Ending the HIV Epidemic in Philadelphia

DRAFT Version 3.5

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Department of Public Health
CITY OF PHILADELPHIA

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Dear Reader,

Since the emergence of AIDS in the early 1980s, the Philadelphia Department of Public Health (PDPH) AIDS Activities Coordinating Office, in partnership with people living with and affected by HIV, has focused on providing HIV-related services to improve health outcomes. Today, Philadelphia has a highly integrated, robust and effective HIV service delivery system consisting of social services, behavioral health and medical providers that serves more than 30,985 persons at risk or living with HIV on a yearly basis. Today, because of new developments in HIV treatment and prevention, there is a once-in-a-generation opportunity to end the HIV epidemic in Philadelphia. PDPH will focus its efforts on 1) diagnosing all persons with HIV as early as possible 2) treating persons living with HIV quickly and effectively 3) preventing new HIV transmissions by promoting pre-exposure prophylaxis and syringe services and 4) responding quickly to HIV outbreaks.

These strategies are part of the Ending the HIV Epidemic: A Plan for America (EHE) initiative. Through this initiative, the City of Philadelphia received funding in late 2019 for a one-year process to develop the local EHE plan to implement these strategies. The plan's overall goal is to decrease new HIV infections by 75% by 2025 and by 90% by 2030. PDPH commits to taking a health equity approach in our work, acknowledging the HIV impacts communities in different ways, particularly African American and Latino Philadelphians.

The EHE plan is organized around the EHE initiative's four pillars: diagnose, treat, prevent, and respond. The document reflects both current approaches as well as new opportunities. It also includes focused efforts with specific communities. In the pages of the plan that follow, you'll read a summary of the HIV epidemic in Philadelphia and learn about current PDPH HIV-related services and identified gaps to be addressed. The EHE Plan section details the goals to be reached and the proposed activities to reach these goals. As detailed in the situational analysis portion of the plan, PDPH recognizes that these goals cannot be achieved without recognizing the impact of poverty, racism, homophobia, transphobia and other underlying forces and their intersectionality. Supporting workers in the HIV field is crucial to implementing the EHE plan so efforts to support workforce development are also discussed. PDPH will continue to advocate for enough funding to implement the plan and make sure that resources align with community-specific prevention and care needs.

When PDPH began its efforts to get community feedback on the plan, we could not have envisioned the unprecedented times that the world would be facing in the face of COVID-19. This pandemic has cast a shadow over our HIV efforts and will undoubtedly impact the plan. Just as importantly, it has greatly impacted already marginalized communities and the people PDPH serves in ways that are still unfolding. Our thoughts are with you during these difficult times. PHPH greatly appreciates you continuing to remain engaged in this important process. For decades, community input has been critical to HIV prevention and treatment efforts. It is also an integral part of the Ending the HIV Epidemic initiative and is already shaping the development of this plan in important ways. The last step before the plan becomes final in September 2020 is the HIV Integrated Planning Council's (HIPC) concurrence.

For detailed information on the characteristics of HIV/AIDS in the region, we invite you to review:

The annual 2018 HIV /AIDS Surveillance Report:
https://www.phila.gov/media/20191101092716/HIV_10_30_2019_FINAL_web.pdf

To learn more about the federal response, please visit:

https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview

EHE Updates and Additions for Version 3.5

This is a living document. During our year of planning, deep community listening and engagement we will continue to make changes to the draft plan. Listed below are the edits and additions to version 3.5 of this document.

Situational Analysis

Updated language to reflect the cultural moment and individual's experiences with legal and medical institutions:

Experiences of medical abuse are common among minority communities due to historic abuses and individual experiences. Such experiences can discourage individuals from fully engaging HIV medical care and prevention services, as well as not adhering to treatment regimens.

Negative encounters with law enforcement- The criminalization of activities such as drug use or sex work, can negatively impact a person's ability to seek HIV testing and/or treatment services and puts people at greater risk of acquiring HIV.

EHE Draft Plan

Updated Activities as follows:

Pillar 1 Diagnose

Activity 1.2.1: Develop network of low-threshold sexual wellness clinics to provide HIV, STI and HCV testing, PrEP, PEP and linkage to HIV, STI and HCV treatment.

Activity 1.2.5: Expand meaningful community engagement efforts to promote HIV testing, PrEP and treatment.

Pillar 2 Treat

Activity 2.3.4: Support homelessness prevention activities by providing direct emergency financial assistance for rent and utilities

Activity 2.3.5: Increase capacity to house homeless and housing insecure PLWH by expanding access to transitional and long term housing

Activity 2.3.6: Ensure medical case managers assess and address housing instability when developing and reviewing care plan

Strategy 2.4: Empower people living with HIV to improve their health.

Activity 2.4.1: Increase visibility and strengthen the knowledge of people who are under-insured and uninsured about the Ryan White funded service delivery system to improve retention to care

Activity 2.4.2: Reduce HIV Stigma by including health equity and cultural humility approaches to future funding request for proposals that address provider-initiated stigma and bias

Activity 2.4.3: Require providers actively participate in the local continuum of care to ensure patient access to all support services.

Activity 2.4.4: Develop and distribute rights-based consumer medical education, including tool-kits for PLWH.

Activity 2.4.5: Increase the capacity of PDPH-funded HIV care providers to implement new and expanded activities, through targeted technical assistance activities to improve health outcomes of PLWH.

Activity 2.4.6: Establish a public online data dashboard presenting local EHE-related information for Philadelphia that displays key performance indicators for providers. Shared information will include

retention and viral suppression metrics for individual medical facilities. It will provide PLWH with the necessary information to assess medical care and other services.

Activity 2.4.7: Ongoing data dissemination to key community partners and internal and external stakeholders to increase knowledge, close information gaps, and empower PLWH to improve their health.

Pillar 3 Prevent

Activity 3.1.1: Develop network of low-threshold sexual wellness clinics to provide HIV, STI and HCV testing, PrEP, PEP, and linkage to HIV, STI and HCV treatment.

Activity 3.1.5: Expand financial support for PrEP-related routine laboratory work, through provider and home collected specimens, and adherence services.

Activity 3.2.3: Expand the promotion and distribution of community- specific sexual wellness and harm reduction information and supplies through innovative approaches

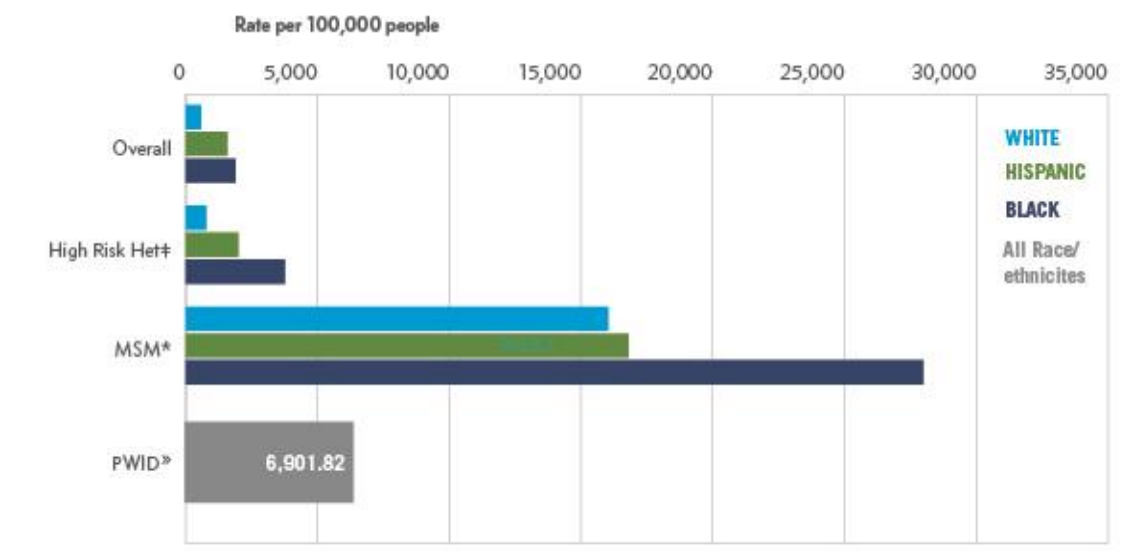
Epidemiological Snapshot

Characteristics of HIV in Philadelphia

In Philadelphia, reducing new HIV infections and improving health outcomes for People Living with HIV (PLWH) remains a challenge. Despite steady declines, Philadelphia is one of 48 counties in the U.S. with the highest number of new HIV diagnoses[1]. In 2018, there were 424 new diagnoses with significant differences between subpopulations[2] (*Chart 2* and *Appendix A*).

Currently, 19,011 PLWH live in Philadelphia[2]. This number has remained stable in the past few years due to advances in HIV treatment and fewer deaths. As of 2018, 1.3% of Philadelphians were diagnosed and living with HIV with significant differences between subpopulations[2] (*Chart 1*).

