



# HIV & Oral Health Why Oral Health

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#### Presenter & Acknowledgements

- Mark Schweizer, DDS, MPH
- No financial relationships with commercial entities to disclose
- This slide set has been peer-reviewed to ensure that there are no conflicts of interest represented in the presentation





## Learning Objectives

By the end of this session, the learner will be able to:

Discuss barriers to oral health for patients with HIV

- Outline HIV health outcomes in patients engaged in oral health care Define Comorbidity
- Describe the most common comorbidities in PWH
- Apply Dental Recommendations for PWH



#### **Oral Health Care Access**

- Less than one half of the population gains access to the oral health care system
- Major Oral Health Problems include dental caries, Periodontal Disease and Oral Cancer

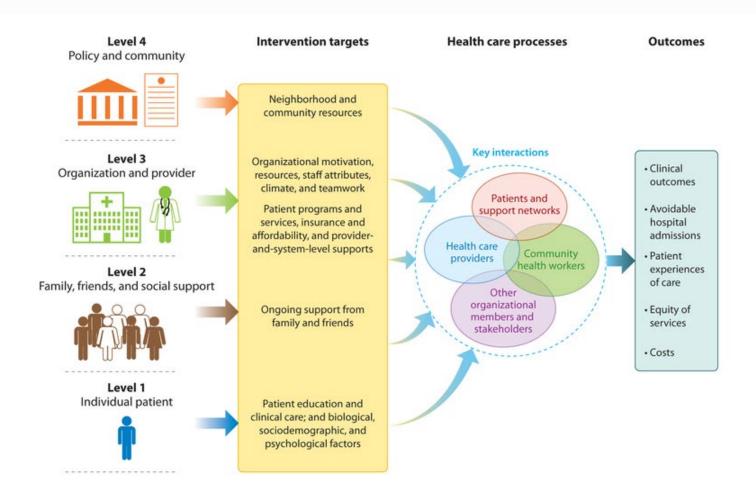




#### **Oral Health Care Access**

- Oral Manifestations of HIV Infection
- Oral Health Inequities
- Barriers to Care





This conceptual model, factors that influence disparities in access to care and quality of health care services, by level, was created from the analysis of findings from systematic reviews of cardiovascular disease and cancer disparities (115). Figure adapted from Reference 115 with permission.



Purnell TS, Calhoun EA, Golden SH, Halladay JR, Krok-Schoen JL, et al. 2016. Achieving health equity: closing the gaps in health care disparities, interventions, and research. *Health Aff.* 35(8):1410–15

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#### **Interprofessional Practice**

#### **Recommendations for an Interprofessional Practice Model**

- Apply oral health core clinical competencies within primary care practices to increase oral health care access for safety net populations in the United States.
- 2. Develop infrastructure that is interoperable and accessible across clinical settings and enhances adoption of the oral health core clinical competencies. The defined, essential elements of the oral health core clinical competencies should be used to inform decision making and measure health outcomes.
- Modify payment policies to efficiently address the costs of implementing oral health competencies and provide incentives to health care systems and practitioners.
- 4. Execute programs to develop and evaluate implementation strategies of the oral health core clinical competencies into primary care practice.

AETC AIDS Education & Training Center Progre US DHHS (Dep. Health Hum. Serv.). 2014. *Integration of oral health and primary care practice*. US DHHS, Health Res. Serv. Admin., Rockville, MD: <u>https://www.hrsa.gov/sites/default/files/hrsa/oralhealth/integrationoforalhealth.pdf</u>

#### **HIV Continuum of Care**





Center for Disease Control and Prevention: https://www.aids.gov/federal-resources/policies/carecontinuum/

### **HIV Care Continuum Definitions**

#### Total Clients:

Clients who are HIV+ and received at least one service from the selected service category(s) in the reporting period.

#### Ever in Care:

HIV+ clients who ever had a medical care service documented.

#### In Care:

HIV+ clients who had a medical care service within the reporting period.

\*Medical Care Service: Documented viral load or CD4 lab, medical visit, prescription filled and paid by Ryan White, or payment requests for co-pays made by HICP.



## HIV Care Continuum Definitions -Continued

#### Retained in Care:

HIV+ clients who had two or more medical care services at least three months apart in the reporting period.

#### Prescribed Antiretroviral Drugs (ARV):

HIV+ clients who have a documented ARV at any time during the reporting period within HIV history records.

#### Virally Suppressed:

HIV+ clients with most recent viral load less than 200 copies/mL, as of end of the reporting period.

\*Medical Care Service: Documented viral load or CD4 lab, medical visit, prescription filled and paid by Ryan White, or payment requests for co-pays made by HICP.





