

HEALTH CONDITIONS, HEALTH SERVICES USE, AND VIRAL SUPPRESSION PATTERNS IN AN HIV SPECIAL NEEDS PLAN

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RESEARCH OBJECTIVE

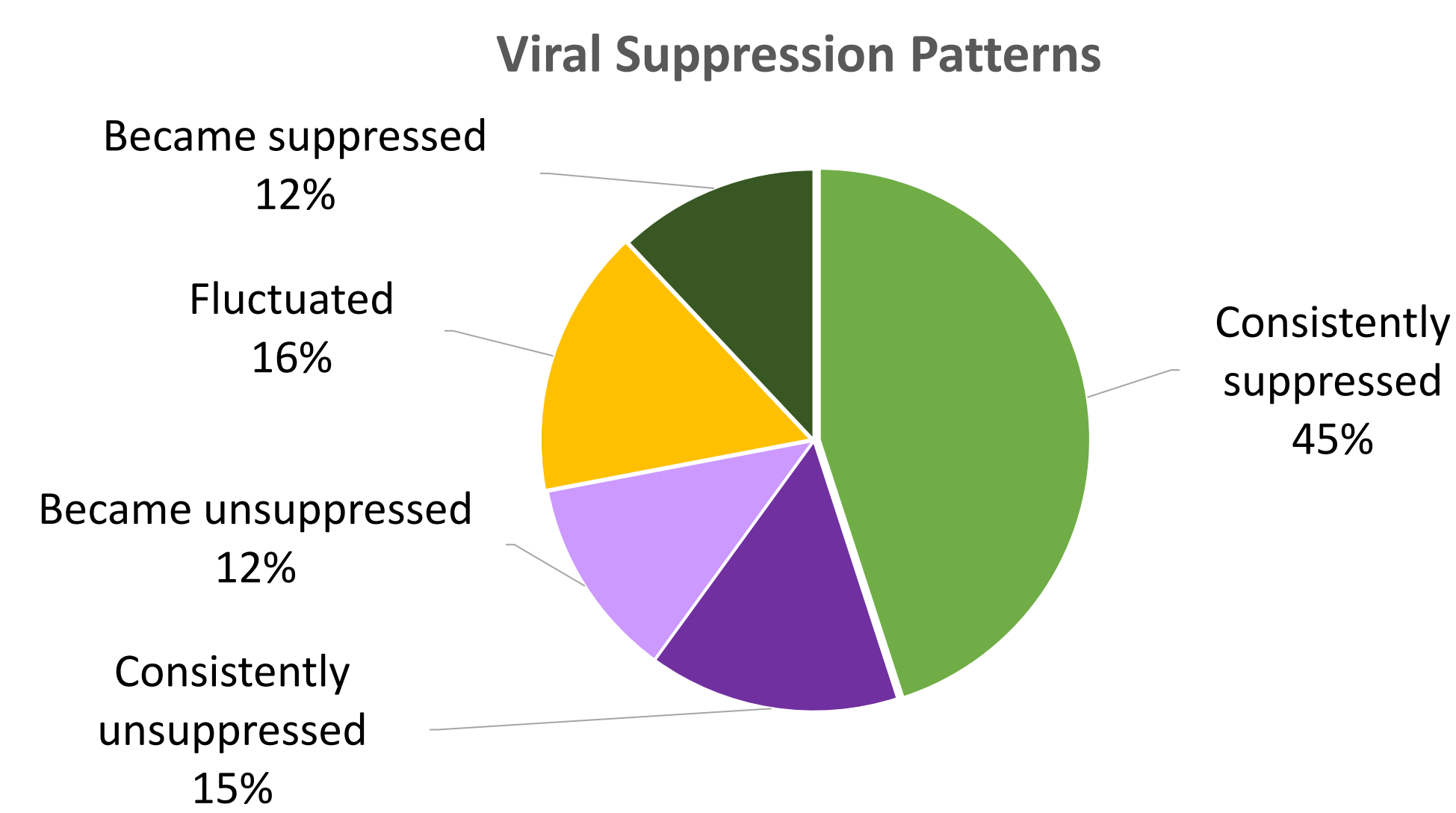
- In 2015, New York State launched its Ending the Epidemic Blueprint, an initiative to end AIDS. Viral suppression is a key part of the effort.
- The purpose of this study was to identify how health conditions and health care use were associated with unsuppressed viral load in a clinical population of people living with HIV.

