Northwell Health

Center for AIDS Research and Treatment (CART)

HIV on Long Island: Heat Maps and REDCaps

Joseph P. McGowan, MD, FACP, FIDSA

June 15, 2017

Northwell Health℠

CART Overview

Over 2100 active patients with HIV/AIDS

238 new patients with HIV initiated care in the past year (12% growth)

NCQA recognized Level 3 HIV Patient Centered Medical Home

Outpatient program located at 400 Community Drive in Nassau

Satellite office at the Dolan Family Health Center in Suffolk

Currently awarded 10 Competitive HIV Service grants

On-site 340B HIV Specialty Pharmacy

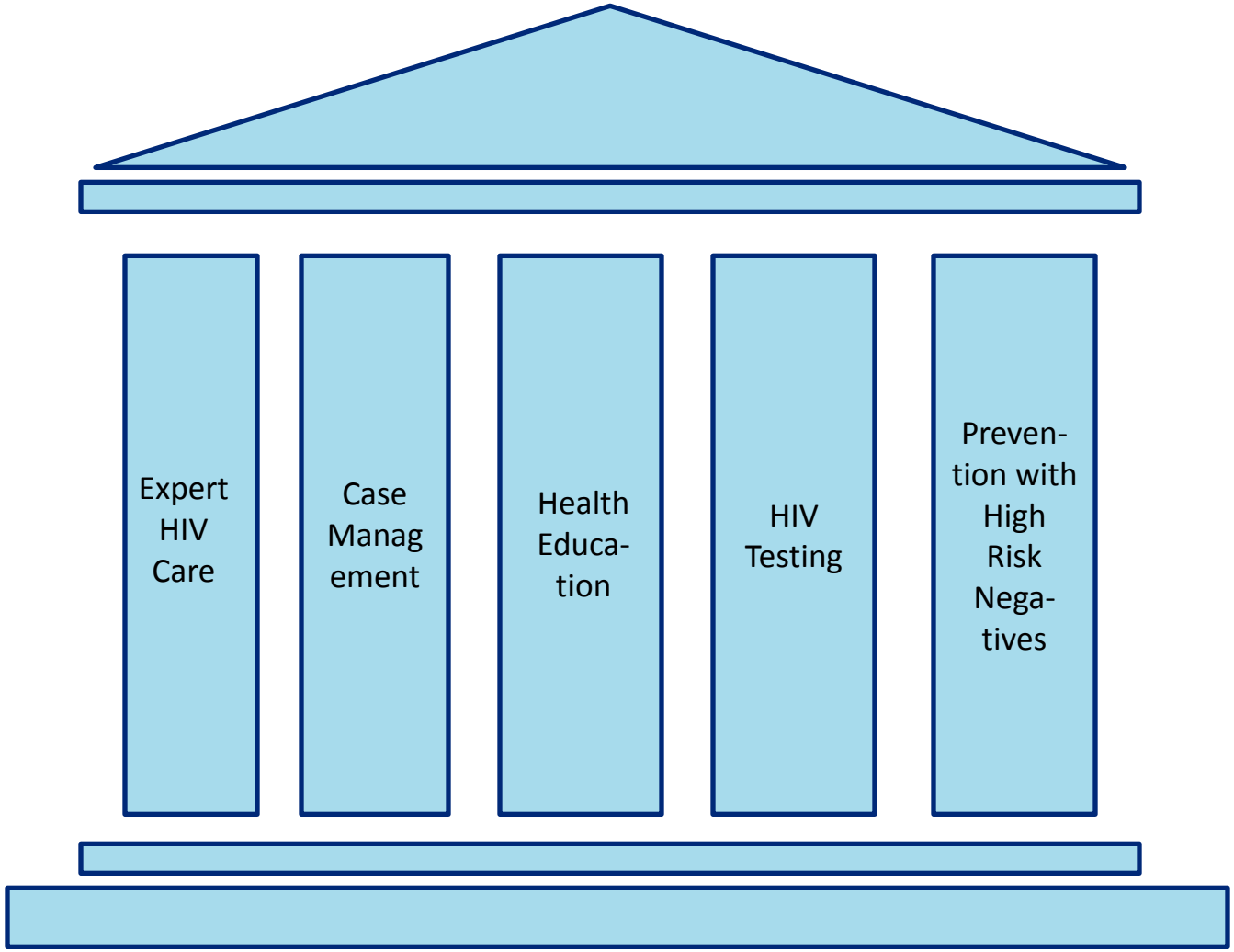
HIV Clinical Trials Program

Health Home Downstream Provider

HIV Testing in Emergency Rooms Pilot Project

CDC Community based HIV Prevention Collaborative

Pillars of Care at CART



Co-Located Services

Comprehensive Medical Case Management Model

- Medical Care provider
- RN Case Manager
- Social Work Case Manager

} Patient Care Team

Specialty Pharmacy (Pharm D has Collaborative Practice Agreement with all Clinicians)

Behavioral Health (2 P/T Psychiatrists, 9 SW therapists, SBIRT Behavioral Health Educator)

GYN Services

Nutritionist (Full time Dietician)

Health Education

Health Home

Hepatitis C Co-infection Treatment

Peer Support

Outreach/Retention in Care

Substance use (Buprenorphine prescribers)

Dental in adjoining suite

Legal Aid (Through Nassau Suffolk Law Services)

Client Advisory Board

CQI Program

vDOT, Daily Adherence Support

HIV Viral Suppression Rate over 90%

Regional Impact to End the Epidemic

Specialized Pharmacy

VIVO HEALTH
PHARMACY

- The 340B Drug Pricing Program requires drug manufacturers to provide outpatient drugs to eligible health care organizations at significantly reduced prices
- Eligibility: FQHCs, Disproportionate Share Hospitals, Ryan White Grantees
- Adherence Support: Delivery, Pill Trays, Text Reminders
- Collaborative Practice Agreement with all CART clinicians
- HIV Specialty Pharm D Residency

Breaking Down Walls

MOBILE HEALTH VAN SERVICES
GET TESTED

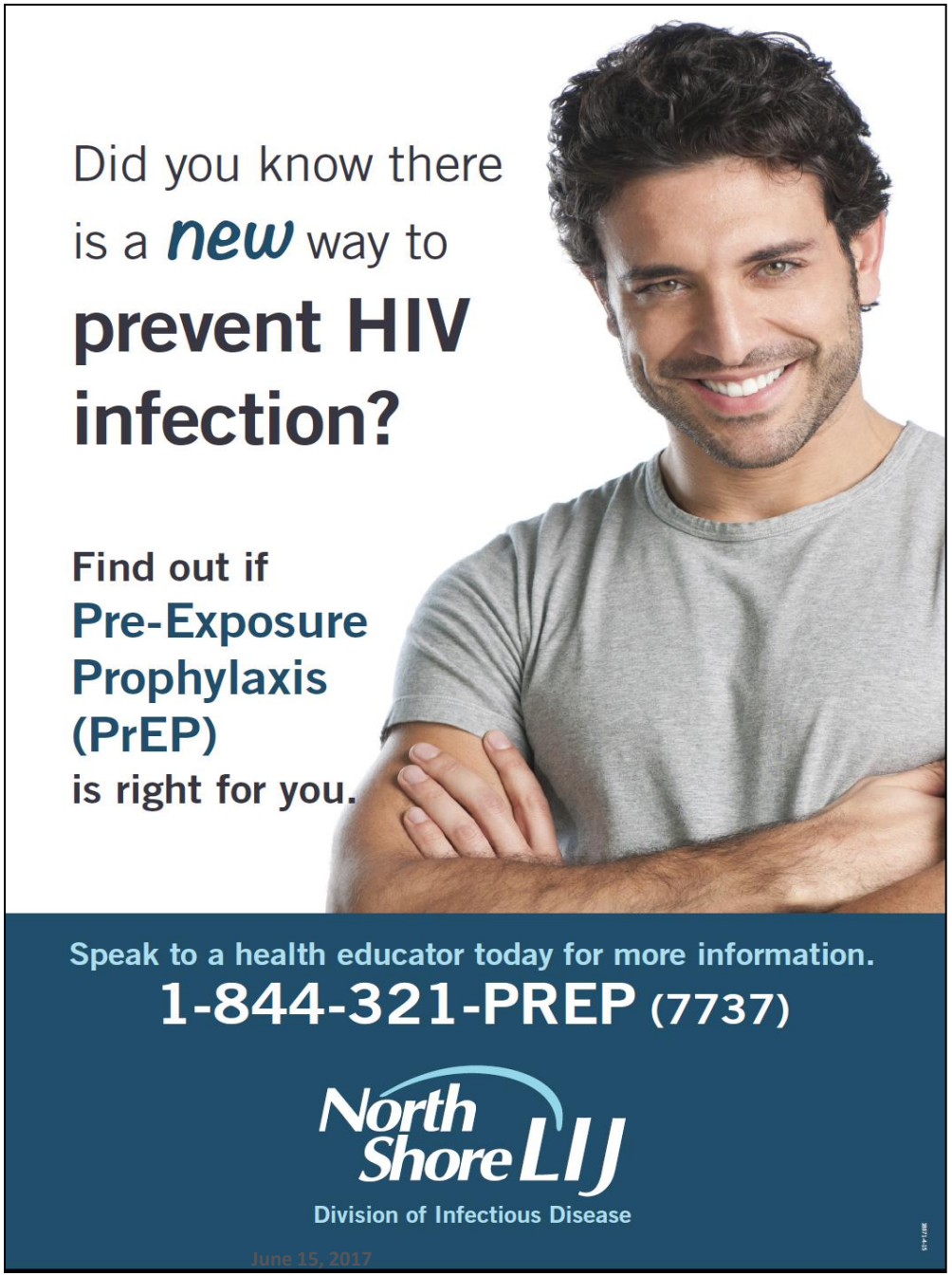
CART
CENTER FOR AIDS RESEARCH & TREATMENT
NORTH SHORE UNIVERSITY HOSPITAL, MANHASSET, NY

long island gay and lesbian youth

Pride for Youth
Creating Success Through Pride
A Project of Long Island Crisis Center

Dolan Family
Health Center

Planned Parenthood®
Care. No matter what.
Planned Parenthood Hudson Peconic


Did you know there is a new way to prevent HIV infection?
Find out if Pre-Exposure Prophylaxis (PrEP) is right for you.
Speak to a health educator today for more information.
1-844-321-PREP (7737)
North Shore LIJ
Division of Infectious Disease

Opportunities/Challenges

- Leverage Expertise and Community Relationships/Collaboration to impact HIV Epidemic Regionally
- Enhance use of Social Media
- Identify Health Care Disparities
- Use Data to assess program effectiveness and target areas of resource need

Quality Improvement

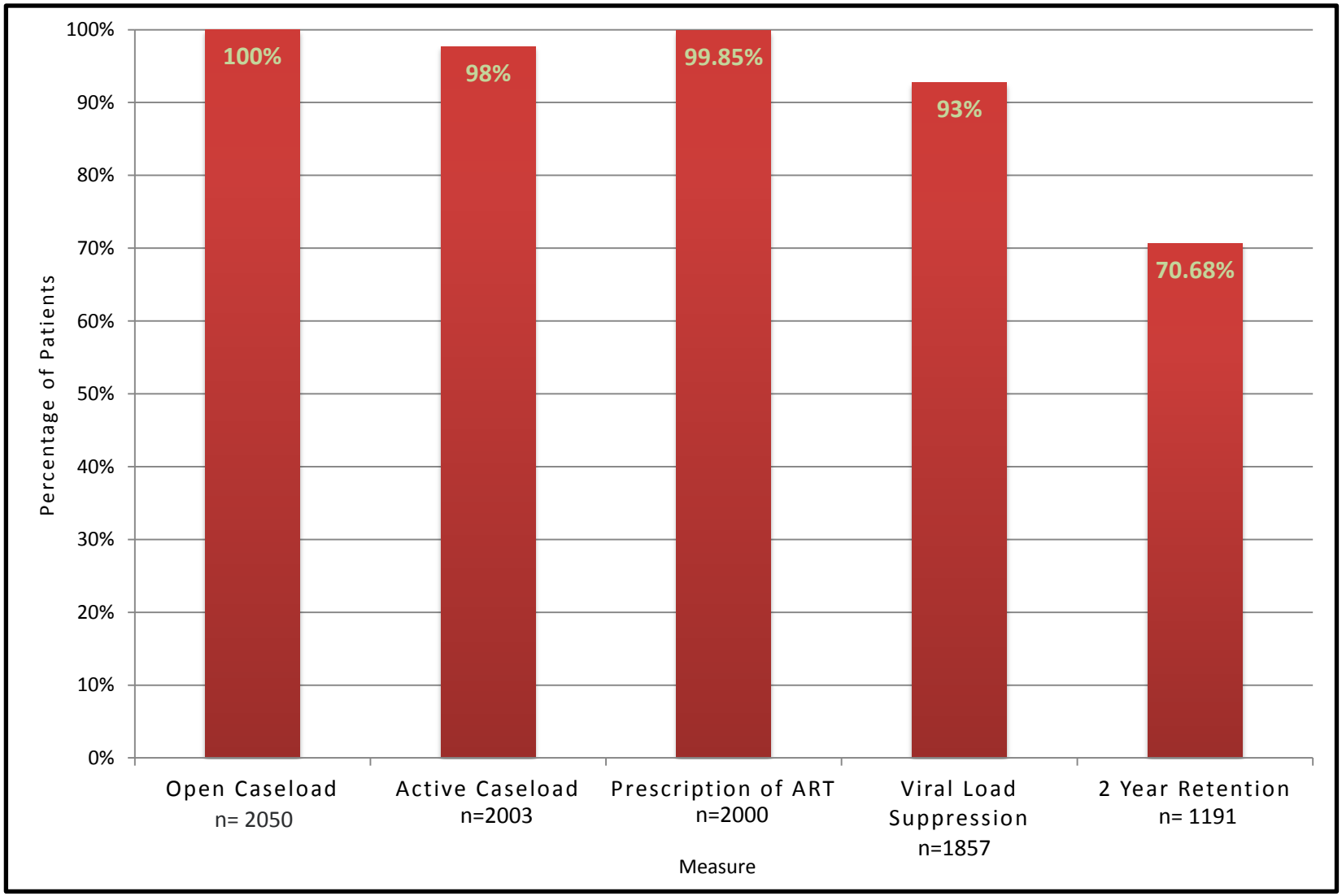
CART Quality Improvement

Quality Statement: The mission of the CQI Program is to maximize health outcomes of patients at the CART by ensuring access to and maintenance in HIV Primary Care.

