

VIRGINIA INTEGRATED HIV SERVICES PLAN 2017-2021

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Virginia Integrated HIV Services Plan 2017-2021

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and the

Norfolk, Virginia Ryan White Part A Transitional Grant Area

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Introduction

The Virginia Department of Health (VDH) Division of Disease Prevention (DDP) presents this new Integrated HIV Services Plan (Plan), which responds to the inaugural integrated planning guidance issued by both the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) in June 2015. This document serves as the joint jurisdictional Plan for the Commonwealth of Virginia, which is a Ryan White Part B recipient, and also for the Norfolk, Virginia Ryan White Part A Transitional Grant Area (TGA). The District of Columbia Ryan White Part A Eligible Metropolitan Area (EMA) is submitting a separate plan for that jurisdiction, which includes 17 counties in Northern and Northwestern Virginia, overlapping service areas of the Commonwealth.

The *National HIV/AIDS Strategy Updated to 2020* (NHAS) outlines the national vision and action plan for curtailing the HIV epidemic, improving health outcomes of all people living with HIV, including AIDS (PLWH) in the United States, and achieving a more coordinated response to the epidemic. Virginia's plan embraces this vision:

The United States will become a place where new HIV infections are rare, and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity, or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination. (NHAS, August 2015)

Virginia's Plan articulates this vision locally and presents a roadmap for HIV services over the next five years, identifying specific goals, objectives, and activities that are needed to radically interrupt transmission of HIV in Virginia and improve health outcomes of all Virginians living with HIV. Virginia's HIV Continuum of Care, which includes four HIV outcome measures (i.e., linkage to care, evidence of care, retention in care, and viral suppression) has become a cornerstone for planning and provides a useful tool for measuring Virginia's progress and success in achieving NHAS goals.

This plan is divided into three sections: (1) Statewide Coordinated Statement of Need (SCSN), (2) Integrated HIV Services Plan; and (3) Monitoring and Improvement. The Statewide Coordinated Statement of Need describes the HIV epidemic in Virginia and within each of its five health regions (i.e., Central, Eastern, Northern, Northwestern, and Southwestern); social determinants of health and their impact on PLWH; available financial resources for services delivered within the Commonwealth; HIV workforce capacity needs; and the needs, barriers, and gaps of persons living with and at high risk of acquiring and/or transmitting HIV to others. The SCSN also includes a description of the current and planned use of data to improve services. The Plan describes Virginia's specific goals, measurable objectives, planned strategies, and core activities that are needed to curtail HIV transmission in Virginia and improve the health and well-being of all Virginians living with HIV. These are closely aligned with the vision and goals articulated in the NHAS. This section also describes the collaboration of key stakeholders and the engagement of PLWH in the planning process. Lastly, the monitoring section outlines a specific method for monitoring progress of measurable objectives and how this information will be used to improve HIV services in Virginia.

Virginia's Plan is a living document. The overall plan will be reviewed annually, as well as progress in achieving desired outcomes. The NHAS provides ambitious targets that Virginia will strive toward. For example, 90% of all persons living with HIV will know their serostatus, reduce new diagnoses by 25%, increase retention in care to 90%, and increase viral suppression to 85%. This plan represents an aggressive step forward toward ending HIV in Virginia.

Section I: Statewide Coordinated Statement of Need

A. Epidemiologic Overview

a. Describe the geographical region with regard to communities affected by HIV infection

The Commonwealth of Virginia is comprised of 95 counties and 39 independent cities, which span 42,769 square miles. Virginia shares the border of five states (Maryland, West Virginia, Kentucky, North Carolina, and Tennessee) and the District of Columbia (DC). Within the state, there are five health regions encompassing 35 health districts. They include the Central, Eastern, Northern, Northwest, and Southwest regions. Figure 1 presents a map and comprehensive list of Virginia's health regions, health districts, and local areas (counties and independent cities). In addition, there are two large metropolitan regions that receive dedicated federal HIV funding for services: Northern Virginia, which is part of the DC Eligible Metropolitan Area (EMA) and the Norfolk, Virginia Transitional Grant Area (TGA), which is part of the Eastern Region.

Figure 1. Virginia Health Regions, Health Districts, and Localities (Counties and Independent Cities)

Central		Eastern		Southwest		Northern		
Health District	Locality	Health District	Locality	Health District	Locality	Health District	Locality	
Chesterfield	Chesterfield	Chesapeake	Chesapeake	Alleghany	Alleghany	Alexandria	Alexandria	
	Colonial Heights		Accomack		Botetourt		Arlington Co.	
	Powhatan		Northampton		Craig	Fairfax Co.		
Crater	Dinwiddie	Hampton	Hampton		Roanoke Co.	Fairfax City	Loudoun	Falls Church
	Greensville	Norfolk	Norfolk		Covington	Loudoun		
	Prince George	Peninsula	James City	Salem	Prince William	Prince William		
	Surry		York	Amherst		Manassas		
	Sussex		Newport News	Appomattox	Manassas Park			
	Emporia		Poquoson	Bedford				
	Hopewell		Williamsburg	Campbell				
Petersburg	Portsmouth	Portsmouth	Lynchburg					
Chickahominy	Charles City	Three Rivers	Essex	Cumberland Plateau	Buchanan	Central Shenandoah	Augusta	
	Goochland		Gloucester		Dickenson		Bath	
	Hanover		King & Queen		Russell		Highland	
	New Kent		King William		Tazewell		Rockbridge	
Henrico	Lancaster		Lee	Rockingham				
Piedmont	Amelia	Mathews	Scott	Lenowisco	Wise	Lord Fairfax	Buena Vista	
	Buckingham	Middlesex	Norton		Bland		Harrisonburg	
	Charlotte	Northumberland	Carroll		Grayson		Lexington	
	Cumberland	Richmond Co.	Smyth		Frederick		Staunton	
	Lunenburg	Westmoreland	Washington		Page		Waynesboro	
	Nottoway	Virginia Beach	Wythe	Shenandoah	Clarke			
	Prince Edward	Western Tidewater	Bristol	Warren	Frederick			
Richmond Southside	Richmond City	Isle of Wight	Galax	New River	Floyd	Rappahannock	Caroline	
	Brunswick	Southampton	Floyd		Giles		King George	
	Halifax	Franklin City	Montgomery		Pulaski		Spotsylvania	
	Mecklenburg	Suffolk	Radford		Stafford		Fredericksburg	
			Pittsylvania/Danville		Pittsylvania		Rappahannock / Rapidan	Culpeper
			Roanoke	Danville	Fauquier	Madison		
			West Piedmont	Roanoke City	Orange	Rappahannock		
				Franklin Co.	Albemarle	Fluvanna		
				Henry	Greene	Louisa		
			Patrick	Albemarle	Nelson	Charlottesville		
			Martinsville	Thomas Jefferson				



The United States (U.S.) Census Bureau’s 2014 American Community Survey (2010-2014) estimates the current population to be 8,185,131.ⁱ This represents approximately a 2% increase from Virginia’s 2010 population of 8,001,024.ⁱⁱ Table 1 presents the total population data for Virginia (2014 population data) and total persons living with HIV, including AIDS (PLWH) and 2015 newly-diagnosed PLWH by health planning region.

Table 1. Virginia Population Estimates (2014) and Persons Living with HIV/AIDS in Virginia (2015)

Residence Status / Region	2014 General Population ¹		2015 PLWH ²		2015 New Diagnoses ²	
	Number	Percent	Number	Percent	Number	Percent
Total	8,185,131	100%	24,853	100.0%	929	100.0%
Known Residence	8,185,131	100%	24,437	98.3%	929	100.0%
Central	1,388,962	17.0%	5,920	24.2%	245	26.4%
Eastern	1,829,361	22.3%	7,697	31.0%	301	32.4%
Northern	2,343,364	28.6%	6,773	27.2%	223	24.0%
Northwest	1,266,922	15.5%	1,944	7.8%	92	9.9%
Southwest	1,356,522	16.6%	2,103	8.5%	68	7.3%
Unknown Residence			416	1.7%	0	0.0%
Norfolk TGA	1,661,809	20.3%	7,270	29.3%	280	30.1%

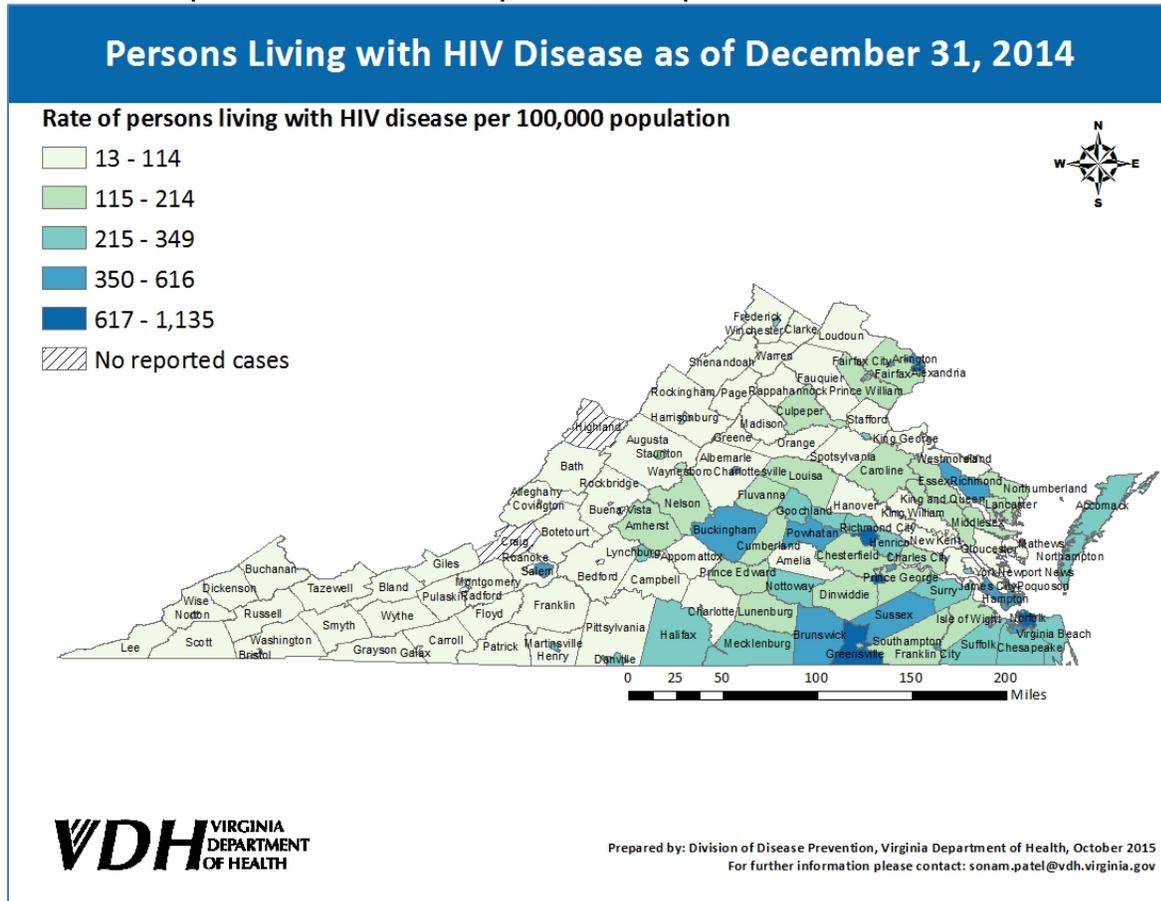
Sources: ¹2014 American Community Survey 5-Year Estimates (Health Region population compiled by Cubit Planning, Inc. based on Federal Information Processing Standard (FIPS) codes provided by the Virginia Department of Health); ²Virginia 2015 HIV Surveillance Annual Report.

Notes: 2015 HIV data are provisional due to reporting delays.

Although the 2014 general population in the Northern region is the largest among the five health regions (28.6%), it ranks second in terms of total number of PLWH (27.2%) and third in 2015 new diagnoses (24.0%). The Eastern Region, which includes the Norfolk TGA, has both the largest number of PLWH (31.0%) and largest number of 2015 new diagnoses (32.4%). These percentages are both disproportionate to their 2014 general population (28.6%). The Central Region, which is home to Virginia’s capital, Richmond, ranks third in total number of PLWH (24.2%) and second in new 2015 diagnoses (26.4%). Three regions represent a larger proportion of 2015 new diagnoses compared to their proportion of total PLWH: Eastern, Central, and Northwest. The Norfolk TGA’s general population represents 90.8% of the total population in the Eastern Region. In terms of PLWH, the Norfolk TGA contains 94.5% of the Eastern Region’s PLWH and 93.0% of the Eastern Region’s 2015 newly-diagnosed persons.

The map depicted in Figure 2 shows the geographic distribution of PLWH across Virginia expressed as a rate per 100,000 population. Examining HIV data using rates allows for the comparison of smaller populations with larger ones to highlight impacted areas. The darkest shaded areas on the map represent the counties and independent cities most impacted by HIV. As seen, the darker areas are predominantly located in the Eastern Region/Norfolk TGA, Central Region, and Northern Region of Virginia.

Figure 2. Persons Living with HIV Disease as of December 31, 2014 Across Virginia's Counties and Independent Cities as a Rate per 100,000 Population



b. Socio-demographic characteristics

i. Demographic profile

Table 2 presents the demographic characteristics of all PLWH reported as of December 31, 2015 and 2015 newly-diagnosed PLWH compared to the demographic characteristics of Virginia's general 2014 population. PLWH are predominantly male (74.1%), between the ages of 45 and 64 years (55.5%), and Black, non-Hispanic (59.2%). Due to the large number of PLWH without an identified HIV transmission category (5,113), these are excluded from the percentage calculations for planning purposes. In terms of HIV transmission risk, more than half (58.6%) report being men who have sex with men (MSM) as their risk for transmission (58.6%), followed by heterosexual risk (24.2%), and injection drug use (IDU) (11%).

Table 2. Comparison of Demographic Characteristics of Virginia's 2014 General Population with PLWH as of December 31, 2015 and New HIV Diagnoses in 2015

Characteristic	2014 General Population ¹		PLWH as of 12/31/2015 ²		2015 New Diagnoses ²	
	Number	Percent	Number	Percent	Number	Percent
Total	8,185,131	100%	24,853	100%	929	100%
Gender						
Male	4,022,624	49.1%	18,423	74.1%	750	80.7%
Female	4,162,507	50.9%	6,430	25.9%	179	19.3%
Age (years)						
<10	1,030,135	12.5%	26	0.1%	1*	0.1%
10 – 14	517,643	6.3%	29	0.1%	0	0.0%
15 – 19	550,376	6.7%	118	0.5%	43	4.6%
20 – 24	585,852	7.2%	812	3.3%	192	20.7%
25 – 34	1,137,877	13.9%	3,540	14.2%	301	32.4%
35 - 44	1,098,730	13.4%	4,715	19.0%	184	19.8%
45 - 54	1,198,183	14.6%	8,174	32.9%	125	13.5%
55 - 64	1,005,287	12.3%	5,617	22.6%	67	7.2%
65+	1,061,048	13.1%	1,821	7.3%	16	1.7%
Race (non-Hispanic)/ Ethnicity						
Black/African American	1,549,909	18.9%	14,703	59.2%	581	62.5%
White	5,227,415	63.9%	7,336	29.5%	219	23.6%
Hispanic	687,265	8.4%	2,003	8.1%	92	9.9%
Asian/Native Hawaiian/ Pacific Islander	477,411	5.8%	329	1.3%	26	2.8%
American Indian/ Alaska Native	17,252	0.2%	30	0.1%	1	0.1%
Multi-race/Some Other Race/Unknown	225,879	2.8%	452	1.8%	10	1.1%
Transmission Category**						
Known/Reported risk			19,740	100.0%	551	100.0%
MSM			11,563	58.6%	418	75.8%
Injection drug use (IDU)			2,181	11.0%	12	2.2%
MSM/IDU			914	4.6%	10	1.8%
Heterosexual contact			4,781	24.2%	110	20.0%
Pediatric			301	1.5%	1	0.2%

Sources: ¹2014 American Community Survey 5-Year Estimates and ²Virginia 2015 HIV Surveillance Annual Report

Notes: Age groups for all PLWH exclude 1 case with "unknown" age; for PLWH, age is "current age" and for new diagnoses, age is "age at diagnosis;" 2015 HIV data are provisional due to reporting delays; percentages may not add due to rounding.

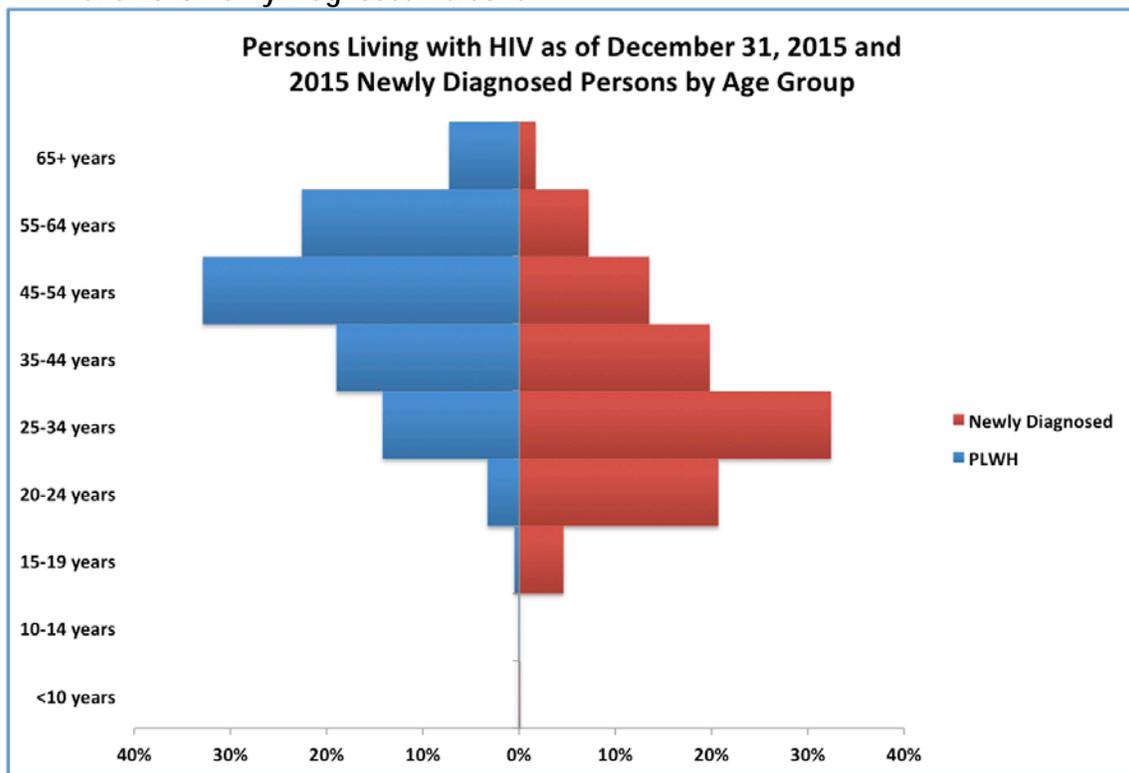
* The one pediatric case in 2015 had an unknown transmission risk. This represents a decline in pediatric cases reported in previous years.

** Virginia has a large number of total cases with unknown/not reported transmission risk (5,031 total PLWH and 378 newly-diagnosed persons in 2015). The percentages calculated are based only on cases with a known/reported transmission category.

Among newly-diagnosed PLWH in 2015 a similar pattern is seen, except in age distribution. Newly-diagnosed PLWH are male (80.7%), Black, non-Hispanic (62.5%), and have MSM as their main risk for transmission (45.0%). MSM transmission risk increases to 75.8% when the 378 newly-diagnosed PLWH without a reported transmission risk are excluded from the total. Newly-diagnosed PLWH are younger overall than all PLWH in Virginia; 53.1% are between the ages of 20 and 34 years old. Figure 3 depicts the age pattern for all PLWH and newly-diagnosed persons.

Virginia has an aging population of PLWH, as persons have been living with the disease for more than 30 years and antiretroviral therapy (ART) has transformed HIV from a once acute illness to a chronic disease. In contrast, persons who are newly-diagnosed with HIV are younger with more than half (57.8%) under 35 years of age.

Figure 3. Percentage by Age Group of Diagnosed Persons Living with HIV as of December 31, 2015 and 2015 Newly Diagnosed Persons



HIV incidence estimates currently provide the best source for identifying persons at highest risk for HIV. The Virginia Department of Health (VDH) participates in the Centers for Disease Control and Prevention’s (CDC) HIV Incidence Surveillance Project. HIV incidence is defined as “the number of new cases of a disease that occur in a population over a certain period of time.”ⁱⁱⁱ Based on the most recent HIV incidence data analysis, the populations most at risk for HIV include MSM, Black, non-Hispanic persons, and youth and young adults (ages 13 to 34 years old).^{iv} This is consistent with the pattern seen in newly-diagnosed PLWH presented in Table 2.

The Norfolk Transitional Ryan White Part A Grant Area (TGA)

Table 3. Comparison of the Virginia Demographic Characteristics of the Norfolk TGA's 2014 General Population with PLWH in the Norfolk TGA as of December 31, 2015 and New HIV Diagnoses in 2015 in the Norfolk TGA

Characteristic	2014 General Population ¹		PLWH as of 12/31/2015 ²		2015 New Diagnoses ²	
	Number	Percent	Number	Percent	Number	Percent
Total	1,661,809	100%	7,270	100%	280	100%
Gender						
Male	817,296	49.2%	5,266	72.4%	223	79.6%
Female	844,513	50.8%	2,004	27.6%	57	20.4%
Age (years)						
<10	213,720	12.9%	4	0.0%	0	0.0%
10 – 14	104,177	6.3%	10	0.0%	0	0.0%
15 – 19	115,177	6.9%	40	0.6%	20	7.1%
20 – 24	146,388	8.8%	303	4.2%	78	27.9%
25 – 34	248,004	14.9%	1,295	17.8%	92	32.9%
35 - 44	204,153	12.3%	1,333	18.3%	38	13.6%
45 - 54	235,245	14.2%	2,250	30.9%	24	8.6%
55 - 64	191,780	11.5%	1,582	21.8%	23	8.2%
65+	203,215	12.2%	453	6.2%	5	1.8%
Race (non-Hispanic)/ Ethnicity						
Black/African American	507,985	30.6%	5,060	69.6%	209	74.6%
White	933,900	56.2%	1,677	23.1%	58	20.7%
Hispanic/Latino	98,365	5.9%	333	4.6%	10	3.6%
Asian/Native Hawaiian/ Pacific Islander	62,973	3.8%	47	0.6%	2	0.7%
American Indian/ Alaska Native	4,150	0.2%	12	0.2%	1	0.4%
Multi-race/Some Other Race/Unknown	1,374	0.1%	141	1.9%	0	0%
Transmission Category*						
Known/Reported risk			5,485	100%	159	100%
MSM			3,214	58.6%	130	81.8%
IDU			618	11.3%	3	1.9%
MSM/IDU			236	4.3%	3	2%
Heterosexual contact			1,317	24.0%	23	14%
Pediatric			85	1.5%	0	0%

Sources: ¹2014 American Community Survey 5-Year Estimates and ²Virginia 2015 HIV Surveillance Annual Report

Notes: Age groups for all PLWH exclude 1 case with "unknown" age; for PLWH, age is "current age" and for new diagnoses, age is "age at diagnosis;" 2015 HIV data are provisional due to reporting delays; percentages may not add due to rounding.

* Virginia has a large number of total cases with unknown/not reported transmission risk (5,031 total PLWH and 378 newly-diagnosed persons in 2015. The percentages calculated are based only on cases with a known/reported transmission category.

Table 3 presents the demographics of the overall population of the Norfolk TGA, and also PLWH in the TGA and persons newly-diagnosed with HIV in the TGA in 2015. Compared to the general population of Virginia, residents of the Norfolk TGA are slightly younger with approximately 34.9% of Norfolk TGA residents under 24 years old (Table 3) compared to 32.7% of all persons living in Virginia (Table 2). Norfolk TGA residents are also more likely to be Black or African American (30.6%), compared to 18.9% of all persons living in Virginia (Table 2).

PLWH and persons newly diagnosed in 2015 in the Norfolk TGA have similar demographic patterns to Virginia; they are predominantly male (72.4% PLWH, 79.6% new diagnoses in the Norfolk TGA in 2015), Black or African American (69.6%, 74.6%), and have MSM as their primary transmission risk (58.6%, 81.8%). PLWH in the Norfolk TGA are mostly between the ages of 45 to 64 years (52.7%) and 60.8% of 2015 newly-diagnosed persons are between the ages of 20 to 34 years old. The key differences between PLWH in the Norfolk TGA and in Virginia are a higher proportion of Black/African American PLWH (69.6%) in the Norfolk TGA compared to 59.2% in Virginia. This difference is more striking among 2015 newly-diagnosed persons with 74.6% of newly-diagnosed persons in the Norfolk TGA being Black or African American compared to 62.5% of newly-diagnosed persons in Virginia. There is a slightly higher percentage of females living with HIV in the Norfolk TGA (27.6%) than in Virginia overall (25.9%). For persons newly diagnosed in 2015, a larger proportion are less than 25 years old in the Norfolk TGA (35%) than in Virginia overall (25.3%). Newly-diagnosed persons in the Norfolk TGA are also more likely to be Black or African American (74.6%) compared to Virginia overall (62.5%).

ii. Socioeconomic data

Table 4 presents selected socioeconomic data for Virginia and the five health regions, including the Norfolk TGA. In 2014, an estimated 11.5% of Virginians lived at or below 100% of the federal poverty level (FPL).^v Among all the health regions in the Commonwealth, the Southwest Region had the highest percentage of persons living below the FPL (17.5%).^{vi} Per capita income followed the same pattern across health regions. The highest per capita income was in the Northern Region (\$48,973), which also had the lowest percentage of persons living below 100% FPL (6.4%).^{vii, viii} The Eastern Region, including the Norfolk TGA, which had 12.5% of residents living below 100% FPL (ranks 3rd) and the second lowest per capita income (\$28,811), had the largest proportion (54.3%) of residents who pay 30% or more of their gross income on rent.^{ix, x, xi} The 30% threshold is important as it is commonly utilized as a measure of housing instability.^{xii}

Table 4. Socioeconomic Characteristics of Virginia and Five Health Regions' General Population

Characteristic	Virginia	Health Region				
		Central	Eastern/ Norfolk TGA ¹	Northern	North- west	South- west
Below 100% Federal Poverty Level	11.5%	13.5%	12.5%	6.4%	11.3%	17.5%
Per capita income	\$33,958	\$29,366	\$28,811	\$48,793	\$30,327	\$23,362
Gross rent as a percentage of household income (≥ 30%)	50.1%	51.7%	54.3%	45.3%	50.2%	50.6%
Educational Attainment (population 25 years and older)						
≤8 th grade	4.9%	5.3%	3.4%	4.5%	5.1%	7.3%
9 th to 12 grade (no diploma)	7.2%	8.8%	7.3%	3.9%	8.1%	10.0%
High School or Equivalent	25.0%	27.6%	26.8%	14.5%	31.2%	32.4%
Some College	20.0%	20.7%	25.5%	15.2%	19.4%	20.9%
Associates Degree	7.1%	6.8%	8.7%	5.6%	6.5%	8.4%
Bachelors Degree	20.7%	19.4%	17.6%	30.0%	17.6%	13.2%
Masters Degree or Higher	15.0%	11.4%	10.7%	26.3%	12.2%	7.7%
Unemployed (percent of population ≥ 16 years)	4.5%	5.1%	5.3%	5.1%	3.7%	4.1%
Uninsured	12.1%	12.4%	12.0%	12.0%	11.9%	12.5%
Foreign Born	11.6%	6.7%	6.2%	26.4%	6.3%	3.3%
Not a U.S. Citizen	6.0%	3.8%	2.8%	13.5%	3.6%	2.1%
English spoken "less than very well" (percent of population ≥ 5 years)	5.6%	3.6%	2.8%	12.6%	3.4%	1.7%

Source: U.S. Census Bureau, 2014 American Community Survey Five-Year Estimates (2010-2014). Data compiled for Health Regions by Cubit Planning, Inc. based on FIPS codes provided by the Virginia Department of Health.

¹Norfolk TGA data exclude Currituck County, NC; Data was aggregated separately for the 14 Virginia localities (cities and counties) within the Norfolk TGA, but the results were the same as the Eastern Region and so they are combined in one column due to space limitations.

The ability to secure a job, especially one that pays well so that a person and family can meet their basic subsistence needs such as food and housing, is correlated with educational attainment.^{xiii} As seen in Table 4, the Southwest Region has the lowest educational attainment in the Commonwealth; 7.3% of persons 25 years and older have less than a ninth-grade education, and an additional 10% have not completed high school for a total of 17.3%, followed by the Central Region at 14.1%.^{xiv} Thus, one in every six adults in the Southwest Region has less than a high school or equivalent education. This compares to 12.1% of Virginians overall.^{xv} The Northern Region has the highest level of education; 8.4% have less than a high school or equivalent education and 56.3% have a baccalaureate or higher degree.^{xvi} This is more than double the proportion of adults 25 years and older in the Southwest Region (20.9%) with a comparable level of education.^{xvii}

Although unemployment data reported in the U.S. Census Bureau's American Community Survey (ACS) is not the most current, it offers the opportunity to compare unemployment across

Virginia's health regions. In 2014, an estimated 4.5% of Virginians 16 years and older in the civilian population are unemployed.^{xviii} The Eastern Region and Norfolk TGA have the highest unemployment (5.4%) and the Northwest Region (3.7%) has the lowest.^{xix}

It is important to note that Virginia's implementation of the Patient Protection and Affordable Care Act (commonly referred as the Affordable Care Act or ACA) does not include expansion of Medicaid benefits to adults 18-64 years old or an increase of financial eligibility. However, it does include access to marketplace plans and health insurance premium subsidies for income-eligible Virginians. While not all health insurance is job-based (e.g., Medicare), employment is a source of health insurance for many. Table 4 shows that 12.1% of Virginians are uninsured according to the U.S. Census Bureau's 2014 five-year estimates.^{xx} The Northwest Region, which has the lowest unemployment, also has the lowest proportion of uninsured residents (11.9%).^{xxi} The Southwest Region (12.5%) has the highest proportion of uninsured persons, followed by the Central Region (12.4%).^{xxii}

Understanding Virginia's immigrant populations, including those who are not U.S. citizens as well as persons who may not speak English very well, is important for understanding potential barriers to health care access. Barriers to services are discussed later in this section. As seen in Table 4, approximately 11.6% of Virginia's residents are foreign born; the largest proportion is in the Northern Region (26.4%) and the lowest is in the Southwest Region (3.3%).^{xxiii} An estimated 6.2% of residents in the Norfolk TGA are foreign born.^{xxiv} The Northern Region also has the largest proportion of residents who are not a U.S. citizen (13.5%), which includes persons who may be undocumented.^{xxv} This is more than double the overall percentage in Virginia (6.0%).^{xxvi} In terms of language, an estimated 5.6% of Virginia's population five years and older does not speak English very well.^{xxvii} This proportion is largest in the Northern Region (12.6%), which also has the largest foreign-born population.^{xxviii}

c. HIV Burden in Virginia (i.e., number of PLWH, rates, trends, populations most affected, geographic concentrations, deaths, etc.).

HIV impacts Virginians of all races/ethnicities, ages, sexes and gender identities, transmission categories, and geographic regions. However, this impact is not equally distributed across populations or geographies. There are some populations that are disproportionately impacted by HIV. Disproportionate impact can be measured as a percentage (i.e., the percentage of HIV within the population is greater than their representation in the entire population) or as a rate. Examining HIV-related data as a rate per 100,000 population allows populations and geographic areas with a smaller number of PLWH to be compared to populations and geographic areas with larger numbers of PLWH. The following narrative describes the impact of HIV by population and geography, highlighting trends in new diagnoses as well as those populations and geographies with the greatest disparities and/or burden of disease.

Trends in New HIV Diagnoses (2010-2014)

During the five-year period from 2010 through 2014, there were 4,790 persons newly-diagnosed with HIV in Virginia, at an average of 958 persons diagnosed per year. An additional 929 persons were diagnosed in 2015 (provisional due to reporting delay) for a six-year total of 5,719 persons. This ranges from a high of 1,019 newly-diagnosed persons in 2010 to a low of 924

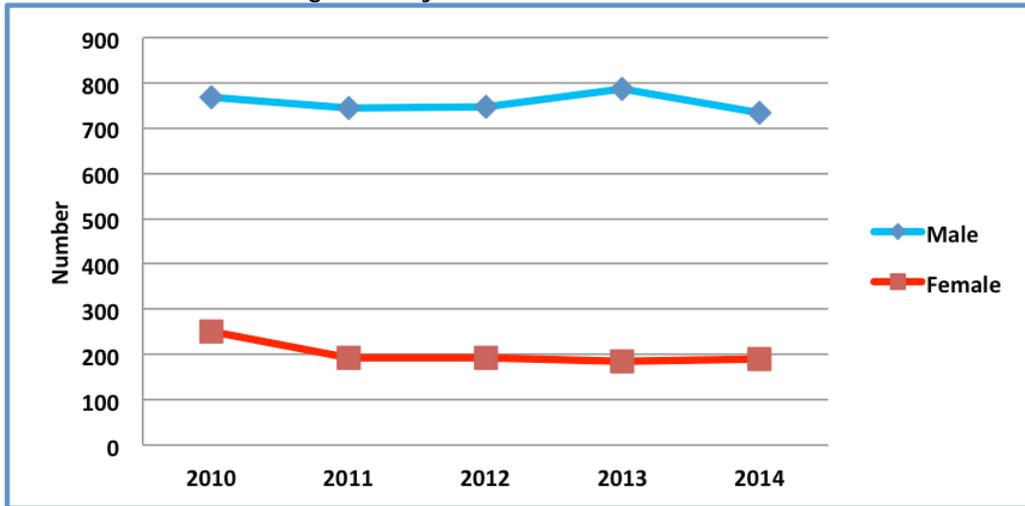
persons in 2014.

Key highlights in the five-year trends (2010-2014) for selected categories are depicted in the figures below with a brief description.

Diagnosis by sex at birth (see Figure 5)

- Most persons newly diagnosed with HIV are male (see Figure5).

Figure 5. Trend in New HIV Diagnoses by Sex at birth from 2010 to 2014



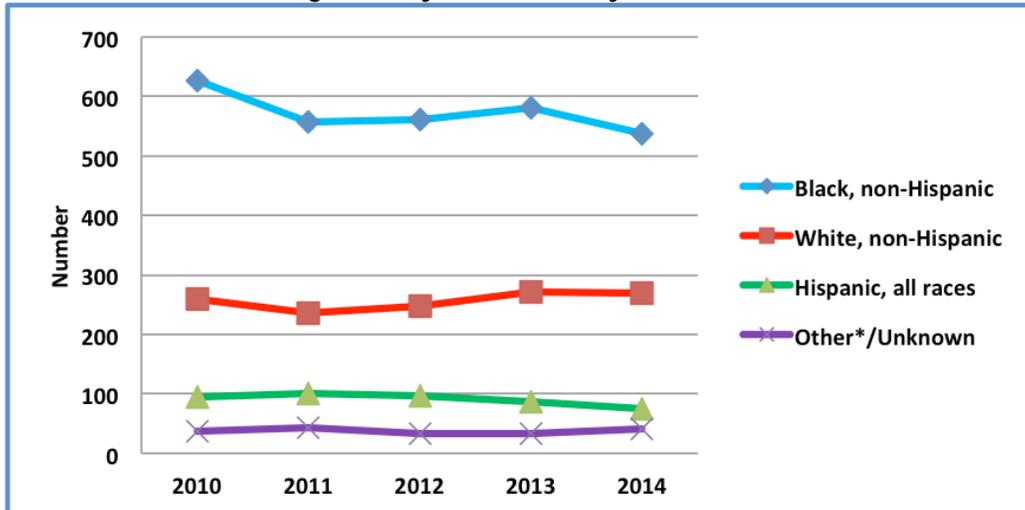
Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Note: Transgender data are not available due to incomplete reporting of current gender.

Diagnoses by race (see Figure 6)

- Most persons newly diagnosed with HIV are Black, non-Hispanic, followed by White, non-Hispanic persons.

Figure 6. Trend in New HIV Diagnoses by Race/Ethnicity from 2010 to 2014



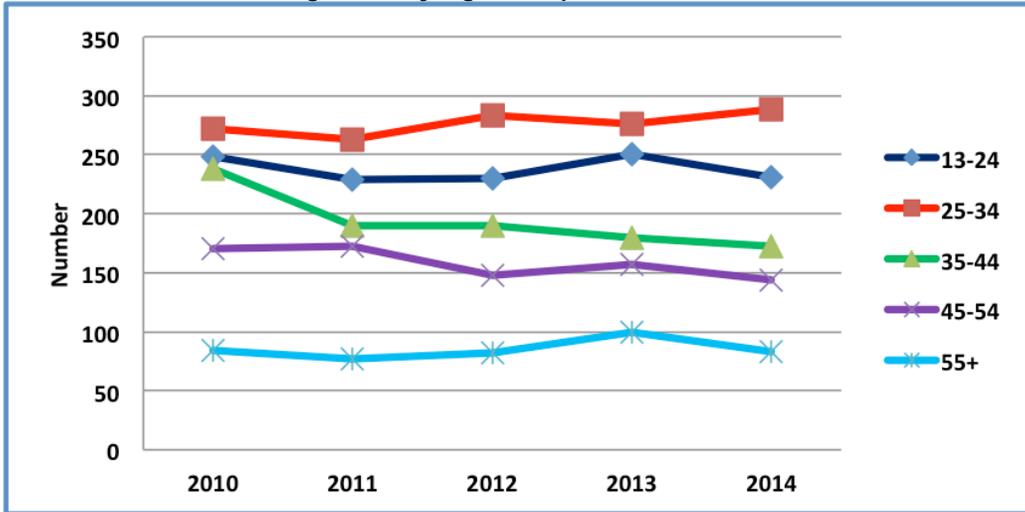
Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Note: * Includes Asian, American Indian, Alaskan Native, Hawaiian/Pacific Islander, and Multi-Race

Diagnoses by age at diagnosis (see Figure 7)

- The number of persons diagnosed with HIV between ages 25-34 appear to be increasing; and
- The number of persons diagnosed with HIV between ages 35-44 and 45-54 appear to be decreasing.
- Overall, the majority of new diagnoses from 2010 to 2014 occur between the ages of 13-34.

Figure 7. Trend in New HIV Diagnoses by Age Group from 2010 to 2014

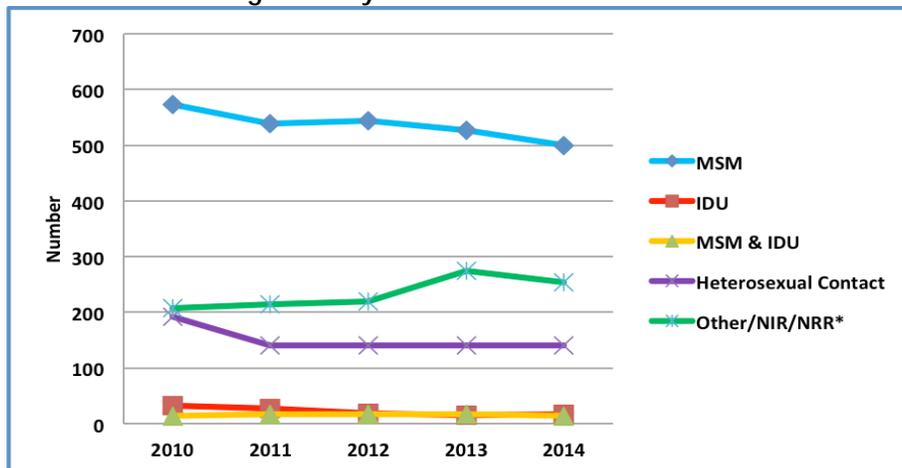


Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Diagnoses by transmission risk (see Figure 8)

- The number of persons diagnosed with HIV with a risk of MSM appears to be on a slight decline, although this could be attributed to the increase of no reported risk/no identified risk (NRR/NIR) cases, indicating the need for continual review of transmission risk information.

Figure 8. Trend in New HIV Diagnoses by Transmission Risk from 2010 to 2014

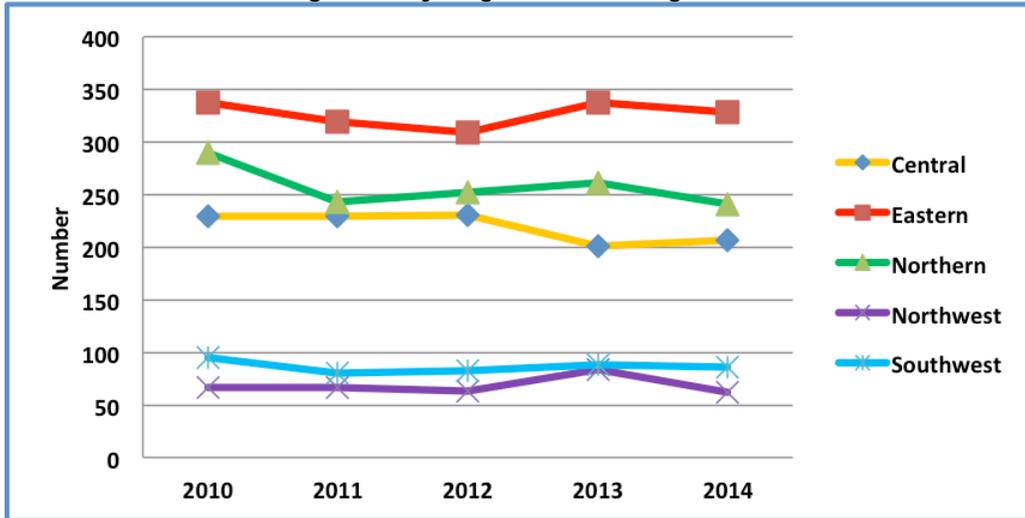


Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Diagnoses by health region (see Figure 9)

- Most new diagnoses occur in the Eastern Region, which includes the Norfolk TGA; and
- The number of new diagnoses in the Northern region appears to be decreasing.

