

Scaling Up HIV Workforce Capacity for Ending the HIV Epidemic

Webinar 1: The State of HIV Workforce

June 9, 2021 | 2:00 – 3:30 PM



Agenda

❖ CDC Introduction

- ❖ Maria E. Alvarez, CDC

❖ The COVID-19 Pandemic's Impact on Health Departments

- ❖ Emily McCloskey, Director, Policy & Legislative Affairs, NASTAD

❖ Defining the HIV Workforce

- ❖ Jessica Arrazola, DrPH, MPH, MCHES, Senior Program Analyst, CSTE

❖ Assessing HIV Workforce Capacity in Mecklenburg County

- ❖ Patrick Robinson, MD, MPH, FACP, FIDSA, Research Professor, University of North Carolina at Charlotte Affiliated, Mecklenburg County Public Health
- ❖ Renate Nnoko, MBA, MPH, Senior Health Manager – Ending the HIV Epidemic, Mecklenburg County Public Health

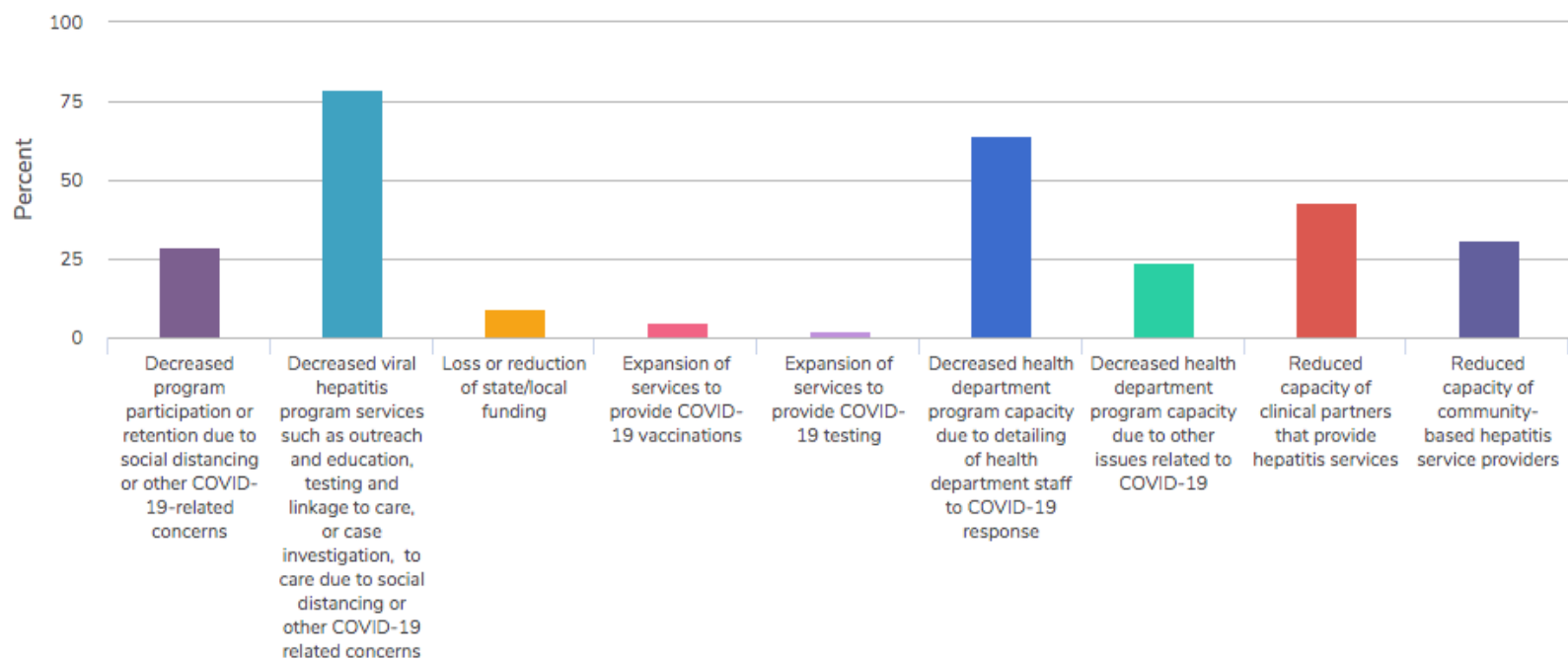
The Impact of COVID-19 on the HIV Workforce



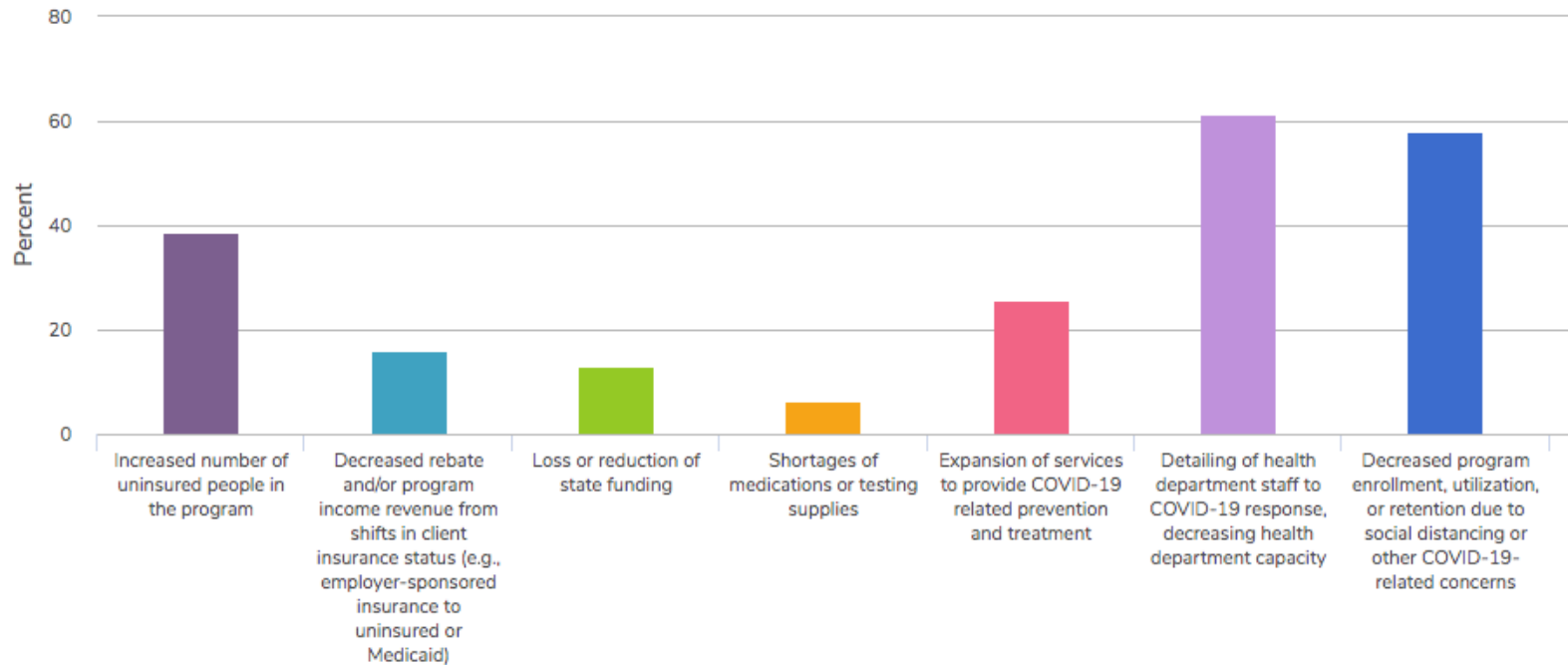
NASTAD COVID-19 RFI

- Three Request For Information (RFIs) fielded across HIV prevention, hepatitis, and RWHAP Part B/ADAP HD staff since beginning of COVID-19 Pandemic
- Key themes from March 2021 RFI
 - HIV and hepatitis capacity has been impacted across all programs as staff are detailed to COVID-19 response
 - Programs struggled with continuity of care, but many implemented innovative, adaptive strategies
 - While most programs not anticipating cost containment measures in 2021, NASTAD has experienced increase in cost-containment TA requests
 - EHE activities continue, but with anticipated delays and work plan modifications

Biggest Impacts of COVID-19 on HIV Prevention Programs



Biggest Impacts of COVID-19 on RWHAP Part B Programs & ADAPs



REFLECTION

- What opportunities to increase equity and justice should we be engaged in with Part Bs/ADAPs?
 - X

Defining the HIV Workforce

Jessica Arrazola, DrPH, MPH, MCHES

Senior Program Analyst, CSTE



Council of State and Territorial Epidemiologists

Who is on the HIV workforce team?



