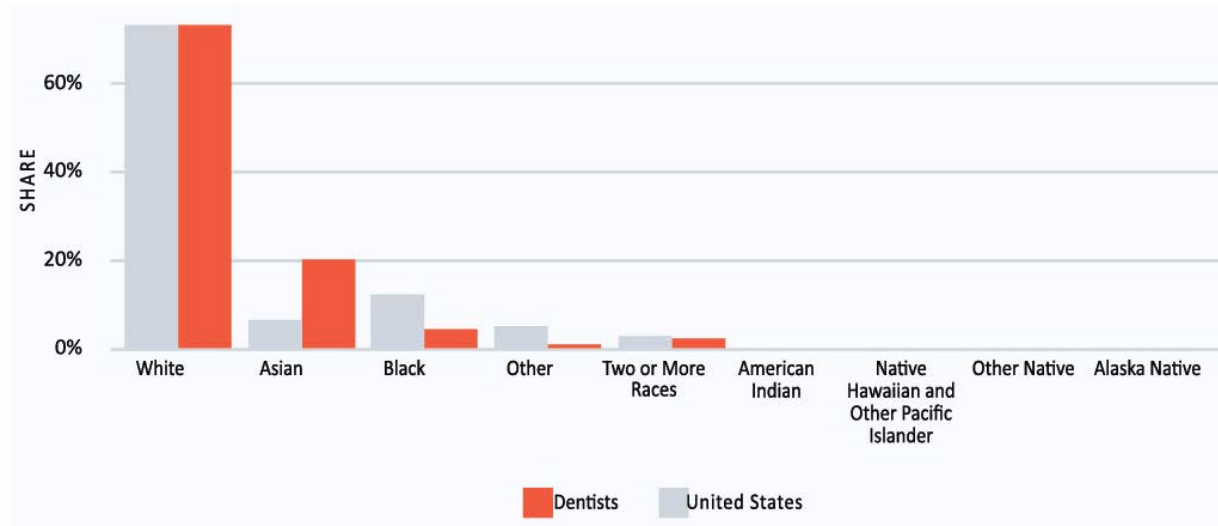
[Visit the Minority Nurse website for statistics \(https://minoritynurse.com/nursing-statistics/\)](https://minoritynurse.com/nursing-statistics/)

# Race & Ethnicity - Dentists

## Most Common Race or Ethnicity of Dentists

1. White 73.1% of Dentists are White, making that the most common race or ethnicity in the occupation.
2. Asian Representing 19.6% of Dentists, Asian is the second most common race or ethnicity in this occupation. This chart shows the racial and ethnic breakdown of Dentists.
3. Black

Data from [the Census Bureau ACS PUMS 1-Year Estimate](#)

