

Disparities in the progression from recent to sustained viral suppression in HIV-infected people in care: Georgia Medical Monitoring Project, 2009-2014



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Introduction

- The achievement of sustained viral suppression is the goal of HIV treatment.
- Viral suppression is associated with lower morbidity, mortality and decreased risk of HIV transmission.
- Barriers to achieving viral suppression are higher for certain demographic groups, resulting in disparities in viral suppression.

Objectives

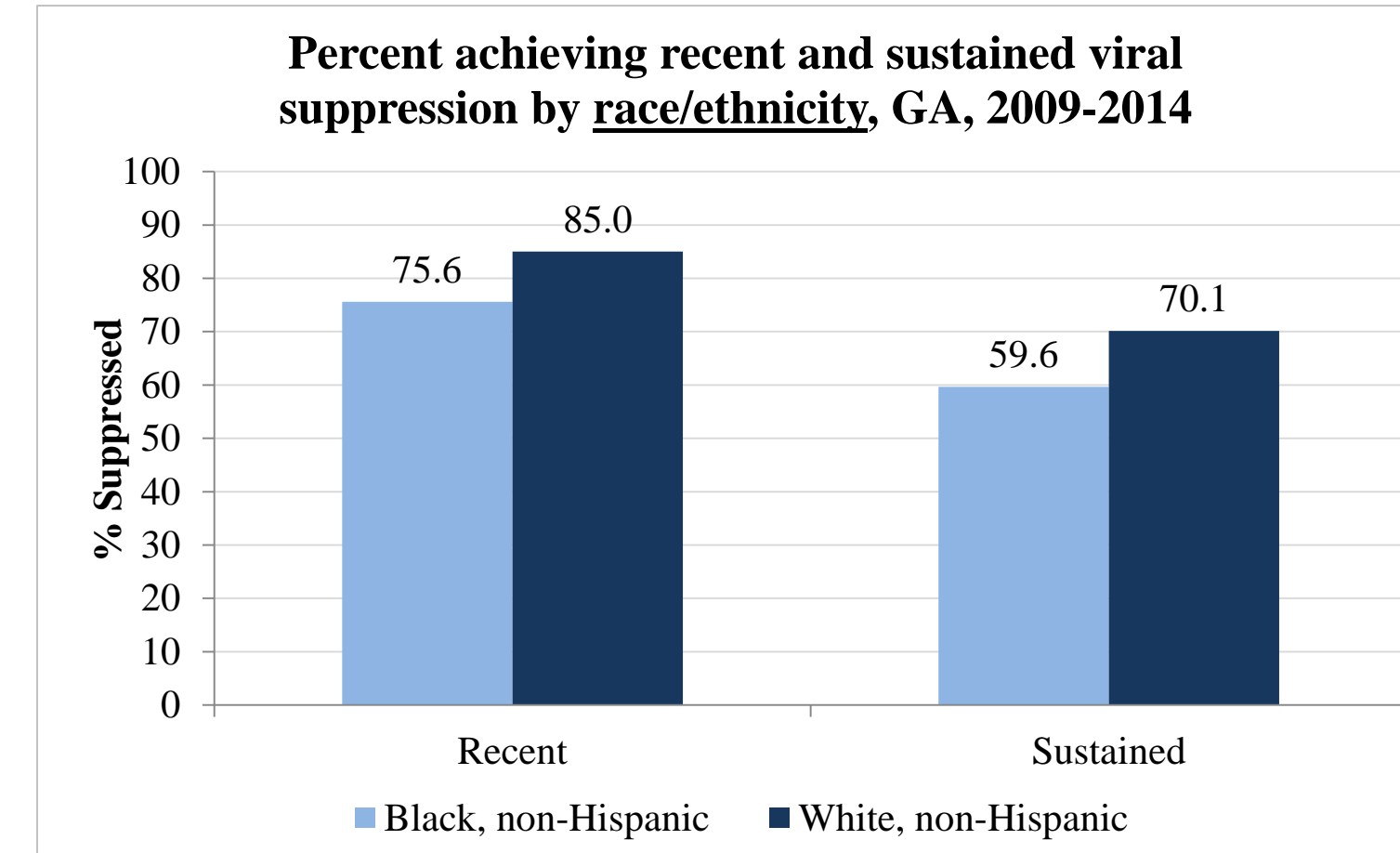
- The objective of this analysis was to compare the magnitude of the disparities seen among those with **recent viral suppression (RVS)**, the standard measure used for the HIV care continuum, and among those with **sustained viral suppression (SVS)**.