Figure 9. Trend in New HIV Diagnoses by Virginia Health Region from 2010 to 2014

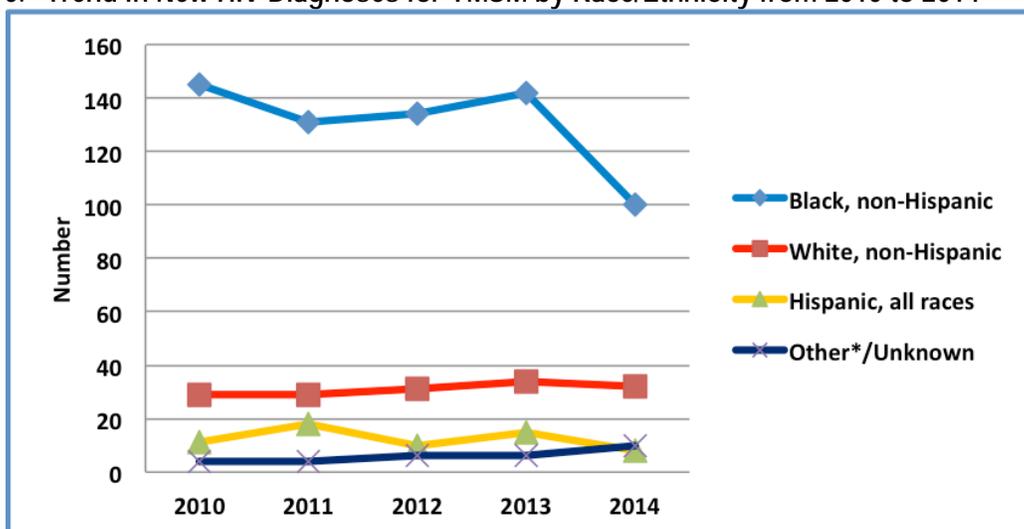


Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Diagnoses for young MSM (YMSM) ages 13-24 (see Figures 10 and 11)

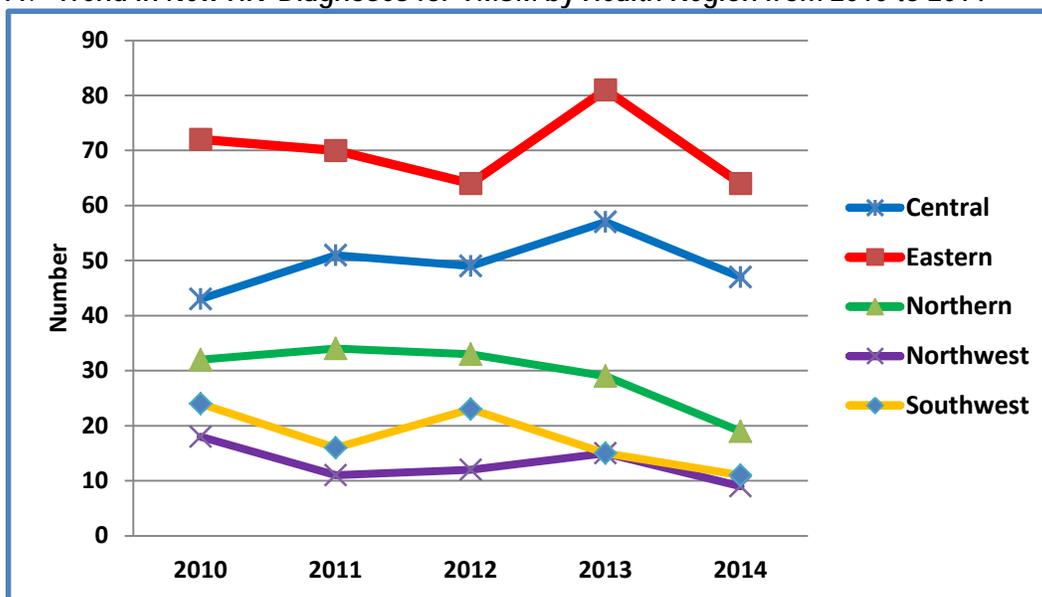
- The number of new diagnoses for this population appear to be the highest among Black, non-Hispanic persons and occur mostly in the Eastern Region;
- The number of new diagnoses for this population who are Black, non-Hispanic appear to be decreasing in 2014; however, this could be due to a general decrease in the number of new diagnoses among YMSM of all races/ethnicities in 2014 (N=150).

Figure 10. Trend in New HIV Diagnoses for YMSM by Race/Ethnicity from 2010 to 2014



* Includes Asian, American Indian, Alaskan Native, Hawaiian/Pacific Islander, Multi-Race
 Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Figure 11. Trend in New HIV Diagnoses for YMSM by Health Region from 2010 to 2014



Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Other trends across the figures presented include:

Diagnoses for White, non-Hispanic MSM aged 35 years and older

- The number of new diagnoses for this population is highest in the Northern region.

Diagnoses for Black, non-Hispanic women

- The number of new diagnoses for this population is highest in the Eastern Region;
- New diagnoses through heterosexual contact have seen a large decrease while diagnoses for people who inject drugs (PWID) have seen a smaller decrease; and

- Overall, there are decreases in the number of new diagnoses in all health regions, with a larger decrease in the Central and Eastern Regions.

Disparity Populations

Populations that are disproportionately impacted by HIV are considered to be a disparity population. Disproportionate impact can be identified and will vary across different measures, including but not limited to the following:

- total PLWH,
- newly-diagnosed PLWH,
- total persons living with AIDS (PLWA),
- newly-diagnosed PLWA,
- PLWH who are diagnosed with HIV late in their disease progression and are diagnosed with AIDS in the same year,
- total deaths among PLWH,
- PLWH who are considered “not in care,” and
- HIV incidence estimates of undiagnosed persons.

Additional disparities can be seen in Virginia’s HIV Continuum of Care if a population has HIV-related health outcomes that are worse than the average in Virginia. Although there may be some variation across measures, many of the populations that are disproportionately impacted among total PLWH and newly-diagnosed persons are also disproportionately impacted across other measures. For the purpose of this discussion, disproportionate impact among total PLWH and newly-diagnosed PLWH is presented (see Table 1). Disparities regarding the HIV Continuum of Care measures are presented in the next section.

Gender: As seen in Table 1, males comprise 49.1% of Virginia’s total population but represent 74.1% of PLWH and 80.7% persons newly diagnosed in 2015. The impact on males is largely due to sexual transmission risk among MSM, which is the primary transmission risk of Virginia’s HIV epidemic. As seen, among PLWH with an identified/reported transmission risk, MSM comprise 58.6% of all PLWH and 75.8% of persons newly diagnosed in 2015.

The data for transgender PLWH in Virginia is not complete. As part of the Integrated HIV Services Plan (Appendix B), the VDH Division of Disease Prevention (DDP) plans to implement activities to improve the data reporting for transgender persons across the Commonwealth. The Williams Institute estimates there are 31,419 transgender persons in Virginia, approximately 0.4% of Virginia’s total population based on Table 1.^{xxix}

Race/Ethnicity: Non-Hispanic Blacks are the most severely impacted racial/ethnic population in Virginia. While they represent 18.9% of the Commonwealth’s total population (Table 1), they represent 59.2% of PLWH and 62.5% of persons newly diagnosed in 2015. More than one in two PLWH is Black, non-Hispanic, and nearly two in three persons newly diagnosed in 2015 is Black, non-Hispanic.

Hispanics of all races are not currently disproportionately impacted among PLWH. Hispanics represent 8.4% of Virginia’s general population and 8.1% of PLWH. However, among persons newly diagnosed in 2015, Hispanics represent 9.9% of newly-diagnosed PLWH.

Age: The population pyramid in Figure 3 shows the differences between total PLWH and newly-diagnosed persons in 2015 by age. The advances in HIV treatment have extended not only the quantity of a PLWH's years, but the quality of those years. Thus, total PLWH are aging and younger persons are infected and diagnosed with HIV. Older persons comprise the largest number of total PLWH. Those between 45 and 64 years old represent 26.9% of Virginia's general population and 55.5% of PLWH. Among newly-diagnosed persons in 2015, this pattern is reversed. Older persons 45-64 years old represent 20.7% of 2015 newly-diagnosed persons, less than their representation in the general population. However, younger persons aged 20-44 years old represent 72.9% of 2015 newly-diagnosed persons and only 34.5% of Virginia's general population.

Transmission Risk: MSM represent more than half of all PLWH whose risk category is known (58.6%) and more than three-quarters (75.8%) of persons newly diagnosed in 2015. When the dual risk category of both MSM and injection drug use (PWID) is combined, these percentages increase to 63.2% of PLWH and 77.6% of new diagnoses in 2015. The Williams Institute estimates that approximately 3.5% of adults are gay, lesbian, or bisexual.^{xxx}

Heterosexual contact accounts for nearly one quarter (24.2%) of HIV transmission among PLWH and 20.0% among persons newly diagnosed in 2015 with a reported HIV transmission risk (Table 1). PWID account for more than one in ten PLWH in Virginia (11.0%), but only 2.2% of persons newly-diagnosed in 2015 with a reported transmission risk. PLWH with the dual risk category of MSM/PWID add an additional 4.6% to total PLWH and 1.8% to 2015 new HIV diagnoses. Although the proportion of newly-diagnosed persons is considerably smaller due to the growing opioid problem in Virginia, these data need to be monitored closely. The U.S. government lifted the ban on the use of federal funding for syringe services in January 2016 in response to the localized outbreak of HIV among PWID in Scott County, Indiana.^{xxxii} Virginia has a large number of 2015 PLWH without a known/reported HIV transmission risk category (5,031) documented. PLWH who are PWID and/or MSM may not disclose their HIV risk due to homophobia or stigma associated with being MSM and/or drug use, which could change actual percentages if reported.

Geographic Concentrations

As seen in Table 1, three health regions are home to 82.4% of all PLWH in Virginia with a known residence (i.e., Central, Eastern, and Northern Regions). They also represent 82.8% of persons newly diagnosed in 2015. However, two of these regions have a disproportionate burden of HIV compared to their percentage of the general population. The Eastern Region, which encompasses the Norfolk TGA, is home to the largest number of PLWH (31.0%) and newly-diagnosed persons in 2015 (32.4%). Yet, the Eastern Region makes up 22.3% of Virginia's total population. This same pattern is true in the Central Region, which is home to 24.2% of PLWH and 26.4% of persons newly diagnosed in 2015 and only represents 17.0% of Virginia's total population.

However, as these are large geographic areas, it is important to examine the local disparities within each region to identify the geographic areas with the greatest disease burden. This is best understood by comparing rates per 100,000 population. Table 5 presents the concentration of PLWH and 2015 newly-diagnosed persons by health region and city or county. For total PLWH,

only cities/counties with greater than or equal to 100 PLWH are presented and for persons newly-diagnosed in 2015, only cities/counties with greater than or equal to 10 newly-diagnosed persons are presented. These provide a good depiction of how PLWH are concentrated across Virginia.

Table 5. Concentration of PLWH (N≥100) and Newly Diagnosed Persons in 2015 (N≥10) for Cities/Counties by Virginia Health Region

Geography	Total PLWH as of December 31, 2015	Newly Diagnosed Persons in 2015
Virginia	24,583	929
Central Region	5,920	245
Richmond (city)	2,478	66
Henrico County	900	53
Chesterfield County	624	35
Petersburg (city)	391	29
Hopewell (city)	143	--
Powhatan County	124	--
Prince George County	122	--
Hanover County	120	--
Greensville County	117	--
Mecklenburg County	107	--
Eastern Region	7,697	301
Norfolk (city)	2,221	72
Virginia Beach (city)	1,336	65
Newport News (city)	952	38
Portsmouth (city)	752	28
Hampton (city)	727	26
Chesapeake (city)	667	19
Suffolk (city)	281	11
Accomack County	121	--
York County	--	11
Northern	6,773	223
Fairfax County	2,637	79
Arlington County	1,229	30
Alexandria (city)	1,221	38
Prince William County	1,009	46
Loudoun County	375	22
Manassas (city)	118	--
Northwest	1,944	92
Stafford County	211	12
Spotsylvania County	182	10
Charlottesville (city)	181	11
Albemarle County	157	--
Frederick County	107	--
Fredericksburg (city)	103	--
Southwest	2,103	68
Roanoke County	118	--
Danville (city)	176	--
Roanoke (city)	475	14
Pittsylvania County	100	--
Lynchburg (city)	201	--

Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Deaths

Table 6 presents the 2014 death rate (from all causes) among PLWH. As seen in Table 6, the highest death rate in 2014 among PLWH is in the Eastern Region (4.4 per 100,000), the majority of which is encompassed by the Norfolk TGA, followed by the Central Region (3.8 per 100,000). The Eastern Region has more than three times the rate of the Northern, Northwest, and Southwest regions, and the Central Region has more than double the rate of these regions.

Table 6. Number of Deaths and 2014 Death Rate per 100,000 Population Among Persons Living With HIV in Virginia as of December 31, 2014, by Health Region

Health Region	Number of Deaths	Rate per 100,000
Central	53	3.8
Eastern	82	4.4
Northern	35	1.5
Northwest	15	1.2
Southwest	15	1.1

Source: Virginia Department of Health Division of Disease Prevention, June 2016.

When examining deaths by other demographic characteristics, there are specific differences between the proportion of PLWH by a specific population compared to the proportion of deaths in that same population. These differences highlight potential disparities. As seen in Table 7, although the majority of deaths are among males (72.5%), the proportion of deaths among female PLWH (27.5%) is slightly higher than their representation among all PLWH (25.9%). PLWH (55-64 years) have the largest number of deaths (n=67) of all populations; their proportion among all PLWH deaths in 2014 (33.5%) is significantly higher than their representation among all PLWH (22.6%). In terms of race/ethnicity, non-Hispanic Blacks represent the largest number (n=132) and proportion (66.0%) of PLWH who died in 2014. This is disproportionate to their representation among all PLWH (59.2%).

Table 7. Comparison of Demographic Characteristics of Virginia's 2015 PLWH with 2014 Deaths Among PLWH (all causes) for selected populations

Characteristic	2015 PLWH		2014 Deaths	
	Number	Percent	Number	Percent
Total	24,853	100%	200	100%
Gender				
Male	18,423	74.1%	145	72.5%
Female	6,430	25.9%	55	27.5%
Age at Death (years)				
15 - 24	930	3.7%	5	2.5%
25 - 34	3,540	14.2%	18	9.0%
35 - 44	4,715	19.0%	23	11.5%
45 - 54	8,174	32.9%	60	30.0%
55 - 64	5,617	22.6%	65	32.5%
65+	1,821	7.3%	29	14.5%
Race/Ethnicity				
Black, non-Hispanic	14,703	59.2%	132	66.0%
White, non-Hispanic	7,336	29.5%	54	22.0%
Hispanic	2,003	8.1%	4	2.0%
Other*	811	32.6%	10	5.0%
Transmission Category*				
MSM	11,563	47.0%	76	38.0%
PWID	2,181	8.9%	39	19.5%
MSM/PWID	914	3.7%	6	3.0%
Heterosexual contact	4,781	19.4%	38	19.0%
Pediatric/Blood Recipient	383	1.6%	1	0.5%
No risk factor reported/identified	5,031	20.5%	39	19.5%

Source: Virginia Department of Health Division of Disease Prevention, June 2016.

Note: * "Other" includes Asian/American Indian/Alaska Native/Multi-Race/Unknown.

d. Indicators of risk for HIV infection in the population covered by your service area.

Over the past 30 years of the HIV epidemic, the understanding of what puts a person at risk for transmitting or acquiring HIV has vividly changed. Behavior is no longer considered the sole determinant of risk. Social and economic factors, as well as barriers to the full participation in available services, including stigma, have tremendous impact on individual and community health. In 2013, the CDC published its first report examining the relationship between selected social determinants of health (i.e., poverty, educational attainment, median household income, and unemployment) and new HIV diagnoses; Virginia was included in the 18 areas examined.^{xxxii} In its most recent analysis (2015), the CDC added *uninsured* to the measures examined; Virginia was included in the 11 states examined.^{xxxiii} In addition to social determinants, the improved understanding of the role of viral load in HIV transmission has led to more widespread implementation of “test and treat” strategies to identify HIV-positive persons who do not know their HIV status and to begin them on treatment immediately, as well as efforts such as Virginia’s Data to Care (DtC) initiative to identify PLWH who know their HIV status but are not engaged in HIV medical care. Lastly, the role of stigma cannot be overstated. Not only is stigma associated with HIV, there is stigma associated with being lesbian, gay, bisexual, or

transgender (LGBT); substance use, especially illicit drug use; having a mental health disorder; being homeless; and the list can go on. Persons who fall into several of these groups face stigma from multiple directions. Thus, to understand risk for HIV in Virginia, one must examine risk through multiple lenses.

- ***Transmission of HIV Along the HIV Care Continuum***

The landmark study conducted through the HIV Prevention Trials Network, known as HPTN 052, was the first “HIV Treatment as Prevention” clinical trial. It found that early initiation of ART decreased HIV transmission by 96%.^{xxxiv} A more recent study has further identified that PLWH who are not in care account for 61.3% of HIV transmission, and persons who are undiagnosed account for 30.2% of HIV transmission.^{xxxv} These findings suggest that these two populations account for 91.5% of new HIV infections. The study further estimated the percentage of HIV transmission attributed to PLWH along the steps of the HIV Care Continuum. It estimated that:

- PLWH who are retained in care (defined as attending at least one visit with a medical care provider) but not prescribed ART account for 2.7% of transmission;
- PLWH who are prescribed ART but not virally suppressed account for 3.3% of transmission; and
- PLWH who are virally suppressed account for 2.5% of HIV transmission.^{xxxvi}

The CDC estimates that 12.7% of all PLWH in Virginia are currently unaware of their HIV status.^{xxxvii} This results in an estimate of 3,576 undiagnosed HIV-positive persons based on 24,853 diagnosed persons in 2015.

PLWH who are diagnosed and not in care are unevenly distributed across demographic categories in Virginia. Although the estimate is 43.4% overall, VDH estimates higher percentages of PLWH not in care among the following populations/geographic regions (in order from largest percentage to lowest):^{xxxviii}

- Northern Region (57.5%)
- PWID (51.7%)
- Persons 60 years and older (50.8%)
- Hispanics/Latinos (47.1%)
- Persons 50-59 years of age (45.5%)
- Males (45.3%)
- Non-Hispanic Whites (45.3%)
- Eastern Region, including Norfolk TGA (44.4%)
- Persons 40-49 years of age (44.4%)
- MSM/PWID (44.3%)
- Asian/Hawaiian/Pacific Islanders (44.1%)

- ***Behavioral Risk***

As seen in the data already presented for total PLWH and newly-diagnosed persons in 2015, there are three primary modes of transmission that constitute the majority of HIV cases in Virginia. Two modes of transmission are sexual: MSM and heterosexual transmission. The

third results from the sharing of injection paraphernalia among persons who inject drugs (PWID). This includes sharing needles and/or “works” used to inject drugs. “Works” refer to the cotton, cooker (e.g., spoon), and other paraphernalia that may be used and shared. Vertical transmission of HIV from mother to child has remained relatively stable in Virginia from 2011 to 2014, accounting for an average of 7 newly-diagnosed cases in each of these years, approximately 1% of all HIV transmission.^{xxxix} In 2015, this declined dramatically and there was only one pediatric case of HIV reported.^{xl}

Sexual Risk

HIV: The HIV data for sexual transmission of HIV were already presented in Table 2. MSM accounts for 75.8% of PLWH with a reported transmission category. The dual risk of MSM/PWID accounts for an additional 4.6% of HIV transmission. Heterosexual contact accounts for 20.0% of Virginia’s HIV transmission. When examining the data for persons newly diagnosed in 2015 with a reported transmission category, MSM accounts for an even larger proportion of reported risk (75.8%), heterosexual contact a smaller proportion (20.0%), and the dual risk of MSM/PWID accounts for a smaller proportion of risk (1.8%).

In the Norfolk TGA (see Table 3), MSM accounts for 58.6% of HIV transmission with a reported risk category among all PLWH and 81.8% of transmission risk for persons newly diagnosed in 2015. The dual risk of MSM/PWID accounts for an additional 4.3% of risk for all PLWH and 1.9% for persons newly diagnosed in 2015. Heterosexual contact accounts for 24% of all PLWH and only 14.5% of 2015 new diagnoses.

Sexually Transmitted Diseases: The CDC notes that “*In the United States, people who get syphilis, gonorrhea, and herpes often also have HIV or are more likely to get HIV in the future.*”^{xli} Having an STD puts a person at greater risk of acquiring HIV.^{xlii} It may in fact increase the odds of HIV transmission three to five fold.^{xliii} Risk behaviors for STDs are the same risk behaviors for HIV and include, among others: not practicing safer sex (including not using condoms) and other barriers to prevent exposure to blood, semen, and vaginal fluids; having multiple sex partners; having anonymous sex without practicing safer sex; and having sex under the influence of drugs and/or alcohol.^{xliv}

- *Chlamydia:* The rate of chlamydia in 2014 in Virginia was 426.7 per 100,000 population.^{xlv} This rate has fluctuated since 2011 (431.1 per 100,000) and represents a slight decrease from that time. However, the rate was highest among females (575.4 per 100,000), Blacks/African Americans (934.9 per 100,000), and younger persons.^{xlvi} Youth 15-19 years had a rate of chlamydia of 1,654.2 per 100,000; youth 20-24 years had an even higher rate of 2,447.1 per 100,000, and young adults 25-29 years had a rate of 1,088.1 per 100,000 population.^{xlvii}
- *Gonorrhea:* The rate of gonorrhea in 2014 in Virginia was 98.4 per 100,000 population.^{xlviii} This rate has increased steadily over the past four years from 81.3 per 100,000 population.^{xlix} The highest rates were in the same populations as chlamydia with one additional age group (30-34 years) experiencing a higher rate of gonorrhea. The rate among females was 102.2 per 100,000 population; Blacks/African Americans was 310.5

per 100,000 population; youth 15-19 years was 318.0 per 100,000 population; youth 20-24 years had the highest rate of all groups, 504.2 per 100,000 population; young adults 25-29 years had a rate of 272.6 per 100,000; and adults 30-34 years had a rate of 139.3 per 100,000.¹

- *Total Early Syphilis:* Total early syphilis includes persons diagnosed with primary, secondary, and early latent syphilis. The rate of total early syphilis in 2014 in Virginia was 6.7 per 100,000 population.^{li} This represents a slight increase from 2011 (6.5 per 100,000) but is a decrease from both 2012 (7.5 per 100,000) and 2013 (8.2 per 100,000).^{liii} The pattern of total early syphilis is very different than chlamydia or gonorrhea in that total early syphilis is more prevalent in males (12.5 per 100,000) than females (1.1 per 100,000).^{liiii} This is largely due to the fact that 68.7% of all 2014 total early syphilis cases were diagnosed among MSM; about 75% of all cases among males.^{liv} Blacks/African Americans have the highest rate of total early syphilis in 2014, at 17.8 per 100,000.^{lv} In terms of age, there were higher than average rates across all age groups from 20-49 years old. The two highest rates were in younger persons 20-24 years old (19.1 per 100,000) and persons 25-29 years old (20.2 per 100,000).^{lvi}

Although total early syphilis data were not reported by region, data for primary and secondary syphilis alone are available. In terms of geographic regions, the Eastern Region, which includes the Norfolk TGA, had the highest rate of primary and secondary syphilis in 2014 (4.9 per 100,000), followed by the Central Region (4.6 per 100,000).^{lvii}

Although the data have not yet been fully analyzed, Virginia experienced a significant outbreak of syphilis in 2015. This will require close monitoring to identify the populations and communities most impacted.

Drug Use

Injection Drug Use: According to HIV surveillance data, 11.0% of all PLWH in 2015 with a reported transmission risk identified injection drug use as their risk; an additional 4.6% identified the dual risk category of MSM/IDU for a total of 15.6%.^{lviii} The number of newly-diagnosed cases of HIV among people who inject drugs (PWID) has declined steadily from 2011 to 2015 from 27 newly-diagnosed PWID to 12 newly-diagnosed PWID, a decline of 44.4%.^{lix} There has also been a decline in the number of newly-diagnosed HIV cases among MSM/IDU, from 16 cases in 2011 to 10 cases in 2015.^{lx} Virginia has a large proportion of total and newly-diagnosed cases of HIV with “no risk factor reported or identified.” Further identification of transmission risk may identify injection drug use as a factor among those with no known risk.

The 2015 HIV outbreak in Scott County, Indiana put a renewed national spotlight on HIV transmission through injecting drug use behavior. This attention has led to the lifting of the ban on the use of federal funds for syringe exchange services in January 2016.^{lxi} With the current opioid epidemic that is sweeping the nation and Virginia, it is vital that reducing HIV transmission risk associated with injection drug use remain a priority.

- *Virginia's Opioid Epidemic and Hepatitis C Transmission among PWIDs:* The Commonwealth of Virginia is severely impacted by heroin abuse, as well as prescription analgesics such as methadone, fentanyl, hydrocodone, oxycodone, codeine, morphine, and tramadol. From 2004 to 2014, the number of deaths due to heroin overdose has increased dramatically from zero deaths in 2004 to 210 in 2014, with a projected 380 deaths in 2016.^{lxii, lxiii}

A secondary analysis of drug treatment data from the Virginia Department of Behavioral Health and Developmental Services (DBHDS) shows that, in 2015, there were 3,303 admissions to publicly-funded drug treatment programs among Virginians identifying injecting drug use behavior in the past year; 78% of the PWID-related admissions were among White, non-Hispanics, 61% between the ages of 18-34, and 76% reported heroin as their primary injection substance.^{lxiv} In the first six months of 2015, approximately 4,000 emergency room visits in the state were attributed to unintentional drug overdoses, with approximately 345 of these visits attributed to heroin according to VDH surveillance data.^{lxv}

With the increase of opioid use comes the increase in intravenous injection as a method to administer the drugs, which is an efficient means to transfer blood borne pathogens from an infected person to another if sharing syringes.^{lxvi} Currently, VDH HIV/STI testing sites have seen an increase in the number of persons who are identifying injection drug use as a possible risk factor for HIV acquisition. Self-reported injection drug use almost doubled from 2009-2013 among STD clinic patients in Richmond, Chesterfield, Henrico, and Alexandria health departments. In 2012, 954 persons claimed injection drug use as a risk factor during HIV counseling sessions; in 2015, that number increased to 1,559.^{lxvii} Additionally, new trends in HIV cases among PWIDs are emerging. At the end of 2015, there were 2,186 Virginians living with HIV who acquired the virus from sharing needles, primarily Black, non-Hispanic (72%), male (63%), and diagnosed between the ages of 25-44 years.^{lxviii} From 2006-2015, the infection rate among PWIDs has been fairly stable; however, White, non-Hispanic persons represented 22% of the PWID-related HIV diagnoses in 2006 and now represent 44% in 2015.^{lxix}

The relationship between needle sharing and the transmission of HIV and hepatitis C virus (HCV) is profound. CDC estimates that 60%-80% of all HCV cases occur due to needle sharing. Within two years of beginning injecting drug use, one-quarter of PWID become infected with HCV, which is usually the first blood-borne virus they acquire.^{lxx} Over time, approximately 70% of all untreated HCV cases develop into chronic liver disease, which is one of the leading causes of death in the U.S.^{lxxi} Annual direct medical costs associated with treatment of liver disease range up to \$13.6 billion nationally.^{lxxii} The 2015 HIV and HCV outbreak among PWID in Scott County, Indiana highlighted the need to monitor rural counties with high HCV rates as potential areas of risk for outbreaks of HIV. Several of Virginia's counties in the Southwest Region are among the counties the CDC lists as potential HIV outbreak sites.^{lxxiii}

Virginia has experienced a 333% increase in the number of acute HCV cases over the past five years (2010-2014) when compared to the previous five years (2005-2009).

Acute HCV refers to the first six months after contracting the virus. In most cases, 75-80% of individuals with acute HCV infection develop chronic infection, which persists life-long, unless treated.^{lxxiv} In addition, Virginia and three neighboring states (Kentucky, Tennessee, West Virginia) showed a considerable increase (364%) in the number of cases of acute HCV infection from 2006 to 2012 among persons aged ≤ 30 years, with injection drug use as the most commonly reported risk for infection (73% of those reporting a risk).^{lxxv}

In 2011, the U.S. Surgeon General determined that access to legal sterile syringes was a science-based, effective strategy for reducing the risk of HIV.^{lxxvi} Large-scale studies citing 25 years of evidence indicate that access to legal syringes does not promote or increase drug use.^{lxxvii} Conversely, persons who participate in harm reduction programs (programs that distribute sterile syringes, condoms, wound care products, overdose prevention information, drugs that can reverse the effects of an opioid, and information about substance abuse prevention to injection drug users) are five-times more likely to enter drug treatment than non-participants. Numerous studies also cite that decriminalization of syringes as drug paraphernalia helps decrease the number of used and potentially contaminated syringes in public places, as injection drug users don't fear carrying used needles to syringe disposal sites.^{lxxviii, lxxix} Correct disposal of used syringes also reduces the risk of occupational exposure to blood-borne diseases to sanitation workers, police officers, emergency medical technicians/paramedics, and other public safety personnel.

Many of Virginia's neighboring states have taken legislative action to ease or eliminate legal restrictions regarding the possession of syringes/needles as part of a more comprehensive harm reduction strategy to reduce new HIV and HCV infections. Kentucky, North Carolina, and Maryland have recently passed laws allowing for syringe exchange within their states. West Virginia has implemented syringe exchange programs and participants are exempt from arrest on drug paraphernalia laws. Other jurisdictions that have decriminalized the possession and distribution of sterile syringes have shown evidence of the impact these legal actions have on disease prevention in their states. New York City, one of the first jurisdictions to enact syringe exchange, reported in 1990 that 42% of all AIDS cases in the city were attributed to injection drug use, including 75% of AIDS cases among women and 85% of AIDS cases among children due to prenatal transmission via a mother who was injecting or had a partner who was injecting, consequently transmitting HIV to mother and child.^{lxxx} In 2013, only 6.2% of New York City's AIDS cases were attributed to injection drug use.^{lxxxii} Hawaii's 2013 Evaluation Report of its state's syringe program showed no HIV infection in a random sample of 100 persons participating in a sterile syringe exchange program and a reduction of 12% reduction of HCV cases among participants from 2010-2013.^{lxxxiii}

VDH introduced legislation in the 2016 General Assembly session that would decrease penalties for possession of paraphernalia and allow the State Health Commissioner to authorize syringe services programs (SSP) in times of public health emergency. The bill passed unanimously out of the Health, Education and Welfare Committee but was not reported out of the Criminal Law subcommittee of the Courts of Justice Committee,

although there was widespread community support for the bill from both medical and law enforcement organizations. The lack of sterile syringes being available to Virginians who inject drugs continues to hamper prevention and care efforts to this population, increasing the possibility of HIV and HCV transmission.

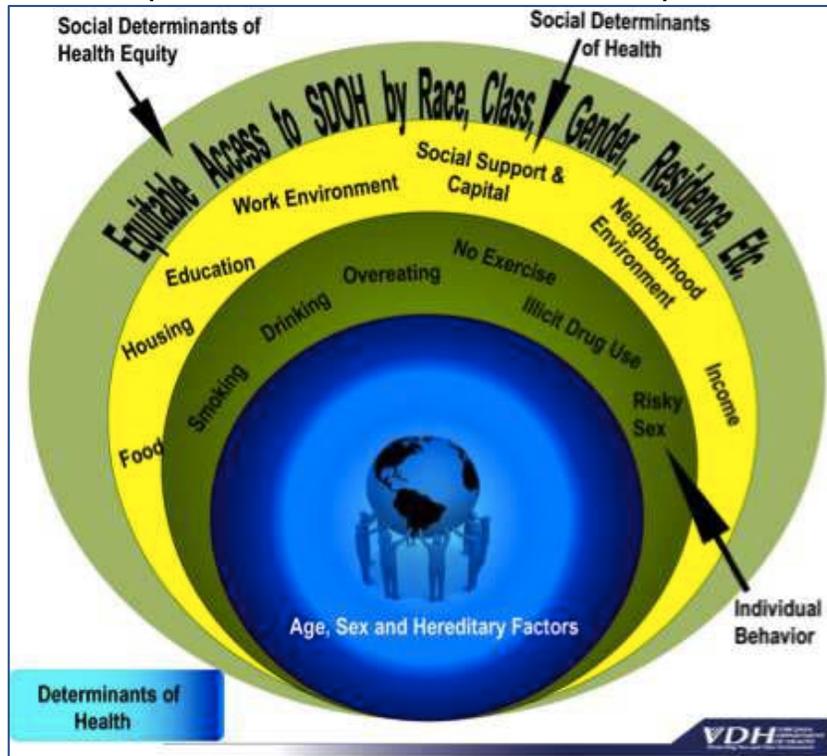
- ***Social Determinants of Health***

VDH’s Office of Minority Health and Health Equity (OMHHE) has led the conversation regarding health equity in the Commonwealth. It defines health equity:

“Health equity” is the idea that everyone should have optimal opportunity to have a healthy and long life, regardless of gender, race, ethnicity, social class, or place of residence.^{lxxxiii}

To achieve health equity, Virginians must have an understanding of the various factors that influence one’s health and well-being. Figure 11 identifies the areas of focus needed for a vibrant, healthy life: (1) individual behavior change, (2) enhancing health promoting social determinants of health, and (3) ensuring access to social determinants of health regardless of age, race/ethnicity, gender identity, place of residence, etc.^{lxxxiv} Understanding the connection between social determinants of health with HIV is essential to better understanding persons who are at greater risk of acquiring and/or transmitting HIV.

Figure 11. Virginia’s Conceptual Framework of Factors Needed for Optimal Health

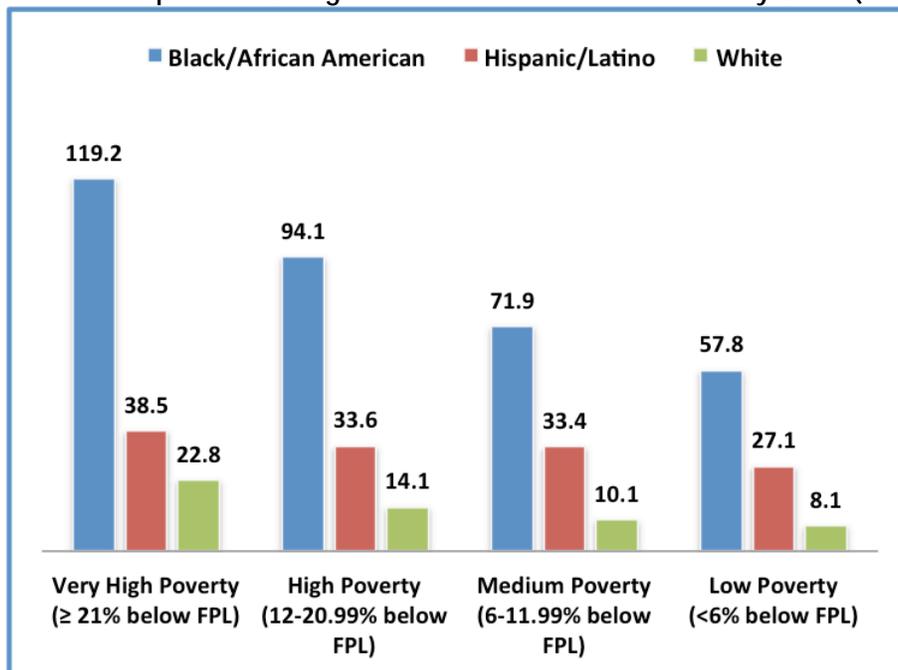


Source: VDH OMHHE, Virginia Health Equity Report, 2012

Centers for Disease Control and Prevention Analysis: Selected Social Determinants of Health and HIV

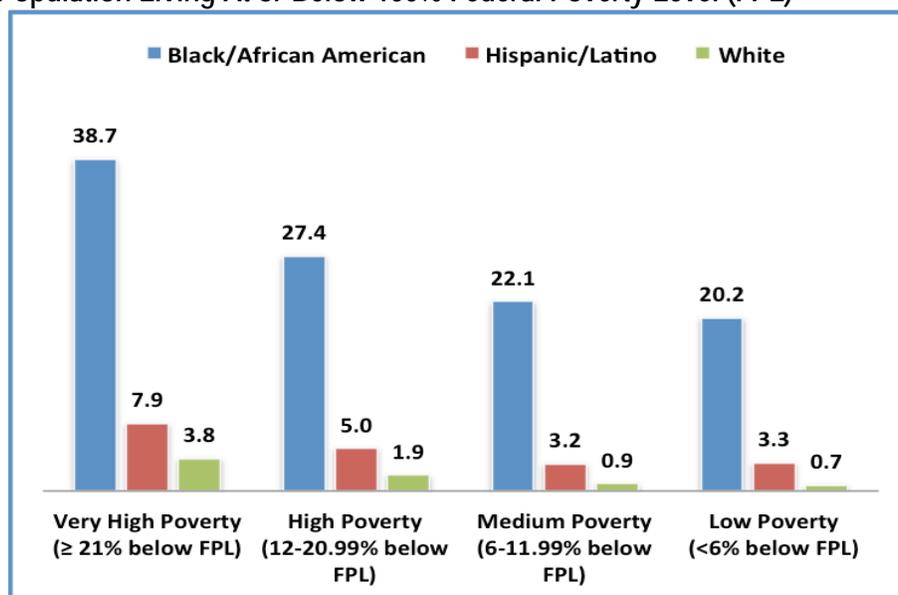
Using census tracts as the geographic level of analysis, the U.S. Centers for Disease Control and Prevention (CDC) examined 2013 HIV surveillance data in 11 states, including Virginia, the District of Columbia, and Puerto Rico in conjunction with specific social determinants of health (i.e., poverty, educational attainment, unemployment, median household income, and having health insurance).^{lxxxv} They examined the data by gender, age group, race/ethnicity, and HIV transmission category. Only one of the five social determinants examined (percent of persons living below 100% Federal Poverty Level or FPL) had a direct correlation with HIV diagnoses in every population examined. CDC found that as poverty level increased, HIV diagnoses also increased. The highest rates of HIV diagnoses in nearly every population was found in census tracts with equal to or more than 21% of the population living below the FPL. Of all populations, the highest rates were among Black/African American males (119.2 per 100,000) followed by Hispanic/Latino females who inject drugs (77.5 per 100,000), young adult males 25-34 years old (76.3 per 100,000 population), and Hispanic/Latino male who inject drugs (75.5 per 100,000 population).^{lxxxvi} Figures 12 and 13 illustrate the correlation between poverty and HIV diagnoses in males and females by race/ethnicity: HIV is highest in census tracts with the highest level of poverty.

Figure 12. Rate of HIV Diagnoses (per 100,000 population) Among Males by Race/Ethnicity by Poverty Concentration (i.e., Very High Poverty to Low Poverty) in Census Tracts for Population Living At or Below 100% Federal Poverty Level (FPL)



Source: CDC, Social determinants of health among adults with diagnosed HIV in 11 states, the District of Columbia and Puerto Rico, 2013.

Figure 13. Rate of HIV Diagnoses (per 100,000 population) Among Females by Race/Ethnicity by Poverty Concentration (i.e., Very High Poverty to Low Poverty) in Census Tracts for Population Living At or Below 100% Federal Poverty Level (FPL)



Source: CDC, Social determinants of health among adults with diagnosed HIV in 11 states, the District of Columbia and Puerto Rico, 2013.

Three other social determinants in the CDC analysis had a similar correlation with HIV diagnoses as poverty in all but one or two populations. These were: educational attainment, unemployment, and being without health insurance.^{lxxxvii} Therefore, in census tracts with the lowest educational attainment (i.e., less than a high school diploma), highest level of unemployment, and highest level of persons without health insurance, the rates of HIV diagnoses were the highest for the majority of populations examined. The correlation between median household income and HIV diagnoses was less clear.

Housing

Adequate and stable housing has a positive influence on health, and the lack of it can deteriorate health and well-being. The *National HIV/AIDS Strategy Updated to 2020* includes as a new indicator the reduction of homelessness among PLWH.^{lxxxviii} It states:

...successful access to care is often precluded by unmet basic needs such as housing. Supplementing care services with robust policies in support of basic needs is crucial for timely linkage to and retention in HIV care. (NHAS Updated to 2020, p. 5)

Research has shown that housing assistance improves health outcomes, including viral suppression.^{lxxxix,xc} The U.S. Department of Housing and Urban Development (HUD) uses the HIV care continuum to show the positive impact that housing assistance makes on persons living with HIV.^{xcii} Some researchers suggest that housing status itself is a predictor of better health outcomes.^{xcii} The extent of housing instability and/or homelessness among PLWH is profound. One study found that half of all PLWH experience housing instability or homelessness after their diagnosis.^{xciii}

New York City completed an analysis of 2013 HIV care continuum measures for total PLWH and PLWH who were recipients of Housing Opportunities for People With AIDS (HOPWA) services.^{xciv} It found improved outcomes among HOPWA clients for every measure:

- 99.5% of HOPWA clients were linked to care compared to 86% of all PLWH;
- 96% of HOPWA clients were retained in care compared to 63% of all PLWH;
- 91% of HOPWA clients were presumed started on ART compared to 60% of all PLWH; and
- 71% of HOPWA clients had achieved viral suppression compared to 50% of all PLWH.^{xcv}

The importance of reducing homelessness and housing instability among PLWH cannot be overstated. As discussed earlier, a commonly-accepted standard for housing instability is when 30% or more of the gross household income is needed to pay rent.^{xcvi} Housing instability is not only a concern for PLWH in Virginia; it is a concern for at least half of Virginians. As seen in Table 4, an estimated 50.1% of Virginians pay more than 30% of their household income for rent; this is highest in the Eastern Region/Norfolk TGA where 54.3% of residents pay more than 30% of their household income for rent.