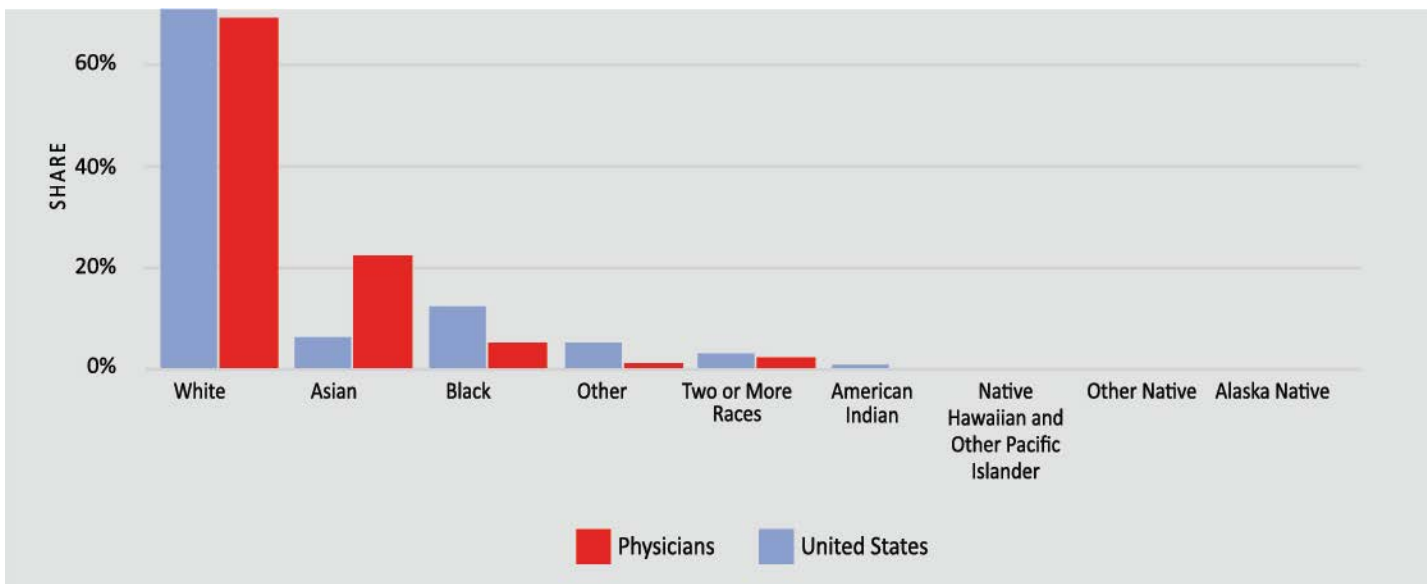


# Race & Ethnicity – Pharmacists

## Most Common Race or Ethnicity of Pharmacists

1. White 69.2% of Pharmacists are White, making that the most common race or ethnicity in the occupation. Representing
2. Asian 22.1% of Pharmacists, Asian is the second most common race or ethnicity in this occupation. This chart shows the racial and ethnic breakdown of Pharmacists.
3. Black

Data from [the Census Bureau ACS PUMS 1-Year Estimate](#)



# U.S. Health Occupations by Race/Ethnicity (2011-2015)

	Hispanic	Non-Hispanic					
		White	Black	Asian	American Indian/ Alaska Native	Native Hawaiian and Other Pacific Islander	Multiple/ Other Race
U.S. Workforce <sup>3</sup> (#)	25,776,728	102,850,895	18,597,223	8,534,837	902,977	251,578	2,910,645
U.S. Workforce <sup>3</sup> (%)	16.1	64.4	11.6	5.3	0.6	0.2	1.8
<b>Health Occupations<sup>3</sup></b>							
<b>Community and Social Services Occupations</b>							
Counselors	10.7	64.6	18.8	2.8	0.8	0.1	2.2
Social Workers	12.0	60.6	21.5	3.0	0.8	0.1	2.0
<b>Life, Physical, and Social Sciences Occupations</b>							
Psychologists	6.3	83.5	4.9	3.4	0.2	(0.0)	1.6
<b>Health Diagnosing and Treating Practitioners Occupations</b>							
Advanced Practice Registered Nurses <sup>4</sup>	4.5	84.0	5.7	4.1	0.2	NR	1.3
Chiropractors	3.7	86.7	1.9	5.4	0.5	NR	1.8
Dentists	6.1	74.8	3.0	14.3	(0.1)	NR	1.7
Dietitians and Nutritionists	8.5	68.7	15.0	6.0	0.3	(0.1)	1.4
Optometrists	3.9	78.4	1.8	13.7	NR	NR	1.8
Pharmacists	3.7	70.4	5.9	17.9	0.2	0.1	1.8
Physicians	6.3	67.0	4.8	19.6	0.1	0.0	2.1
Physician Assistants	10.0	72.7	7.1	7.3	0.6	NR	2.2
Occupational Therapists	4.0	83.8	4.4	6.6	0.2	NR	1.1
Physical Therapists	4.8	77.8	4.4	11.1	0.2	(0.1)	1.6
Respiratory Therapists	7.9	70.1	12.8	7.0	0.5	NR	1.7
Speech-Language Pathologists	6.2	86.1	4.1	2.2	0.3	NR	1.0
Registered Nurses	5.7	73.5	10.4	8.4	0.4	0.1	1.5
<b>Health Technologists and Technicians Occupations</b>							
Dental Hygienists	7.5	83.4	3.1	4.2	0.2	NR	1.5
Diagnostic Related Technologists and Technicians	9.6	75.7	7.8	4.9	0.4	(0.1)	1.5