The CART Annual CQI Plan is based on standards set forth by the AIDS Institute, HRSA and CDC. Projects are focused across various CART activities:

- Program wide CQI Project- Retention in Care
- RN Case Manager CQI Project- Advanced Directives
- 9 Grant Program Specific CQI Projects (e.g.: Prevention and Retention, Medical Nutrition, Mental Health, Part C, Part D, HIV Testing)
- PrEP Program CQI initiative
- CAB CQI plan review

CART HIV Care Cascade (2016)

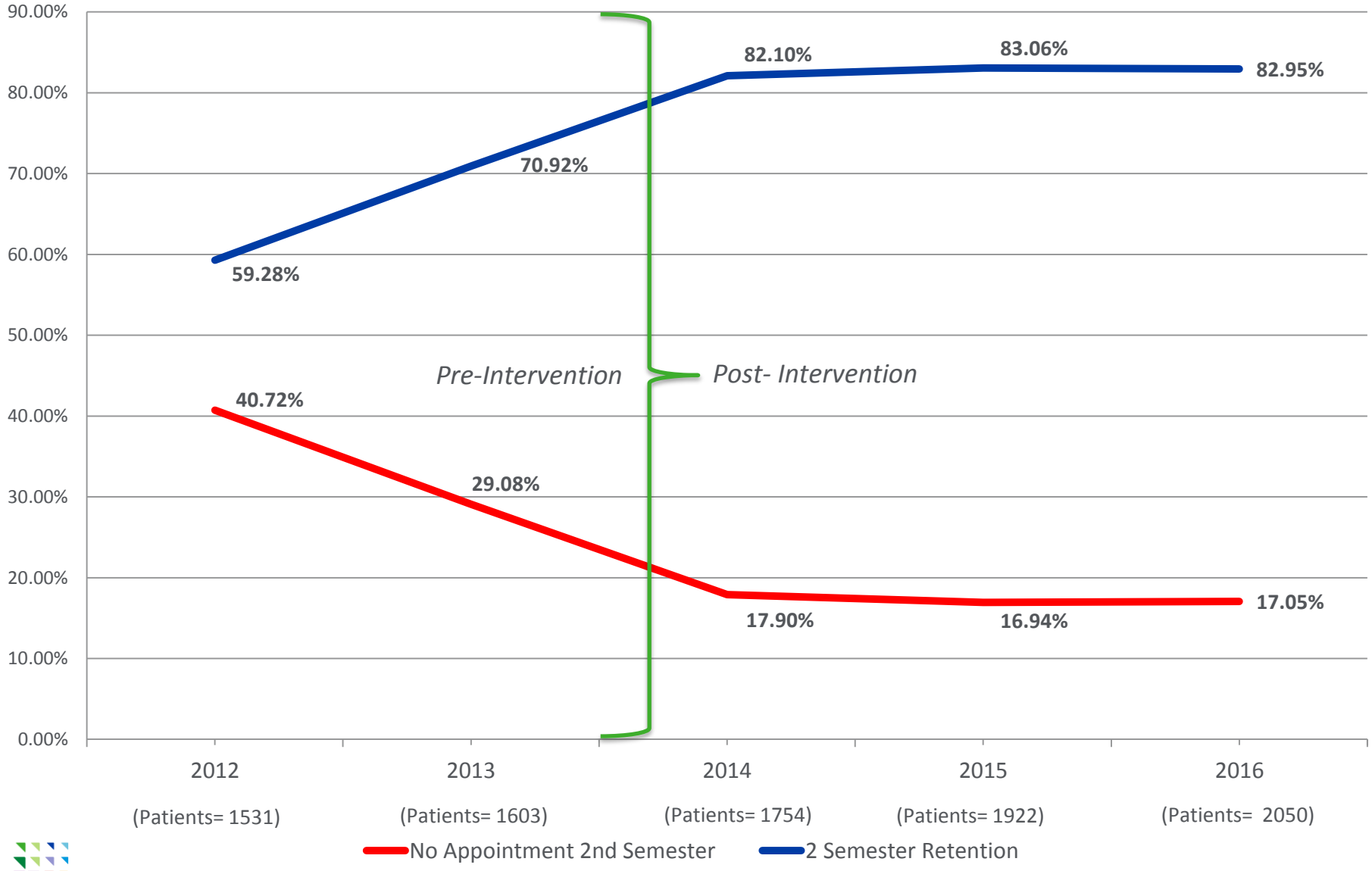


Program-wide CQI Project

- **Prospective Medical Case Management**
  - **Identify all patients among those seen in the past 2 years without a pending appointment**

- Retention in Care Initiative
  - Interventions:
    - Send reminder calls for all scheduled patients and track all missed appointments.
    - Implement NY Links Appointment Procedures
    - Provide multidisciplinary consistent messaging to direct patients to make an appointment for follow-up with their HIV Primary Care clinician.
    - Peer intervention to contact patients to facilitate appointment scheduling.
    - Conduct outreach to patients lost to follow-up for > 6 months.
    - Assess Appointment pending by MD, PA, NP, PharmD and RN at time of medication Renewals.
    - Provide Visit summary and “appointment slip” to patient at time of RN Exit interview with F/U appointment interval highlighted.

Program Wide CQI



Retention & Outreach

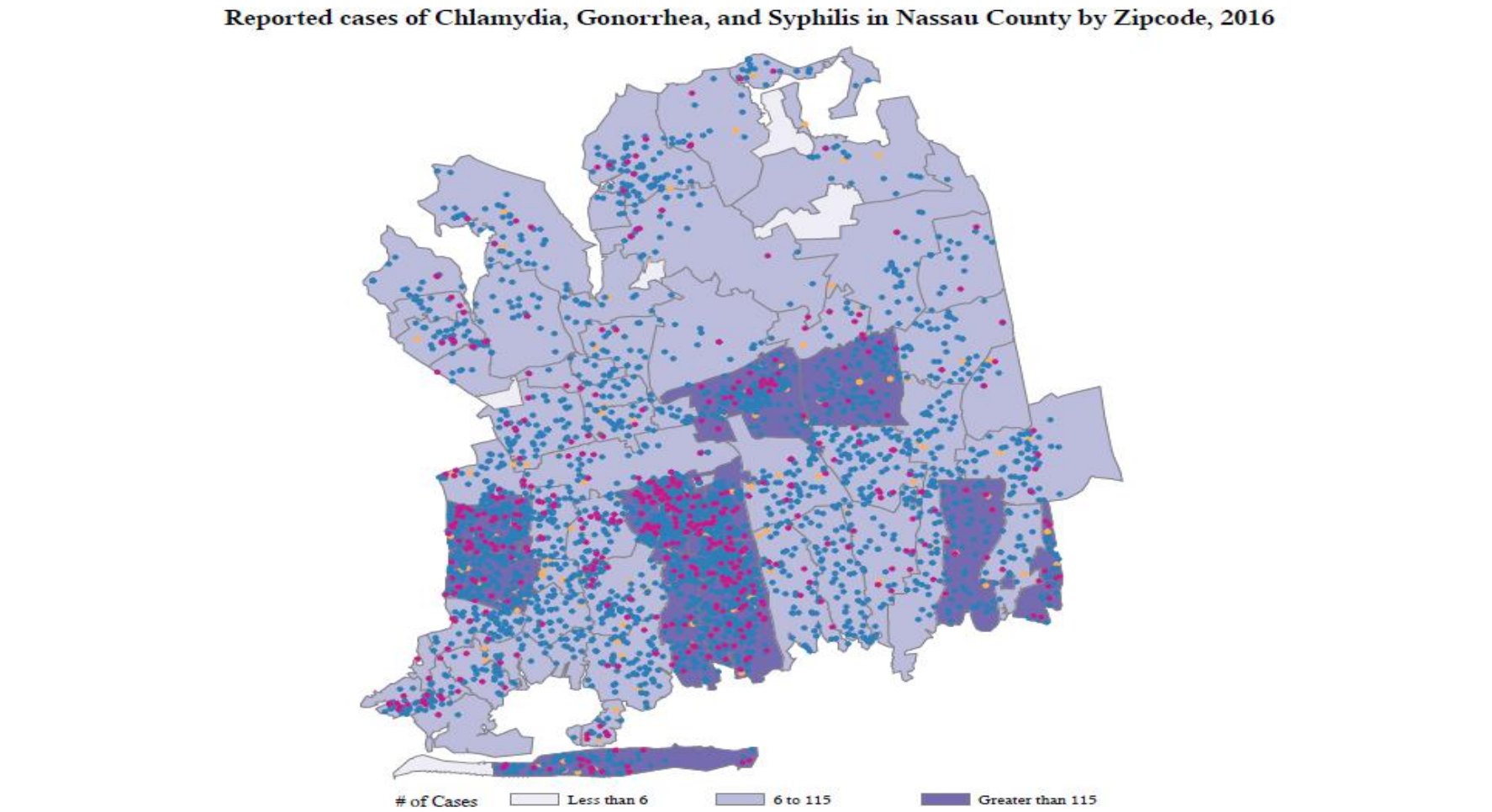
2015 Out of Care for 6 Months	20.75% (of active patients)
Moved/Transferred/Deceased (**of those out of care**)	27.20%
Out of Care after Removal	15.11%
Returned to Care	75.85%

2016 Out of Care for 6 Months	18.62% (of active patients)
Moved/Transferred/Deceased (**of those out of care**)	27.65%
Out of Care After Removal	13.47%
Returned to Care	76.83%

By the end of this year, there will be enough data in REDCap to analyze demographic, mental health, etc. data and identify trends as it relates to retention and those of unknown disposition.