STUDY DESIGN

- This study involved a retrospective analysis of claims data from members of a Medicaid Special Needs Plan for people living with HIV in New York City.
- We used cluster analysis to classify viral suppression patterns among plan members across a 4-year period. We identified five viral suppression groups: Consistently Suppressed, Became Suppressed, Fluctuated, Became Unsuppressed, and Consistently Unsuppressed.
- We conducted bivariate analyses and used multinomial logistic regression to examine factors associated with these viral suppression patterns.

POPULATION STUDIED

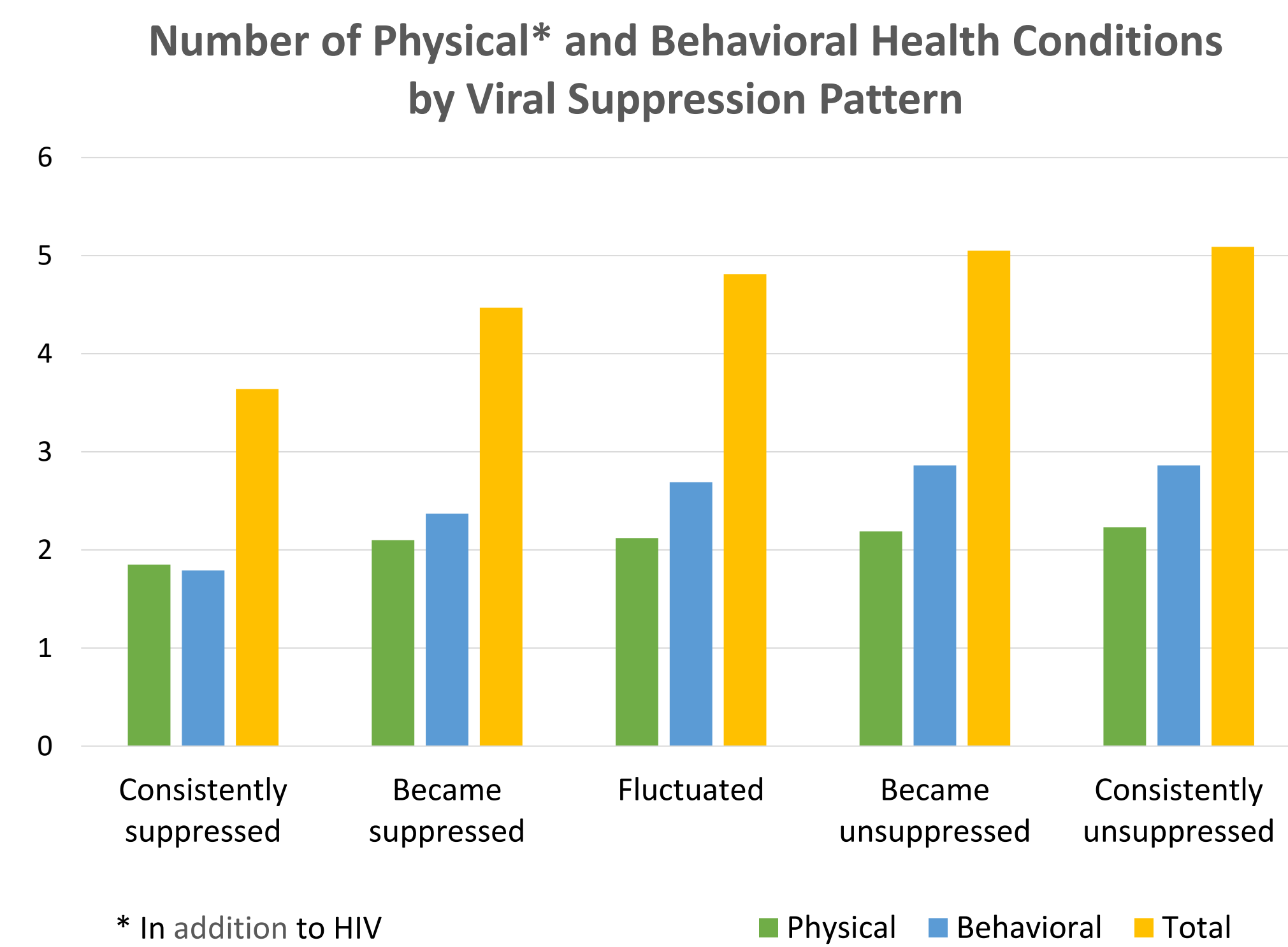
- We used data from adults age 18 or older who had received a diagnosis of HIV and who were continuously enrolled in the Medicaid plan from 2016 through 2019 (N=3,265).
- Viral suppression information for 2,677 was sufficient to classify them into one of the five groups for the period 2016–2019.