February 2019

Plan to END the HIV/AIDS Epidemic

#### Ending the HIV Epidemic: A Plan for America

HHS is proposing a once-in-a-generation opportunity to eliminate new HIV infections in our nation. The multi-year program will infuse 48 counties, Washington, D.C., San Juan, Puerto Rico, as well as 7 states that have a substantial rural HIV burden with the additional expertise, technology, and resources needed to end the HIV epidemic in the United States. Our four strategies – diagnose, treat, protect, and respond – will be implemented across the entire U.S. within 10 years.



The Initiative will target our resources to the 48 highest burden counties, Washington, D.C., San Juan, Puerto Rico, and 7 states with a substantial rural HIV burden.



#### Geographical Selection:

Data on burden of HIV in the US shows areas where HIV transmission occurs more frequently. More than 50% of new HIV diagnoses\* occurred in only 48 counties, Washington, D.C., and San Juan, Puerto Rico. In addition, 7 states have a substantial rural burden – with over 75 cases and 10% or more of their diagnoses in rural areas.



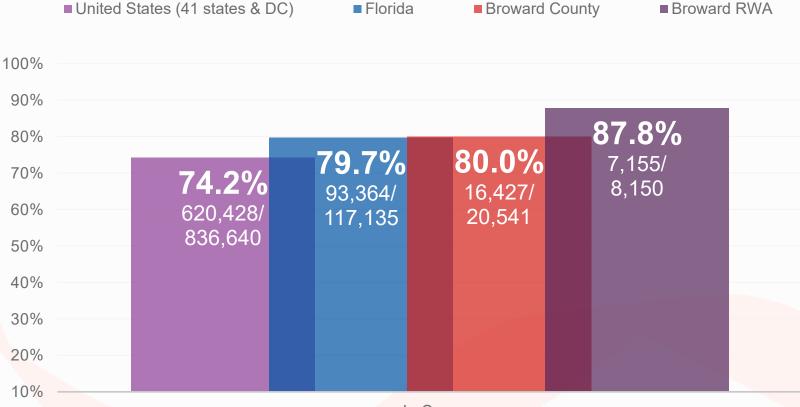


#### In Care, Retained in Care and Virally Suppressed Statistics US, FLORIDA, BROWARD COUNTY, & BROWARD PART A HIV CARE CONTINUUM









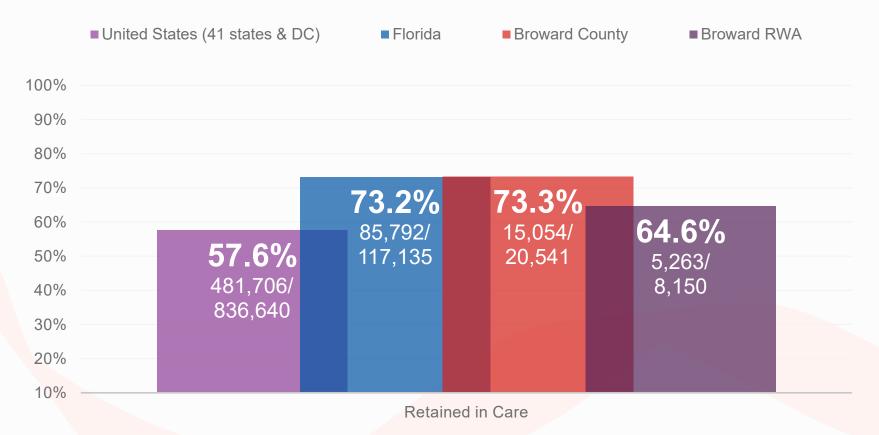
In Care

Data Sources: Broward County, FL-HIV EPIDEMIOLOGICAL PROFILE, EMA 0010, Continuum of HIV Care, 2020; Broward EMA HIV Continuum of Care Report (3/1/2020-2/28/2021); CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2019;24(No. 3).

Technical Notes: Data reported for Broward County, FL for CY2020 (1/1/2020 through 3/31/2021 as of 6/31/2021). Broward EMA data is for FY2020 (3/1/2020-2/28/2021), CDC Data only recent as of 2016.



#### **Retained in Care**



Data Sources: Broward County, FL-HIV EPIDEMIOLOGICAL PROFILE, EMA 0010, Continuum of HIV Care, 2020; Broward EMA HIV Continuum of Care Report (3/1/2020-2/28/2021); CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2019;24(No. 3). Technical Notes: Data reported for Broward County, FL for CY2020 (1/1/2020 through 3/31/2021 as of 6/31/2021). Broward EMA data is for FY2020 (3/1/2020-2/28/2021), CDC Data only recent as of 2016.