Chart 1: Prevalence by Race/Ethnicity and Transmission Category, Philadelphia, 2018



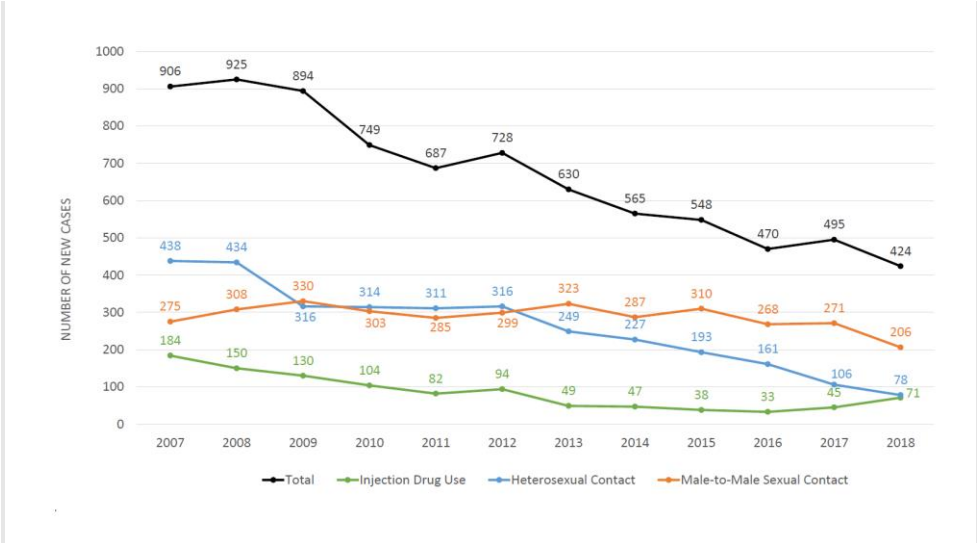
Please see *Appendix A* and *Appendix B* for prevention and care indicators arranged by pillar for all subpopulations.

Pillar One: Diagnose

The number of newly diagnosed PLWH decreased 14% from 495 diagnoses in 2017 to 424 new diagnoses in 2018[2] (Chart 2). The City has experienced steady declines in new HIV diagnoses since the mid-2000s, consistent with national trends.

- In 2018, there was a notable decline of 36% in new HIV diagnoses among Black men who have sex with men (MSM). Rates remain high in comparison to other subpopulations.
- In 2018, there were 71 newly diagnosed cases of HIV among people who inject drugs (PWID) (including MSM who inject drugs). This is a 115% increase from 33 cases reported in 2016.
- Out of all new diagnoses in 2018, 1 in 4 were youth ages 13–24 (1 in 5 were in 20-24-year-old, 1 in 20 in 13-19-year-old).
- PDPH estimates that 2,019 people living with HIV are unaware of their HIV status. These individuals accounted for 40% of new infections in 2018.
- Of HIV transmission risk groups, MSM have the highest estimated unaware rate. Over 1,202 MSM living with HIV, or 14%, are estimated to be unaware of their HIV status.
- More than half of youth ages 13–24 living with HIV are unaware of their status.
- Although local data are currently not available for transgender individuals, PDPH estimates that approximately 17% are unaware of their HIV status (based on national data)[3].

Chart 2: New HIV Diagnoses by Transmission Category 2007-2018[1]



Pillar Two: Treat

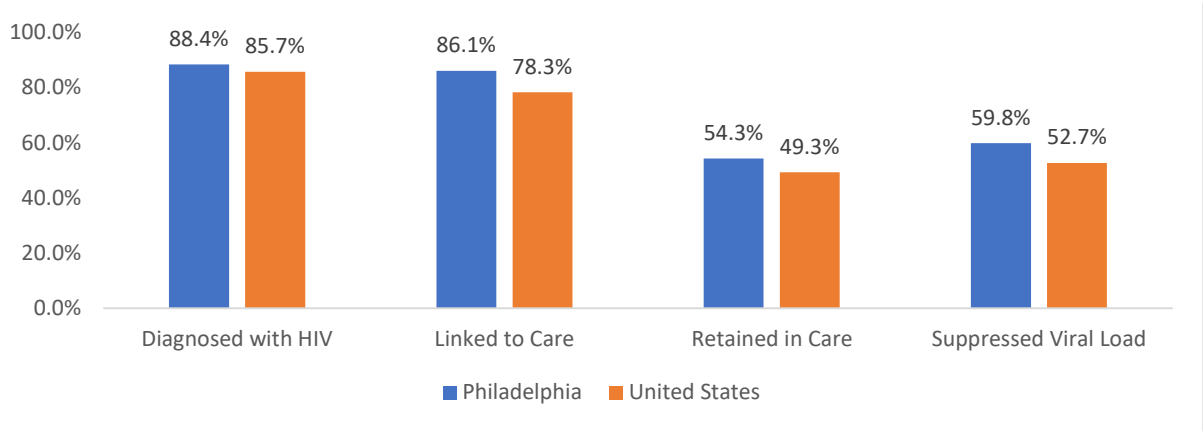
[1] *Data presented included newly diagnosed HIV reported through June 30, 2019.*
Note: In 2017, PDPH changed the method for identifying heterosexual transmission of HIV in order to align with CDC standards of risk factor collection.

HIV Care Continuum

The HIV Care Continuum is a data-driven tool focusing on the diagnosis and care of individuals living with HIV. Engaging HIV patients in care is critical to both individual health and slowing the spread of new HIV infections. The Continuum shows the percentage of people living with HIV at various stages of engagement in care. Chart 3 below shows Philadelphia's modified prevalence-based HIV Care Continuum[4]. See *Appendix C* for definitions of each stage of the Care Continuum. HIV Care Continuum outcomes are typically based on total counts from HIV public health data. However, this methodology can overestimate the number of PLWH due to duplicate case reporting, migration, and missed deaths of PLWH. In this modified prevalence-based HIV Care Continuum, PDPH has excluded individuals without evidence of recent care in the last five years to more precisely evaluate our HIV Care Continuum outcomes and better identify individuals for intervention and re-engagement services for the EHE plan.

The definitions for each stage of the Modified HIV Care Continuum are shown in *Appendix C*.

Chart 3: Modified HIV Care Continuum Philadelphia vs. the United States 2018



- Nearly 4,000 PLWH with a last known home address in Philadelphia have not had care in the past five years. These individuals are likely either deceased or no longer live in Philadelphia and are excluded from the *Modified HIV Care Continuum*.
- As shown in the Modified HIV Care Continuum, 86% of people newly diagnosed with HIV in 2018 were linked to care within 30 days (Refer to *Appendix C* for definition of linkage to care). These rates were lower for PWID, transgender individuals and Black MSM. Disparities were seen among PWID and transgender individuals with 76% and 67% linking to care in 30 days, respectively (see attached tables).
- In Philadelphia, the greatest barrier to ending the HIV epidemic is poor retention in care (Refer to *Appendix C*) specifically among people who are not virally suppressed. 2,395 PLWH who had evidence of care in the last five years were not in care in 2018 in Philadelphia. In 2018 these individuals accounted for 35% of HIV transmissions in Philadelphia. There are disparities in retention across demographic and transmission risk groups, which are presented in *Appendix B.*

- Another 1 in 10 PLWH in 2018 were in care but not virally suppressed (Refer to Appendix C). These individuals accounted for 25% of HIV transmissions in Philadelphia in 2018.

Pillar Three: Prevent

There are 342,201 people in Philadelphia estimated to be at risk for acquiring HIV (Chart 4). Among these, 13,900 have an indication for pre-exposure prophylaxis (PrEP). The greatest overall number and proportion of persons with an indication for PrEP is among MSM (*Chart 4*).