Disease
Investigation
Specialists

Epidemiologists

Health
Educators

Medical
Services

Community
Health Workers

Harm Reduction
Services

Behavioral
Health

HIV Prevention

Skills and services provided by the team



- HIV prevention
 - Testing
 - Linkage to care
 - Outreach
 - PrEP and PEP
- HIV care
 - HIV case management
 - Medical services
 - Direct observation therapy
- Cross program collaboration
 - Health educators
 - Community health workers
 - Grant administration
- Jurisdictional Variation
 - State vs. local agency
 - Governance structure
 - Centralized
 - Decentralized
 - Hybrid
 - Shared

How many workers are needed?



Identify who and how many currently exist



Who	Number of Filled Positions	Number of Vacant Positions	Total Current Positions
Disease Investigation Specialists			
Epidemiologists			
Health Educators			
Clinical Care			
Community Health Workers			
Harm Reduction Services			
Behavioral Health			
HIV Prevention			

Identify the ideal workforce size



Who	Total Current Positions	Number of Additional Workers Needed to Support Current Activities	Number of Additional Workers Needed to Support Activities to Achieve EHE Goals	Ideal Total Number of Positions
Disease Investigation Specialists				
Epidemiologists				
Health Educators				
Clinical Care				
Community Health Workers				
Harm Reduction Services				
Behavioral Health				
HIV Prevention Services				

Strategies to right-size the workforce





- Prioritize programmatic needs
- Engage community partners
- Consider funding requirements
- Consider required skills and experiences
- Explore various staffing models
 - Strategic placement of staff to eliminate siloes
 - Leverage agency and individual strengths
 - Student training experiences (e.g. internships or class projects for evaluation or community needs assessment projects)
- Create a community of practice within the agency to promote cross-training and awareness, and create a culture of technical assistance within the agency



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Assessing Current and Future HIV Workforce Capacity in Mecklenburg County, NC



Patrick Robinson, M.D., MPH

Claire Schuch, Ph.D.

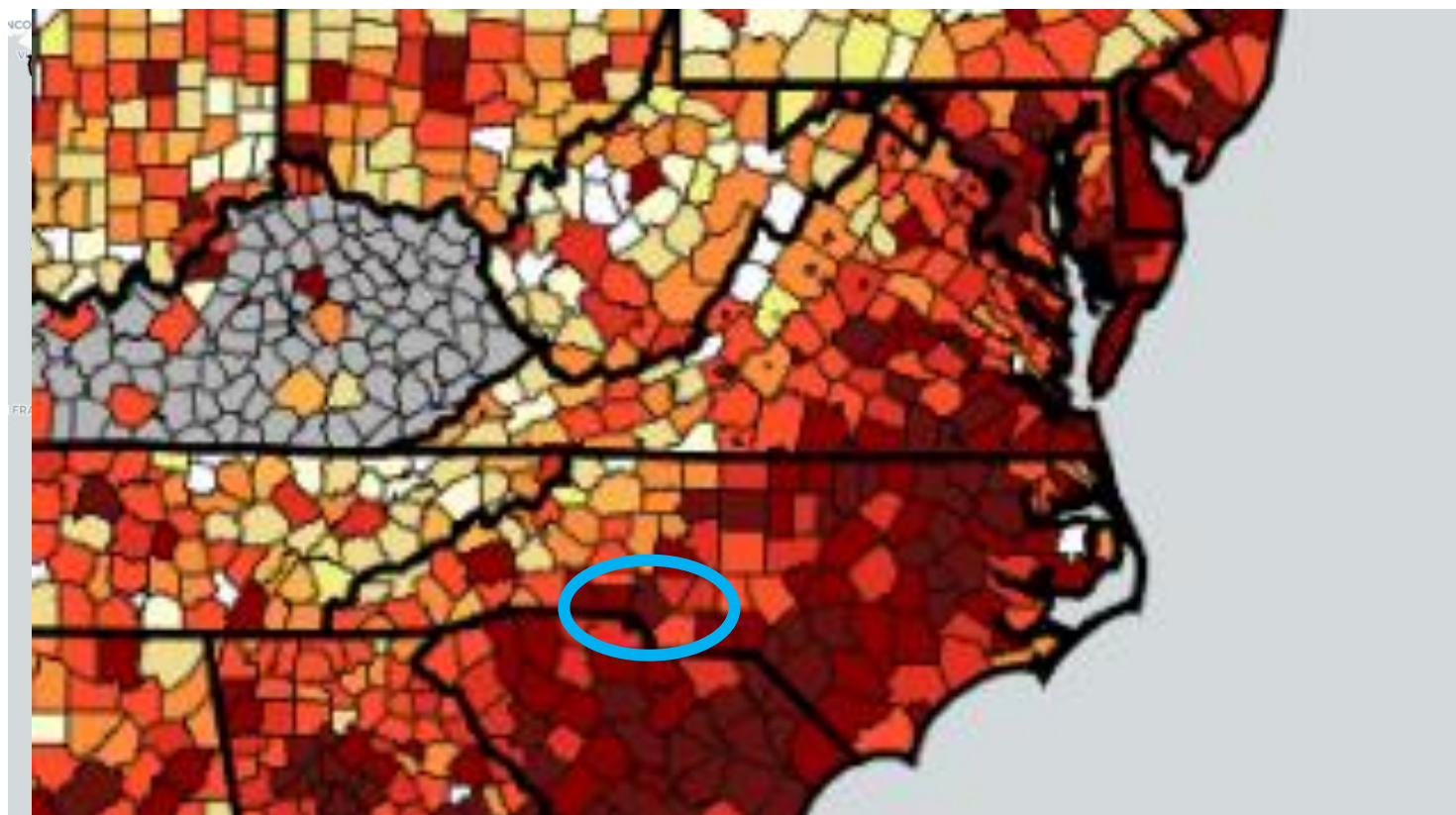
09 June, 2021

Looming National HIV Workforce Shortage

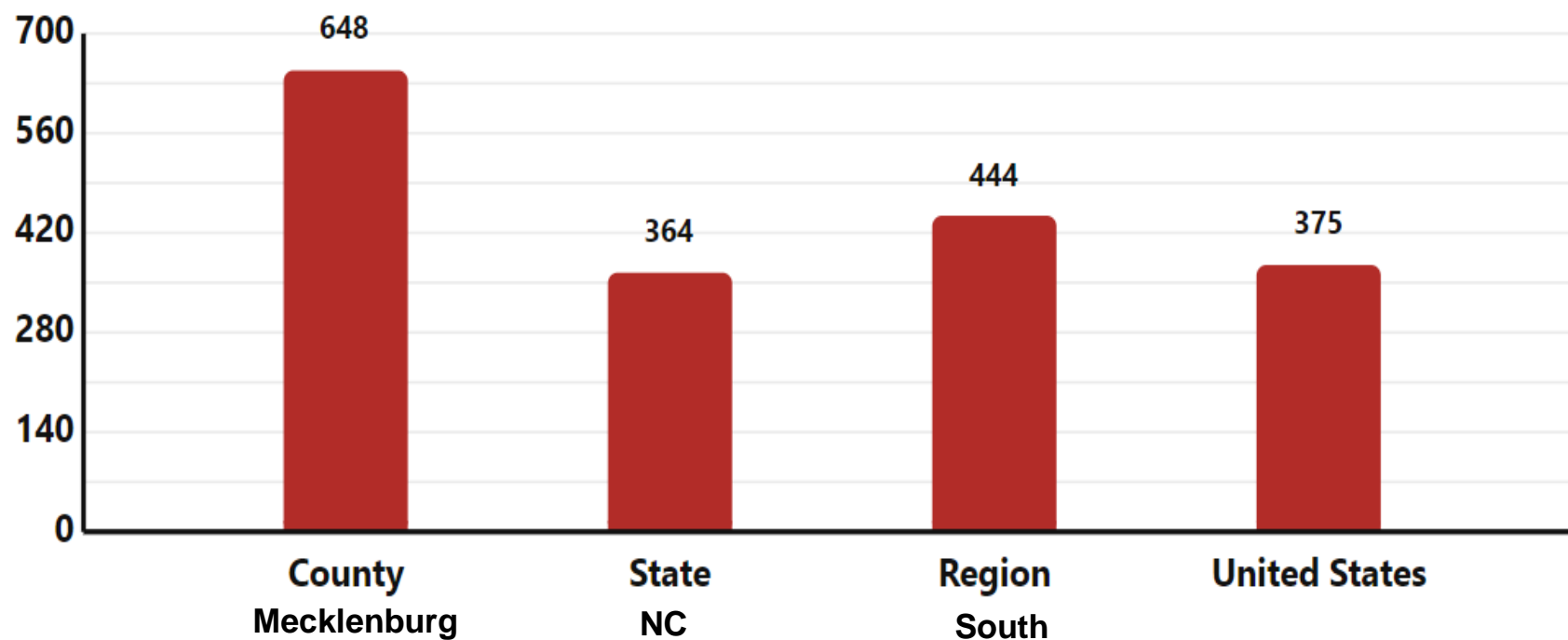
- National shortage of qualified HIV Medical Treeters; will continue to increase¹
- Increasing numbers of PLWH
- “Silver Tsunami” – increasing medical care requirements as PLWH age²
- Pending crisis nationally has been identified and needs to be addressed