### **Virally Suppressed**

■ United States (41 states & DC) Broward County Broward RWA Florida 100% 90% 87.3% 80% 7,118/ 70% 69.5% 8,150 68.1% 60% 61.5% 14,278/ 79,738/ 50% 20,541 514,519/ 117,135 40% 836,640 30% 20% 10%

Virally Suppressed

Data Sources: Broward County, FL-HIV EPIDEMIOLOGICAL PROFILE, EMA 0010, Continuum of HIV Care, 2020; Broward EMA HIV Continuum of Care Report (3/1/2020-2/28/2021); CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2019;24(No. 3).

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#### FY 2020, FY 2021-Q2, FY 2021-Q3 ORAL HEALTH HIV CARE CONTINUUM





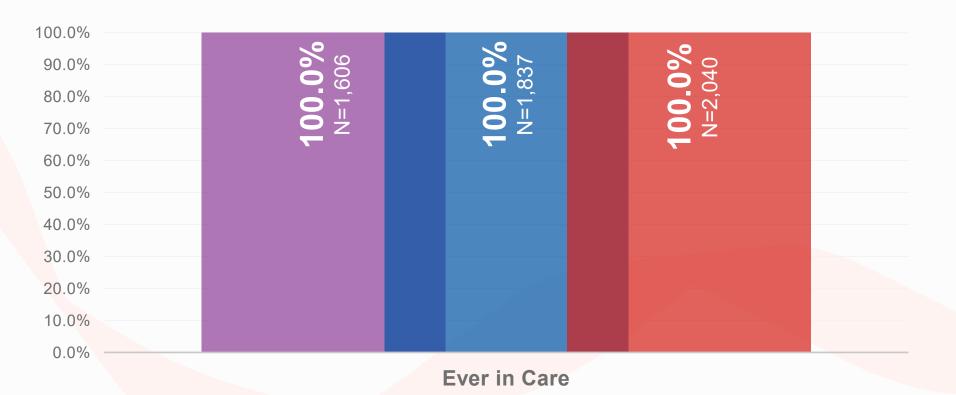
#### **Total Clients**







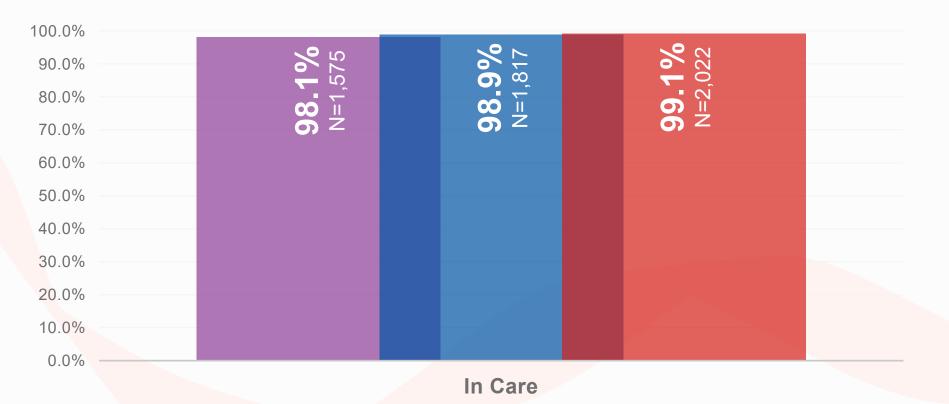