Chart 4: Estimates of Adults with Indications for HIV Pre-Exposure Prophylaxis by Race/Ethnicity and Transmission Category, Philadelphia 2018

	NEGATIVE AT RISK			PrEP INDICATION			% NEGATIVE POPULATION		
	MSM	PWID	Heterosexual	MSM	PWID	Heterosexual	MSM	PWID	Heterosexual
Black	9,926	N/A	125,713	4,880	480	2,290	49.2%	N/A	1.8%
Hispanic	3,516	N/A	48,243	1,680	560	560	47.8%	N/A	1.2%
White	10,197	N/A	64,349	1,320	1,360	200	12.9%	N/A	0.3%
									
TOTAL	26,406	55,000	260,795	8,290	2,480	3,130	31.4%	4.8%	1.2%

Methods based on Smith, Handel & Grey[5]; Notes The population of individuals 18 and older living below poverty level is used as a proxy for at risk heterosexual population estimates. MSM population estimate based on number of active MSM in the past 5 years. PWID population based on an estimated 55,000 persons who have ever injected drugs in Philadelphia. (Source: Annual HIV Surveillance Report)

Other significant factors that contribute to a higher risk of acquiring HIV include:

- **Sexually Transmitted Infections/Sexual Exposure to HIV** - Sexually transmitted infections increase the risk of both HIV transmission and acquisition[6]. In 2018, there were 408 cases of primary or secondary syphilis, 540 cases of early latent syphilis, 7,205 cases of gonorrhea, and 20,206 cases of chlamydia in Philadelphia[7]. According to 2018 Philadelphia Medical Monitoring Project data, 30.7% of PLWH who were not virally suppressed had condomless sex with a person who was HIV-negative or of unknown status[4].
- **Substance Use** - Substance use contributes to behaviors that increase risk for exposure to HIV. Substance use is associated with trauma, mental illness, and other factors impacting people at risk for and living with HIV[8]. Injection drug use particularly increases HIV risk. As of 2018, nearly 24% of PLWH in Philadelphia had acquired HIV through

current or past injection drug use[2]. After many years of low rates of new HIV infections among PWID, diagnoses are on the rise.

Pillar Four: Respond

Philadelphia is now experiencing an epidemic in use of and addiction to opioids. This epidemic is characterized by the introduction of fentanyl in the illicit drug supply, a rise in the number of people who inject drugs, an increase in homelessness among drug users, an increase in Hepatitis C transmission, and sharp increases in fatal and non-fatal drug overdoses. There were 1,116 drug-related deaths in 2018 compared to 460 in 2013[22]. In September 2018, PDPH identified an increase in new HIV infections among PWID. These infections are associated with the opioid crisis.

At the same time, the epidemic in Philadelphia remains concentrated among MSM. This indicates a need to investigate new cases in all risk groups.

- In 2018, 71 new HIV diagnoses were reported among PWID, a 115% increase since 2016.
- Viral suppression in previously diagnosed PWID remains lower than average.
- In 2018, rates of newly diagnosed HIV were more than six times greater among MSM compared to PWID and heterosexuals.

Through routine public health data analysis, PDPH identified groups of rapidly growing, closely related HIV diagnosis in MSM. One group was identified in 2018 and the other, more recent group, was identified in June 2019. Recently diagnosed individuals in these groups received Partner Services and receive follow-up through a project that aims to identify patterns of missed opportunities in the HIV prevention system in Philadelphia. This project uses standardized chart reviews and interviews with sentinel cases of recently HIV-diagnosed individuals. Information gathered is reviewed through a regular, structured, inter-disciplinary Case Review Team and a Community Action Team to identify actionable policy changes to be implemented through a Policy Implementation Team.

Philadelphia continues to improve its capacity to investigate active HIV, recent and rapid growth of HIV, and respond to outbreaks.

Limitations

Data about HIV-positive transgender and gender non-binary individuals has improved, but gaps remain. PDPH does collect and report gender identity where data is available; however, it can be limited. There is little information about disabilities among PLWH. Current data does not adequately capture people with visual, hearing, cognitive, and motor impairments. This is significant since more than half of PLWH in Philadelphia are over the age of 55, and disabilities are often acquired over time.

Situational Analysis

The number of new HIV diagnoses in Philadelphia has declined for more than ten years. We are ready to end the HIV epidemic in Philadelphia.

Philadelphia is the largest city in Pennsylvania, with a population of approximately 1.5 million people[9] and home to 19,011 people living with HIV (PLWH)[2]. The Philadelphia Ending the HIV Epidemic (EHE) plan will reduce new diagnoses in Philadelphia by 75% in five years, consistent with the federal EHE Initiative.

For over 30 years, The PDPH AIDS Activities Coordinating Office (AACO) has conducted HIV public health data collection and analysis, and provided HIV prevention, care, and planning activities in collaboration with the communities most impacted by HIV. As the recipient of federal, state, and local funding, PDPH coordinates and monitors services for people living with HIV or at risk for acquiring HIV. This includes an extensive network of health care facilities and essential services providers: nine city health centers, 18 medical facilities that provide HIV care (including the city health centers), and 45 facilities that provide PrEP.

PDPH partners include the Pennsylvania and New Jersey Departments of Health, the Philadelphia Department of Prisons, the Philadelphia Department of Behavioral Health and Intellectual disAbilities and other PDPH divisions such as the Division of Disease Control which includes the STD Control Program and the Viral Hepatitis Programs, and the Division of Substance Use Prevention and Harm Reduction. PDPH also coordinates with community health care providers, hospital emergency departments, Federally Qualified Health Centers, and various social services organizations.

The Office of HIV Planning supports the Philadelphia Eligible Metropolitan Area (EMA) HIV Integrated Planning Council (HIPC), the decision-making body that plans HIV care and prevention services in Philadelphia and the surrounding areas. The HIPC considers public and private funding throughout its planning process to maximize the number of services and reduce duplicate efforts. The EHE Draft Plan is based on the "2017-2021 Philadelphia EMA Integrated HIV Prevention and Care Plan," authored by the Office of HIV Planning in collaboration with PDPH. The EHE Draft Plan maintains and expands critical services while incorporating novel approaches to end the HIV epidemic in Philadelphia.

Input to the EHE plan extends beyond PDPH and the partners described above. Direct input from consumers of HIV prevention and care programs funded by PDPH has been ongoing and extensive. In the last 3 years, PDPH has conducted interviews with nearly 2,900 individuals including over 500 out-of-care PLWH and participants of the Medical Monitoring and National HIV Behavioral Surveillance Projects. As part of the HIV Medical Case Management enrollment process operated by PDPH, information on met and unmet needs at intake was collected from over 5,700 PLWH. Another major source of direct consumer input is the Philadelphia HIPC, where empowering community voices is supported in all its assessment and planning activities.

Approximately 100 consumers participate annually in HIPC's standing Positive Committee. Finally, input from leading HIV researchers is available through the Department's ongoing relationship with the local NIH-funded Center for AIDS Research. Throughout the life of the EHE plan, PDPH will continue to rely on these and other community engagement activities to inform HIV planning, program implementation, and evaluation.

Needs Assessment

Health is influenced by many factors such as social environment, economic conditions, accessibility of services, individuals' behaviors, and the infrastructure of the medical care system. Philadelphia is one of 48 counties in the U.S. that have the highest incidence and prevalence of HIV. While newly diagnosed HIV cases in Philadelphia have declined, there remains much work to be done in various communities. Barriers such as poverty, homelessness, HIV stigma, an expanding opioid crisis, and other social determinants of health continue to limit local efforts to end the HIV epidemic.

Of the ten most populated cities in United States, Philadelphia is the poorest. Nearly 26% of residents live in **poverty**. Half of these 400,000 poor residents are also living in deep poverty, at less than half of the federal poverty level. That means in 2018, a family with one adult with two children lived on an annual income of less than $10,000 [9, 10]. Deep poverty is highest among Black and Hispanic residents. People living in poverty are more likely to acquire HIV and develop other chronic diseases that are the leading causes of death. People living in poverty also have shorter life spans. Approximately one-third of Philadelphia residents have health insurance through Medicaid[9].

Racial and ethnic minorities represent the majority of Philadelphia's residents, making Philadelphia one of the most diverse cities in the country. **Racism,** in conjunction with poverty, is one of the drivers of health disparities in Philadelphia. Structural and interpersonal racism threaten the sense of physical safety and increases stress responses, which research shows negatively impacts health over time[11]. Structural racism also prevents access to services for racial and ethnic minority communities because of lack of resources in those communities and barriers created by the systems themselves. Philadelphia is one of the most racially segregated cities in the country. Racial segregation impacts the ability to access vital services and needed resources.

Housing in Philadelphia is increasingly expensive, due to gentrification and other forces. Lack of affordable housing is a pervasive problem. There is a lack of federal, state, and local resources to combat the problem. The entrenched nature of poverty makes this lack of housing resources even more acute for many Philadelphians. About half of renters in the city spend more than 35% of their annual income on rent[9]. On a single night in January 2018, the Philadelphia Office of Homeless Services counted 5,788 homeless people. Of these, 149 were PLWH[12]. PLWH experiencing homelessness were 53% less likely to receive ART. PLWH in temporary or unstable

housing were 49% less likely to achieve viral suppression[4]. Stable housing improves health outcomes[13].

Philadelphia is home to a vibrant community of diverse sexual orientations and gender identities. However, stigma toward **lesbian, gay, bisexual, transgender, queer, intersex and asexual (LGBTQIA+)** permeates the city even with increasing social acceptance and legal protections. Discrimination based on sexual orientation or gender identity and expression present barriers to experiencing wellness and accessing healthcare. There are also emerging threats to previously protected legal rights with changes to policy at the state and federal level that affect LGBTQIA+ residents.