Virginia's Comprehensive HIV/AIDS Resources and Linkages for Inmates (CHARLI) program provides a continuum of services for incarcerated individuals living with HIV, starting 60-90 days prior to their release. Services included in CHARLI are pre-release discharge planning and post-release services for 18-months after discharge. A pilot transitional housing project component to CHARLI was introduced in 2013 in the Eastern Health Region as part of DDP's CAPUS initiative. Virginia's 2015 HIV Care Continuum data show that of the 33 people receiving transitional housing services, 94% were retained in care with 70% achieving viral load suppression compared to 43% and 42% for all Virginia PLWH, respectively. When compared to Virginia PLWH receiving Ryan White services (which included emergency financial assistance for housing and utilities assistance) in 2015 who achieved viral load suppression (69%), results were similar to transitional housing clients.

- ***Contributing Co-Factors to HIV Risk***

There are a number of co-factors that are associated with increased risk for HIV. These include but are not limited to: non-injection drug and/or alcohol use, mental illness, history of incarceration, transactional sex (in public health, this often refers to sexual activity that may include high risk behaviors for HIV exposure and transmission in exchange for favors, gifts, or money - which is differentiated from commercial sex work as participants in the exchange do not self-identify as sex workers and clients of sex workers), and stigma. Non-injection drug and/or alcohol use can impair a person's decision making regarding sexual and/or needle sharing behaviors. Persons with mental health disorders have also been found to have increased risk for HIV.^{xcvii} Specific data for substance use and mental health are provided below.

The Substance Abuse and Mental Health Services Administration (SAMHSA) provides some data regarding the prevalence of substance use and mental illness. Table 8 presents selected alcohol and drug indicators from the 2012-2014 National Survey on Drug Use and Health (NSDUH) for the general population in Virginia and its five health regions.^{xcviii}

Table 8. Selected Drug and Alcohol Indicators from the 2002-2014 NSDUH for Virginia and Health Regions

Characteristic (persons 12 years and older)	Virginia	Central	Eastern	Northern	Northwest	Southwest
Illicit Drug Use Other than Marijuana in Past Month	8.1%	7.7%	8.9%	6.5%	9.7%	8.6%
Marijuana Use in Past Month	6.4%	6.2%	7.0%	5.0%	7.8%	6.8%
Binge Alcohol Use in Past Month	22.3%	22.4%	21.8%	22.2%	22.3%	23.1%
Alcohol Dependence in Past Year	3.3%	3.7%	3.4%	3.1%	3.4%	3.4%
Illicit Drug Dependence in Past Year	1.8%	2.0%	2.1%	1.4%	1.9%	1.9%
Non-medical use of pain relievers	4.6%	5.0%	4.6%	4.3%	5.1%	4.5%
Cigarette Use in Past Month	22.4%	23.3%	24.1%	15.8%	23.1%	29.5%
Needing but not receiving treatment for alcohol use in past year	6.6%	6.7%	6.7%	6.3%	6.6%	6.9%
Needing but not receiving treatment for illicit drug use in past year	2.3%	2.4%	2.6%	1.9%	2.3%	2.5%

Source: SAMHSA, 2012-2014 National Survey on Drug Use and Health, Sub state Estimates.

Note: Grey shading indicates proportion that is higher than in Virginia overall.

The observations by regions:

- Central Region has highest prevalence of *alcohol dependence in the past year* (3.7%);
- Eastern Region, which includes the Norfolk TGA, has the highest prevalence of *illicit drug dependence in the past year* (2.1%) and largest percentage of residents *needing but not receiving treatment for illicit drug use in past year* (2.6%);
- Northern Region has the lowest prevalence in Virginia for every indicator listed;
- Northwest Region has highest prevalence of *illicit drug use other than marijuana in past month* (9.7%) and *marijuana use in past month* (7.8%); and
- Southwest Region has highest prevalence of *binge alcohol use in past month* (29.5%) and *needing but not receiving treatment for alcohol use in past year* (6.9%).

Table 9 presents the prevalence of various mental health indicators for Virginia and the five health regions based on data from SAMHSA’s 2012-2014 NSDUH for the general population.

Table 9. Mental Health Indicators from the 2002-2014 NSDUH for Virginia and Health Regions

Characteristic (persons 12 years and older)	Virginia	Central 4	Eastern 5	Northern 2	Northwest 1	Southwest 3
Serious mental illness in the past year	4.0%	4.0%	4.0%	3.3%	4.0%	5.1%
Any mental illness in the past year	17.9%	18.5%	17.7%	16.1%	18.1%	20.5%
Serious thoughts of suicide in past year	3.9%	3.8%	3.9%	3.4%	3.9%	4.6%
Major depressive episode in past year	7.1%	7.1%	7.0%	6.7%	7.4%	7.8%

Source: SAMHSA, 2012-2014 National Survey on Drug Use and Health, Sub state Estimates.

Note: Grey shading indicates proportion that is higher than in Virginia overall.

For all four mental health indicators measured, the Southwest Region has the highest prevalence. This is contrasted by the Northern Region, which has a lower than average prevalence in every indicator. The Eastern Region has a lower or equal prevalence to Virginia in every indicator. The Central Region has a higher prevalence than Virginia for the indicator, *any mental illness in the past year* (18.5%). The Northwest Region has a higher prevalence than Virginia in two indicators: *any mental illness in the past year* (18.1%) and *major depressive episode in the past year* (7.4%). Unfortunately, SAMHSA does not collect information regarding “needing but not receiving mental health treatment.” HIV Care Continuum

B. HIV Care Continuum

b. The HIV Care Continuum for Virginia and the Norfolk TGA.

For planning, DDP currently uses a diagnosed-based HIV Care Continuum compared to a prevalence-based continuum. The diagnosed-based continuum includes all PLWH who are diagnosed and reported in Virginia’s HIV surveillance system and excludes persons who are undiagnosed.

Virginia’s HIV Continuum of Care consists of four HIV-related measures: (1) Linkage to HIV Care; (2) Evidence of HIV Care; (3) Retention in HIV Care; and (4) Viral Suppression. Table 10 defines the numerator and denominator used to calculate each measure. VDH does not have complete data for ART prescription for all PLWH in the Commonwealth and so does not use this measure in its HIV Continuum of Care. It is available for specific subsets of PLWH through its Care Markers database, specifically PLWH who receive services through Ryan White Part B funding as well as PLWH who are participants in Virginia’s Medical Monitoring Project (MMP), which is a national initiative of the CDC.

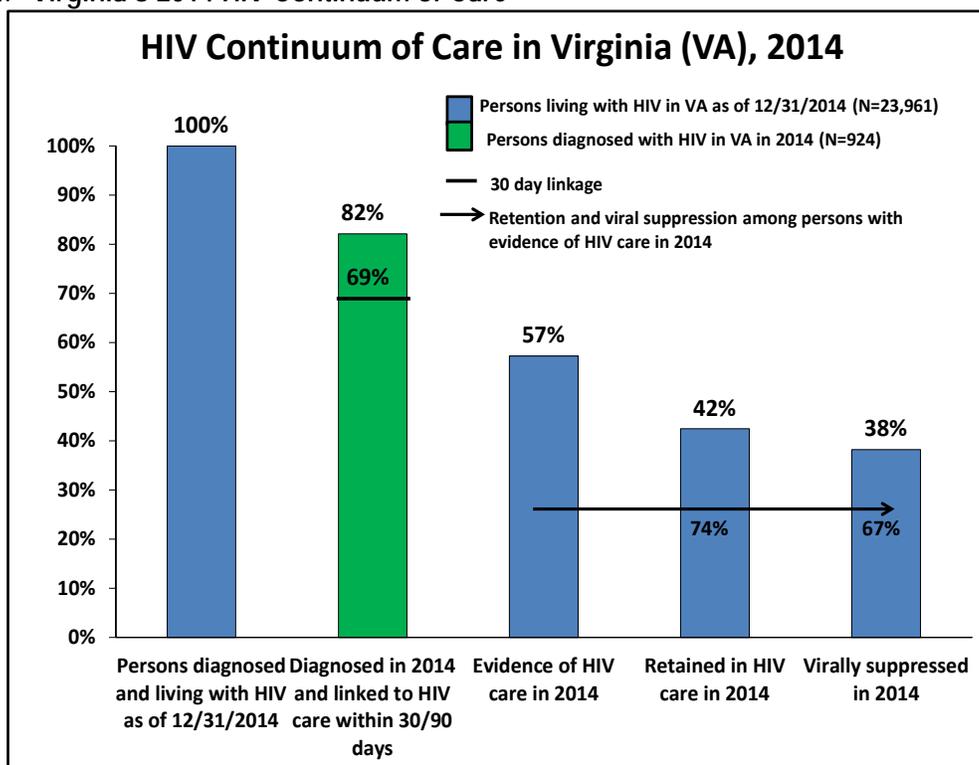
Table 10. Definition of Virginia’s 2014 HIV Continuum of Care Measures

Measure	Numerator	Denominator
Linkage to HIV Care	Persons newly-diagnosed with HIV in 2014 who were linked to care within 30 days and 90 days of initial diagnosis	Persons newly-diagnosed with HIV in 2014 (green column)
Evidence of HIV Care	Persons diagnosed and living with HIV at end of 2014 who had at least one care marker (i.e., HIV medical visit, CD4 count, viral load test, or ART prescription) during 2014	Persons diagnosed and living with HIV at end of 2014

Retention in HIV Care	Persons diagnosed and living with HIV at end of 2014 who had evidence of care at least twice during 2014 at least three months apart	Persons diagnosed and living with HIV at end of 2014
Viral Suppression	Persons diagnosed and living with HIV at end of 2014 whose last viral load test in 2014 was <200 copies/milliliter (mL)	Persons diagnosed and living with HIV at end of 2014
Retention in HIV Care (black arrow)	Persons diagnosed and living with HIV at end of 2014 who had evidence of care at least twice during 2014 at least three months apart	Persons diagnosed and living with HIV at end of 2014 who had evidence of HIV care in 2014
Viral Suppression (black arrow)	Persons diagnosed and living with HIV at end of 2014 whose last viral load test in 2014 was <200 copies/mL	Persons diagnosed and living with HIV at end of 2014 who had evidence of HIV care in 2014

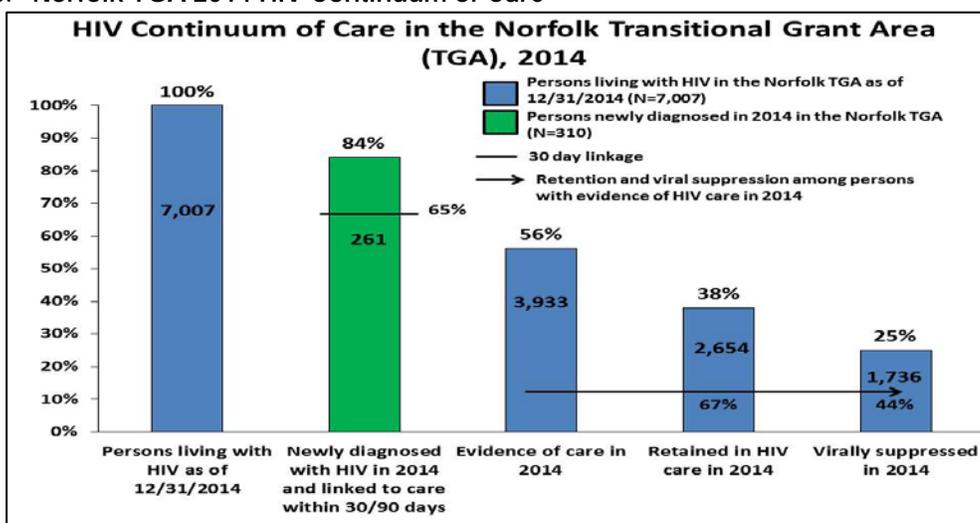
Figures 14 and 15 present Virginia’s and the Norfolk TGA’s 2014 HIV Continuum of Care for all diagnosed PLWH. In addition, Figure 16 presents Virginia’s 2014 HIV Care Continuum for PLWH who receive any Ryan White service. The narrative discussion follows the figures.

Figure 14. Virginia’s 2014 HIV Continuum of Care



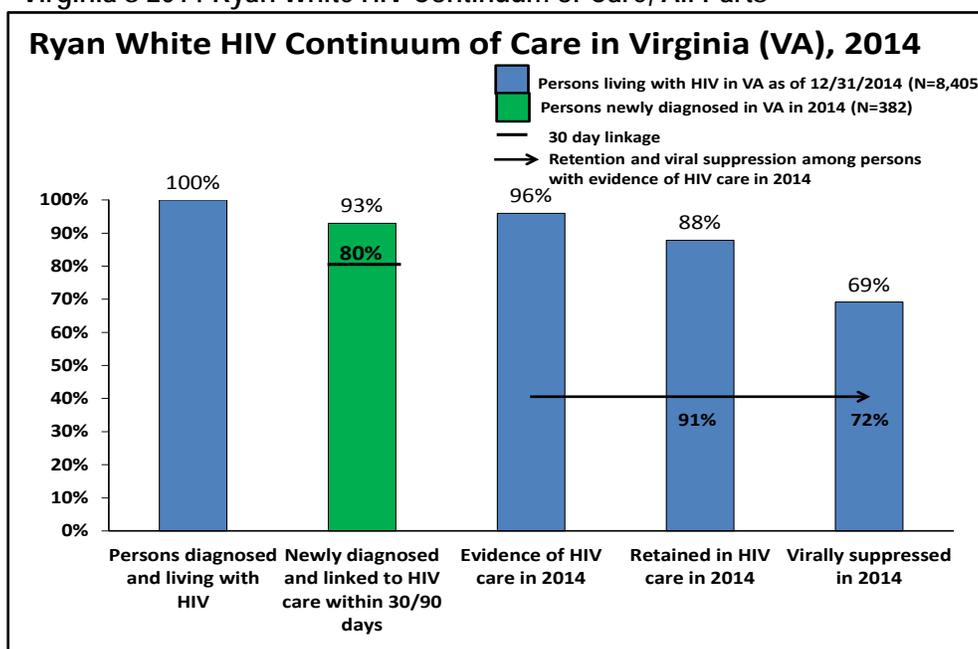
Source: Virginia Department of Health Care Markers Database, December 2015

Figure 15. Norfolk TGA 2014 HIV Continuum of Care



Source: Virginia Department of Health Care Markers Database, December 2015

Figure 16. Virginia's 2014 Ryan White HIV Continuum of Care, All Parts



Source: Source: Virginia Department of Health Care Markers Database, December 2015

When compared to Virginia overall, evidence of HIV care is similar for the state and the Norfolk TGA, at 57% and 56% of PLWH, respectively. In terms of retention in care and viral suppression, the measures for the Norfolk TGA begin to decline in comparison to Virginia. About 42% of Virginia PLWH are retained in care compared to 38% of PLWH in the Norfolk TGA. In addition, 38% of Virginia's PLWH have achieved viral suppression, compared to 25% of PLWH in the Norfolk TGA. It is important to note that some of this disparity may be attributed to data reporting issues in addition to genuine disparities experienced by PLWH in the Norfolk TGA. As VDH and the Norfolk TGA improve data reporting of providers within the TGA, these disparities will likely decrease.

In comparison, the HIV Continuum of Care for PLWH receiving Ryan White services (Figure 16) shows overall better outcomes than Virginia's HIV Continuum of Care across all measures. For example, 69% of Ryan White clients are virally suppressed compared to 38% of all diagnosed PLWH. This may suggest there are other factors that contribute to the better outcomes of Ryan White recipients, including participation in the Ryan White program as these services are designed to mitigate barriers to care and improve health outcomes. It is important to note that Ryan White-funded providers are required to report service utilization as a requirement of funding. This in turn leads to better reporting of health outcomes overall. Accordingly, the disparities between the two HIV Continua of Care must be carefully interpreted.

a. Disparities in engagement among key populations along Virginia's HIV Care Continuum.

There are a number of disparities across Virginia's HIV Continuum of Care. Table 11 presents a summary of Virginia's HIV Continuum of Care for numerous subpopulations of PLWH, including by gender (Figure 17), race/ethnicity (Figure 18), age group (Figure 19), transmission risk (Figure 20), and geographic health region (Figure 21).

Table 11. Virginia 2014 HIV Continuum of Care Data by Specific Population Groups

Population	Linked to HIV Care (30 days)	Evidence of HIV Care	Retained in HIV Care	Virally Suppressed
NHAS Updated to 2020 Targets	85%	not applicable	90%	80%
Virginia Total	69%	57%	42%	38%
Virginia Ryan White	80%	96%	88%	69%
Gender				
Male	69%	56%	41%	37%
Female	69%	62%	47%	41%
Race/Ethnicity				
Black, non-Hispanic	66%	59%	44%	38%
White, non-Hispanic	72%	55%	40%	38%
Hispanic (all races)	75%	52%	39%	39%
Asian/Hawaiian/Pacific Islander	78%	54%	39%	38%
Age (Current Age as of 12/31/2014 and Age at Diagnosis)*				
15-24 years	64%	72%	52%	43%
25-34 years	68%	64%	47%	40%
35-44 years	76%	57%	42%	38%
45-54 years	63%	56%	42%	38%
≥ 55 years	68%	53%	39%	37%
Transmission Risk				
MSM	69%	60%	44%	40%
PWID	53%	49%	38%	34%
MSM/PWID	86%	58%	44%	40%
Heterosexual	71%	65%	51%	44%
Health Region				
Central	56%	63%	52%	48%
Eastern	65%	56%	38%	26%
Northern	74%	48%	31%	35%
Northwest	74%	68%	57%	55%
Southwest	73%	66%	52%	52%

Note: *Age is assessed for PLWH by current age as of December 31, 2014, and for newly-diagnosed persons in 2014 (linkage to care) by age at diagnosis.

As noted in Table 11 and the figures that follow, there are some significant disparities across subpopulations. More significant disparities—defined as 3% or more less than Virginia’s overall percentage—vary considerably. These are highlighted in **bold italics** and grey shading in Table 12. Table 12 below reorganizes the information from Table 11 and ranks from best to worst HIV-related outcome.

Table 12. Virginia’s 2014 HIV Continuum of Care Data for Specific Population Group in Order from Best to Worst HIV-Related Outcomes

	Linked to Care (30 days)	Evidence of Care	Retained in Care	Virally Suppressed
Best ----- Worst	MSM/PWID 86%	15-24 yrs 72%	Northwest 57%	Northwest 55%
	Asian/Hawaiian/Pacific Islander 78%	Northwest 68%	15-24 yrs 52%	Southwest 52%
	35-44 years 76%	Southwest 66%	Central 52%	Central 48%
	Hispanic 75%	Heterosexual 65%	Southwest 52%	Heterosexual 44%
	Northwest 74%	25-34 yrs 64%	Heterosexual 51%	15-24 yrs 43%
	Northern 74%	Central 63%	25-34 yrs 47%	Female 41%
	Southwest 73%	Female 62%	Female 47%	25-34 yrs 40%
	White 72%	MSM 60%	Black 44%	MSM 40%
	Heterosexual 71%	Black 59%	MSM 44%	MSM/PWID 40%
	MSM 69%	MSM/PWID 58%	MSM/PWID 44%	Hispanic 39%
	Male 69%	35-44 yrs 57%	35-44 yrs 42%	White 38%
	Female 69%	Virginia 57%	45-54 yrs 42%	Asian/Hawaiian/Pacific Islander 38%
	Virginia 69%	Eastern 56%	Virginia 42%	Black 38%
	≥ 55 yrs 68%	45-54 yrs 56%	Male 41%	35-44 yrs 38%
	25-34 yrs 68%	Male 56%	White 40%	45-54 yrs 38%
	Black 66%	White 55%	≥ 55 yrs 39%	Virginia 38%
Eastern Region 65%	Asian/Hawaiian/Pacific Islander 54%	Asian/Hawaiian/Pacific Islander 39%	≥ 55 yrs 37%	
15-24 yrs 64%	≥ 55 yrs 53%	Hispanic 39%	Male 37%	
45-54 yrs 63%	Hispanic 52%	Eastern 38%	Northern 35%	
Central 56%	PWID 49%	PWID 38%	PWID 34%	
PWID 53%	Northern 48%	Northern 31%	Eastern 26%	

Note: **Bold** indicates populations that are at least three percentage points below Virginia average. **Bold RED** and grey shading indicates populations that are at least five percentage points below Virginia average.

Using the outcomes for Virginia as the measuring line for health outcomes, there are a number of populations in Table 12 that fall below the Virginia average. These populations have some level of disparity as compared to Virginia’s overall average. However, populations with the more severe disparity (i.e., ≥ 3 percentage points less than Virginia’s average) are bolded and those with the most severe disparities (i.e., ≥ 5 percentage points less than average) are bolded in red.

Disparities along the HIV Continuum of Care: Discussion

• ***Linkage to HIV Care:***

In 2014, 69% of persons newly-diagnosed with HIV in Virginia were linked to HIV care within 30 days. Linkage is defined as a person newly-diagnosed with HIV in 2014 having a CD4 or viral load lab, ART prescription, or HIV medical care visit within 30 days of initial diagnosis. In 2014, lower linkage rates are seen among Black, non-Hispanic persons (66%), PWID (53%), 15-24 and 45-54 year olds (64%; 63%), and persons diagnosed in the Eastern (65%) or Central (56%) health regions as compared to Virginia overall.

• ***Evidence of HIV Care:***

Evidence of HIV care in Virginia is defined as all PLWH who had at least one marker for HIV care (CD4, viral load, HIV medical visit, ART prescription) in 2014. Fifty-seven percent (57%)

of PLWH had evidence of HIV care in 2014; Asian/Hawaiian/Pacific Islander and Hispanic persons are less likely to have evidence of HIV care than the statewide average, at 54% and 52%, respectively. Older persons (55 years of age and older) are less likely to have evidence of care (53%), as well as persons living in the Northern region of the state (48%) and PWID (49%).

- ***Retention in HIV Care:***

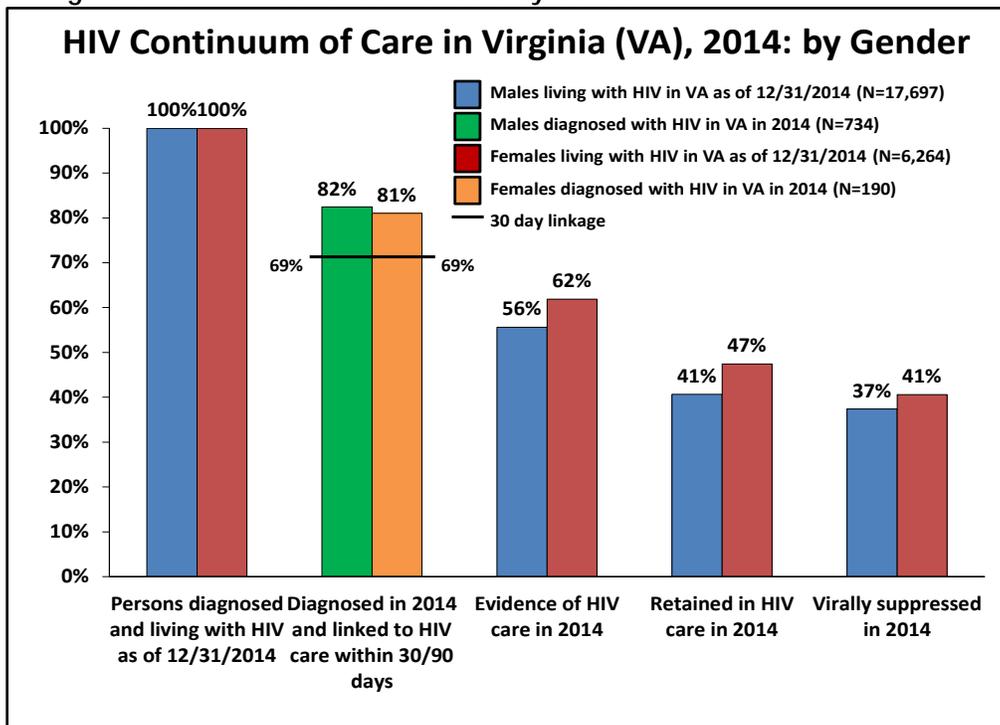
Retention in HIV care in Virginia is defined as having two or more markers for care in 2014 at least three months apart, of which 42% of PLWH in Virginia met this definition in 2014. Persons living in the Eastern (38%) and Northern Regions (31%) in Virginia had lower retention rates than the statewide average. Disparities in retention are also seen among the Asian/Hawaiian/Pacific Islander and Hispanic communities, as well as older populations and PLWH attributed to PWID.

- ***Viral Suppression:***

In Virginia, viral suppression is defined as the last viral load that is measured in 2014 is less than 200 copies/mL. Among PLWH in Virginia as of December 31, 2014, 38% were virally suppressed. PWID are less likely to be virally suppressed at 34%, and regional differences in viral suppression also exist in the Northern and Eastern Regions, at 35% and 26%, respectively.

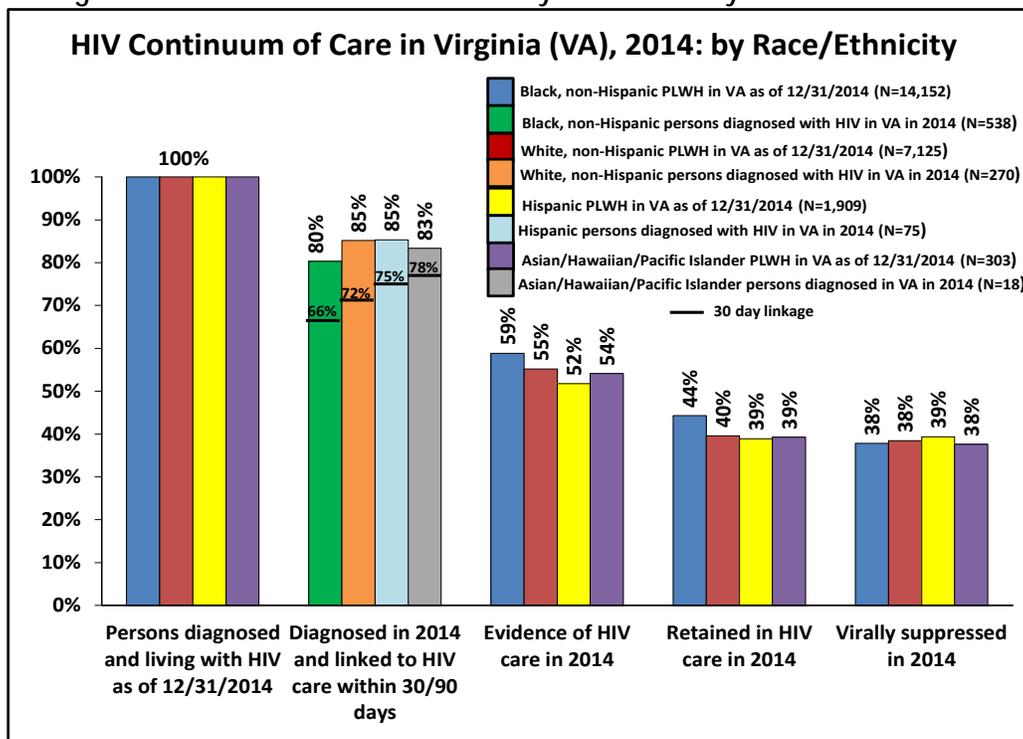
Only one subpopulation has a disparity across all four measures: PWID. Although PWID represent only 8.8% of total PLWH (Table 2), their disparity across every measure may suggest that they experience significant barriers to accessing services. Two regions (Northern and Eastern) have disparities in three of the four measures. These regions are home to 58.2% of total PLWH (i.e., 14,470 persons) in Virginia reported as of December 31, 2015 (Table 1) and are the two health regions with the most PLWH in the Commonwealth. The Northern Region is part of the Health Resources and Services Administration's (HRSA) Ryan White Washington, DC EMA, and the Eastern Region includes the Norfolk TGA. Thus, despite the additional resources that these areas get from Ryan White Part A funding, there continues to be significant challenges in each, suggesting that disparities persist due to other contributing factors (e.g., stigma and social determinants of health).

Figure 17. Virginia's 2014 HIV Continuum of Care by Gender



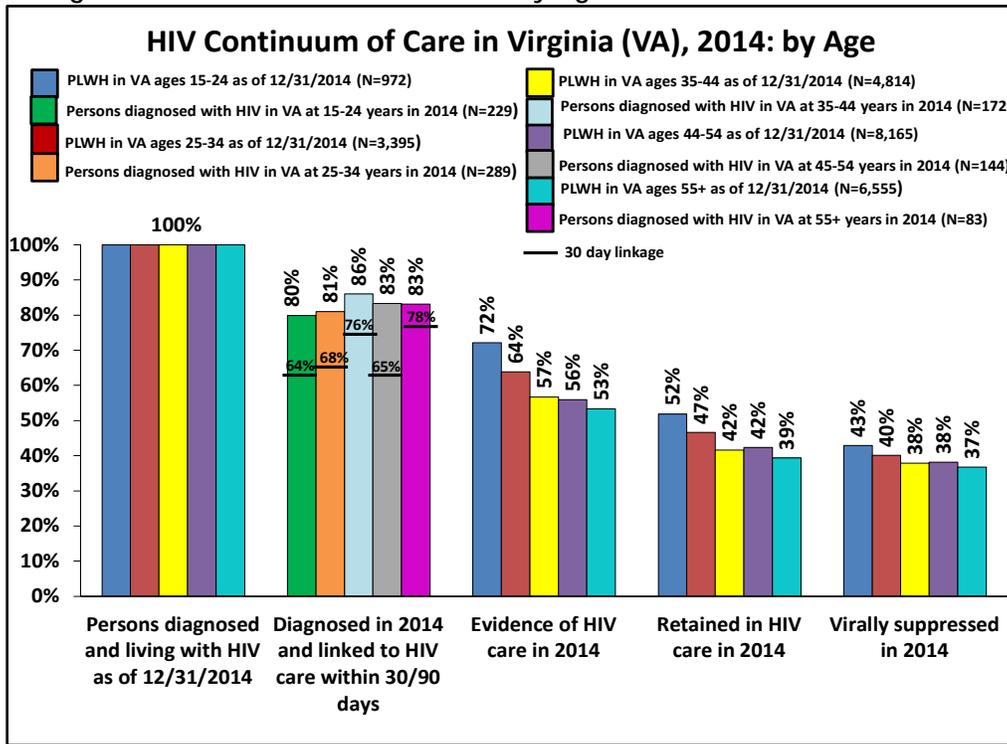
Source: Virginia Department of Health Care Markers Database, December 2015

Figure 18. Virginia's 2014 HIV Continuum of Care by Race/Ethnicity



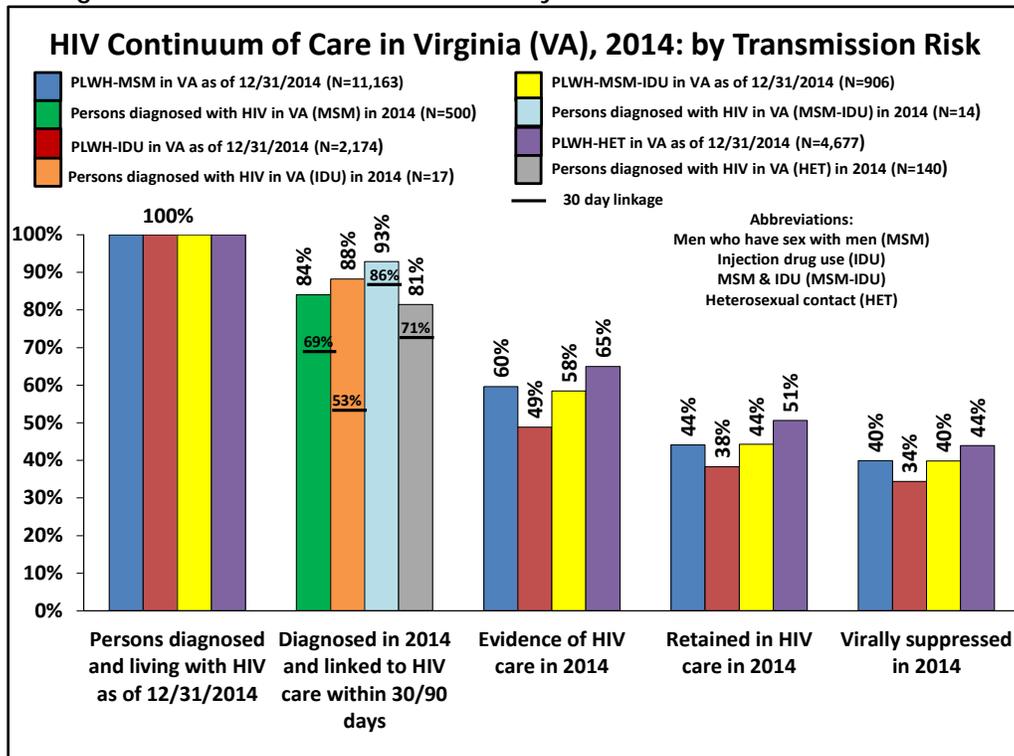
Source: Virginia Department of Health Care Markers Database, December 2015,

Figure 19. Virginia's 2014 HIV Continuum of Care by Age



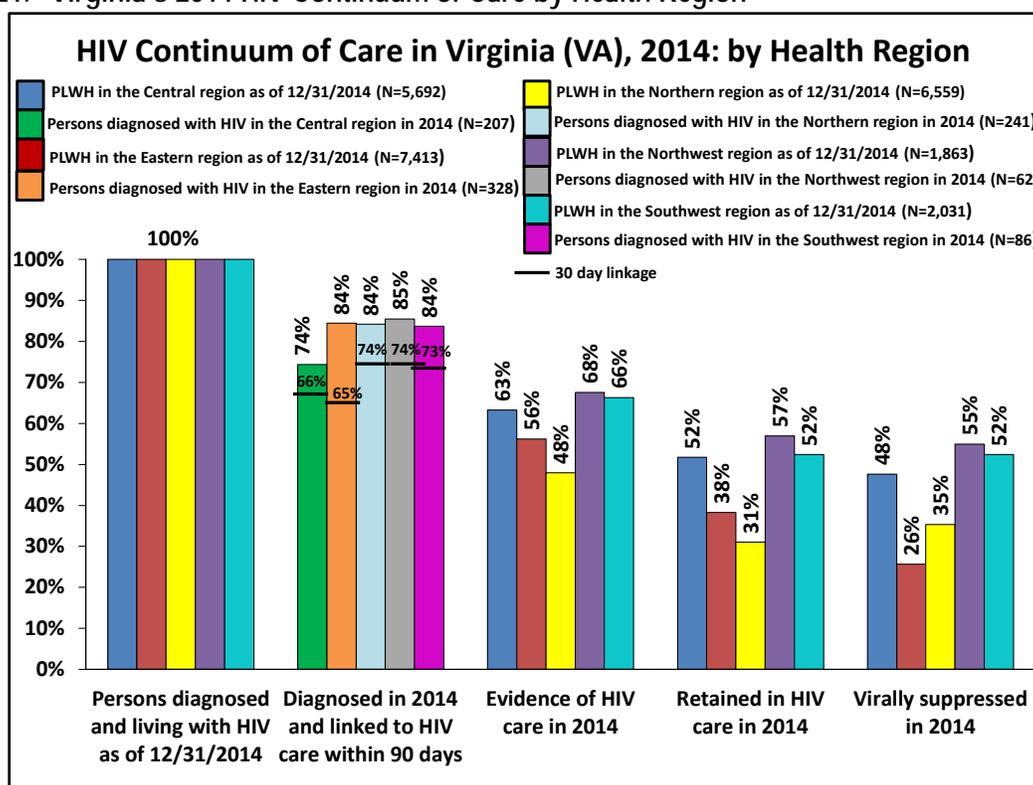
Source: Virginia Department of Health Care Markers Database, December 2015

Figure 20. Virginia's 2014 HIV Continuum of Care by Transmission Risk



Source: Virginia Department of Health Care Markers Database, December 2015

Figure 21. Virginia's 2014 HIV Continuum of Care by Health Region



Source: Virginia Department of Health Care Markers Database, December 2015, December 2015

- b. **How the HIV Care Continuum may be or is currently utilized in (1) planning, prioritizing, targeting, and monitoring available resources in response to the needs of PLWH in the jurisdiction, and (2) improving engagement and outcomes at each stage of the HIV Care Continuum.**

Virginia's HIV Continuum of Care is the cornerstone of DDP's current HIV planning. It provides a useful framework for assessing how Virginia is progressing in achieving NHAS goals and its indicators related to: (1) linkage to HIV care, (2) retention in HIV care, and (3) viral suppression. The HIV Continuum of Care data has been used extensively in the development of Virginia's Five-Year HIV Services Work Plan (2017-2021) (Appendix B) to develop baseline and target measures.

At minimum annually, DDP surveillance staff develop the HIV Continuum of Care graphs for Virginia statewide, Ryan White clients, and selected subpopulations (e.g., by gender, race/ethnicity, age, transmission category, and health region). DDP's HIV care services and prevention planners will review this information, track any changes from the previous reporting of HIV Continuum of Care measures and, with other DDP staff, make recommendations on how to address challenges along the HIV Continuum of Care. The HIV Continuum of Care measures will be presented to the statewide planning groups for their review, consideration, and feedback into the planning process. This information will be used to inform Virginia's annual Ryan White Part B application, CDC application renewal, and numerous other competitive opportunities that bring critically needed resources into Virginia to support a comprehensive HIV services

portfolio. DDP uses HIV Continuum of Care data to routinely evaluate how resources are allocated to increase the proportion of people who are aware of their HIV positive status, are linked and retained in care, and ultimately achieve viral suppression. Analyzing regional and subpopulation data provides insight into disparities within the Commonwealth to inform prioritization and allocation of resources needed to address them.

DDP conducts a statewide Needs Assessment of both providers and consumers to identify barriers to and gaps in the current portfolio of HIV services, as well as distribution of services. Virginia's Five-Year HIV Services Work Plan (2017-2021) detailed in Appendix B presents a core set of measurable objectives, which includes the three NHAS indicators related to the HIV Continuum of Care. The Work Plan outlines specific strategies that Virginia will employ to achieve the stated objectives as well as very specific, concrete activities that will be implemented to actualize the identified strategies. The focus of every conversation that led to the development of this work plan centered on how to move PLWH along the HIV Continuum of Care to ultimately achieve viral suppression, which itself is a primary strategy to curtail transmission of HIV.

Ongoing analysis of HIV Continuum of Care data analysis ensures that services are delivered in a manner that continues to meet current and emerging needs to link, engage, and retain PLWH in care, and enhance adherence in order to achieve HIV viral suppression. DDP and the Norfolk TGA will prioritize and allocate funding to the services needed to achieve these positive results.

C. Financial and Human Resources Inventory

A. Virginia's HIV Financial Resources Inventory

VDH gathered extensive information regarding financial resources available in Virginia that provide direct services for PLWH and/or persons at high risk of acquiring HIV. *Appendix A: Financial Resources Inventory* presents the most current list available, including the details of the type(s) of services supported through identified funds, as well as an assessment of how those funds impact Virginia's activities along its HIV Services Continuum (the HIV Care Continuum measures are defined and are under development for Virginia's prevention portfolio to create a model that will represent a continuum for its integrated HIV Services portfolio). For the purposes of this inventory, DDP added two additional columns to be inclusive of persons at risk for HIV infection. These columns are "Prevention" and "PrEP" to indicate if funds are used for HIV prevention services (e.g., HIV testing, condom distribution, behavioral interventions) and pre-exposure prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP). HIV prevention funding also supports linkage to and retention in care, as well as treatment adherence. The inventory does not represent an exhaustive list as some financial resources, particularly those paid through public and private health insurance companies are currently not available (e.g., Medicaid, Medicare, Kaiser Permanente, Blue Cross and Blue Shield, etc.).

B. Virginia's HIV Workforce Capacity and how it impacts the HIV prevention and care service delivery system.

The portfolio of HIV services in Virginia encompasses not only medical care but HIV testing, prevention, behavioral health, housing, case management, food services, medical transportation,

and many more. Hence, the HIV workforce in Virginia spans a wide variety of job titles and classifications of workers to implement the variety of services available.

For the purposes of this plan, VDH focuses its lens on the HIV physician and, to some extent, the primary care physician workforce to discuss issues related to an aging workforce, potential retirement, and other issues that impact the size and readiness of a qualified, competent workforce. Not only is there a need to care for the growing number of PLWH in Virginia, the implementation of biomedical interventions such as PrEP to prevent HIV transmission also requires prescribing privileges. Thus, the need for primary care physicians to prescribe and monitor high-risk individuals on PrEP is key to ending HIV transmission in Virginia. This narrow focus on workforce addresses current issues that Virginia is facing.

Workforce capacity can be examined in terms of having a sufficient number of qualified workers, as well as having a workforce that has the right skills needed to do their particular jobs. Workforce capacity can also examine the diversity of the workforce to identify potential challenges with delivering culturally and linguistically-responsive services. Examples of workforce capacity challenges (all of which are not necessarily occurring in Virginia) include staff turnover, including retirement; burnout due to chronic short staffing; and organizational implementation of waiting lists for specific services or long wait times before a client's initial appointment. A total of 72 respondents, identified as program administrators or supervisors, completed the survey. The results of the survey provide insight into other workforce challenges and issues and provide a direction for future activities to address workforce capacity.

