SASI Update: The Continuing HIV Crisis in the US South

Duke Center for Health Policy and Inequalities Research

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Introduction

Data from the Centers for Disease Control and Prevention (CDC) regarding new HIV diagnoses in 2009, summarized in a prior Southern HIV/AIDS Strategy Initiative (SASI) report,\(^1\) indicated that the South\(^1\) had the highest HIV diagnosis rate of any US region.\(^2\) In 2009, half of new HIV diagnoses reported (which includes any new HIV diagnoses regardless of stage of HIV disease) were located in the Southern US, while the Southern region accounted for only 37% of the US population.\(^2,3\)

A subset of Southern states is particularly affected by HIV disease and shares characteristics such as overall poorer health, high poverty rates, an insufficient supply of medical care providers and a cultural climate that likely contributes to the spread of HIV.\(^1,4,5\) These states include Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee and East Texas. Henceforth these states will be referred to as the “targeted states.” The targeted states also share a similar heritage that includes slavery, strong rural and agrarian elements and an agricultural and economic base in cotton.\(^6\) HIV and other STDS disproportionately affect individuals in the targeted states and the states share similarities in HIV-related outcomes including the highest HIV case fatality rates in the US.\(^7\) Epidemiologic data from 2009 indicated that the targeted states area had the highest new HIV diagnosis rate of any region.\(^2\) Furthermore, eight of the 10 states with the highest HIV diagnosis rates were targeted Southern states.\(^2\) Thirty-five percent of new HIV diagnoses were in the targeted states while this region accounts for only 22% of the US population.\(^2,8\)

This report examines HIV epidemiology in the South, with a particular focus on the targeted Southern states, using updated CDC HIV surveillance data from 2010 and comparing this information to the SASI report on HIV in the South, which used 2009 HIV surveillance data. This report also examines funding for HIV care in the US in 2010 and compares this data to HIV care funding information from prior years.\(^1\) Documenting the HIV epidemic in the US South is a critical and necessary step in the process of adequately addressing the epidemic in this region.

HIV/AIDS Epidemiology

HIV/AIDS Diagnosis Rates 2010

CDC data from 2010 indicate that consistent with 2009, the targeted states had the highest new diagnosis rates (23.8 per 100,000 population) in the US, followed by the Northeast (19.3 per 100,000 population), the South without the targeted states (17.2 per 100,000 population), the West (13.0 per 100,000 population), and the Midwest (9.3 per 100,000 population) (Table 1).\(^9\) Eight of the 10 states with the highest HIV diagnosis rates were in the South: 7 of these were targeted states. Similar to 2009, just under half (48%) of new HIV diagnoses resided in the South, while the South contains only 37% of the population.\(^3,9\) Thirty-two percent of new HIV diagnoses were in the targeted states.

For AIDS diagnosis rates, the Northeast region leads the nation (14.1 per 100,000 population), with the targeted states only slightly lower (13.8 per 100,000 population),

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\(^1\) The Census Bureau defines the South as including Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Oklahoma, North Carolina, South Carolina, Tennessee, Texas, Virginia, West Virginia.
followed by the South without the targeted states (11.3 per 100,000 population), the West (8.7 per 100,000 population), and the Midwest (6.2 per 100,000 population). Seven of the states/district with the highest AIDS diagnosis rates were in the South. Four were targeted states (FL, LA, MS, SC). These four states were also among the states with the highest AIDS diagnosis rates in 2009. Georgia was among the ten highest AIDS diagnosis rates in 2009 but not in 2010.

In 2010, 9 of the 10 metropolitan areas with the highest HIV diagnosis rates were in the targeted states. These metropolitan areas ranged from very large areas, such as Miami FL, to mid-size areas such as Jackson, MS. In addition, 9 of the 10 metropolitan areas with the highest AIDS diagnosis rates were in the South; 7 were in targeted states. The findings regarding metropolitan areas in 2010 are consistent with those reported in 2009.

Figure 1: New HIV Diagnosis Rate in 2010

HIV/AIDS Prevalence Rates, 2010

In year end 2009, Southern states accounted for 6 of the 10 states with the highest rates of people living with HIV (also referred to as HIV prevalence rates) in the US (FL, GA, LA, DE, SC, MS). The Northeast leads the nation in HIV prevalence followed by the targeted states, the South without the targeted states, the West and the Midwest (Table 1). AIDS prevalence is also high in the South, as Southern states/DC represented 6 of the 10 areas with the highest AIDS prevalence rates (DC, MD, FL, GA, DE, LA) at year end 2009. Three of these states are targeted states. Similar to HIV prevalence, the Northeast region leads the nation in AIDS prevalence while the Southern region has the second highest AIDS prevalence rate.
HIV prevalence data from metropolitan areas at year end 2009 indicate that 8 of the 10 metropolitan areas with the highest HIV prevalence were in the South (all were in targeted states) and 6 of the 10 metropolitan areas with the highest AIDS prevalence were in the South; 4 were in targeted states. Trends for HIV and AIDS prevalence in states and metropolitan areas for 2010 were consistent with those for year end 2008.