Methods

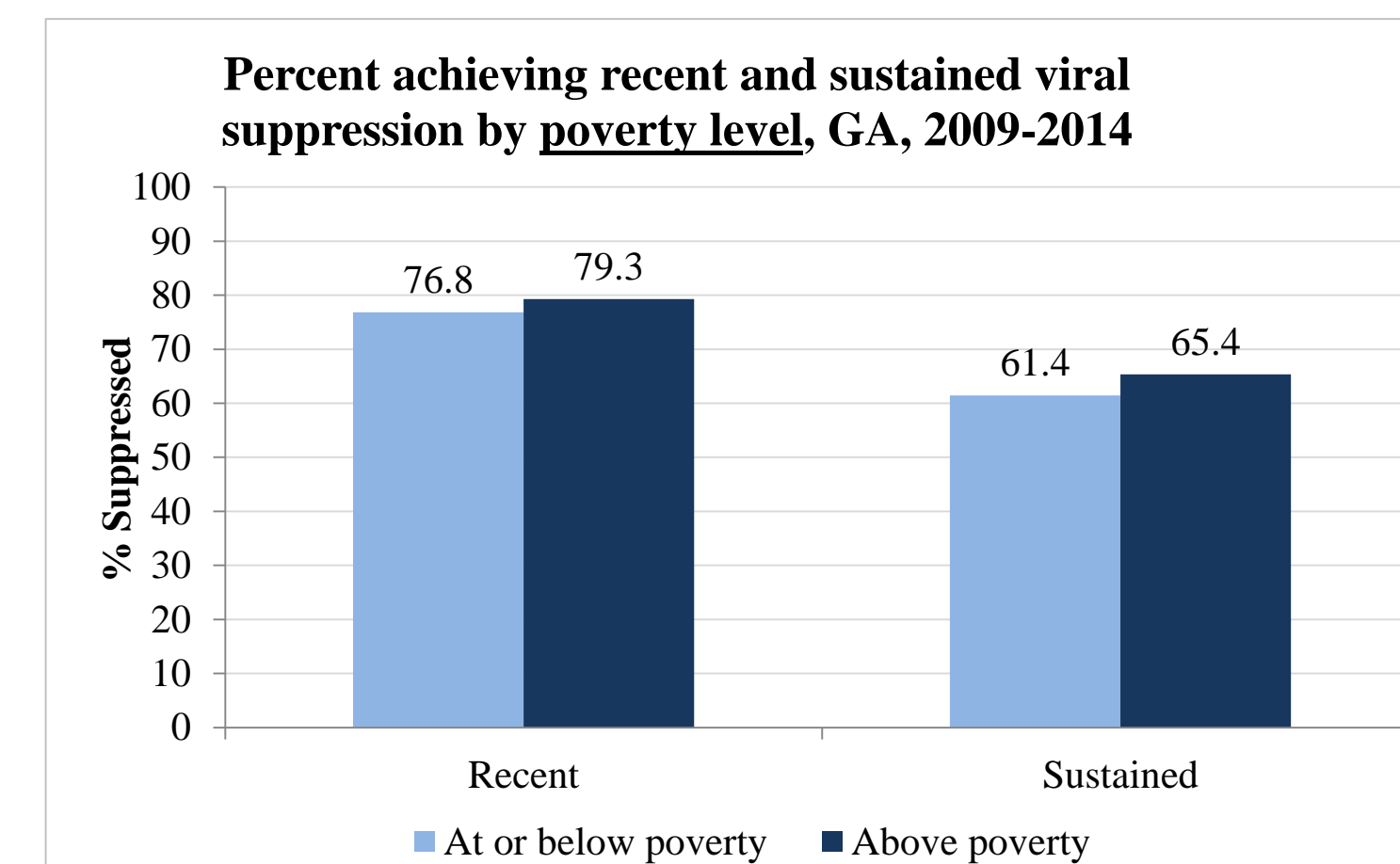
- MMP is a surveillance system that produces nationally representative estimates of behavioral and clinical characteristics of HIV-infected adults receiving medical care in the United States.
- Data were collected from 2009 to 2014 from 988 Georgia Medical Monitoring Project (MMP) respondents.
- RVS was defined as viral load (<200 copies/ml at last test within past 12 months)
- SVS was defined as (<200 copies/ml at all tests within past 12 months).
- Rao-Scott chi-square tests were performed to identify significant bivariate differences in factors associated with RVS and SVS
- Relative disparity (RD), or percent difference, was calculated to evaluate changes in disparities within the group for RVS and SVS.
- Depression was measured using PHQ-8, an eight item patient health questionnaire depression scale.