Limited English speaking proficiency is a barrier for various cultural and ethnic communities within our diverse city. Even if language interpretation and translation are available at service providers, many people are unaware or do not feel comfortable seeking services outside their communities. It is estimated that 26% of residents speak a foreign language at home[9] and 6.9% of residents in Philadelphia live in limited English-speaking households[9].

Experiences of medical abuse are common among minority communities due to historic abuses and individual experiences. Such experiences can discourage individuals from fully engaging HIV medical care and prevention services, as well as not adhering to treatment regimens.

Mental health impacts every element of the HIV care continuum. People with diagnosed and undiagnosed mental health disorders have a much higher risk of acquiring HIV. Mental illness diagnoses are more common among PLWH than in the general population[14]. Philadelphia's Medical Monitoring Project found that 43% of PLWH had a mental health diagnosis, which includes depression, anxiety, mood disorders and psychosis[4].

People with diagnosed and undiagnosed mental health disorders have a much poorer HIV health outcome. PLWH with moderate to severe depression were 55% less likely to stay in care and 46% less likely to receive antiretroviral treatment. PLWH with untreated moderate to severe depression were 38% less likely to achieve viral suppression[15].

Substance use is associated with trauma, mental illness, and other factors impacting people at risk for and living with HIV. In particular, injection drug use increases HIV risk. After many years of low rates of new HIV infections among PWID, diagnoses are on the rise. As of 2018, nearly 24% of PLWH in Philadelphia had acquired HIV through current or past injection drug use.

HIV stigma is negative beliefs, attitudes, and feelings about people living with or at risk of acquiring HIV. HIV stigma causes harm because those attitudes and beliefs can lead to discriminating behaviors of PLWH. In recent interviews of persons in at-risk groups through the National HIV Behavioral Surveillance (NHBS) project, participants (both HIV-positive and HIV-negative) in Philadelphia were recently asked multiple questions about HIV-related stigma. High rates of stigma were reported by a large majority of NHBS participants. For example, about 8 in

10 PWID and MSM participants perceived HIV-related stigma in the Philadelphia community (81.3% of PWID and 79.5% of MSM). Addressing stigma requires multi-level, evidence-based, and measurable interventions. For organizations, the goal is a care environment in which patients feel respected and appropriately cared for from the moment of their first encounter.

Negative encounters with law enforcement- The criminalization of activities such as drug use or sex work, can negatively impact a person's ability to seek HIV testing and/or treatment services and puts people at greater risk of acquiring HIV.

Incarceration - HIV prevalence is much higher in jails and prisons than in the general population[17]. In Philadelphia, the jail population, though declining, remains high[16]. In 2018, 1062 people living with HIV were released from incarceration in Philadelphia[4].

These factors must all be considered in the efforts to end the HIV epidemic.

Table 1: Needs Assessment Information for the Philadelphia Jurisdiction by Pillar	
Needs and Gaps	**Strategies to Address Needs and Gaps**
Pillar 1: Diagnose	
An estimated 2,019 PLWH in Philadelphia are unaware of their status. Based on CDC estimates, these individuals accounted for 40% of HIV transmissions in Philadelphia in 2018[18].	Increase access to and options for HIV testing, including expansion of routine opt-out testing at various venues. Implement bio-social screening in health care settings. Realign focused community-based testing efforts to ensure key populations are reached.
Pillar 2: Treat	
In 2018 in Philadelphia, 10% of PLWH (n=1,710) with evidence of medical care were not virally suppressed. Based on CDC estimates, these individuals accounted for 25% of HIV transmissions in Philadelphia[18]. In addition, 2,395 people had no evidence of medical care in 2018, accounting for 35% of HIV transmissions[18].	Maintain and expand current core medical and other Ryan White funded services, as well as fund new services that support re-linkage, retention, and increased viral suppression rates.
Pillar 3: Prevent	
PDPH estimates that nearly 350,000 Philadelphians are at risk for HIV. An estimated 13,900 people in Philadelphia who are HIV negative have an indication for PrEP. This large group includes 8,290 MSM, 2,480 PWID, and 3,130 heterosexuals. Indications	Maintain condom distribution program. Expand access to PrEP, nPEP. Expand syringe service programs.

Table 1: Needs Assessment Information for the Philadelphia Jurisdiction by Pillar	
Needs and Gaps	**Strategies to Address Needs and Gaps**
vary significantly by race/ethnicity with higher proportions of people of color with an indication for PrEP in all risk groups. Based on a recent survey of PrEP prescribers, PDPH estimates that a minimum of 2,790 individuals are on PrEP (21% of all people with an indication) in Philadelphia in 2018 for a PrEP gap of 10,323 individuals. The ongoing opioid crisis in Philadelphia has overwhelmed the existing syringe service programs in Philadelphia.	
Pillar 4: Respond	
PDPH recently identified an outbreak of HIV infections among PWID[2]. In 2018, 71 new HIV diagnoses were reported among PWID, reflecting an 115% increase since 2016. Meanwhile, the outbreak in Philadelphia remains concentrated among MSM, indicating the need to investigate new cases in all risk groups. In 2018, rates of newly diagnosed HIV were more than six times greater among MSM compared to PWID and heterosexuals (784 new HIV diagnoses per 100,000 population in MSM compared to 121 per 100,000 among PWID and 30 per 100,000 in heterosexuals).	Investigate and respond to all related HIV cases to stop chains of transmission. Initiate outbreak response. Make systemic changes based on the data.

Pillar 1: Diagnose

Philadelphia has an established network of testing sites in a variety of settings and has recently implemented distribution of in-home HIV test kits. There were nearly 70,000 publicly funded HIV tests in Philadelphia in 2018. In addition to community-based HIV testing programs, PDPH funded efforts include opt-out testing at three major emergency departments, two pediatric hospitals, and the Philadelphia Department of Prisons. Prison efforts have been hugely successful with most inmates tested at intake.

Table 2: PDPH-Funded HIV Testing in Philadelphia, 2018			
Location	**Number of HIV Tests Performed**	**Number HIV Positive**	**Number of New HIV Diagnoses**
Community-based settings	22,028	297	72
Clinical settings	39,530	200	69
Philadelphia Department of Prisons	23,024	80	20
Total	**84,582**	**577**	**161**

In 2017, 12% of PLWH (based on the modified HIV care continuum of PLWH in care in the last 5 years) in Philadelphia did not know they had HIV. Those unaware of their status account for 40% of new transmissions. Multiple reports suggest local testing efforts need to be strengthened. In June 2019, CDC reported that just 58% of Philadelphia residents had ever taken an HIV test, and only 21% were tested in the past year[23]. Philadelphia data from the NHBS found that the majority of MSM, heterosexuals, and PWID had medical care in the last twelve months, but many were not offered an HIV test or counseling for PrEP[19]. Frequency of HIV testing and missed opportunities are shown in *Table 3*.

PDPH will promote increased access and frequency of HIV testing through bio-social screening. Bio-social screening aims to provide clear pathways for clinicians in healthcare settings to offer HIV testing to patients. Bio-markers for screening may include suspected or confirmed diagnoses of syphilis, gonorrhea, chlamydia, hepatitis C, hepatitis A, unintended pregnancy, overdose, or injection-related infection. Social-markers for screening include people in populations with a higher prevalence of HIV, including gay, bisexual, and other men who have sex with men—especially Black and Hispanic/Latino, transgender or heterosexual women of color.

Current testing efforts in community-based settings are not engaging key populations, with only 23% of tests being in MSM (2018). Despite opt-out testing initiatives in the last decade, routine opt-out testing has not been implemented system-wide. PDPH introduced revised funding criteria for community-based testing providers to emphasize and realign testing in key populations based on public health data estimates.

Table 3: HIV Testing and Medical Care Data Among Select Philadelphia Populations, National HIV Behavioral Surveillance (NHBS), 2017-2020						
NHBS population (number of Philadelphia respondents, and year)	**Percent HIV tested in past 2 years (among HIV- or unknown)**	**Percent HIV tested in past 12 months (among HIV- or unknown)**	**Percent HIV tested in past 3 months (among HIV- or unknown)**	**Percent with medical care visit past 12 months**	**Percent offered HIV test among persons with a medical visit in the past 12 months**	**Percent PrEP discussion among persons with a medical visit in the past 12 months**
Men who have sex with men (n=575 in 2017)	93.8%	77.2%	32.0%	83.0%	60.0%	38.9%
People who inject drugs (n=621 in 2018)	88.7%	68.8%	28.5%	82.0%	61.8%	12.5%
High risk heterosexuals (n=370 in 2019)	78.4%	44.2%	13.2%	85.6%	58.5%	1.6%
Transgender Women (N=222)	87.8%	76.5%	45.2%	91.3%	74.2%	55.2%

PDPH has implemented an in-home HIV testing program, which has the potential to de-stigmatize screening. It may also provide an alternative for people at high risk for acquiring HIV who are unwilling to get tested in other venues. HIV test kits are distributed in combination with a HIV testing campaign. Consumers can request in-home test kits through the campaign website: http://www.PhillyKeepOnLoving.com.