# U.S. Health Occupations by Race /Ethnicity (2011-2015)

Emergency Medical Technicians and Paramedics	10.3	78.9	6.3	1.9	0.6 <sup>4</sup>	0.1	1.9
Health Practitioner Support Technologist and Technicians	12.3	65.5	12.8	6.9	0.5	0.1	1.9
Licensed Practical/Vocational Nurses	9.4	60.8	23.1	4.0	0.7	0.1	1.9
Medical and Clinical Laboratory Technologists and Technicians	9.4	62.0	13.7	11.8	0.5	0.2	2.2
Medical Records and Health Information Technicians	11.8	65.3	15.3	5.1	0.8	0.2	1.5
Opticians, Dispensing	12.1	75.9	5.5	4.4	0.7	NR	1.3
<b>Healthcare Support Occupations</b>							
Dental Assistants	22.7	62.1	6.9	5.5	0.7	0.1	2.1
Massage Therapists	11.0	72.9	5.5	7.5	0.5	(0.1)	2.5
Medical Assistants	26.1	53.6	13.4	4.2	0.5	0.3	1.9
Nursing, Psychiatric and Home Health Aides	13.7	46.8	32.0	4.5	0.8	0.2	2.1
Physical Therapist Assistants and Aides	8.9	76.0	7.1	5.3	0.5	(0.2)	2.1
<b>Personal Care and Services Occupations</b>							
Personal Care Aides	18.2	48.7	22.1	7.2	1.1	0.5	2.2

Source: HRSA estimates from American Community Survey 2011-2015.

Notes: <sup>1</sup> Occupations are titled and grouped as in the U.S. Government's Standard Occupation Classification system. <sup>2</sup> Population 16 years and older who are employed or seeking employment. <sup>3</sup> Self-reported occupations. <sup>4</sup> Includes Nurse Anesthetists, Midwives, and Nurse Practitioners. NR: data not reported because relative standard errors (RSE)  $\geq 30$ ; estimate does not meet standards of reliability or data not present. Numbers in parenthesis represent estimates with relative standard errors (RSE)  $\geq 20$  percent and should be interpreted with caution. Not all totals equal to 100 percent due to rounding.



# PART II

## EXPANDING THE HIV CLINICAL WORKFORCE



# **% 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/>

# Rationale for HIV Clinician Shortage

- HIV clinicians are retiring
- Recruitment challenges
- Young providers opting out of HIV
- Lack of exposure to HIV training
- Lack of HIV medicine in academic programs
- Provider Stigma

