BALTIMORE CITY, MARYLAND

Ending the HIV Epidemic

Baltimore City EHE Plan 2020 - 2030

Baltimore City Ending the HIV Epidemic Committee and Working Group

Written: December, 2019

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Baltimore's Guiding Document for HIV/AIDS Efforts in the City

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II. Glossary of Terms/Acronyms

Term/acronym	Definition
ACE	Adverse Childhood Experience
AETC	AIDS Education Training Center
AHC	Accountable Health Communities
AIDS	Acquired Immuno-Deficiency Syndrome (AIDS-defining condition or CD4 less than 200 cells/mm3
ASO	AIDS Service Organization
BCHD	Baltimore City Health Department
BCRI	Baltimore Crisis Response Inc
BESURE	Behavioral Surveillance (Baltimore)
BHSB	Behavioral Health systems Baltimore
BRFSS	Behavioral Risk Factor Surveillance System
CBO	Community-Based Organization
CCHR	John Hopkins Center for Child and Adolescent Health Research
CD4	Type of white blood cell that helps one fight off infection
CDC	Center for Disease Control and Prevention
CFAR	Center for AIDS Research
CHW	Community Health Worker
CSW	Commercial Sex Workers
DIS	Disease Intervention Specialist
DOT	Directly Observed Treatment
ED	Emergency Department
EHE	Ending the HIV Epidemic
EMA	Eligible Metropolitan Area- Baltimore, Harford, Howard, Carroll, Anne Arundel, and Queen Anne's
GTZ	Getting to Zero (JHU REACH program)
HCAM	Healthcare Access Maryland
HCV	Hepatitis C Virus
HIV	Human Immuno-Deficiency Virus
HMO	Healthcare Management Organization
HPG	HIV Planning Group and Commission
IDU	Injecting Drug User
JHU	Johns Hopkins University
KAP	Knowledge, Attitude and Practice
LGBTQ	Lesbian, Gay, Bisexual, Transgender, Queer
LTBI	Latent Tuberculosis Infection
LTC	Linkage to Care
MCH	Mother and Child Health
MCO	Managed Care Organization
MDH	Maryland Department of Health
MED CHI	Maryland State Medical Society
MICA	Maryland Institute College of Art

MSM	Men who have sex with men
NACCHO	National Association of County and City Health Officials
NASTAD	National Alliance of State and Territorial AIDS Directors
NHBS	National Health Behavioral Surveillance (system)
NIC	Not in Care
OOC	Out Of Care
PEP	Post-Exposure Prophylaxis
PLWH	People Living with HIV
PrEP	Pre-Exposure Prophylaxis
PTC	Prevention Training Center
PWID	People who inject drugs
RW	Ryan White
SSP	Syringe Services Program (Needle Exchange)
STI/STD	Sexual Transmitted Infection/Disease
U=U	Undetectable=Untransmittable (Treatment as Prevention)
Viral Load	Quantity of virus in a given volume (# of RNA copies per milliliter of blood)
WHO	World Health Organization

III. Preface

December 1, 2020

The Baltimore City Ending the HIV Epidemic (EHE) plan is a compilation of countless hours of discussion, community conversations, collaborations, data analysis, and pursuit of novel intersectionality. Described herein reflects our status in terms of: (1) where we are in the development of this plan, (2) what this document currently represents, and (3) specific modifications and additions we utilized to expand the required structure of this plan.

The development of this plan is more fully described in *Section VI: Engagement Process*. Baltimore City Health Department (BCHD) convened a series of community engagement sessions to ensure community input to inform this plan. Some sessions were focused on the EHE Plan, while others focused on other important aspects of HIV programming. Both types of sessions included information relevant to this planning process. The items included in this document are primarily informed by community input, as described below.