Results

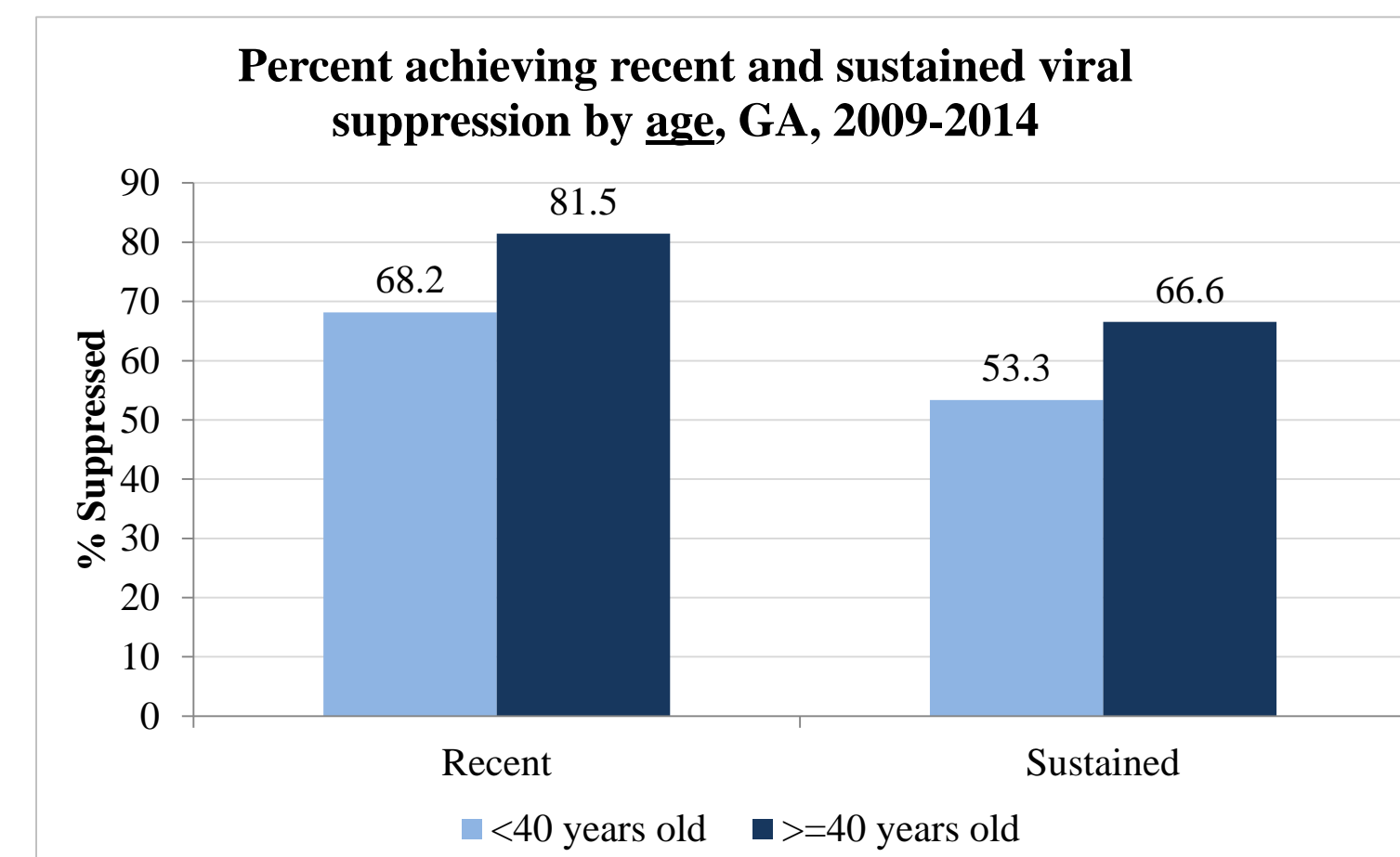
- RVS was achieved in 772 participants (77.6%, 95% CI: 74.2-80.9)
- SVS was achieved in 626 participants (62.7%, 95% CI: 57.8-67.6)