Partner Services (PS) is an essential component in the HIV testing process that notifies partners of possible HIV exposure and links identified individuals to HIV medical care or PrEP. PS can also significantly impact the other three pillars of: treat, prevent and respond. In Philadelphia, Partner Services is conducted with (1) all people with newly identified HIV infection, previously diagnosed cases with high viral loads, and contacts to index cases who are locatable and consent to be interviewed; (2) PLWH with a diagnosis of gonorrhea, or syphilis who can be

located and consent to be interviewed; and (3) all people with newly diagnosed syphilis and contacts to index cases who are locatable and consent to be interviewed. In 2018, 74% of people with newly diagnosed HIV were interviewed by Partner Services.

Identified Gaps:

1. Insufficient testing of key populations in community-based settings
2. Insufficient opt-out routine testing in clinical settings
3. Inadequate testing among people at high risk for exposure to HIV

Pillar 2: Treat

For people who achieve and maintain viral suppression, there is effectively no risk of transmitting HIV to their sexual partners. PDPH funds a system of 18 **outpatient medical facilities** with experienced HIV providers within the city. In Philadelphia, the 12,671 patients who have had at least one HIV medical care visit in the past 12 months have an 86% viral suppression rate. Rates of retention in medical care are low with only 54.3% of PLWH receiving at least two HIV visits in 2018 (See Appendix C for definition of retention in care).

Immediate **initiation of anti-retroviral therapy (ART)** will be key to achieve EHE goals and reduce barriers to care engagement for people with new diagnoses of HIV. Data are available on ART start date for approximately 50% of new diagnoses in Philadelphia. In 2019, 52 persons were initiated on ART therapy within 0-4 days of diagnosis.

Medical Case Management (MCM) offers a range of client-centered activities to improve health outcomes. PDPH funds 20 MCM providers within the city, which includes medical facilities where MCM services are co-located with HIV medical care (6,688 PLWH were served in 2018). MCM is a major retention intervention in Philadelphia and consists of two levels of care: (1) Comprehensive case management services focus on individuals who are not virally suppressed; (2) Standard case management services focus on maintaining virally suppressed individuals in HIV medical care. MCM activities include linkage to HIV medical care for newly diagnosed and out-of-care individuals and treatment adherence support.

Other core services offered to PLWH are mental health and substance abuse support, emergency HIV medications, medical nutritional services and oral health care (2,786 clients received these services in 2018). In addition, PDPH funds services to address social determinants of health including emergency financial assistance (for back-rent and utilities in arrears); food bank/home delivered meals; housing assistance; legal services; linguistic services (translation and interpretation); and transportation; (7,909 clients received services in 2018). For more information on core and supportive services provided through the Ryan White Program, please visit: https://hab.hrsa.gov/about-ryan-white-hivaids-program/about-ryan-white-hivaids-program.

Data-to-Care (D2C) is an evidenced-based strategy that uses HIV public health data and other data to support the HIV Care Continuum, by identifying PLWH who are out of medical care and facilitating re-engagement to care. 322 people were served in 2018 through D2C activities; 269 were relinked to HIV medical care with 209 maintaining viral suppression at one-year post enrollment in data-to-care.

Identified Gaps:
1. Immediate ART (within 0-4 days of diagnosis)
2. Re-engagement of out-of-care individuals into medical care
3. Ongoing retention in HIV medical care
4. Increasing durable viral suppression rates
5. Increased access to low-threshold HIV medical care

Pillar 3: Prevent

PDPH participates in large scale **condom distribution** across Philadelphia. Last year PDPH distributed more than 1.3 million free condoms through multiple outreach activities, including education and social marketing.

PDPH is actively promoting other biomedical prevention interventions such as PrEP. PDPH funded clinics provided 1,017 people with **PrEP navigation services** in 2019. PrEP is safe and effective for preventing HIV acquisition. An estimated 13,900 people in Philadelphia who are HIV-negative have an indication for PrEP. This group includes MSM (8,290), people who inject drugs (2,480), and heterosexuals (3,130). Estimates for transgender women are forthcoming. Indications vary significantly by race/ethnicity, with higher proportions of people of color with an indication for PrEP in all risk groups. **Health promotion activities** to expand knowledge of PrEP have been undertaken through the campaign website at PhillyKeepOnLoving.com. PDPH has developed a PrEP monitoring and evaluation plan in order to be able to assess uptake by subpopulation.

Transgender Community Mobilization provides gender-affirming and culturally responsive spaces for transgender people who have sex with men to seek HIV prevention and treatment information, promote rights-based education around healthcare access, and conduct activities that reduce HIV stigma. Currently a diverse set of community based organizations implement this activity across the City. Funded organizations range from residential treatment facilities to large LGBT community-based health centers.

PDPH has supported **syringe services programs** through the City General Fund since 1992. In 2018, the program served 14,000 unique exchangers and dispensed 3.3 million syringes.

Previous reductions in HIV infections from injection drug use in Philadelphia were due to several protective factors, including access to sterile syringes through Prevention Point Philadelphia, access to drug treatment, and behavioral changes among experienced users. In a recent study, it was estimated that syringe exchange programs in Philadelphia averted 10,000 new HIV infections over 10 years[20]. However, from 2016 to 2018, the number of newly-diagnosed HIV infections among PWID increased 115% (n=71 cases). New HIV diagnoses in this population continue to rise. In 2018, Philadelphia had one of the highest drug death rates in the country related to opioid misuse with an estimated 939 deaths[21]. This increase correlates with Philadelphia's opioid crisis, which is characterized by the introduction of fentanyl, a rise in the number of people who inject drugs, an increase in homelessness among drug users, an increase in hepatitis C transmission, and sharp increases in fatal and non-fatal drug overdoses. Fentanyl has a shorter duration of effect than heroin, so people who inject fentanyl may be injecting more frequently.

There were no perinatal HIV infections in 2016, 2017, or 2018. PDPH maintains ongoing **perinatal HIV prevention** activities including sentinel case review and specialized case management for pregnant women living with HIV.

Identified Gaps:

1. Not enough people at risk for acquiring HIV are being prescribed PrEP
2. Insufficient data to evaluate the uptake of PrEP
3. Expansion of syringe services programs in the wake of the opioid crisis
4. Low awareness and access to post-exposure prophylaxis

Pillar 4: Respond

Analysis of HIV public health data using methods outlined in the PDPH Outbreak Response Plan identifies new groups of related HIV infections. The Outbreak Response Plan guides PDPH and its community partners, including HIV care and treatment providers, substance use prevention and care providers, and community based testing agencies, to coordinate and implement the necessary response activities to address emerging trends and to monitor an outbreak until it is resolved. For example, PDPH used geographic and time analysis of new infections to identify an outbreak of HIV outbreak among PWID in 2018. PDPH also identified new groups of related infections among MSM in Philadelphia through analysis of laboratory data. An outbreak response team that includes staff from multiple PDPH units developed interventions to address both these groups of related infections and the outbreak of HIV among PWID.

As noted above, in September 2018, PDPH identified an increase in HIV diagnoses among PWID. This increase was identified through routine analysis of HIV public health data by PDPH. Analysis showed an increase in the number of HIV cases with PWID transmission risk dispersed in specific geographic regions of Philadelphia. Of the 242 HIV cases identified that are related to the outbreak, half are PWID diagnosed after 2018. Responses have involved increasing HIV

testing in key areas of the city; increasing syringe services resources; efforts to use Partner Services to locate and link people affected by the outbreak; implementation of harm reduction approaches by both prevention and care providers. Additionally, a group of "One-Stop-Shop" medical providers organized their resources to provide HIV medical care, PrEP, Medication Assisted Treatment for substance abuse, medical case management and connection to needed support services—in one location.

Molecular HIV Surveillance (MHS) promises to be an effective tool for responding to the HIV epidemic. MHS uses routinely collected public health data to identify emerging and growing groups of related HIV infections. MHS is the collection of HIV genetic data, routinely used by medical providers to make treatment decisions for individual patients, that has been used to support local and state health departments in monitoring trends in HIV transmission and drug resistance[22]. This data is also used to compare various strains of the virus to each other and identify groups, or clusters, of people with HIV who have similar strains of the virus. There are community concerns about the use of MHS. PDPH has worked with the City's Law Department to assess legal issues related to MHS and has worked to inform the community about MHS and get input on implementation through community presentations to the AACO's Executive Director's Forum, the Penn CFAR Community Advisory Board, HIV Integrated Planning Council, and a workshop at Philadelphia FIGHT's HIV Prevention Summit.