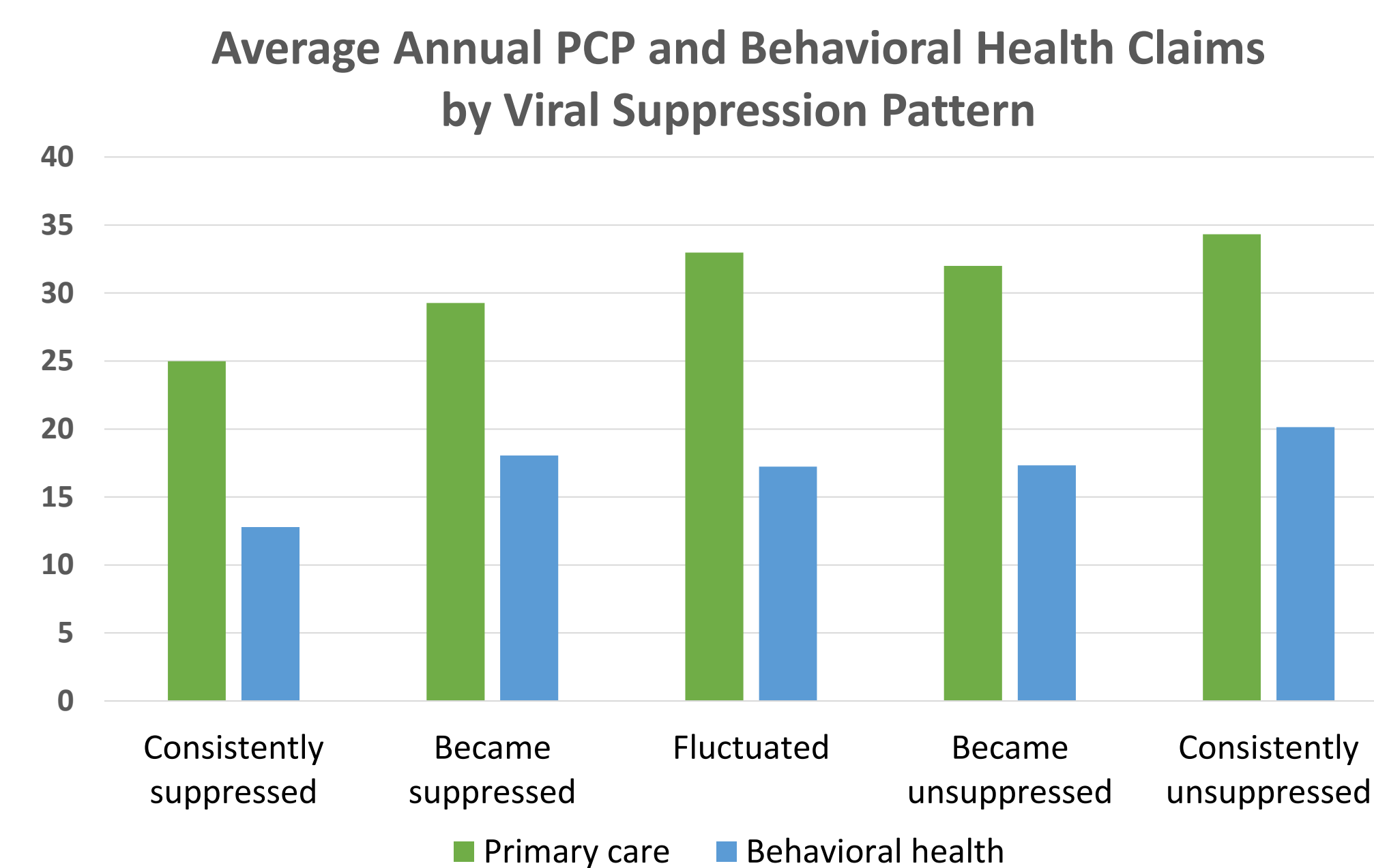