“Think globally, act locally”

The Southern HIV Epidemic



PLWH/100K Pop in Mecklenburg County - 2018



Charlotte, NC / Mecklenburg County and the HIV Epidemic

- Representative of Southern Epidemic
- Rapidly growing metropolitan area of > 1.1 mil people
- Diversity and disparities
 - Race/ethnicity
 - Economic opportunities
 - Housing crisis
 - Growing substance use issues

HIV Workforce Capacity Objectives

- **Assess size and characteristics of the HIV 2020 workforce in MeckCo**
- **Project future workforce needs for 2025 and 2030.**

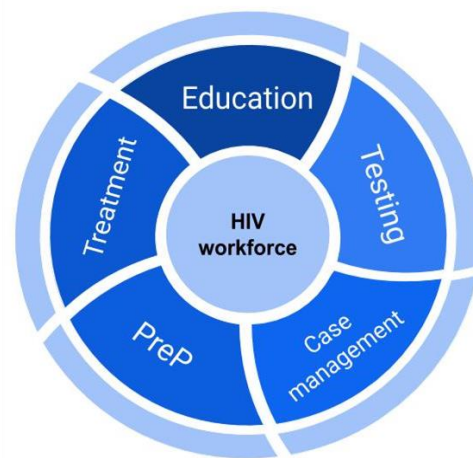
Our Approach to Assessing the HIV Workforce Capacity

1. HIV Medical Treators (HMTs)

- Prescribers of ART

2. HIV Service Agencies and Organizations:

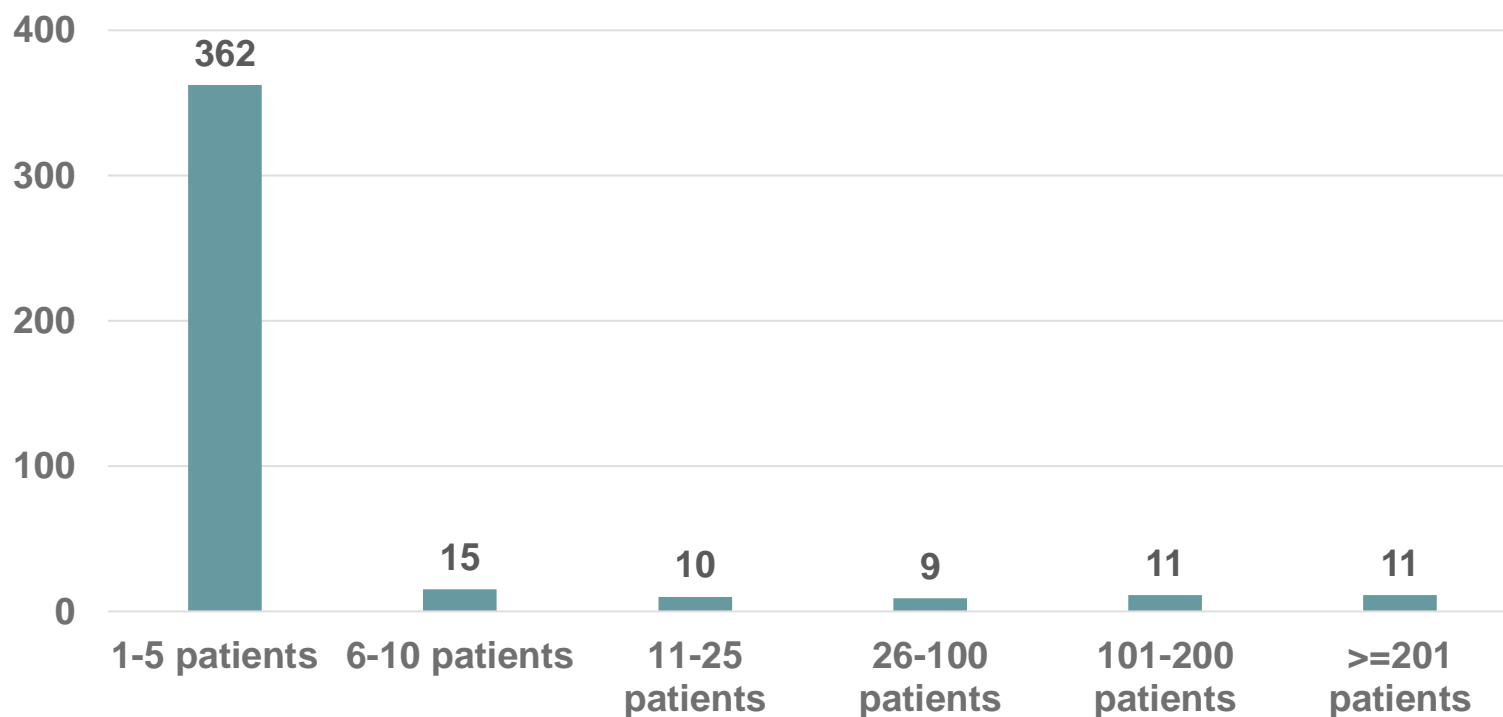
- Testing, PrEP, education and outreach, case management



HIV Medical Treators (HMTs)

