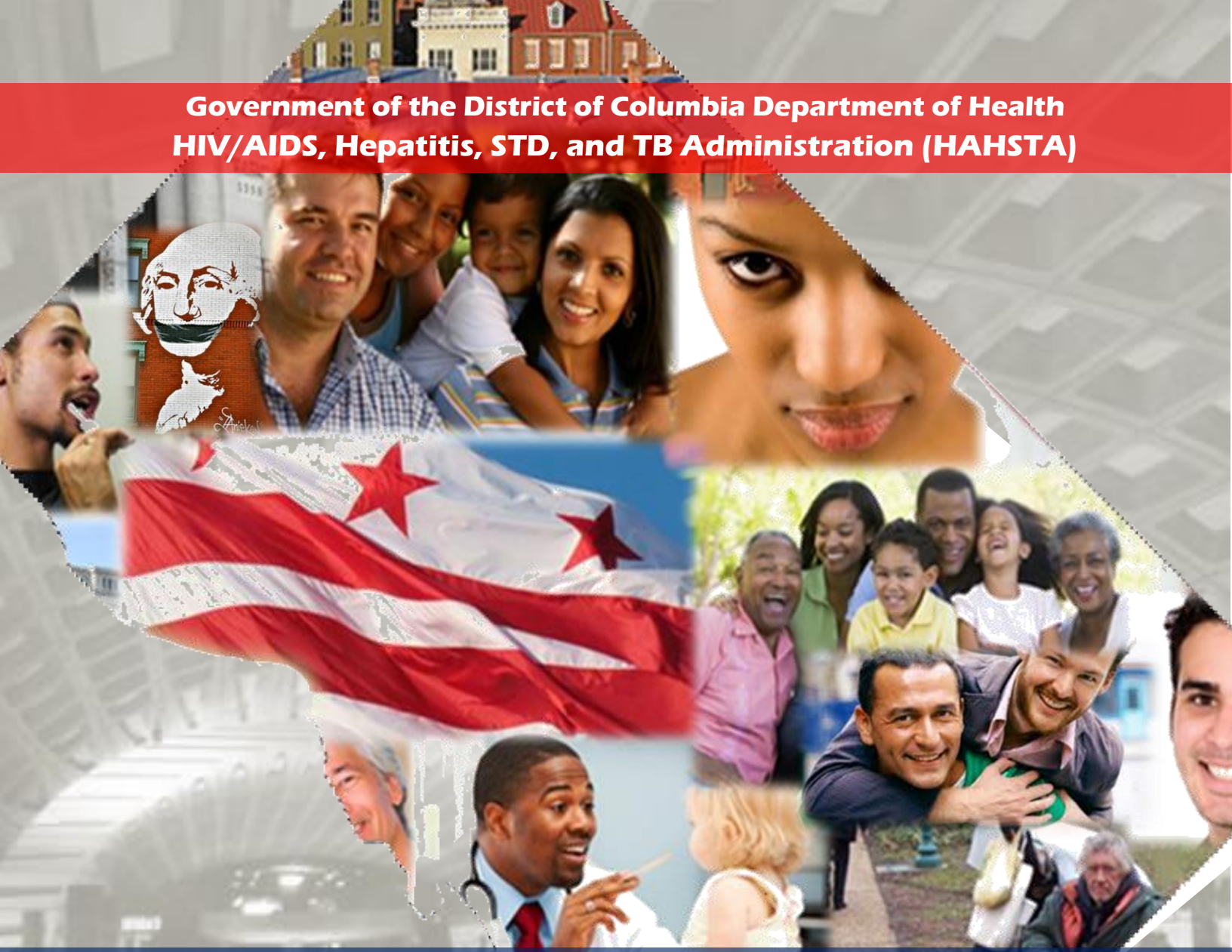
Government of the District of Columbia Department of Health
HIV/AIDS, Hepatitis, STD, and TB Administration (HAHSTA)



HIV Care and Ryan White Care Dynamics

HIV/AIDS, Hepatitis, STD, and TB Data through 2014

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Muriel Bowser
Mayor, District of Columbia

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Acknowledgments

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Section 1: HIV Care Dynamics

With the advances and effectiveness of care and treatment, HIV has transitioned to a chronic condition that can be managed successfully for persons living with HIV to maintain healthy outcomes and live a standard life span. The Care Continuum is the new title for the approach of diagnosing persons with HIV, linking them into care and treatment, retaining them in continuous care and achieving viral load suppression, which is the marker of a person's and community's health. In addition to the goal of healthy outcomes for persons with HIV, viral suppression can help decrease new transmissions by vastly decreasing the amount of HIV circulating in the body and reduce the chances of infection. Assessing HIV care dynamics is an essential step in understanding the strengths of HIV programs in the District, as well as an opportunity to identify and resolve gaps in the care continuum.