#### **Ever in Care**









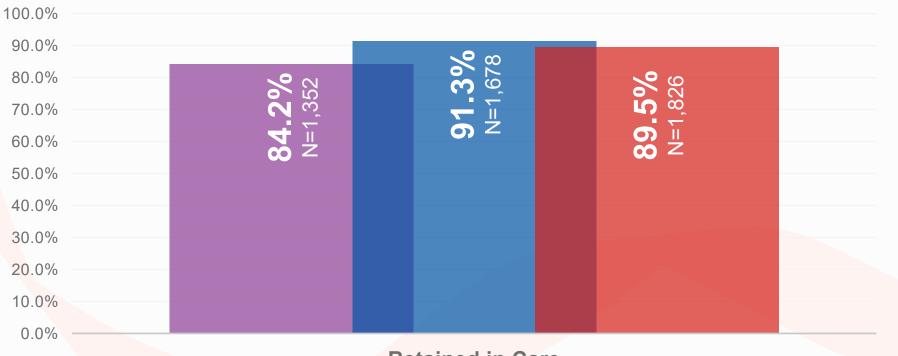






#### **Retained in Care**

■ FY 2020 ■ FY 2021 - Q2 ■ FY 2021 - Q3

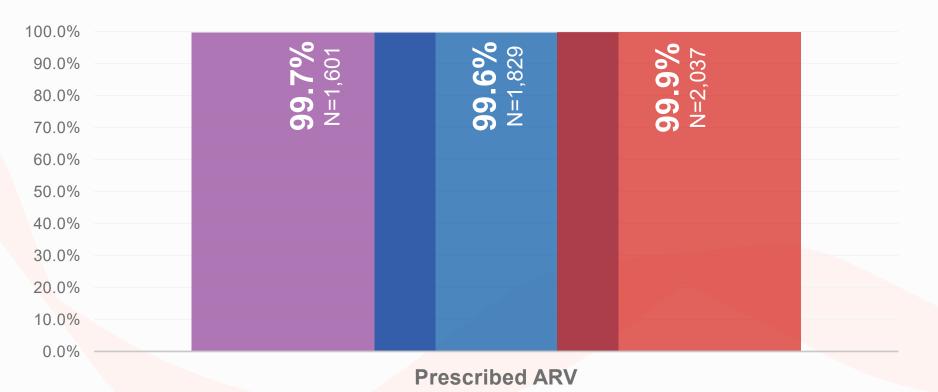


**Retained in Care** 





#### **Prescribed ARV**

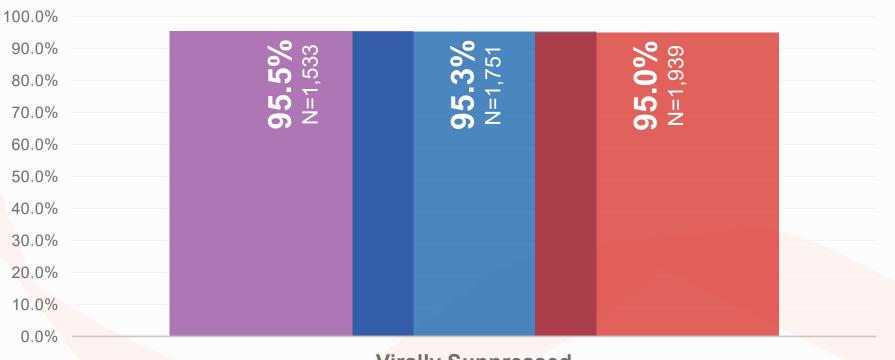






### **Virally Suppressed**

■ FY 2020 ■ FY 2021 - Q2 ■ FY 2021 - Q3



Virally Suppressed





Retention in Care, Prescribed ART and Viral Suppression by Gender

#### ORAL HEALTH HIV CARE CONTINUUM



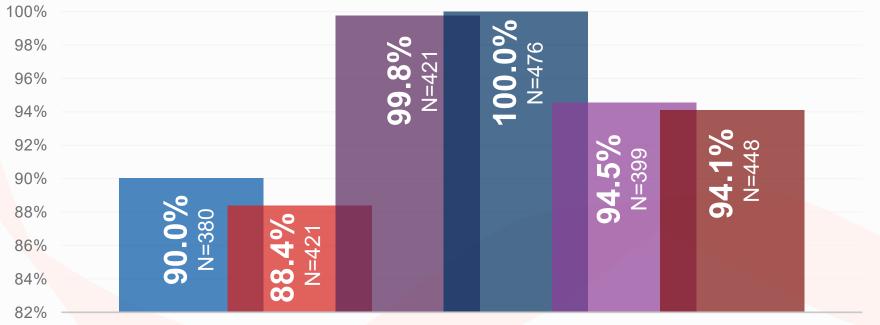


## Oral Health HIV Care Continuum: Female

■ FY 21 - Q2 RIC	FY 21 - Q3 RIC	■ F
■ FY 21 - Q3 Prescribed ARV	■FY 21 - Q2 VS	■ F