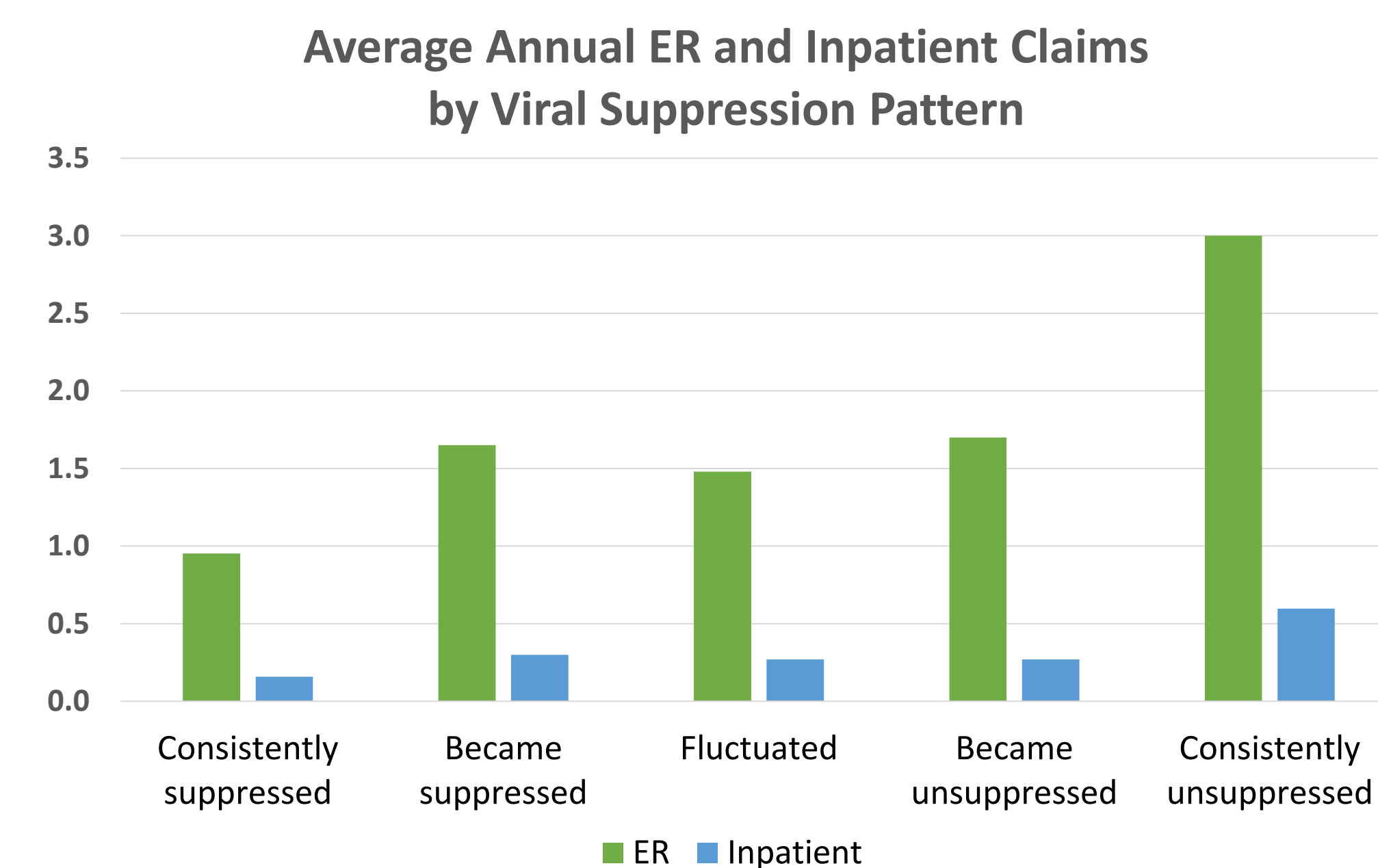
BASELINE DEMOGRAPHICS