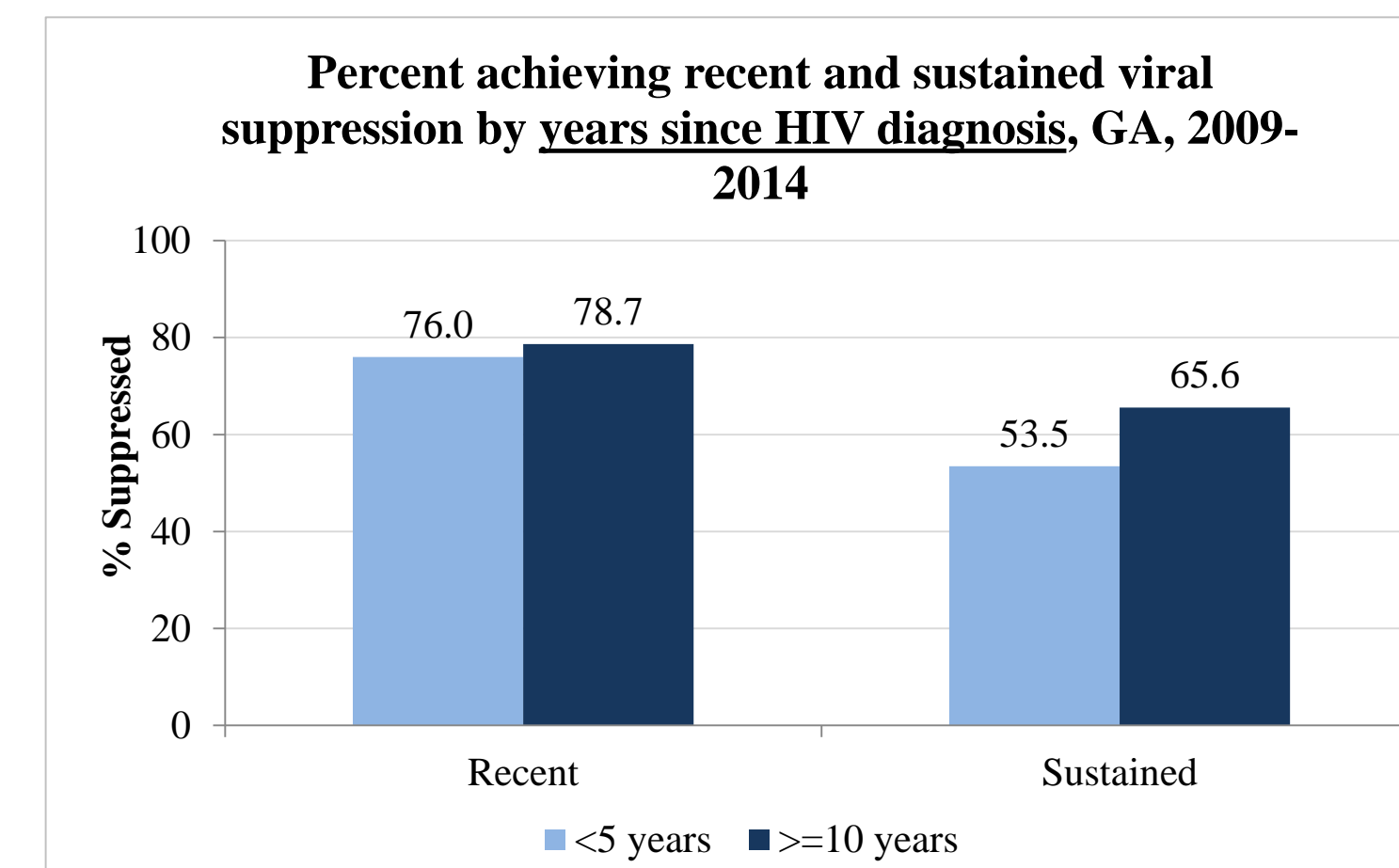
- RVS- RD: Black vs White (ref): 11.1%
- SVS- RD: Black vs White (ref): 14.9%