To create a more fully responsive plan, reflecting the needs of those affected by it, our planning process has included an ongoing schedule of listening and feedback sessions, utilizing a range of settings and formats. This reflects the pervasive and ongoing effect of COVID 19 upon this community and jurisdiction, which is addressed later in this preface. The two primary planning groups, the Ryan White Council and the HIV Planning Group (HPG), as well as other key stakeholders (Baltimore EHE working group) have reviewed and voted for concurrence on the plan. In tandem with this review we are in the first wave of a community-wide status neutral needs assessment, focusing on Ryan White clients, those who are HIV-negative, and those unaware of their status. The results of the needs assessment will be essential to inform updated aspects of this plan.

An important and unresolved issue affecting this plan is the issue of language and its nuances. Feedback obtained from our community listening sessions have consistently revealed that some terms traditionally used in academia, clinical practice and public healthcare are both hurtful and stigmatizing. These include such terms as “men who have sex with men,” “targeted groups,” “at-risk groups,” and “risky behaviors,” among others. Although we made every effort to avoid such language, it remains in some places. As this plan becomes more fully developed, one important aspect of revision will be the identification and utilization of language that is non-stigmatizing and inclusive.

In addition to language, we continue to struggle with community feedback suggesting that identifying/targeting certain groups creates further stigma and isolation. We recognize that the strategies described in our plan should address the health and well-being of our entire communities. By ensuring high quality health prevention and treatment to *everyone* we address social inequities and promote social justice. We are still working on how to best explore and communicate these nuances in our proposed strategies.

There are a few aspects of this document that deviate from the recommended structure. In addition to the required sections of the plan (key activities, partners, funding and budgets), the repeated calls for inclusion of social justice from the community led to its inclusion for each strategy. “Addressing health disparities” is a key part of Ending the HIV Epidemic in Baltimore, hence it is included in each of the strategies.

A foundational pillar has been added: *Educate, Transform, and Inform*. This pillar serves two purposes: (1) to recognize the key aspects of EHE that are cross cutting through the traditional pillars of "test, treat, prevent and respond." (e.g. addressing stigma is important for each of the pillars); and (2) to articulate the concern that in Baltimore these pillars alone are inadequate to address HIV and End the HIV Epidemic. Strong data collection systems, data analyses, and ongoing data review will be important across all pillars. To highlight these areas, these are discussed collectively in the foundational pillar, instead of individually in each pillar. The work of HIV does not begin with testing, but rather with what we identify as "the work before the work." Without addressing stigma, mistrust, and the social determinants of health, no amount of testing, treatment, prevention, or response will be able to meet our goals. As testing and treatment alone will not end this epidemic; a broader, more foundational view is needed in order to respond to HIV in our communities.

The path to HIV prevention and treatment is not as linear as the four pillars would suggest. Individuals cycle in and out of seasons of risk, they fall in and out of care; more often HIV prevention and treatment is more along a continuum of swirl or helix, reflecting complex interactions across and between social, economic, political, and health disparity factors, which can facilitate or impede progress. The focus of this report, therefore, is on providing a comprehensive panel of strategies, rather than "correct" assignment of strategies to each pillar.

HIV in Baltimore is not the purview of one agency or one community, nor can it be accomplished in isolation. There is for this draft cursory mention of the social determinants of health, particularly housing, mental health, substance abuse, food insecurity, poverty, but these items require a more detailed exploration than is currently presented. This will provided in subsequent iterations of this report. The epidemics of Hepatitis C (HCV), Hepatitis B, syphilis, opioid/substance abuse and violence create syndemics that must be unraveled, with the goal of identifying common root causes to mitigate their impact.