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

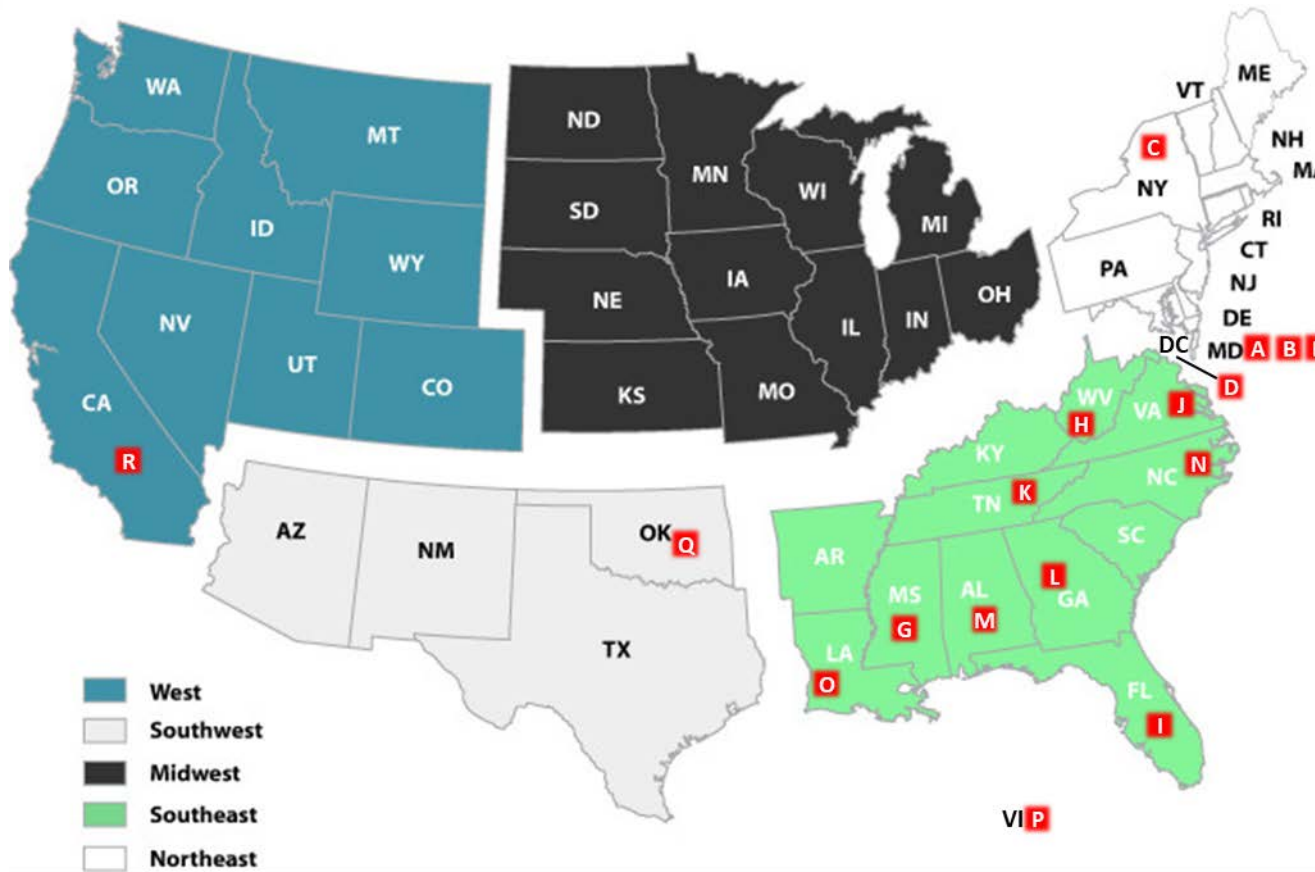
LOCATION	POPULATION	HIV PREVALENCE	AIDS PREVALENCE	CLINICAL EXPERTS	# OF AIDS SERVICE
Alabama	4,853,875 <sup>1</sup>	12,316 <sup>1</sup>	12,651 <sup>2</sup>	319 <sup>3</sup>	112 <sup>4</sup>
Tuskegee, AL	8,544 <sup>1</sup>	102 <sup>1</sup>	NA*	26 <sup>2</sup>	14 <sup>3</sup>
Georgia	10,199,398 <sup>1</sup>	49,463 <sup>1</sup>	1,152 <sup>2</sup>	1,499 <sup>3</sup>	125 <sup>4</sup>
Atlanta, GA	4,333,441 <sup>1</sup>	35,402 <sup>1</sup>	17.4	900 <sup>3</sup>	75 <sup>4</sup>
New York	19,747,183 <sup>1</sup>	128,681 <sup>1</sup>	203,728 <sup>2</sup>	4,717 <sup>3</sup>	1904 <sup>4</sup>
Brooklyn	2,648,771 <sup>1</sup>	640 <sup>2</sup>	346 <sup>3</sup>	255 <sup>4</sup>	225 <sup>5</sup>
North Carolina	10,035,186 <sup>1</sup>	29,814 <sup>1</sup>	25,070 <sup>2</sup>	792 <sup>3</sup>	75 <sup>4</sup>
Winston-Salem, NC	238,474 <sup>1</sup>	1,462 <sup>2</sup>	236 <sup>2</sup>	53 <sup>3</sup>	31 <sup>4</sup>
Tennessee	6,595,056 <sup>1</sup>	16,425 <sup>2</sup>	17,841 <sup>2</sup>	476 <sup>3</sup>	125 <sup>4</sup>
Nashville, TN	645,398 <sup>1</sup>	352 <sup>2</sup>	NA*	96 <sup>3</sup>	86 <sup>4</sup>
Virgin Islands	107,268 <sup>1</sup>	551 <sup>1</sup>	827 <sup>1</sup>	NA*	24 <sup>2</sup>
Virginia	8,367,587 <sup>1</sup>	21,607 <sup>1</sup>	22,822 <sup>2</sup>	2,033 <sup>3</sup>	733 <sup>4</sup>
Hampton, VA	1,681,522 <sup>1</sup>	6,071 <sup>1</sup>	18 (2015) <sup>2</sup>	40 <sup>3</sup>	90 <sup>4</sup>
West Virginia	1,841,053 <sup>1</sup>	1,781 <sup>2</sup>	10 cases <sup>2</sup>	NA*	75 <sup>3</sup>
Bluefield, WV	10,366 <sup>1</sup>	57 <sup>2</sup>	NA*	NA*	NA*