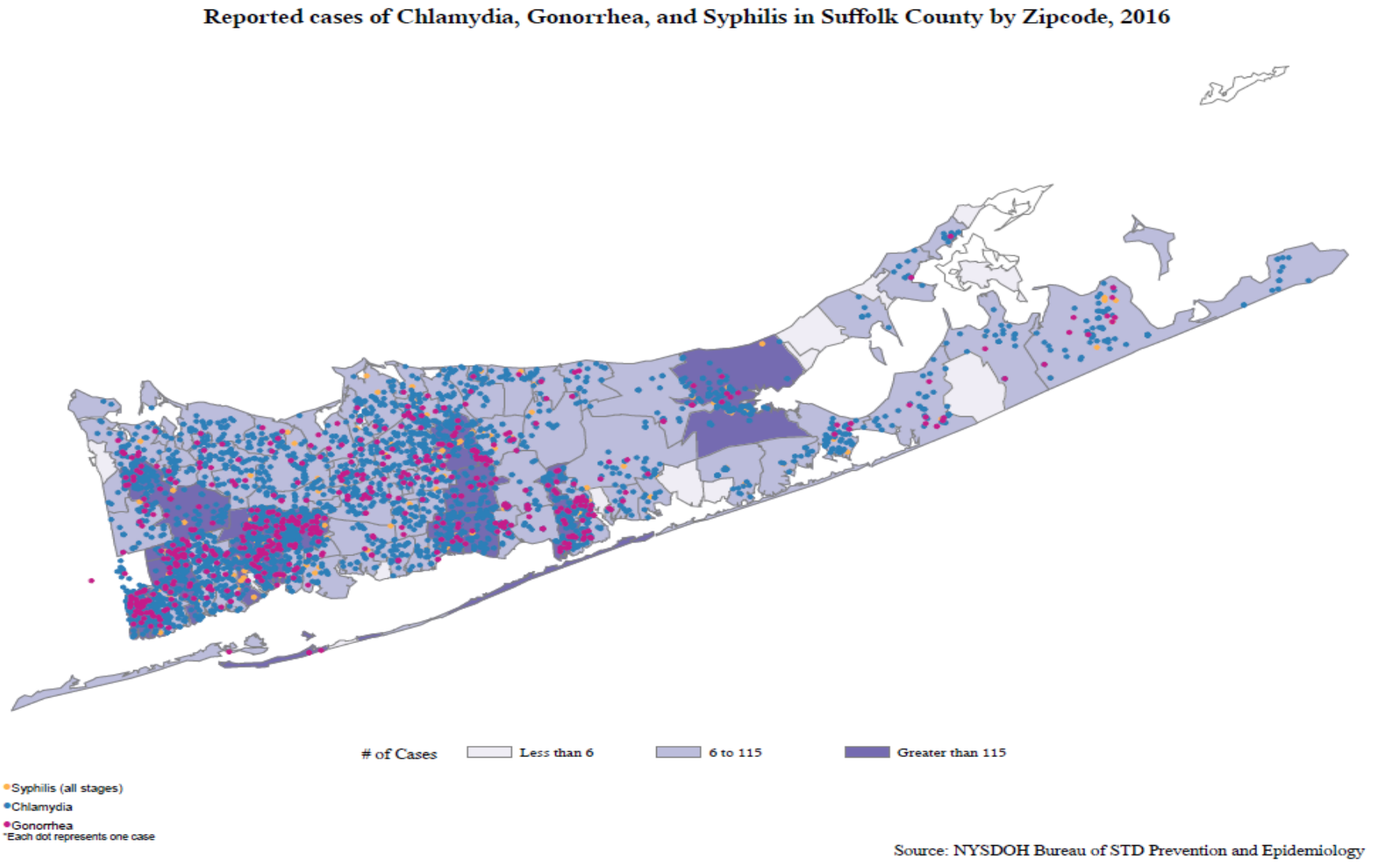
Heat Maps and Testing

Heat Maps & Mobile Testing

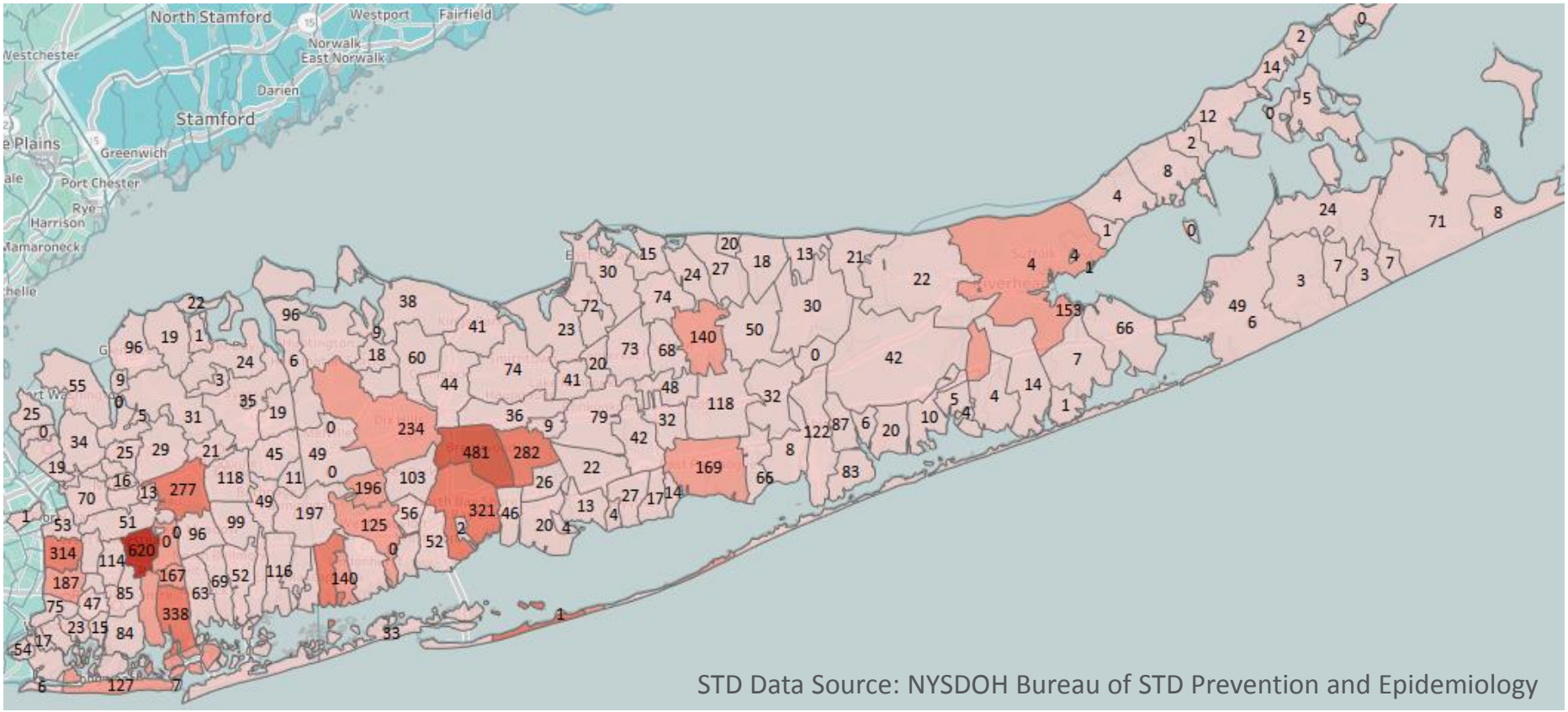


Source: NYSDOH Bureau of STD Prevention and Epidemiology

Heat Maps & Mobile Testing

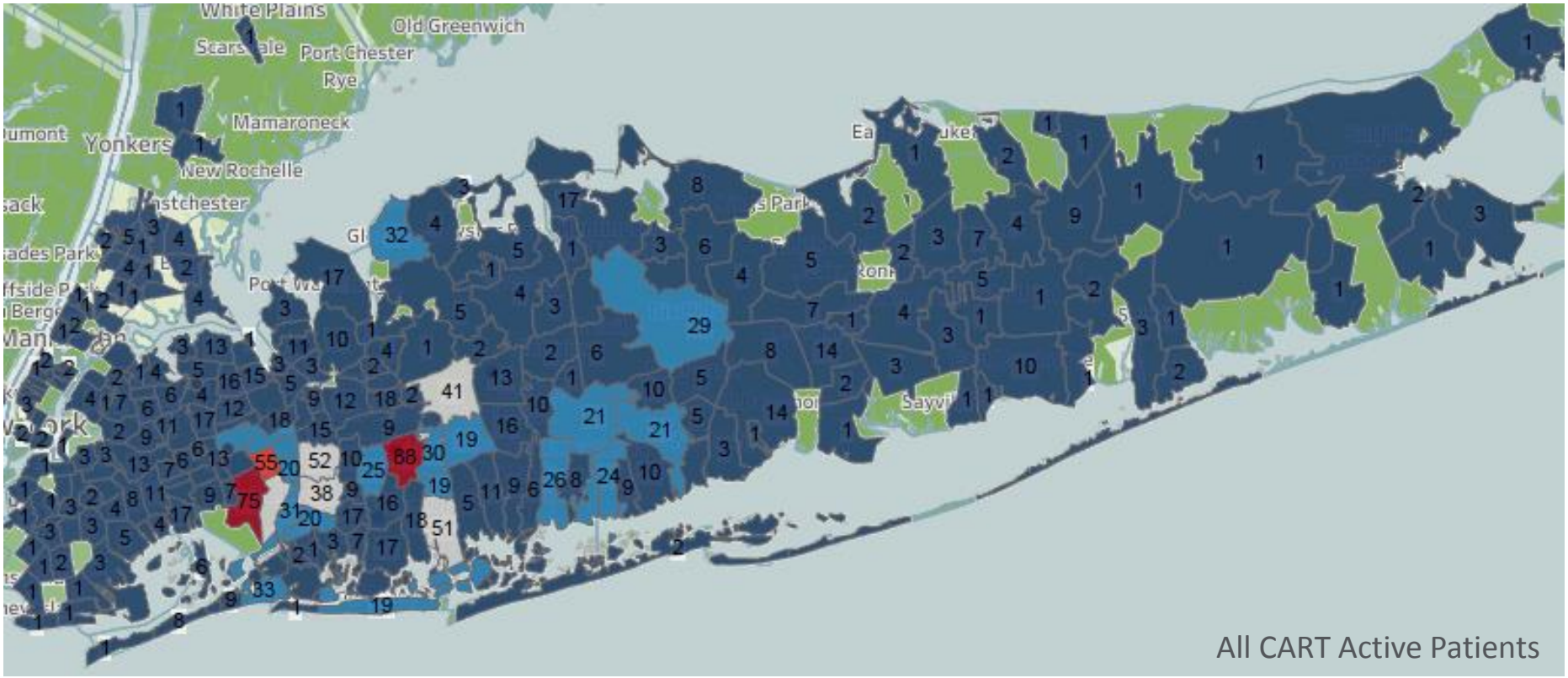


Heat Maps & Mobile Testing



Combined Nassau & Suffolk Reported cases of Chlamydia, Gonorrhea and Syphilis in 2016

Heat Maps & Mobile Testing



CART develops “Heat Maps” using Tableau Software indicating by zip code the location of:

1. All PLWHA in care at CART
2. All PLWHA in care at CART with an unsuppressed HIV viral load
3. All newly diagnosed persons referred for care at CART

Number of Patients

1.00 — 88.00

2017 Household Income ..

- 0 to 39,900
- 39,900 to 45,500
- 45,500 to 50,500
- 50,500 to 58,100
- 58,100 to 129,000

Health System Unsuppressed Viral Load

Based on 3 months of Data from the Northwell Health System. Areas highlighted are Hempstead, Far Rockaway, St. Albans, Jamaica, Corona and Brooklyn.

CART Unsuppressed Viral Load

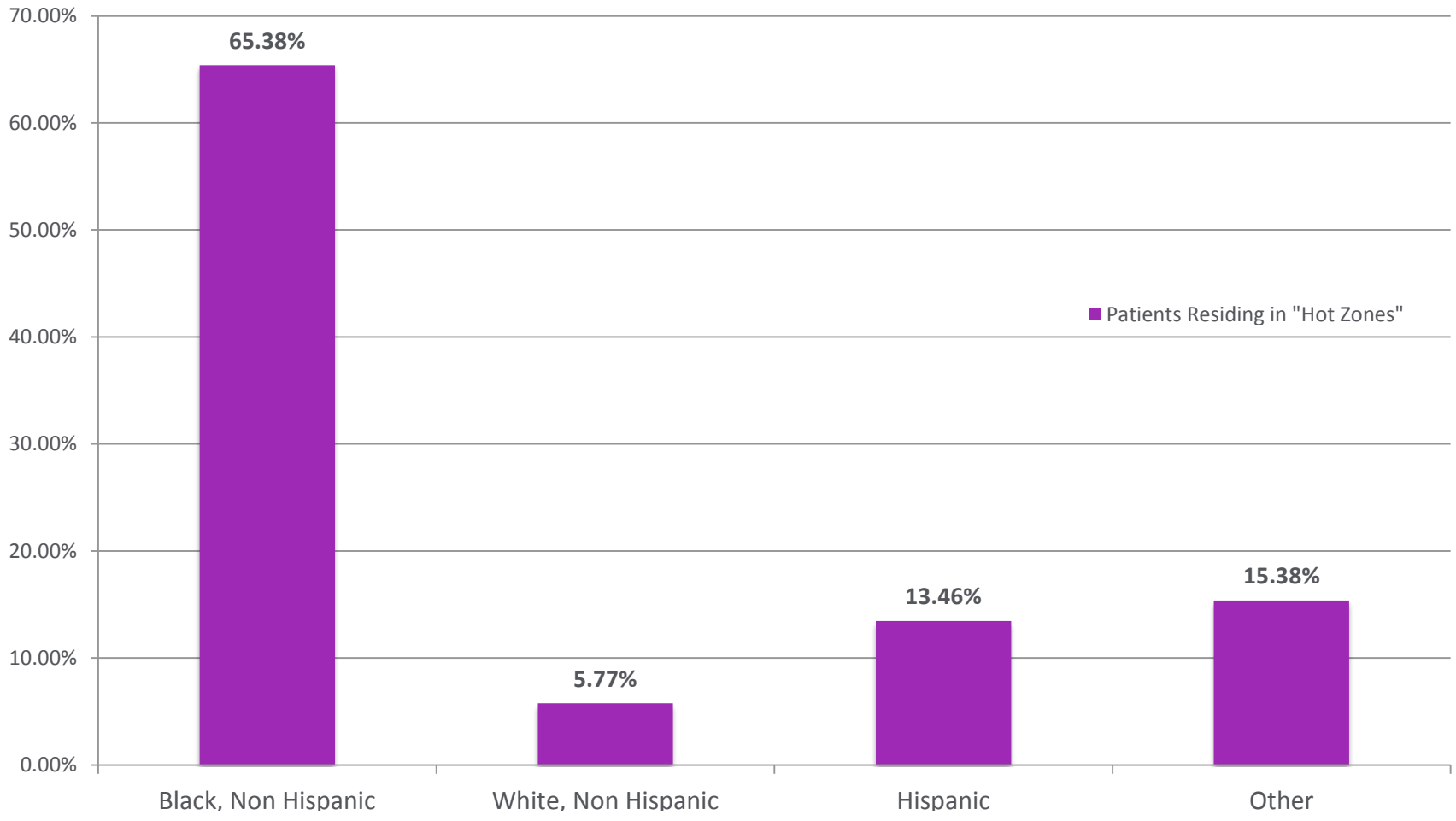
43% of Unsuppressed CART Patients live within this zone.

Areas highlighted are Hempstead, St. Albans, Springfield Gardens, Rosedale and surrounding areas.

CART Newly Diagnosed

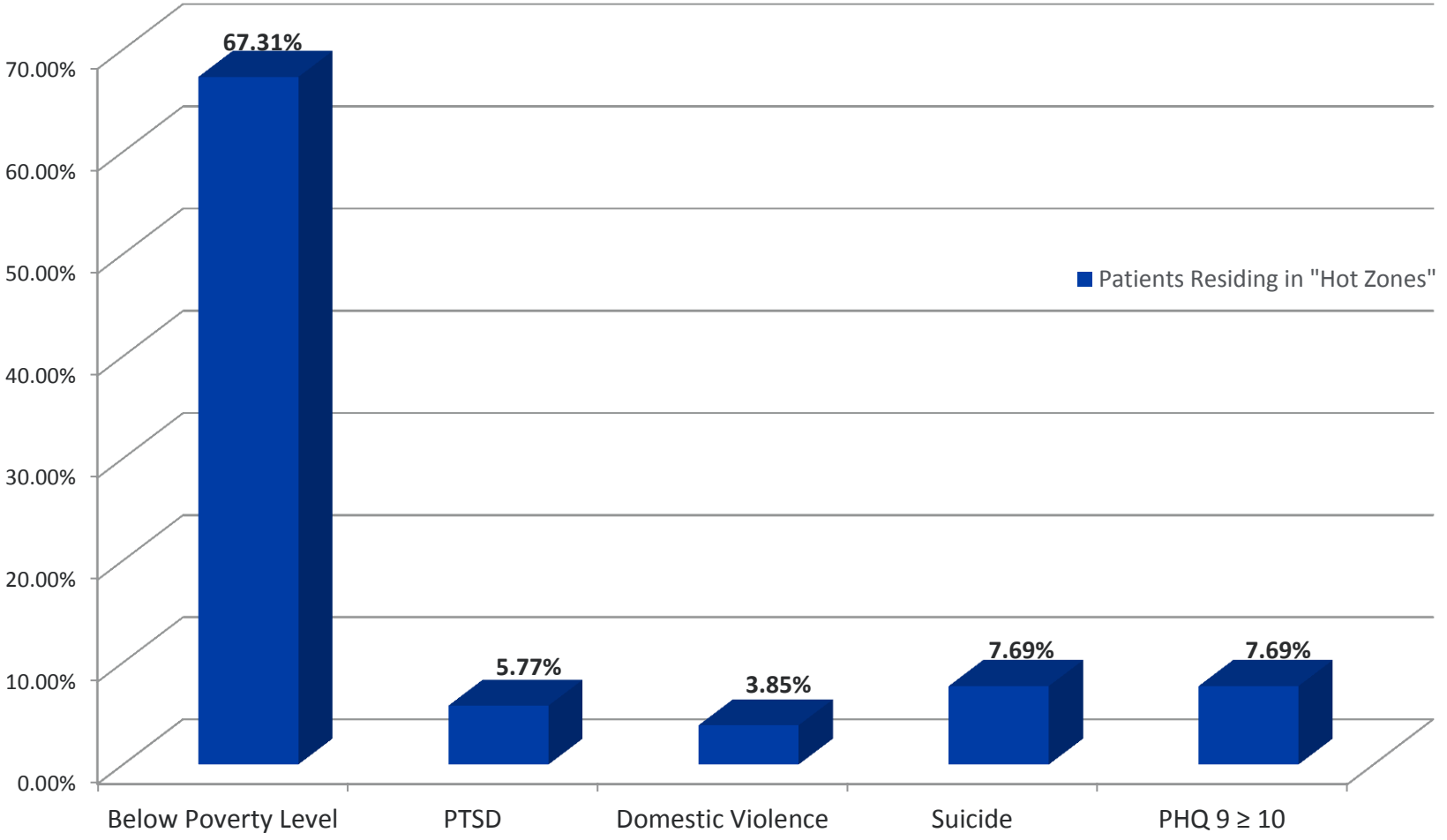
46.34% of Newly Diagnosed CART patients live within this zone.