Demonstrating Expanded Interventional Surveillance (DExIS) is a multi-year CDC demonstration project launched in 2018 to identify missed opportunities for HIV prevention in Philadelphia using individual, system, and community level interventions. The project identifies and analyzes a cohort of sentinel cases (defined as either acute HIV infection or an HIV diagnosis within six months of a previous negative HIV test). This process discovers missed opportunities along the HIV Care Continuum and provides Partner Services to the individuals in the cohort. To address system-level gaps in HIV prevention, information is gathered from confidential interviews, medical chart abstractions, and HIV prevention program data. The DExIS priority populations are MSM, youth ages 13 – 24, and transgender people who have sex with men.

Identified Gaps:

1. Community concerns regarding data security and privacy, and medical mistrust threaten ongoing MHS efforts.

EHE Plan

Pillar 1: Diagnose

Goal 1: By 2025, 97% of people living with HIV will know their HIV status.

This includes (as of December 2019):

a. Diagnosing the 1,958 of the estimated 2,019 PLWH who are unaware of their HIV status.
   - Of the 1,958: 60% are MSM, 30% are heterosexuals, and 6% are PWID.
   - 32% are youth, 13-24 (includes all risk groups).

b. Diagnosing an additional 1,325 people that will acquire HIV by 2025.

Strategy 1.1: Increase access to HIV testing through bio-social screening in medical settings, including primary and urgent care settings, emergency departments, and at prison intake.

- *Activity 1.1.1*: Expand support for opt-out HIV testing as part of routine medical care in primary and urgent care settings, emergency departments, and at prison intake.
- *Activity 1.1.2*: Focus funding opportunities on structural practice improvements (changes in electronic medical records, appointment scheduling, and practice flow to increase access to medical appointments etc.).
- *Activity 1.1.3*: Require significant participation by clinical leadership as a requirement of any funding provided to clinical settings for implementation of routine HIV testing.
- *Activity 1.1.4*: Identify key urgent care settings to build capacity for HIV testing when patients are seeking STD/STI treatment or emergency contraceptive care.
- *Activity 1.1.5*: Strengthen partnerships for routine screening in other key locations such as family planning clinics, sexual health clinics, substance use treatment clinics, and Philadelphia County Prison Health Services.
- *Activity 1.1.6*: Provide technical assistance and support by PDPH staff to clinical practices to assess barriers to and develop solutions for expanding routine HIV testing.

Strategy 1.2: Increase access to HIV testing through community-based programs.

- *Activity 1.2.1:* Develop network of low-threshold sexual wellness clinics to provide HIV, STI and HCV testing, PrEP, PEP and linkage to HIV, STI and HCV treatment.
- *Activity 1.2.2*: Use geospatial analysis (geography and location) to ensure community-based testing is aligned with population needs.
- *Activity 1.2.3*: Explore implementation of pharmacy-based HIV testing in which pharmacists offer and administer HIV testing to clients.
- *Activity 1.2.4*: Partner with home HIV test kit providers to explore innovative approaches to increase correct use of home HIV test kits.
- *Activity 1.2.5*: Expand meaningful community engagement efforts to promote HIV testing, PrEP and treatment.

Strategy 1.3: Increase the frequency of HIV testing among key populations.

- *Activity 1.3.1*: Expand capacity in strategic locations serving key populations for low-barrier HIV testing including walk-in options.

- *Activity 1.3.2*: Conduct health promotion activities to encourage more frequent HIV testing based on health assessment.
- *Activity 1.3.3*: Explore school-based HIV testing through partnership with community stakeholders and parent groups.

Strategy 1.4: Implement a status-neutral approach to linkage with realignment and expansion of key personnel. This includes linkage to HIV medical care or PrEP.

- *Activity 1.4.1*: Support linkage to care by AACO centralized Client Services Unit by facilitating HIV medical appointments for newly-diagnosed and out-of-care individuals. These individuals will be identified through the funded HIV prevention and care system as well as other diagnosing facilities (e.g., emergency departments).
- *Activity 1.4.2*: Establish an AACO Field Services Unit as a safety net resource responsible for providing intensive linkage to care services for people diagnosed with HIV at locations with limited capacity to link people to HIV medical care.
- *Activity 1.4.3*: Incentivize timely linkage to PrEP and HIV care of new patients via bi-directional partnerships (between testing and care) as a condition of funding for prevention and HIV medical services.
- *Activity 1.4.4*: Provide partner services for partner notification after possible HIV/STD/STI exposure and link people to care as appropriate.

Key Partners: Philadelphia Office of HIV Planning, PDPH Division of Disease Control, clinical providers, health care facilities, community-based providers, Philadelphia County Prison Health Services, and home test kit providers
Potential Funding Resources: CDC HIV Prevention and Surveillance Prevention Cooperative Agreement, Pennsylvania Department of Health, City of Philadelphia General Revenue, Medicaid, and other public and private funding sources
Estimated Funding Allocation: Current PDPH funding: $6,375,007; Increase needed to fully implement plan: TBD. Current funding will not support all activities necessary to meet goals.

Outcomes:
Number of newly infected people with HIV to be diagnosed over the 5-year period: 1,325
Number of currently unaware PLWH who will be diagnosed over the 5-year period: 1,958

Table 4. Number of New HIV Infections Expected and Number of People Unaware of Their Status that Need to be Diagnosed in Philadelphia by Year

Year	Number of new HIV infections expected	Number of people unaware of their status that need to be diagnosed
Baseline	*424*	
Year 1	424	
Year 2	345	489
Year 3	265	490
Year 4	186	489

Year 5	106	490

Monitoring Data Sources: EvaluationWeb, PDPH HIV Public Health Data

Pillar 2: Treat

Goal 2: By 2025, 91% of PLWH in HIV care will be virally suppressed.

Strategy 2.1: Improve rapid access to HIV medications and medical appointments.

- *Activity 2.1.1*: In accordance to federal treatment guidelines, increase access to immediate ART initiation (within 96 hours).
- *Activity 2.1.2:* Establish new low-threshold HIV treatment sites in underserved areas of the city including a clinic designed to serve PWID and explore low-threshold implementation models for HIV care, e.g., telemedicine, nurse-extended visits pharmacy-supported HIV care, and HIV in drug treatment centers and behavioral health programs.
- *Activity 2.1.3*: Build capacity in high-volume substance abuse treatment programs to diagnose HIV, immediately initiate ART, and link PLWH to HIV medical care.
- *Activity 2.1.4*: Continue to reduce barriers to Special Pharmaceutical Benefits Program and emergency pharmaceutical assistance.

Strategy 2.2: Improve the capacity of the HIV medical system to retain patients in care.

- *Activity 2.2.1*: Increase re-engagement in HIV medical care by expanding the existing PDPH Data-to-Care Program to all existing HIV treatment sites.
- *Activity 2.2.2*: Support provider-initiated approaches, based on provider need and capacity, to re-engage PLWH in medical care. Use data to identify the unique needs of provider's patients and offer resources that promote retention and viral suppression. To accomplish this:
    - PDPH will identify the last medical facility patients not in care visited (within the last five years). Medical facilities will use this information to assess facility-specific plans to improve retention.
    - PDPH will fund a range of options for facilities to implement to improve retention including:
        - Expand operating hours to include evening and weekend appointments for HIV medical care in community and hospital-based HIV treatment sites.
        - Increase the capacity for more intensive levels of medical case management services system-wide by adding more medical case managers at clinical sites.
        - Strengthen the multidisciplinary team approach by adding community health workers at HIV treatment sites to implement the evidence-based Managed Problem Solving intervention.
        - Establish medical/legal partnership services consisting of lawyers and paralegals located in health care sites to serve PLWH whose health may be negatively impacted by legal needs such as access to health insurance or immigration status.

Strategy 2.3: Address social and structural influencers of health to improve healthcare outcomes among PLWH through behavioral health care, housing, and supportive services.

Behavioral Health Care

-
- *Activity 2.3.1*: Reduce barriers to behavioral health care by expanding service access through partnership with the Department of Behavioral Health and Intellectual disAbility Services (DBHIdS) (e.g., telepsychiatry sessions).
- *Activity 2.3.2*: Increase the coordination of mental health care and HIV care for PLWH through integration of additional behavioral health consultants using the Primary Care Behavioral Health model (targeted assessment, short term intervention, and brief follow-up).

Housing*

- *Activity 2.3.3*: Implement a Rapid Rehousing Program to assist PLWH experiencing homelessness to move into permanent housing by providing short-term subsidies and leveraging business and existing and new housing partners that have previously participated in housing for PLWH.
- *Activity 2.3.4:* Support homelessness prevention activities by providing direct emergency financial assistance for rent and utilities
- *Activity 2.3.5:* Increase capacity to house homeless and housing insecure PLWH by expanding access to transitional and long term housing
- *Activity 2.3.6:* Ensure medical case managers assess and address housing instability when developing and reviewing care plan

*Note: Current HIV funding is not sufficient to cover local housing needs. When possible PDPH will work with additional partners to address the urgent lack of funding for housing.