\* Not Available

# 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)

# H-NIP: Geographic Diversity Partnership Map



## Northeast

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

## Southeast

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

## Southwest

- Q** Langston University

## West

- R** Charles R. Drew University

## Effect of Taking the NHC on Students' Self-Perceived HIV Clinical Skills

Modules	More confident	No change in confidence	Less confident
Screening & Diagnosis	80	16	3
Basic HIV Primary Care	42	54	4
ARV	27	40	33
Co-Occurring Conditions	40	20	40
Prevention of HIV	55	36	9
Key Populations	47	12	41

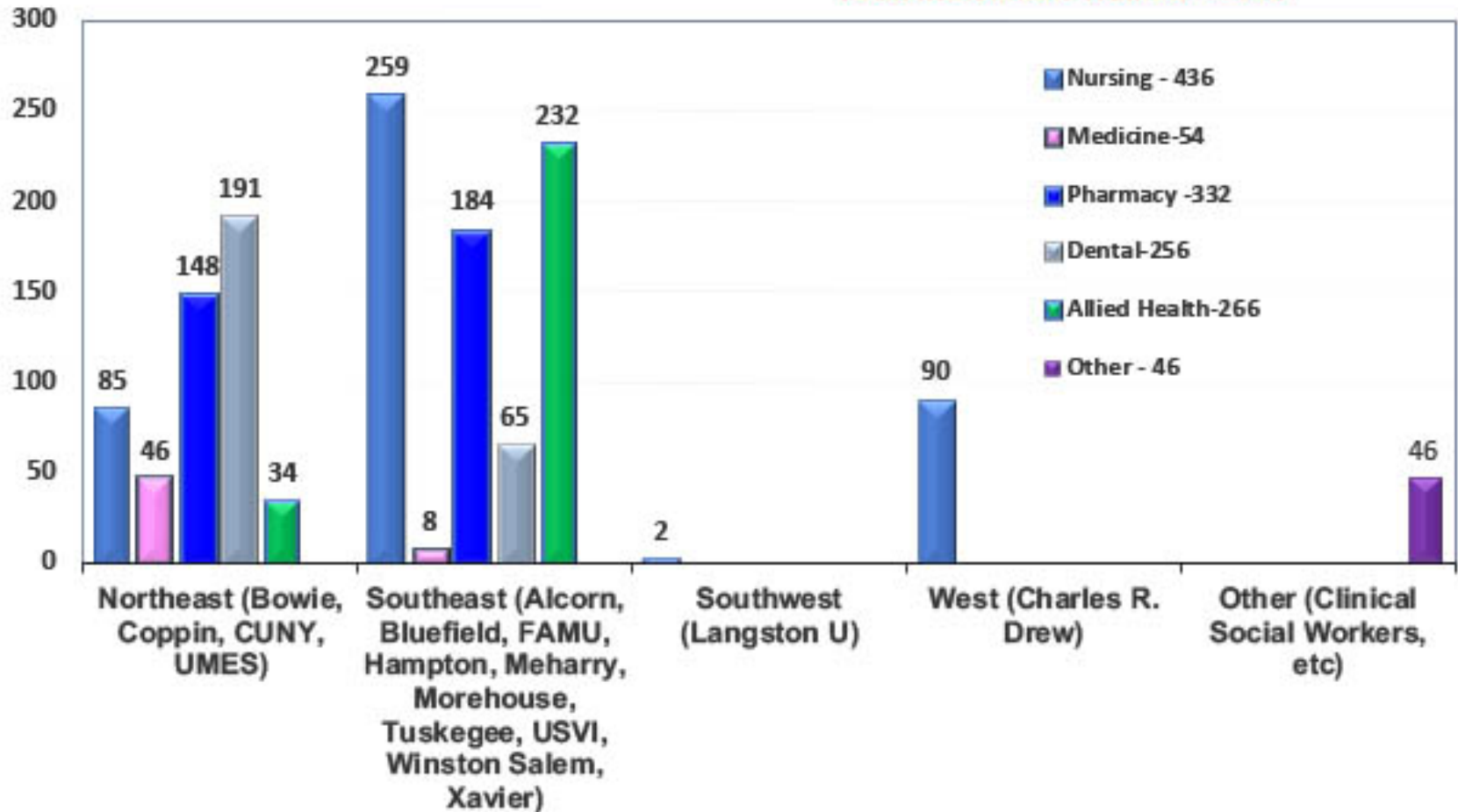
## NHC: Student Motivation

- 82% - academic requirement
- 25% - had no interest at all in the field of HIV
- 24% - interest in HIV
- 33% - interest in HIV prior to completing NHC
- 54% - after completing NHC

