

Standardized Viral Suppression Performance

The Ryan White HIV/AIDS Program (RWHAP), administered by the U.S. Department of Health and Human Services Health Resources and Services Administration, provides funding to states, cities, counties, and community organizations to deliver HIV medical care, treatment, and support services for low-income people with HIV. Viral suppression is an important factor in ending the HIV epidemic in the United States. People who receive HIV medical care and who reach and maintain viral suppression can live longer and healthier lives. They also cannot sexually transmit HIV.

RWHAP recipients and providers vary in many ways, including the characteristics of clients they serve. The RWHAP Compass Dashboard uses a standardized viral suppression score to support RWHAP recipients and providers in tracking performance and making like-to-like comparisons among jurisdictions, recipients, and service providers. Each viral suppression score is placed into one of four performance rating categories, referred to as the “Viral Suppression Performance Rating.” This allows users to see differences across organizations and changes over time.

The **RWHAP Compass Dashboard** is an interactive tool that helps users see and compare the reach, impact, and outcomes of the RWHAP. It enables users to explore data, assess trends, and use the information to support planning and decision making.

The **standardized viral suppression performance rating** makes it possible to compare jurisdictions, recipients, and service providers fairly, even when they serve different populations.

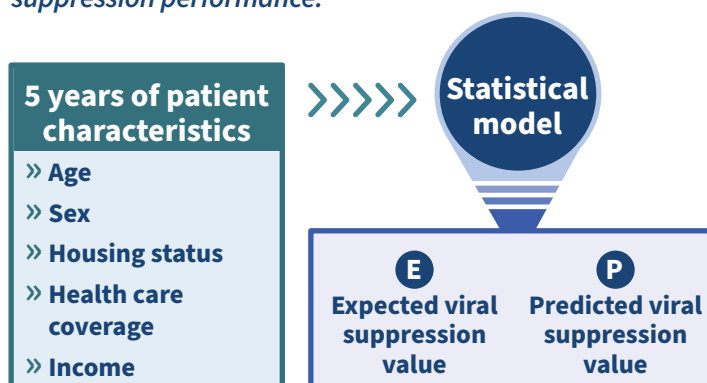
Each organization’s rating is available on the Treatment Outcomes page of the Dashboard.

You can access the RWHAP Compass Dashboard and see your performance rating here:
<https://data.hrsa.gov/topics/hiv-aids/rwhap-compass-dashboard>.

STEP 1 Creating Outcome Values

A statistical model is used to create two types of viral suppression values for each patient.

Using these calculated patient values—rather than actual observed values— to determine performance scores gives more stable and reliable estimates of standardized viral suppression performance.



E The **expected viral suppression value** comes from the statistical model, which uses five years of RWHAP Services Report (RSR) client characteristic data to quantify the estimated effects of patient characteristics on their viral suppression status. (See *Technical Notes: Statistical Model*).

P The **predicted viral suppression value** uses the patient’s expected viral suppression value plus provider- and year-specific factors. (See *Technical Notes: Statistical Model*).

STEP 2

Calculating Standardized Viral Suppression Performance Scores

Using these values, a standardized viral suppression performance score is calculated for each jurisdiction, recipient, and service provider. The score is created by dividing the average predicted value for patients by the average expected value for patients.

P Predicted viral suppression value

E Expected viral suppression value

=

Viral Suppression Score

The performance score is a way to understand how jurisdictions, recipients, and service providers compare to one another and to track improvement over time.

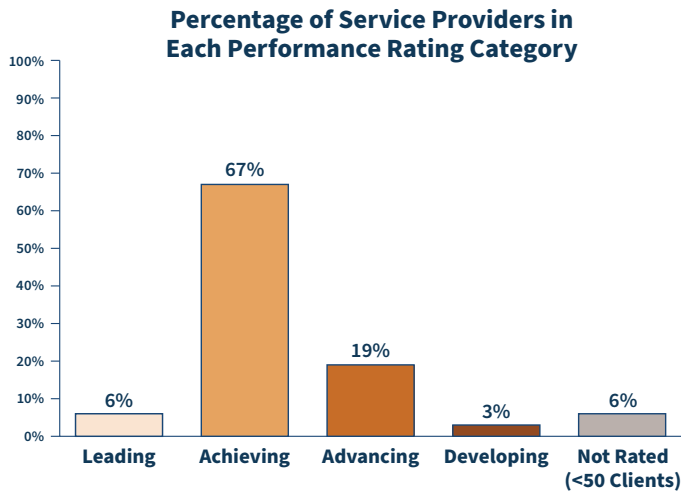
For the RWHAP patient population they serve:

- » Scores **greater than 1.0** indicate performance above expectations.
- » Scores **equal to 1.0** indicate performance at expectations.
- » Scores **less than 1.0** indicate performance below expectations.