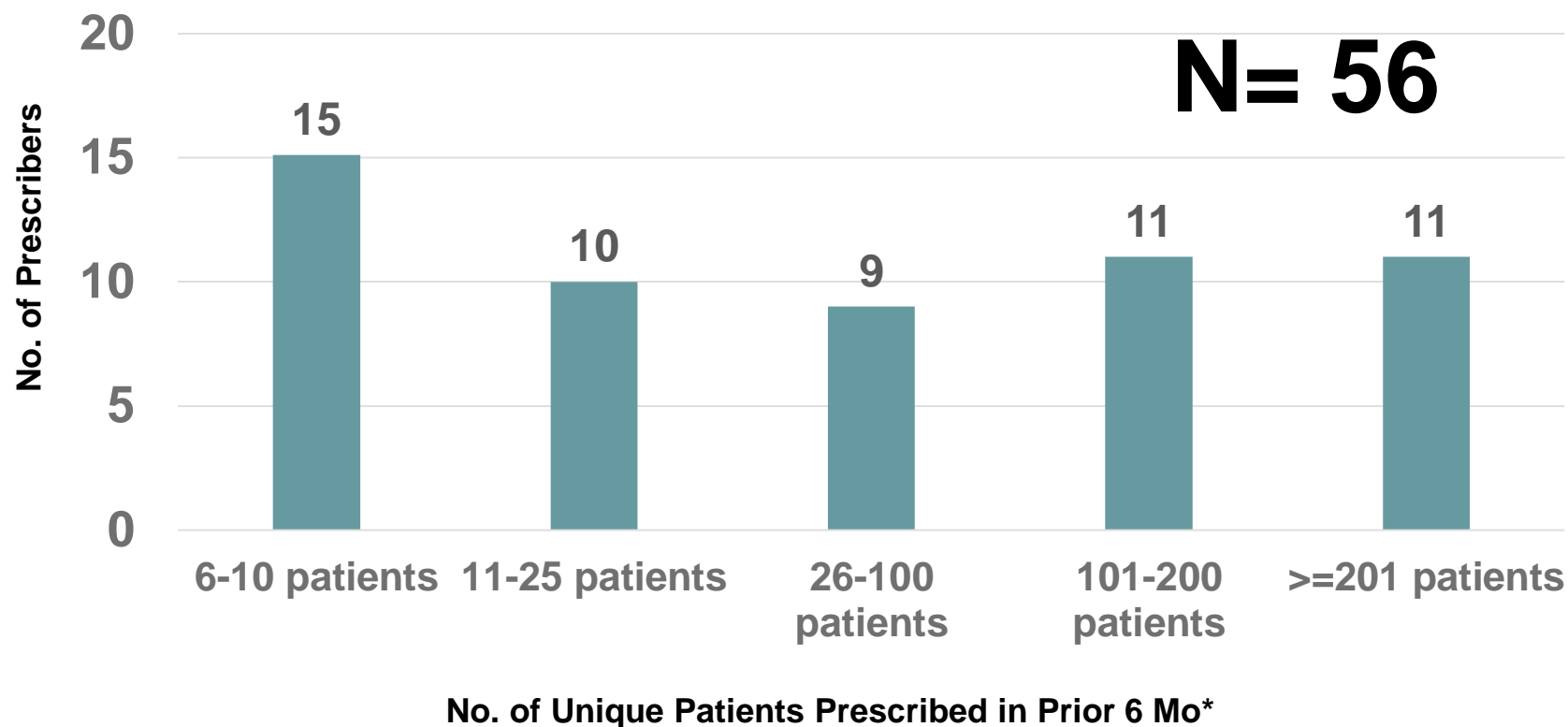
- 1. Presumed that HMTs prescribe antiretroviral treatment (ART)**
- 2. Prescription claims datasets to identify HMT in MeckCo**
 - Summarized ART pharmacy claims datasets for prior 6 mo (PRA HealthSciences)
 - Each prescription writer of combination ARV medication is captured by a unique (anonymous) code
 - Excluded PrEP regimens, HBV regimens and GI physicians
 - Excluded “minimal prescribers” (<6 unique patients in prior 6 months)
 - Assumed age retirement= 65 yrs
- 3. Number of treaters, gender, specialty, prescriber type, age group, and practice zip code**