Overall, the care continuum continues to improve for persons living with HIV in the District of Columbia. The Department of Health, in partnership with medical providers and community organizations, have prioritized early diagnosis and rapid connection to care ("Red Carpet" protocol ensures a HIV medical appointment within 72 hours) and introduced new innovations to support and retain persons in HIV care and treatment (community health workers and other treatment adherence approaches). In the care continuum, there are persons who drop out of care. The District has partnered with providers to outreach to those persons and re-engage them into care and treatment.

There persist some health disparities in the care continuum. Blacks (77.7%) and Hispanics (80.1%) have lower rates of linkage to care within 3 months of diagnosis compared to whites (88.6%). Young adults (ages 20-29) had lower rates of linkage to care (76.2%) and viral suppression (41.0%)

The data contained in this section provide important insight into how the HIV care system is ensuring healthy outcomes for persons living with HIV. The Department of Health will continue its collaboration with providers and engage with the community in meaningful ways to address gaps and enhance the care system.

Table 1. Care Dynamics Measure Definitions
District of Columbia

Measure*	Definition	Levels
Newly Reported HIV Diagnoses	Number of HIV cases among District residents reported to the DC Department of Health from 2009 to 2013	-
Time to Linkage to Care	Length of time from diagnosis date to first CD4 and/or viral load** lab	≤3 months >3 to 6 months >6 to 12 months >12 months No lab reported
Care Status	Stability of care in 2014	Continuous: At least two viral load and/or CD4 labs reported more than 60 days apart in 2014 Sporadic: One viral load or CD4 lab reported in 2014 Out of care: No lab reported in 2014
Ever Virally Suppressed	Suppression any time after HIV disease diagnosis	Suppressed: reported viral load ≤200 copies/mL Not suppressed: reported viral load >200 copies/mL No viral load reported
Last Known Viral Status	Suppression status at last known viral load in 2014	Suppressed: reported viral load ≤200 copies/mL Not suppressed: reported viral load >200 copies/mL No viral load reported in 2014

Figure 1. Care Dynamics at Time of Diagnosis for Newly Diagnosed HIV Cases District of Columbia, 2009-2013

