Recent clinical advances have made HIV/AIDS a highly treatable disease. Appropriate medical care can prolong the lives of HIV-infected individuals and prevent unnecessary and potentially costly complications. However, not all HIV-infected individuals have sufficient access to medical care. Although previous research has suggested that some segments of the HIV-infected population encounter serious difficulties in accessing care, the HIV Cost and Services Utilization Study (HCSUS) is the first study to demonstrate systemic, socioeconomic differences in access to HIV care across all regions of America.

Access-to-Care Problems Are Common
Using a nationally representative sample of persons receiving treatment for HIV infection, the HCSUS found that, as of early 1996, almost three-quarters of those surveyed (71 percent) were out of compliance with at least one of the six access-to-care measures used in the study. For example, 15 percent had fewer than two outpatient visits during a 6-month period, the minimum number necessary to provide reasonable monitoring of disease progress and treatment response. Over a 6-month period, 30 percent of acutely ill individuals did not receive medication to prevent Pneumocystis carinii pneumonia, a common opportunistic infection among AIDS patients. And more than a year after the introduction of two new and more effective types of HIV drugs (protease inhibitors and non-nucleoside reverse transcriptase inhibitors), 41 percent of eligible patients still had not received a trial of either one.

Certain Populations Receive Sub-Optimal Care
Even after adjusting for degree of illness, certain populations showed statistically significant differences in access to care. African Americans and Hispanics, for instance, received fewer preventive treatments and less outpatient care than did whites. Similarly, those who lacked health insurance or who were covered by Medicaid experienced less-desirable patterns of HIV care than did those who possessed private insurance. (See accompanying graphs for further details.) Although being female was also associated with inferior patterns of medical care, this outcome appeared to be related more to age, race/ethnicity, and insurance status than to gender.

Education and income also showed significant effects on access to care. For example, 71 percent of eligible college graduates had received treatment with the new HIV drugs by the end of 1996, compared with only 51 percent of those who had not completed high school. Similar disparities in access to care were found across income ranges, with those in the lowest income group having the least favorable patterns of care.

Insurance Status Strongly Influences Access to Care
A considerable portion—but by no means all—of the racial and ethnic variations in access to care can be explained by insurance status. Many of the variations that exist across educational and income levels appear to be related to insurance status as well, with those who lack health insurance faring the worst on almost all access-to-care measures. Surprisingly, those covered by Medicaid also showed deficient patterns of care when compared with those who possess private insurance. Medicaid recipients did, however, have higher rates of access than the uninsured.
**Access to Care is Gradually Improving**

During late 1997 and early 1998, the HCSUS participants were re-surveyed to determine whether there had been any changes in access to care. The results showed mixed progress. For example, the percentage of individuals who were out of compliance with at least one access-to-care measure decreased significantly, from 71 to 54 percent, as did the proportion of individuals who had not received the new HIV drugs, from 41 to 15 percent. However, the percentage of individuals who did not receive pneumonia prophylaxis declined only slightly (from 30 to 26 percent), while the proportion of individuals with fewer than two outpatient visits per 6-month period remained virtually unchanged. Although the magnitude of the racial/ethnic and insurance-status disparities also diminished during the 15-month HCSUS follow-up period, particularly in terms of access to new anti-HIV drugs, disenfranchised groups overall remained less likely to obtain ongoing, effective care.

**Public Health Implications**

Despite substantial outreach efforts and gradual improvement over time, widespread disparities in care still exist among the HIV-infected population. Disadvantaged individuals have the least access; those who are relatively advantaged—that is, those who are white, privately insured, college-educated, and financially secure—have the greatest access to HIV care.

Up-to-date treatment offers the best prospect for survival for those infected with HIV. Although the differences in access to care among various demographic groups appear to be narrowing, any delay in obtaining new therapies places HIV-infected persons at risk of serious complications or death.

The HCSUS findings highlight a socioeconomic chasm in America's health care system, one that probably exists in the care of other chronic illnesses as well. If we wish to prolong and enhance the lives of those infected with HIV, we must use this information to develop strategies to improve their access to medically recommended care. Although improved access will increase costs in the short run, in the long run it is likely to result in net savings by avoiding hospitalizations and emergency department visits, by preventing complications, and by reducing the costs of lost productivity due to HIV infection.

The methodology and findings of this work are documented in Shapiro MF, Morton SC, McCaffrey DF, et al. 1999. "Variations in the Care of HIV-Infected Adults in the United States." Journal of the American Medical Association 281:2305-2315.

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**Persons of color experience greater difficulties accessing HIV care...**

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<tr>
<th></th>
<th>African American</th>
<th>Hispanic</th>
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<td>No treatment with new HIV drugs before 12/31/96</td>
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...as do those who lack insurance or who are on Medicaid

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The HIV Cost and Services Utilization Study is being conducted by a consortium of private and public institutions under cooperative agreement U-01HS05878 between RAND and the Agency for Healthcare Research and Quality (AHRQ), formerly the Agency for Health Care Policy and Research. Collaborating funders include the Health Services Resources Administration, the National Institute of Mental Health, the National Institute on Drug Abuse, and the National Institutes of Health Office of Research on Minority Health through the National Institute of Dental Research, the Robert Wood Johnson Foundation, Merck and Company, Glaxo-Wellcome, Quest Diagnostics, Hoffmann-LaRoche, the National Institute on Aging, the National Institute of Allergy and Infectious Diseases, and the Office of the Assistant Secretary for Planning and Evaluation of the U.S. Department of Health and Human Services. Collaborating research institutions include the National Opinion Research Center, RAND Survey Research Group, Project Hope, University of California Los Angeles and San Diego, the Veterans Affairs San Diego Healthcare System, Charles R. Drew University, Brown University, University of Rochester, Jefferson Medical College, Harvard University, and the VA Center for the Study of Healthcare Provider Behavior. Additional information about HCSUS can be found on the World Wide Web at http://www.rand.org/organisation/health/hcsus/.

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