- ***HIV Physician Workforce***

In a 2010 report, HRSA brought attention to the increasing workforce challenges the country would face “to effectively treat people living with HIV/AIDS.”^{xcix} One of the recommendations of this report called for the completion of a more comprehensive HIV workforce study. That study has been completed with the results published in August 2016.^c This report asserts that “Evidence suggests that the supply of HIV clinicians might not be keeping pace with the general growth in the demand for HIV health care services.”^{ci} The reasons for this are abundant: (1) new PLWH are diagnosed every year and linked to HIV medical care; (2) implementation of the ACA gives more PLWH access to health insurance with the possibility of a federal subsidy; and (3) PLWH who were previously not in care are being identified and linked to care, sometimes for the first time.^{cii} PLWH are also living longer, increasing the complexity of care as PLWH experience many of the same co-morbid health conditions as older persons in the general population (e.g., cardiovascular disease, Type II diabetes, high blood pressure, and high cholesterol). These issues all impact the demand or need for HIV health services. However, there are equally important issues impacting the supply side of the HIV workforce equation (e.g., new entrants into the HIV clinical workforce or the expected retirement of current HIV workforce). The HRSA study projected the supply and demand for HIV health services from 2010 to 2015. A notable finding was that 16.5% of HIV clinicians were 65 years and older.^{ciii} The vast majority of HIV clinicians were either primary care physicians (54.5%) or infectious disease specialists (37.2%). Only 8.3% of the workforce were nurse practitioners or physician assistants.^{civ} In their projections through 2015, the authors projected that the percentage of non-physician HIV physicians would grow to 11.5% of the HIV clinician workforce by 2015.^{cv} In

terms of race/ethnicity, 68% of HIV clinicians were White, 8.3% Black, and 7.3% Hispanic.^{cvi} This lack of diversity highlights potential challenges to provide culturally and linguistically-responsive care if the demographics of providers does not change or if there is not high uptake and application of training that can assure the provision of culturally-responsive care. HIV clinicians 55 years and older accounted for 15.3% of HIV patient visits.^{cvi} Overall, the study reported an overall projected increase in clinician demand at 13.9%; if HIV testing efforts are successful in identifying undiagnosed persons; the demand for clinicians could increase to as much as 36% of the supply.^{cvi}

The study modeled two scenarios for reducing the gap: (1) increasing the proportion of clinicians' time spent working with HIV patients overall; and (2) increase the number of patients seen in an hour (i.e., less time with the patient).^{cix} Although these are two possibilities, the study did not include other innovative methods that are being implemented through HRSA's HIV workforce Special Projects of National Significance, such as the use of telemedicine, increase the number of nurse practitioners and physicians assistants, or mentoring models to expand number of primary care physicians seeing HIV patients.

DDP completed a preliminary analysis of the geographic distribution of HIV physicians based on available data and compared it to 2015 HIV prevalence data to better understand Virginia's HIV clinician workforce and identify potential problem areas. The results of this analysis are presented in Table 13, which shows the number of known physicians working with HIV patients by Virginia County/Independent City, Health Region, and Health District.

Table 13. Distribution of HIV Physician Workforce by Virginia County/Independent City, Health Region, and Health District with 2015 HIV Prevalence

County/ Independent City	Health Region	Health District	Physicians	2015 HIV Cases
Central	Central		48	5,920
Brunswick Co.	Central	13		75
Halifax Co.	Central	13		93
Mecklenburg Co.	Central	13		107
Amelia Co.	Central	14		15
Buckingham Co.	Central	14		80
Charlotte Co.	Central	14		17
Cumberland Co.	Central	14		21
Lunenburg Co.	Central	14		48
Nottoway Co.	Central	14		64
Prince Edward Co.	Central	14		59
Charles City Co.	Central	15		20
Chesterfield Co.	Central	15	3	624
Goochland Co.	Central	15		77
Hanover Co.	Central	15	2	120
Henrico Co.	Central	15	1	900
New Kent Co.	Central	15		26
Powhatan Co.	Central	15		124

County/ Independent City	Health Region	Health District	Physicians	2015 HIV Cases
Richmond (city)	Central	15	40	2,478
Colonial Heights (city)	Central	19		40
Dinwiddie Co.	Central	19		48
Emporia (city)	Central	19		20
Greensville Co.	Central	19		117
Hopewell (city)	Central	19		143
Petersburg (city)	Central	19	1	391
Prince George Co.	Central	19	1	122
Surry Co.	Central	19		15
Sussex Co.	Central	19		76
Eastern	Eastern		50	7,697
Lancaster Co.	Eastern	17		27
Northumberland Co.	Eastern	17		25
Richmond Co.	Eastern	17		48
Westmoreland Co.	Eastern	17		27
Essex Co.	Eastern	18		20
Gloucester Co.	Eastern	18		44
King and Queen Co.	Eastern	18		14
King William Co.	Eastern	18		11
Mathews Co.	Eastern	18		12
Middlesex Co.	Eastern	18		17
Chesapeake (city)	Eastern	20	6	667
Franklin (city)	Eastern	20		28
Isle of Wight Co.	Eastern	20		79
Norfolk (city)	Eastern	20	30	2,221
Portsmouth (city)	Eastern	20	4	752
Southampton Co.	Eastern	20		51
Suffolk (city)	Eastern	20		281
Virginia Beach (city)	Eastern	20	1	1,336
Hampton City	Eastern	21	3	727
James City Co.	Eastern	21		77
Newport News (city) Co.	Eastern	21	5	952
Poquoson (city) Co.	Eastern	21		9
Williamsburg (city)	Eastern	21		53
York Co.	Eastern	21		60
Accomack Co.	Eastern	22		121
Northampton Co.	Eastern	22	1	38
Northern	Northern		43	6,773
Alexandria (city)	Northern	8	1	1,221
Arlington Co.	Northern	8	8	1,229
Fairfax (city)	Northern	8	10	99
Fairfax Co.	Northern	8	14	2,637
Falls Church (city_	Northern	8	1	59

County/ Independent City	Health Region	Health District	Physicians	2015 HIV Cases
Loudoun Co.	Northern	8	7	375
Manassas (city)	Northern	8	1	118
Manassas Park (city) Co.	Northern	8		26
Prince William Co.	Northern	8	1	1,009
Northwest	Northwest		42	1,944
Augusta Co.	Northwest	6	2	68
Bath Co.	Northwest	6		5
Buena Vista (city)	Northwest	6		2
Harrisonburg (city)	Northwest	6		74
Highland Co.	Northwest	6		0
Lexington (city)	Northwest	6		8
Rockbridge Co.	Northwest	6		14
Rockingham Co.	Northwest	6		67
Staunton (city)	Northwest	6		50
Waynesboro (city)	Northwest	6		48
Clarke Co.	Northwest	7		19
Frederick Co.	Northwest	7	3	107
Page Co.	Northwest	7	1	10
Shenandoah Co.	Northwest	7		30
Warren Co.	Northwest	7		53
Winchester (city)	Northwest	7		83
Culpeper Co.	Northwest	9		96
Fauquier Co.	Northwest	9	1	74
Madison Co.	Northwest	9		8
Orange Co.	Northwest	9		56
Rappahannock Co.	Northwest	9		10
Albemarle Co.	Northwest	10		157
Charlottesville (city) Co.	Northwest	10	28	181
Fluvanna Co.	Northwest	10		40
Greene Co.	Northwest	10		13
Louisa Co.	Northwest	10		44
Nelson Co.	Northwest	10		23
Caroline Co.	Northwest	16		64
Fredericksburg (city) Co.	Northwest	16	7	103
King George Co.	Northwest	16		44
Spotsylvania Co.	Northwest	16		182
Stafford Co.	Northwest	16		211
Southwest	Southwest		19	2,103
Lee Co.	Southwest	1		25
Norton (city)	Southwest	1		3
Scott Co.	Southwest	1		12
Wise Co.	Southwest	1		30
Buchanan Co.	Southwest	2		14

County/ Independent City	Health Region	Health District	Physicians	2015 HIV Cases
Dickenson Co.	Southwest	2		6
Russell Co.	Southwest	2		12
Tazewell Co.	Southwest	2		40
Bland Co.	Southwest	3		8
Bristol (city)	Southwest	3		38
Carroll Co.	Southwest	3		17
Galax (city)	Southwest	3		7
Grayson Co.	Southwest	3		15
Smyth Co.	Southwest	3		43
Washington Co.	Southwest	3	1	43
Wythe Co.	Southwest	3		38
Floyd Co.	Southwest	4		15
Giles Co.	Southwest	4		13
Montgomery Co.	Southwest	4		78
Pulaski Co.	Southwest	4		25
Radford (city)	Southwest	4		15
Alleghany Co.	Southwest	5	1	23
Botetourt Co.	Southwest	5		26
Covington (city) Co.	Southwest	5		20
Craig Co.	Southwest	5		4
Roanoke (city)	Southwest	5	8	475
Roanoke Co.	Southwest	5		118
Salem (city)	Southwest	5	3	34
Amherst Co.	Southwest	11		57
Appomattox Co.	Southwest	11		30
Bedford Co.	Southwest	11	1	71
Campbell Co.	Southwest	11		78
Lynchburg (city) Co.	Southwest	11	4	201
Danville (city)	Southwest	12	1	176
Franklin Co.	Southwest	12		68
Henry Co.	Southwest	12		61
Martinsville (city) Co.	Southwest	12		48
Patrick Co.	Southwest	12		16
Pittsylvania Co.	Southwest	12		100
VIRGINIA TOTAL			202	24,853

Sources: Physicians on Virginia Department of Health ADAP list, American Academy of HIV Medicine List (includes members and non-members who self-report caring for HIV patients); HIV prevalence data: Virginia 2015 HIV Surveillance Report.
Note: Excludes 416 cases of HIV, including AIDS, with unknown residence.

Table 14 aggregates the number of HIV physicians and HIV cases by health district, for an estimated calculation of HIV physician to HIV prevalence ratio, assuming that all diagnosed PLWH were in care. As they are not, this ratio provides a starting point for further analysis.

Table 14. HIV Physician to HIV Prevalence (2015) Ratio by Health Region and Health District

Health District by Health Region	HIV Prevalence	HIV Physicians	HIV Physician to HIV Prevalence Ratio
Central Region	5,920	48	123:1
13	275	0	275:0
14	304	0	304:0
15	4,369	46	95:1
19	972	2	486:1
Eastern Region	7,697	50	154:1
17	127	0	127:0
18	118	0	118:0
20	5,415	41	132:1
21	1,878	8	235:1
22	159	1	159:1
Northern Region	6,773	43	157:1
8	6,773	43	157:1
Northwest Region	1,944	42	46:1
6	336	2	168:1
7	302	4	76:1
9	244	1	244:1
10	458	28	16:1
16	604	7	86:3
Southwest Region	2,103	19	111:1
1	71	0	71:0
2	72	0	72:0
3	209	1	209:1
4	146	0	146:0
5	700	12	58:1
11	437	5	87:1
12	469	1	469:1

Sources: Physicians on Virginia Department of Health ADAP list, American Academy of HIV Medicine List (includes members and non-members who self-report caring for HIV patients); HIV prevalence data: Virginia 2015 HIV Surveillance Report. Note: Excludes 416 cases of HIV, including AIDS, with unknown residence. Health districts with physician to HIV prevalence ratio greater than 200:1 are bolded in red.

There is a wide range of HIV physician to HIV prevalence estimation ratios in Virginia, from health districts with no HIV physicians to a high of 486:1 (HIV cases to HIV physicians) in the Central Region, health district 19. The second highest ratio is in the Southwest Region, health district 12, 469 HIV cases to only one HIV physician. Virginia's HIV physicians are clustered in urban centers, leaving areas outside those centers with a significant deficit.

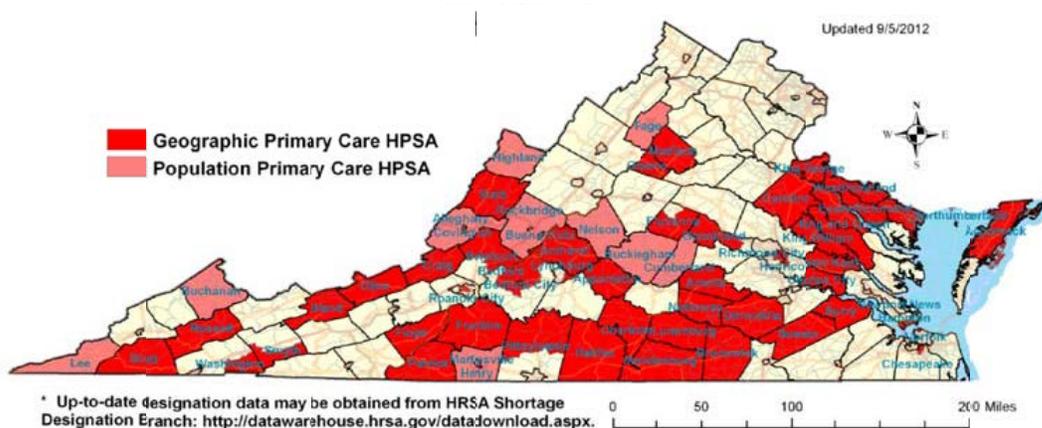
The intent of this table is to identify potential geographic areas of concern for future analysis. PLWH need to be included in future analysis to comprehensively understand depth their current travel patterns (i.e., where they seek care), their modes of transportation, and other factors that may influence their choice of a care location (e.g., concerns about stigma and discrimination while living in a small community could influence serostatus disclosure or where they seek care).

A more complete analysis should also include nurse practitioners and physician assistants.

Now 30 years into the HIV epidemic, the first wave of HIV clinicians will be planning retirement. Challenges with Virginia's HIV physician workforce are part of larger physician workforce challenges among primary care providers (i.e., general practice/family medicine, internal medicine, and pediatrics). A new U.S. report shows a projected shortfall of 12,500-31,000 primary care physicians by 2025 in the U.S.^{cx} There is a projected shortage of 5,100 to 12,300 medical specialty physicians, which include infectious disease physicians.^{cxii}

Virginia faces its own challenges. Figure 22 depicts the HRSA primary care shortage areas in the Commonwealth. Virginia has a primary care physician ratio of 91.2 per 100,000 population compared to the U.S. of 79.4 per 100,000.^{cxiii} Implementation of the ACA gives more people access to health insurance and the demand on primary care providers has increased.

Figure 22. 2012 Virginia Primary Care Shortage Areas



Source: Report of the Joint Commission on Healthcare: Update on the Virginia Physician Workforce Shortage, 2014

These data make clear that Virginia will need to employ a mix of strategies to provide access to medical care for its rural-living residents. Gathering information and developing innovative or alternative initiatives to explore new service delivery methods, i.e., the increased use of telemedicine and mobile health services will ease future challenges faced by the Commonwealth. This will be especially important as PrEP uptake is expanded and the need to identify clinicians willing to prescribe PrEP adds another dimension for consideration.

- **2016 Provider Survey, Workforce Questions: Summary of Findings**

During May 2016, VDH developed a short, four-question survey to collect information about workforce capacity. VDH used Survey Monkey and distributed the electronic survey to sub-recipients with an email link to respond in mid-June 2016. A reminder email was sent to providers asking that they complete the survey in late June 2016.

There were a total of 72 valid surveys. The responses represent a convenience sample of VDH contracted providers, which is not generalizable to all VDH contracted providers or all HIV services providers in Virginia. For planning purposes, they offer insight into areas of concern for some HIV services providers in Virginia and provide a starting point for addressing other

workforce challenges in future years of this plan. The findings discussed below are presented in the order of the four questions asked.

Workforce Challenges: The first question asked respondents to identify their level of agreement with the workforce challenges in their organization. Table 15 presents the major workforce challenges experienced by at least 25% or more of respondents who answered “agree” or “strongly agree.” (Note: Percentages of respondents are based on the total number of respondents who answered the question and vary for each question.)

Table 15. 2016 Provider Survey Top Reported Workforce-Related Challenges

Workforce Challenge (in ranked order)	Number Responding to Question	Frequency	“Strongly Agree” or “Agree” (%)
1. Staff pay is too low	44	34	77.3%
2. No benefits for part-time staff	40	29	72.5%
3. Lack of bilingual staff	43	22	51.2%
4. Continuing education available for staff but heavy workload prevents staff from obtaining continuing education	44	20	45.5%
5. Staff burnout or low morale	43	17	39.5%
6. Staff does not reflect the racial/cultural diversity of clients	44	15	34.1%
7. Have aging workforce and are anticipating retirement	42	12	28.6%
7. Staff lack a competitive benefits package	42	12	28.6%
8. High staff turnover	44	12	27.8%
9. Staff are not up-to-date on latest HIV treatment information, including pre-exposure prophylaxis (PrEP)	44	11	25.0%
9. Waiting lists exist in all or some services	44	11	25.0%

The top two issues identified are related to compensation and benefits: overall staff pay is too low (77.3% of respondents) and there are no benefits for part-time staff (72.5%). Although these challenges may have limited impact on direct client services, they can contribute to burnout, which ranks 5th (34.1%) and high staff turnover, which ranks 8th (27.8%). Staff turnover and burnout can impact the quality of services delivered. Over half (51.2%) of respondents identified the lack of bilingual staff as a workforce challenge. Although there may be opportunities for continuing education, staff are unable to take advantage of those opportunities due to a heavy workload (45.5% of respondents ranking 4th).

Language Services: When asked how their organization provides services to clients with limited English proficiencies, half of respondents reported that their organization has a *contract in place with a company for interpreter services*. Almost a third (30.7%) of respondents stated that they *have bilingual front-line staff* to assist with verbal interpretation. Less than a quarter (23.6%) of respondents stated that they *have bilingual medical staff*. A significant cause for concern is that 23.7% of respondents report that they use *family or friends of the client to interpret*.

Continuing Education Needs: The most frequently reported continuing education need (6 of 27 respondents to the question) was for cultural competency training related to the LGBT community. This was followed by three respondents identifying need for training related to PrEP; one of which was to teach nurse practitioners to prescribe PrEP. Other training needs identified by individual respondents included among others: everyday Spanish, motivational interviewing, HIV and HCV treatment updates, rapid HIV testing, and dental training for HIV dental management. Two respondents identified the need for pursuing advanced degrees, one of which was specific to mental health. Several respondents reiterated that the problem is not the availability of training but the lack of staff time to attend training. This may indicate need for more training opportunities via web-based trainings.

Help With Workforce Challenges: When asked how VDH can help with workforce challenges, the most frequent response was *additional funding* (31.9%), followed by *offer more training and/or continuing education opportunities for staff* (29.2%), and *conduct a statewide salary survey of HIV-related staff positions* (25.0%). Other areas of respondent interest include ensuring that services provided under the Care and Prevention in the United States (CAPUS) demonstration project continue beyond the funding that is ending; better compensation for nurses; better follow-up with ADAP questions and concerns; provide more training by polycom/webinar rather than in-person trainings which often require long travel distances; training for administrative staff to understand the Ryan White/HRSA/VDH standards; centralized eligibility by the VDH central office; and increased salaries for outreach workers, peer case managers, and disease intervention specialists (DIS).

c. How different funding sources interact to ensure continuity of HIV services.

The resources inventory presented in Appendix A includes over \$94 million of resources identified that provide services to PLWH and persons at risk for HIV. As this inventory does not include resources paid for through public (i.e., Medicaid, Medicare, Veterans Affairs) and/or private health insurance, it represents a low estimate of total resources. These insurance resources are likely to be sizeable as they are predominantly for the medical care of PLWH, which supports viral suppression thereby minimizing HIV transmission.

VDH is the recipient of a significant portion of federal funding that comes into the Commonwealth through HRSA and the CDC. DDP hosts regular HRSA Ryan White All Parts Grantee meetings (2 regions receive Part A funding [Northern Virginia as part of the Washington, D.C. Eligible Metropolitan Area and the Norfolk Transitional Grant Area]; 7 Part C Early Intervention Services [EIS] grantees; and two Part D grantees) to collaborate with other recipients of Ryan White funding. There is only one CDC directly-funded organization in the Commonwealth, located in Norfolk (Eastern Region), three SAMHSA-funded organizations, and two organizations that receive Housing Opportunities for People With AIDS (HOPWA) funds (located in Northern Virginia and Richmond). Due to the low number of other HOPWA funding recipients in the Commonwealth, it is not difficult keeping track of these organizations. To ensure coordination of funding streams, as well as sufficient programmatic resources to fund Virginia's HIV portfolio, VDH regularly conducts the following activities:

1. Internal DDP coordination of HIV prevention, surveillance, and Ryan White Part B

- resources to maximize community impact and minimize duplication of efforts;
2. DDP internal coordination and external collaboration with other funding streams for development and implementation of shared activities (e.g., public forums, trainings, community awareness, and community events); and
 3. DDP identification of new HIV resources, including private and governmental funding, to fill gaps in the Commonwealth's portfolio of HIV services (e.g., to continue successful demonstration projects beyond their grant period and/or to provide resources to fill newly identified service gaps).

Examples of these coordination efforts, as well as program continuation beyond the initial grant period, include the following:

1. VDH expanded its Ryan White Part F Special Projects of National Significance (SPNS) Linkage to Care grant for its Patient Navigation program within the existing pilot health regions (i.e., Central and Southwest) using Ryan White Part B funds and CDC Care and Prevention in the United States (CAPUS) demonstration project funding program to support Patient Navigation programs in the Northern, Eastern, and Northwest health regions of the state;

2. Data to Care

Data to Care illustrates a coordinated effort between Prevention, Care and Surveillance Units at VDH. The strategy was initiated at VDH as a result of CAPUS funding. Data to Care activities involve the use of HIV surveillance data to determine individuals who may need linkage-to-care or re-engagement services, and they are a key step to supporting individuals along the HIV care continuum and ultimately reduce their viral load.

3. DDP collaborates internally as well as with community HIV testing partners to coordinate the Active Referral process. DDP used Ryan White SPNS Linkage funds to help develop the Active Referral Protocol for Disease Intervention Specialists (DIS). Active Referrals are intended to maximize receipt of the referred service versus passively providing an individual with referral information. Now that the protocol is fully developed and implemented, DDP sustains the Active Referral strategy through HIV Surveillance and other STD Surveillance, Operations and Data Administration (SODA) resources. HRSA Ryan White Part B supplemental funding augments SODA resources by providing salary support for eight DIS.
4. DDP's Ryan White SPNS Patient Navigation program contracted services to local community based organizations (CBO) to improve PLWH linkage and retention in HIV medical care and treatment. The successes of the program warranted continuation, especially to aid PLWH who have transitioned to insurance with follow up to ensure that they are retained in care. Then, the Patient Navigation strategy has been sustained through RW Part B and HIV Prevention resources.

5. Using Ryan White Part B Minority AIDS Initiative (MAI) funding, DDP also expanded the Patient Navigation strategy to an additional site (i.e., Centra Health) in the Southwest region of the state, serving the Lynchburg and Danville areas;
6. DDP partnered with Virginia Commonwealth University (VCU) Institute for Drug and Alcohol Studies (IDAS) to administer Motivational Interviewing Training and Fidelity Monitoring of the Patient Navigators including both Ryan White and CDC-funded navigators; and
7. DDP's Ryan White SPNS Mental Health strategy has been sustained beyond its initial grant period through Ryan White Part B and insurance reimbursement resources as sites are credentialed for providing comprehensive assessments, referral, and treatment.
8. DDP has established an internal weekly meeting between DDP HIV Care and HIV Prevention programs to better facilitate collaboration and resources allocation between HIV Care Services Care Coordination processes and the Comprehensive HIV/AIDS Resources and Linkages for Inmates (CHARLI) program, managed by the HIV Prevention Unit. Both programs provide services to PLWH released from correctional facilities.
9. HIV Prevention Services funds a contractor to train patient navigators in the Community Health Worker model and conducts monthly webinars and quarterly in-person trainings for all patient navigators and linkage personnel regardless of funding source (CAPUS, Ryan White HIV/AIDS Part B, HIV Prevention).
10. The Virginia Ryan White Part B Grantee, HIV Surveillance, and HIV Prevention are jointly funding a program to enhance the health information technology (HIT) client-level data system in the state called *e2Virginia* and the HIV Care Markers database. The enhanced HIT systems fully integrate and utilize relevant measures of HIV treatment, surveillance, and laboratory data to allow for more efficient data collection, monitoring and tracking of health outcomes of PLWH along the HIV Continuum of Care.
11. DDP facilitates the Ryan White Cross-Parts Quality Management Collaborative. This collaborative includes representation from Ryan White Parts A, B, C, D, and F Ryan White program administrators, staff, and clinicians who come together to learn, share, build skills, and network with their Ryan White colleagues throughout the State. The Quality Management Advisory Committee including 35 members meets on a quarterly basis and the Quality Management Summit is held annually. The Summit includes presentations on the federal Ryan White Program, the ACA, medication assistance programs, testing and linkage to care, quality management, a variety of care topics, and emerging HIV medication treatments.

To ensure that Ryan White is *payer of last resort*, all PLWH are screened for eligibility and apply for health insurance (e.g., Medicaid, Medicare, FAMIS, marketplace insurance plans) and other public programs (e.g., Supplemental Nutrition Assistance Program, Housing Choice Plus, HOPWA). PLWH who are denied assistance under these programs or have needs that are not

covered may be eligible for services offered through the Ryan White Program. In regions where there are multiple Ryan White funding sources (e.g., Part A, B, C, and D) for the same services (e.g., outpatient/ ambulatory medical care for PLWH), the organization providing services tracks expenditures for each client to ensure that there is no duplication. Whenever possible, a single Ryan White funding stream pays for the services of the PLWH or at least until those funds are exhausted.

d. Needed resources and/or services and steps being taken to secure them.

DDP gathers information through a wide variety of sources to assess ongoing needs, barriers, and gaps in Virginia's portfolio of HIV services. Resource needs are generally tied to service needs. The following list provides a description of various service needs and the efforts that DDP is making to obtain the necessary resources.

- Both needs assessment and health outcomes data show that rural clients are a population group that experiences significant health disparities. In the Southwest region, one of the biggest challenges is recruiting HIV clinical providers. One long-time physician is retiring. To address this major gap in HIV medical care delivery, VDH is funding telemedicine services through the University of Virginia Medical Center to provide ongoing access to specialty care for PLWH in the Lenowisco Health District. Clients now have the opportunity to see a medical specialist without driving five or more hours or hundreds of miles to medical facilities in other states. This initiative has the potential for replication and scale-up in other geographical areas to address clinical provider shortages.
- The data for HIV testing conducted through VDH shows that fewer males are being tested for HIV than females. As part of the development of this five year HIV services plan, VDH has discussed the need to develop new and expand successful HIV/STD testing strategies to ensure more men get tested as part of its *No Wrong Door* approach to testing. As part of the efforts to address this need, VDH will develop activities to expand routine testing, encourage physicians to test more men, include HIV/STD content in educational materials, expand social network testing models, have a social media presence, build new partnerships, and continue its pilot home-based testing program targeting MSM). Pharmacy testing, initiated under the CAPUS demonstration project, is being incorporated into the base HIV Prevention grant as the CAPUS program ends. Many of the resources needed for development of these efforts will be staff time and building new and/or expand existing partnerships.
- Virginia's HIV Continuum of Care data has identified a challenge in retaining PLWH in care and treatment. In comparison to all PLWH, PLWH receiving Ryan White services (all Parts) have dramatically better retention. For example, the retention rate for Ryan White clients (all Parts) is 91.8% compared to 43% for PLWH overall. DDP developed a fishbone cause and effect diagram to identify the problem. DDP learned that one of the major causes was the lack of case managers' knowledge about health insurance and HIV medication management. To address this, DDP conducted a two-day Case Management Retreat "Leading the Right Path" in March 2016, focused on specific HIV clinical

information, the new Virginia Case Management Standards, Virginia Data to Care initiatives, insurance management, and how to sharing existing resources. DDP will continue assess retention ongoing and offer this training as needed in future years.

DDP is planning to expand access to pre-exposure prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP) for high-risk individuals, particularly MSM, over the next five years. However, because Virginia is not a Medicaid expansion state and not everyone qualifies for subsidies under the ACA, low-income individuals may not have access to PrEP outside of Gilead Sciences, Inc.'s Truvada for PrEP Medication Assistance Program. DDP has purchased medications for both PrEP and nPEP with state funding. DDP is working with both health districts and other medical providers across the state to increase access to PrEP and nPEP for individuals at risk for HIV. In addition, DDP has received funds through CDC to promote PrEP and nPEP in the Virginia Beach-Norfolk-Newport News MSA. These activities include conducting provider education, recruiting providers to become PrEP and nPEP prescribers, patient navigation services for PrEP and social marketing to promote PrEP awareness with a focus on reaching MSM, transgender persons (especially among communities of color) as well as others at risk for HIV including partners of people living with HIV.

D. Assessing Needs, Gaps, and Barriers

a. Process used to identify HIV prevention and care service needs of people at higher risk for HIV and PLWH (diagnosed and undiagnosed).

Overview of Process

- **Commonwealth of Virginia**

VDH utilized a mixed methods approach to assess the need for HIV prevention and care services within the Commonwealth. This included the review and analysis of the data already presented in the Epidemiology Overview section of this plan (e.g., HIV surveillance data, HIV Care Continuum data, demographic and socio-economic data from the 2014 five-year American Community Survey [ACS], etc.). The 2014 ACS data included: demographic profile of the general population (i.e., total population by sex, race/ethnicity, and age group), population living below 100% of the federal poverty level (FPL), educational attainment, per capita income, employment status, foreign-born population, language spoken at home, English spoken less than “very well,” gross rent as a percentage of household income, and health insurance status. This data was compiled for Virginia’s five health regions using the Federal Information Processing Standard (FIPS) codes, for the counties and independent cities in each region. FIPS codes are used to uniquely identify counties and county equivalents in the U.S. Additional data that were reviewed included Ryan White program data, HIV testing data, specific HIV surveillance reports (e.g., late testing, deaths, HIV incidence surveillance), sexually transmitted disease information, and the 2015 End of Year Report for Comprehensive HIV Prevention Programs for Health Departments. Lastly, many journal articles were also reviewed to inform this process.

VDH augmented this data with a number of qualitative data sources through interviews, surveys and focus groups, which focused on the identification of needs, barriers, and gaps. The

qualitative data was gathered at: (1) a two-day consumers training on quality management of HIV/AIDS, which targets PLWH; (2) the cross-parts collaborative Quality Management Advisory Committee (QMAC) meeting, a committee which comprises of VDH staff, contracted providers and consumers; and (3) the Quarterly Contractors Meeting which comprised of contracted providers. In addition, a provider survey was disseminated via Survey Monkey, which assesses needs and challenges faced by providers in providing care to consumers and people at risk for HIV.

In addition to this data analysis, VDH conducted additional needs assessment data collection with targeted groups. These included:

- 2016 consumer survey distributed during two consumer meetings (88 responses)
- 2016 19 semi-structured consumer interviews
- 2016 targeted consumer focus groups/town halls targeting both PLWH and persons at risk for HIV (4 focus groups/town halls completed with 120 participants)
- 2016 provider survey (123 respondents)
- 2016 focus groups with provers (52 participants)
- Survey among People Who Inject Drugs
- Medical Monitoring Project data

- **Norfolk TGA**

To assess the needs specific to the Norfolk TGA, VDH relied heavily on a review of their local documents. These included the following:

- Norfolk TGA Comprehensive in Care, Newly Diagnosed & Out of Care PLWH/A: 2013 Report of Findings
- Fiscal Year (FY) 2016 Ryan White Part A Grant Application – sections specific to the Early Identification of Individuals with HIV/AIDS (EIIHA) and unmet need analysis
- FY 2014 Client Demographics
- 2017 Prioritized Service Categories for Ryan White Part A Services
- 2017 Resource Allocation by Service Category
- 2016 financial resources inventory
- 2016 assessment of clinical (i.e., HIV physicians) workforce challenges

In addition, VDH reviewed 2015 HIV surveillance data for the TGA, HIV Care Continuum data, and 2014 five-year ACS demographic and socio-economic data described above.

Strategies for Targeting, Recruiting, Retaining and Participants in Process

The following describes the process used for targeting, recruiting, and retaining participants in the needs assessment process for targeted activities.

- **Participation from PLWH and Persons at Risk for HIV**

As part of its mixed methods design, VDH used three tools to gather additional needs assessment data from PLWH and persons at high risk for HIV (i.e., survey, semi-structured interviews, and focus groups/town halls). VDH conducted recruitment and implementation of these tools during May and June of 2016. Due to time limitations, VDH leveraged pre-scheduled meetings to

recruit participants for the semi-structured interviews, focus groups, and distribute the consumer survey. A limitation of this approach was that there were more PLWH than persons at-risk for HIV or PLWH not engaged in care in attendance. As a result, the qualitative and survey data gathered is more representative of PLWH than of persons at-risk for HIV or lost-to-care. The consumer survey specifically targeted PLWH; 108 questionnaires were distributed to PLWH and 88 returned for a 73.3% response rate.

Recruitment for the PLWH focus groups/town halls, semi-structured interviews, and consumer survey were completed at pre-scheduled meetings and training events that brought together PLWH and persons at-risk for HIV. These events included the cross-parts collaborative Quality Management Advisory Committee (QMAC) and the consumers training on quality management. The focus groups/town halls, interviews, and surveys predominantly reached African American males and VDH partnered with providers and community-based organization (CBO) with a large Latino client base to recruit participation from more Latinos living with and at risk for HIV. NovaSalud, a CBO serving the Latino population in the Northern region, assisted in organizing a 12- person, Spanish-language focus group with Latinos from myriad of countries of origin, who were living with or at-risk for HIV.

- **Participant Description**

The majority of participants in the consumer focus group and survey assessments were African-American males who self-identified as gay. Latino gay men comprised the second largest group of participants. Ages of participants ranged from younger than 25 years to over 70 years. Sixty-two percent of survey respondents were male; 36.4 % were female; and 1.6% transgender. All consumer focus groups were comprised of more male participants than female. Ninety-eight percent of the consumer survey respondents reported currently being in care. About 98% of consumer interview and focus group respondents also reported being in care.

- **Provider Surveys and Focus Groups**

In addition to investigating the needs of clients from their perspective, DDP also assessed service needs from the provider's perspective. DDP conducted four provider focus groups and administered a provider survey via Survey Monkey. One hundred and twenty three (N=123) providers across the state responded to the survey and fifty-two participated in the focus groups. Except for the online provider survey, pre-scheduled meetings and training events were used to recruit participants for the provider focus group. The two meetings included the cross-parts collaborative Quality Management Advisory Committee (QMAC), the Virginia Ryan White Part B Quarterly Contractors Meeting (QCM). One hundred and twenty three providers responded to the online survey.

- **Engagement of Other Stakeholders, Including PLWH**

VDH planning staff presented the consumer and provider needs assessment findings to Virginia's Community HIV Planning Group (CHPG), the Norfolk TGA's Greater Hampton Roads HIV Services Planning Council, PrEP planning group, 1506/1509 planning team, Drug User Health Workgroup, Racial Disparities Among MSM workgroup, and the VDH Integrated Plan workgroup, which was comprised of the Surveillance Unit, HIV Prevention Unit, HIV Care Unit, STD Surveillance, and Operations and Data Administration (SODA) for feedback and prioritization of need. The strategies and activities outlined in the work plan are outcomes of an

integrated working session between CHPG members, which is comprised of representatives from Ryan White Parts A, B, C and D, CBOs, Department of Behavioral Health, the Department of Corrections, homeless service institutions, , HIV prevention and care providers, labor industries, academic institutions, psychosocial support and treatment service providers, officials supporting efforts against transmission of HIV, tuberculosis, hepatitis and STDs, local and state health departments, and other stakeholders. The working sessions led to agreement of what objectives, strategies and, activities to include in the work plan, as well as target population prioritization. Participants at the CHPG meeting were asked to review initial strategies and activities, and to provide feedback. Amendments were made and incorporated into the final work plan (Appendix B).

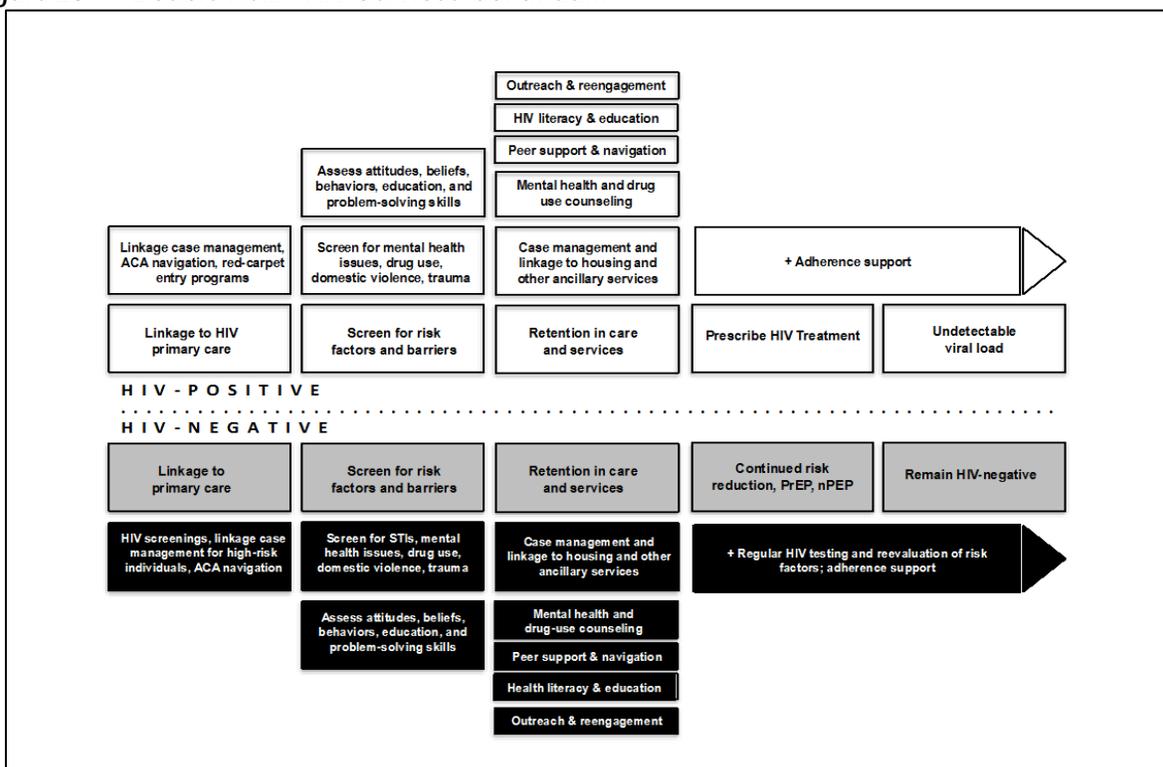
b. & c. HIV prevention and care *service needs and gaps*.

Overview

The tremendous advances in science, including the understanding of not only how to treat HIV, but also to prevent HIV has resulted in the need for more integration between HIV prevention and care. Science has demonstrated that there is reduced transmission when PLWH are virally suppressed.^{cxiii} As a result, “treatment as prevention” has become one of the foremost strategies to end the HIV epidemic. Nine of the CDC’s 14 required interventions that are part of its current *High-Impact HIV Prevention* strategy target HIV positive individuals and include efforts to improve linkage to care, retention in care, and treatment adherence.

Thus, to understand service needs, gaps, and barriers, one must identify the populations that will need these services as well as the specific services themselves. The two broad categories of people needing these services include those who are HIV positive (i.e., PLWH) as well as those who are HIV negative whose behaviors put them at high risk for HIV (i.e., high-risk negative persons, abbreviated as HRN). Although the HIV Care Continuum provides an invaluable tool for discussing needs of PLWH, it is less useful for HRN. VDH plans to develop an integrated HIV prevention and care continuum. However, until this model is complete, the Treatment Action Group’s “Double Helix” continuum (Figure 23) offers a starting point for discussing service needs.^{cxiv}

Figure 23. 'Double Helix' HIV Services Continuum



Source: Treatment Action Group, Toward Comprehensive HIV Prevention Service Delivery in the United States, June 2015.

The double helix in the figure above provides a “mirrored” services continuum, focusing on PLWH (i.e., HIV positive) on the top and High Risk Negative persons (HRN) on the bottom. The service needs within each continuum are similar with only slight differences specific to HIV status. The first layer of services for PLWH closely aligns with the HIV Care Continuum, and begins with “linkage to care” and works towards having an “undetectable viral load.” The upper layers of the HIV-positive half of the double helix address a variety of other medical and support service needs of PLWH that help ensure they become fully engaged and retained in HIV medical care and adherent to treatment. Screening for personal risk factors and barriers is an essential part of the individual’s needs assessment and care planning process as these factors can be major barriers to engagement and retention in care.

The HIV-negative side of the double helix depicts a similar path for HRN and begins with linkage to care. Now that full implementation of the ACA is well underway, ensuring that HRN individuals also accesses regular primary care services may well serve as a protective factor against acquiring HIV. Having a medical home may also facilitate access to pre-exposure prophylaxis (PrEP) for those at highest risk of acquiring HIV. The goal of this continuum is that the person remains HIV-negative over time.

However, within these broad population groups there are specific subpopulations with different needs. For example, there are three broad subpopulations of PLWH (i.e., persons in care, persons not in care, and persons who remain undiagnosed). Other subpopulations (e.g., racial/ethnic, gender identity, age group, those grouped by transmission risks) may also have unique service needs, as well as barriers to accessing them). Not all populations have equitable

access to services. There are many social, structural, and personal barriers that prevent PLWH and HRN from engaging and utilizing HIV services available to them.