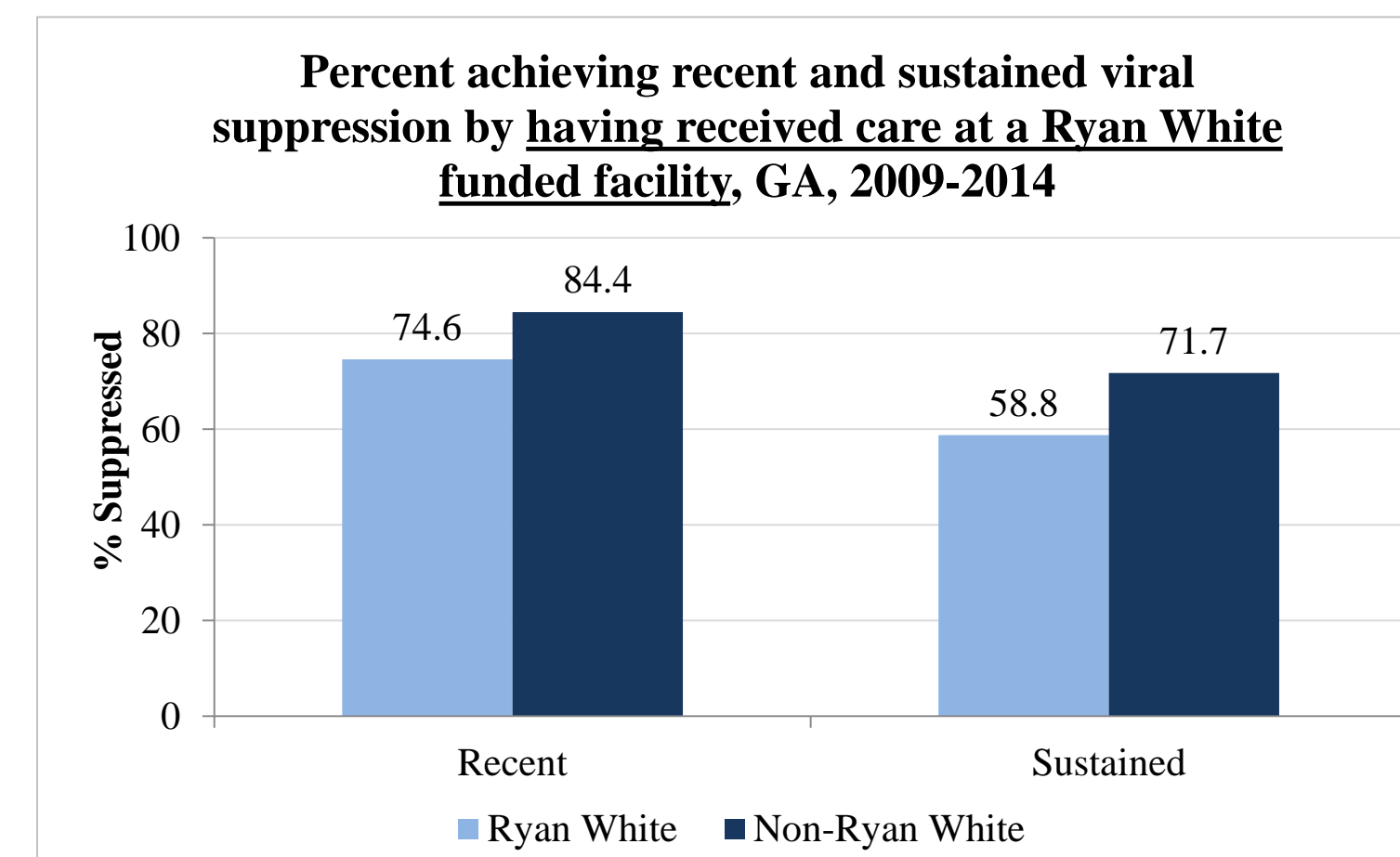
- RVS- RD: at/below vs above (ref): 3.1%
- SVS- RD: at/below vs above (ref): 6.0%