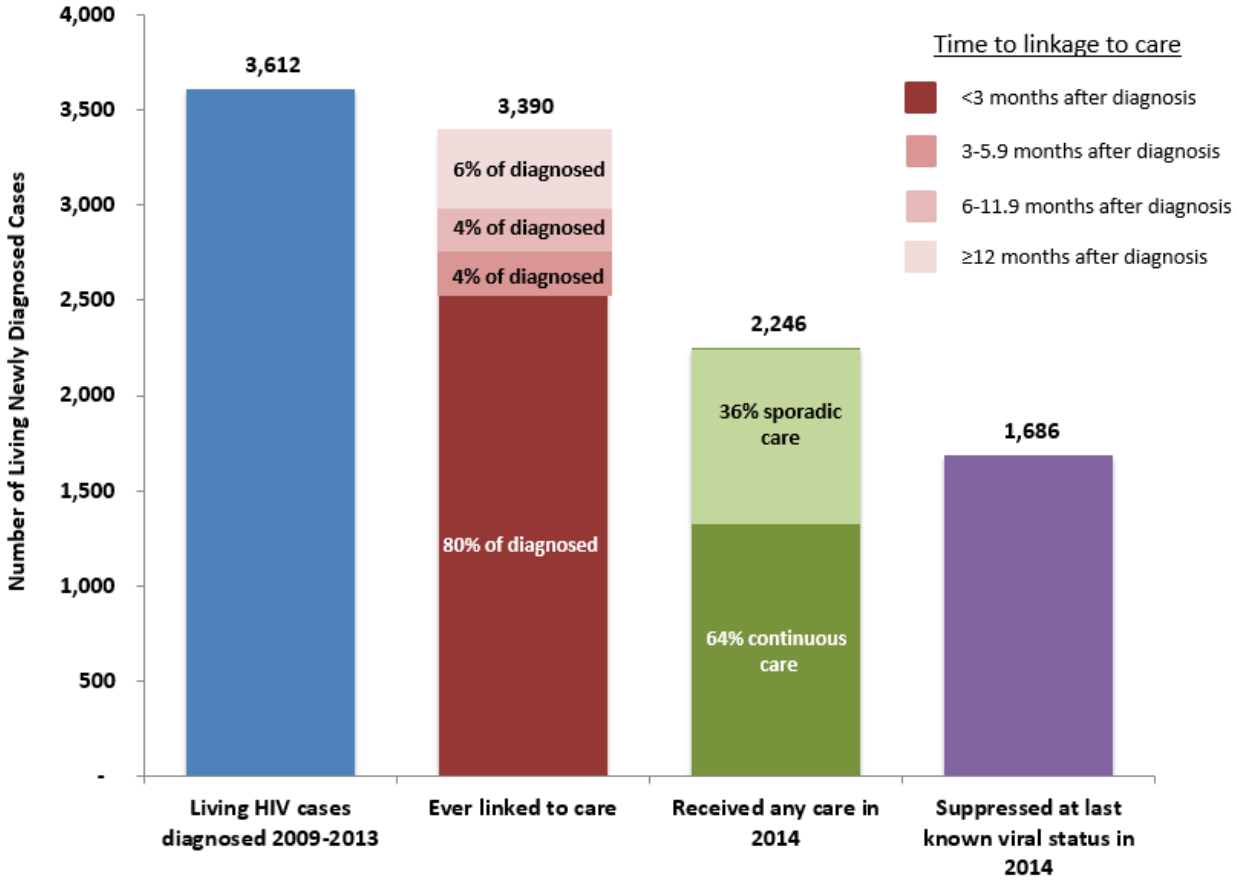


Figure 1 represents the 2013 care continuum for newly diagnosed HIV cases in the five year period that were living as of December 31, 2013. Each bar contains living newly diagnosed population from 2009 to 2013, and presents a graduated view of care performance for each metric (defined in Table 1). This figure is intended to give a snapshot of the care environment in Washington, DC using population-based data. Of the 3,612 cases newly diagnosed between 2009 and 2013, 80% were linked to HIV primary care with 3 months of diagnosis, 62% were retained in any type of care in 2014 and 47% were virally suppressed in 2014.

Table 2. Care Dynamics for Newly Diagnosed HIV Cases by Selected Characteristics District of Columbia, 2009-2013

	Living HIV Cases Diagnosed 2009-2013	Ever Linked to Care		Linked to Care <3 Months After Diagnosis		Retained in Any Care in 2014		Retained in Continuous Care in 2014		Suppressed at Last Known Viral Status in 2014	
	N	N	%	N	%	N	%	N	%	N	%
Sex											
Male	2,653	2,488	93.8	2,119	79.9	1,624	61.2	1,016	38.3	1,233	46.5
Female	959	902	94.1	771	80.4	622	64.9	422	44.0	453	47.2
Race/Ethnicity											
White	498	485	97.4	442	88.8	312	62.7	198	39.8	264	53.0
Black	2,723	2,543	93.4	2,133	78.3	1,704	62.6	1,096	40.2	1,243	45.6
Hispanic	276	257	93.1	223	80.8	171	62.0	113	40.9	137	49.6
Other	115	105	91.3	92	80.0	59	51.3	31	27.0	42	36.5
Mode of Transmission											
MSM	1,514	1,445	95.4	1,236	81.6	960	63.4	605	40.0	747	49.3
IDU	169	141	83.4	117	69.2	102	60.4	67	39.6	66	39.1
MSM/IDU	69	62	89.9	49	71.0	36	52.2	25	36.2	28	40.6
Heterosexual contact	1,190	1,119	94.0	954	80.2	728	61.2	468	39.3	538	45.2
RNI/Other	670	623	93.0	534	79.7	420	62.7	273	40.7	307	45.8
Age at Diagnosis											
0-19	152	146	96.1	124	81.6	112	73.7	75	49.3	70	46.1
20-29	1,061	985	92.8	809	76.2	613	57.8	356	33.6	435	41.0
30-39	851	790	92.8	679	79.8	527	61.9	336	39.5	398	46.8
40-49	844	791	93.7	683	80.9	528	62.6	366	43.4	416	49.3
50-59	520	501	96.3	433	83.3	356	68.5	229	44.0	277	53.3
60 and older	184	177	96.2	162	88.0	110	59.8	76	41.3	90	48.9
Year of Diagnosis											
2009	842	789	93.7	628	74.6	501	59.5	312	37.1	359	42.6
2010	846	802	94.8	672	79.4	513	60.6	320	37.8	382	45.2
2011	709	664	93.7	580	81.8	422	59.5	276	38.9	323	45.6
2012	668	635	95.1	572	85.6	422	63.2	268	40.1	329	49.3
2013	547	500	91.4	438	80.1	388	70.9	262	47.9	293	53.6
Grand Total	3,612	3,390	93.9	2,890	80.0	2,246	62.2	1,438	39.8	1,686	46.7

