

2010 Profile of HIV/AIDS in Michigan

Patterns of Service Utilization of HIV-infected Persons

Data from HIV/AIDS Reporting System (eHARS), Uniform Reporting System (URS), Adult and Adolescent Spectrum of disease (ASD) & Medical Monitoring Project (MMP)

The *Ryan White HIV/AIDS Treatment Extension Act of 2009* (Ryan White), which replaced the *Treatment and Modernization Act of 2006*, provides federal funds to help communities and States increase the availability of primary health care and support services for people living with HIV/AIDS disease (PLWH/A). Ryan White Part A funds are allocated to Eligible Metropolitan Areas (EMA) heavily impacted by the epidemic, and in Michigan, the Detroit EMA receives Part A funds. States and U.S. Territories receive Ryan White Part B funds, including resources earmarked for AIDS Drug Assistance Programs (ADAP).

Table 1: Comparing HIV Services with Reported Cases throughout Michigan, January 2010

Group	Services	Cases
White	36%	36%
Black	54%	58%
Hispanic	5%	5%
Other	4%	2%
Unknown	1%	na
Males	76%	77%
White Males	31%	31%
Black Males	37%	41%
Hispanic Males	4%	4%
Other Males	3%	2%
Unknown Males	0%	na
Females	24%	23%
White Females	5%	5%
Black Females	17%	16%
Hispanic Females	1%	1%
Other Females	1%	1%
Unknown Females	<1%	na
0-12 Years [^]	1%	<1%
13-19 Years [^]	2%	1%
20-24 Years [^]	5%	4%
25-44 Years [^]	44%	37%
45+ Years [^]	48%	54%
Infants: 0-1 Years [^]	<1%	<1%
Children: 2-12 Years [^]	1%	<1%
Youth: 13-24 Years [^]	7%	5%
Women 25+ Years [^]	22%	21%
Total	100% (N = 6,840)	100% (N = 15,285)

[^]“Years” within this table refers to **current age**, not age at diagnosis

Part C funds are allocated to local clinics for outpatient HIV early intervention services and Part D is used to coordinate and enhance services for women, infants, children and youth. Ryan White funds are funds of last resort.

The Uniform Reporting System (URS) is a state-wide client-level data system designed to document the quantity and types of services provided by agencies receiving Ryan White funds, and to describe the populations receiving the services. A wide range of clinical and supportive services are reported in the URS including outpatient medical care, dental care, mental health services, case management, the AIDS Drug Assistance Program. URS data may include HIV/AIDS services that are not directly funded by Ryan White, as long as the reported service is eligible to be funded. However, most services reported in the URS are at least partially funded by Ryan White resources.

There are several client-level data systems in Michigan that collect URS data. Demographic and service data from all these systems were extracted into a standard format, and these data were then combined and unduplicated to produce a statewide URS dataset for analysis. The statewide dataset includes records from all Ryan White A-D funded programs in Michigan, including the AIDS Drug Assistance Program.

Tables 1 and 2 represent HIV+ male and female clients served by Ryan White funded HIV service programs during 2009 and reported through the HIV/AIDS surveillance system by December 31, 2009.

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Table 1 compares Ryan White clients served to living cases reported through the HIV/AIDS surveillance system. In 2009 there were 6,840 HIV-infected persons who received Ryan White services in the state of Michigan. Ryan White clients represent 45 percent of the total reported living cases in Michigan.

URS data have a higher proportion of records with unreported race than surveillance data, and also more clients whose race is reported as “other minority”. (This category in the URS includes persons reporting more than one race).

The Ryan White Treatment Modernization Act puts a priority on providing services to women, infants, children and youth (WICY) with HIV infection. As a result, the proportion of youth age 13 to 24, and women age 25 or older receiving care is somewhat higher than in reported cases.

Overall, the comparison table shows that persons receiving Ryan White care services are similar demographically to reported cases, however reported cases are slightly older and more likely to be black males. In other words, on a statewide basis, it appears that Ryan White funded programs are serving clients who are representative of the general population of persons living with HIV/AIDS in Michigan.

Table 2: Core Services per Ryan White Client, Michigan Residents, 2009

Total Clients Served: 8,019	Outpatient Medical Care	Oral Health Care	Mental Health Care	Medical Case Management	DAP (Medication Assistance)
No. of unduplicated clients served*	5,372	911	1008	3,406	2,958
Percent receiving the service	67%	11%	13%	42%	37%
Total Days of Service (Visits)	18,699	2,626	5,287	61,200	32,659
Average no. of visits per client	3.5	2.9	5.2	18.0	11.0
Median no. of visits per client	3	2	3	11	10
Range of visits per client	1-23	1-15	1-61	1-120	1-61

* Clients are unduplicated for the service across all providers and may be counted in more than one service category.