FY 21 - Q2 Prescribed ARV

FY 21 - Q3 VS



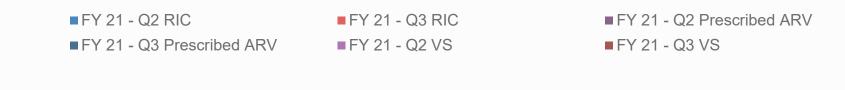
Female

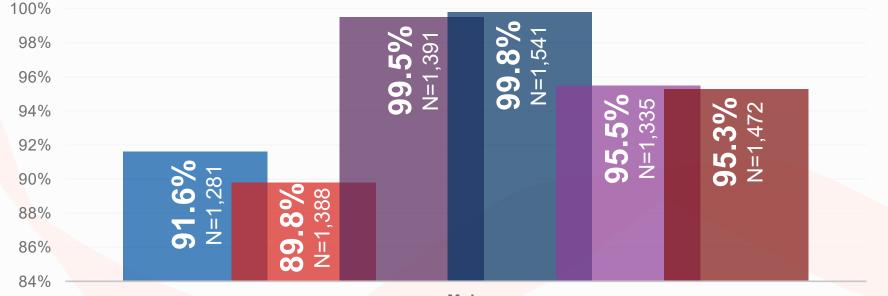
Total Clients: FY 2021 – Q2: Female = 422, Male = 1,398, Transgender = 15; FY 2021 – Q3: Female = 476, Male = 1,544, Transgender = 18 Data Source: Broward County Ryan White Part A Care Continuum Provide Enterprise Report: 6/1/2021 – 8/31/2021 & 9/1/2021 – 11/30/2021





## Oral Health HIV Care Continuum: Male





Male

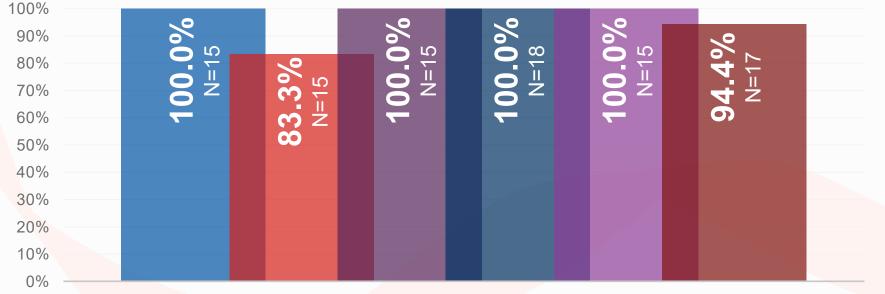
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# Oral Health HIV Care Continuum: Transgender





#### Transgender

Total Clients: FY 2021 – Q2: Female = 422, Male = 1,398, Transgender = 15; FY 2021 – Q3: Female = 476, Male = 1,544, Transgender = 18 Data Source: Broward County Ryan White Part A Care Continuum Provide Enterprise Report: 6/1/2021 – 8/31/2021 & 9/1/2021 – 11/30/2021





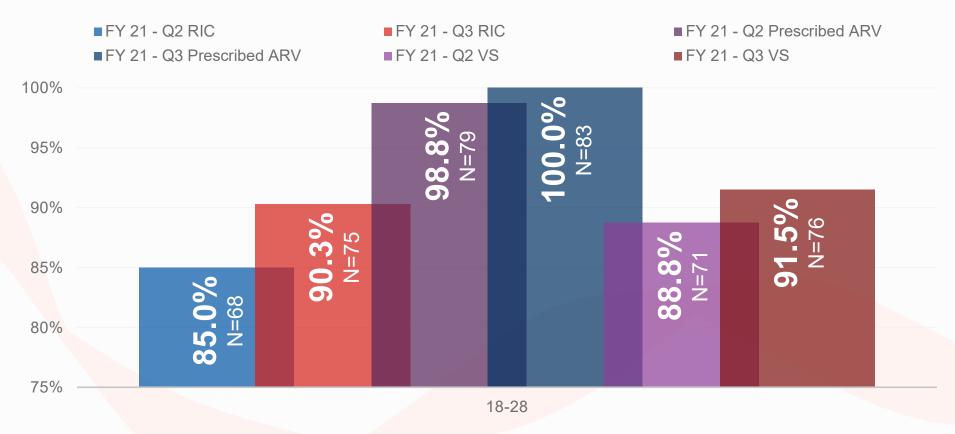
# Retention in Care, Prescribed ART and Viral Suppression by Age

