Disparities in HIV Treatment Initiation, Viral Load Suppression Vary State-to-State

March 19, 2012 By Tim Horn

Some states are lagging behind others in terms of getting people in need of HIV treatment started on medications in a timely fashion, according to new data from a multiple cohort study presented Thursday, March 8, at the 19th Conference on Retroviruses and Opportunistic Infections (CROI) in Seattle. The analysis, reported by David Hanna, a PhD candidate at Johns Hopkins University and his colleagues, also notes disparities in rates of undetectable viral load, with the widest range noted in four western states.

HIV remains a major public health concern in the United States. About 53,000 new infections continue to occur annually, and while deaths due to HIV dropped dramatically after the introduction of potent ARV therapy in the mid-1990s, the decline in death rates has slowed in recent years.

The National HIV/AIDS Strategy (NHAS) for the United States has made it a priority to reduce health disparities among demographic groups, notably women and people of color. However, such disparities may largely depend on geography, given that health care access varies with state policies regarding funding for medical care, prescription drugs and supportive services. Yet few studies have examined interstate disparities in HIV-related health outcomes in the modern-day treatment era. Such data are needed to refine funding streams in ways to help meet National HIV/AIDS Strategy goals.

To further explore whether geography influences NHAS goals, Hanna and his team set out to examine the differences in ARV treatment initiation and viral load suppression by state of residence among those who are at least somewhat engaged in HIV care. One study, reported by the U.S. Centers for Disease Control and Prevention (CDC), in October 2011, has already suggested that geographic disparities exist.

The researchers looked at data from NA-ACCORD, a collaboration of more than 20 cohort studies of people living with HIV in North America. A total of 14 participating cohorts were included in the analysis reported by Hanna's group.

Included in the evaluation were people who had been seen by an HIV care provider participating in one of the 14 cohorts and who were found to be medically eligible for ARV treatment between 2001 and 2007, based on U.S. Department of Health and Human Services recommendations at the

time. In short, treatment-eligible individuals were those with a CD4 count below 350 cells or a documented AIDS-related opportunistic infection.

The researchers looked specifically at the rate of individuals who actually started ARV therapy within six months of being found to be medically eligible for treatment. They also looked for rates of viral load suppression, specifically the percentage of treatment-eligible individuals who started ARV therapy and who managed to get their viral loads below 500 copies after a year.

Thirty-four states were represented overall, but Hanna's group used only 16 for its estimates. In the West, states included in the analysis were California, Colorado, Oregon and Washington. In the South, states analyzed were Alabama, Florida, Maryland, North Carolina and Tennessee, plus the District of Columbia. In the Midwest and Northeast, states included were Illinois, Michigan, Minnesota, New York, Ohio and Pennsylvania.

Roughly 6,500 cohort volunteers met the treatment-eligible criteria during the six-year observation period. All reported data were adjusted to account for differences in age, race/ethnicity, transmission risk, drug or alcohol use, actual CD4 cell counts and viral loads at eligibility and variability between the cohorts.

Rates of ARV therapy initiation within six months of eligibility varied the most in the South, ranging from a low of 31 percent (Tennessee) to a high of 67 percent (North Carolina). Alabama was also above 60 percent. DC was between 50 and 60 percent, Florida was between 40 and 50 percent, and Maryland was about 40 percent.

In the West, the incidence of ARV therapy initiation within six months of eligibility was between 60 and 70 percent in Colorado, between 50 and 60 percent in California and between 40 and 50 percent in Oregon and Washington.

In the Midwest and Northeast, the incidence rates of treatment initiation within six months of medical eligibility were all above 60 percent in Minnesota, New York, Illinois and Pennsylvania. In Ohio, the incidence was slightly above 40 percent. And in Michigan, the incidence was just above 30 percent.

As for the incidence of maintaining viral load suppression below 500 copies after a year among those eligible for HIV treatment and prescribed ARV therapy, rates were highest and lowest in the West: 68 percent (California) and 41 percent (Oregon). In Washington and Colorado, the incidence rates were lower than that documented in California but still above 60 percent.

In Southern states, undetectable viral load incidence rates after a year were between 45 and 60 percent, with the lowest rate in Florida and the highest percentage in Alabama.

In the Northeast and Midwest, rates were between 47 and 62 percent, with the highest rate in Illinois and the lowest in Michigan.

The ARV initiation and viral load suppression data reported by the NA-ACCORD researchers are actually higher than surveillance data reported by other research teams. However, unlike other surveillance data—such as the CDC estimate that only 28 percent of people living with HIV have undetectable viral loads in the United States—the results reported by Hanna's group are from cohorts of people who are at least somewhat engaged in HIV care, whereas those from the CDC

involve all people believed to be living with HIV, including those who have not yet tested positive or connected to medical care.

“Among treatment-eligible persons,” Hanna and his team concluded, “we observed differences by state of residence in timely initiation of therapy and, to a lesser extent, short-term viral load suppression.” The researchers add, however, that the participants included in their analysis may not be representative of all people living with HIV in the United States.

“Further assessment of state-level barriers, in addition to individual and clinic-based factors, to treatment initiation may help to inform the strategy to achieve NHAS goals.”