Shared Service Needs and Gaps - All Populations

There are some needs that are shared by all persons, regardless of their HIV status, and regardless of their age, race, ethnicity, sex, gender identity, or sexual orientation. Addressing them, will improve the quality of services and health outcomes and remove systemic barriers that prevent the full and equitable participation of all Virginians in the portfolio of HIV services available to them. Table 16 summarizes at least three common service needs with their associated gap(s).

Table 16. Shared Service Needs and Gaps of All Populations

Needs	Gaps
<ul style="list-style-type: none"> To address social determinants of health, especially poverty, educational attainment, housing, etc. that are associated with increased risk for acquiring/transmitting HIV 	<ul style="list-style-type: none"> No coordinated effort across health, education, social service, and employment sectors to address social determinants of health as a strategy to improve health outcomes of PLWH and persons at risk for HIV
<ul style="list-style-type: none"> Improved access to and use of health care services 	<ul style="list-style-type: none"> An estimated 12.1% of Virginians are uninsured Approximately 27% of FY 2016 ADAP clients are uninsured
<ul style="list-style-type: none"> A trauma-informed approach to service delivery 	<ul style="list-style-type: none"> HIV service providers lack training on trauma-informed care to understand the impact of different types of trauma (emotional abuse, neglect, physical abuse, other forms of violence including intimate partner violence, family dysfunction) on people’s lives, behavior, and their health outcomes, as well as how long-lasting effects of trauma may be a barrier to accessing the full portfolio of HIV services in Virginia

Service Needs and Gaps of PLWH

The service needs and gaps of PLWH must be examined through multiple lenses, using mixed methods data collection and analysis. As noted earlier, there are three subgroups of PLWH, including those who are: (1) ‘unaware’ of their HIV status, (2) aware of their HIV status but ‘not in care,’ and (3) are ‘in care.’

- Persons Living with HIV who are Unaware of their HIV status**

Persons who have undiagnosed HIV infection need to be (1) found, (2) tested for HIV to learn their HIV status, and (3) linked to care once newly-diagnosed. Table 17 examines the associated gaps to these activities.

Table 17. Service Needs and Gaps of Persons Living with HIV who are *Unaware* of Their Status

Needs	Gaps
<ul style="list-style-type: none"> To identify high risk individuals through effective, innovative 	<ul style="list-style-type: none"> CDC estimates that 12.7% of all PLWH in Virginia are undiagnosed; this estimate is even higher (14.8%) for males

<i>outreach</i> (e.g., social network models, high risk venues, social media approaches, etc.) and other approaches (e.g., partner services)	13 years and older attributed to male-to-male sexual contact; applying this 2012 estimate to Virginia's 2015 HIV diagnosed cases yields an estimate of 3,576 undiagnosed persons, of whom an estimated 2,009 are MSM*
<ul style="list-style-type: none"> Increase accessibility and provide <i>HIV testing</i> to high risk individuals 	<ul style="list-style-type: none"> Based on a 1%-4% HIV seropositivity test rate, Virginia will need to conduct between 89,400 to 357,600 HIV tests to identify the estimated 3,576 persons (this excludes any new infections that occur to increase HIV prevalence) CDC estimates higher new HIV diagnoses in geographic areas impacted by social determinants of health (SDH). Except for VDH's pharmacy based testing program, there are few programs that geographically target testing using SDH combined with HIV prevalence data.
<ul style="list-style-type: none"> Provide <i>linkage to care</i> for newly-diagnosed HIV positive individuals 	<ul style="list-style-type: none"> Linkage to care is not a billable service under any health insurance plan. Thus, resources to support this service must be identified through other potential sources (e.g., CDC, Ryan White, state/local discretionary funds, etc.)

*This likely underestimates total MSM as it excludes persons with dual risk of MSM/IDU and also excludes the large proportion of cases that have no identified risk, many of which may be MSM.

• Persons Living with HIV who are Aware of their HIV status but Not in Care

Similar to unaware PLWH, PLWH who already know their status share two needs: (1) to be found, and (2) linked to care for the first time if they have never been in care or re-engaged into care if they were once in care but dropped out. Once they are re-engaged into care, they share all of the needs of PLWH who are in care. Table 18 presents a brief description of these two needs of this population and associated gaps in Virginia's HIV services continuum.

Table 18. Service Needs and Gaps of Persons Living with HIV who are *Not in Care*

Needs	Gaps
<ul style="list-style-type: none"> Effective, innovative <i>outreach</i> (e.g., social network models, data-to-care, use of social media, etc.) that identifies PLWH who are not in care 	<ul style="list-style-type: none"> Virginia launched its Data to Care intervention in 2014. This CDC intervention uses HIV surveillance data to identify PLWH who appear to be 'not in care'. Virginia uses a hybrid model and partners with local health departments and HIV medical clinics to assist in the follow-up. The program itself is labor intensive and requires an ongoing commitment of staff resources for success. The program needs to expand, especially in high prevalence areas with large numbers of PLWH who appear to be not in care Innovative models need to be developed to identify PLWH who are not in care
<ul style="list-style-type: none"> <i>Linkage to care</i> to engage or re-engage PLWH who are not in care into care 	<ul style="list-style-type: none"> Linkage to care is not a billable service under any health insurance plan. Resources to support this service must be identified through other potential sources (e.g., CDC, Ryan White, state/local discretionary funds, etc.)

- **Persons Living with HIV who are in care**

On the Double Helix continuum—“screen for risk factors and barriers”—represents the individual needs assessment of a PLWH. This is followed by “retention in care and services.” Identifying the needs of PLWH and addressing them is critical as it promotes retention in care and treatment adherence. To assess the service needs of PLWH, VDH conducted a brief survey with PLWH recruited through a consumer training on quality management. VDH also conducted focus groups and semi-structured interviews with PLWH to deepen their understanding of needs, barriers, and gaps. The survey is a convenience sample of attendees of the meeting and results are not generalizable to all PLWH in Virginia. They provide a glimpse of the service needs and gaps of the survey respondents. A total of 88 PLWH completed the survey. Table 16 presents the results of service needs and gaps identified through the consumer survey. One question asked respondents to identify whether or not if they *needed* a service and if they were using the service or if they *needed but did not receive* the service (i.e., a gap). The results are listed in the order of the *service gap* versus *service need* as this approach highlights where there may be challenges in the service delivery system that require attention. At the consumer level, a service need that is filled is not a problem. It is the service need that is not filled that is the real challenge.

There were some challenges with the PLWH survey data; not everyone who took the survey completed every question. Therefore, the percentages are derived from the number of PLWH who completed the question versus the number who completed the survey. None of the questions were required, so a respondent could skip that specific question. Except for oral/dental care, four of the top five service gaps are for services that are categorized by HRSA as Ryan White support services. The top five service gaps are: (1) emergency financial assistance (25.9%); (2) housing assistance (24.4%); (3) food assistance (22.6%); (4) oral/dental care (22.0%); and non-medical case management (18.2%).

As housing assistance ranked as the second-highest need in the data from the consumer survey, this was also an expressed need of in the client focus groups, along with other basic living needs. One participant stated:

If I do not have a place to live, my priority should be finding a place to live, not getting HIV medication. Also, if I have no money to get basic needs like food and water, do you really think my HIV medications are my priority? Medications go with food and water and if I cannot provide those, I won't be taking any medications.

The need for oral/dental care was identified by survey respondents as the top needed service (80.5%) of survey respondents; it also ranked fourth in terms of a service gap (22%). Good oral health is especially important for PLWH because having dental problems increases the likelihood of developing serious oral manifestations and oral cancers. Poor oral health can lead to inadequate food intake, which affects HIV medication absorption. There is a shortage of oral/dental health providers willing to provide services to PLWH in Virginia. The need for more oral/dental health providers varies across the state: the Southwest, Northwest, and Northern regions are areas that need more dental providers to serve PLWH. The need for an increase in mental health and substance use treatment providers were needs also cited by focus group participants. Shortage of mental health and substance use treatment counselors in Virginia was

identified as a major barrier to access these services. Respondents from the Southwest are excited about the telemedicine mental health service now available in the area and hope that this will be replicated for other services, as the Southwest region experiences a shortage in healthcare providers compared to other areas of the state. The shortage of mental health and substance use providers can result in poorer health outcomes for PLWH needing these services.

Norfolk TGA: As a Ryan White Part A jurisdiction, the Norfolk TGA regularly conducts a needs assessment with PLWH who are in care, not in care, and are newly-diagnosed to determine needed services, gaps in services, and barriers to care. Table 19 presents the top ranked service needs and service gaps of newly-diagnosed PLWH and PLWH who are in care who are living in the Norfolk TGA. Also included are top five ranked services with experienced barriers.

The results of the Norfolk TGA needs assessment are slightly different than the brief survey conducted by VDH. It is important to note that the Norfolk TGA needs assessment took place in 2013, which was prior to the full implementation of the ACA. Although Virginia is not a Medicaid expansion state, Virginians living at or below 200% of the FPL are eligible for government subsidies, making health insurance more affordable. The top five service gaps for PLWH who are in care are: (1) housing assistance, (2) insurance, (3) emergency financial assistance, (4) transportation, and (5) nutrition assistance. The top five services for newly-diagnosed persons are: (1) housing assistance, (2) health insurance premium cost sharing assistance, (3) insurance, (4) transportation, and (5) medication co-pay assistance. Thus, the needs of PLWH who are in care are largely support services needs, while the needs of PLWH who are newly-diagnosed center on getting and maintaining access to medical care and medications. The Norfolk TGA is planning their 2017 needs assessment and it will be important to see any changes in these gaps, especially post ACA implementation.

Table 19. Service Needs and Gaps of People Living with HIV: Findings from 2016 PLWH Survey, n88

Description of Service	Total Respondents	Need	Gap	
		Percent	Number	Percent
Emergency Financial Assistance	85	45.9%	22	25.9%
Housing assistance	82	40.2%	20	24.4%
Food assistance	84	56.0%	19	22.6%
Oral/dental care	82	80.5%	18	22.0%
Non-medical case management	77	51.9%	14	18.2%
Emotional support	84	56.0%	14	16.7%
Job training	80	22.5%	12	15.0%
Mental health	82	50.0%	11	13.4%
Legal	77	19.5%	10	13.0%
Health insurance premium/ cost sharing assistance	82	69.5%	10	12.2%
Medical nutrition therapy	82	31.7%	10	12.2%
Treatment adherence counseling	75	41.3%	8	10.7%
Medical transportation	83	37.3%	8	9.6%
Medical case management	85	81.2%	7	8.2%
Outpatient HIV care	80	56.3%	6	7.5%
Outreach	80	30.0%	6	7.5%
Assistance applying for insurance, SSD benefits, Medicare, Medicaid, etc.	83	42.2%	6	7.2%
Patient assistance program through pharma	75	32.0%	5	6.7%
Health education/risk reduction	80	37.5%	5	6.3%
Assistance telling my current or future sex/needle sharing partner about my HIV status	81	9.9%	5	6.2%
AIDS Drug Assistance Program (ADAP)	80	63.8%	4	5.0%
Substance use treatment	80	12.5%	3	3.8%
Home health care	80	11.3%	3	3.8%
Translation services during medical visits	80	7.5%	3	3.8%
Child care	79	6.3%	3	3.8%
Access to free condoms	84	49.4%	2	2.5%
HIV prevention services for my sex/needle sharing partners	79	11.4%	2	2.5%
HIV medication assistance after being released from jail	82	17.1%	1	1.2%
Interpretation and translation	74	6.8%	1	1.4%
Assistance notifying my sex/needle sharing partners to get tested	81	11.1%	1	1.2%
HIV or STD testing	82	39.0%	1	1.2%
Linkage to a medical provider	84	35.7%	1	1.2%

Source: 2016 VDH Consumer Survey (convenience sample of attendees at QM training)

Table 20. 2013 Ranked Service Needs and Gaps for Newly-Diagnosed and In Care PLWH

NORFOLK TGA	
<i>The Norfolk TGA includes the Virginia cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach and Williamsburg; and counties of Gloucester, Isle of Wight, James City, Mathews and York within Virginia's Eastern Health Region; and Currituck County in North Carolina.</i>	
Top ranked service needs	
'Newly Diagnosed' Persons	'In Care' PLWH
1. Ambulatory Outpatient Medical Care	1. Ambulatory Outpatient Medical Care
2. Support Groups	2. Medication Assistance
3. Medication Assistance	3. Housing assistance
4. Nutrition Assistance	4. Support Groups
5. Health Education / Peer Mentor	5. Transportation
6. Medical Case Manager	6. Insurance
7. Mental health	7. Nutrition Assistance
8. Housing assistance	8. Mental health
9. Transportation	9. Medical Case Manager
10. Exercise	10. Other: Employment Assistance
11. Insurance	11. Health Education / Peer Mentor
12. Emergency Financial Assistance	12. Exercise
Top ranked service gaps	
'Newly Diagnosed' Persons	'In Care' PLWH
1. Housing assistance	1. Housing assistance
2. Health Insurance Premium Cost Sharing Assistance	2. Insurance
3. Insurance	3. Emergency Financial Assistance
4. Transportation	4. Transportation
5. Medication Co-Pay Assistance	5. Nutrition Assistance
6. Emergency Financial Assistance	6. Other: Vision Care
7. Other: Disability Assistance	7. Health Insurance Premium Cost Sharing Assistance
	8. Other: Employment Assistance
	9. Oral Health
	10. Support Groups
	11. Medication Co-Pay Assistance
	12. Other: Disability Assistance
Top 5 ranked services with barriers	
'Newly Diagnosed' Persons	'In Care' PLWH
1. Housing Assistance	1. Housing Assistance
2. Health Insurance Premium Cost Sharing Assistance	2. Emergency Financial Assistance
3. Insurance	3. Other: Employment Assistance
4. Emergency Financial Assistance	4. Insurance
5. Other: More Services in Rural Areas	5. Transportation

Source: Norfolk TGA, Comprehensive 'In-Care', 'Newly Diagnosed' & 'Out of Care' PLWH/A Needs Assessment, 2013 Report of Findings. Available from: <http://www.ghrplanningcouncil.org/site/2015/04/2014NorfolkTGAFinal%20Report08192014.pdf>.

Service Needs for Persons at-risk for HIV

The Double Helix continuum shows the service needs of HIV-negative individuals’ mirrors that of HIV-positive individuals. It begins with linkage to primary care and includes HIV screening at that first step. It progresses to include screening for risk factors and behaviors, retention in care and services, continued risk reduction and access to PrEP and nPEP as appropriate. All these stages culminate in the person remaining HIV-negative. Table 21 presents the service needs and gaps of persons at risk for HIV, including HRN.

Table 21. Service Needs and Gaps of Persons at-risk for HIV

Needs	Gaps
<ul style="list-style-type: none"> Improved access to and use of health care services 	<ul style="list-style-type: none"> An estimated 12.1% of Virginians are uninsured
<ul style="list-style-type: none"> Access to pre-exposure prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP) 	<ul style="list-style-type: none"> Limited number of providers currently prescribing PrEP (less than 25 identified by VDH as of August 2016)
<ul style="list-style-type: none"> CDC high-impact prevention toolbox 	<ul style="list-style-type: none"> <i>Behavioral interventions targeting HRN</i> – Resources need to support effective interventions among highest risk groups.
<ul style="list-style-type: none"> Syringe exchange services 	<ul style="list-style-type: none"> Syringe exchange services are currently illegal in Virginia. However, they play an important role in reducing risk of HIV transmission among PWID. The experience of the HIV outbreak in Scott County, Indiana put a national spotlight on HIV transmission through sharing of needles, which culminated in January 2016 of the lifting of the ban to use federal funds for syringe services. Continued efforts are needed in Virginia to make syringe services available to PWID.
<ul style="list-style-type: none"> Partner Services 	<ul style="list-style-type: none"> The CDC’s 2015 STD Treatment Guidelines recommend that partner services be provided to all persons newly-diagnosed with HIV infection. They also recommend that identified partners be provided nPEP. Currently, the capacity to conduct partner services across local health departments varies considerably. Continued resources need to support expansion of partner services for newly-diagnosed PLWH.

Population Specific Service Needs

The populations below were prioritized by the Virginia Community HIV Planning Group (CHPG) as being populations of concern in the Commonwealth. The service needs and gaps described are the result of innumerable meetings, presentations, and discussion of this group over the past three years since completion of the last Comprehensive HIV Plan and Statewide Coordinated Statement of Need in 2012 and Prevention Plan update in 2014. The needs described represent the consensus of this group.

Men who have Sex with Men, including those living with HIV

Need: Expand availability of and access to culturally-sensitive health care pertaining to health issues of gay/bisexual and other MSM.

Gap: There are gaps in the provision of culturally competent health care for MSM in different areas of the state and in different health care settings. MSM indicate that they frequently feel stigmatized for being MSM, and also for being HIV positive. This is even more frequently experienced in the rural portions of the state.

Need: Improve retention in care among all MSM, with an emphasis on young minority MSM in order to increase health outcomes and lower viral loads in the community.

Gap: Stigma, lack of access to transportation, the inability to navigate health care systems, substance use, mental health, trauma and isolation, health inequities and the nature of adolescence have all been named as contributing factors to decreased health care retention in this population.

Need: Increase the availability, acceptability, affordability, and accessibility of mental health and substance abuse services for all MSM.

Gap: There are gaps in accessing mental health care and substance abuse treatment throughout the Commonwealth, due to high demand for the services and few publically funded service providers. This gap broadens when seeking public assistance for these services for those without insurance or the underinsured. Finding mental health professionals with experience and expertise in mental health provision for MSM and MSM living with HIV further increases the gap in this service.

Need: Increase prevention efforts to reach minority MSM, particularly Black and Latino youth, and engage them in prevention and testing activities.

Gap: DDP has only one contractor located in Northern Virginia that focuses on prevention efforts specifically for Latino MSM. Prevention and testing contractors throughout the state lack the ability to engage young Latino MSM due to language barriers and lack of staff with knowledge of the population. Gaps also exist in engaging young MSM of color outside of urban areas where prevention contractors are located. Local Health Departments (LHDs) are not seen as gay or minority friendly by many young MSM.

People Who Inject Drugs, including those living with HIV

Need: Availability of syringe exchange services.

Gap: VDH put forth a legislative proposal in 2016 to allow for sterile syringe exchange within the Commonwealth in areas with high morbidity of Hepatitis C virus (HCV) and HIV. The bill was not passed. Currently, syringe exchange as part of a comprehensive harm reduction approach is not legal in Virginia.

Need: Address the holistic health needs of PWIDs, in order to increase access to medical care by this population.

Gap: PWIDs have many health issues that could be addressed by HIV prevention and care providers. Wound care, accessing mental health and substance abuse services, enrollment in health plans, and hepatitis testing are among a few of the gaps that exist across the state.

Need: Increase the number of PWIDs that get tested for HIV each year, particularly young PWIDs.

Gap: The face of the heroin epidemic has changed. Methods that worked in the 1990s to address HIV among PWIDs are no longer relevant in a world where drugs can be ordered through the internet. Methods of engaging and outreaching to the “new” opioid users are needed.

Need: Address the need for additional mental health/substance abuse treatment and detoxification (i.e., detox) centers in the state.

Gap: Virginia, like other states, doesn’t have the resources to offer mental health and substance abuse treatment to all of its citizens in need. Virginia did not expand Medicaid, further creating a gap in accessing these services among those uninsured. While Opioid Treatment Facilities are expanding, there are few in the rural western part of the state where prevalence of opioid use is high, and community acceptance of these facilities is often low.

Need: Harm reduction, including PrEP and Naloxone, for active users and their families and/or friends in order to reduce HIV and HCV transmission, and fatality risk from overdose.

Gap: The utilization of PrEP to prevent HIV infections among PWIDs in Virginia is only just being explored by DDP and some LHDs. Staffing of PrEP clinics within LHDs remains an issue since CDC funding to pay for clinician’s services is not allowable. Harm reduction techniques, such as bleach kits, used to prevent HIV are not always effective in the prevention of hepatitis transmission, and sterile syringe exchange is not available. Naloxone became

available without prescription at one retail pharmacy chain in Virginia in 2015. However, uptake is low and much of the population is unaware of its use and or availability. Stigma surrounding addiction and PWIDs plays a role in the lack of utilization of PrEP and Naloxone in the injection community as providers hesitate to discuss these options with patients who could benefit from their use.

High Risk Heterosexuals (HRH), including those living with HIV

Need: Increase routine sexual health assessments and STI/HIV/Hepatitis testing in primary care settings for patients under 35 years old.

Gap: HIV screening (testing) may be routinely offered to patients in all health-care settings. Virginia law allows for routine opt-out HIV testing (§32.1-37.2) and requires that, prior to HIV testing, a medical care provider shall inform the patient that the test is planned, provide information, and advise them of their right to decline the test. However, routine opt-out HIV testing has not been widely adopted by primary care providers, federally qualified health centers, emergency rooms and other clinical sites in Virginia. Many primary care providers express their lack of comfort and lack of skill in taking adequate sexual histories to ascertain the need for STD/HIV/hepatitis testing.

Need: Develop gender and age-specific education regarding PrEP and nPEP to increase awareness and access to this biomedical intervention.

Gap: Much of the promotional education surrounding PrEP and nPEP has been aimed at MSM in throughout the state. Efforts to educate young high-risk heterosexual males and females are needed. Increased efforts to inform both male and female victims of sexual assault and those engaged in high-risk behaviors regarding the use of nPEP are also needed.

Need: Increase efforts to engage heterosexual men, particularly men of color, in prevention and care interventions.

Gap: There are few effective behavioral interventions developed for heterosexual males. Stigma surrounding HIV being a “gay disease” is also prevalent and precludes heterosexual males from participating in prevention interventions. Heterosexual men living with HIV often find they are assumed to be gay or PWIDs and therefore do not engage in care interventions.

Need: Increase patient navigation for persons who are newly-diagnosed with HIV to increase engagement in care.

Gap: Patient navigation is available at most major HIV care centers in Virginia; however the expansion of these services in community health clinics and other arenas where PLWH receive treatment would be beneficial. Navigation services are also needed for persons whose native language is not English, and severe gaps exist with that need around the state.

Need: Increase HIV testing efforts among minority high-risk heterosexual (HRH) males.

Gap: Heterosexual males are among the populations least tested for HIV in Virginia, especially men of color.

Transgender Persons, including those living with HIV

Need: Create more safe havens, safe shelters, and safe job training services in order to provide a stable environment for transgender persons living with HIV.

Gap: Gaps exist in specialized services for transgender persons in the state. Collaborative efforts between prevention and care providers with community partners in housing and vocational skill attainment are needed.

Need: Increase education to transgendered persons about benefits of health insurance and help with health insurance enrollment, help navigating health systems, and help responding to questions related to current gender and gender listed on birth or ID records are needed. These can cause transgender individuals not to access health services.

Gap: Gaps exist in cultural competency to work with the transgender community in many arenas, including health plan enrollment. Capacity and educational programs to increase provider knowledge regarding barriers to health care access for this population is needed.

Need: Provide more holistic HIV prevention services that address injection drug use, commercial sex work, coping with discrimination and stigma, mental health, substance abuse, and self-esteem/self-worth issues.

Gap: Viewing HIV prevention services as a part of a holistic health care need for transgender persons is often overlooked by HIV prevention contractors, and as a new concept in the delivery of prevention services requires training and skills building initiatives.

Need: Provide more HIV care, retention, and adherence support services for transgender persons.

Gap: Transgender individuals in Virginia have low retention in HIV care.

Need: Increase the number of medical care providers with knowledge of transgender health issues.

Gap: Additional provider education and cultural capacity building sessions are needed in order to effectively provide services to transgender individuals.

Sex-Workers, including those living with HIV

Need: Create job training centers/programs and educational institutions that provide services with flexibility in order to accommodate commercial sex workers who are looking for other opportunities for employment.

Gap: Comprehensive resource directories for providers that include educational and vocational training opportunities that would benefit sex workers are lacking. Collaborative partnerships between educational/vocational organizations and providers of HIV prevention and care are also lacking in the state.

Need: Availability of affordable housing opportunities in the state, particularly for young adults in order to decrease the financial hardship that often results in engaging in sex work to remain housed.

Gap: Few HIV care and prevention providers explore housing opportunities for HIV negative individuals, and don't have the funding or expertise to do so.

Need: Increase the number of sex workers who receive PrEP.

Gap: Gaps exist in the number of HIV prevention contractors who target sex workers in their prevention efforts (currently two in Virginia). The lack of screening for sex work and the lack of capacity of providers to engage sex workers impede PrEP promotion to this community.

Need: Increase the number of mental health providers, substance abuse treatment centers, support groups, and shelters that are culturally sensitive and can address the unique needs sex workers may have.

Gap: Gaps exist in targeted services for sex workers are impeded by the illegal nature of their work. Promoting services geared toward this group could also invite intervention by police in order to arrest or identify sex workers. Collaborative efforts between law enforcement and service providers are needed in order to advance services targeted to sex workers.

Need: Increase the number of sex workers who receive at least two HIV tests per year.

Gap: Data collection on behaviors during HIV testing does not include mandatory questions regarding sex work in Virginia. Estimation of the number of sex workers in the state in order to ascertain testing habits is also difficult. Providers of HIV testing services should increase effective testing strategies, such as social networking, to increase the number of sex workers who receive at least two HIV test per year. However, capacity and funding issues targeting this population are lacking.

Rural Populations, including those living with HIV

Need: Improve transportation services that allow PLWH and high-risk individuals to more easily access health care providers.

Gap: Gaps in transportation services in rural communities are an ongoing issue. Stigma surrounding HIV often keeps rural PLWH from disclosure, preventing communities from realizing a gap exists. Lack of resources by care providers to furnish transportation services, lack of the existence of public transportation in some areas of the state, and lack of community mobilization around HIV care and prevention are also primary reasons for these gaps.

Need: Increase the number of mobile clinics (vans, buses) that provide sexual health services in rural communities.

Gap: Providing mobile clinics to address HIV and other sexual health services requires resources, including staffing and funding, which many care centers cannot afford. Collaboration with existing mobile health outreach efforts, such as mammography and prenatal care may address this issue partially, but does not engage males.

Need: Design and implement community interventions to reduce stigma regarding HIV/STDs and LGBT communities, which would decrease patient fears in accessing health care.

Gap: Gaps exist in the number of prevention providers in rural areas of the state. Current prevention efforts in rural Virginia are being absorbed by the opioid epidemic, and target PWIDs. Resources for non-PWIDs are lacking.

Active Duty Military, including those living with HIV

Need: Increase collaborative efforts to link male and female enlisted personnel with sexual assault services, nPEP, and mental health and substance abuse counseling in a safe environment.

Gap: Gaps in providers to address the unique needs of military personnel seeking services off-base due to sexual assault within the military, or mental health and substance abuse counseling that the enlisted person feels may negatively impact their service status exist and are difficult to address. Conflicts with confidentiality when using military insurance programs off base, and limited access due to military services play a part in this gap.

Need: Expand outreach to veterans or enlisted men with post-traumatic stress disorder (PTSD) who engage in high-risk sexual and drug using behaviors due to their mental health disorder to encourage HIV testing and use of mental health counseling.

Gap: Community organizations providing prevention and care services and the federal entities that administer veteran's care do not or cannot in many ways form collaborations to address the needs of veterans living in Virginia. The lack of veteran's care centers in the state also impedes this process.

Need: Create transitional services for enlisted personnel living with HIV, who are leaving a managed care system and do not have health literacy skills to navigate health systems on their own.

a. Gap: Enlisted personnel living with HIV have managed health care that schedules appointments, provides transportation, and does not require insurance and health care navigation skills. Upon discharge, many veteran PLWH do not have the skills to access health care. Currently no collaborative efforts with prevention and care providers address this issue in Virginia.

Latinos, including those living with HIV

Latino focus group participants, including PLWH and persons at risk for HIV, identified the following needs:

Need: Sex and HIV education. Focus group participants identified the need for sex and HIV education in schools. One participant stated:

We do not see anything happening in the community regarding HIV/AIDS awareness. We need to see more community engagement efforts. You need to use the old school method to advertise services, meaning you need to preach the word at barbers shops, construction sites, churches and schools.

Need: Community based education to foster awareness of prevention and care services in Spanish.

Over half of the Spanish-language focus group participants reported that advertisements through community outreach initiatives proved the most impactful. One participant's reflections,

We need to know more about the services available out there. You should come to our communities to enlighten us. Some of us cannot read and so your very wordy brochures do not help us.

Participants identified that reaching out to predominantly Latino churches, schools, community based organizations and construction sites for such campaigns will be very beneficial. Respondents voiced that this will also help in fighting stigma and would have better health outcomes for PLWH.

Need: Culturally and linguistically appropriate services for the Latino population. Focus group participants stated that they find prevention and care services culturally-and linguistically-inappropriate, with very little information about services available in Spanish. Most said they find it hard expressing themselves to healthcare providers with a completely different culture from theirs. Most participants suggested that any promotional material targeting the Latino population be reviewed by some members of the Latino community for cultural appropriateness. Most providers also reported having insufficient cultural competency training or not being confident with the training they received.

Need: Legal assistance.

Latino focus group participants perceived intimate partner violence as prevalent in the Latino community with mostly men perpetrating violence against women. Participants stated that in a community where "machismo" is still very prevalent, women have no room to negotiate safer sex practices. Most of these women are unaware of how to seek help. In addition, the Latino community includes undocumented residents with no knowledge of their own basic rights in the U.S. Many undocumented Latinos fear

that an undocumented HIV patient will be deported. Consequently they do not seek care.

Need: *The need for a “one stop shop” where HIV-positive patients can also access other chronic disease services.*

Participants identified the need for holistic approaches in health assessment of PLWH especially those suffering from co-morbid conditions. Eleven percent of the PLWH survey respondents said they were diagnosed with, or treated for HCV within the last twelve months, and 6 % reported being diagnosed with or treated for hepatitis B virus (HBV). All respondents who reported being diagnosed or treated for syphilis also reported being diagnosed or treated for gonorrhea. About 33% of providers reported that they would like to increase capacity to provide HBV and HCV testing. Focus group participants stated that having a ‘one stop shop’ will improve health outcomes since it will address some of the barriers they already face like transportation and travel time.

Geographic-Specific Needs that Address Gaps in their Portfolio of HIV Services

Similar to the population-specific needs described above, the geographic needs discussed represent the culmination by the Virginia Community HIV Planning Group (CHPG) as being populations of concern in the Commonwealth. The service needs and gaps described are the result of innumerable meetings, presentations, and discussion of this group over the past three years since completion of the last Comprehensive HIV Plan and Statewide Coordinated Statement of Need in 2012 and Prevention Plan update in 2014. The needs described represent this group.

CENTRAL HEALTH REGION

- Expand availability of HIV prevention and testing services in eastern Piedmont area (Farmville), Crater (Colonial Heights, Greenville) and Southside areas of the health region (i.e., areas outside of Richmond, Henrico, Chesterfield, and Petersburg).
- Increase availability of HIV prevention, testing, and care services offered in Spanish, as well as translation services.
- Create new and/or improve collaborative efforts between HIV service organizations and community agencies to increase “buy-in” for those services within the community, leading to more sustainable efforts.

EASTERN HEALTH REGION

- Increase collaborative efforts between health care providers, HIV care providers, and community based organizations regarding education and referral about PrEP and nPEP.
- Mobilize CBOs and faith-based institutions to address issues surrounding HIV such as stigma, HIV testing, and adherence.
- Expand the number of health education and HIV prevention programs that specifically target young MSM in areas such as health literacy, condom negotiation, and treatment adherence.

- Provide educational programming targeting young Black MSM regarding the benefits of health coverage through the ACA, health care systems; and how to navigate those systems.
- Improve availability of and access to substance abuse and mental health treatment.

NORTHERN HEALTH REGION

- Expand availability of bilingual and/or medical translation services in HIV care centers and at HIV testing locations.
- Increase availability of transportation services for PLWH to attend medical and other care-related appointments.
- Diversify the HIV workforce, especially clinical care providers and care centers that treat PLWH.
- The need for additional community-based resources/organizations that focus on specific targeted populations in the region (i.e., youth, minorities, MSM, PWID, etc.)
- Improve the availability of support groups, either online or in person, for MSM, drug users, persons requiring disclosure assistance, etc.

NORTHWEST AND SOUTHWEST HEALTH REGIONS

- Improve access to and increase availability of transportation services for PLWH.
- Develop collaborative initiatives in rural communities to reduce stigma surrounding HIV, STDs, and lesbian, gay, bisexual, and transgender (LGBT) persons.
- Increase HIV testing in non-traditional sites (e.g., pharmacies).
- The need to increase access to care by increasing the number of providers who are trained in HIV care.
- The need for community mobilization efforts to increase the quality of life in rural communities, including better employment, educational, substance abuse and other health care opportunities.

c. *Barriers to HIV prevention and care services.*

Barriers to accessing HIV services exist due to a wide variety of reasons. They may be legal or structural in nature. In other cases, the service may be available but the travel distance and time is so great that individuals choose not to access them. Some organizations may not have convenient hours of operation, which become barriers, especially for working adults. For individuals, a resource may be available but the person does not access the service due to personal reasons. Thus, there are real and perceived barriers to HIV services that prevent the full and fair participation of all populations. It is only to the extent that people are able to access and use services that needs are met. The following narrative describes many of the barriers that prevent Virginians from accessing the full spectrum of HIV services from free condoms, HIV testing, and pre-exposure prophylaxis (PrEP) to full engagement in HIV medical care and supportive services.

i. Social and structural barriers

• Lack of Health Insurance

Lack of health insurance prevents access to a wide variety of billable health care services including primary medical care, mental health, home health care, etc. As noted in Table 4, about 12.1% of Virginians are uninsured with a range from 11.9% in the Northern Region to 12.5% in the Southwest Region.^{cxv} In 2014, Hispanics/Latinos were the most likely to be uninsured racial or ethnic group in Virginia (27.9%), followed by non-Hispanic Asians (13.7%), non-Hispanic African Americans/ Blacks (13.6%), and non-Hispanic Whites (7.5%).^{cxvi}

• Cultural Differences, Linguistic Challenges, and Stigma as Barriers

Virginia is a diverse state inhabited by many cultural groups. Increases in the growth of minority populations over the last few decades have posed challenges in the delivery of health care and prevention services that are acceptable to these communities. Although Virginia's Hispanic/Latino population represents 8.4% of the general population and Asian/Native Hawaiian/Pacific Islanders represent 5.8% of the population (Table 2), few health care providers are able to provide linguistically appropriate services for these populations.^{cxvii}

Various regional cultures exist within the Commonwealth. Urban areas such as Northern Virginia, Richmond, and Hampton Roads are vastly different from rural areas of the state in perceptions about health care, mental health, substance abuse, and trusting governmental systems. Western Virginia is mountainous and densely populated, which serves to add to transportation barriers in accessing health care and health information. Rural areas of the state tend to be politically conservative while urban areas politically more moderate to liberal, with some exceptions.^{cxviii}

• Stigma and Racial/Ethnic Prejudice

Stigma and racial/ethnic prejudice in Virginia area also barriers to quality health care. Stigma surrounding HIV and STDs is particularly detrimental to the achievement of NHAS goals of identifying undiagnosed PLWH and retaining those diagnosed in care. Perceptions that HIV is a “gay disease,” a “black disease,” “a disease that you deserve for being promiscuous”, and a disease that “doesn’t happen around here” are all pervasive attitudes that help fuel the epidemic in Virginia.^{cxix} Reporting epidemiological trends in HIV may also unintentionally add to this stigma when governmental agencies focus on the epidemic data reports on one population or subset of a population.^{cxx} Homophobia, transphobia, and racism are pervasive attitudes across the U.S., including Virginia. The impact of these attitudes is felt in the number of LGBT individuals and persons of color who report that they felt they did not get quality health care due to provider or care center prejudices, or misperceptions their health care providers had due to their color, gender identity, and/or sexual orientation.^{cxxi} Stigma surrounding substance use and addiction as a weakness or delinquent behavior also has negative impact on engaging PWIDs into care.

• Undocumented and Migrant Communities

The Pew Research Center, in their November 2014 report on unauthorized immigrants in the U.S., ranks Virginia as 10th overall with approximately 275,000 undocumented individuals living in its borders.^{cxxii} This accounts for approximately 3.5% of Virginia's population. Undocumented individuals are difficult to engage in health care and other social services due to

the fear of being identified and deported. PLWH or those at high-risk for acquiring HIV, who are also undocumented, pose unique challenges to health care and prevention staff and require community efforts, such as free clinics and mobile outreach units, which many communities do not have the resources to provide.

Virginia's migratory communities are inclusive of farmworkers, college students, and military personnel, as all play a significant role in the challenges of delivering prevention and health care in the state. Migrant farm workers in Virginia are most abundant in the Northwest and Eastern Health Regions. Many travel to Virginia just long enough to harvest a particular crop then move along to other states to do the same. Providing health care and prevention efforts to these populations is difficult in that they may not be in one area long enough to receive needed medical information, such as lab results, prescription renewals, and follow-up visits. Approximately 20% of Virginia's undergraduate populations in public schools in 2015 were out-of-state students.^{cxxiii} Some schools have out-of-state populations that exceed 33% of the total undergraduate population. While Virginia requires students enrolled in higher education to have insurance, influx of this population increases demands in health care settings. Also, sexual activity and drug use associated with young adults may also increase transmission of undiagnosed STDs acquired in their home state to students in Virginia and vice versa.

Similar conclusions can be formed with members of the military stationed in Virginia. Virginia is the home to the largest Naval Base and Marine Base in the U.S. Over 25% of all enlisted naval personnel live in Virginia, predominantly the Norfolk/Hampton Roads area.^{cxxiv} Enlisted personnel interact with residents in the area creating the opportunity for disease transmission.

With both college students and military personnel, difficulties exist when notifiable diseases occur. Access to military bases for Disease Intervention Specialists for partner services, coordinated care efforts between school and military clinics and Virginia care centers, and confidentiality concerns when billing insurance are barriers to serving these populations. Both university health care systems and military health care systems require low health literacy to navigate, since the school or military provide managed care. Graduating students and discharged service members who are PLWH and lack health literacy skills will have greatly impeded transitions into mainstream health care.

ii. Federal, state, or local legislative/policy barriers^{cxxv}

• Syringe Exchange and Drug Laws

VDH introduced legislation in the 2016 session of the General Assembly that would decrease penalties for possession of paraphernalia and allow the State Health Commissioner to authorize syringe services programs (SSP) in times of public health emergency. The bill passed unanimously out of the Health, Education and Welfare Committee but was not reported out of the Criminal Law subcommittee of the Courts of Justice Committee. VDH and community partners who supported this proposal continue to strategize proposals to reintroduce the legislation for successful passage to add legal exchange of sterile syringes to the public health collection of harm reduction strategies to prevent HIV and other blood-borne infections.

State and Federal laws and policies that enforce punishment rather than treatment of individuals

with substance use addiction often are counterintuitive to public health methods. Treatment of substance use and drug addiction has been found to be less costly, and more beneficial than incarceration. The expansion of drug courts and social programs to address the needs of persons living with addiction and their families would greater serve the individual and the Commonwealth, than increased penalties for drug user offences.

- **Expedited Partner Therapy**

In June 2015, DDP received permission from VDH senior management to proceed with an expedited partner therapy (EPT) Legislative Proposal Request, after having postponed this activity in 2014. During a September 2015 stakeholders meeting, the Virginia College of Emergency Physicians argued that liability protections must be provided in order for physicians to prescribe EPT. The Virginia Trial Lawyers Association contended that immunity laws leave those who are harmed by negligent conduct without legal recourse for any harm done to them, and therefore should be reserved for extraordinary circumstances. As a result of these differences of opinion among stakeholders, which could not be reconciled, the proposal did not move forward.

- **Non-Medicaid Expansion State**

Virginia has not adopted Medicaid expansion, and many poor adults with incomes at or below 138% FPL with incomes below the federal poverty level fall into a coverage gap because they remain ineligible for Medicaid but earn too little to qualify for premium tax credits for Marketplace coverage. As a result, they are likely to remain uninsured. The impact of the coverage gap varies by race and ethnicity, with poor uninsured African Americans most likely to fall into the gap followed by poor uninsured Latinos. This gap in access to health care coverage will likely continue to contribute to racial and ethnic disparities in many key HIV prevention areas, such as the acquisition of PrEP and nPEP and HIV testing in clinical settings.

- **Funding for PrEP, nPEP, and Behavioral Health**

Lack of Medicaid expansion severely impacts the implementation of biomedical interventions, such as PrEP and nPEP, as well as mental health and substance use treatment. Federal funding opportunities require the advancement of biomedical interventions, but do not allow states to allocate funding for medication and clinical costs associated with implementing these strategies. While prescription assistance programs fill some of the need, the ability for high-risk individuals to access PrEP and nPEP is often hampered by medical visit costs. In order to overcome constrictive out-of-pocket expenses to pay for medical visits, Virginia is piloting PrEP and nPEP clinics in LHDs. Laboratory work need for medical assessment for eligibility of PrEP is being absorbed by the LHD or state funding. While this system benefits persons in need of PrEP and nPEP, it poses another burden on already burdened and underfunded health department system. The need for additional clinical staff to evaluate and prescribe PrEP is a common concern noted by LHDs considering becoming PrEP clinics. Federal partners recognize the connection that mental health and substance use play in high-risk behaviors that put individuals at risk of acquiring or transmitting HIV, and require state HIV programs to refer to these services, which often are non-existent in many areas of the state, or not culturally-competent to handle the special needs of PLWH, gay men, transgender individuals, and PWIDs.

- **The Criminalization of HIV in Virginia**

Virginia Code §[18.2-67.4:1](#) outlines the penalties of Infected Sexual Battery laws in Virginia. It is a Class 6 felony in the state to intentionally infect an individual with HIV, Hepatitis B virus (HBV), or syphilis. It is also a Class 1 Misdemeanor to not disclose to sexual partners that you are infected with any of these diseases. A workgroup formed by the CHPG in 2013 examined this issue and determined that legislation may provide a barrier to individuals wanting to get tested for HIV and/or HBV for fear of having to disclose having one these diseases. It also provides a barrier for ongoing partner services for persons with HIV, as they open themselves up to possible criminal charges for using the service. PLWH who participated in the workgroup said the law also poses the potential for vindication from partners who were disclosed to, but misrepresent that fact due to a failed relationship.