Unsuppressed Patients & “Hot Zones”



N= 53

Unsuppressed Patients & “Hot Zones”



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REDCap Initiative

REDCap Initiative

REDCap- a browser-based, metadata-driven electronic data collection software solution and workflow methodology for designing clinical and translational research databases.

Social work case managers provide a Comprehensive Psycho-Social Assessment with a Care Plan every six months to the total patient population.

Assessments contain over 300 questions ranging from demographics and mental health status to substance abuse.

The REDCap initiative, which involved building a user friendly, electronic version of the assessment, took 11 months to complete from conception to implementation.

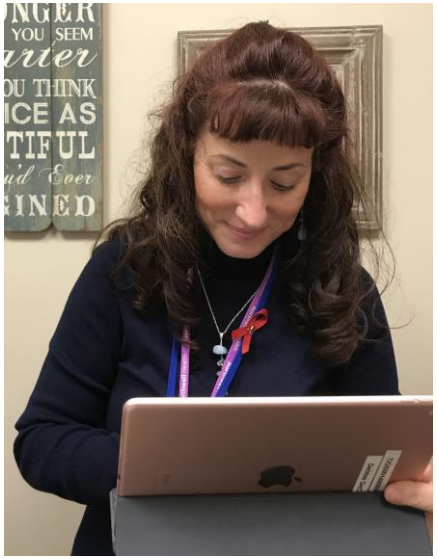
REDCap Initiative

By using REDCap's logic capabilities, the system allows fewer questions for some patients and more in-depth questions for other patients; if a particular question does not apply for a specific patient, then the question would not be asked during the assessment.

REDCap went live as of November 4, 2016

Houses two electronic versions of the psychosocial assessment

- Adult (296 fields) and Young Adult (320 fields) versions



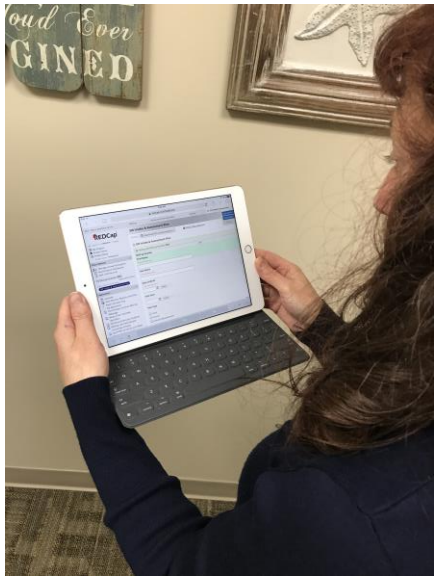
REDCap Initiative

Allows for mining of data from the database in real time

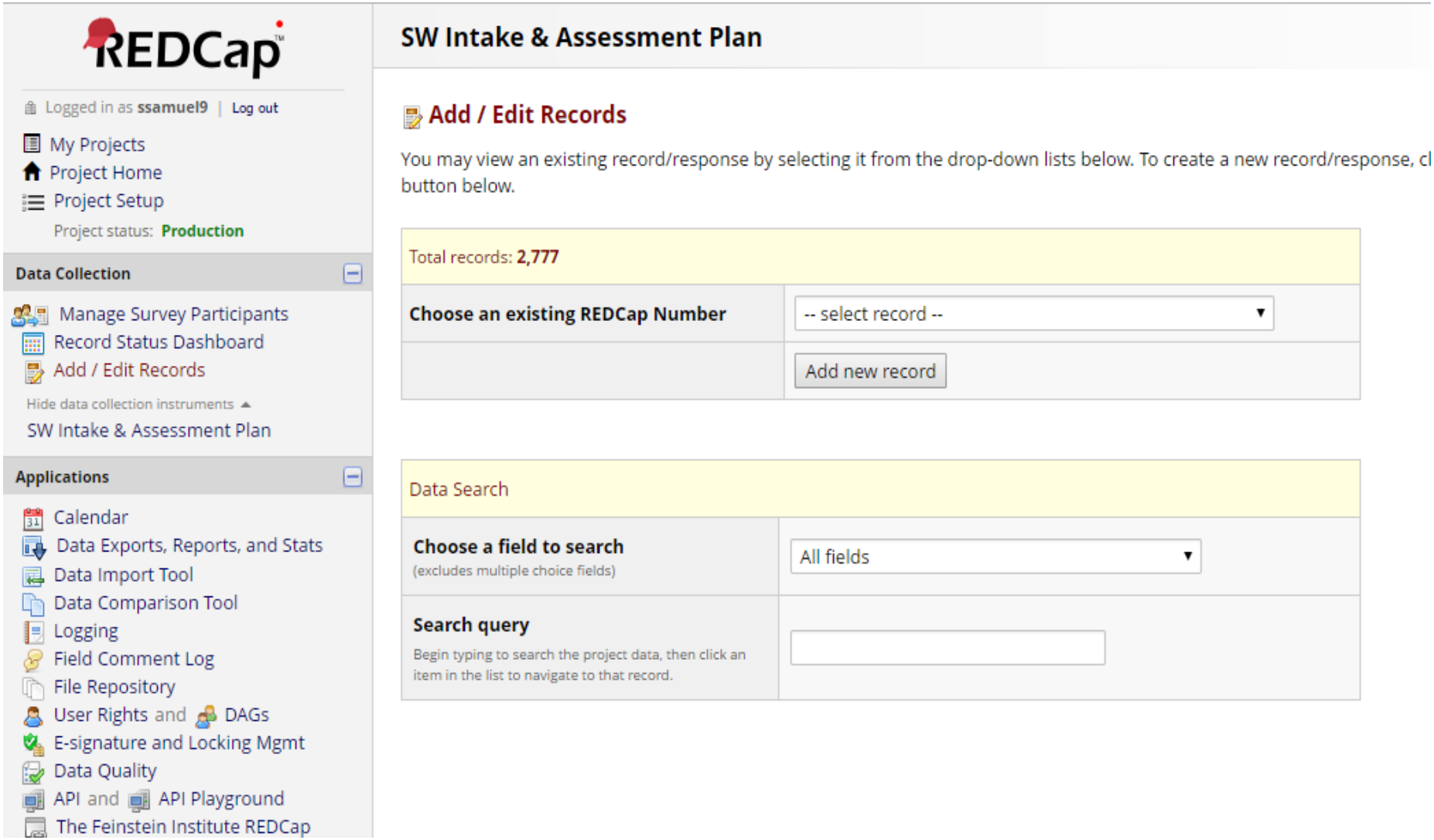
- Create custom reports and extract data to find disparities based on age, mode of transmission, housing status, mental health history, etc.

Assessment is categorized into the following sections:

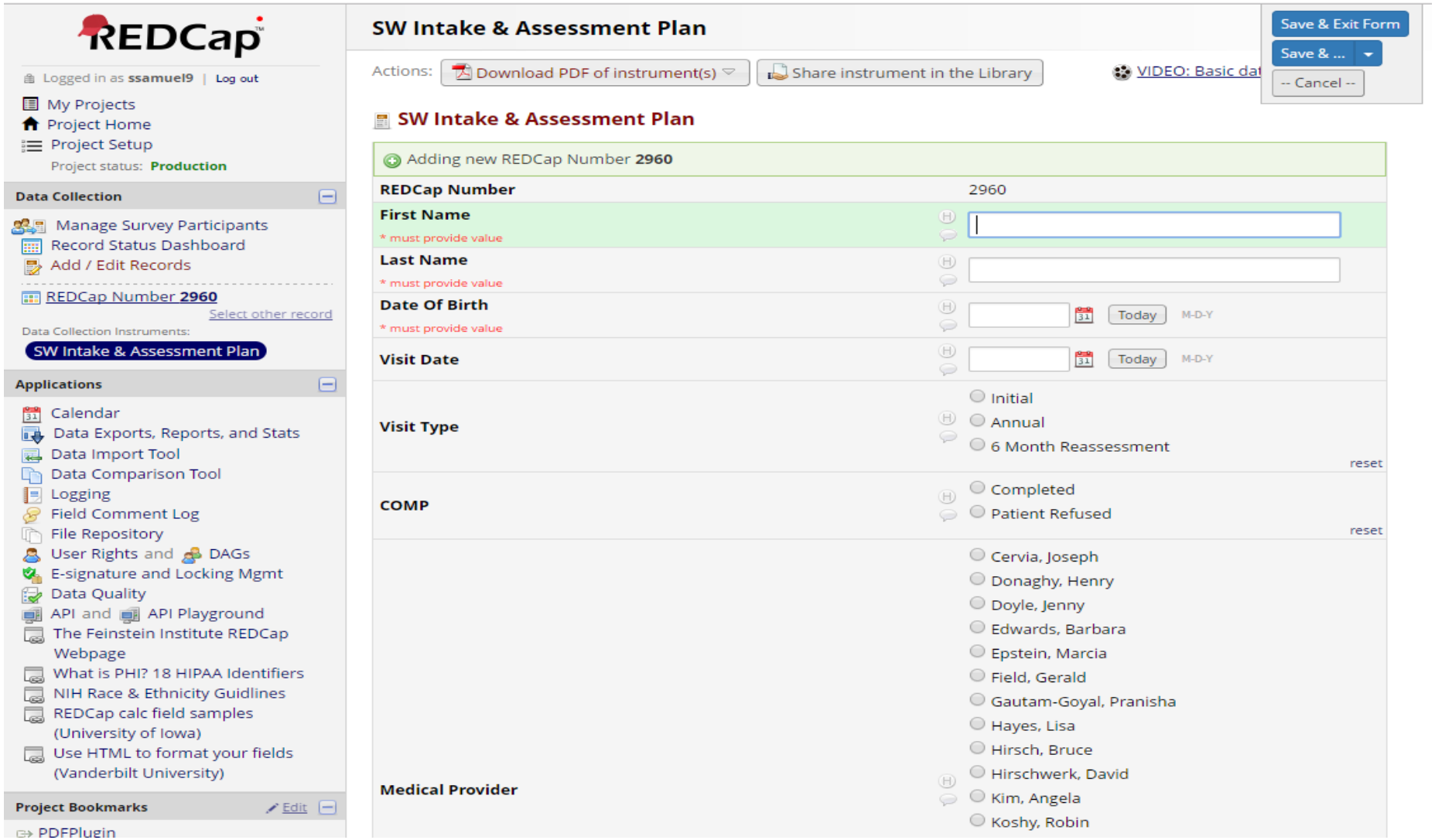
- Demographics
- Financials
- Housing/Transportation/Food
- Case Management Information
- Mental Health Assessment (mood/affect, anxiety screening, PTSD screening, Depression/PHQ-9, Suicide/Homicide screening)
- Substance Use History
- Legal Assessment (Domestic Violence, Child Protective Services, Adult Protective Services, Criminal Activity)
- Treatment Adherence Assessment
- Service Plan & Referrals
- Short term & Long term Goals