Gender identity	Cisgender male	61%
	Cisgender female	32%
	Transgender	7%
Race/ethnicity	Black/African American	53%
	Hispanic/Latino	37%
	Non-Hispanic White	8%
	Age category	
	18–29 years	13%
	30–49 years	59%
	50+ years	29%

PRINCIPAL FINDINGS



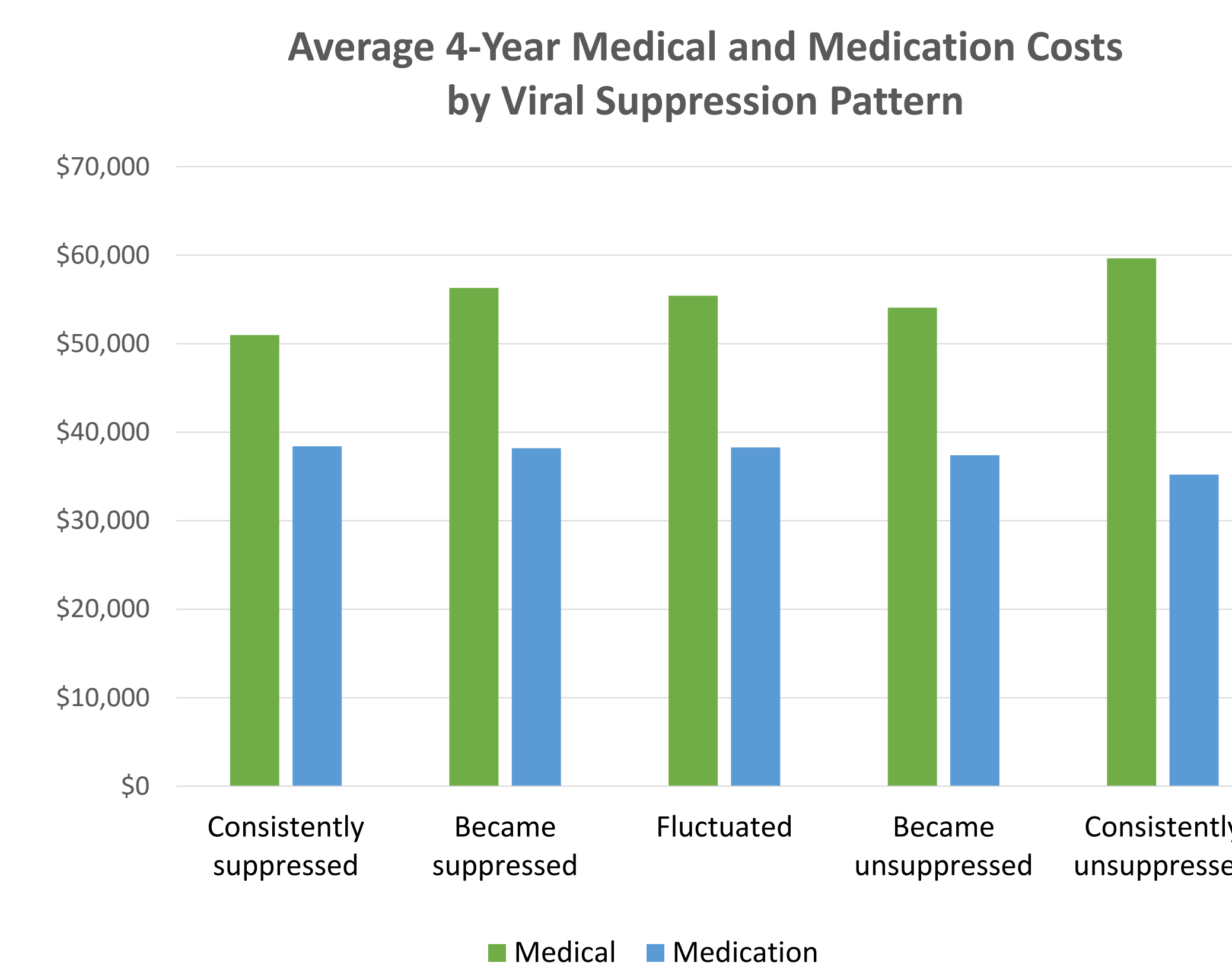
The consistently unsuppressed group generally used the most medical services—not only emergency room visits and inpatient visits, but also primary care and behavioral health care.