Table 1: HIV/AIDS Epidemiology 2010

<table>
<thead>
<tr>
<th></th>
<th>Targeted States</th>
<th>South</th>
<th>South w/o targeted states</th>
<th>Northeast</th>
<th>Midwest</th>
<th>West</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV Diagnosis Rate*</td>
<td>23.4</td>
<td>20.9</td>
<td>17.2</td>
<td>19.3</td>
<td>9.3</td>
<td>13.0</td>
<td>16.2</td>
</tr>
<tr>
<td>AIDS Diagnosis Rate</td>
<td>13.8</td>
<td>12.9</td>
<td>11.3</td>
<td>14.1</td>
<td>6.2</td>
<td>8.7</td>
<td>10.7</td>
</tr>
<tr>
<td>HIV Prevalence Rate**</td>
<td>346.7</td>
<td>312.9</td>
<td>261.3</td>
<td>412.3</td>
<td>146.4</td>
<td>220.7</td>
<td>273.0</td>
</tr>
<tr>
<td>(year end 2009)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIDS Prevalence Rate^#</td>
<td>169.3</td>
<td>167.4</td>
<td>161.6</td>
<td>248.4</td>
<td>76.9</td>
<td>132.8</td>
<td>154.2</td>
</tr>
<tr>
<td>(year end 2009)</td>
<td></td>
<td></td>
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</tbody>
</table>

*For the states without CDC estimated new HIV diagnoses, the raw number of diagnoses reported was included in the regional calculations.
** For the states without CDC estimated HIV prevalence, the raw prevalence numbers reported were included in the regional calculations.
^Includes the entire state of Texas in calculations.
#Includes adolescents and adults only.

Funding for HIV Care

**Ryan White Funding**

The Ryan White Program provides medical care and support services to individuals with HIV who have no or limited insurance coverage and meet the financial qualifications of the Ryan White Program in their geographic area. Reports from the General Accounting Office (GAO) and Institute of Medicine (IOM) in 2005 and 2004 respectively indicated that Southern states received less Ryan White funding per AIDS case than other states, particularly in the Deep South (AL, GA, LA, MS, NC, SC). For example, in 2004, on average, the Deep South states received $3,990 per AIDS case, the remaining Southern states received $4,258 and the U.S. average without the Deep South states was $4,529. Examination of Ryan White funding data from 2009 and 2010 identified a narrowing of the gap in Ryan White per capita funding by region. In 2010, the Southern region had an
average of $2,488 per person living with HIV ($2,476 for the targeted states) while the US average was $2,555 per person living with HIV (Table 2).\(^{13}\)

Table 2: HIV Care and Prevention Funding

<table>
<thead>
<tr>
<th>HIV Care/Prevention Funding Program</th>
<th>Targeted States</th>
<th>South</th>
<th>South w/o targeted states</th>
<th>Northeast</th>
<th>Midwest</th>
<th>West</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryan White Funds*^ (2010)</td>
<td>2476.4</td>
<td>2488.8</td>
<td>2530.6</td>
<td>2659.5</td>
<td>2463.6</td>
<td>2603.1</td>
<td>2554.7</td>
</tr>
<tr>
<td>CDC^</td>
<td>523.6</td>
<td>588.3</td>
<td>805.9</td>
<td>707.6</td>
<td>703.6</td>
<td>741.3</td>
<td>663.1</td>
</tr>
<tr>
<td>HOPWA^</td>
<td>332.3</td>
<td>346.6</td>
<td>394.5</td>
<td>417.5</td>
<td>231.1</td>
<td>303.1</td>
<td>344.3</td>
</tr>
<tr>
<td>ADAP federal only^# (2011)</td>
<td>1106.5</td>
<td>1118.5</td>
<td>1158.6</td>
<td>1037.4</td>
<td>1051.3</td>
<td>1119.2</td>
<td>1088.8</td>
</tr>
<tr>
<td>ADAP state only^ (2011)</td>
<td>357.3</td>
<td>293.5</td>
<td>79.0</td>
<td>278.0</td>
<td>323.5</td>
<td>668.1</td>
<td>363.5</td>
</tr>
<tr>
<td>Medicaid Spending/per beneficiary (2009)</td>
<td>18867.2</td>
<td>20808.1</td>
<td>27065.1</td>
<td>35964.8</td>
<td>21710.8</td>
<td>20254.6</td>
<td>26225.6</td>
</tr>
<tr>
<td>Medicaid % PLWH covered (2009)</td>
<td>23.1</td>
<td>23.3</td>
<td>23.9</td>
<td>34.2</td>
<td>27.2</td>
<td>21.8</td>
<td>26.5</td>
</tr>
</tbody>
</table>