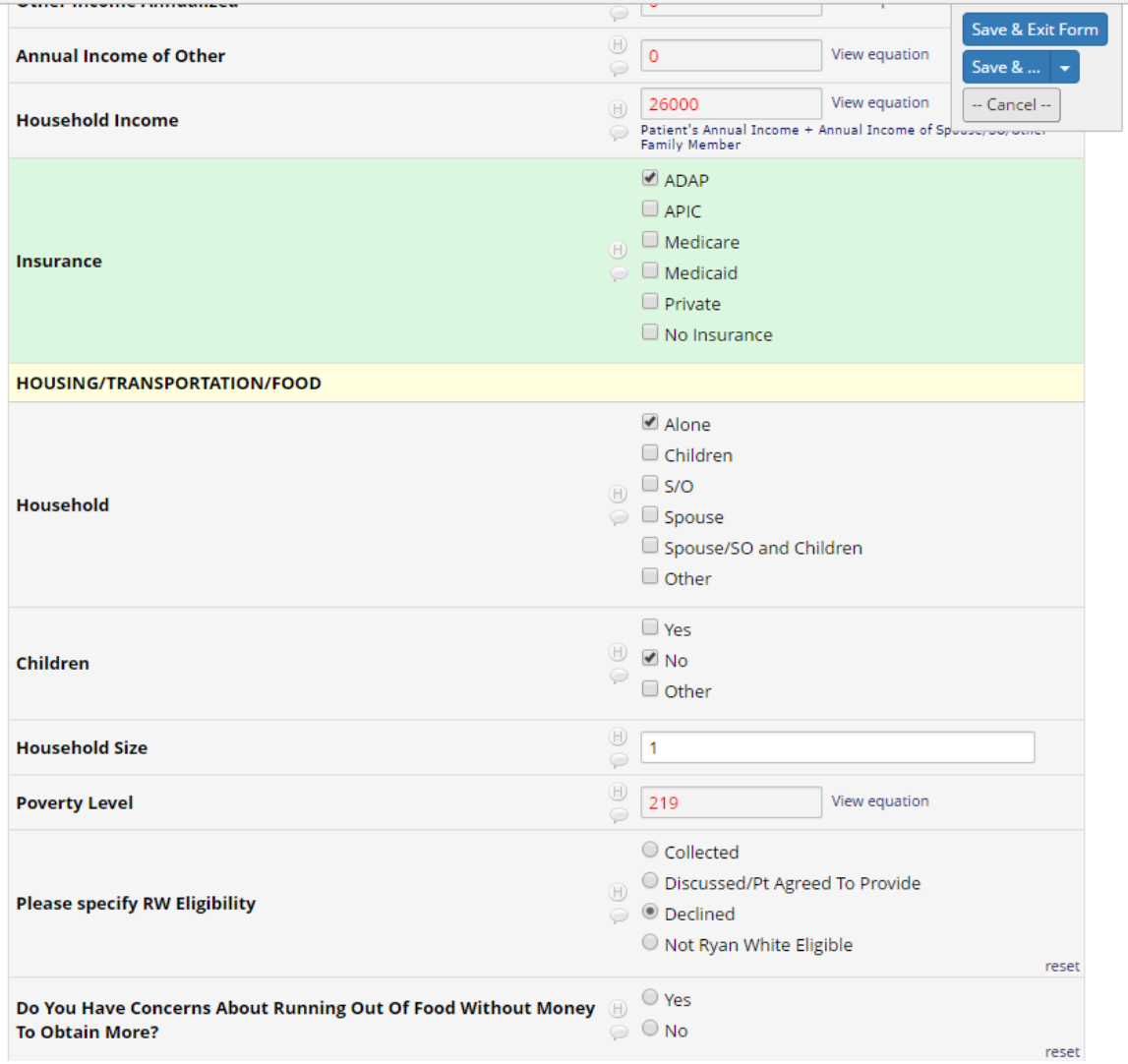
REDCap Interface



REDCap Interface



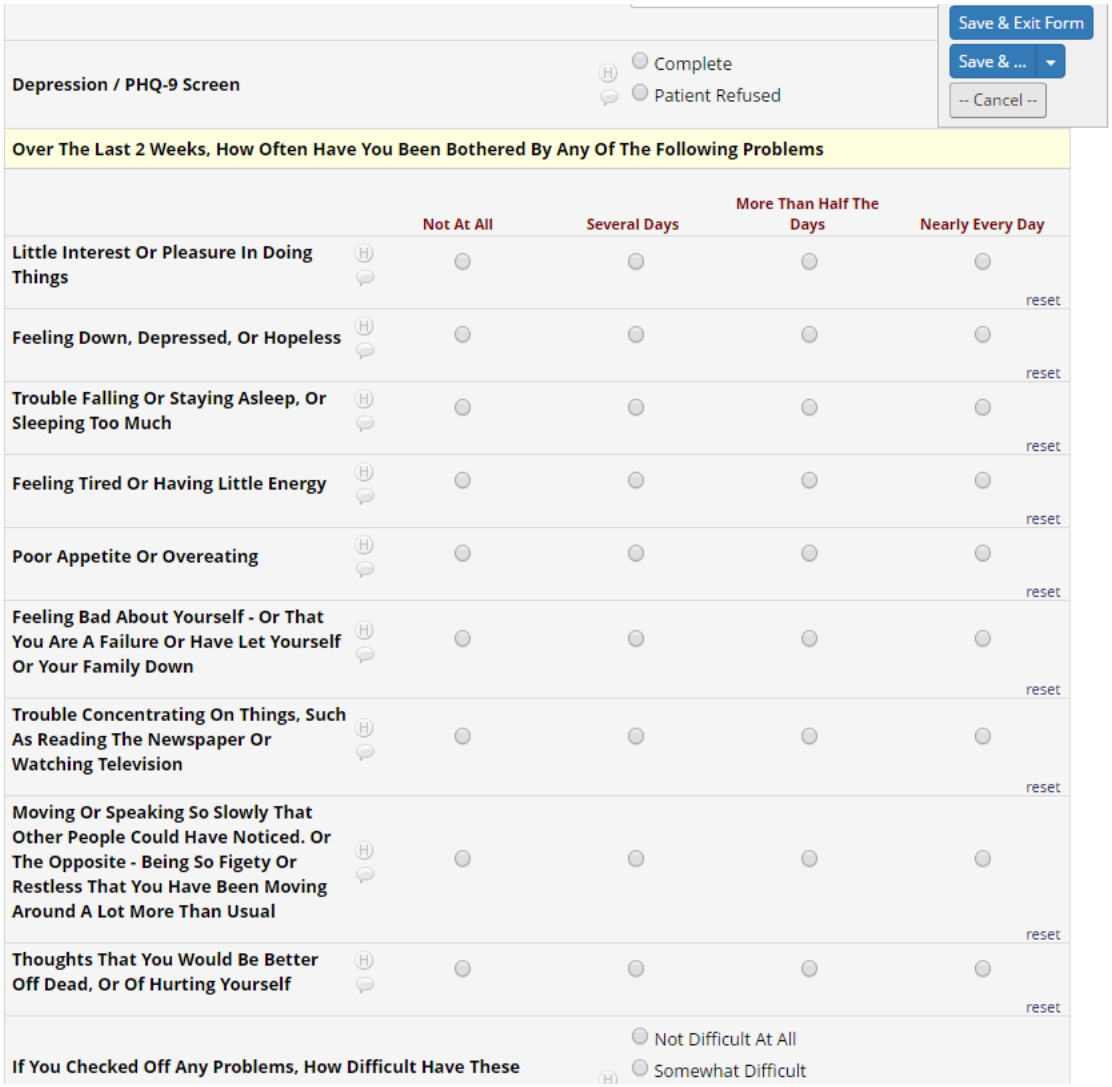
REDCap Interface



Annual Income of Other	0 View equation
Household Income	26000 View equation Patient's Annual Income + Annual Income of Spouse/SO/Other Family Member
Insurance	☑ ADAP ☐ APIC ☐ Medicare ☐ Medicaid ☐ Private ☐ No Insurance
HOUSING/TRANSPORTATION/FOOD	
Household	☑ Alone ☐ Children ☐ S/O ☐ Spouse ☐ Spouse/SO and Children ☐ Other
Children	☐ Yes ☑ No ☐ Other
Household Size	1
Poverty Level	219 View equation
Please specify RW Eligibility	○ Collected ○ Discussed/Pt Agreed To Provide ◉ Declined ○ Not Ryan White Eligible reset
Do You Have Concerns About Running Out Of Food Without Money To Obtain More?	○ Yes ○ No reset

Save & Exit Form | Save & ... | -- Cancel --

REDCap Interface



Save & Exit Form
Save & ...
-- Cancel --

Depression / PHQ-9 Screen

Complete
Patient Refused

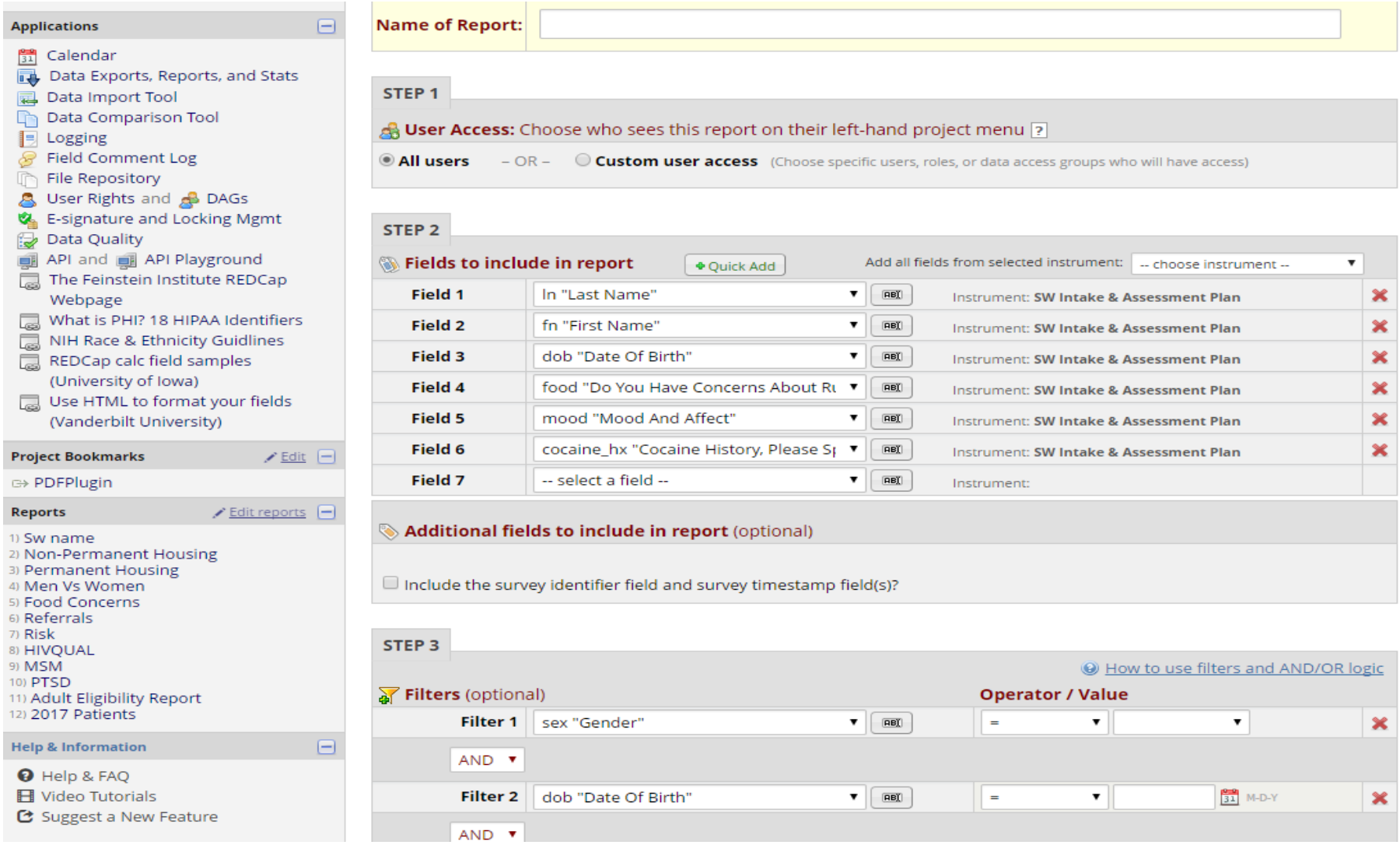
Over The Last 2 Weeks, How Often Have You Been Bothered By Any Of The Following Problems

	Not At All	Several Days	More Than Half The Days	Nearly Every Day	
Little Interest Or Pleasure In Doing Things					reset
Feeling Down, Depressed, Or Hopeless					reset
Trouble Falling Or Staying Asleep, Or Sleeping Too Much					reset
Feeling Tired Or Having Little Energy					reset
Poor Appetite Or Overeating					reset
Feeling Bad About Yourself - Or That You Are A Failure Or Have Let Yourself Or Your Family Down					reset
Trouble Concentrating On Things, Such As Reading The Newspaper Or Watching Television					reset
Moving Or Speaking So Slowly That Other People Could Have Noticed. Or The Opposite - Being So Figety Or Restless That You Have Been Moving Around A Lot More Than Usual					reset
Thoughts That You Would Be Better Off Dead, Or Of Hurting Yourself					reset

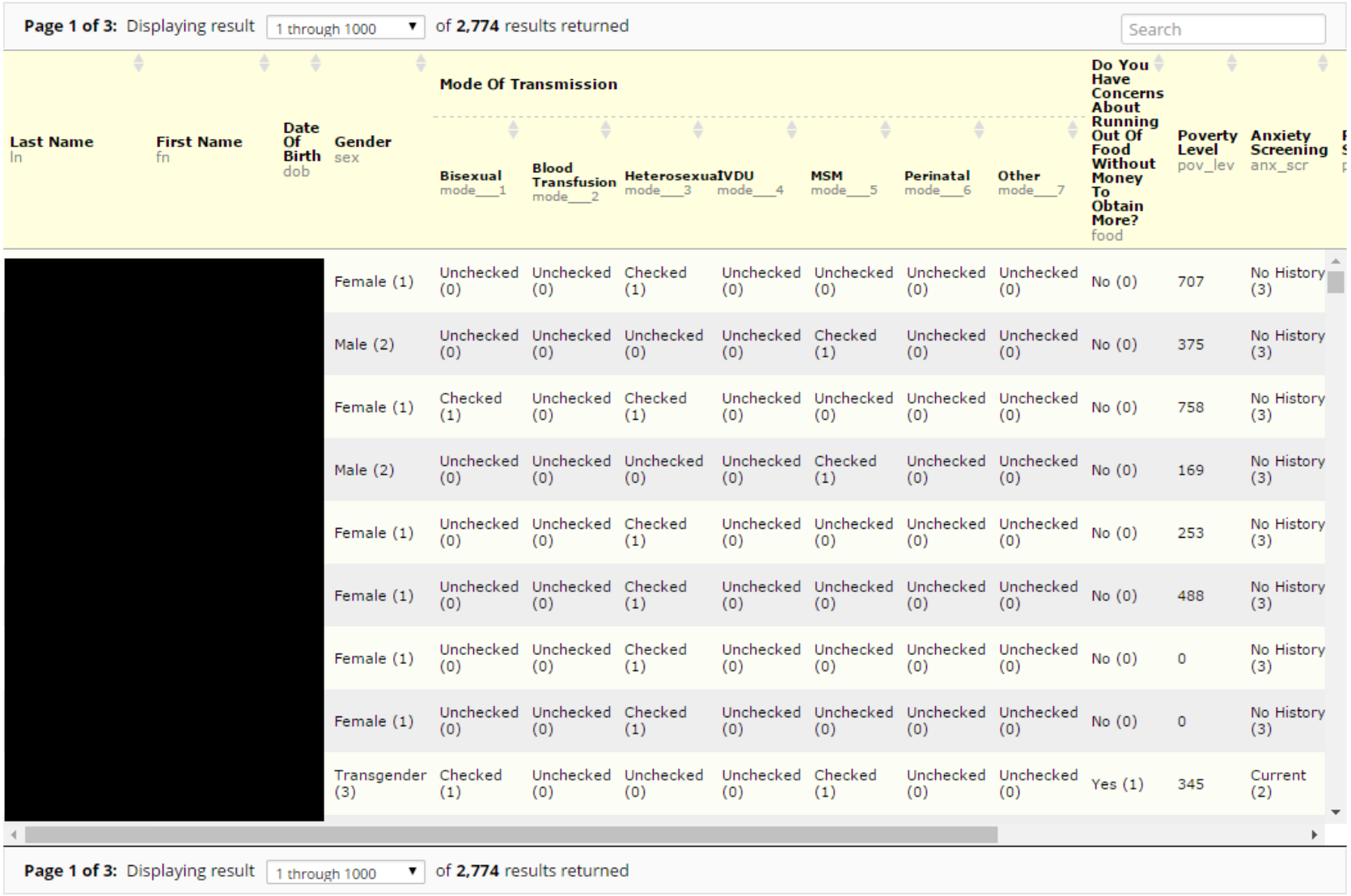
If You Checked Off Any Problems, How Difficult Have These