*Retention and last known viral load by Year of Diagnosis will have a longer follow-up time for persons diagnosed in the earlier of the 5 year time frame

*Other: mixed race individuals, Asians, Alaska natives, Native Hawaiians, Pacific Islanders and unknown

**MSM: Men who have sex with men; IDU: Injecting drug users; RNI: Reason not indicated; Other: perinatal transmission, hemophilia, blood transfusion and occupational exposure

Disparities between men and women were slightly observed. Women newly diagnosed and living were more likely to be retained in any type of care in 2014, as well as be retained in continuous care in 2014. Whites had higher rates of linkage and suppression compared to all other racial groups. Persons with IDU as reported mode of transmission had lower rates of linkage and suppression compared to the MSM, heterosexual and RNI/other modes of transmission. By age, cases diagnosed between the ages of 20-29 had the lowest proportions of linkage, retention in care and viral suppression compared to all other age groups. Cases aged 60 and older had high rates of linkage, but varied by retention and suppression compared to other age groups. Linkage, retention, and suppression increased over the five-year period.

Section 2. Ryan White Care Dynamics

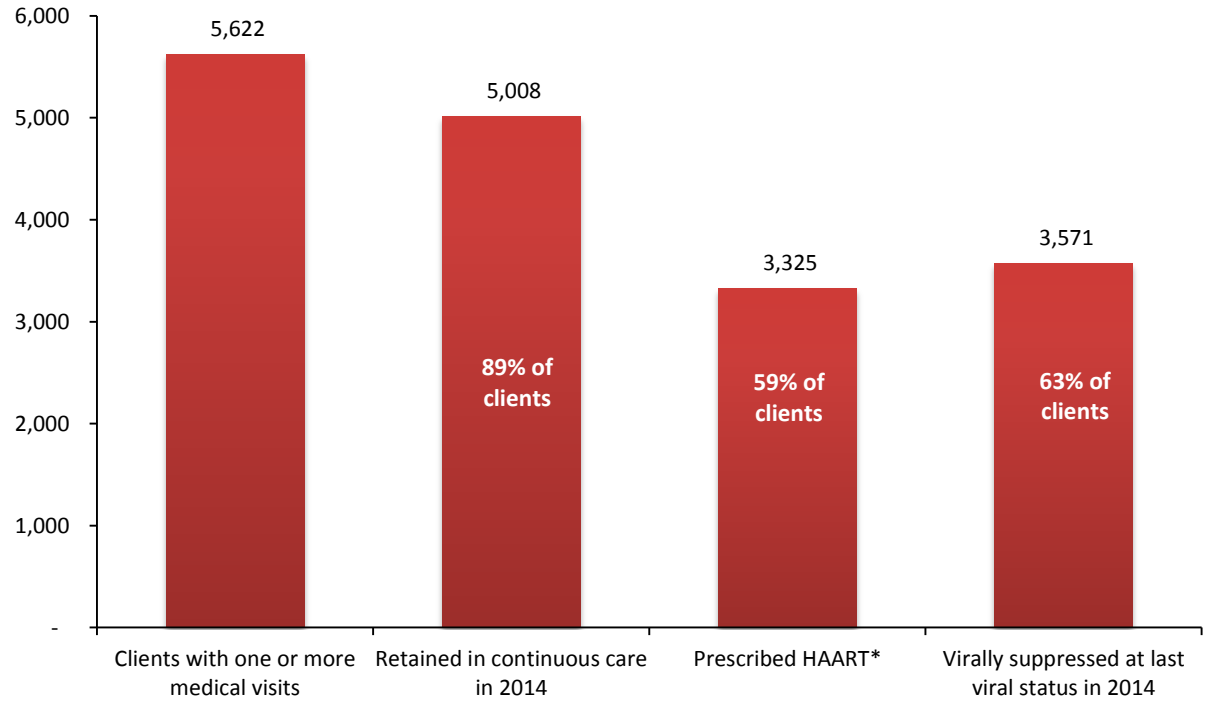
The Ryan White Comprehensive AIDS Resource Emergency (CARE) Act is a program funded by the Health Resource and Service Administration (HRSA) to provide HIV-related services to people diagnosed with HIV disease. More specifically, it is a program for those who do not have sufficient health care coverage or financial resources for coping with HIV disease. Ryan White fills gaps in care not covered by other sources. The Ryan White Care program primarily funds core medical and support services. Core medical services include outpatient and ambulatory health services, AIDS Drug Assistance Program (ADAP), AIDS pharmaceutical assistance, oral health care, early intervention services, health insurance premium and cost-sharing assistance, home health care, medical nutrition therapy, hospice care, home and community-based health services, mental health, outpatient substance abuse care, medical case management, and treatment adherence services.