The service utilization data available for this report are limited to the HIV/AIDS care service programs contained in the four Ryan White CAREWare data systems in Michigan. Services provided by private physicians or HIV Service programs not funded by Ryan White or MHI resources are not included.

Table 2 gives additional detail about the core services of outpatient medical care, oral health care, mental health care, medical case management and ADAP medication assistance delivered by these HIV service programs in 2009. The service counts in the table are visits, not units of time. Only one “visit” per day is counted for any one service category in URS summary data.

Outpatient medical care services in this table are for outpatient ambulatory medical care visits ranging from a complete physical with a physician, to a brief or repeat visit with a physician or nurse practitioner, and may include adherence counseling with a medical practitioner. The average of 3.5 visits per client, with a median of three, is consistent with HIV care standards that recommend monitoring of health status every three to four months. (Table 2)

Oral health care services reported in the URS are provided primarily through the statewide Michigan Dental Program (MDP), administered by the Division of Health, Wellness and Disease Control of MDCH. The University of Detroit/Mercy Dental School provides many of these services for MDP clients

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in the Detroit area. Dental services for clients may be extensive, and require multiple visits, but may also simply be for annual or more frequent prophylaxis. The average of 2.9 visits per client is consistent with an initial exam to plan the care needed and one or more treatment visits following approval of the care plan. (Table 2)

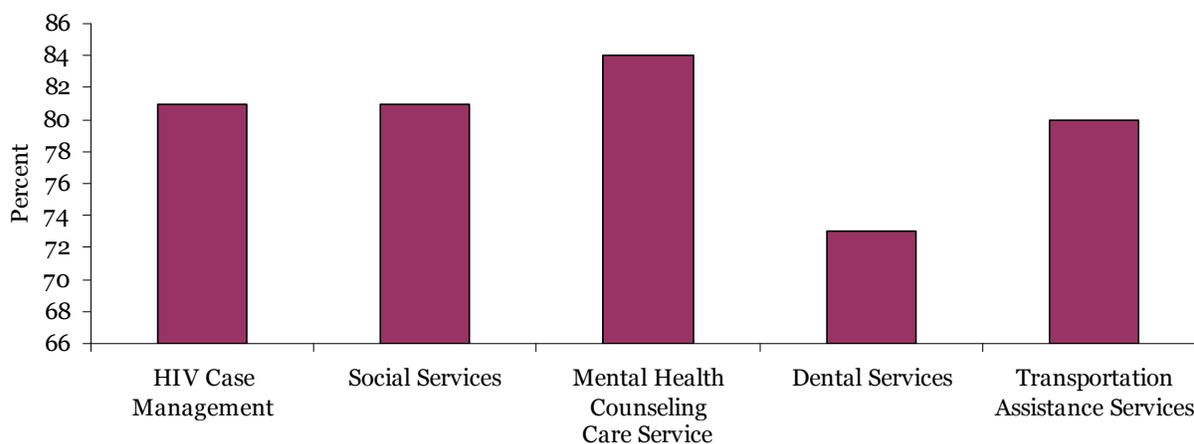
The Drug Assistance Program (DAP), administered by the Division of Health, Wellness and Disease Control of MDCH pays for medications dispensed to eligible HIV+ clients. The DAP covers all HIV medications and many other medications as well, in addition to CD4, viral load, and HIV genotype tests. The unit of service reported in Table 2 is one day in which medications were dispensed or when DAP-reimbursed monitoring tests (CD4 or viral load) took place. This is not an indication of the number of medications dispensed or prescriptions filled during the year, as several medications can be dispensed on one day of service. In 2009, 34 percent of statewide clients received medications through DAP services, at an average of 11 visits a year (or about once a month).

The need for DAP services continues to increase because more people are living with HIV each year, more are entering into care where drugs are prescribed to treat the disease, and each year it seems that fewer have access to prescription drug coverage through other sources.

Mental health care services encompass mental health assessments, individual counseling, and group sessions for HIV+ clients with a mental health diagnosis, and must be conducted by a licensed mental health professional. Mental health services do not include substance abuse treatment. In 2009, 13 percent of statewide clients received mental health care services at an average of 5.2 visits per person.