Not Difficult At All
Somewhat Difficult

REDCap Reports



REDCap Reports



Page 1 of 3: Displaying result 1 through 1000 of 2,774 results returned

Search

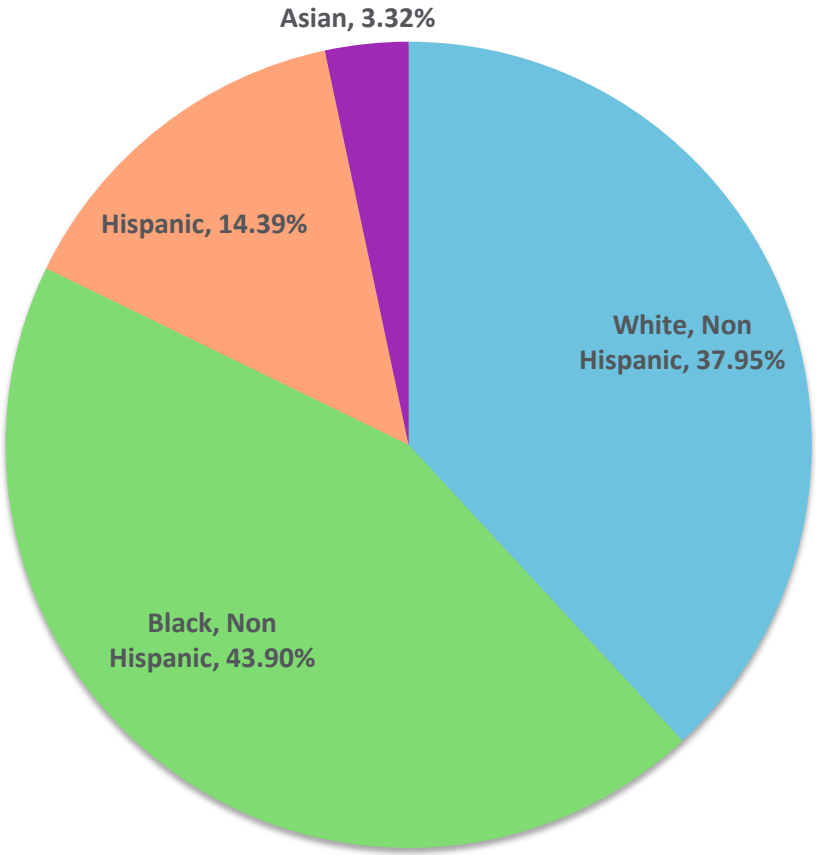
Last Name ln	First Name fn	Date Of Birth dob	Gender sex	Mode Of Transmission							Do You Have Concerns About Running Out Of Food Without Money To Obtain More? food	Poverty Level pov_lev	Anxiety Screening anx_scr
				Bisexual mode___1	Blood Transfusion mode___2	Heterosexual mode___3	IVDU mode___4	MSM mode___5	Perinatal mode___6	Other mode___7			
[redacted]			Female (1)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	No (0)	707	No History (3)
			Male (2)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	No (0)	375	No History (3)
			Female (1)	Checked (1)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	No (0)	758	No History (3)
			Male (2)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	No (0)	169	No History (3)
			Female (1)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	No (0)	253	No History (3)
			Female (1)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	No (0)	488	No History (3)
			Female (1)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	No (0)	0	No History (3)
			Female (1)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	No (0)	0	No History (3)
			Transgender (3)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Yes (1)	345	Current (2)

Page 1 of 3: Displaying result 1 through 1000 of 2,774 results returned

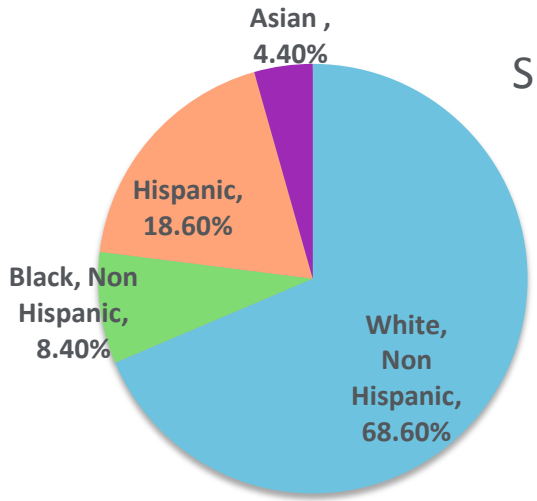
REDCap Data & Disparities in Care

Patient Demographics

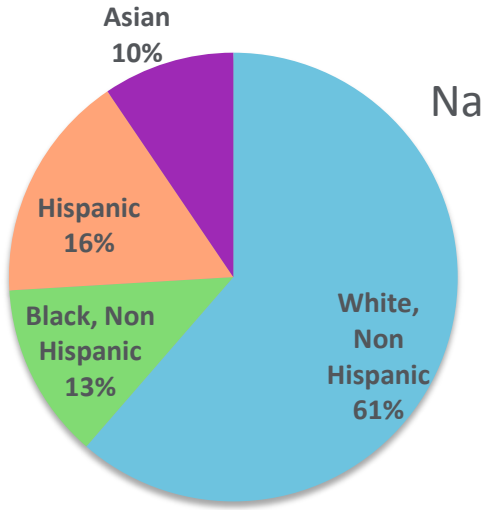
All CART Patients



Suffolk

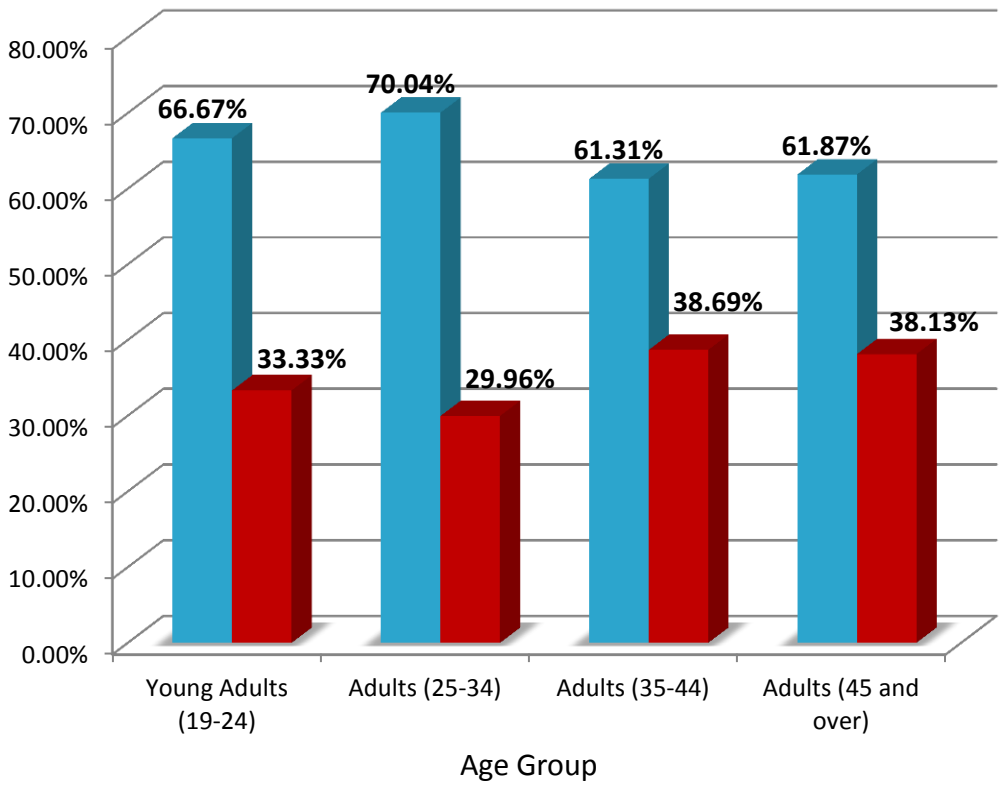


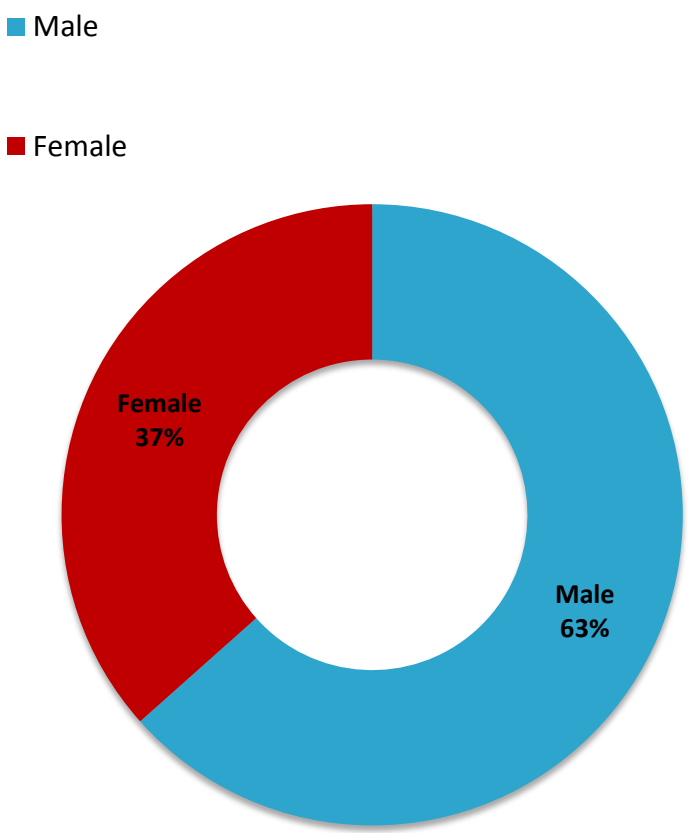
Nassau



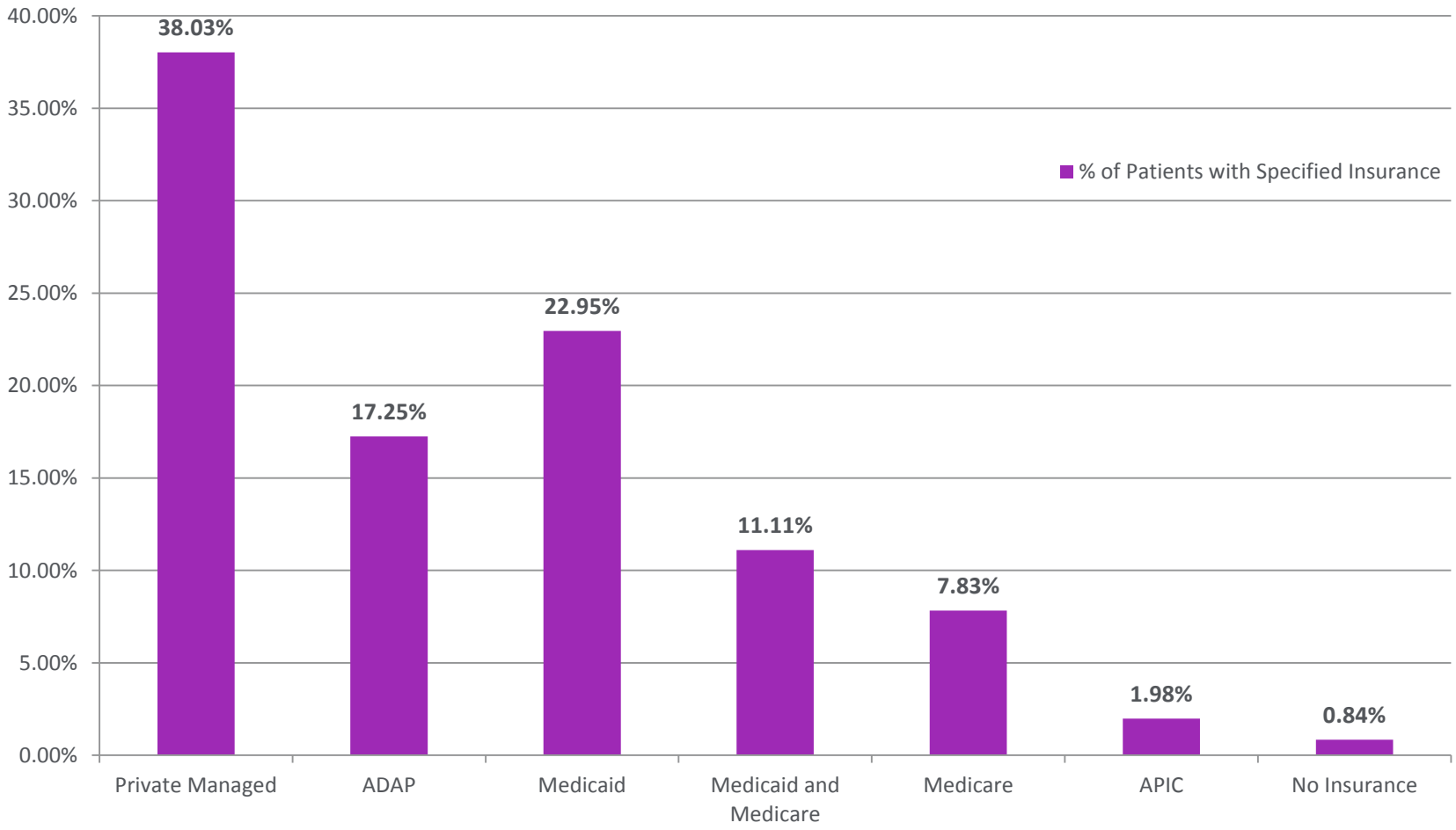
**Nassau & Suffolk Data based on U.S. Census Bureau, 2015*