HIV Care dynamics among Ryan White clients was examined to evaluate clients on the care continuum and asses their health outcomes. This continuum of care differs from what has been previous presented in several ways. First, the population used is a subset of the total number of HIV cases living in the District. These cases are not newly diagnosed in a given year, but are HIV cases who received any type of Ryan White Care Act services in 2014. Second, the number of medical visits, rather than linkage to care, was measured. Third, information is included on the number of clients who had been prescribed HIV medication. Finally, data collection for RW clients differs from that of surveillance data; information is received at the health department in aggregate, rather than on an individual client, therefore information on subpopulations may not be complete and were not presented in this report.

Table 3. Care Dynamics Measure Definitions, District of Columbia

Measure	Definition
Total clients served	All HIV positives cases using any Ryan White care service from January 1-December 31, 2014
Clients with one or more medical visits	Ryan White clients with at least one documented primary care visit in 2014
Retained in continuous care in 2014	Having 2 more medical visits in 2014 that were at least 90 days apart
Prescribed HAART	Ryan White clients with documentation of having been prescribed HIV medication
Virally suppressed at last viral status in 2014	Having a viral load result of <200 copies/mL at last viral load test in 2014

Figure 2. 2014 Care dynamics among Ryan White Clients



*One provider was unable to submit date and therefore was not included in this metric.

At the end of 2014, there were 5,622 unique clients had one or more primary medical care visits in 2014 and 89.1% (5,008/5,622) clients had 2 or more primary care visits in 2014. Nearly two-thirds (59.1%; 3,325/5,622) were prescribed HAART. Among Ryan White clients that had at least one

primary care visit in 2014, 63.5% (3,571/5,622) were virally suppressed at their last viral load test in 2014.

Table 4. Characteristics of Care Dynamics among Ryan White Clients District of Columbia, 2014

	Clients with one or more medical visits	Retained in Continuous Care in 2014		Prescribed HAART*		Virally Suppressed at Last Viral Status in 2014	
	N	N	%	N	%	N	%
Gender							
Male	3,621	3,203	88.5%	2,166	59.8%	2,329	64.3%
Female	1,833	1,657	90.4%	1,062	57.9%	1,137	62.0%
Transgender	168	148	88.1%	97	57.7%	105	62.5%
Age at service							
0 - 12	4	3	75.0%	0	0.0%	0	0.0%
13-24	282	230	81.6%	110	39.0%	95	33.7%
25-34	1,019	875	85.9%	574	56.3%	595	58.4%
35-44	1,118	993	88.8%	672	60.1%	705	63.1%
45-54	1,780	1,607	90.3%	1,109	62.3%	1,182	66.4%
55-64	1,168	1,072	91.8%	704	60.3%	803	68.8%
65+	251	228	90.8%	156	62.2%	191	76.1%
Race							
White	583	499	85.6%	374	64.2%	375	64.2%
Black	4,355	3,913	89.9%	2,652	60.9%	2,540	58.3%
Asian/PI	35	25	71.5%	19	54.3%	24	68.6%
AI/AN	16	12	75.0%	10	62.5%	9	56.3%
Unknown	633	559	88.3%	270	42.7%	623	98.4%
Ethnicity							
Hispanic	441	347	78.7%	236	53.5%	308	69.8%
Non-Hispanic	5,181	4,661	90.0%	3,089	59.6%	3,263	63.0%
Mode of Transmission							
MSM	1,702	1,702	100.0%	1,123	66.0%	1,026	60.3%
IDU	198	198	100.0%	125	63.1%	109	55.1%
Heterosexual contact	2,215	2,214	100.0%	1,600	72.2%	1,332	60.1%
Other	83	83	100.0%	30	36.1%	22	26.5%
RNI/Unknown	1,424	811	57.0%	447	31.4%	1,082	76.0%
Total	5,622	5,008	89.1%	3,325	59.1%	3,571	63.5%

*One provider was unable to submit date and therefore was not included in this metric.