- iii. Health department barriers^{CXXVI}**

A team of VDH staff representing DDP, LHDs, and the Health Commissioner's office met in April 2016 to discuss implementation of LHD third-party billing procedures for STI services. The focus of the initial meeting was to discuss the rationale for billing for services traditionally provided at no charge, and to review Virginia's Eligibility Guidance to assess feasibility of the process. Issues outlined included potential costs for "services" versus "goods" in the clinical setting; fee determination; potential privacy concerns regarding billing documents being sent to clients' home addresses; concerns for teens seeking STD screening and care; and considerations for fee variations among volunteer clients versus those referred for care through public health communicable disease procedures.

DDP continues to review a proposed regulatory amendment regarding incidence surveillance, with final approval expected sometime in 2016. The request is currently undergoing the third and final stage of the review and approval process. Status of the regulatory proposal may be viewed at <http://townhall.virginia.gov/L/ViewStage.cfm?stageid=7406>. Once the amendment has been adopted, DDP's HIV Surveillance program will distribute the information to HIV testing laboratories in Virginia and to out-of-state reference laboratories performing HIV testing on Virginia residents.

DDP's Molecular HIV Surveillance staff also continued to monitor the progress of a state regulation amendment requiring the reporting of HIV nucleotide sequence data. The proposed regulatory amendment is currently undergoing Stage III Final Regulation and Executive Branch review; HIV Surveillance staff will continue to monitor progress of the amendment until implementation occurs.

Addressing the opioid epidemic as a public health entity is impacted in the fragmentation of services for substance abuse and substance abuse treatment in Virginia and within VDH. Prevention services are distributed between several state agencies with no one lead agency. Within VDH, the Office of Injury Prevention (OIP) and DDP provide some prevention services, but they are not comprehensive and focus on specific populations, persons driving while intoxicated (OIP) and PWIDs (DDP) as they pertain to HIV and HCV transmission.

iv. Program barriers^{CXXVII}

DDP has launched a new client-level database called e2Virginia, which will allow for the analysis of HIV prevention, care, and surveillance data from one source, in order to better track HIV Continuum of Care outcomes. Discrepancies in how data is reported, the timeliness of data reporting and the accuracy of data reporting from LHDs and prevention and care contractors may be improved with the initiation of this data system.

The lack of prevention contractors throughout the state, particularly in the Northern Health Region impedes DDP's prevention efforts. Currently, only two contractors deliver prevention services in an area that is home to one-fourth of Virginia's population. Several contractors statewide lack capacity in engaging MSM and PWID into prevention programs and HIV testing.

v. Service provider barriers^{CXXVIII}

Staffing issues remain a problem with many service providers. Low wages and the lack of adequate benefits make keeping qualified staff difficult. Capacity needs to address the inclusion of integration of care and prevention strategies. Biomedical interventions and behavioral interventions that address viral suppression are lacking as well.

Engaging substance use and mental health providers in HIV prevention efforts has had moderate success. More collaborative efforts are needed to bring these services to high-risk negative individuals, as well as PLWH. Forming collaborations and community focus groups to address issues such as the opioid problem in Virginia, homelessness, homophobia, and racism are also needed and should include representation from public health, social services, criminal justice, policy makers, and the targeted populations to be effective. Community mobilization efforts are needed to engage community members in issues such as overcoming stigma surround HIV, sexuality, sexual orientation, gender identity, and addiction would also benefit efforts to advance policy within the Commonwealth.

vi. Client barriers

In the 2016 consumer survey, a total of 79 respondents at-risk for HIV and PLWH answered questions related to barriers to HIV services. Table 22 shows that the majority of all respondents (60%) stated that they did not have any barriers to accessing HIV-related services. However, among those experiencing barriers, the top barrier to accessing services was *fear and/or stigma* (50% of respondents reporting barriers), followed by *lack of transportation* (26.9%), and *culturally inappropriate services* (23.1%).

Table 22. Survey respondents' top three barriers to accessing HIV prevention and services within the last twelve months (N=79)

Barrier	Number	Percent (all responses) (N=79)	Percent (Persons w/Barriers) (N=26)
Fear/stigma	13	14.7%	50.0%
Lack of transportation	7	8%	26.9%
Culturally inappropriate services	6	6.8%	23.1%
No barriers	53	60%	

Source: Virginia Department of Health, Division of Disease Prevention, 2016 Consumer Survey.

These barriers are discussed in more detail below in addition to barriers identified through the additional forums described.

Fear/stigma

Respondents identified fear and stigma as their biggest barrier. Most participants from the Northwest and Southwest regions are afraid of being stigmatized and therefore prefer to not access services. The lack of anonymity in small rural communities is perceived to decrease the likelihood of confidentiality and increase the risk for discrimination. This was highlighted by one focus group participant who said:

Where I live in the Southwest, everybody knows everybody. I would rather travel six hours to access care than see a clinician in my area and have everybody in the village start pointing fingers at me. But then, a six hours journey is quite a drive, which renders me incapable of attending all my medical appointments.

Lack of transportation

While lack of transportation is not as major a problem with PLWH who live in Central and Eastern Virginia, it is a barrier cited by those who live in rural areas, especially those who reside in the Northwest Region where there is lack of public transportation. PLWH find it costly and time consuming to travel four to six hours to access care. For hourly workers, taking a day off work to access care is not a priority or a possibility. Latino respondents said that many in their communities are unable to drive because they are undocumented and do not have drivers' licenses. Their families and friends who have a driver's license are usually very busy with work and seldom in the position to assist with transportation.

Culturally inappropriate services

A common barrier cited by respondents is culturally-inappropriate services. PLWH indicated that they would like to be assigned case managers who are of similar race/ethnicity and/or sexual orientation because they believe their challenges and concerns would be better addressed by someone who understood their culture. This was a common barrier expressed by PLWH of color.

Inconvenient Times and Locations of Services

A barrier to accessing prevention and treatment services was identified as the inconvenience of scheduled time and place of services and/or events. Focus group participants and interview respondents stated that most organized events interfered with work schedules or were not

accessible due to lack of transportation due to location. One focus group participant echoed the feelings of others when he said:

Most events are in the afternoon. I go to work at from 9 a.m. until 6 p.m. I cannot afford to take off as I am an hourly employee and need the money. Events are not organized on weekends, unfortunately.

This was also a major barrier echoed by the Latino focus group participants.

Shortage of providers

Shortage of providers was mostly reported by consumers who reside in the Southwestern region of Virginia. As a result, most consumers end up accessing care out of state or go without treatment. The Latino community in the Northern region expressed the need for more providers who understand the Latino culture. This was not a common response on the surveys and interviews but was a barrier identified by nearly all of the participants in the focus group conducted in the Latino community.

E. Data: Access, Sources, and Systems

VDH utilized numerous data sources to conduct the needs assessment, including development of the Virginia's HIV Continuum of Care. These included HIV surveillance, prevention, and care data that is integrated into Virginia's Care Markers Database (CMDDB); surveys targeting both clients and providers; focus groups; and semi-structured interviews. A description of several of these data sources follows.

Enhanced HIV/AIDS Reporting System (eHARS)

The Enhanced HIV/AIDS Reporting System (eHARS) serves as the main data system for all PLWH within Virginia, as it collects data on all reported cases of HIV. Following a positive, confirmatory HIV test, the case is entered into eHARS from the CDC case reporting form, which contains information on patient demographics and risk, testing and treatment history, and medical history on HIV-related conditions. Updates include laboratory results on CD4 counts and viral loads that are received either electronically or on paper, as well as updates on patient history and location, received from medical sites and local health departments. The eHARS data serve as the base for Virginia's HIV Continuum of Care, as it is used to generate the number of persons living with HIV as of a given date, as well as the number of new diagnoses in a given time frame.

Medical Monitoring Project (MMP)

MMP is an ongoing supplemental HIV surveillance program that uses a patient's medical record abstraction (MRA) and a patient interview to provide a representative sample of the HIV epidemic in Virginia in order to better assess the needs of PLWH. Approximately 400 randomly selected participants from HIV medical provider sites are interviewed to obtain demographics, medical history, insurance, housing, and income status. The associated MRA is retrieved from the patient's medical provider site and information is entered into the MMP data system, including labs, medical visits, medication history and other information for a two-year period.

E2Virginia/CAREWare/Virginia Client Reporting System (VACRS)

E2Virginia (e2VA) is a secured web-based system where community-based and medical providers report intake and encounter data on clients receiving services funded by Ryan White. Data in e2VA include all Ryan White Part B providers and all medical providers for Ryan White Parts A, C, and D, patient navigation process data for all patient navigation programs statewide, HIV testing, and data for the HIV Prevention Comprehensive HIV/AIDS Resources and Linkages for Inmates (CHARLI) corrections program. This data system launched in February 2016 and is the new system being utilized for HIV care and prevention data; the previous legacy system was Virginia Client Reporting System (VACRS).

These data are received either through data import via CAREWare, which is a HRSA-provided software designed to manage and monitor Ryan White clinical care, or by direct data entry via the front-end e2VA interface. Currently about half of Ryan White providers in the state use CAREWare and send data monthly, which is then imported into e2VA.

AIDS Drug Assistance Program Database

The AIDS Drug Assistance Program (ADAP) database contains client-level data on persons who receive medication assistance through ADAP. Enrollment and recertification data for ADAP are collected by VDH through a centralized eligibility process and entered into the ADAP database. These data include CD4 counts and viral loads that are collected every 6 months. Prescription data for the direct medication program are received monthly from the four pharmacies that provide medications to the local health departments and are imported into the ADAP database.

Evaluation Web

CDC's EvaluationWeb program is used to capture and report HIV risk reduction activities for both HIV negative and HIV positive persons and to enter client-level data for HIV testing.

STD*MIS

Data from Disease Intervention Specialist (DIS) field interviews are collected in STD*MIS, which is the surveillance system for all reportable sexually transmitted diseases (STDs). These data include interviews with HIV positive persons, as well as persons with other STDs and their partners who are interviewed.

Other data sources:

Department of Medical Assistance Services (DMAS)

VDH receives Medicaid data from DMAS that can be utilized for Virginia's HIV Continuum of Care. A quarterly file is sent by DMAS to the HIV Surveillance program that contains data on all fee-for-service Medicaid clients living with HIV, including labs, HIV medical care visits, and ART prescription information which is integrated into the CMDB.

Black Box Project

The Black Box Project is a Georgetown University project through which VDH shares client level data (i.e., vital status, laboratory data, and current address) via a data sharing agreement with Maryland (MD) and District of Columbia (DC). The data is then matched with data from the two jurisdictions (exact and fuzzy matched) to cases in Virginia's eHARS. The laboratory data, comprised of clients' last CD4 and viral load test dates, provide additional information on

the HIV-related care that PLWH receive. The inclusion of these data in the CMDB assists VDH in more accurately assessing Virginia's HIV epidemic. It also assists in more accurately calculating linkage to and retention in care measures along the HIV Continuum of Care for PLWH, particularly those who move frequently across neighboring states' boundaries for medical care and other service needs. Virginia is continuing monthly data exchanges of HIV surveillance data with MD and DC through secured file sharing.

Care Markers Database and Data Integration

Care Markers Database (CMDB)

VDH has combined some of the systems described above into the CMDB. Living cases from eHARS serve as the base for the CMDB, and currently, data extracts from e2Virginia, ADAP database, MMP, Medicaid, and Black Box are being matched on a monthly basis to create a merged care marker file. Care markers are considered any one of the following: a CD4 count, a viral load, a medical visit, or evidence of ART. The CMDB data is used to produce the HIV Continuum of Care for Virginia overall and for specific subpopulations and regions.

Focus groups, Semi-structured interviews and consumer surveys

Focus groups, semi-structured interviews, and surveys were conducted at pre-scheduled meetings and training events that brought together PLWH and PARFH. These events include the cross-parts collaborative Quality Management Advisory Committee (QMAC), the Virginia Ryan White Part B Quarterly Contractors Meeting (QCM) and consumers training on quality management. A Spanish-language focus group targeting the Latino population was conducted at NovaSalud, a community based organization which serves the Latino population in the Northern region of VA. The focus groups interviews and consumer surveys, focused on assessing the need, barriers and gaps in HIV services as perceived by consumers.

Online provider surveys

A provider survey was administered via Survey Monkey to assess needs, barriers, and gaps in services as perceived by providers. Considering the views of both the consumers and providers will ensure a well-informed plan.

- a. Describe any data policies that facilitated and/or served as barriers to the conduct of the needs assessment, including the development of the HIV Care Continuum.**

The integration of the CMDB allows for a holistic framework in which to conduct the needs assessment and develop the HIV Continuum of Care, as multiple data sources are linked together in order to more comprehensively assess health outcomes of PLWH in Virginia. In addition, HIV prevention, surveillance, and care are integrated under the DDP and share data across units, thus facilitating a more complete overview of the needs assessment and HIV Continuum of Care outcomes.

- b. Describe any data and/or information that the planning group would like to have used in conducting the needs assessment including developing the HIV Care Continuum and the plan, but that was unavailable.**

National HIV Behavioral Surveillance (NHBS)

National HIV Behavioral Surveillance (NHBS) is a CDC supplemental HIV surveillance project used to conduct behavioral surveillance among persons at high risk for HIV infection, focusing on three annual cycles: MSM, persons who inject drugs (PWID), and high-risk heterosexuals (HRH). VDH was just awarded the NHBS grant in January 2016; thus, data collection and evaluation was not available at the time of the needs assessment.

Insurance claims data

The landscape of medication claims data is changing with the advent of the ACA. As nearly three-quarters of Virginia ADAP clients are now insured, increased coordination with insurance companies is required to ensure that all needed data are received. Therefore, insurance claims data would support better assessment of health outcomes along the HIV Continuum of Care, with the addition of HIV medical care visits and ART prescriptions for all PLWH.

An All Payer Claims Database (APCD) is available in Virginia; however, the APCD only collects aggregate insurance claims data on clients and is not client-level. Therefore, insurance claims cannot be linked to the CMDDB at this time on an individual level to assess health outcomes of PLWH.

Health Information Exchange/Electronic Medical Records

Virginia is currently implementing a health information exchange to link electronic medical records with VDH data. The health information exchange will assist in ascertaining additional markers for care for all PLWH; however, these data are not currently available as the implementation process is not yet complete. Section II: Integrated HIV Prevention and Care Plan

Section II: Integrated HIV Prevention and Care Plan

A. Integrated HIV Prevention and Care Plan

a-c. Five-Year work plan objectives, strategies, and activities

Appendix B: Virginia Five-Year HIV Services Plan presents the NHAS goals with specific SMART objectives, associated strategies and activities in a table format. The table also includes a column entitled “Gap” to indicate if the specific activities are intended to fill gaps along Virginia’s Continuum of Care. For the most part, the “yes” response in the Gap column indicates a new activity within Virginia. If the activity is designed to expand existing programs and services, there will be a “no” response in the column.

The following table summarizes the SMART objectives and their associated strategies for each NHAS goal. Appendix B provides additional detail.

Table 23. Summary of Virginia’s Five-Year HIV Services Plan by NHAS Goal

NHAS Goal/ Objective/Strategy	Description
NHAS GOAL #1:	REDUCE NEW HIV INFECTIONS
Objective 1.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of people living with HIV who know their serostatus to at least 90 percent.
Strategy A	Expand routine testing in targeted areas of high prevalence and in areas with disparities related to social determinants of health indicators.
Strategy B	Develop innovative strategies to engage providers in both routine and risk-based testing.
Strategy C	Expand and/or develop innovative models of targeted testing to high-risk populations.
Strategy D	Identify and help facilitate systems changes to barriers that prevent third-party payment of routine HIV testing and screening.
Strategy E	Engage injection drug users in HIV and Hepatitis C virus (HCV) testing as part of DDP’s Drug User Health Initiative.
Objective 1.2	By December 31, 2021, the Virginia Department of Health increase HIV testing among men to 58,350.
Strategy A	Improve current methods for engaging MSM populations in HIV prevention and testing.
Strategy B	Address Sexual Health and HIV as part of the holistic health needs of all men by facilitation of community health efforts aimed toward men.
Strategy C	Use innovative ways to reach men by introducing HIV testing for men to sites atypical of providing HIV testing for men, and by introducing HIV testing to sites/events most likely to receive men.
Objective 1.3	By December 31, 2021, the Commonwealth of Virginia will reduce the number of new HIV diagnoses by at least 25%.
Strategy A	Implement and/or expand use of biomedical interventions in high-risk populations, i.e., pre-exposure prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP).
Strategy B	Ensure access to free condoms to high-risk populations statewide.
Strategy C	Expand the implementation of effective behavioral interventions with PLWH and high-risk negative populations and/or in high prevalence regions.
Strategy D	Provide seamless transition programs through care coordination for recently released HIV positive offenders.
Strategy E	Expand delivery of retention and adherence services offered by providers.
Strategy F	Expand service navigation for high-risk HIV negative individuals, including linkage to primary medical care.
NHAS GOAL #2:	INCREASING ACCESS TO CARE AND IMPROVING HEALTH OUTCOMES FOR PEOPLE LIVING WITH HIV (PLWH).
Objective 2.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of newly-diagnosed persons linked to HIV medical care within <u>one month</u> of their HIV diagnosis to at least 85 percent.
Strategy A	Increase access to and utilization of patient navigation and linkage to care services for all newly-diagnosed individuals, regardless of testing site.
Strategy B	Link and engage clients in care through culturally and linguistically competent mechanisms.
Strategy C	Increase the number of newly-diagnosed individuals who complete a partner services interview with Disease Intervention Specialist to at least 80% to align with the NHAS.
Objective 2.2	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent.
Strategy A	Strengthen the medical case management program and referral networks.

NHAS Goal/ Objective/Strategy	Description
Strategy B	Improve access to resources for transportation to core medical and support services.
Strategy C	Strengthen collaboration between HIV, Mental Health, and Substance Use.
Strategy D	Increase sub-recipient pool and referrals to dental services.
Strategy E	Develop initiatives to address stigma (e.g., HIV, LGBTQ, mental health, and/or substance use).
Objective 2.3	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80 percent.
Strategy A	Increase stable housing for people living with HIV.
Strategy B	Increase the number of individuals on ART (antiretroviral therapy).
Strategy C	Educate consumers and providers on Quality Management of HIV/AIDS.
NHAS GOAL #3:	REDUCING HIV-RELATED DISPARITIES AND HEALTH INEQUITIES.
Objective 3.1	By December 31, 2021, the Commonwealth of Virginia will reduce disparities in the rate of new diagnoses by at least 15 percent in the following groups: gay and bisexual men, Black females, and persons living in the Eastern Region, Hispanics in the Northwest, and Transgender persons.
Strategy A	Engage communities with health disparities to affirm support for people living with HIV.
Strategy B	Fill gaps in targeted interventions and services to better meet the HIV prevention and care needs of vulnerable populations.
Strategy C	Integrate social determinants of health (SDH) into program planning, design, and implementation (e.g., using data to inform policy and program decisions, designing holistic programs that address SDH).
Objective 3.2	By December 31, 2021, Virginia Department of Health will increase the percentage of persons diagnosed with HIV infection (PWID, Transgender, 55 year and older, Northern, and Eastern) who are virally suppressed to at least 80 percent.
Strategy A	Expand service access using multi-modal service delivery options throughout the state.
Strategy B	Design and pilot programs that leverage use of social media and new technologies.
Strategy C	Expand peer based social support networks in the targeted populations.
Strategy D	Build on the DDP Patient Navigation Models Developed Through CAPUS and SPNS.
Objective 3.3	By December 31, 2021, Virginia Department of Health will increase the percentage of timely diagnosis to 90% among the following populations (Hispanics, PWIDs, Females, Aging Persons 55 years and older, Northwest Region, and the Northern Region)
Strategy A	Provide more HIV testing options in Northern and Northwest Health Regions.
Strategy B	Develop partnerships and coalitions to target and engage Hispanics, females, and persons over 55 years of age, PWIDs in holistic health programs, which include sexual health and HIV testing components.
Strategy C	Promote self-management skills development among people with HIV.
Strategy D	Promote public leadership by people with HIV, including gay and bisexual men, racial/ethnic minorities, transgender and gender non-conforming individuals, youth, and women.
NHAS GOAL #4:	ACHIEVING A MORE COORDINATED VIRGINIA RESPONSE TO THE HIV EPIDEMIC.
Objective 4.1	By December 31, 2021, the Commonwealth of Virginia will increase by at least two efforts to improve the programmatic coordination of HIV programs within the Virginia Department of Health and at least two external initiatives to increase coordination with regional and local partners.
Strategy A	Develop an integrated outbreak response plan that outlines how HIV prevention, care and

NHAS Goal/ Objective/Strategy	Description
	surveillance efforts work as a coordinated unit to address mobilizing the affected area's systems and personnel in order to effectively end the continuation of new infections in a timely manner.
Strategy B	Integrate Virginia's HIV Care Continuum to include a prevention element, using baseline data to be gathered from PrEP projects and data from other prevention activities.
Strategy C	Expand the availability of HIV services within the Commonwealth.
Strategy D	Improve joint planning with the Norfolk Transitional Grant Area (TGA) and the Washington DC Eligible Metropolitan Area (EMA) to improve health outcomes among people living with HIV, including AIDS in the TGA.
Strategy E	Establish active collaborative relationships with other governmental partners (e.g., Virginia Department of Behavioral Health and Developmental Services, Office of Minority Health and Health Equity, Virginia Department of Medical Assistance Services, Virginia Department of Housing and Community Development, etc.).
Objective 4.2	By December 31, 2021, VDH will increase the timeliness, completeness, and accuracy of data on persons living with and at-risk for HIV in the Commonwealth.
Strategy A	Continue to improve data quality, collection, and reporting to support HIV planning and evaluation activities within the Commonwealth.
Strategy B	Improve the accuracy and completeness of HIV surveillance data.
Strategy C	Improve the e2Virginia database.

DDP will leverage a variety of existing resources from across the state to implement its proposed plan. Appendix A: Financial Resources Inventory provides key information on HIV resources within Virginia. DDP will update this inventory on an ongoing basis throughout the five-year planning cycle. DDP has a strong, successful history of obtaining new funding for a variety of projects, including HRSA Ryan White Part F funds for Special Projects of National Significance and CDC demonstration projects. DDP has a grant writer devoted to assist with the identification of new funding opportunities and applying for new resources, as well as re-competing for existing resources. In addition, DDP has significant discretionary funds available to them through the 340B voluntary rebates from pharmacy companies as well as Medicare back billing.

In addition to financial resources, other resources needed to implement the various activities include staff time and energy, on the part of both DDP, as well as its community partner organizations. As content experts are needed, DDP will identify and engage consultants as appropriate to conduct training, needs assessment, and other activities. Lastly, a greater level of coordination of HIV services is called for through this plan, both internally within DDP and externally with other organizations. These activities will require staff time and energy both on the part of DDP and the collaborating/coordinating entities.

- a. Describe the metrics (e.g., number of HIV tests performed, medical visits, mental health screenings, HIV positivity rate, etc.) that will be used to monitor progress in achieving each goal outlined in the plan. Metrics should be consistent with the most current HHS Core Indicators and the NHAS Indicators.**

Attachment B: Virginia Five-Year work plan lists in detail the various metrics and data indicators

that will be used to measure progress in achieving the goals of the NHAS, as well as achieving full implementation of the plan.

The SMART objectives outlined above in Table 19 are in complete alignment with the indicators outlined in the NHAS Updated to 2020. DDP has incorporated six of the NHAS indicators, specifically Objectives 1.1, 1.3, 2.1, 2.2, 2.3, and 3.1 into its own plan.

b. Describe any anticipated challenges or barriers in implementing the plan.

DDP anticipates there will be a number of barriers and/or challenges that it faces in implementing the proposed plan. Some of them are client-level challenges and others are system or organizational-level challenges. They include but are not limited to:

- There are subgroups among PLWH who present further challenges to the system of care, notably youth, with high rates of sexually transmitted infections; the homeless and recently incarcerated populations; and MSM, notably men of color. Failure to meet the primary care, substance use, and mental health needs of these populations of PLWH will lead to reduced linkage to and retention in care;
- Although low health literacy affects individuals of every age, race, education and income level, vulnerable populations, including the elderly, minorities, immigrants, poor, homeless, incarcerated individuals, and persons with limited education are more likely to have low health literacy skills;
- People who are managing multiple chronic diseases and/or multiple insurance systems are also likely to have greater difficulty understanding health messages;
- There is a need for an increased sense of empowerment among PLWH to reach needed self-health management goals that will support treatment adherence, retention, and viral suppression;
- There is a need for enhanced public communication strategies – phone, twitter, internet searches etc. to expand access to information;
- Transportation continues to be a challenge for many PLWH in getting to their medical appointments to link to and be retained in HIV medical care;
- There are limited opportunities for persons at risk for HIV to access information and testing; and
- There is a lack of communication between case managers and HOPWA, which needs to expand in order to increase support for housing.

B. Collaborations, Partnerships, and Stakeholder Involvement

a. Describe the specific contributions of stakeholders and key partners to the development of the plan.

In the formulation of this integrated plan, DDP collaborated extensively with the Community HIV Planning Group (CHPG); Part A/B/C/D providers in Virginia, including the Norfolk TGA and Washington D.C. EMA; and agencies serving persons at high risk for HIV as well as PLWH, in order to create a plan responsive to their needs. In addition, DDP conducted several focus groups and semi-structured interviews (provider and consumer). The questions for the focus groups, interviews and surveys were developed by HCS and HPS. Before the tools were utilized, a review of the questions was conducted by other DDP units. The provider survey was an online survey made available on Survey Monkey. This tool was vetted by the DDP and other stakeholders, including sub-recipients, who participated in a test run of the tool. Feedback was incorporated into the final version. The consumer survey was distributed at a two-day consumers training on quality management of HIV/AIDS, which targets PLWH. NVRC and NovaSalud assisted with the recruitment of Latino participants for the focus group, which targeted Latino PLWH and HRN. Participants for the other focus groups and interviews were recruited mainly by DDP through pre-planned meetings, which brought together PLWH and HRN. The following examples describe how their input has been solicited in each step of the planning process since the development of the last Comprehensive HIV Plan and Statewide Coordinated Statement of Need. Their ongoing participation and input is vital to assessing the needs of the state's HIV health service delivery system, which resulted in this plan—the *Virginia Integrated HIV Services Plan (2017-2021)*.

Virginia Community HIV Planning Group: The CHPG is the legislatively mandated Part B planning group in Virginia. It meets six times per year and is comprised of members of priority populations for HIV prevention and care, as well as organizations that provide services to these populations. The CHPG has convened three work groups over the past five years, including a group that examined the effects of Virginia's HIV Criminalization laws on HIV partner services and disclosure of status; a workgroup on Drug User Health that focused on Virginia's need for syringe exchange and other services for PWID and a racial disparities workgroup to examine the disparity between minority MSM and white MSM in the utilization of health care and HIV testing services. CHPG also compiled a needs assessment for each priority population and health region of Virginia, provided input on prioritizing populations and subpopulations, and has helped construct the strategies and activities for meeting the goals in the integrated plan.

Table 24 presents a list of topics discussed during regular CHPG meetings to solicit stakeholder input, including that from PLWH since 2013. These informational presentations and discussions provided important input regarding needs, barriers, and gaps in the current HIV services portfolio. For example, the discussion regarding sexual assault and HIV has led DDP to engage content experts to deliver training to the HIV workforce on trauma-informed care to strengthen their skills in this area. The training will be delivered in October 2016.

Table 24. List of Presentations and Topics Discussed During CHPG Meetings (2013-Present)

TOPIC	ORGANIZATIONS/INDIVIDUALS THAT COLLABORATED
Sex workers	<ul style="list-style-type: none"> • HIPS- Washington DC • Nationz Foundation, Richmond • 2 individual sex workers
Offender Population	<ul style="list-style-type: none"> • Virginia Department of Corrections
Substance Abuse and HIV/Hepatitis C	<ul style="list-style-type: none"> • Department of Behavioral Health and Developmental Services • NASTAD
Sexual Assault and HIV	<ul style="list-style-type: none"> • Division of Prevention and Health Promotion's Department of Sexual and Domestic Violence • Bon Secours' Forensic Nursing Department • Victim Assistance Network • Virginia Action Alliance • Virginia Department of Justice • Virginia Victims Compensation Fund
Mental Health Services	<ul style="list-style-type: none"> • Access AIDS Care, Norfolk • AIDS/HIV Services Group- Charlottesville • Department of Corrections • VCU Infectious Disease Clinic • Richmond Behavioral Health Authority • Department of Behavioral Health and Developmental Services
Social Marketing	<ul style="list-style-type: none"> • Kaiser Family Foundation
HIV Criminalization	<ul style="list-style-type: none"> • SeroProject • Pennsylvania/Mid-Atlantic AETC

Ryan White Part A Organizations: There are two Part A jurisdictions that serve PLWH in Virginia: (1) Norfolk TGA and (2) Washington, D. C. EMA. The Norfolk TGA area overlaps with Virginia's Eastern Region and includes one county in North Carolina. The Washington, D.C. EMA serves the portion of Virginia that comprises the Northern health region in addition to several counties in the Northwest region. These two jurisdictions are home to the most number of PLWH in the state. DDP hosted a meeting in July 2016 with both Part A grantees to discuss DDP's progress on the plan, including the needs assessment activities being conducted. In April 2016, the Norfolk TGA asked to be included in the statewide plan. They provided extensive needs assessment data to describe service needs, barriers, and gaps in their region. NVRC assisted with bringing together Latinos living in the northern region for the focus group. All participants of the focus group, which targeted Latinos, resided in the northern region. There are plans to conduct a more representative needs assessment of Latinos in Virginia. Due to time constraints, it was not possible for this Plan. However, VDH is already in contact with other providers like Cross Over Ministries and Valley AIDS Network to plan more focus groups, which focus on Latino PLWH and those at risk for HIV. The Washington, D.C. EMA is developing its own plan. It exchanged financial resources information with DDP to add to Virginia's Financial Resources Inventory (Appendix A).

Ryan White Part B Contracted Organizations: DDP conducted a provider survey in May/June 2016, which it distributed via email to its contracted providers.

HOPWA Grantees: In preparation of this plan, DDP contacted two HOPWA grantees to obtain a better initial understanding of their programs and services. This served a two-fold purpose, to collect first Financial Resources Inventory information from them, and second, to understand better the services provided through HOPWA to understand how they are leveraged to serve PLWH in Virginia, specifically in the Northern and Eastern Regions. As a result, a small ad-hoc work group will explore the issue of housing services and make recommendations to VDH on identification of needs and resources to meet them.

b. Describe stakeholders and partners not involved in the planning process, but who are needed to more effectively improve outcomes along the HIV Care Continuum.

Stakeholders not adequately involved in the creation of this planning document are mentioned below:

- **Male to female transgender persons:** CHPG lost representation of the male to female transgender population in 2014 and had no representatives from this community until August 2016.
- **Military and Veterans:** DDP has had limited engagement of activity duty and veteran military personnel, which in a state with a large military presence leaves many of the Commonwealth's citizens unrepresented.
- **Lawmakers:** Several key planning objectives focus on policy and law, such as syringe exchange. DDP and CHPG has had limited input from the legal community in the development of this planning document.
- **Undocumented persons:** While indirect input from Virginia's undocumented population has come from contractors who provide services to these individuals, direct guidance and input was not received from this population.
- **The Asian and Asian American community:** Virginia's population of persons identifying as Asian or Asian American is growing rapidly, particularly in Northern Virginia. While HIV prevalence is not high in this population in Virginia, representation from Asian/Asian Americans would benefit the planning process.
- **People Who Inject Drugs in the Southwest Health Region:** Efforts to engage PWIDs in the Central, Eastern and Northern Health Regions have been fairly successful. With the high prevalence of Hepatitis C in the Southwest Health Region among PWIDs, representation from this group would be beneficial, particularly from the counties that CDC has determined are vulnerable to HIV outbreak.
- **Other state agencies:** The Departments of Education, Social Services, Justice, Juvenile Justice, Medical Assistance Services and Housing would all be beneficial

partners for HIV planning in the Commonwealth but have had limited input in this planning document.

- c. Provide a letter of concurrence to the goals and objectives of the Integrated HIV Prevention and Care Plan from the co-chairs of the planning body and the health department representatives (*Appendix C*)**

See Letters of Concurrence from the Norfolk TGA (Part A) and the Community HIV Planning Group, both of which are chaired or co-chaired by the single signee.

C. People Living With HIV (PLWH) and Community Engagement

- a. Describe how the people involved in developing the Integrated HIV Prevention and Care Plan are reflective of the epidemic in the jurisdiction.**

DDP seeks to implement an integrated planning process that reflects guidelines established by CDC's 2012 Planning Guidance and one that supports CDC and HRSA's recommendation of parity and inclusion of those most affected by HIV. In order to achieve this goal, Virginia relies heavily on its Community HIV Planning Group (CHPG) membership to be reflective of Virginia's HIV epidemic. Table 21 illustrates CHPG membership in relation to Virginia's 2014 HIV prevalence data.

Table 25. CHPG Membership Compared to Virginia Prevalence Rates in 2014

	2014 HIV Prevalence in Virginia	Target Membership	Actual Membership	
		(N=35 members)	As of August 2016	
Sex	Percent	Number	Number	Percent
Male	74%	26	23	69.7%
Female	26%	9	10	30.3%
Priority Population				
MSM	47%	16	17	51.5%
PWID	9%	3	2	6.1%
Heterosexuals	19%	7	14	42.4%
Transgender	data incomplete	data incomplete	2	6.1%
Race/Ethnicity				
Black	60%	21	18	54.5%
White	30%	11	14	42.4%
Hispanic	8%	3	3	9.1%
Asian	1%	0	0	0.0%
Health Region of Residence				
Eastern	31%	11	10	30.3%
Central	23%	8	12	36.4%
Northern	29%	10	9	27.3%
Northwest	8%	3	1	3.0%
Southwest	8%	3	3	9.0%
Age Group				
15-29	11%	4	7	21.2%
30-39	16%	6	5	15.2%
40-49	29%	10	9	27.3%
50-59	31%	11	7	21.2%
60+	14%	5	7	21.2%
Sero-status				
Living with HIV (Bylaws mandate 30%)		11	14	42.4%

The CHPG consists of representatives from populations with high HIV prevalence and from stakeholders across Virginia that provides and/or supports HIV prevention, care and treatment services for its Virginia’s residents. Stakeholder engagement includes PLWH, behavioral and social sciences disciplines, business and labor industries, community health care centers (CHCs), correctional facilities, faith communities, HIV clinical care providers, homeless service experts, academic institutions, psychosocial support and treatment service providers, other relevant state agencies, local and state health departments, and officials supporting efforts against transmission of HIV, tuberculosis, hepatitis, and STDs. Through this broad range of representation, DDP seeks input on planning, implementation, monitoring and evaluation, and integration of services to provide a coordinated approach to addressing HIV.

b. Describe how the inclusion of PLWH contributed to the plan development.

In the formulation of this integrated plan, DDP collaborated extensively with the CHPG; Consumer Advisory Groups; focus groups and semi-structured interviews (provider and consumer); Part A providers in Virginia, including the Norfolk TGA and Washington D.C. EMA Planning Councils; and agencies serving at persons at high risk for HIV as well as PLWH, in order to create a plan representative of their needs. The following examples describe their input during the planning process over the past five years.

Community HIV Planning Group: The CHPG is a mixed group of PLWH and stakeholder organizations. As seen in Table 21, PLWH comprise 42.4% of the CHPG membership. The activities of the CHPG have already been described in this section of the plan, under *B. Collaborations, Partnerships, and Stakeholder Involvement*.

Public Hearings: DDP routinely conducts public hearings annually to ask for input on improving care and prevention strategies and activities throughout the state. The hearings are held in three of the five health regions, and rotate each year so that PLWH and other community members are each afforded the opportunity to have their voice heard. Public hearings have helped DDP restructure the format in how medical case management services were delivered in the Southwest Region, helped address transportation needs in the Eastern Region and informed DDP on various other issues that PLWH face in the Commonwealth. Information gathered from public hearings has been incorporated into the need assessment section of this planning document. In the year preceding submission of the Plan, in lieu of public hearings, DDP conducted semi-structured interviews and focus groups, and sent written surveys with consumers and providers

Individual and Small Group Engagement Sessions: There are many at risk sub-populations and PLWH that are not represented adequately in traditional community engagement settings. Therefore it was decided in the revision of the 2013 Jurisdictional Plan to have DDP's HIV planners facilitate small forums in which information can be gathered to help represent these groups in the planning process. From 2013 to 2016, DDP's HIV Planners engaged PLWH and those at high risk who are substance users, sex workers, military personnel, undocumented immigrants, migrant farmworkers, community health workers, young MSM from 16-18, and homeless individuals. Information gleaned from these meeting has been compiled and included in the needs assessment section of this plan. In total, 31 small group engagement sessions were held to ascertain the needs of these populations. They helped to guide the formation of the specific strategies and activities needed to address identified needs, barriers, and gaps in Virginia's HIV services portfolio (see Appendix B: HIV Services Five-Year Work Plan).

CAPUS, SPNS, and Latino Engagement Meetings: DDP has hosted engagement meetings that coincide with specific funding awards. Both HRSA Special Projects of National Significance (SPNS) and Virginia's CDC-funded Care and Prevention in the United States (CAPUS) demonstration projects hosted day long events in order to gather information from their respective targeted communities in order to formulate strategies to achieve the goals of each funded project. These projects targeted PLWH, as well as high-risk individuals. Through this input process, DDP improved care and prevention strategies that have since become institutionalized. For example, Virginia's statewide partnership with Walgreens piloted the

pharmacy-based testing program under CAPUS and patient navigation for PLWH was piloted under SPNS. Both of those strategies now receive continuing funding through other DDP funding sources. The CAPUS engagement meeting had high turnout from the Latino population, and many members of that population voiced concerns specific to Latinos in Virginia. As a result, DDP organized another day long engagement meeting focused specifically on the Latino population where issues such as health literacy, delivery of services in Spanish, and serving undocumented individuals was discussed and incorporated into this planning document.

Community Advancement Project (CAP): DDP’s advisory board of MSM and Transgender women of color is in its eighth year of existence. The CAP consists of both PLWH and those at high-risk for HIV. It provides input regarding the needs of MSM and Transgender women of color around the Commonwealth. The CAP has regional meetings throughout the year and a statewide meeting annually. CAP members have been instrumental in providing input for DDP on topics such as stigma, PrEP and nPEP, ACA, media campaigns and materials, and racial disparities in health access. The group also serves as “PrEP ambassadors” for the state, promoting the use of the biomedical intervention among young minority MSM. Their input has also been incorporated into this planning document.

Community Advisory Boards (CABs) and Forums with PLWH: DDP’s HIV Care Services and regional planning councils (Norfolk TGA and Washington, D.C. EMA) heavily rely on the guidance of PLWH to participate in the development of local, regional and statewide planning efforts to improve services. Several Community Advisory Boards of PLWH, including those facilitated by DDP and its contractor have provided extensive input into the development of this planning document, which is discussed in sections throughout the plan.

Sisters Promoting H.O.P.E. is a community mobilization effort for Black women jointly led by DDP and faith-based organizations. DDP receives input from this advisory committee on improving engagement with and services for African American women. The group hosts annual meetings for African American women and beginning in 2014, women living with HIV.

Specific engagement of PLWH, in addition to the above, included a brief needs assessment conducted in May/June 2016. Results of the needs assessment have guided the formulation of objectives, strategies, and specific activities outlined in Appendix B (Virginia Five Year HIV Services Plan). Also, in July of 2016, DDP partnered with Virginia Commonwealth University (VCU) to host a two-day forum for PLWH. The forum solicited input from PLWH in the forms of structured interviews and small group forums. This input was also instrumental in the formulation of strategies and activities found in this planning document.

- c. Describe the methods used to engage communities, people living with HIV, those at substantial risk of acquiring HIV infection and other impacted population groups to ensure that HIV prevention and care activities are responsive to their needs in the service area.**

Many engagement methods have already been described earlier in this section. To ensure the planning process addresses the current and emergent needs of those most affected by HIV, DDP and the CHPG use epidemiological data along with biographical data in the membership

selection process. Demographic factors utilized in the selection of new members include age, gender, sexual orientation, race, ethnicity, and geographic region. DDP and CHPG also consider life experiences and ensure that individuals with relevant life histories are afforded opportunities for active participation, as well as, those who bring workforce credentials. As a result of these identified priorities, the CHPG membership list is very reflective of Virginia's HIV prevalence.

Other strategies for the engagement of PLWH and those at high-risk include population-focused regional meetings where the HIV planners travel to the five health regions of the state to engage the targeted communities in the planning process through the use of regional forums, interviews and focus groups. This strategy allows for targeted input on the development of strategies and activities to address the integrated needs of hard-to-reach populations, such as active drug users, sex workers, and men who engage in sex with men but do not identify as gay or bisexual. DDP has used this strategy since 2014 in order to help determine barriers to accessing services for these populations.

By improving upon community engagement strategies, communities also have an opportunity to ask questions and voice their concerns. Engagement is demonstrated as a two-way street ensuring both dissemination and collection of information to inform planning processes. Verbal and written feedback from community members is then incorporated into CHPG discussions and activities. Stakeholders are encouraged to support and inform integration services in communities wherever possible to address syndemic diseases associated with HIV.

d. Describe how impacted communities are engaged in the planning process to provide critical insight into developing solutions to health problems to assure the availability of necessary resources.