Numbers of ART* Prescription Writers, according to Numbers of Unique Patients

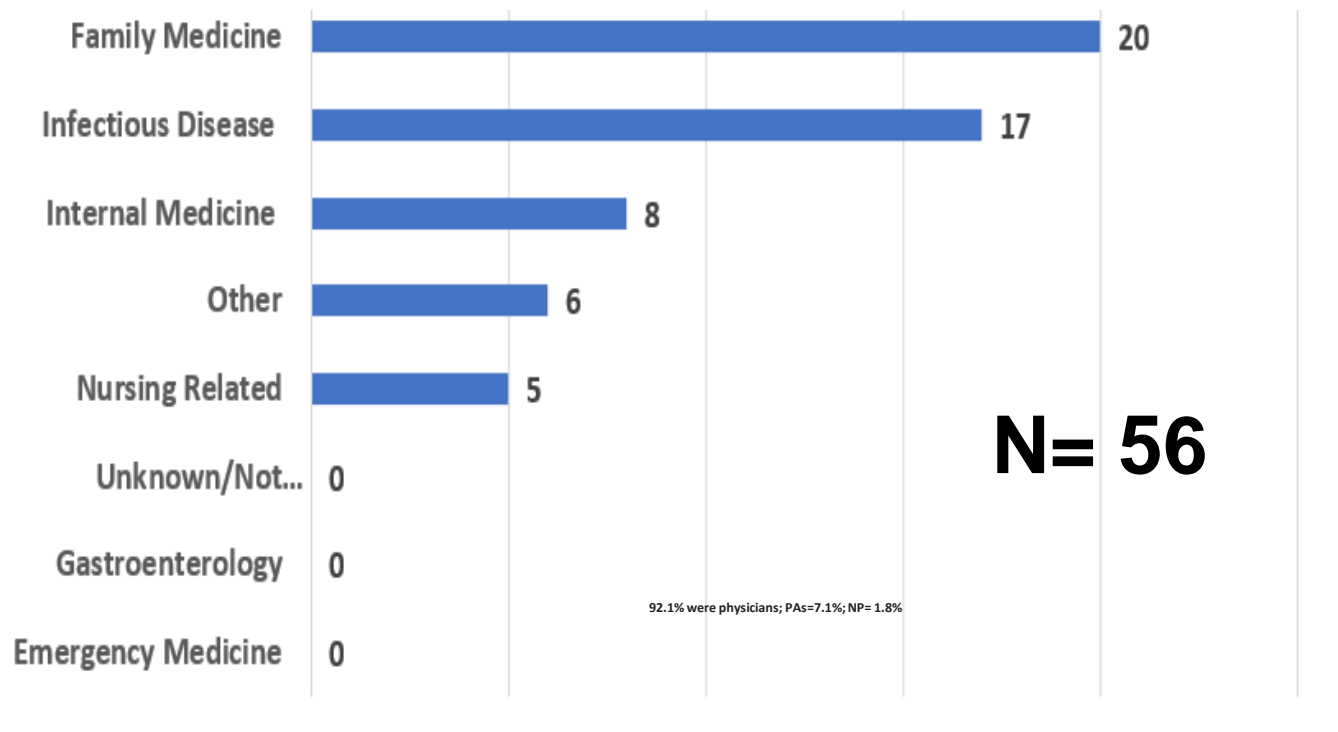


*PrEP & HBV prescriptions not included

Estimated Current HIV Medical Treaters*

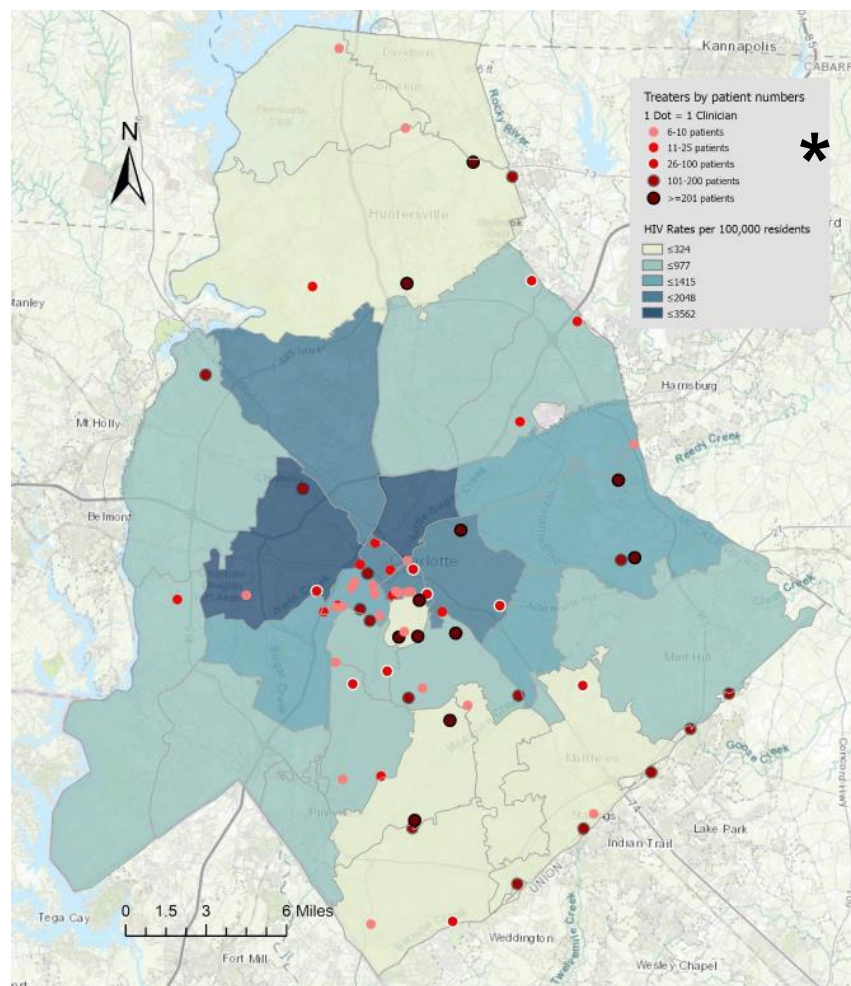


Estimated Current HMTs* – by Specialty



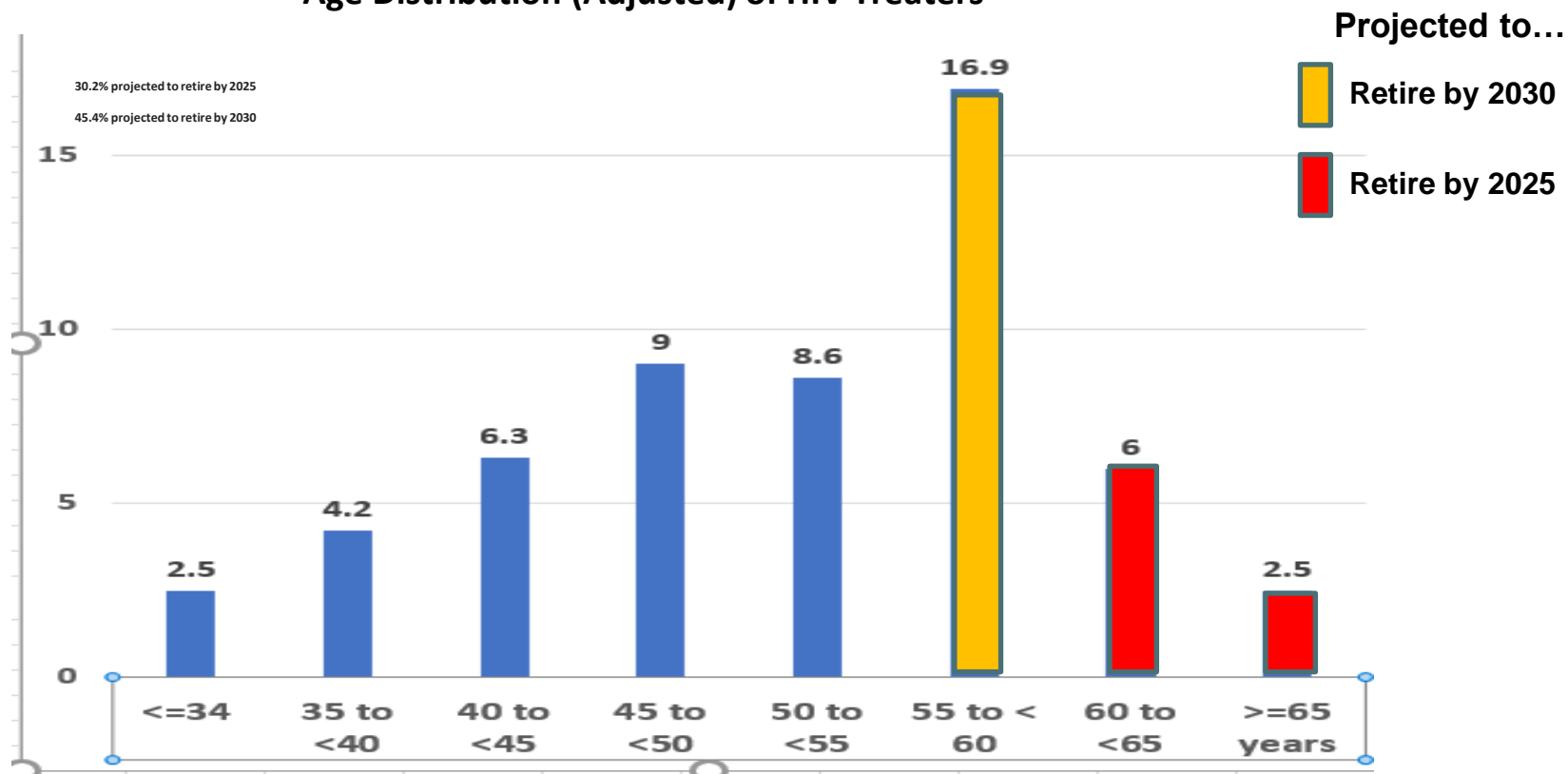
Practice Locations of HMTs in Mecklenburg County (by ZIP code)

*** Numbers of Unique Patients for which They Provided Prescriptions and ZIP codes with rates of PLWH**



Estimated Current HMTs – by Age Group

Age Distribution (Adjusted) of HIV Treaters*



High Prescribers

Treated over 200 unique patients in prior 6 months: n = 11 HMTs

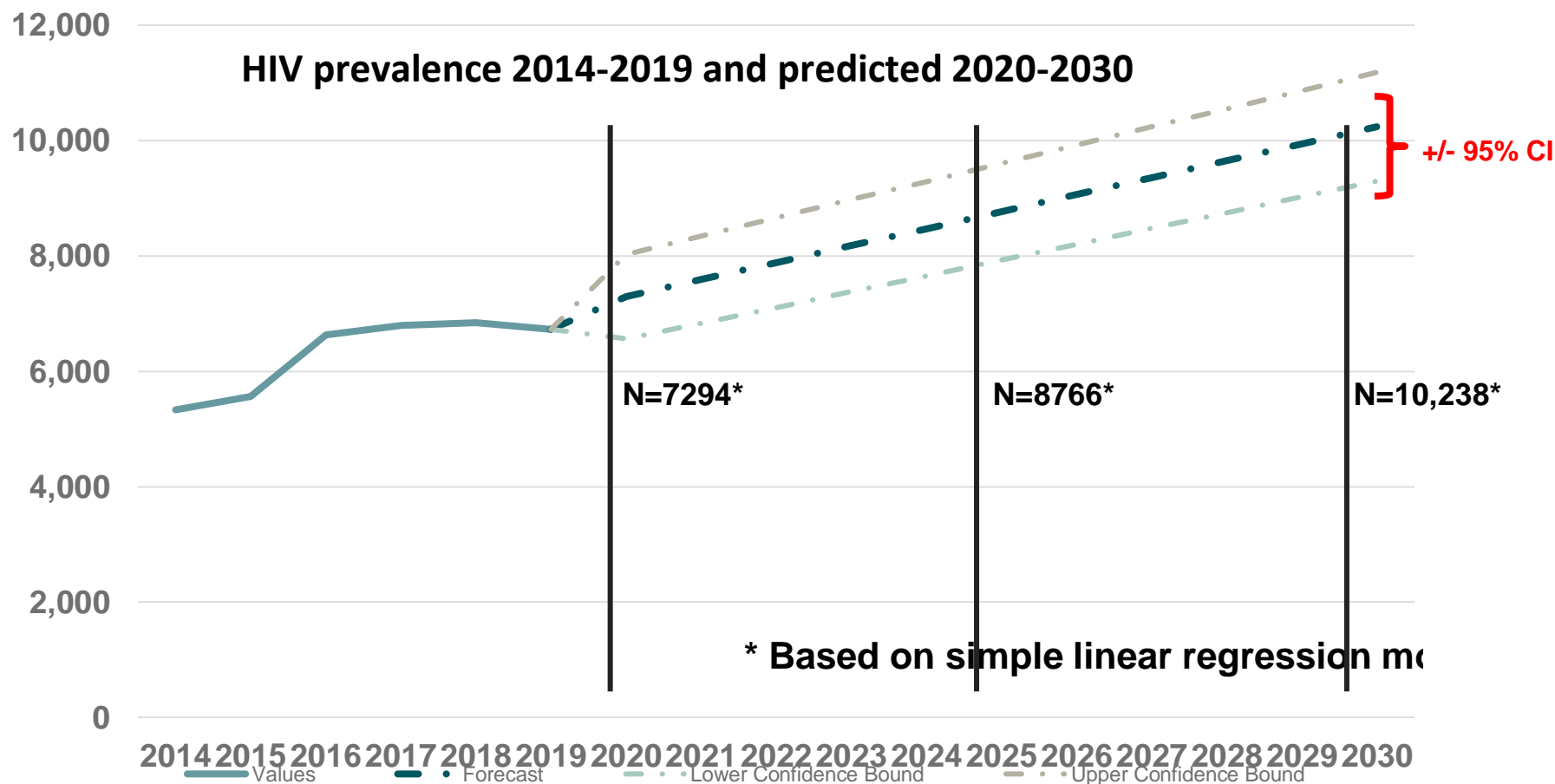
Male gender: n =8 (unknown gender for 3)

Practice: Infectious Disease (n=6), Family Medicine (n=4), or Internal Medicine (n=1).