#### ORAL HEALTH HIV CARE CONTINUUM





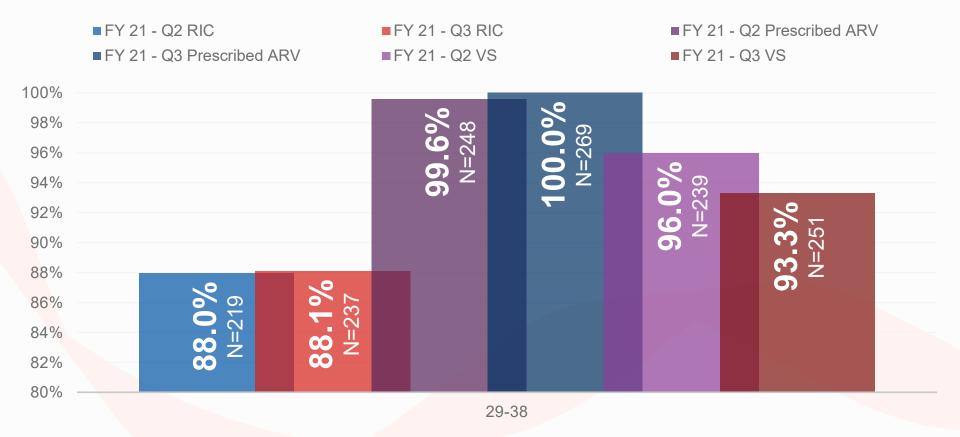
# Oral Health HIV Care Continuum: 18-28







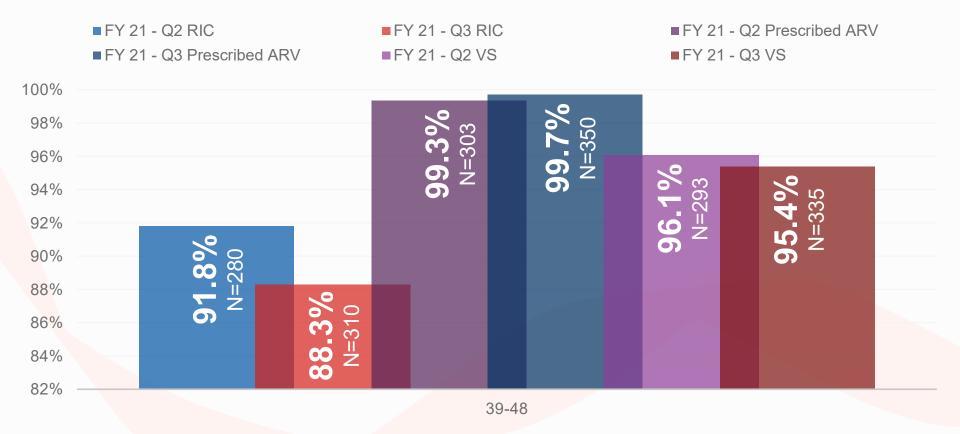
# Oral Health HIV Care Continuum: 29-38







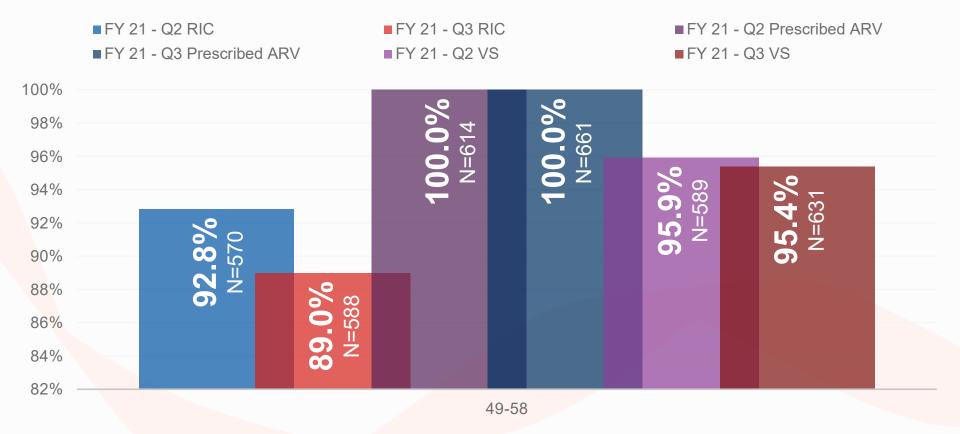
# Oral Health HIV Care Continuum: 39-48







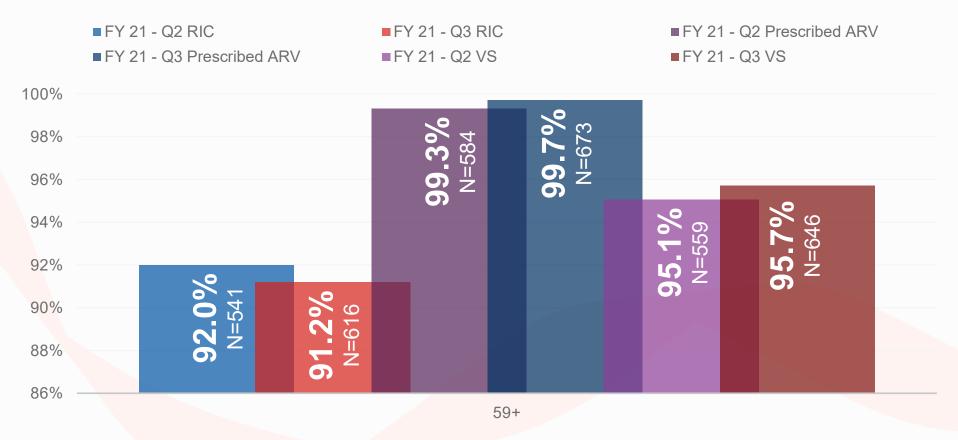
# Oral Health HIV Care Continuum: 49-58







# Oral Health HIV Care Continuum: 59+







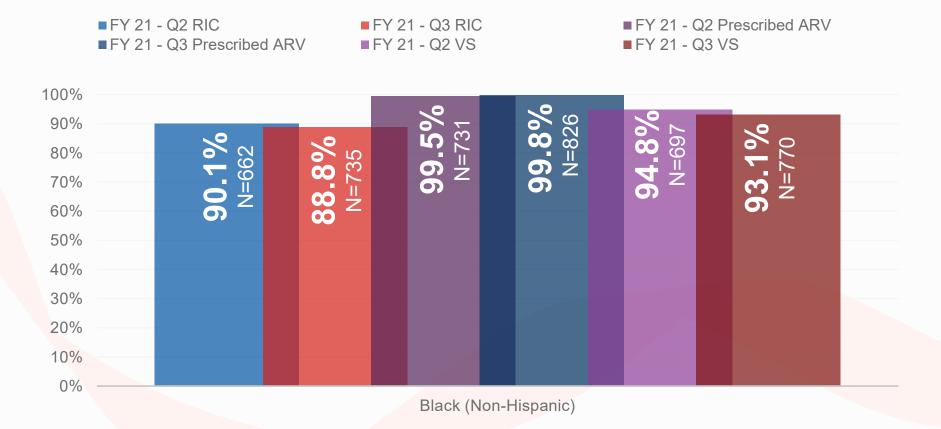
# Retention in Care, Prescribed ART and Viral Suppression by Race/Ethnicity

#### ORAL HEALTH HIV CARE CONTINUUM





# Oral Health HIV Care Continuum: Black (Non-Hispanic)



Total Clients: FY 2021 – Q2: Black = 735, White = 620, Hispanic = 453; FY 2021 – Q3: Black = 827, White = 652, Hispanic = 527 Data Source: Broward County Ryan White Part A Care Continuum Provide Enterprise Report: 6/1/2021 – 8/31/2021 & 9/1/2021 – 11/30/2021



#### **Oral Health HIV Care Continuum:** White (Non-Hispanic) FY 21 - Q2 RIC FY 21 - Q3 RIC

FY 21 - Q2 VS

100%							
90%	0		<b>99.5%</b> N=617	<b>99.8%</b> N=651	× +	→%	
80%	<b>91.3%</b> N=566	<b>88.4%</b> N=577	<b>9.5%</b> N=617	<b>)9.8%</b> N=651	<b>94.2%</b> N=584	<b>95.2%</b> N=621	
70%		<b>8.4</b> % N=577	o Z	ō É	<b>4</b> =	<b>3</b> 2	
60%	ດ -	<sup>w</sup> z					
50%							
40%							
30%							
20%							
10%							
0%							
			White (Nor	n-Hispanic)			

Total Clients: FY 2021 – Q2: Black = 735, White = 620, Hispanic = 453; FY 2021 – Q3: Black = 827, White = 652, Hispanic = 527 Data Source: Broward County Ryan White Part A Care Continuum Provide Enterprise Report: 6/1/2021 – 8/31/2021 & 9/1/2021 – 11/30/2021