CART Patient Demographics

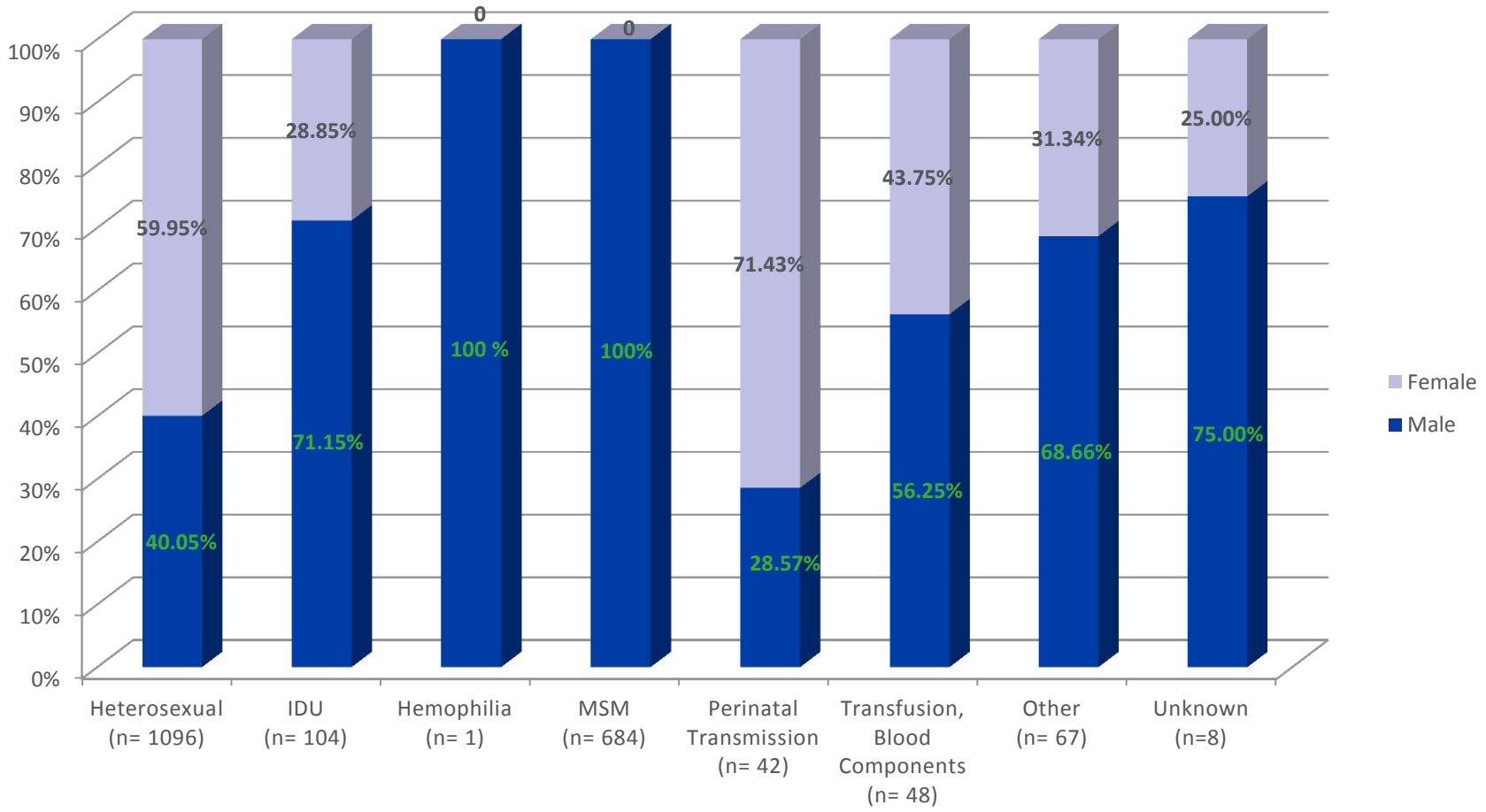




Patient Insurance

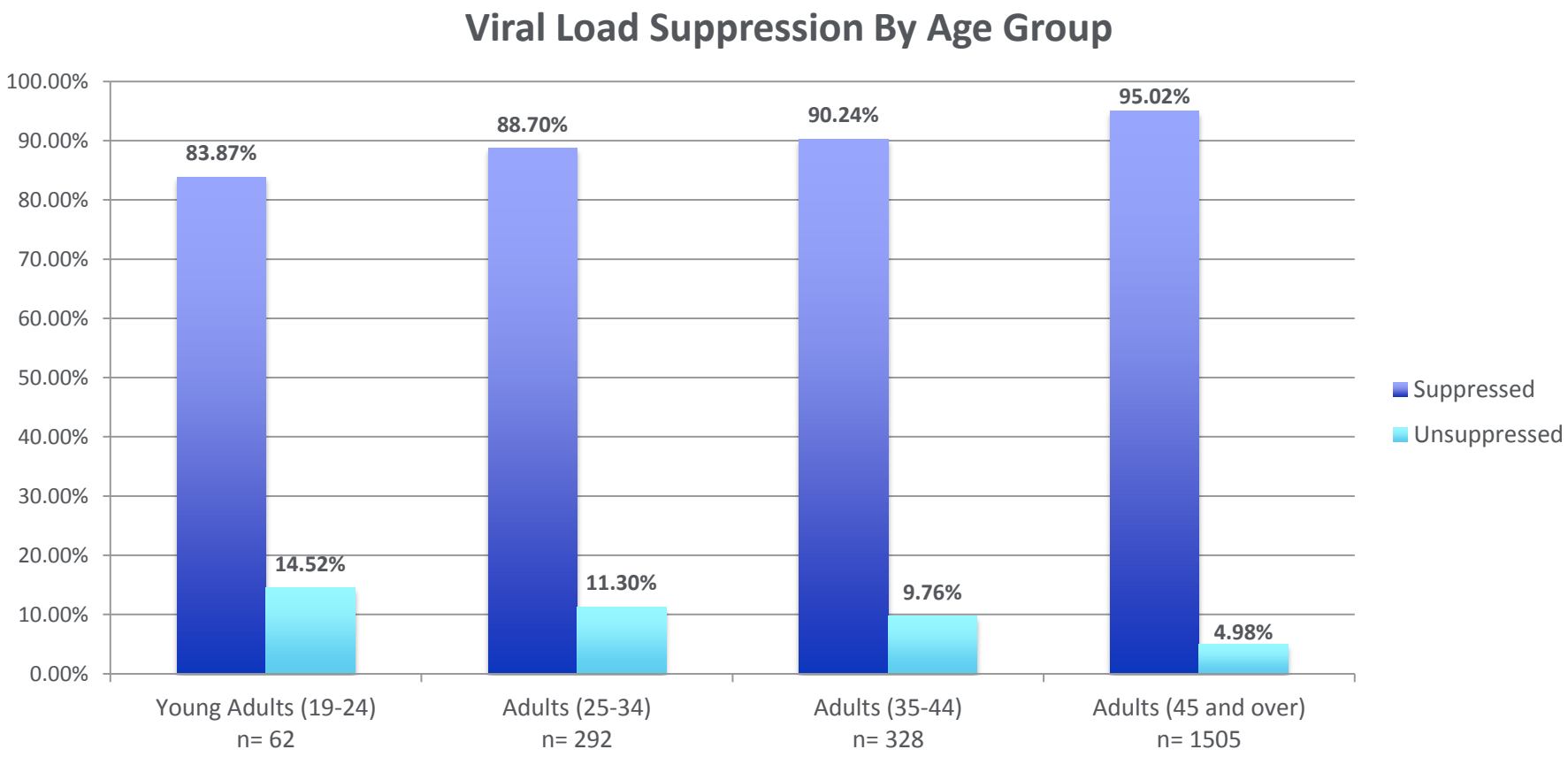


Mode of Transmission and Gender

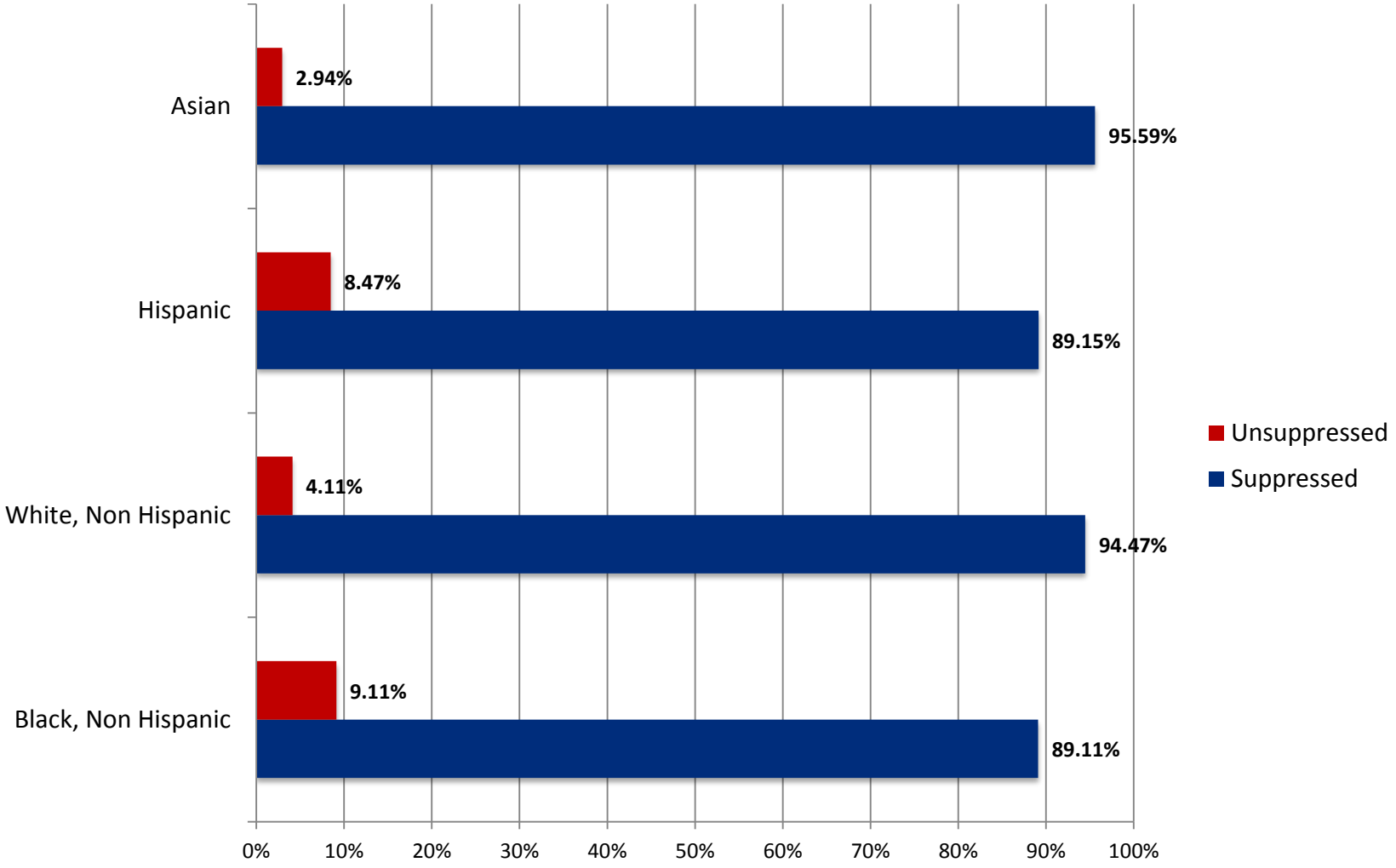


Viral Load Suppression

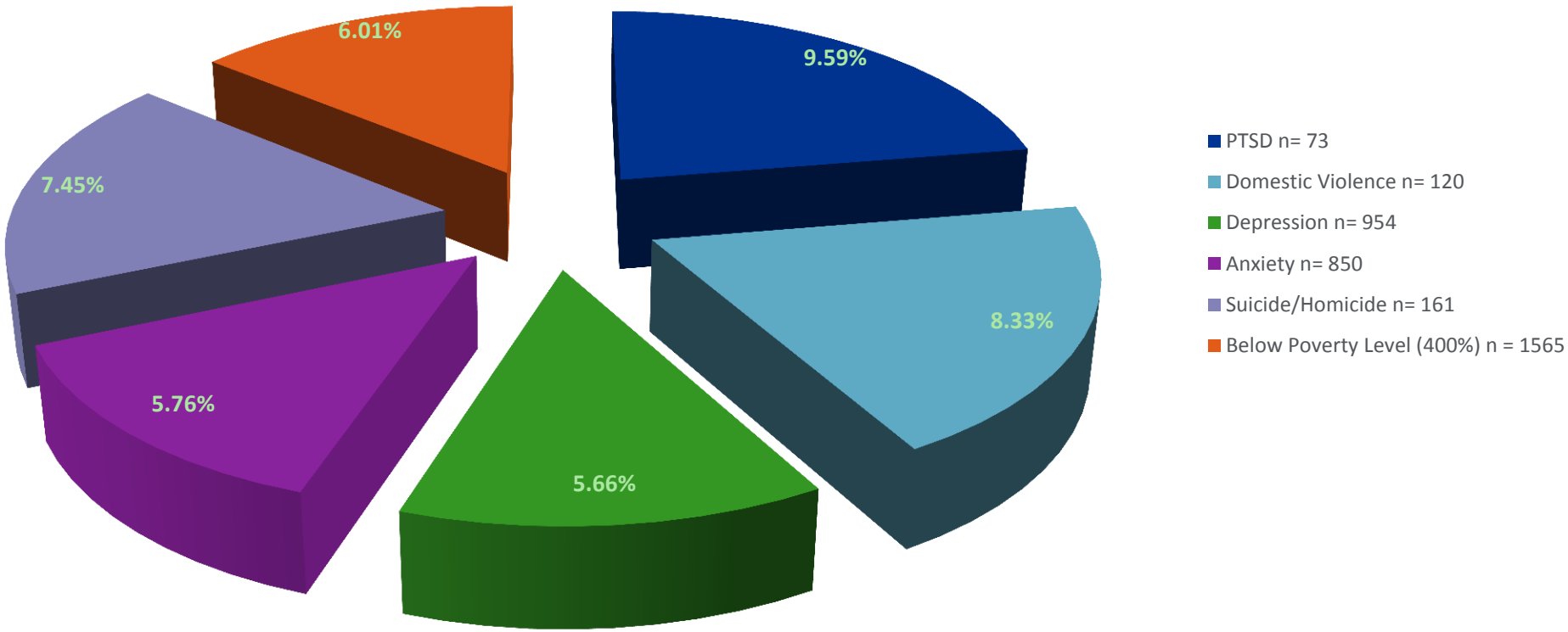
CART Clinic-Wide Viral Load Suppression Rate: 93.18%