More frequently found in the 55 to 60-year-old age.

- None < 45 yrs of age
- All were physicians

Predicting Future HIV Prevalence



Predicting Future HIV Prevalence & Medical Treater Workforce Needs – Base Case ^{1,7}

Projections of future need for medical HIV treaters

	<u>2020</u>	<u>2025</u>	<u>2030</u>
2020 cohort	56	49.5	32.6
Cumulative loss from 2020 cohort²		6.5	16.9
PLWH³	7,294	8,766	10,238
Treaters/1000 PLWH⁴	7.68	7.68	7.68
Treaters to maintain ratio⁵	56	67.3	78.6
New Treaters needed⁶		17.8	46.0

1. Base Case 2. – Adjusted for “missing age” group, assuming similar age distribution among those recorded as “missing age”
2. Due to retirement from 2020 medical treater cohort at 65 years of age
3. Projections based on HIV prevalence in Mecklenburg County from 2013-2018, using simple linear regression model
4. The number of HIV Treaters per 1,000 PLWH
5. This is the total of HIV Treaters needed to maintain the PLWH/Treater ratio equal to that of 2020
6. The estimated number of new Treaters required to enter the HIV Treater Workforce by 2025 and by 2030
7. based on estimated prevalence of persons living with HIV (PLWH) in Mecklenburg County for 2020, 2025 and 2030

Over the next 10 years...

1. Retiring HMT WF needed to be replaced + increasing PLWH:
 - 2025: 32% of current WF
 - 2030: 82%
2. Does not account for increasing medical complexity of aging PLWH

Caveats:

Losses through non-retirement mechanisms were not projected.

No mechanism to predict entry of new HMTs into WF.

ART prescriber may not fully define HMT

- NPs, PAs may be under-represented

MeckCo HIV Service Workforce Assessment

1. WF from organizations and agencies that provided direct HIV services (Not ART)

- Identified by extensive outreach to MCPH, G2Z-Meck, MedLink, medical providers
- Chain recruitment (snowball)
- Continued until we exhausted our leads
- There were no HMTs (ART prescribers) included

2. Online survey: managers of Service Orgs. + MCPH

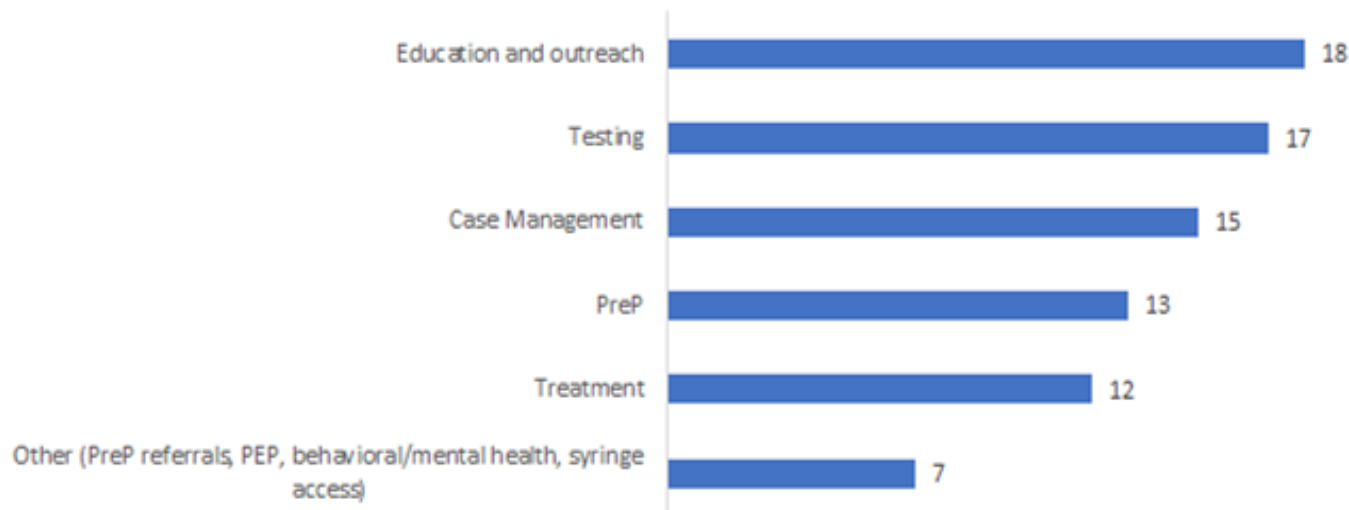
- Services
- Workforce size and characteristics
- Current and anticipated workforce needs

Results –Organizations

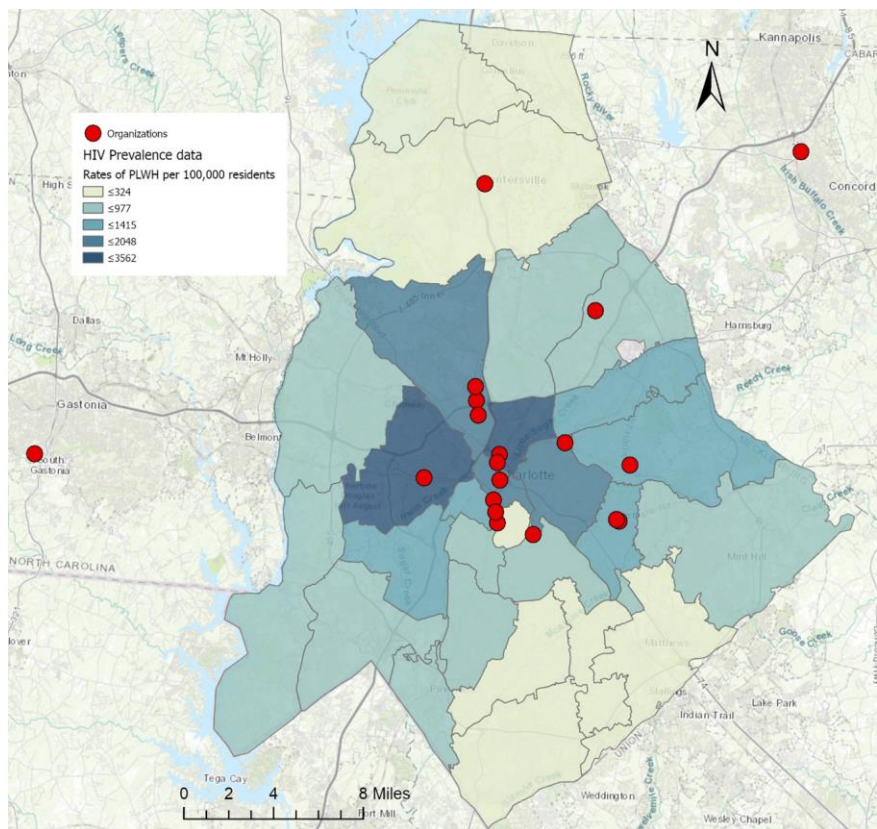
Identified 18 agencies / organizations including MCPH

- 11 orgs received funding from the Ryan White program
- 5 orgs specifically focused on HIV/PLWH
- 11 orgs served over 200 PLWH in the past 12 months