By gender, though disparities were not greatly seen, women had the highest proportion of retention in care in 2014 compared to men and transgender persons. Men had higher rates of prescribed

HAART and viral suppression in 2014. By age at service, Among cases aged 13-24 at service, clients had very low proportions of HAART prescription and viral suppression, signifying that there is much work to be done among RW clients in this age group. Clients aged 65 and older had the highest proportions of clinical outcomes across the continuum. Disparities by race vary across the RW care continuum. Asian/Pacific Islanders had the lowest rates of continuous care in 2014, while people of unknown race had the lowest rates of prescribed HAART. By mode of HIV transmission, clients who were listed as "other" had low rates of prescribed HAART and viral suppression in 2014.

Appendix A. Understanding HIV Care Surveillance

Primary care visits are not reportable to the DC DOH. However, HIV-related laboratory measures, such as CD4+ T-cell counts and HIV RNA viral loads, are required by DC Municipal code to be reported to HAHSTA by healthcare providers and clinical laboratories. Laboratory measures are used in surveillance to provide approximate measures of access to medical care and HIV-related clinical health status. With improved reporting of laboratory data through the comprehensive electronic laboratory reporting system instituted in 2007, HAHSTA is able to obtain a picture of HIV care among persons living with HIV in the District.

Limitations of Surveillance Data

The Health Resources and Services Administration (HRSA), Centers for Disease Control and Prevention (CDC) and the Department of Health and Human Services (DHHS) released measures to monitor the stages of HIV care, including diagnosis, linkage to care, retention in care and measurement of viral suppression. The measures reported in this supplement reflect local variations of federal standards revised to reflect the realities of available HIV surveillance data. Due to the nature of these data, there are a number of limitations to consider:

- **Year to year variation**
  Metrics are subject to variation by year since they are based on reported surveillance data; fluctuations in timing of data reported to the DC DOH may affect data availability.

- **Moving between stages**
  This report is a snapshot of care dynamics in the District and does not reflect movement between stages.

- **Changes in surveillance procedures**
  Although instituted in 2007, systematic collection of laboratory data began in 2009; thus, data collected prior to 2009 are not as complete or reliable as data collected since 2009.

- **Missing data**
  Care information can only be assessed among persons with reported data. There are some instances where diagnosed cases may not have laboratory data but are included in this report. For these cases, it is unclear whether persons are in care and HAHSTA is not receiving reports of laboratories, or whether a person is truly out of care.

- **Limited extra-jurisdiction data**
  While healthcare facilities in the District cater to residents of the greater metropolitan area, DOH surveillance data are currently limited to HIV patients who were established as residents of the District at the time of HIV or AIDS diagnosis.
- **Migration out of the city**
  This reports uses as a denominator the number of HIV positive people who were first diagnosed while residents of DC, between 2008 and 2012, and who are still alive. Whether any of these persons are receiving care in other jurisdictions (other than Virginia and Maryland) or whether they have moved out of DC is not known.

- **Number of lab tests**
  HIV positive persons in good health may be less likely to seek care, as compared to those who are in poorer health and require more care. Thus, there may be a trend towards persons with suppressed viral loads and higher CD4 counts to receive primary medical care but skip recommended lab tests. If this is the case, it would result in an underestimate of retention in care.

- **Newly diagnosed snapshot**
  Data used in the continuum of care are for cases diagnosed between 2008 and 2012. As such, it provides only a portion of the picture of linkage to care, retention, and viral suppression in the District. Persons diagnosed with HIV positive more than five years ago are not included and patterns and trends of their care cannot be assumed from these data.

- **No comparison to other data**
  These data should not be compared to other continuum of care presentations. Lack of uniformity of data systems and definitions of care metrics prevent accurate between-jurisdictional assessments. This continuum of care should not be compared to previous supplemental care data, as it evaluates different time periods. This supplement is designed to examine patterns and trends in the District only from HIV cases diagnosed between 2008 and 2012.