Race & Viral Load Suppression

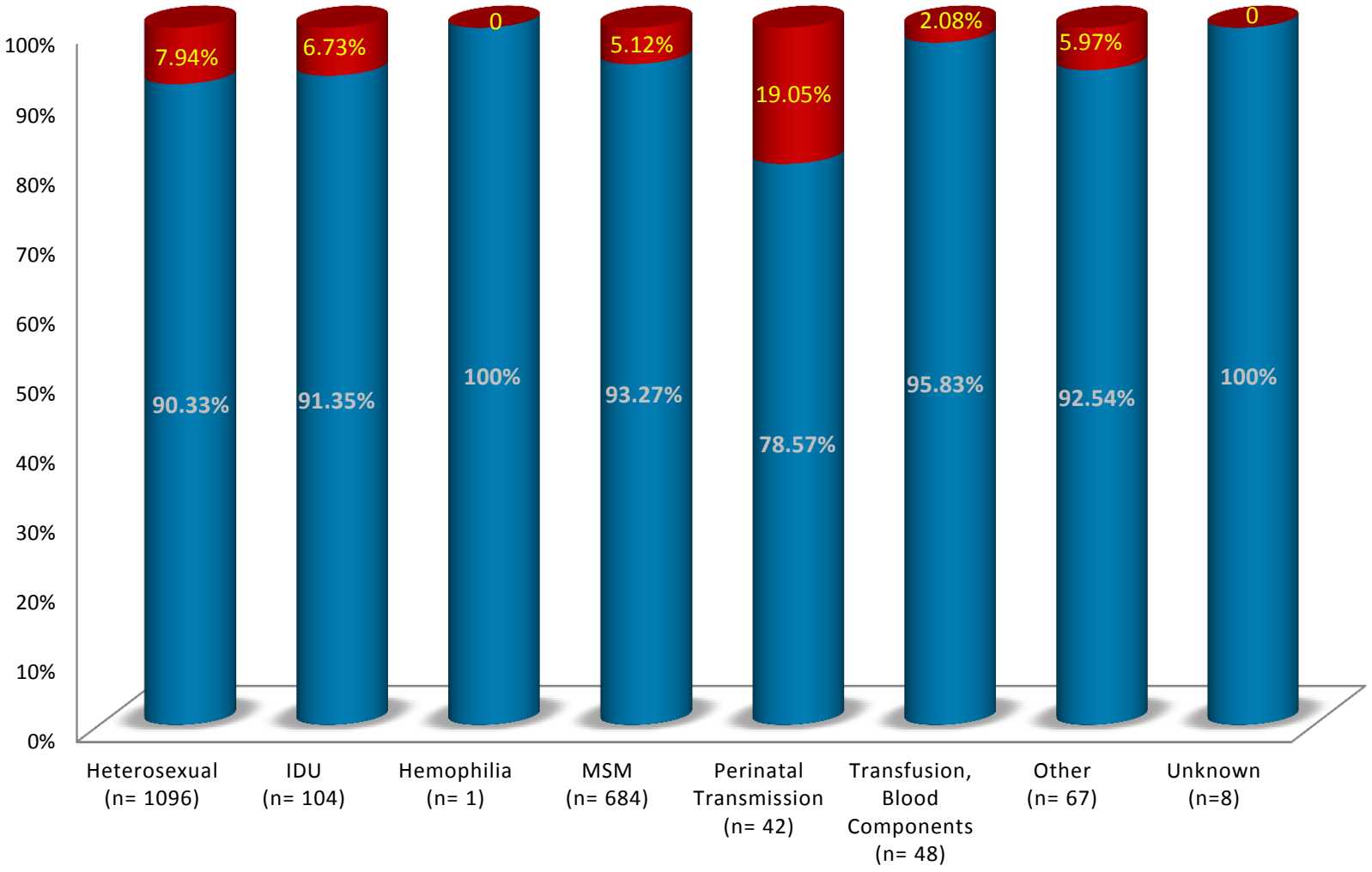


Virally Unsuppressed at Last Visit

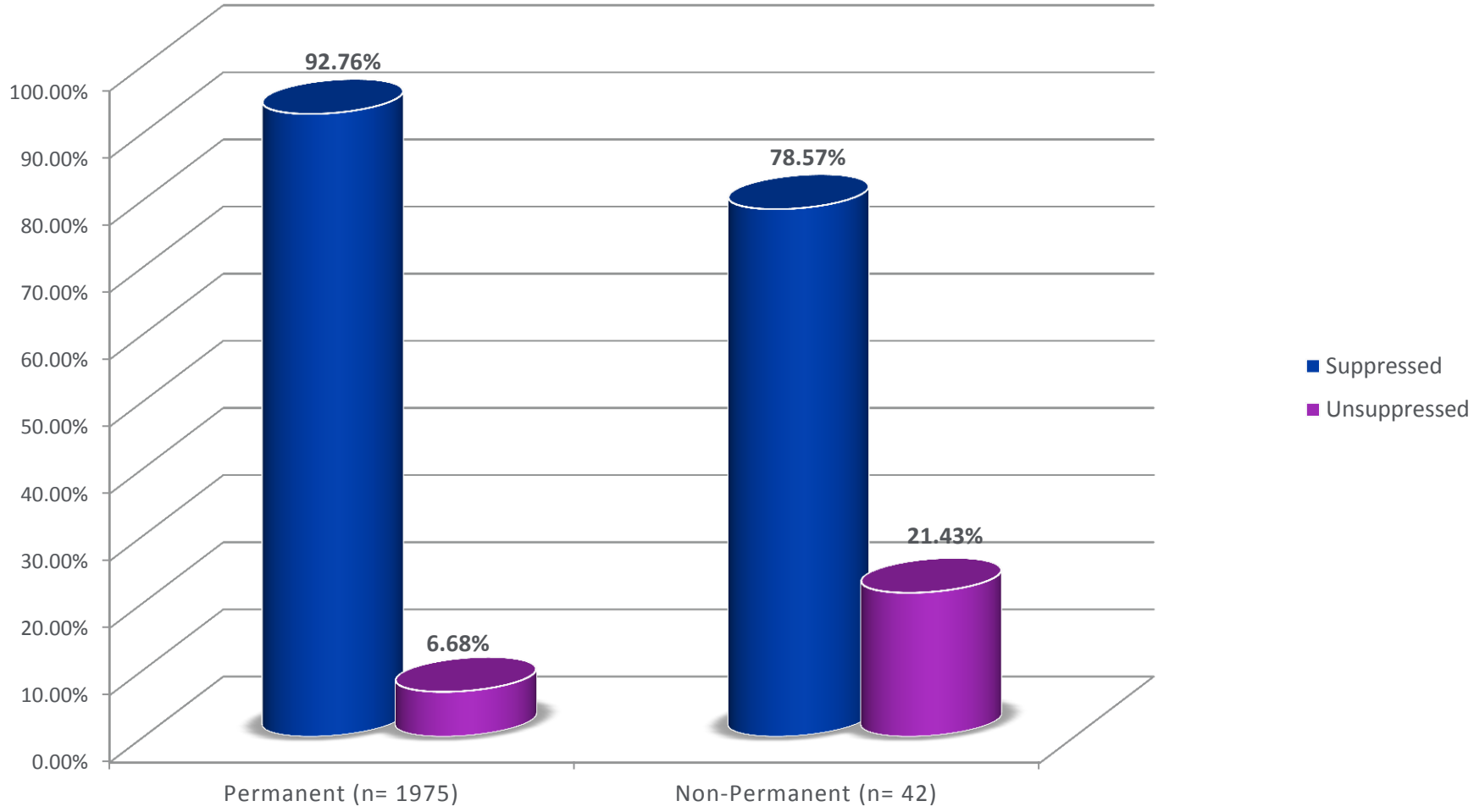


Percentage of patients with current or past history of each subgroup that had a VL >200 at their last visit.

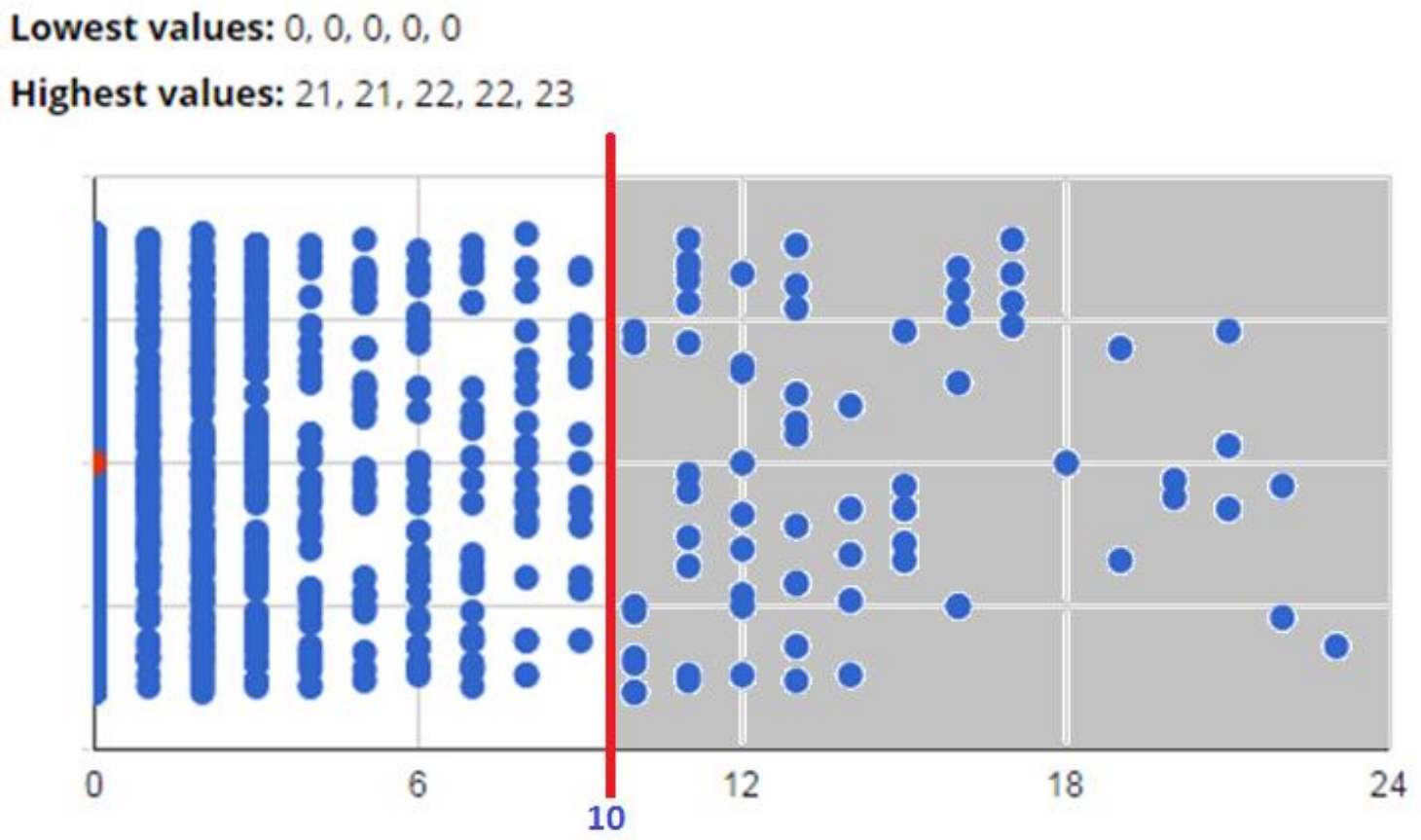
Viral Load Suppression & Risk Factor



Viral Load Suppression and Housing

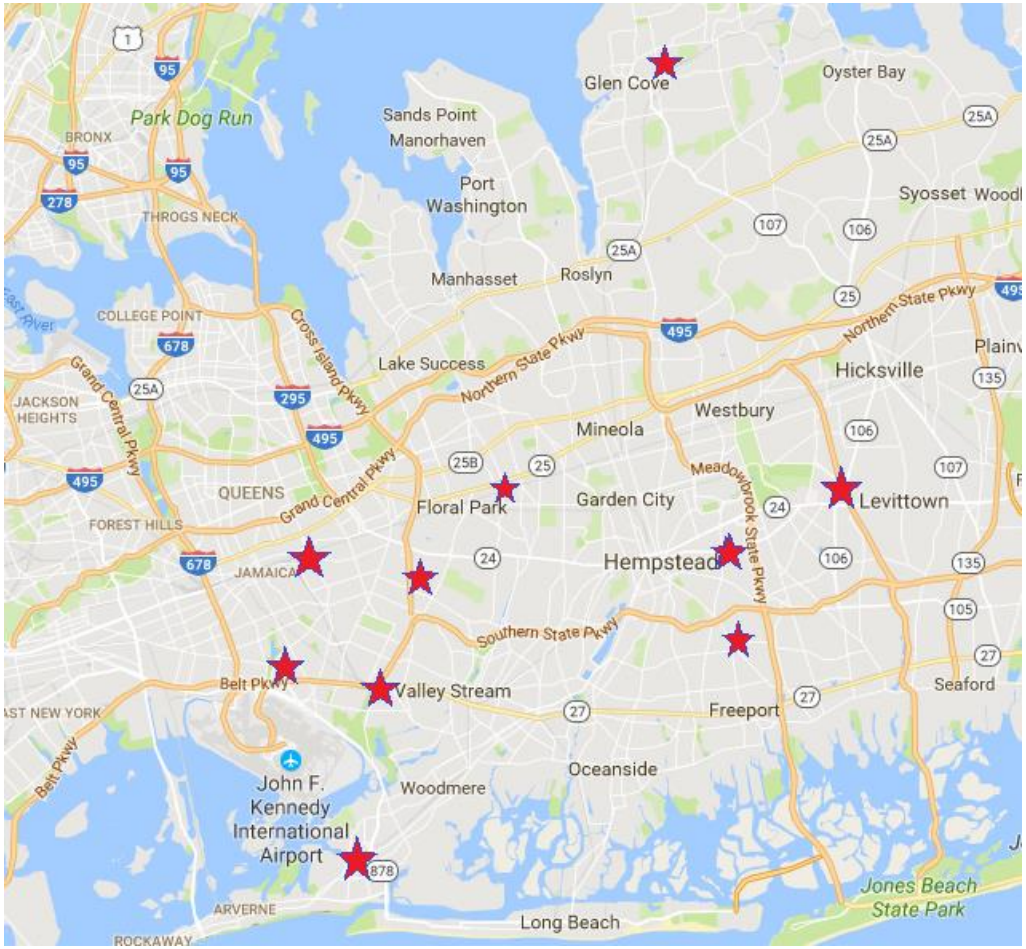


PHQ-9 Screen



15.49% of Patients with a PHQ-9 Score ≥ 10 have a VL >200
4.97% of Patients with a PHQ-9 Score <10 have a VL >200

Initiatives to Target Outcomes



- ✓ Expand retention efforts.
- ✓ Conduct outreach and testing in high incidence locations.
- ✓ Identify and engage POLs from disparately affected communities-disengaged/unaware stakeholders
- ✓ Scale up behavioral, biomedical, and organizational HIV intervention strategies to significantly impact the HIV epidemic and reduce health disparities identified with:
  - Young HIV-infected Adults
  - Race/Ethnicity
  - Patients with history of PTSD/Domestic Violence/Suicide-Homicide
  - Patients below the poverty level and those with unstable housing

Thank You