STEP 3

Assigning Performance Ratings

Jurisdictions, recipients, and service providers are then placed into four rating categories based on their standardized viral suppression performance score.



Based on 2024 RSR data

The rating categories are created by grouping those with similar scores. Each category is given a rating label to highlight progress and encourage continued improvement for RWHAP patients:

- ✓ **Leading** recognizes jurisdictions and organizations that are setting new standards and inspiring innovation.
- ✓ **Achieving** acknowledges jurisdictions and organizations that are meeting standards and moving toward excellence.
- ✓ **Advancing** indicates jurisdictions and organizations are building momentum and gaining consistency.
- ✓ **Developing** recognizes jurisdictions' and organizations' emerging strengths and potential for growth.

RWHAP-funded organizations with fewer than 50 patients (over the last five years shown in the Dashboard) are placed in a "Not rated" category because there are not enough data to reliably assess their performance.

Technical Notes

The RWHAP Compass Dashboard shows standardized viral suppression performance ratings for individual states and territories, metropolitan areas, grant recipients, and service providers. Standardized viral suppression performance ratings are not produced for specific patient characteristics.

Data used

The standardized viral suppression performance scores—and the ratings based on them—are calculated using demographic and outcome data from the five most recent years of the RSR. These scores include only RWHAP-eligible patients with HIV who had at least one outpatient ambulatory health services (OAHS) visit during the calendar year. Providers are included in the dataset only if they delivered OAHS and had at least one patient with a viral load test. Providers who do not offer OAHS are not assigned a standardized viral suppression performance score and are therefore not placed into any performance rating category. The standardized viral suppression performance scores do not include data from the RWHAP Part B AIDS Drug Assistance Program (ADAP).

Statistical model

The **expected viral suppression value** uses the five most recent years of patient characteristic data that RWHAP recipients and subrecipients submit through the RSR. It is the viral suppression value we would expect for each patient in a given year, accounting for five characteristics: age, sex, housing status, health care coverage, and income. These characteristics were selected using statistical analysis, guidance from technical experts, and previous work by the Centers for Medicare & Medicaid Services.¹

The **predicted viral suppression value** for each patient includes both the expected value plus an adjustment that accounts for how the patient's provider's viral suppression performance compares to the average provider performance year-to-year and across all years.

Using these values—rather than the actual observed value—when calculating the performance score helps reduce year-to-year swings caused by smaller sample sizes. This approach gives more stable and reliable estimates of jurisdiction's, recipient's, and service provider's standardized viral suppression performance.

Performance ratings

Standardized viral suppression performance scores are then sorted into categories using a data-driven method called K-means clustering. This method groups jurisdictions, recipients, and providers with the most similar scores while making sure the differences between categories are as large as possible. Unlike a quintiles approach, which forces an equal number of entities into each category, this method allows category sizes to vary based on the underlying score patterns. This also means that the cutoff points for each category can change slightly each year, depending on how the scores are distributed. These categories (Leading, Achieving, Advancing, Developing, or Not Rated) are referred to as the “Viral Suppression Performance Rating” in the Dashboard.

For additional information or questions regarding the standardized viral suppression performance methodology, please contact us at: RWHAPCompass@mathematica.org.

¹ Krumholz, H.M., Normand, S.L.T., Galusha, D.H., Mattera, J.A., Rich, A.S., Wang Yongfei, Wang Yun. (2010). *Risk-Adjustment Models for AMI and HF 30-Day Mortality Methodology*, prepared for Centers for Medicare & Medicaid Services. Under subcontract #8908-03-02, February 2, 2010.