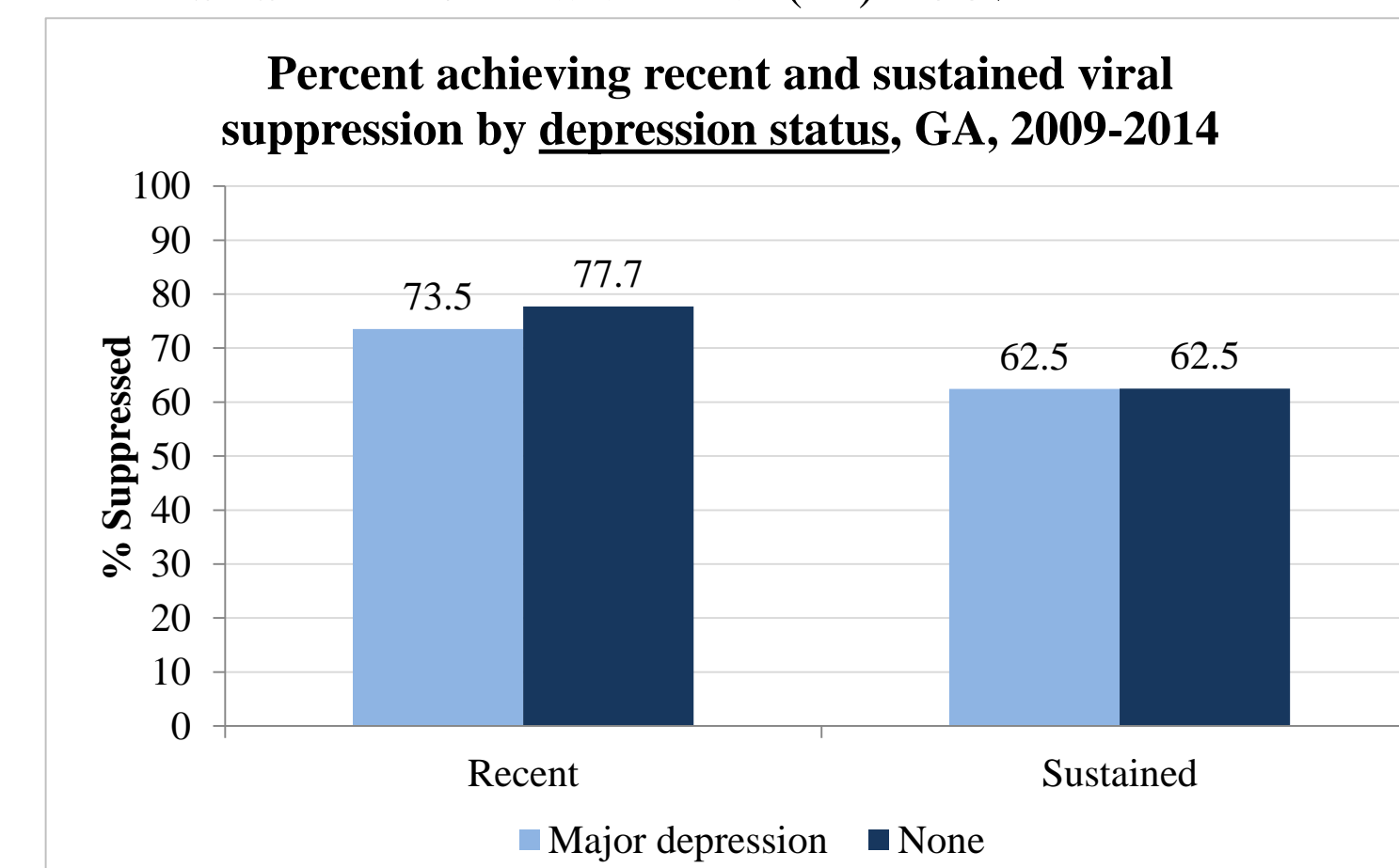
- RVS- RD: <40 vs >= 40 (ref): 16.3%
- SVS- RD: <40 vs >= 40 (ref): 19.9%



- RVS- RD: <5 years vs >=10 years (ref): 3.4%
- SVS- RD: at/below vs above (ref): 18.5%



- RVS- RD: Ryan White vs Non-Ryan White (ref): 11.7%
- SVS- RD: Ryan White vs Non-Ryan White (ref): 18.0%



- RVS- RD: major depression vs none (ref): 3.4%
- SVS- RD: major depression vs none (ref): 0%

Conclusions and Discussions

- Viral suppression disparities are generally larger for the achievement of sustained viral suppression than for recent viral suppression, the measure commonly used for the HIV care continuum.
 - Disparities grew for participants who were Black <40 years old, at or below poverty level, diagnosed with HIV <5 years ago, and received care at a Ryan White funded facility.
- However, the disparity grew smaller for participants scoring as having major depression.
- Relative disparity for characteristics with no or small observed change were: gender, sexual orientation, education level, ART adherence, and MMP cycle year.
- It is essential that these differences are highlighted and addressed. Targeted intervention efforts are needed to improve adherence, retention in care, and ultimately sustained viral suppression.
- These improvements will contribute to reducing disparities in morbidity, mortality, and HIV incidence.

Limitations

- During 2009-2014 MMP only collected information from people in care. The population percentage of those who have achieved recent or sustained viral suppression is smaller.
- Self-reported measures can be affected by recall and desirability biases.

Acknowledgements

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