DDP has broadened the scope of engagement to focus on gaining community input to address key health problems during the past three years. CHPG meetings were restructured to become topic specific forums where community partners and members of impacted communities were invited in to participate with CHPG membership in tackling specific issues. Three of the issues outlined in Table 20 are described in more detail below.

1. *HIV Criminalization and its impact on partner services and linkage to care:* DDP invited a national organization that focuses on HIV criminalization issues, along with an individual charged with the felony to participate in a discussion with CHPG on how state laws that make disclosure mandatory in many instances are a barrier for individuals to know their status, or in the case of new diagnosis, prevent individuals from confirmatory testing or entering care for fear their partners will take legal action against them. The issue of ongoing partner notification and how criminalization laws impact the ability of PLWH to use this service is also impacted by fear of prosecution.
2. *nPEP for Victims of Sexual Assault:* DDP invited members from the forensic nursing community, advocate organizations for victims of sexual assault, the state Criminal Compensation Fund, and the state Department of Justice to a forum to ascertain the issues that exist with getting nPEP into the hands of sexual assault victims in emergency room situations. Virginia's Criminal Compensation Fund will pay for nPEP, but only if the

victim files a police report and submits receipts to be reimbursed. Cost then becomes a prohibitive issue for many victims. Follow up care was also stated as an issue in that emergency room (ER) doctors were hesitant to prescribe the medication without having qualified doctors to refer to after release from the ER. During the forum, these issues were addressed and input from CHPG and the community partners initiated activities to help explore direct billing from pharmacies to the Criminal Compensation Fund, and nPEP training for local health department clinicians to serve as follow up care providers.

3. *Prevention and Care Issues pertaining to Sex Workers:* DDP hosted a CHPG meeting to address specific barriers to providing prevention and care to persons who exchange sex for money or drugs. An organization from Washington D.C. that provides services to sex workers, several members of the sex worker community, together with CHPG, discussed gaps and barriers to services for this population. Several needs and activities discussed at this forum have been incorporated into this integrated plan.

Other topics discussed in this format by CHPG and community members included care coordination for inmates re-entering society, expedient linkage to care, prevention and care issues of persons with substance abuse and mental health disorders, and the unique needs of PWID. Strategies formed by this collaboration of persons impacted by HIV that address specific issues that prevent marginalized communities from accessing quality prevention and care services have helped guide integrated planning activities found in this document.

Section III: Monitoring and Improvement

- a. **Describe the process for regularly updating planning bodies and stakeholders on the progress of plan implementation, soliciting feedback, and using the feedback from stakeholders for plan improvements.**

DDP will utilize direct email contact, the E-Bulletin, as well as the Department of Health's (DOH) website, to update the CHPG, the Norfolk TGA's Greater Hampton Roads HIV Services Planning Council, the Washington D.C. Part A Planning Council, DDP-sub-recipients, local health departments, and other stakeholders on the progress of implementing the Integrated HIV Services Plan (Plan), as well as to obtain feedback from them and utilize that feedback as part of the plan's continuous quality improvement. PLWH and HRN will receive updates via their CHPG representatives, VDH's website, and town halls.

1. **Responsibility:** DDP will continue to assume the lead responsibility for monitoring the Plan. A greater emphasis will be placed on quantifiable and qualitative data that demonstrate outcomes for each activity outlined in the Plan. VDH will report back to the CHPG and the Greater Hampton Roads HIV Services Planning Council on a quarterly basis on the progress associated with the various goals, objectives, and activities. Therefore, additional steps will be identified that need to be taken to address issues or to enhance results.
2. **Tracking Tool:** DDP's HIV Planners will develop a tool to track and monitor results of the Plan and have it reviewed by the CHPG, which includes representatives from Ryan Whites Parts A, B, C, and D and prevention sub-recipients. This tool will include the level of detail needed to accurately monitor all aspects of the plan in a simple, easy-to-follow format. It will also include tracking of progress toward meeting the SMART objectives outlined in the Plan's 5-year work plan.
3. **Monitoring Process:** Ongoing monitoring, input, and adjustment are critical to ensure that available HIV/AIDS resources in Virginia are maximized and the use of these resources are prioritized when changes to the system are needed. The HIV Services Prevention and Care Planners will evaluate Plan progress every six months, and modifications will be made as needed, based on measures indicated in the plan. This monitoring process will help VDH and all stakeholders reprioritize, adjust, or revise strategies in a timely manner in response to the evolving needs or changing profile of the HIV epidemic.
4. **Continuous Quality Improvement:** If objectives need to be adjusted based on activities and other developments over the course of the year, DDP's HIV Planners will ask the CHPG and other Planning Groups to develop and recommend changes. The CHPG and other Planning Groups will work with DDP to define a set of reports that will allow tracking of some of the measurable outcomes defined for the activities within the Plan's 5-year work plan. The HIV Planners will generate these reports quarterly and/or bi-annually depending on the outcome being measured. In addition, DDP will conduct regular client and provider surveys. These surveys will be another valuable tool

for monitoring and tracking success of the various activities in the plan. DDP will conduct these and other needs assessment activities on an ongoing basis and results will enable the HIV Planners, CHPG, and other Planning Groups to make adjustments and enhancements to the planned initiatives.

Also, the HIV Planners will compile lessons learned from the process for development of the next jurisdictional plan. They will query partners on their readiness for ongoing engagement, their needs for continued involvement, and possible “best practices” for maintaining partner relationships throughout the implementation of a joint plan.

5. **Annual Evaluation:** DDP will convene an annual “Plan Evaluation Workgroup” which will include stakeholders from all RW parts, the CHPG and prevention contractors. The results will be presented at the planning group meetings and published on VDH’s website. The workgroup will review data, assess direction of stated objectives, provide explanation of outcomes, and report findings. DDP will mandate representation of PLWH as part of the Plan Evaluation Workgroup.

b. Describe the plan to monitor and evaluate implementation of the goals and SMART objectives from Section II: Integrated HIV Prevention and Care Plan.

DDP has the primary responsibility for monitoring and evaluating the implementation of Virginia’s Plan. DDP Planners will monitor the Plan quarterly throughout the five-year planning period in order to assess progress toward meeting NHAS goals. DDP’s HIV Planners will convene a workgroup consisting of DDP staff and members of the CHPG to review monitoring data. DDP’s e2VA database, the Care Markers Database (CMDDB), and EvaluationWeb will supply HIV Continuum of Care and other data needed for the evaluation process. The HIV Planners will complete a semi-annual written report on progress being made for DDP leadership and for submission to the CDC and HRSA.

Table 22 presents Virginia’s Plan SMART objectives with annual targets, which are aligned with NHAS goals. Therefore, as Virginia makes progress toward meeting the SMART objectives, Virginia will also be making progress meeting NHAS goals. In order to assess the extent to which each HIV planning step is being met, the following guiding principles and monitoring questions described below will facilitate the monitoring process.

NHAS Goal 1: Reducing New Infections

Guiding Principle:

In order to reduce new infections, efforts directed toward HIV positive persons to achieve viral suppression, increasing HIV testing among men, the increased utilization of PrEP by high risk negative individuals, increased condom distribution among persons living with HIV and those at high-risk, and access to sterile needles for those who inject will be the primary focus.

Monitoring questions

- To what extent was success achieved in health care settings in promoting routine testing and integrating HIV screening into work flow?
- To what extent did non-clinical HIV testing services effectively target communities with the greatest disease prevalence?
- To what extent did non-clinical HIV testing services effectively target communities with the greatest disease burden?
- To what extent was condom distribution expanded in the state?
- To what extent was access to sterile needles for injection drug users achieved?
- To what extent was success achieved in ensuring that every individual with a positive HIV test was offered partner services?
- To what extent was PrEP utilized by persons practicing high-risk behaviors?
- To what extent was success achieved in reaching viral load suppression for PLWH?

NHAS Goal 2: Increase access to care and optimize health outcomes

Guiding Principle

All PLWH in VA should have access to, and be retained in culturally appropriate, coordinated HIV care and treatment.

Monitoring questions

- To what extent did facilities providing routine testing successfully achieve establishing linkage to care networks across prevention, care and social service systems?
- To what extent was success achieved in settings offering non-medical testing in establishing linkage to care networks across prevention, care and social service systems?
- What success was achieved in using monitoring and surveillance data for identifying clients with unsuppressed viral load and/or insufficient engagement in HIV medical care?
- To what extent were systems successfully established across prevention and care systems for engaging PLWH who have never been in care?
- To what extent were systems established across prevention and care systems for re-engaging PLWH who have fallen out of care?
- What success was achieved in developing capacity for implementing HIV treatment adherence strategies for funded jurisdictions?

NHAS Goal 3: Reduce HIV-related health disparities

Guiding Principle:

All PLWH should have access to equitable, appropriate, and effective HIV care that is free of stigma and discrimination, regardless of their age, gender, sex, socio-economic status, race, sexual orientation, or gender identity.

Monitoring questions

- To what extent were available data and existing research utilized in assisting the identification of Virginia's populations experiencing HIV related health disparities?

- To what extent were jurisdictions assisted in identifying, developing, and implementing strategies to reduce HIV related stigma and discrimination?
- To what extent were community-level approaches identified and implemented for reducing HIV infection in high-risk communities?
- To what extent were health outcome disparities reduced in identified populations?

NHAS Goal 4: Achieve a coordinated response to the HIV epidemic in VA

Guiding Principle:

In order to achieve a coordinated response to HIV, mechanisms must be streamlined for monitoring and reporting on progress toward achieving the goals. Emphasis therefore must be placed on coordination of activities within, and between state and non-state agencies, as well as all level of governments. DDP must approach these efforts in an integrated fashion, utilizing prevention, care and surveillance teams to achieve these outcomes.

Monitoring questions

- To what extent was collaboration strengthened within the DDP and VDH in developing coordinated strategies for HIV care and prevention?
- To what extent was collaboration strengthened between VDH and other external stakeholders like CBOs, other state agencies, alcohol and drug programs, housing, and other support services?
- To what extent were data collection requirements streamlined among providers, including creating shared, standardized data collection forms where possible?
- What new strategies or improvements occurred as a result of collaborations?

Table 26. Yearly Targets for SMART Objectives

NHAS Goal and SMART Objective		Baseline	2017	2018	2019	2020	2021	
1. Reduce New HIV Infections.								
1.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of people living with HIV who know their serostatus to at least 90%.	86.3%	90%	90%	90%	90%	90%	
1.2	By December 31, 2021, the Virginia Department of Health increase HIV testing among men to 58,350.	33,341	38,323	43,305	48,287	53,269	58,250	
1.3	By December 31, 2021, the Commonwealth of Virginia will reduce the number of new HIV diagnoses by at least 25%.	950	902	854	806	758	713	
2. Increase Access To Care And Improve Health Outcomes For People Living With HIV.								
2.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of newly-diagnosed persons <i>linked</i> to HIV medical care within <u>one month</u> of their HIV diagnosis to at least 85 percent.	69%	75%	75%	80%	85%	85%	
2.2	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are <i>retained</i> in HIV medical care to at least 90 percent.	42%	54%	66%	78%	85%	90%	
2.3	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are <i>virally suppressed</i> to at least 80 percent.	38%	50%	60%	70%	80%	80%	
3. Reducing HIV-related disparities and health inequities. [Note: Targets are expressed as rate/100,000 population]								
3.1	By December 31, 2021, the Commonwealth of Virginia will reduce disparities in the rate per 100,000 population of new HIV diagnoses by at least 15% in the following groups:	Gay and bisexual men <i>(Decrease by 13/year)</i>	443.3	430.3	417.3	404.3	391.3	376
		Black females <i>(Decrease by 0.5/year)</i>	16	15.5	14	14.5	13	13.6
		Persons living in the Eastern Region <i>(Increase by 0.5/year)</i>	17.8	18.3	18.8	19.3	19.8	20.4
		Hispanics in the Northwest <i>(Decrease by 0.2/year)</i>	5.5	5.3	5.1	4.8	4.5	4.7
		Transgender persons (≥ 13 yrs) <i>(Decrease by 2/year)</i>	54.1	52.1	50.1	48.1	46.1	46
3.2	By December 31, 2021, the VDH will increase the percentage of persons diagnosed with HIV infection who are virally suppressed to at least 80%:	Injection Drug Users (PWID)	34	50	60	70	80	90
		Transgender Persons	46	50	60	70	80	90
		Northern Region	35	50	60	70	80	90
		Eastern Region	26	50	60	70	80	90
		55 years and older	37	50	60	70	80	90
3.3	By December 31, 2021, the VDH will increase the percentage of timely diagnosis to 90% among the following populations:	Hispanics	65	70	75	80	85	90
		Northwest Region	70	74	78	82	86	90
		Northern Region	75	78	81	84	87	90
		Ageing Persons	60	66	72	78	84	90
		Injection Drug Users	60	66	72	78	84	90
		Females	70	74	78	82	86	90
Achieve a More Coordinated Virginia Response to the HIV Epidemic								
4.1	By December 31, 2021, the Commonwealth of Virginia will increase by at least two efforts to improve the programmatic coordination of HIV programs within the Virginia Department of Health Services and at least two external initiatives to increase coordination with regional and local partners.	Annually, DDP will document achievement of this objective as new programmatic efforts are implemented.						
4.2	By December 31, 2021, VDH will increase the timeliness, completeness, and accuracy of data on persons living with and at-risk for HIV in the Commonwealth.	67%	70	75	80	85	90	

c. Describe the strategy to utilize surveillance and program data to assess and improve health outcomes along the HIV Care Continuum, which will be used to impact the quality of the HIV service delivery system, including strategic long-term planning.

Data is integral to Virginia's long-term planning efforts as well as ensuring that persons at high risk for HIV and PLWH have the best possible health outcomes. The HIV Care Continuum provides a common set of indicators that Virginia can use to gauge its own progress and how it is doing compared with the nation as a whole. DDP has led and participated in key initiatives that improve the quality of its HIV surveillance data. These include: (1) the Black Box Project spearheaded by Georgetown University; and (2) DDP's implementation of a robust Data to Care Program. Through secure sharing of multi-jurisdiction (i.e., Virginia, Maryland, and District of Columbia) surveillance data, the Black Box Project successfully identified PLWH who had migrated to other jurisdictions outside Virginia and these individuals were removed from Virginia's surveillance system. The Data to Care Program is designed to identify PLWH who are not in care using HIV surveillance data and then to re-engage them in care. Using HIV surveillance, care, prevention and other data sources, VDH currently generates lists of PLWH who have evidence of care through a CD4 count or viral load lab test, HIV medical care visit, or ART prescription reported in the reference year but no evidence of care in the following calendar year. Out of Care lists are then distributed to linkage personnel at VDH-contracted local health departments, medical facilities, and community-based organizations (CBOs) for client follow-up and linkage and reengagement services if a client is not currently engaged in HIV care. The results have shown that the majority (as many as 75%) of PLWH who are not in care are actually in care and that there are other issues that impact the care status (e.g., not all laboratories in Virginia are reporting viral load results to VDH as required, especially private laboratories). Thus, Data to Care has become as much a tool to clean Virginia's HIV surveillance data as it has been re-engage PLWH who are genuinely not in care.

Surveillance and program data are utilized in multiple frameworks to better assess and improve health outcomes along Virginia's HIV Continuum of Care. By identifying demographic, geographic, and other disparities in the HIV Continuum of Care, programs and interventions can be developed and implemented within populations or areas of greatest need.

VDH's strategy of data integration also plays an immense role in assessing and improving health outcomes along the HIV Continuum of Care. The utilization of multiple data sources of both internal and external programs and initiatives support HIV Continuum of Care outcomes, as the data provides additional evidence of care for PLWH in Virginia. Continued expansion of data integration, such as expansion of the Black Box Project, incorporation of additional data sources (i.e., Department of Motor Vehicles to update address information), and bidirectional feedback of program data like Data to Care outcomes into HIV surveillance, will facilitate improved health outcomes by more accurately defining and evaluating the HIV epidemic in Virginia.

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED						
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression
*Fiscal Year (FY) means annual period of 4/1-3/31 end in the year indicate unless otherwise specified											
Ryan White Part A	City of Norfolk	\$5,313,186	FY 2016	Outpatient/ambulatory health services, AIDS pharmaceutical assistance (local), Health Insurance premium & cost sharing assistance, medication co-pays, oral health services, mental health services, substance abuse treatment (outpatient), medical case management, early intervention services, medical transportation, emergency financial assistance (housing and utility assistance), non medical case management	x		x	x	x	x	x
Ryan White Part A- MAI	City of Norfolk	\$516,960	FY 2016	Early Intervention Services, Access to Medication Coverage	x		x	x		x	
Ryan White Part A and MAI - Northern Virginia	Northern Virginia Regional Commission	\$6,006,817	March 01, 2016- Feb-28, 2017	Outpatient/ambulatory medical care services, AIDS pharmaceutical assistance (local), EMA wide LPAP, Early Intervention, Health insurance Premium and Cost Sharing, Oral Health, Mental health, Medical Nutrition therapy, Medical Case Management, Substance Abuse, non-medical case management, Child Care Services, Food Bank/Home Delivered Meals, Legal Services, Linguistic services, Medical Transportation, and EFA Food.				x	x	x	x
Ryan White Part B Program other - NVRC Consortium	Northern Virginia Regional Commission	\$1,544,673	April 01, 2016- March 31, 2017	OAMC (Specialty), Oral Health, Mental health, Non-Medical Case Management, Medical Transportation and EFA (food). The award also includes a proportion of NVRC Admin				x	x	x	x

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED							
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression	
				Dollars. Virginia uses pharmaceutical rebates to fund consortia.								
HOPWA-Northern Virginia	Northern Virginia Regional Commission	\$2,735,498	10/1/15-9/30/16	Tenant-based rental assistance, Short-term rent, mortgage and utilities, first month's rent/security deposit, housing information, housing case-management, vocational training, and transportation.					X			X
Ryan White Part C-EIS	Eastern Virginia Medical School (Norfolk)	\$500,000	FY 2015	Comprehensive primary health care in outpatient settings for PLWH.			X	X	X	X		X
Ryan White Part B- Base	VDH DDP	\$6,906,764	FY 2016	Outpatient/ambulatory medical care, oral health care, mental health, substance abuse, non-medical case management, medical case management, medical transportation, emergency financial assistance, health education/risk reduction, food bank, outreach, medical nutrition therapy, linguistic services, and treatment adherence counseling			X	X	X	X		X
Ryan White Part B- ADAP Base	VDH DDP	\$17,493,329	FY 2016	Direct ADAP; Insurance Continuation Assistance Program; Medicare Part D; Health Insurance Marketplace Assistance Program; Care Coordination for HIV-positive, offenders recently-released from incarceration				X	X	X		X
Ryan White Part B- ADAP Supplemental	VDH DDP	\$4,576,120	FY 2016	Direct ADAP; Insurance Continuation Assistance Program; Medicare Part D; Health Insurance Marketplace Assistance Program					X	X		X
Ryan White Part	VDH DDP	\$255,696	FY 2016	Outreach services) and education for				X	X	X		X

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED							
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression	
B- MAI				racial/ethnic minority PLWH in the Northern region, City of Richmond, and Southwest Region								
Ryan White Part B- Emerging Communities	VDH DDP	\$373,228	FY 2016	. Oral health, mental health, medical case management, non-medical case management, medical transportation, and outreach services in the Richmond metropolitan area				X	X			X
Ryan White Part C-EIS	Eastern Virginia Medical School (Norfolk)	\$285,000	FY 2015	Comprehensive primary health care in outpatient settings and support services for PLWH.			X	X	X	X		X
Ryan White Part C-EIS	Rector and Visitors of the University of Virginia (Charlottesville)	\$392,298	FY 2015	Comprehensive primary HIV medical care and support services.			X	X	X	X		X
Ryan White Part C-EIS	Mary Washington Hospital/ Medisorp Health System (Fredericksburg)	\$274,994	FY 2015	Comprehensive primary HIV medical care and support services.			X	X	X	X		X
Ryan White Part C-EIS	Centra Health, Inc. (Lynchburg)	\$211,154	FY 2015	Comprehensive primary HIV medical care and support services.			X	X	X	X		X
Ryan White Part C-EIS	Virginia Commonwealth University (Richmond)	\$460,648	FY 2015	Comprehensive primary HIV medical care and support services.			X	X	X	X		X
Ryan White Part C-EIS	Carilion Medical Center (Roanoke)	\$304,390	FY 2015	Comprehensive primary HIV medical care and support services.			X	X	X	X		X
Ryan White Part C-EIS	Inova Health Care Services (Falls Church)	\$553,890	FY 2015	Comprehensive primary HIV medical care and support services.			X	X	X	X		X

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED						
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression
Ryan White Part D	Rector and Visitors of the University of Virginia (Charlottesville)	\$341,156	FY 2015	Comprehensive primary HIV medical care and support services targeting Women, Infants, Children, and Youth (WICY).			X	X	X	X	X
Ryan White Part D	Inova Health Care Services (Falls Church)	\$542,049	FY 2015	Comprehensive primary HIV medical care and support services targeting WICY.			X	X	X	X	X
Ryan White Part F-SPNS - Health Information Technology	VDH DDP	\$1,500,000	2014 - 2017	Design and implementation of new client-level data system for HIV Care and Prevention, design and expand the state's Care Markers database to better measure the HIV Continuum of Care, and advance initiative bi-directional, electronic data for Data-to-Care.			X	X	X	X	X
Ryan White Part F: AIDS Education & Training Center	Inova Juniper Program (Falls Church)	\$241,520	July 1, 2016- June 30, 2017	Education, training, technical assistance, and consultation to support health care workers to improve all aspects of the HIV Care Continuum. This Northern Virginia Regional Partner is responsible for the Northern and Northwest regions, and shares responsibility for the Southwest region with the Southern Virginia Regional Partner.	X	X	X	X	X	X	X
CDC Prevention	VDH DDP	\$7,519,442	1/1/16-12/31/17	Comprehensive HIV Prevention Services: HIV testing, linkage to care, partner services, condom distribution, behavioral interventions for HIV positive persons, patient navigation, adherence counseling, behavioral interventions for HIV negative persons, public information, capacity building, community mobilization, social marketing, and PrEP support services.	X	X	X	X			

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED						
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression
CDC	VDH- DDP	\$455,431	1/1/16-12/31/16	Virginia National HIV Behavioral Surveillance (NHBS) Norfolk, Virginia Beach, Newport News MSA			X	X	X	X	X
CDC	VDH- DDP	\$2,005,228	1/1/16-12/31/16	Disease Intervention Specialist (DIS-STI/HCV)				X			
CDC	VDH- DDP	\$1,750,000	9/30/15-9/29/16	HIV Prevention Collaborative for MSM Eastern Region (1509)	X						
CDC	VDH- DDP	\$2,166,852	9/30/15-9/29/16	HIV PrEP for MSM and Transgender persons in Eastern Region (1506)		X					
CDC	VDH- DDP	\$538,421	6/1/16-5/31/17	Medical Monitoring Project (MMP)			X	X	X	X	X
CDC	VDH- DDP	\$1,072,177	1/1/16 - 12/31/16	Case surveillance			X	X	X	X	X
CDC	VDH- DDP	\$232,615	1/1/16 - 12/31/16	Incidence surveillance			X	X			
CDC	VDH- DDP	\$49,000	1/1/16 - 12/31/16	Molecular HIV surveillance			X	X		X	
CDC	VDH- DDP	\$90,000	1/1/16 - 12/31/16	Supplement HIV surveillance (link Testing/HIV Surveillance data)			X	X			
CDC-directly funded CBOs (PS-15-1502)	Candii (DBA ACCESS AIDS Care) (Norfolk)	\$294,394	ends 3/31/17	HIV prevention services for young MSM of color and young transgender persons of color. Includes HIV testing, the Community Promise intervention, condom distribution, social marketing and outreach.	X		X				
SAMHSA - Center for Substance Abuse Prevention (CSAP)	Virginia Commonwealth University (Richmond)	\$283,875	9/30/15 - 9/29/20	The goal of this project is to strengthen the capacity of community organizations and VCU to provide prevention programs and services in Richmond, Virginia. These will be comprised of evidence-based HIV and substance abuse prevention programs; education and awareness events; HIV and Hepatitis Viral testing and counseling; and a social media	X		X	X			

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED							
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression	
				campaign to reach African Americans 18-24 years of age.								
SAMHSA - Center for Substance Abuse Treatment (CSAT) - DCT Adult Drug Courts	Virginia Commonwealth University (Richmond)	\$300,000	9/30/15 - 9/29/18	To enhance available treatment services to people with substance use disorders and co-occurring mental health functioning or disorders. Program will serve 110 participants. Participants are economically dependent on others, have limited education, limited or nonexistent employment histories, and medical problems including hepatitis, HIV/AIDS, and tuberculosis.				x	x			X
SAMHSA - Center for Substance Abuse Treatment (CSAT) - Targeted Capacity Expansion (TCE) HIV 2015	City of Richmond	\$500,000	9/30/15 - 9/29/18	To achieve improved recovery outcomes for African American and Hispanic/Latino adults (18 years and older) in high-priority, underserved Richmond communities who are affected by the co-occurrence behavioral health disorders and HIV/AIDS. Evidence-based services will include outreach, community and small group prevention education, rapid HIV/HCV testing, substance use/ mental health treatment, primary health care, with referral for specialized medical services, plus case management, wrap-around services, and patient navigation for health care.	x		x	x	x			X
United States Department of Health and Human Services	Southwest Virginia Community Health Systems,	\$325,000	received in March 2016	Improve and expand delivery of substance abuse services in health centers with specific focus on treatment of opioid use disorders in				x	x			x

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED							
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression	
	Incorporated			underserved populations including medication-assisted treatment (MAT)								
United States Department of Agriculture	Carilion Medical Center	\$434,182	received in July 2016	Distance Learning and Telemedicine grant funding to improve rural health care services, with a focus on mental health and drug addiction treatment in 12 counties in Southwest Virginia.			X	X	X	X	X	
United States Department of Agriculture	University of Virginia	\$153,082	received in July 2016	Distance Learning and Telemedicine grant funding to improve rural health care services, with a focus on mental health and drug addiction treatment in 11 rural community care centers.			X	X	X	X	X	
HOPWA-Formula Funding	Richmond Field Office	\$813,475	2016	Tenant based rental assistance; short-term rent, mortgage and utilities					X			X
HOPWA-Formula Funding	Northern Virginia Regional Commission	\$1,180,789	2016	Housing case management; tenant based rental assistance; short-term rent, mortgage, and utilities; support services					X			X
HOPWA-Formula Funding	Department of Housing and Community Development	\$745,593	2016	Tenant based rental assistance; short-term rent, mortgage and utilities					X			X
Bureau of Primary Health Care	26 Federally Qualified Health Centers (FQHCs) funded in Virginia	\$336,003	CY 2014	FQHCs provide primary medical care and other Section 330 services to an estimated 1,486 PLWH.			X		X	X	X	
Bureau of Primary Health Care	Eastern Shore Rural Health System, Inc. (Onancock, VA)	\$280	FY 2016	Received 2016 Oral Health funding to expand oral health services (.08% patients are HIV positive)					X			X
Bureau of Primary Health Care	Kuumba Community Health & Wellness Center (Roanoke, VA)	\$280	FY 2016	Received 2016 Oral Health funding to expand oral health services (.08% patients are HIV positive)					X			X

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED						
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression
Bureau of Primary Health Care	Alexandria Neighborhood Health (Alexandria, VA)	\$5,215	FY 2016	Received 2016 Oral Health funding to expand oral health services (1.49% patients are HIV positive)					X		X
Bureau of Primary Health Care	Piedmont Access to Health Services, Inc. (Danville, VA)	\$665	FY 2016	Received 2016 Oral Health funding to expand oral health services (0.19% patients are HIV positive)					X		X
Bureau of Primary Health Care	Piedmont Access to Health Services, Inc. (Danville, VA)	\$618	FY 2016	Received 2016 Substance Abuse Service Expansion to address opioid epidemic and provide medication assisted treatment (0.19% patients are HIV positive)					X		X
Virginia Legislature	VDH- DDP	\$2,800,000	7/1/16-6/30/17	Health Insurance Premiums- for PLWH, HIV Biomedical interventions (PrEP and medications)		X		X	X	X	X
Other: Pharmaceutical (340B rebates)	VDH- DDP	\$15,000,000	4/1/16-3/31/17	Medication, insurance premiums, medication copays, program initiatives for HIV care, and support for 2 HIV/AIDS Consortia in Virginia in Northern and Southwestern regions.				X	X	X	X
Department of Medical Assistance Services/Medicaid	VDH- DDP	\$225,000	4/1/16-3/31/17	Estimated annual amount of HIV medication expenditures for Medicaid eligible clients.						X	
HRSA- ADAP Shortfall Relief	VDH- DDP	\$10,991,639	4/1/16-3/31/17	\$2,800,000 for Direct ADAP Medications, \$8,191,630 for Medication Co-Pays for insured ADAP Clients				X	X	X	X
Ryan White Part B Supplemental	VDH- DDP	\$2,219,875	9/30/16 - 9/29/17	Dental/Oral health services, Linkages to Care activities				X	X		X
State General Funds	Council of Community Services	\$100,000	7/1/16-6/30/17	HIV and Hepatitis testing and prevention and harm reduction services for injection drug users through the AIDS Services and	X		X				

APPENDIX A. VIRGINIA HIV-RELATED FINANCIAL RESOURCES INVENTORY

SOURCE	GRANTEE	AMOUNT	PERIOD*	SERVICES/ACTIVITIES PROVIDED	HIV CONTINUUM OF CARE STEPS IMPACTED						
					Prevention	PrEP	DX	Linkage	Retention	ART	VL Suppression
				Education Grants Program							
State General Funds	Minority AIDS Support Services, Council of Community Services, Thomas Jefferson Health District, Inova Health System, Health Brigade	\$395,000	7/1/16-6/30/17	Comprehensive HIV/AIDS Resource and Linkages for Inmates (CHARLI) program. Pre-release HIV testing and education. Discharge planning and post release case management, prevention, patient navigation, and support services for HIV positive inmates.	X		X	X	X		X

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

NHAS GOAL #1: REDUCE NEW HIV INFECTIONS

Objective 1.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of people living with HIV who know their serostatus to at least 90 percent.				
	Baseline: 86.3% (baseline equates to 3,400 undiagnosed individuals)		2021 Target: 90%		
Note: "Gap?" - Responds yes or no to the question if the activity addresses a gap in the current continuum of services.					
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A					
Expand routine testing in targeted areas of high prevalence and in areas with disparities related to social determinants of health indicators.					
By 12/31/17 and ongoing	Director HIV Prevention, HIV Testing Team	1. Continue to allocate resources to increase community-based HIV testing in high prevalence areas.	No	MSM, High Risk Heterosexuals, PWID, Transgender	<ul style="list-style-type: none"> Demographics of newly-diagnosed persons Amount of allocated dollars HIV positivity rates
By 12/31/2019	HIV Testing Team, HIV Care and Prevention Planners, CBO's, LHDs	2. Use collaborative approaches to expand use of universal screening tools, such as those developed in CDC PS 15-1509, to assess HIV risk behaviors in populations at high-risk for HIV in order to refer to HIV testing and mental health/substance abuse counseling services.	No	MSM, High Risk Heterosexuals, PWID, Transgender	<ul style="list-style-type: none"> Number of agencies using universal screening tool for HIV risk and need for MH/SA treatment Number and tracking of referrals for identified services
By 06/30/2017 and ongoing	HIV Care and Prevention Planners, Directors of HIV Prevention and Care	3. Facilitate the development of innovative strategies such as the development of Community Resource Centers (RCHD model), mobile care, satellite care in order to increase clinic based testing.	Yes	Care Providers, Rural communities, Medically underserved communities	<ul style="list-style-type: none"> Number of new innovative strategies established
Strategy B					
Develop innovative strategies to engage providers in both routine and risk-based testing.					
By 12/31/2017 and ongoing	HIV Surveillance, HIV Care and Prevention Services, AETC	1. Use strategies such as Public Health Detailing to educate care providers on health concerns in their geographic regions.	Yes	Care Providers	<ul style="list-style-type: none"> Number of new providers educated by region Number of providers performing HIV testing by region,

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

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	Baseline: 86.3% (baseline equates to 3,400 undiagnosed individuals)			2021 Target: 90%	
Note: "Gap?" - Responds yes or no to the question if the activity addresses a gap in the current continuum of services.					
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
	Contractors			high risk behaviors for HIV exposure	
By 6/30/2017	HIV Testing Team	5. Facilitate the development of at least one new partnership or collaboration with non-traditional partners to provide HIV testing and counseling services.	Yes	Potential Partners for HIV testing	<ul style="list-style-type: none"> Number of new partnerships and collaborations developed
Strategy D					
Identify and help facilitate systems changes to barriers that prevent third-party payment of routine HIV testing and screening.					
By 12/31/2017	/HIV Prevention Director, HIV Testing Team, DMAS	1. Collaborate with Virginia Medicaid to change DMAS policy to allow reimbursement routine HIV testing rather than diagnostic testing only	Yes	Medicaid patients	<ul style="list-style-type: none"> Policy changed and communicated to Medicaid providers
By 6/30/2017	Third Party Billing Specialist	2. Contracted billing specialist to provide training and capacity building assistance to CBOs and local health departments on third-party billing.	Yes	CBOS and LHD	<ul style="list-style-type: none"> Number of CBOs/LHDs trained on 3rd party billing Number of CBOs/LHDs implementing 3rd party billing
Strategy E					
Engage injection drug users in HIV and Hepatitis C virus (HCV) testing as part of DDP's Drug User Health Initiative.					
By 1/31/2017	HIV Testing Team, HIV Care and Prevention Planners, Hepatitis Team	1. Identify additional HIV and Hepatitis C testing opportunities and partners with agencies and private businesses who provide substance abuse disorder treatment and/or services.	No	PWIDs, MSM, HRH	<ul style="list-style-type: none"> Number of new agreements formed with SA Centers to provide HIV/HCV testing Number of new SAMH facilities performing HIV/HCV tests
By 6/30/2017	HIV Prevention and Care Team, HIV Care and Prevention Planners, HIV Services Coordinators, HIV Provider network	2. Expand drug user health initiatives that allow for collaborative efforts with infectious disease clinics, mental health, substance abuse, criminal justice, and educational agencies and organizations.	No	CBOs, Governmental Agencies, ID clinics, MH/SA treatment facilities, Educational facilities, LHD, and other organizations serving PWIDs	<ul style="list-style-type: none"> Number of MOA/MOUs with agencies serving PWIDs/ substance users RW and other funding amounts allocated for expanded services for PWIDs/substance users

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 1.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of people living with HIV who know their serostatus to at least 90 percent.				
	Baseline: 86.3% (baseline equates to 3,400 undiagnosed individuals)			2021 Target: 90%	
Note: "Gap?" - Responds yes or no to the question if the activity addresses a gap in the current continuum of services.					
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
					from baseline year of 2016 <ul style="list-style-type: none"> Number of clients receiving services from baseline year of 2016
By 12/30/2017	HIV Care and Prevention Planners, AETC, Hepatitis and HIV Prevention Teams	3. Educate and engage Virginia's Drug Courts to mandate court-ordered HIV and Hepatitis C testing for offenders with an opioid related offense, and to inform and encourage HIV testing for all offenders.	Yes	PWIDs and other substance users receiving Drug Court Services	<ul style="list-style-type: none"> Number of MOA/MOU with Drug Courts completed, Number of court-ordered HIV and HCV tests HIV positivity rate
By 12/31/18	HIV Testing Team, Hepatitis Team	4. Expanded HIV and Hepatitis C test sites in counties designated by CDC as vulnerable to outbreaks		PWIDs	<ul style="list-style-type: none"> Number of new sites providing HIV/HCV testing

Objective 1.2	By December 31, 2021, the Virginia Department of Health increase HIV testing among men to 58,350.				
	Baseline: 33,341			2021 Target: 58,350	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A					
Improve current methods for engaging MSM populations in HIV prevention and testing.					
By 12/31/2017	PS15-1509 Collaboratives, LHDs, HIV Testing Team	1. Increase HIV testing among MSM in the Virginia Beach/Norfolk/Newport News MSA and the DC/Maryland/ Virginia MSA to engage more MSM in 4 th generation and rapid HIV testing within those geographic regions.	No	MSM of Color in both MSAs	<ul style="list-style-type: none"> Number of 4th generation HIV tests performed Demographics of persons receiving HIV tests Location of HIV tests HIV positivity rate
By 12/30/2017	HIV Testing Team, Planners, HIV Prevention Team, PS15-1509 Team	2. Increase community-based HIV testing partners in these MSAs, by engaging new partners in collaborative efforts to provide services to MSM.	Yes	MSM	<ul style="list-style-type: none"> Number of MOAs/MOUs with new HIV testing providers that provide testing services to MSM
By 6/30/2017	Social Media Contractors, Social	3. Explore new social marketing and media venues that would increase the number	No	MSM	<ul style="list-style-type: none"> Number of Home HIV Test Kits distributed to

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 1.2	By December 31, 2021, the Virginia Department of Health increase HIV testing among men to 58,350.				
	Baseline: 33,341		2021 Target: 58,350		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
	Media Coordinator, HIV Testing Team	of MSM who receive home test kits in these MSAs.			<ul style="list-style-type: none"> MSM Referral source for Home Test Kit HIV positivity rate
By 6/30/2018	HIV Testing Contractors, HIV Prevention Specialists	4. Facilitate community based HIV testing efforts focusing on males, particularly MSM of color in the Virginia Beach/Norfolk/Newport News MSA and the DC/Maryland/ Virginia MSA, in which funding is contractually linked to the number of HIV tests performed with MSM and MSM of color.	Yes	MSM	<ul style="list-style-type: none"> Number of MSM-specific HIV testing contracts signed Number of MSM HIV tests HIV positivity rate
Strategy B	Address Sexual Health and HIV as part of the holistic health needs of all men by facilitation of community health efforts aimed toward men.				
By 12/30/2017	HIV Care and Prevention Planners, HIV Prevention and HIV Care, SODA, CBOs, LHDs	1. Collaborate with other agencies and organizations to promote holistic and sexual health programs aimed at males, particularly males 15-34 years old.	Yes	All men engaging in behaviors that would put them at risk for HIV	<ul style="list-style-type: none"> Number of MOAs/MOUs with organizations serving males to provide holistic services, including HIV and STD testing
By 12/30/2018	AETC, HIV Testing Teams, HIV Prevention, PS15-1509 and 1506 teams	2. Provide support and training to LHDs and other medical providers to establish men's clinics that provide general health and sexual health screenings.	Yes	All men engaging in behaviors that would put them at risk for HIV	<ul style="list-style-type: none"> Number of men's clinics provided by LHDs and other medical providers
By 6/30/2017	AETCs, DDP workgroup	3. Provide physicians with tools and training that help facilitate routine HIV testing during health care visits with males 15-34 years old. <ul style="list-style-type: none"> Opt-out testing Standing lab-orders for HIV testing Electronic medical record reminders 	No	All men engaging in behaviors that would put them at risk for HIV	<ul style="list-style-type: none"> Number of trainings for physicians Medicaid testing in men ages 15-34 through existing DMAS agreements or new agreements via partnerships with Medicaid Affinity Group (also see Objective 4.1(E).