# # Trained by Disciplines & Regions

January 2019 – May 2020

**Total Individuals Trained = 1390**





# PART III

HIV CLINICAL WORKFORCE  
STRENGTHENING:  
H-NIP INNOVATIVE APPROACHES

# H-NIP Innovative Approaches

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
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

# H-NIP Innovative Integration Approach

- Module
  - Lesson(s) within the module

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- As part of a course

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- As a shared course

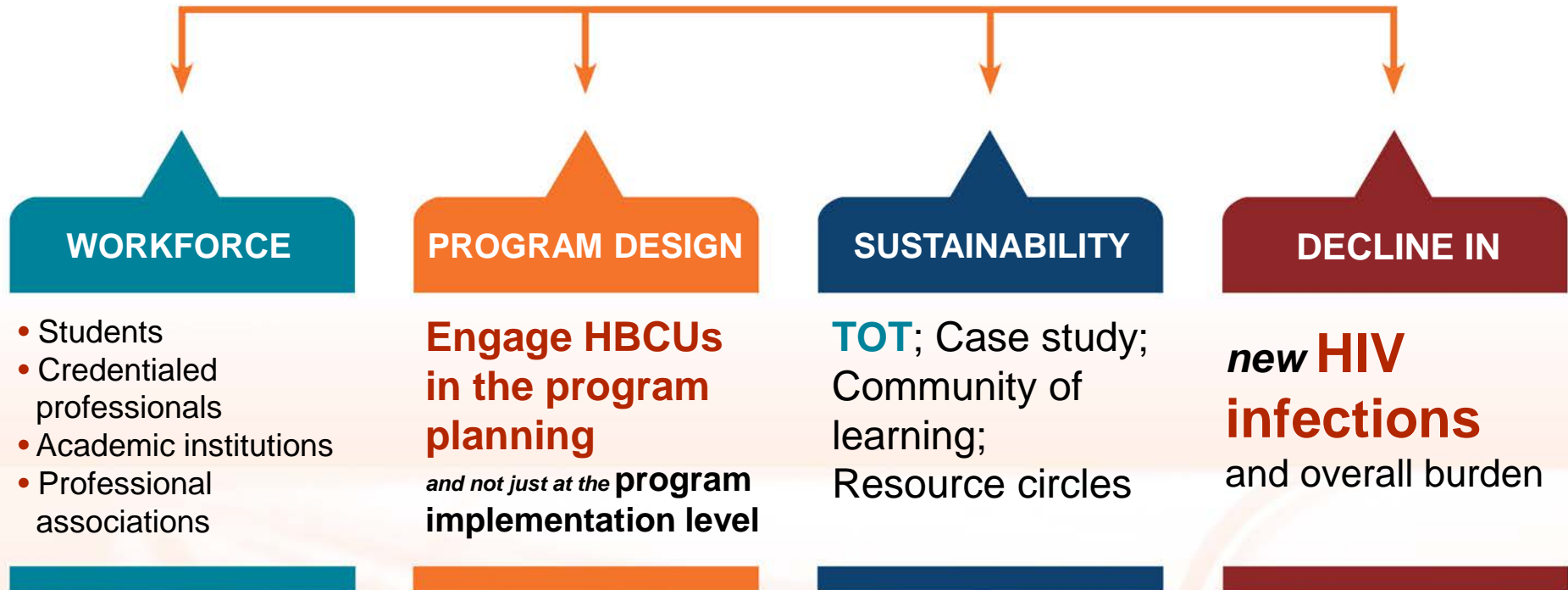
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- As an elective

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- As an entire course
  - Syllabus development

# Priming the HIV Clinical Workforce Pipeline: H-NIP Model






OUR INNOVATIVE APPROACH  
IS PARTNER-LED AND  
PARTNER DRIVEN

# How to claim CE Credit

**If you would like to receive continuing education credit for this activity, please visit:**

***[ryanwhite.cds.pesgce.com](http://ryanwhite.cds.pesgce.com)***



# Howard University Telehealth Training Center (HU-TTC) Team

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**Robin T. Kelley, PhD**

**Denise Bailey, M.ED**

**Marjorie Douglas**

**Kwame Frimpong**

**Table 2: U.S. Health Occupations<sup>1</sup> by Race/Ethnicity, 2011-2015**

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Speech-Language Pathologists	6.2	86.1	4.1	2.2	0.3	NR	1.0
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