Supportive Services

- *Activity 2.3.7*: Address transportation barriers for medical appointments and other necessary services.
- *Activity 2.3.8*: Support integration of trauma-informed approaches to HIV care.
- *Activity 2.3.9*: Continue to provide necessary linguistic services.
- *Activity 2.3.10*: Provide supportive services that reduce individual barriers to treatment adherence (i.e., food services, emergency financial assistance, and supportive job services).

Strategy 2.4: Empower people living with HIV to improve their health.

- Activity 2.4.1: Increase visibility and strengthen the knowledge of people who are under-insured and uninsured about the Ryan White funded service delivery system to improve retention to care
- Activity 2.4.2: Reduce HIV Stigma by including health equity and cultural humility approaches to future funding request for proposals that address provider-initiated stigma and bias
- Activity 2.4.3: Require providers actively participate in the local continuum of care to ensure patient access to all support services.
- Activity 2.4.4: Develop and distribute rights-based consumer medical education, including tool-kits for PLWH.
- Activity 2.4.5: Increase the capacity of PDPH-funded HIV care providers to implement new and expanded activities, through targeted technical assistance activities to improve health outcomes of PLWH.

- Activity 2.4.6: Establish a public online data dashboard presenting local EHE-related information for Philadelphia that displays key performance indicators for providers. Shared information will include retention and viral suppression metrics for individual medical facilities. It will provide PLWH with the necessary information to assess medical care and other services.
- Activity 2.4.7: Ongoing data dissemination to key community partners and internal and external stakeholders to increase knowledge, close information gaps, and empower PLWH to improve their health.

Key Partners: PDPH AACO, PDPH Division of Disease Control, Office of HIV Planning, Philadelphia EMA Integrated Planning Council, clinical providers, health care facilities, community-based providers, Office of Homelessness Prevention, Division of Housing and Community Development, Department of Behavioral Health and disability Services, Philadelphia County Prison Health Services, Prevention Point Philadelphia, Southeastern Pennsylvania Transportation Authority, Mayor's Office, AIDS Law Project
Potential Funding Resources: Ryan White HIV/AIDS Program, HRSA EHE Initiative, HRSA Bureau of Primary Care, Medicaid, Medicare, private health insurers, PA DOH, and other public and private sources
Estimated Funding Allocation: Current PDPH funding: $28,095,566; Estimated additional needed to implement the plan: $9,000,000 in first year to $12,660,706 in year 5. Current funding will not support all activities necessary to meet goals.

Outcomes:
The number of PLWH who will reach viral suppression during the five years:

Table 5. Number of PLWH in Philadelphia Who Will Reach Viral Suppression by Year	
Year	**PLWH**
Baseline (2019)	*10,961*
Year 1	10,961
Year 2	12,109
Year 3	13,258
Year 4	14,406
Year 5 *	15,554
* At the end of the 5-year period, there will be no disparities in viral suppression.	

Monitoring Data Sources: PDPH HIV Public Health Data, PDPH AACO, CAREWare

Pillar 3: Prevent

Goal 3: By 2025, 50% of people with a PrEP indication will be prescribed PrEP, and 100% of people seeking nPEP will be prescribed treatment.

Strategy 3.1: Increase access to low-threshold pre- and post-exposure prophylaxis (PrEP/nPEP) for priority populations.

- *Activity 3.1.1:* Develop network of low-threshold sexual wellness clinics to provide HIV, STI and HCV testing, PrEP, PEP, and linkage to HIV, STI and HCV treatment.
- *Activity 3.1.2*: Expand new PrEP clinical-community partnerships to engage focus populations.
- *Activity 3.1.3*: Expand PrEP access and provider capacity through low-threshold implementation models, e.g., same-day PrEP telePrEP, nurse-extended PrEP, pharmacy-administered PrEP, and PrEP in drug treatment centers and behavioral health programs.
- *Activity 3.1.4*: Establish new PrEP partnerships with grassroots and community-based organizations not currently involved in HIV services.
- *Activity 3.1.5*: Expand financial support for PrEP-related routine laboratory work, through provider and home collected specimens, and adherence services.
- *Activity 3.1.6*: Increase awareness and establish a centralized mechanism to distribute PEP through pharmacy partnerships, PEP centers of excellence, and PEP hotline.
- *Activity 3.1.7*: Expand PEP availability in key settings through starter packs, navigation support from proposed PDPH AACO Field Services Unit and PDPH Client Services Unit.
- *Activity 3.1.8*: Continue to provide ongoing clinical technical assistance for implementation of PrEP in settings across the city.
- *Activity 3.1.9*: Expand capacity to evaluate PrEP uptake.

Strategy 3.2: Ensure access to syringe service programs, provide harm reduction services and linkage to substance use disorder treatment.

- *Activity 3.2.1*: Expand capacity for syringe service programs to distribute and collect syringes.
- *Activity 3.2.2*: Provide organizational development and capacity building to expand local partnerships and establish new organizations providing SSP services and new locations of service based on need and HIV public health data.
- *Activity 3.2.3:* Expand the promotion and distribution of community- specific sexual wellness and harm reduction information and supplies through innovative approaches

Strategy 3.3: Provide HIV prevention activities for communities at risk.

- *Activity 3.3.1*: Continue City-wide distribution of free condoms including high schools, locations accessed by youth, and at syringe service program sites.
- Activity 3.3.2: Re-establish community-based partnerships for age-appropriate, comprehensive sex education and HIV education through existing health education programs including work with Philadelphia Schools.
- Activity 3.3.3: Expand capacity for HIV prevention workforce to provide primary HIV-related education.

Strategy 3.4: Provide perinatal HIV prevention activities.

- *Activity 3.4.1*: Continue sentinel case review and system improvement activities.
- *Activity 3.4.2*: Provide specialized case management for pregnant persons living with HIV.

- *Activity 3.4.3*: Develop PrEP navigation support for pregnant HIV-negative women at risk of HIV acquisition.

Key Partners: PDPH AACO, PDPH Division of Disease Control, PDPH Division of Substance Use Prevention and Harm Reduction, PA DOH, clinical providers, health care facilities, community-based organizations, Prevention Point Philadelphia, The School District of Philadelphia, local colleges and universities, local legislators, agencies that can provide translation (Spanish), FQHCs, SEPTA, neighborhood based businesses
Potential Funding Resources: CDC HIV Prevention and Surveillance Cooperative Agreement, CDC EHE Initiative, HRSA Bureau of Primary Care, Pennsylvania Department of Health, City of Philadelphia General Revenues
Estimated Funding Allocation: Current PDPH funding $5,015,898; Estimated additional funding needed to implement the plan: TBD

Outcomes:

Table 6. PrEP-Related 5-Year Goals by Population		
Population	**Percent of population with PrEP indication on PrEP**	**Number on PrEP**
Overall	***50%***	***6,950***
Transgender persons	75%	TBD
MSM with recent syphilis	75%	TBD
Black MSM	50%	2,440
Cis-gender women	50%	1,565
PWID	50%	1,240
Latino MSM	50%	840
Young MSM	50%	TBD

Table 7. Goals for number of people on PrEP by year	
Year	**# on PrEP**
Baseline (2019)	*2,790*
Year 1	2,790
Year 2	3,830
Year 3	4,870
Year 4	5,910
Year 5 *	6,950

Monitoring Data Sources: PDPH AACO, CAREWare, EvaluationWeb, NHBS

Pillar 4: Respond

Goal 4: Identify and investigate active HIV transmission clusters and respond to HIV outbreaks.

Strategy 4.1: Maintain a robust core HIV public health data system to identify outbreaks of HIV.

- *Activity 4.1.1*: Increase the capacity for HIV-related lab reporting (as we focus on linking more PLWH to care the volume of labs will increase).
- *Activity 4.1.2*: Maintain capacity for new diagnoses follow-up.
- *Activity 4.1.3*: Maintain capacity for molecular HIV surveillance activities and cluster review.
- *Activity 4.1.4*: Quickly implement outbreak response plan as necessary to respond to rapidly growing networks of HIV transmission.
- *Activity 4.1.5*: Streamline systems of data management to avoid duplication, enhance data-linkage and ascertain death factors.

Strategy 4.2: Review incidences of HIV acquisition through Philadelphia's DExIS Project (Demonstrating Expanded Interventional Surveillance).

- *Activity 4.2.1*: Conduct systematic cohort reviews of sentinel new HIV diagnoses to identify missed HIV prevention opportunities and to deepen understanding of care-seeking among people at risk of infection.
- *Activity 4.*2.2: Develop plans for sustaining the DExIS activities after demonstration project ends.
- *Activity 4.2.3*: Establish interventions for implementing system-wide changes based on findings of the review teams.