Number of organizations offering each of these HIV-related services



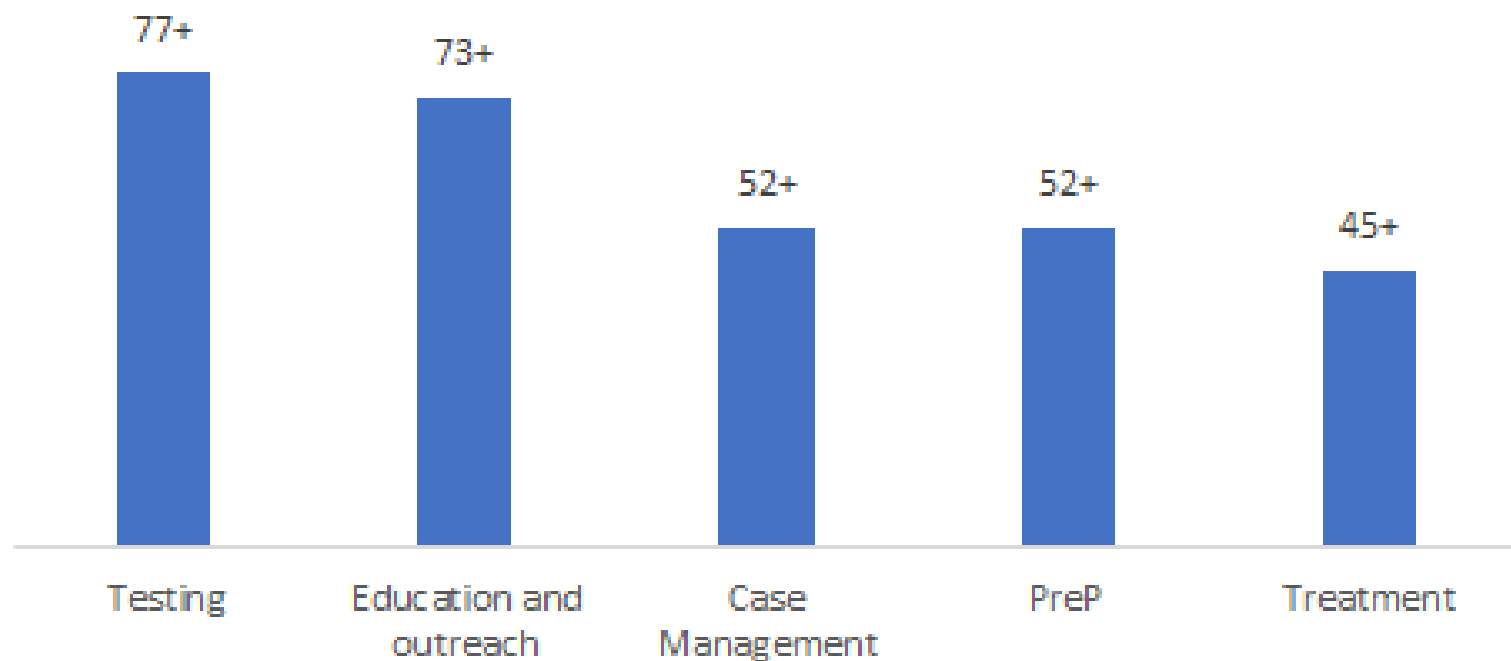
Locations –Organizations with HIV WF



Organizations are generally located in or adjacent to high prevalence ZIP codes

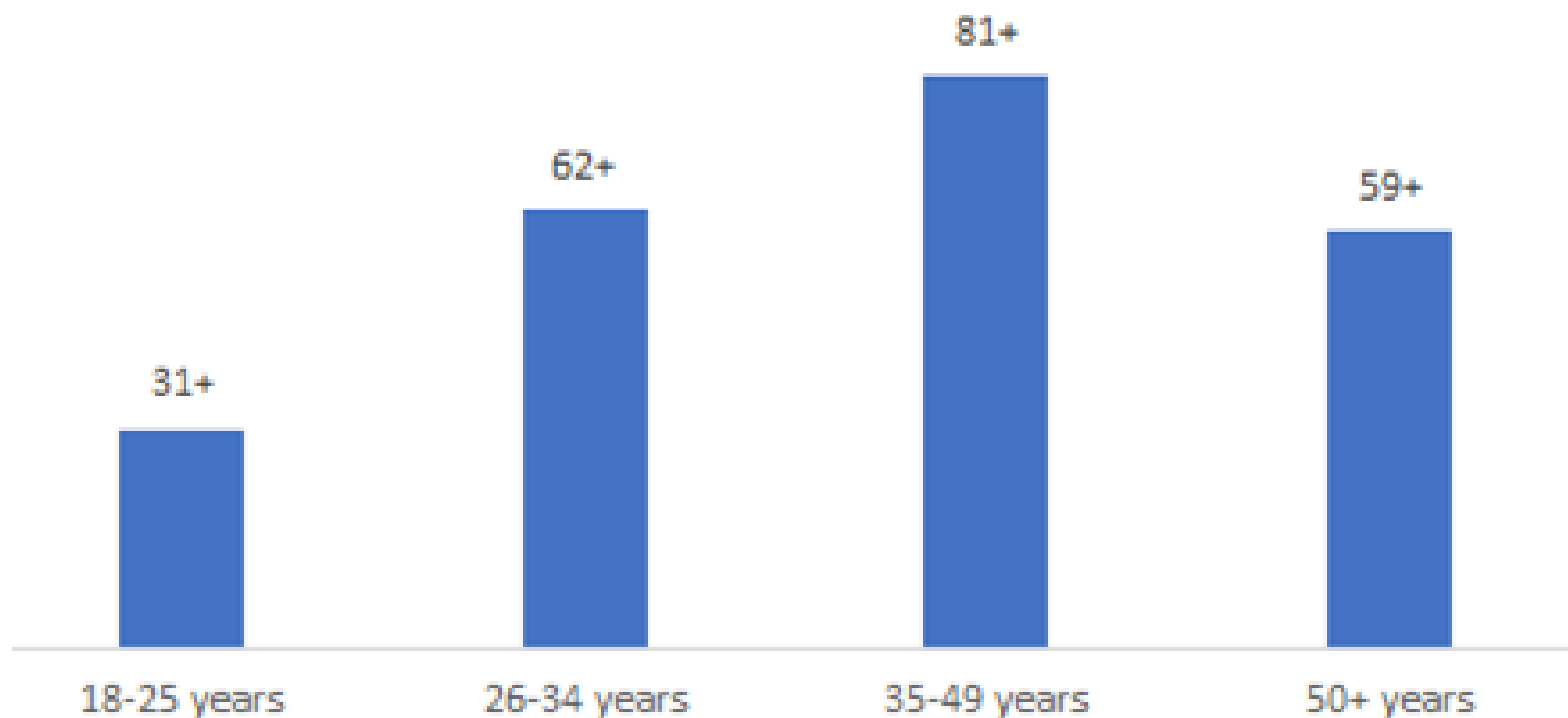
There are at least 233 working in HIV services

Estimated number of staff working in each HIV area

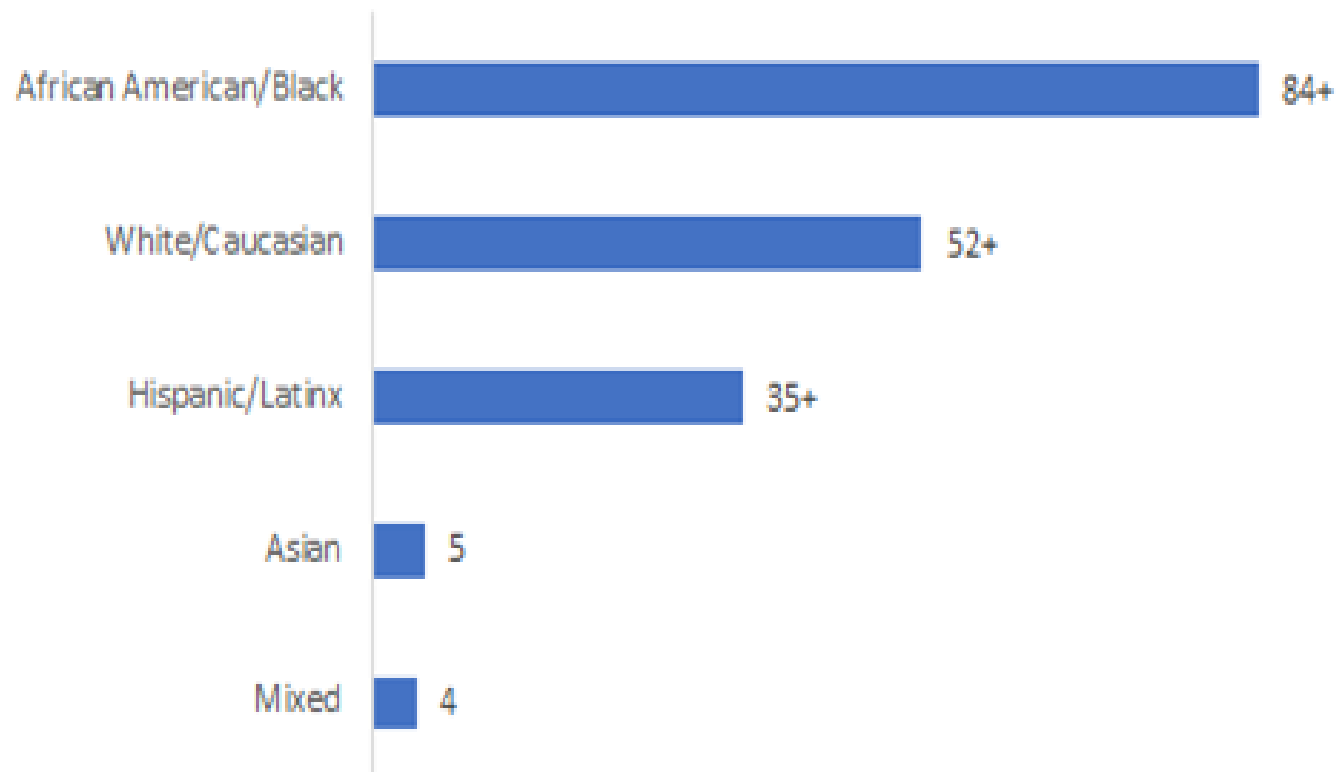


At least 118 have specific HIV training or certifications.