■ FY 21 - Q3 Prescribed ARV



■ FY 21 - Q2 Prescribed ARV

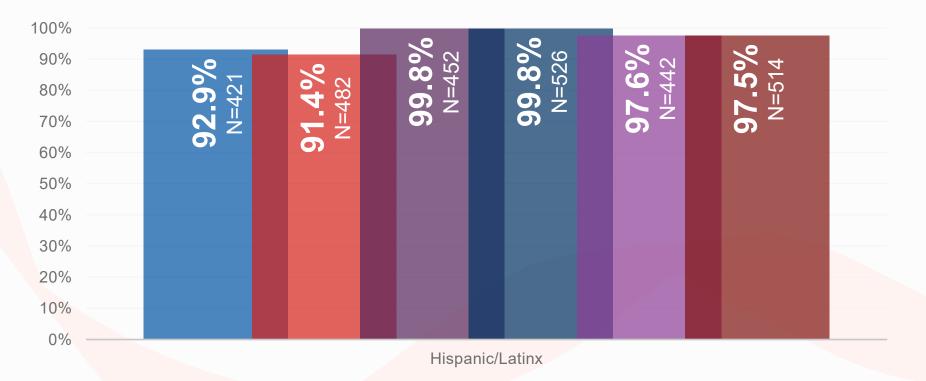
FY 21 - Q3 VS

### Oral Health HIV Care Continuum: Hispanic/Latinx

FY 21 - Q2 RIC	
FY 21 - Q3 Prescribed ARV	

FY 21 - Q3 RIC
FY 21 - Q2 VS

FY 21 - Q2 Prescribed ARVFY 21 - Q3 VS



Total Clients: FY 2021 – Q2: Black = 735, White = 620, Hispanic = 453; FY 2021 – Q3: Black = 827, White = 652, Hispanic = 527 Data Source: Broward County Ryan White Part A Care Continuum Provide Enterprise Report: 6/1/2021 – 8/31/2021 & 9/1/2021 – 11/30/2021



#### Key Take Aways

#### **Viral Load Suppression Rates**

- Retention in care among oral health clients is 30% higher than the national percentage of 68.7%.
- Viral Suppression among oral Health clients is 35% higher than the national average





# Comorbidity

co·mor·bid·i·ty

noun

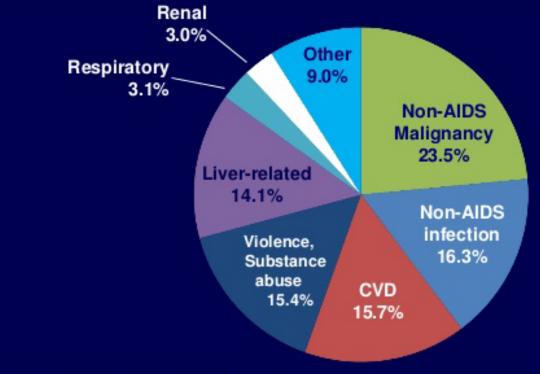
the simultaneous presence of two chronic diseases or conditions in a patient.

 Comorbidity is associated with worse health outcomes, more complex clinical management, increased health care costs.



#### Non-AIDS Diseases Now Account for Majority of Deaths in HIV

- 1,876 deaths among 39,727 patients
- Non-AIDS related deaths accounted for 50.5%

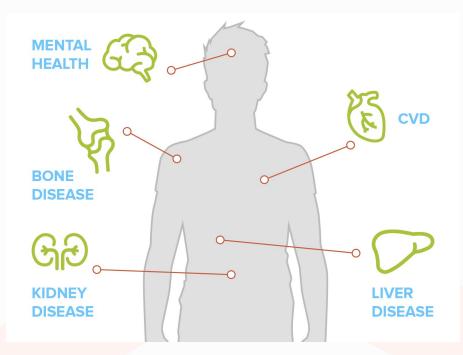


Antiretroviral Therapy Cohort Collaboration (ART-CC). Clin Infect Dis. 2010;50:1387-1396.



# Common Comorbidities in Patients with HIV

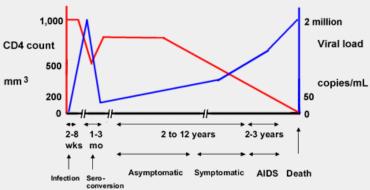
- Cardiovascular Disease
- Kidney Disease
- Neurocognitive
- Hepatic Function
- Bone Disorders
- Diabetes





#### **Dental Recommendations for Treating PWH**

- The magnitude of the viral load is not an indicator to withhold dental treatment for the patient.
- All health professionals can play an important part in reminding patients of the need for regular follow up and monitoring of these markers. It is recommended that the CD4 and viral load determinants be done every six months to one year.



http://i-base.info/ttfa/section-2/14-how-cd4-and-viral-load-are-related/



#### Antibiotic Prophylaxis

- There are no data supporting the need for routine antibiotic coverage to prevent bacteremia or septicemia arising from dental procedures
- Prophylactic antibiotics should not be prescribed routinely for the dental visit when the HIV infection is well controlled





#### Antibiotic Prophylaxis is Indicated:

- If a patient with a neutrophil count below 500 cells/mm<sup>3</sup> requires procedures likely to cause bleeding and bacteremia and is not already taking antibiotics for prophylaxis against opportunistic infections
- Consult Pt's physician regarding the need for antibiotic prophylaxis for dental procedures



#### THANK YOU FOR ATTENDING!