Key Partners: PDPH AACO, HIV Outbreak Response Team, PDPH Division of Disease Control, community partners, DExIS Case Review Team, Community Action Team, and Policy Implementation teams
Potential Funding Resources: CDC HIV Prevention and Surveillance Prevention Cooperative Agreement (includes Component B funding for DExIS), Pennsylvania Department of Health, HRSA EHE, CDC
Estimated Funding Allocation: Current PDPH funding $2,269,023; Increased funding needed to implement plan: TBD
Monitoring Data Sources: HIV public health data, HIV Prevention program data, CAREWare.
Outcomes: PDPH will finalize protocols of cluster detection and response procedures.

Workforce Development

Goal 5: Ensure that the HIV workforce is appropriately trained, supported, and capable of meeting the goals of the Philadelphia Ending the HIV Epidemic Plan.

Strategy 5.1: Assess the capacity of the workforce needed to implement the EHE plan.

- *Activity 5.1.1*: Assess the need for additional staff in all levels of the EHE response.
- *Activity 5.1.2*: Assess training and development needs of existing and new staff.

Strategy 5.2: Develop the capacity of the prevention workforce to meet the goals of the Philadelphia EHE plan.

- *Activity 5.2.1*: Train community-based workforce to meet the goals of the EHE plan.
- *Activity 5.2.2*: Support expansion of the role of HIV testers to include responsibilities for active linkage to HIV medical care and PrEP through training and performance measures.
- *Activity 5.2.3*: Increase compensation of community-based HIV testing workforce to reflect increased responsibilities.

Strategy 5.3: Utilize programmatic and HIV public health data to develop the capacity of the HIV care workforce.

- *Activity 5.3.1*: Build capacity for new community-based partners to promote testing and treatment.
- *Activity 5.3.2*: Provide technical assistance and support by PDPH staff to clinical practices to assess barriers to and develop solutions for expanding routine HIV testing.
- *Activity 5.3.3*: Support expansion of the role of HIV testers to include responsibilities for active linkage to HIV medical care and PrEP through training and performance measures.
- *Activity 5.3.4*: Increase compensation of community-based HIV testing workforce to reflect increased responsibilities.
- *Activity 5.3.5*: Ensure staff is trained in new and expanded interventions in Pillar 2.
- *Activity 5.3.6*: Continue to provide ongoing clinical technical assistance for implementation of PrEP in settings across the city.
- *Activity 5.3.7*: Expand community mobilization to use community as a workforce partners in implementing the EHE plan.
- *Activity 5.3.8*: Increase pathways for leadership among frontline workers and people connected to affected populations.
- *Activity 5.3.9*: Expand HIV-related knowledge among hepatitis investigators and STD staff to link people into HIV treatment and PrEP care.
- *Activity 5.3.10*: Provide ongoing technical assistance and training for staff with direct client roles to improve cultural humility regarding such factors as how health care information is received, and how patient rights and protections are exercised.
- *Activity 5.3.11*: partner with the School District of Philadelphia to integrate current initiatives

Strategy 5.4: Develop capacity to implement services responsive to the changing landscape of healthcare in the wake of COVID-19 crisis and recovery.

- *Activity 5.4.1*: Increase capacity to use appropriate telehealth processes for service delivery

- *Activity 5.4.2:* Develop appropriate virtual means of provider training and service provision to people living with or at risk of HIV.

Some workforce activities are cross-cutting, and many have been previously included under Pillars 1 – 4. HIV workforce activities are listed here to provide focus on the needs of the EHE plan. Funding for these activities is included under Pillars 1 – 4.

Appendices

Appendix A: Priority Populations for the City of Philadelphia's Ending the HIV Epidemic Plan for Pillar 1: Diagnose and Pillar 3: Prevent

Category	Pillar 1: Diagnose			Pillar 3: Prevent
	2018 HIV Diagnoses	2018 Linkage to Care in 30 Days (#/%)	2017 Unaware (#/%)	# of HIV Negative Persons with a PrEP Indication
Total	**424**	**365 (86.1%)**	**2,019**	**13,900**
PWID				
PWID (Includes MSM/PWID)	71	54 (76.1%)	125 (3.2%)	2,480
MSM				
Black MSM	122	103 (84.4%)	1,202 (14.4%)	4,880
Hispanic/Latino MSM	42	37 (88.1%)		1,680
White MSM	33	31 (93.9%)		1,320
Multi-Race non-Hispanic MSM	<6	<6(100.0%)		N/A
Asian/Pacific Islander MSM	7	7 (100.0%)		N/A
American Indian MSM	<6	N/A (100%)		N/A
Transgender				
Transgender	9	6(66.7%)		
Heterosexual Contact				
Multi-Race non-Hispanic	0	N/A		
Asian/Pacific Islander	0	N/A		
American Indian/Alaskan Native	0	N/A		
Female (Birth Sex)				2,921
Black	8	7 (87.5%)	295 (7.2%)	
Hispanic/Latino	<6	<6 (100.0%)		
White	<6	<6 (100.0%)		

Category	Pillar 1: Diagnose			Pillar 3: Prevent
	2018 HIV Diagnoses	2018 Linkage to Care in 30 Days (#/%)	2017 Unaware (#/%)	# of HIV Negative Persons with a PrEP Indication
Multi-Race non-Hispanic	<6	<6 (100.0%)		
Asian/Pacific Islander	0	N/A		
American Indian/Alaskan Native	0	N/A		
Age Group				
Youth 13 – 19	20	100 (91.7%)	643 (51.5%)	N/A
Youth 20 - 24	89			
25 - 54	274	227 (82.8%)	1,640 (12.5%)	
≥ 55	41	38 (92.7%)	206 (2.9%)	

Appendix B: Priority Populations for the City of Philadelphia's Ending the HIV Epidemic Plan Pillar 2: Treat

Category	Total number of PLWH with evidence of care in last 5 years	PLWH with no care in 2018	PLWH in care not virally suppressed in 2018	Total not in care or virally suppressed	Percent of population not in care or virally suppressed
Total	15,066	2,395	1,710	4,105	27.2%
PWID					
PWID (Includes MSM/PWID)	3,261	478	444	922	28.3%
MSM					
Black MSM	3,485	610	430	1040	29.8%
Latino MSM	714	126	69	195	27.3%
White MSM	1,467	257	71	328	22.4%
Asian/PI MSM	76	13	*	*	*
American Indian MSM	9	*	*	*	*
Transgender					
Sexual contact	199	31	37	68	34.2%
Other°	48	7	15	22	45.8%
Heterosexual Contact					
Male (Birth Sex)					
Black	1,549	270	180	450	29.1%
Hispanic/Latino	322	68	25	93	28.9%
Multi-Race (non-Hispanic)	50	9	*	*	*
Asian/Pacific Islander	32	*	*	*	*
American Indian/Alaskan Native	10	*	*	*	*
Female (Birth Sex)					
Black	2,454	314	277	591	24.1%

Category	Total number of PLWH with evidence of care in last 5 years	PLWH with no care in 2018	PLWH in care not virally suppressed in 2018	Total not in care or virally suppressed	Percent of population not in care or virally suppressed
Hispanic/Latino	452	45	38	83	18.4%
Multi-Race (non-Hispanic)	69	11	8	19	27.5%
Asian/Pacific Islander	32	*	*	*	*
American Indian/Alaskan Native	7	*	*	*	*
Age Group					
Youth 13 – 19	80	8	13	21	26.3%
Youth 20 – 24	482	78	100	178	36.9%
25 –54	9,371	1,717	1,208	2,925	31.2%
≥ 55	5,116	589	386	975	19.1%
° Includes PWID, Sexual Contact/PWID, and Unknown/NIR)					

Appendix C: Modified HIV Care Continuum Definitions by Stage

Indicator	Numerator Definition	Denominator Definition
Diagnosed HIV infection	Number of PLWH in Philadelphia with diagnosed HIV infection in 2018	Number of PLWH with diagnosed HIV infection with a reported CD4 or viral load in the last five years (1/1/2014 – 12/31/2018) and number of PLWH estimated to be unaware of their HIV status in Philadelphia in 2018
Linkage to care	Number of persons with newly diagnosed HIV in Philadelphia that were linked to care in 30 days in 2018	Number of persons with newly diagnosed HIV in 2018 in Philadelphia
Retention in care	Number of PLWH in Philadelphia who had evidence of ≥2 CD4 counts and/or viral loads at least 90 days apart in 2018	Number of PLWH with diagnosed HIV infection with a reported CD4 or viral load in the last five years (1/1/2014 – 12/31/2018) and number of PLWH estimated to be unaware of their HIV status in Philadelphia in 2018
Viral suppression	Number of PLWH in Philadelphia whose last viral load of the year was <200 copies/mL in 2018	Number of PLWH with diagnosed HIV infection with a reported CD4 or viral load in the last five years (1/1/2014 – 12/31/2018) and number of PLWH estimated to be unaware of their HIV status in Philadelphia in 2018

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