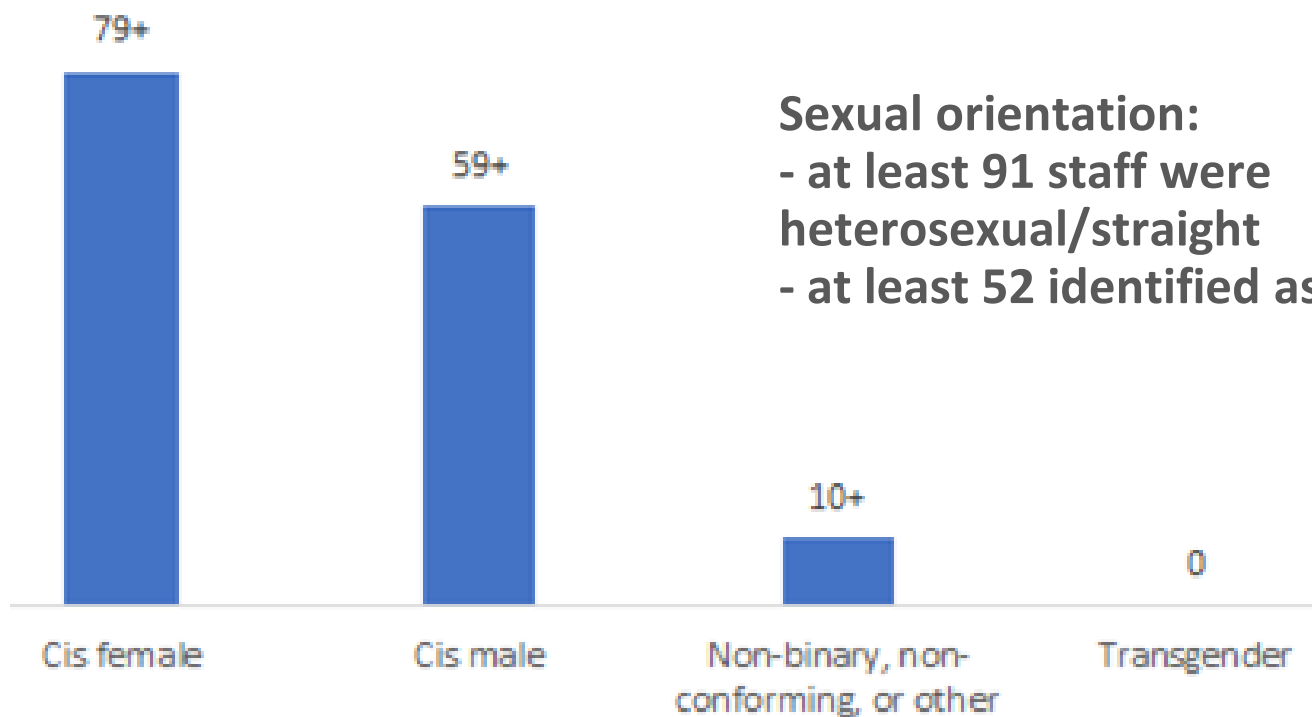
Estimated number of employees in each age category



Estimated number of employees by race/ethnicity



Estimated number of staff by gender identity



Sexual orientation:

- at least 91 staff were heterosexual/straight
- at least 52 identified as LGBTQ+

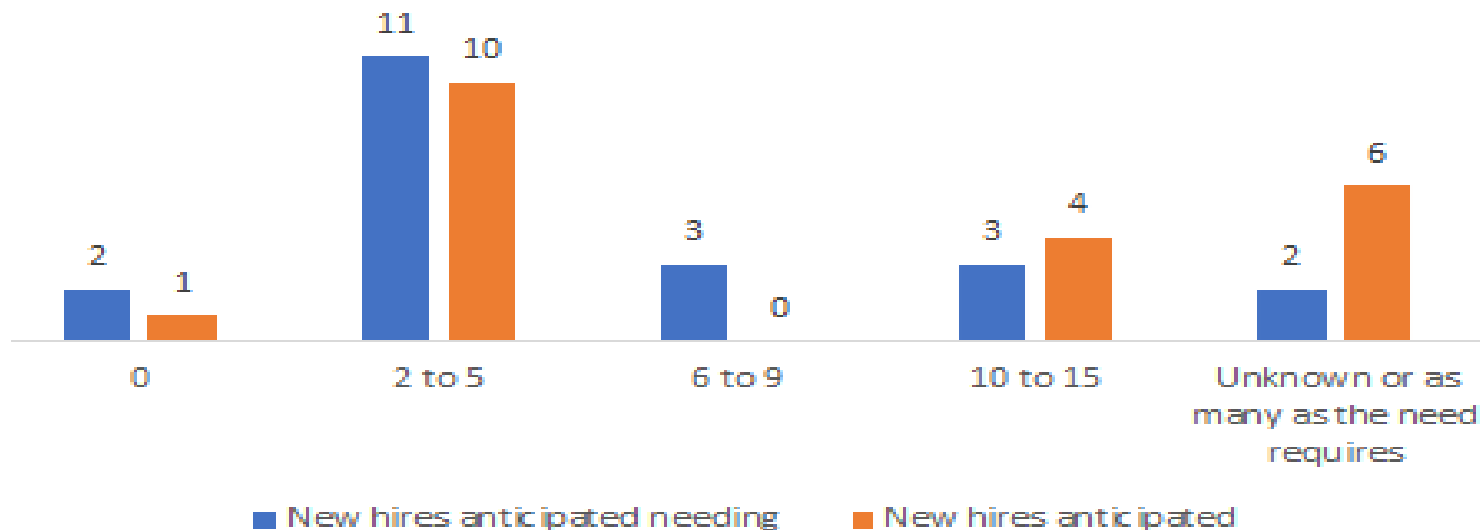
Estimating Supply & Demand - Now & 5yr

62% believed their organizations WFs meet current needs

29%: fully prepared to meet the needs in the next 5 yrs

- 19%: somewhat/mostly prepared

Number of Agencies' Anticipated Needs and Hiring – Next 5 Yrs



Projected Areas of Future Need

- **Case managers**
- **Transgender staff**
- **PrEP services/prescribers**
- **Require more staff and funding to support HIV missions**

Conclusions: HIV Medical Workforce



Impending HMT WF crisis in MeckCo

Influence over HMT WF seems out of the hands of community / County

- HIV training for future clinicians (MDs, DOs, PAs and NPs)
- Increased involvement of NPs, PAs and pharmacists in HIV care
 - Training in programs / mentorship
 - State-level or national certification
- Increased financial incentives

Conclusions: HIV Services Workforce

- **Staff meets current needs**
- **Expand for future needs**
 - **Need for future resources/funding: funded programs**
- **Responding to diversity of PLWH**
- **Challenges of financial, housing, mental health, or health care access**



Thank You

**Assessing Current and Future HIV Workforce
Capacity in Mecklenburg County, NC**



ACKNOWLEDGEMENTS

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Special thanks to: those managers and supervisors of Mecklenburg County HIV agencies and organizations who participated in the survey

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Q&A/Open Discussion



Upcoming Webinars & Meetings

- Second HIV Workforce Webinar: June 30
- CDC Virtual Recipient Meeting: July 13-15
- CDC & NASTAD EHE Technical Assistance Meeting: August 3-5

Contact Information

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