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 1.2	By December 31, 2021, the Virginia Department of Health increase HIV testing among men to 58,350.				
	Baseline: 33,341		2021 Target: 58,350		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
By 12/30/2017	HIV Prevention Team, HIV Care and Prevention Planners	4. Form partnerships with organizations that provide services addressing men's health needs, particularly those serving young men, such as the Partnership for Male Youth, in Washington, DC.	Yes	Men of all orientations who are at risk for HIV	<ul style="list-style-type: none"> Number of MOA/MOUs signed with organization or other documentation providing evidence of collaboration
By 6/30/2017	CBOs, LHD, HIV Prevention Specialists, HIV Services Coordinators PS 15-1509 team	5. Increase patient navigation services to all men at risk for HIV to increase the utilization of health care by males.	Yes	Men of all orientations who are at risk for HIV	<ul style="list-style-type: none"> Number of males receiving patient navigation services Number of new partnerships with the Department of Veteran Affairs sites in the state
By 12/30/2017	Social Media Contractors, Social Media Coordinator, HIV Testing Team,	6. Design social marketing and social media messaging to target men in general to engage in regular HIV testing, rather than just MSM; as well as strategic collaboration with the Department of Veterans Affairs which also designs social media campaigns for testing and care for service men.	Yes	Men of all orientations with HIV Risk behaviors	<ul style="list-style-type: none"> Demographics of men testing for HIV that identify social media as referral source
Strategy C	Use innovative ways to reach men by introducing HIV testing for men to sites atypical of providing HIV testing for men, and by introducing HIV testing to sites/events most likely to receive men				
By 12/30/2021	HIV Testing Team, Urgent Care Centers	1. Provide HIV testing for men at urgent care centers	Yes	All men visiting urgent care centers	<ul style="list-style-type: none"> Proportion of men tested for HIV who were tested at urgent care centers
By 12/30/2021	CBOs, Sports Medicine Centers	2. Provide HIV testing at sports medicine centers	Yes	All men visiting sports medicine centers	<ul style="list-style-type: none"> Proportion of men tested for HIV who were tested at sports medicine centers
By 12/30/2021	CBOs	3. Use a community-based testing approach to test men at gyms, gambling facilities and college fraternity events	Yes	Men	<ul style="list-style-type: none"> Proportion of men tested from community-based interventions

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 1.3	By December 31, 2021, the Commonwealth of Virginia will reduce the number of new HIV diagnoses by at least 25%.				
	Baseline: 950 newly-diagnosed cases		2021 Target: 713 newly-diagnosed cases		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A	Implement and/or expand use of biomedical interventions in high-risk populations, i.e., pre-exposure prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP).				
By 6/30/2018	Social Media Coordinator, Social Media Contractors, PS15-1506 Team, PrEP Coordinator	1. Use focused social media and marketing efforts to promote PrEP and nPEP to targeted populations.	Yes	MSM, PWID, partners of PLWH, sex workers, victims of sexual assault, transgender persons, high-risk heterosexuals (HRH)	<ul style="list-style-type: none"> Number of social media campaigns implemented to targeted populations
By 12/30/2016	PrEP Coordinator, LHDs, Other clinical care staff interested in providing PrEP	2. Establish PrEP and nPEP clinics in local health departments and other community clinical health centers, and regional PrEP clinics in rural areas.	Yes	MSM, PWID, partners of PLWH, sex workers, victims of sexual assault, transgender persons, HRH	<ul style="list-style-type: none"> Number of new PrEP/nPEP clinics or service access points established
By 12/31/2017 and Ongoing	HIV Prevention Director, HIV Prevention, 3 rd Party Billing Team	3. Continue to seek funding for medications used for PrEP and nPEP, lab costs, and medical visits to ensure all Virginians who can benefit from these interventions have access.	No	Persons at high-risk not able to afford PrEP/nPEP	<ul style="list-style-type: none"> Number of funding opportunities identified for allocations, proposal drafting, and partnerships. Amount of funding secured and allocated to support PrEP/nPEP and related costs
By 12/31/2018	HIV Prevention Director, HIV Prevention, 3 rd Party Billing Team	4. Develop policy on program income that directs use for PreP and nPEP protocols.	Yes	Persons at high-risk not able to afford PreP/nPEP	<ul style="list-style-type: none"> Development of policy
Strategy B	Ensure access to free condoms to high-risk populations statewide.				
Annually	Condom Distribution Coordinator, CBOs, LHD, other care providers	1. Expand the number of providers in DDP's Condom Distribution Network.	No	Persons at high risk for HIV, PLWH and their sex partners	<ul style="list-style-type: none"> Numbers of condom distributors annually
Annually	Condom Distribution Coordinator, HIV Prevention and Care	2. Expand condom distribution in non-traditional settings (e.g., gyms and recreational facilities;	No	Persons at high risk for HIV, PLWH and their sex partners	<ul style="list-style-type: none"> Number of non-traditional condom distribution sites

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 1.3	By December 31, 2021, the Commonwealth of Virginia will reduce the number of new HIV diagnoses by at least 25%.				
	Baseline: 950 newly-diagnosed cases		2021 Target: 713 newly-diagnosed cases		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
	Planners, CBOs	places that sell alcohol; and substance abuse treatment centers).			
Strategy C	Expand the implementation of effective behavioral interventions with PLWH and high-risk negative populations and/or in high prevalence regions.				
Annually	HIV Prevention and Care team members who write RFPs, DDP leadership	1. Provide a menu of recommended interventions in Request for Proposals on high-impact prevention and integrated behavioral interventions.	No	CBOs, Care Contractors, Organizations applying for funding from DDP	<ul style="list-style-type: none"> Guidance language appears in RFP Number of RFPs in which guidance language is included
Annually	CBA providers	2. Provide training to contract monitors on innovative prevention and care strategies that advance the National HIV/AIDS Strategy.	No	Persons overseeing provision of integrated, high-impact strategies at DDP	<ul style="list-style-type: none"> Number of trainings conducted and documented
Annually	CBA, HIV Prevention Specialists and HIV Service Coordinators	3. Conduct capacity building and training with contractors to advance their use of integrated strategies that address needs across the Care Continuum.	No	CBOs and care centers delivering integrated, high-impact strategies at DDP	<ul style="list-style-type: none"> Number of trainings conducted and documented
By 12/30/2017	Trauma Informed Care Workgroup, CBOs, Care Providers, LHDS	4. Implement "Trauma Informed Care" strategies to enhance retention in care and prevention activities for persons with a history of interpersonal trauma.	Yes	Persons with a history of trauma which influences positive health outcomes	<ul style="list-style-type: none"> Develop protocols and training curriculum for trauma informed care Numbers of clinical and non-clinical staff trained Numbers of clients retained in care and prevention who receive trauma-informed services Number of clients who receive trauma-informed services achieving viral suppression
Strategy D	Provide seamless transition programs through care coordination for recently released HIV positive offenders.				
Ongoing through 2021	CHARLI Coordinator, Care Coordinators,	1. Continue collaborative efforts with the Department of	No	Incarcerated persons living with HIV about	<ul style="list-style-type: none"> Number of persons linked to care and obtaining ART prescription within 30 days of release

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	Baseline: 950 newly-diagnosed cases		2021 Target: 713 newly-diagnosed cases		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
	Department of Corrections	Corrections that pertain to care coordination and linking HIV positive inmates to care providers within 30 days of their release from incarceration.		to be released.	<ul style="list-style-type: none"> Number of persons determined eligible for ADAP within 30 days of release
Ongoing through 2021	CHARLI Coordinator, CHARLI Contractors, Care Coordinators	2. Continue efforts to expand CHARLI and care coordination to new locations in regional and local jails.	No	Incarcerated persons living with HIV about to be released.	<ul style="list-style-type: none"> Number of MOU/MOAs signed with new local and regional jails
By 12/30/2017	Drug User Health Coordinator, CHARLI Coordinator, CHARLI Contractors	3. Expand prevention education curriculum delivered in correctional institutions to include harm reduction messages regarding drug use, particularly injection drug use.	Yes	Incarcerated persons with a history of PWID.	<ul style="list-style-type: none"> SA/Harm Reduction module developed and incorporated into curriculum Number of trainings provided
Strategy E	Expand delivery of retention and adherence services offered by providers.				
By 12/30/2017 and Ongoing through 2021	Prevention and Care staff	1. Re-design current curricula for providers adoption for retention and adherence interventions in a variety of facility- and community-based settings, such as care settings, outreach organizations, PrEP clinics, pharmacies, etc.	No	PLWH, people at risk for HIV	<ul style="list-style-type: none"> Number of PLWH receiving retention and adherence counseling Number of PLWH retained in care from client-level database/care markers database. Number of people on PrEP receiving adherence counseling
By 12/30/2017	HIV Prevention, HIV Care Services, DDP leadership	2. Include funding for retention and adherence counseling in applicable RFPs.	No	Persons receiving services who have low retention and adherence, newly-diagnosed individuals, persons about to start PrEP or nPEP	<ul style="list-style-type: none"> Number of MOAs/MOUs that codify funding for these services. Number and frequency of invoicing by providers for these services. Amount of funding allocated for retention and adherence counseling services Number of new or expanded retention services funded

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 1.3	By December 31, 2021, the Commonwealth of Virginia will reduce the number of new HIV diagnoses by at least 25%.				
	Baseline: 950 newly-diagnosed cases		2021 Target: 713 newly-diagnosed cases		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy F	Expand service navigation for high-risk HIV negative individuals, including linkage to primary medical care.				
By 6/30/2017	PS 1506 and 1509 teams, HIV Prevention Specialists, HIV Services Coordinators	1. Using models developed by SPNS, CAPUS and PS15-1509, fund agencies to provide navigation services to high-risk individuals, including partners of PLWH.	No	Persons at high-risk for contracting HIV	<ul style="list-style-type: none"> Number of clients serviced by Patient Navigation and linked to care within 30 days Number of clients serviced by Patient Navigation who are linked to HIV/HCV and STI testing within 7 days.
By 6/30/2017 and Ongoing through 2021	CBOs, HIV Care and Prevention Planners, CHPG, HIV Prevention Specialists, HIV Services Coordinators	2. Develop relationships with established substance abuse and mental health related programs that provide patient navigation and community outreach to include HIV/STD/Hepatitis navigation services.	No	SAMH providers and their clients at risk for HIV.	<ul style="list-style-type: none"> Number of MOU/MOAs with SAMH providers for service navigation provision

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

NHAS GOAL #2: INCREASING ACCESS TO CARE AND IMPROVING HEALTH OUTCOMES FOR PEOPLE LIVING WITH HIV

Objective 2.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of newly-diagnosed persons linked to HIV medical care within <u>one month</u> of their HIV diagnosis to at least 85 percent.				
	Baseline: 69%		2021 Target: 85%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A	Increase access to and utilization of patient navigation and linkage to care services for all newly-diagnosed individuals, regardless of testing site.				
Ongoing	HIV Care Services, Sub-recipients	1. Centralize ADAP and RW Part B service eligibility to facilitate a streamlined process and timely access to care.	Yes	Part B Sub-recipients	<ul style="list-style-type: none"> Number of Ryan White Part B clients enrolled through centralized eligibility for all services
Ongoing	Sub-recipients, DIS	2. Provide active linkages and referrals, where patients are personally guided into systems of care, rather than given a list of names, addresses, and appointment dates.	Yes	All newly-diagnosed persons	<ul style="list-style-type: none"> Proportion of newly-diagnosed who are linked to care within a month Number of referrals that are actively tracked to assure linkage to care.
By January 1, 2017	DIS/SODA	3. Increase the number of DIS to increase referrals to patient navigation for linkage to care	Yes	All newly-diagnosed PLWH	<ul style="list-style-type: none"> Number of current DIS or new DIS who make regular referrals to Patient Navigation Number of new DIS who actively link newly-diagnosed PLWH to care
October 1, 2017	HIV Care and Prevention Services,	4. Issue a new RFP for patient navigation services in all health regions that uses both HIV Care and Prevention services funding.	Yes	All newly-diagnosed PLWH	<ul style="list-style-type: none"> RFP issued Number of organizations that respond to the RFP Number of MOAs/MOUs awarded for patient navigation services for newly-diagnosed persons
By 12/31/2021	HIV Care and Prevention Services, Veterans Affairs, HIV Surveillance	5. Establish a care coordination program for military veterans living with HIV/AIDS.	Yes	Military veterans living with HIV/AIDS	<ul style="list-style-type: none"> Proportion of veterans living with HIV/AIDS who are linked to care within one month of release from active duty. Data agreements between DDP and Department of Veterans Affairs to enable client level data capture

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Objective 2.1	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of newly-diagnosed persons linked to HIV medical care <u>within one month</u> of their HIV diagnosis to at least 85 percent.				
	Baseline: 69%		2021 Target: 85%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
					and sharing.
Strategy B	Link and engage clients in care through culturally and linguistically competent mechanisms.				
Annually	HIV Care and Prevention Services, AETC, VHARCC	1. Develop and deliver standardized cultural competency training for prevention and care sub-recipients: standard minimum training topics; and methods for measuring change in knowledge, skill, and ability.	Yes	Sub-recipients' frontline staff	<ul style="list-style-type: none"> • Proportion of care and prevention providers reporting increase in skill or knowledge level post training
Ongoing	HIV Care Services, HIV Prevention Services, AETC, VHARCC	2. Expand health literacy training for all newly-diagnosed individuals with attention to benefits of health insurance coverage and enrollment in ACA plans.	Yes	All newly-diagnosed	<ul style="list-style-type: none"> • Percent of newly-diagnosed clients that receive health literacy training • Proportion of clients trained showing increase in skill or knowledge level post training
Strategy C	Increase the number of newly-diagnosed individuals who complete a partner services interview with Disease Intervention Specialist to at least 80% to align with the NHAS.				
Ongoing	SODA, LHD	1. Provide DIS with cultural competency and motivational interviewing and trauma-informed care training.	No Yes (trauma informed care)	DIS	<ul style="list-style-type: none"> • Number of DIS trained • Number of complete partner engagements within a month of diagnosis • Proportion of persons newly-diagnosed linked to care within one month

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 2.2	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent.				
	Baseline: 42%		2021 Target: 90%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A					
Strengthen the medical case management program and referral networks.					
Ongoing	HIV Care Services, AETC, VHARCC	1. Include motivational interviewing and trauma informed care training in the required case management educational curriculum and deliver to case managers.	No Yes (trauma informed care)	Case managers	<ul style="list-style-type: none"> • Proportion of case managers trained in motivational interviewing per facility • Number of case managers in each health region trained in trauma-informed care approach • Number of case managers reporting increased knowledge of /skills in motivational interviewing and trauma-informed care post training
Annually	HIV Care Services	2. Maintain Case Management annual conference where case managers share and learn best practices in HIV care.	No	Case managers	<ul style="list-style-type: none"> • Number of case managers attending retreat
Strategy B					
Improve access to resources for transportation to core medical and support services.					
By 12/31/2017	HIV Care Services	1. Conduct transportation needs assessment.	Yes	PLWH	<ul style="list-style-type: none"> • Results of needs assessment
Ongoing	HIV Care Services,	2. Develop new and/or partner with existing regional transportation service providers to transport clients to medical appointments.	Yes	Transportation providers; PLWH	<ul style="list-style-type: none"> • Number of MOUs established • Number of PLWH identifying transportation as an unmet need • Number of PLWH assessing transportation through contracted services
Strategy C					
Strengthen collaboration between HIV, Mental Health, and Substance Use.					
By 12/31/2021	HIV Care and Prevention Services,	1. Expand the number of formal partnerships between HIV, mental	Yes	HIV providers, mental health providers and	<ul style="list-style-type: none"> • Number of MOAs/MOUs for provision of these services

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Objective 2.2	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent.				
	Baseline: 42%		2021 Target: 90%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
	Mental Health Providers in private sector, DBHS	health, and substance use service providers.		substance use treatment providers.	<ul style="list-style-type: none"> Proportion of PLWH receiving Ryan White mental health and substance abuse treatment services of who are retained in care
By 12/31/2021	HIV Care Services,, Mental Health providers, Substance use providers, HIV/AIDS service providers	2. Develop a referral tracking process between mental health, substance use and HIV service providers.	Yes	HIV/AIDS, Mental Health and Substance use providers.	<ul style="list-style-type: none"> Number of tracked referrals
Strategy D					
Increase sub-recipient pool and referrals to dental services.					
Ongoing	HIV Care Services, AETCs	1. Partner with dental schools to provide education about HIV dental care with students.	Yes	Dental school students	<ul style="list-style-type: none"> Number of students who report increase in HIV dental care knowledge/skill
Ongoing	HIV Care Services, university based clinics, dental schools	2. Work with university based clinics and dental schools to encourage recent graduates to provide care to PLWH.	Yes	Dental and Oral Health providers.	<ul style="list-style-type: none"> Number of newly recruited oral health providers added Percent of clients reporting satisfaction with oral health services on client surveys Percent of PLWH who report needing but not receiving oral health services.
Ongoing	HIV Care Services, AETC, VHARCC	3. Provide training and refresher courses on motivational interviewing to providers and peer counselors to encourage PLWH to seek oral health services.	Yes	Sub-recipients	<ul style="list-style-type: none"> Number of facilities with medical adherence programs using peer counseling approach
Strategy E					
Develop initiatives to address stigma (e.g., HIV, LGBTQ, mental health, and/or substance use).					
Ongoing	HIV Prevention and Care Services,	1. Provide Continued Medical Education/ Continued Educational Units	Yes	Clinical staff	<ul style="list-style-type: none"> Percent of clients reporting satisfaction with cultural

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Objective 2.2	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent.				
	Baseline: 42%		2021 Target: 90%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
	AETCs, VHARCC, and sub-recipients	(CME/CEU) setting for clinical staff (e.g., LGBT health issues and cultural sensitivity, understanding dually and triply diagnosed patients, HIV education, etc.) to increase comfort working with PLWH and mitigate stigma.			sensitivity and decreased stigmatization of services or from providers on surveys and other data collection tools <ul style="list-style-type: none"> • Number of staff who show increase in skill/knowledge post training • Number of staff self-reporting increased comfort working with consumers who are LGBT, have mental illness, and/or substance use issues
Ongoing	DDP, sub-recipients	2. Use social media as a forum to address stigma and provide supportive messaging for people living with HIV including messages that address the importance of HIV treatment, social and familial support, and resources for mental health and substance abuse treatment , isolation, etc.	Yes	Consumers	<ul style="list-style-type: none"> • Number of new consumer-oriented products • Number of new stigma-related products
Annually	DDP Managers	3. Propose at least one legislative or regulatory change that reduces criminal consequences for risk behaviors, improves access to services or improves access to prevention interventions.	No	General Public	<ul style="list-style-type: none"> • Number of new proposals • Number of legislative or regulatory changes

APPENDIX B. VIRGINIA HIV SERVICES FIVE-YEAR WORK PLAN (2017-2021)

Objective 2.3	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80 percent.				
	Baseline: 38%		2021 Target: 80%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A					
Increase stable housing for people living with HIV.					
Ongoing	HIV Care and Prevention Services, HUD, HOPWA, Housing service providers	1. Establish relationships and coordinate partnership among Virginia Department of Housing and Community Development, Virginia Housing Development Authority, Housing Opportunities for Persons with AIDS (HOPWA), and other providers who provide services to decrease homelessness or unstable housing.	Yes	Housing service providers	<ul style="list-style-type: none"> Number of MOUs established with housing service providers Number of persons with an HIV diagnosis who were homeless or unstably housed in any 12-month measurement period
By January 1, 2017	HIV Care Services	2. Expand use of Ryan White Part B funding to include housing services	Yes	Sub-recipients	<ul style="list-style-type: none"> Amount of funding allocated and obligated for housing services.
Ongoing	HIV Care Services	3. Identify additional funding opportunities for housing for PLWH.	No	Potential funding sources	<ul style="list-style-type: none"> Number of funding opportunities identified Number of successful grant applications
Ongoing	HIV Care and Prevention Services, sub-recipients	4. Establish collaboration between HIV case managers and housing case managers or resources.	Yes	Case managers	<ul style="list-style-type: none"> Number of active referrals to housing by case managers Number of persons with an HIV diagnosis who were homeless or unstably housed in any 12-month measurement period
Strategy B					
Increase the number of individuals on ART (antiretroviral therapy).					
Ongoing	HIV Care Services, sub-recipients	1. Educate clinical providers on ADAP services	Yes	Clinical providers	<ul style="list-style-type: none"> Number of trained providers reporting increased knowledge of

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Objective 2.3	By December 31, 2021, the Commonwealth of Virginia will increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80 percent.				
	Baseline: 38%		2021 Target: 80%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
					ADAP services
Ongoing	AETC, VHARCC	2. Provide treatment updates in a CME/CEU setting for clinical providers.	No	Clinical providers	<ul style="list-style-type: none"> Proportion of clinical providers attending treatment update sessions
Ongoing	HIV Care Services, sub-recipients	3. Expand peer based counseling approach	Yes	Sub-recipients and PLWH	<ul style="list-style-type: none"> Proportion of consumers who attend peer counseling sessions who are virally suppressed
Strategy C	Educate consumers and providers on Quality Management (QM) of HIV/AIDS.				
Annually	HIV Care Services, AETCs, VHARCC	1. Develop a standard QM training session for consumers on a yearly basis.	Yes	Consumers	<ul style="list-style-type: none"> Number of consumers who report increased knowledge of/ skill in QM post training Number of virally suppressed consumers
Ongoing	HIV Care Services, AETCs, VHARCC	2. Provide HIV/AIDS QM training in a CME/CEU setting for clinical staff.	Yes	Clinical and emergency department staff	<ul style="list-style-type: none"> Number of clinical staff who report increased knowledge of/ skill in QM post training Number of virally suppressed consumers

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NHAS GOAL #3: REDUCING HIV-RELATED DISPARITIES AND HEALTH INEQUITIES

Objective 3.1	By December 31, 2021, Virginia will reduce disparities in the rate of new diagnoses by at least 15 percent in the following groups:				
		Baseline:		2021 Target:	
	Gay and Bisexual Men:	443.3 per 100,000		376.0 per 100,000	
	Black Females:	16.0 per 100,000		13.6 per 100,000	
	Persons Living in the Eastern Region:	17.8 per 100,000		15.1 per 100,000	
	Hispanics in the Northwest:	5.5 per 100,000		4.7 per 100,000	
	Transgender Persons (≥13 years):	54.1 per 100,000		46.0 per 100,000	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A	Engage communities with health disparities to affirm support for people living with HIV.				
By 12/31/2021	HIV Care and Prevention Services, SODA, HIV Surveillance, CHPG	1. Review and update DDP, policies, procedures, and other structural solutions to ensure equal treatment of all people living with or at risk for HIV /AIDS.	Yes	Care and prevention sub-recipients	<ul style="list-style-type: none"> Policy and procedures manuals that enforce equal treatment for persons living with HIV are updated in DDP publications
By 6/30/2018	HIV Care and Prevention Services, Sub-recipients	2. Ensure availability of care and prevention services in Spanish and other languages as identified by needs assessment.	Yes	Populations with language needs other than English	<ul style="list-style-type: none"> Number of non-English speakers engaged and retained in care
Strategy B	Fill gaps in targeted interventions and services to better meet the HIV prevention and care needs of vulnerable populations.				
Ongoing process	HIV Prevention, HIV Care Services, CHPG	1. Use long term survivors to convene roundtable discussions to highlight the relevance of the intersecting issues of HIV and the high risk minority communities	Yes	PLWH	<ul style="list-style-type: none"> Number of people from communities with health disparities who get tested and who seek care.
By 12/31/2021	VDH Trauma Informed Care workgroup, CBOs, Sub-recipients, HIV Care and Prevention Services	2. Initiate trauma informed care practices to reduce the impact of past traumatic events on current and future individual health outcomes, and to prevent further traumatization from occurring by untrained prevention and care workers to avoid dis-engagement	Yes	PLWH	<ul style="list-style-type: none"> Convene workgroup at VDH Develop a model for systematic integration of trauma-informed care throughout the state's provider network Retention and adherence data on persons receiving trauma informed services

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Objective 3.1	By December 31, 2021, Virginia will reduce disparities in the rate of new diagnoses by at least 15 percent in the following groups:				
			Baseline:		2021 Target:
	Gay and Bisexual Men:		443.3 per 100,000		376.0 per 100,000
	Black Females:		16.0 per 100,000		13.6 per 100,000
	Persons Living in the Eastern Region:		17.8 per 100,000		15.1 per 100,000
	Hispanics in the Northwest:		5.5 per 100,000		4.7 per 100,000
	Transgender Persons (≥13 years):		54.1 per 100,000		46.0 per 100,000
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
		in HIV services.			
Strategy C	Integrate social determinants of health (SDH) into program planning, design, and implementation (e.g., using data to inform policy and program decisions, designing holistic programs that address SDH).				
By 12/30/2018	HIV Surveillance, Care and Prevention Services, SODA	1. Improve data management systems to better document social determinants of health in historically under- sampled populations.	Yes	Communities with health disparities	<ul style="list-style-type: none"> Capture of SDH in e2Virginia
Ongoing	HIV Surveillance, Care and Prevention Services, SODA	2. Use SDH data to inform program planning, design and implementation.	Yes	Communities with health disparities	<ul style="list-style-type: none"> The number of programs developed that used SDH as part of planning, design, and/or implementation

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Objective 3.2	By December 31, 2021, Virginia Department of Health will increase the percentage of persons diagnosed with HIV infection (PWID, Transgender, 55 year and older, Northern, and Eastern) who are virally suppressed to at least 80 percent.				
	Virginia Average: 38%		Baseline:		2021 Target:
	Injection Drug Users:		34%		80%
	Transgender Persons:		46%		80%
	Northern Region:		35%		80%
	Eastern Region:		26%		80%
Aging Persons (≥ 55 years):		37%		80%	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A					
Expand service access using multi-modal service delivery options throughout the state.					
By 12/31/2021	HIV Care Services	1. Expand telemedicine (including behavioral health) in medically underserved regions of the state to increase the number of HIV care providers.	Yes	Medical providers	<ul style="list-style-type: none"> • Number of MOA/MOUs established to provide telemedicine or mobile health services • Number of consumers from communities with disparities who utilize telemedicine and are virally suppressed • Number of consumers from communities with disparities who utilize telemedicine and are retained in medical care
By 12/30/2021	HIV Care Services, sub-recipients, Office on Aging and Persons with Disabilities, AETCs	2. Support the development and use of community efforts to address isolation, mental illness and social support systems for persons over 55 living with HIV including adherence by clinicians to ART guidelines and special considerations for older HIV-infected patients	Yes	Sub-recipients, Medical Providers	<ul style="list-style-type: none"> • Number of services developed to address needs across the lifespan for PLWH > 55 years • Number of Ryan White clients >55 years who access mental health and support services • Number of trainings

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Objective 3.2	By December 31, 2021, Virginia Department of Health will increase the percentage of persons diagnosed with HIV infection (PWID, Transgender, 55 year and older, Northern, and Eastern) who are virally suppressed to at least 80 percent.				
	Virginia Average: 38%		Baseline:		2021 Target:
	Injection Drug Users:		34%		80%
	Transgender Persons:		46%		80%
	Northern Region:		35%		80%
	Eastern Region:		26%		80%
Aging Persons (≥ 55 years):		37%		80%	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
					for DDP staff on health needs and resources for aging and elderly patients <ul style="list-style-type: none"> Number of trainings for HIV clinicians on health and support needs for PLWH > 55 years
Strategy B					
Design and pilot programs that leverage use of social media and new technologies					
By 6/30/2018	HIV Care Services, AETCs, VHARCC	1. Encourage sub-recipients to use technology to relay educational information and to allow scheduling of appointments, requests for refills, and other routine functions.	Yes	Sub-recipients	<ul style="list-style-type: none"> Number of PLWH in the Eastern and Northern regions with timely refills and who do not miss medical appointments
By 12/31/2018	HIV Care Services, AETC, VHARCC	2. Expansion of the Positive Links program developed by UVA (i.e., a smartphone app that supports PLWH with HIV education and management tools, wellness promotion strategies through social support, self-monitoring and warm technology) to extend care beyond clinic visits.	Yes	Consumers, providers	<ul style="list-style-type: none"> Number of clinical sites using Positive Links Proportion of consumers using Positive Links app who are retained in care.
Strategy C					
Expand peer based social support networks in the targeted populations.					
Ongoing	CHPG, CBOs, Consumer Advisory Board, AETC	1. Support peer-facilitated health literacy initiatives through formal training in health literacy and Quality Management	Yes	PLWH	<ul style="list-style-type: none"> Number of peers trained in health literacy and quality

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Objective 3.2	By December 31, 2021, Virginia Department of Health will increase the percentage of persons diagnosed with HIV infection (PWID, Transgender, 55 year and older, Northern, and Eastern) who are virally suppressed to at least 80 percent.				
	Virginia Average: 38%		Baseline:		2021 Target:
	Injection Drug Users:		34%		80%
	Transgender Persons:		46%		80%
	Northern Region:		35%		80%
	Eastern Region:		26%		80%
Aging Persons (≥ 55 years):		37%		80%	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
		at Consumer Advisory Board Meetings and Consumer Retreats.			<ul style="list-style-type: none"> management Number of new peer-facilitated health literacy initiatives implemented Number of consumers participating in peer-facilitated health literacy initiatives
Ongoing	DDP	2. Support peer based groups that focus on community mobilization efforts to resolve local issues such as transportation.	Yes	PLWH	<ul style="list-style-type: none"> Number of new peer based groups that focus on community mobilization efforts Number of consumers attending medical appointments
Strategy D	Build on the DDP Patient Navigation Models Developed Through CAPUS and SPNS				
	HIV Care and Prevention Services, sub-recipients	1. Increase the number of sites using the DDP patient navigation model	Yes	PLWH	<ul style="list-style-type: none"> Increase in the number of sites using DDP patient navigation model Increase the number of patient navigators who complete Community Health Worker and Motivational

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Objective 3.2	By December 31, 2021, Virginia Department of Health will increase the percentage of persons diagnosed with HIV infection (PWID, Transgender, 55 year and older, Northern, and Eastern) who are virally suppressed to at least 80 percent.				
	Virginia Average: 38%		Baseline:		2021 Target:
	Injection Drug Users:		34%		80%
	Transgender Persons:		46%		80%
	Northern Region:		35%		80%
	Eastern Region:		26%		80%
Aging Persons ((≥55 years):		37%		80%	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Ongoing	DDP, AETC, sub-recipients	2. Train case managers on motivational interviewing and patient-centered communication	Yes	PLWH	Interviewing Training <ul style="list-style-type: none"> Proportion of case managers trained in motivational interviewing and patient-centered communication

Objective 3.3	By December 31, 2021, Virginia Department of Health will increase the percentage of timely diagnosis from 75.5% to 90%. [Note: Timely diagnosis refers to persons who are not diagnosed with AIDS at initial diagnosis or not diagnosed with AIDS within one year of HIV diagnosis, which is considered "late diagnosis."]				
			Baseline:		2021 Target:
	Hispanics:		60%		90%
	Northwest Region:		63%		90%
	Northern Region:		68%		90%
	Aging Persons ((≥55 years):		55%		90%
	Injection Drug Users:		56%		90%
Females		68%		90%	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A					
Provide more HIV testing options in Northern and Northwest Health Regions					
By 12/30/2021	HIV testing team	1. Increase the number of providers offering community based and clinical based HIV testing.	Yes	Clinical providers, CBOs	<ul style="list-style-type: none"> Increase in number of HIV testing providers
By 12/30/2021	HIV testing team	2. Increase the capacity of current HIV testing providers to expand services that target disparity populations.	Yes	Clinical providers, CBOs	<ul style="list-style-type: none"> Proportion of priority populations tested

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Objective 3.3	By December 31, 2021, Virginia Department of Health will increase the percentage of timely diagnosis from 75.5% to 90%. [Note: Timely diagnosis refers to persons who are not diagnosed with AIDS at initial diagnosis or not diagnosed with AIDS within one year of HIV diagnosis, which is considered "late diagnosis."]				
				Baseline:	2021 Target:
	Hispanics:			60%	90%
	Northwest Region:			63%	90%
	Northern Region:			68%	90%
	Aging Persons (≥ 55 years):			55%	90%
	Injection Drug Users:			56%	90%
Females			68%	90%	
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy B	Develop partnerships and coalitions to target and engage Hispanics, females, and persons over 55 years of age, PWIDs in holistic health programs, which include sexual health and HIV testing components.				
By 12/30/2021	HIV Testing Team, HIV Care and Prevention Teams, HIV Care and Prevention Planners, CHPG	1. Establish collaborations with care providers, women's health clinics, Planned Parenthood, agencies serving persons >55 years, and Promotoras de Salud (community health workers) in order to include sexual health and HIV testing components in current programs.	Yes	Care providers, CBOs	<ul style="list-style-type: none"> Number of collaborations formed that include HIV testing.
Strategy C	Promote self-management skills development among people with HIV				
Ongoing	HIV Care Services, sub-recipients	1. Expand initiatives to support self-management skills development among PLWH using culturally competent and culturally appropriate methods.	Yes	PLWH	<ul style="list-style-type: none"> Increased percentage of youth with diagnosed HIV infection who are virally suppressed
Ongoing	HIV Care Services, sub-recipients	2. Deliver multi-level patient self-management health education and empowerment opportunities for PLWH in care that utilize training and peer mentorship to improve retention in care and achieve sustained viral suppression.	Yes	PLWH	<ul style="list-style-type: none"> Increased percentage of PWIDs with diagnosed HIV infection who are virally suppressed

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Objective 3.3	By December 31, 2021, Virginia Department of Health will increase the percentage of timely diagnosis from 75.5% to 90%. [Note: Timely diagnosis refers to persons who are not diagnosed with AIDS at initial diagnosis or not diagnosed with AIDS within one year of HIV diagnosis, which is considered "late diagnosis."]				
			Baseline:	2021 Target:	
	Hispanics:		60%	90%	
	Northwest Region:		63%	90%	
	Northern Region:		68%	90%	
	Aging Persons (≥ 55 years):		55%	90%	
	Injection Drug Users:		56%	90%	
Females		68%	90%		
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy D	Promote public leadership by people with HIV, including gay and bisexual men, racial/ethnic minorities, transgender and gender non-conforming individuals, youth, and women.				
Ongoing	CHPG, and all other public and private stakeholders	1. Continue to develop opportunities for people with HIV to serve in leadership roles throughout the state.	Yes	Care providers, CBOs	• To be determined.
Ongoing	CHPG, and all other public and private stakeholders	2. Support HIV positive individuals in building skills to seek and retain positions of leadership.	Yes	PLWH	• To be determined

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NHAS GOAL #4: ACHIEVING A MORE COORDINATED VIRGINIA RESPONSE TO THE HIV EPIDEMIC

Objective 4.1	By December 31, 2021, the Commonwealth of Virginia will increase by at least two efforts to improve the programmatic coordination of HIV programs within the Virginia Department of Health and at least two external initiatives to increase coordination with regional and local partners.				
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A	Develop an integrated outbreak response plan that outlines how HIV prevention, care and surveillance efforts work as a coordinated unit to address mobilizing the affected area's systems and personnel in order to effectively end the continuation of new infections in a timely manner.				
By 12/31/2019	Outbreak Workgroup, LHDs in vulnerable counties	1. Develop an integrated workgroup that includes LHDs to develop a mobilization plan in counties at risk for outbreak.	Yes	Rural PWIDs and substance users	<ul style="list-style-type: none"> Results of regional assessments for outbreak response Documentation of a completed plan
By 12/31/2019	LHDs, Outbreak Workgroup	2. Engage partners in the outreach response efforts to provide essential services, in the event an outbreak occurs.	Yes	Rural PWIDs and substance users	<ul style="list-style-type: none"> Number of MOA/MOUs with essential service providers
Strategy B	Integrate Virginia's HIV Care Continuum to include a prevention element, using baseline data to be gathered from PrEP projects and data from other prevention activities.				
By 12/30/2018	HIV Care and Prevention Planners, HIV Care and Prevention Services, Data Managers	1. Use research published on prevention continuums and other guidance as it becomes available to create a Continuum Model that integrates Care and Prevention Activities.	Yes	High Risk Negatives and PLWH	<ul style="list-style-type: none"> Completed integrated prevention and care continuum model
By 3/30/2019	PrEP Coordinator, Data Managers	2. Use 2016 baseline data from PrEP projects and other prevention activities throughout the state to estimate the number of people engaging in high-risk behaviors for HIV who are using prevention strategies.	Yes	High Risk Negative Individuals	<ul style="list-style-type: none"> Baseline measures for prevention activities to incorporate into integrated HIV Care Continuum
By 3/30/2021	HIV Prevention and Care, HIV Surveillance, and SODA; DDP leadership	3. Design and conduct process and outcome, mixed-method evaluations of the integrated HIV care continuum model	Yes	DDP	<ul style="list-style-type: none"> Evaluation designs Evaluation activities completed Use of evaluation findings for continuous quality improvement for DDP's HIV

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Objective 4.1	By December 31, 2021, the Commonwealth of Virginia will increase by at least two efforts to improve the programmatic coordination of HIV programs within the Virginia Department of Health and at least two external initiatives to increase coordination with regional and local partners.				
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Ongoing	HIV Care and Prevention Services Data Managers, HIV Surveillance Analyst staff,	<p>4. Utilizing the VDH-developed Continuum Model, evaluate on a biannual basis Virginia's HIV prevention activities/programs through assessment of:</p> <ul style="list-style-type: none"> • PrEP utilization, linkage/patient navigation programs for HIV-negative persons with HIV risk behaviors, HIV testing and screenings, and other structural, behavioral, biomedical, or risk reduction interventions; and • evaluate HIV care activities/programs focused on linkage, retention in HIV care, and viral suppression, such as outreach and re-engagement efforts (Data to Care; patient navigation programs), access and utilization of medical and support services, adherence support, and ART prescription/treatment for HIV-positive persons in Virginia. 	Yes	High Risk Negatives and PLWH	<p>services portfolio</p> <ul style="list-style-type: none"> • Process and/or impact evaluation of an integrated prevention and care model
Strategy C	Expand the availability of HIV services within the Commonwealth.				
Annually	HIV Care Services	1. VDH will submit a waiver of Core Medical Services Requirements for	Yes	Ryan White Part B	<ul style="list-style-type: none"> • Core Waiver submission • Documented support from other Ryan White Parts

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Objective 4.1	By December 31, 2021, the Commonwealth of Virginia will increase by at least two efforts to improve the programmatic coordination of HIV programs within the Virginia Department of Health and at least two external initiatives to increase coordination with regional and local partners.				
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
		Ryan White grantees under part, Bin accordance with guidance issued from HRSA.			stakeholders as needed
Annually	HIV Care Services Grants Manager	2. Diversification of funding for HIV/AIDS services from private sector philanthropy.	Yes	DDP, sub-recipients	<ul style="list-style-type: none"> • Number of funding opportunities identified • Number of grant proposals funded • Amount of new funding for HIV services • Number of public-private partnerships established
Strategy D	Improve joint planning with the Norfolk Transitional Grant Area (TGA) and the Washington DC Eligible Metropolitan Area (EMA) to improve health outcomes among people living with HIV, including AIDS in the TGA.				
By 6/30/2017	CHPG, HIV Care and Prevention Planners	1. Create a membership slot on CHPG for representatives from the TGA and EMS	Yes	PLWH in Norfolk TGA	<ul style="list-style-type: none"> • Membership roster indicating representation • Number of meetings attended by representatives
By 6/30/2017	TGA, DDP representatives to planning council	2. Maintain Part B representation on the TGA planning council and add a representative from Prevention.	No	PLWH and their Partners in the Norfolk TGA	<ul style="list-style-type: none"> • Membership roster indicating representation • Number of meetings attended by DDP staff.
Strategy E	Establish active collaborative relationships with other governmental partners (e.g., Virginia Department of Behavioral Health and Developmental Services, Office of Minority Health and Health Equity, Virginia Department of Medical Assistance Services, Virginia Department of Housing and Community Development, etc.).				
By 12/30/2017	HIV Care Services, HIV Care and Prevention Planners	1. Establish active collaborative relationships with the Housing Opportunities for People with AIDS (HOPWA) grantees in Virginia to improve planning for housing-related services	Yes	PLWH	<ul style="list-style-type: none"> • HOPWA grantees represented at planning functions, as indicated by attendee lists • Number of new housing services established • Amount of new funding allocated for housing services
Ongoing through 2021	HIV Care and Prevention Planners	2. Increase representation on CHPG and other DDP workgroups to include other governmental partners with stakeholder interest in	Yes	PLWH, HIV- Negative Individuals who engage in high risk behaviors for HIV	<ul style="list-style-type: none"> • Representation on CHPG • Number of new services established related to new collaborations

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Objective 4.1	By December 31, 2021, the Commonwealth of Virginia will increase by at least two efforts to improve the programmatic coordination of HIV programs within the Virginia Department of Health and at least two external initiatives to increase coordination with regional and local partners.				
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
		comprehensive HIV services.		exposure	
By 11/30/2016	HIV Care, Prevention and Surveillance, DDP Managers and Leadership, DMAS	3. Develop an HIV affinity group, which will identify a project that supports improved HIV-related outcomes among Medicaid and CHIP enrollees; and builds stronger relationships between DMAS and VDH.	Yes	Medicaid and CHIP enrollees	<ul style="list-style-type: none"> • Outcomes of meetings • Project indicators
By 7/1/17	HIV Care and Prevention Directors	4. Establish quarterly review of service contractor providing both HIV prevention and care services		Sub-recipients, HIV Prevention Specialists, HIV Services Coordinator	<ul style="list-style-type: none"> • Agendas, meeting outcomes
1/1/18	HIV Care and Prevention Directors	5. Issue joint contracts covering the continuum of HIV prevention and care		Sub-recipients, HIV Prevention Specialists, HIV Services Coordinator	<ul style="list-style-type: none"> • Contracts, progress reports and evaluation

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Objective 4.2	By December 31, 2021, VDH will increase the timeliness, completeness, and accuracy of data on persons living with and at-risk for HIV in the Commonwealth.				
Time Period	Who is Responsible?	Activity	Gap?	Target Population	Data Indicators
Strategy A	Continue to improve data quality, collection, and reporting to support HIV planning and evaluation activities within Virginia.				
By 12/31/2021	HIV Surveillance	1. VDH will innovate current procedures for importing data obtained from data to care efforts, people searches, and other methods to update and enhance HIV Surveillance data.	Yes	PLWH	<ul style="list-style-type: none"> Utilization of implemented procedures
By 12/31/2021	HIV Surveillance, HIV Care and Prevention Services,	2. Utilize enhanced HIV Surveillance data to improve Data-to-Care and Patient Navigation Protocols	Yes	Data to Care Coordinators, Patient Navigators, PLWH	<ul style="list-style-type: none"> Revised Data to Care Protocols Revised Patient Navigation Protocols
By 6/30/18	HIV Surveillance, HIV Care and Prevention Services , Norfolk TGA	3. Improve data collection from and sharing data with the Norfolk TGA	No	Providers in Norfolk TGA, Members of the Norfolk TGA	<ul style="list-style-type: none"> HIV Care Continuum data from providers in Norfolk TGA Quarterly meetings between DDP staff and Norfolk TGA members
Strategy B	Improve the accuracy and completeness of HIV surveillance data.				
By 06/30/2018	HIV Surveillance	1. VDH will add income and insurance status collection to routine HIV Surveillance activities.	Yes	PLWH	<ul style="list-style-type: none"> Income and Insurance status data available
By 12/31/2018	HIV Surveillance, Georgetown University	2. VDH will have a formal contract with Georgetown University for the Black Box project for cross-jurisdictional data sharing with at least 4 other jurisdictions, other than MD and DC.	Yes	PLWH	<ul style="list-style-type: none"> MOA established
By 12/31/2021	HIV Surveillance	3. Increase the completeness of current gender reporting for PLWH in the commonwealth from 67% to 90%.	Yes	PLWH	<ul style="list-style-type: none"> Completeness of data

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Strategy C		Improve the e2Virginia database.			
12/31/2018	HIV Surveillance	1. VDH will conduct a provider readiness assessment of at least one large medical facility in each health region to determine readiness for electronically importing Electronic Medical Record data into e2Virginia.	Yes	PLWH	<ul style="list-style-type: none"> • Number of readiness assessments conducted • Number of successful electronic medical imports to e2Virginia.

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