*Includes all categories of Ryan White funding
^Spending per individual living with HIV in that state. For the 4 states without estimated CDC HIV prevalence data the raw prevalence data for the state was used. Includes all of Texas. Source: Kaiser State Health Facts
^Includes ADAP funds from Part B Base, Part B ADAP Supplemental, Part B ADAP Earmark, Part A and ADAP Emergency

Medicaid

Medicaid funding constitutes the majority (51%) of health care spending for individuals with HIV.\(^{14}\) An analysis of data on Medicaid spending for HIV care in 2009 (the most recently reported year) revealed that the Southern region had a lower proportion of individuals with HIV enrolled in Medicaid (23%) than the national average (26%).\(^{15}\) The Northeast had a substantially higher proportion of individuals with HIV enrolled in Medicaid (34%) and had considerably higher spending per Medicaid enrollee ($35,964)
than other regions. The targeted states had the lowest spending per enrollee ($18,867), followed by the West ($20,255), the Midwest ($21,711), and the South excluding the targeted states ($20,808). These trends were consistent with the Medicaid HIV funding trends from 2007 reported in a Medicaid and HIV care analysis conducted by the Kaiser Family Foundation.

Other Federal Funding for HIV Care and Prevention:

In 2010, CDC funding per person estimated to be living with HIV was lowest in the targeted states ($523.60) followed by the Midwest ($703.6), the Northeast ($707.60), the West ($741.3), and the Southern states without the targeted states ($805.90). The per capita funding for the Housing Options for Persons with AIDS (HOPWA) program in the targeted states in 2010 was very similar to the national average. However, because of funding formulas that favor more urban areas there are large discrepancies among targeted states. A more in-depth state-level analysis of HOPWA funding will be forthcoming from SASI. The findings regarding CDC and HOPWA funding levels by region in 2010 are consistent with those reported for 2009.

Consistent with the 2010 findings, the South/targeted states received virtually the same level of federal funding per person living with HIV as the national average for the federal AIDS Drug Assistance Program (ADAP) in 2011. For state ADAP funding the targeted states had nearly $100 less funding per capita than the US average in 2010. However, in 2011, the average state ADAP funding levels in targeted states was nearly identical to the national average for state funding.

Conclusion

Analysis of the HIV-related epidemiologic data from 2010 and comparison of this information to 2009 data identified a continued disproportionate impact of HIV in the South, particularly in the targeted states. Eight of the ten states with the highest HIV diagnosis rates were targeted states, and the targeted states accounted for over one-third of new HIV diagnoses while accounting for less than one-quarter of the US population. The targeted states also had nearly identical AIDS diagnosis rates to the Northeast. The Northeast continues to lead the nation in AIDS diagnosis and prevalence rates.

Trends in federal and state funding for HIV care and prevention were relatively consistent between 2009 and 2010. An examination of funding for HIV care in 2010 identified that although the gaps in federal Ryan White funding noted in 2004/2005 have notably lessened, a small differential ($78) remained in the per capita funding for the targeted states in 2010 in comparison to the national average. If the targeted states were to receive the US average per capita funding this would translate into an additional 21.6 million dollars in Ryan White funds. The targeted states also provided Medicaid coverage for a lower proportion of individuals with HIV and provide less funding per beneficiary with HIV when compared to the national average.

It is important to note for the epidemiologic and financial calculations using HIV new diagnoses and prevalence that these figures are subject to error, as 4 states (and Washington, DC) did not have CDC estimated new diagnoses and prevalence numbers in 2010; therefore, we used the raw numbers of individuals living with HIV (which do not include adjustment for reporting delays) for these states/district. However, these 2010
figures likely provide a more accurate description of HIV epidemiology and financing than those of 2009, when 10 states (and Washington, DC) did not have CDC estimated data.

The continued disproportionate effect of HIV in the South, particularly in the targeted states, coupled with previous research indicating that the region has the highest morbidity and mortality rates in the US, indicate a critical need to further examine and address the HIV epidemic in this region.1,7 Adequately addressing the HIV epidemic in the region would include determining and instituting effective HIV prevention, detection and treatment strategies tailored to the specific needs and culture of the US South.
REFERENCES