The Medical Monitoring Project (MMP) collected data on service utilization and complements the Ryan White data. Among the 148 persons living with HIV who were in care and interviewed for the MMP in 2007, 84 percent of patients who needed mental health counseling received it and 73 percent of patients who needed dental services received them. (Figure 12)

Figure 12: Proportion of Most Frequently Reported Care Received (MMP, 2007)



Medical case management visits include intake, assessments, care planning, medication adherence counseling, and monitoring of medical status, and may be conducted in person, by phone or by mail, with the goal of linking HIV+ clients to health care services, and assisting them to remain in care. In 2009, 42 percent of statewide clients received medical case management services at an average of 18 visits per client.

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Among the persons living with HIV who were in care and interviewed for the MMP in 2007, 93 percent indicated that they have used antiretroviral drugs in the 12 months prior to the interview. Although the numbers are quite low, there is a marked difference in proportion of males who were not on ART compared to females (5 percent v 15 percent) (Figure 13a & 13b).

Figure 13a: ART Use in Males
(MMP, 2007) N = 115

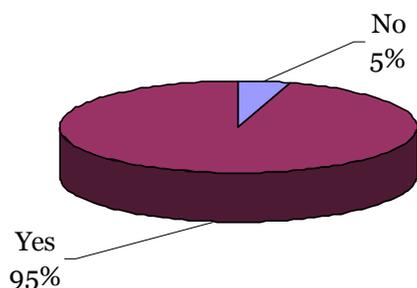
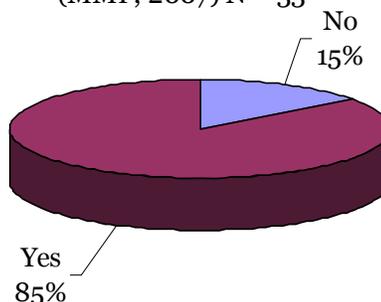
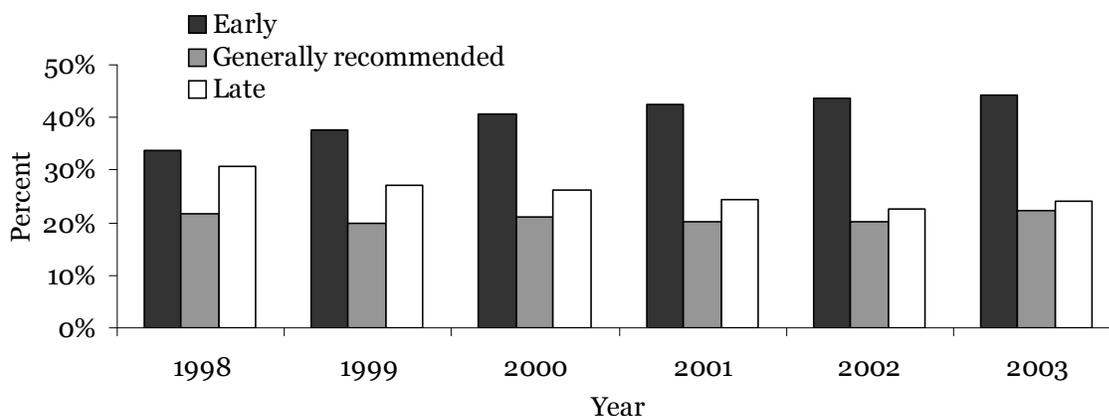


Figure 13b: ART Use in Females
(MMP, 2007) N = 33



The Adult/Adolescent Spectrum of Disease Project (ASD) collected data on the timing of the initiation of antiretroviral treatment and the proportions of patients whose treatments began at each three times (each time corresponds to a category of CD4 count) (Figure 14). This analysis included only intervals during which the person had either an outpatient clinic visit or a hospitalization, and did not include intervals in which the person had only visited the ER or had telephone contact with the clinic staff. Of patients receiving care at the two health care systems included in the ASD study, the proportion whose antiretroviral treatment was begun late decreased from 31 percent in 1998 to 24 percent in 2003. Inversely, the proportion whose antiretroviral treatment was begun early increased from 34 percent in 1998 to 44 percent in 2003. The most current treatment guidelines (December 2009) include a statement that there is growing evidence to start ART for patients with > 500 CD4 cells/ μ L, but this recommendation is optional and should be considered on a case by case basis.

Figure 14: Proportion of Patients who Received Antiretroviral Treatment Late, at the Recommended Time, or Early, ASD Project-Michigan, 1998-2003



Note. Late (CD4 count of less than 200 cells/ μ L), generally recommended time (CD4 count of greater than or equal to 200 μ L, but less than 350 cells/ μ L), or early (CD4 count greater than or equal to 350 cells/ μ L).