The unsuppressed and intermittently suppressed groups had significantly more physical and behavioral health comorbidities, including chronic pain, depression, bipolar disorder, and substance use disorder.

Overall, the consistently suppressed had the lowest medical costs and the consistently unsuppressed had the lowest medication costs.

Combined medical and medication costs over four years did not show significant differences between groups.



REGRESSION RESULTS

Highlights from the multinomial logistic regression analysis:

- Individuals who had a nadir CD4 count below 200 had 10 times the odds of being in the consistently unsuppressed group, and 3 times the odds of being in one of the intermittently suppressed groups, compared with those who had not had a CD4 count below 200.
- Individuals who had a drug or alcohol use disorder had 1.4 to 2 times the odds of being in the intermittently or consistently unsuppressed groups compared with those who did not.
- ER visits were the only form of health care that differed significantly by viral suppression group. For each additional ER visit, the odds of being in the consistently unsuppressed group increased by 3%.
- Those 30 years old and older had 60% lower odds of being in the consistently unsuppressed group compared with those under 30.
- Non-Hispanic Blacks had 3 times the odds, and Hispanics twice the odds, of being in the consistently unsuppressed group compared with non-Hispanic Whites.

POLICY & PRACTICE IMPLICATIONS

- Primary care is not enough. Providers and policymakers should support evidence-based approaches such as case management and peer support, as well as initiatives to address social drivers of health, such as housing stability.
- Ending the HIV epidemic will require improving the effectiveness of behavioral health care for people living with HIV.
- Some people in care may benefit from long-acting injectable antiretroviral medications, which are currently available only to those who have achieved durable viral suppression.

CONCLUSION

- Many struggle with HIV medication adherence and viral suppression even while engaged in care.
- Given the strong associations between viremia and physical and behavioral health multimorbidity, failure to maintain durable viral suppression appears to be part of a syndrome of poor health in this population, accounting for increased use of health services.

ACKNOWLEDGMENTS

These findings were first reported in: Brennan-Ing, M., Kaufman, J. E., Fusaris, E., Correa, A. & Ernst, J., "Identifying Factors Related to Unsuppressed Viral Load among Older People Living with HIV" (2021), report to the AIDS Institute, New York State Department of Health.



This research was funded in part by the AIDS Institute, New York State Department of Health.