Finally, the effect of the COVID-19 pandemic on the creation, development, and refining of the EHE plan cannot be overstated. The same communities disproportionately impacted by HIV are also disproportionately affected by SARS Co-V2, with higher rates of morbidity, mortality, and transmission. This, combined with a greater risk of the economic consequences of epidemic control measures (lockdowns) and limited digital access meant the increased work needed to ensure the presence of community voices was significant. This, however, does not begin to identify the additional burden these communities face as the pandemic rages. The mental health consequences of the pandemic, especially for those living with HIV, have been significant, with marked increases in anxiety and depression. The concomitant increases in alcohol and substance abuse have been a prominent feature of this increase, and in Baltimore City the number of drug- and alcohol-related deaths are more than double the number of people who die of homicide. The city now has the highest overdose fatality rate of any city in the U.S., and this has increased compared to the same time last year. These findings reflect the ongoing challenge the COVID pandemic will present to the development of the subsequent plan iterations, but collaborations with community partners and efficient use of digital resources will help bridge the anticipated gaps. (References:

This document is designed to be living and ever evolving, rather than an isolated tome that is outdated as soon as it is finished. If the document is developed correctly, then this is a plan that will never be truly "final," but instead will be ever changing as it is remodeled and refined based upon community input and the ever changing HIV epidemic in Baltimore.

We look forward to the continued work of plan modification, ongoing expansion, and diversification of community input to capture diverse perspectives while expanding community engagement and investment. Thank you for your interest in Baltimore City's Ending the HIV Epidemic (EHE) plan.

Adena Greenbaum, MD MPH
Assistant Commissioner for
Clinical Services and HIV/STD Prevention
Baltimore City Health Department

Victoria Cargill, MD MSCE
Assistant Commissioner for Ryan White
Programs and Community Risk Reduction
Baltimore City Health Department

IV. Mission, Vision, Values and Approach

The **mission** of the Baltimore City Health Department (BCHD) is to protect health, eliminate disparities, and ensure the well-being of every resident of Baltimore through education, advocacy, and direct service delivery. We envision an equitable, just, and well Baltimore where everyone has the opportunity to be healthy and to thrive.

The **vision** of this plan, as adapted from the National HIV/AIDS Strategy, is that Baltimore is 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.

In 2019, BCHD began to review and revise its core values and develop a strategic plan. The newly appointed Commissioner of Health, Dr. Letitia Dzirasa (March 2019), initiated this process by embarking upon a series of listening sessions that involved intimate conversations held separately with BCHD staff and the Baltimore City community. The values that arose from this process have been used as a basis for this plan.

The Baltimore EHE plan is for everyone. Everyone has a role to play so when it says "we," it means everyone working to End HIV in Baltimore.

Collaboration: We practice selflessness and empathy. We are collaborative and respect others" input. We ensure thoughtful, transparent, and intentional communication.

Integrity: We serve and work with integrity. We hold each other and ourselves accountable through an equitable lens.

Empowerment: We protect people and empower them. We seek to change lives. We meet people where they are and do it with empathy.

Data Driven: The EHE plan contains evidence-based and community-informed decisions.

Innovation: The EHE plan embodies bold ideas. We are innovative risk-takers with diversity of thought. We are willing to try new things and we aim to be creative in our approach, always keeping quality of care as a priority. We lead the fight of public health with boldness and courage.

In addition to the BCHD values, the EHE working group has also identified 4 key values, specific to Ending the HIV Epidemic. These are as follows:

Harm Reduction: All HIV treatment and prevention programs should start "where people are," knowing that not all persons are immediately prepared to eliminate all risk behaviors and adopt all risk reduction measures. Harm reduction strategies are effective in reducing HIV transmission and acquisition risk because they encourage achievable steps and help keep people engaged so that they are more readily linked to services when they are ready to access them.

Health Equity: This plan examines service delivery and program implementation through a health equity lens. The World Health Organization (WHO) defines equity as the absence of avoidable, unfair, or remediable differences

among groups of people, whether those groups are defined socially, economically, demographically or geographically or by other means of stratification. "Health equity" or "equity in health" implies that ideally everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential. The Healthy Baltimore 2020 white paper highlighted Race, Equity and Inclusion as a core value. It states that it is impossible to talk about health in Baltimore without addressing the significant disparities that exist because of structural discrimination, racism, poverty, and historical practices of exclusion.

We intend to strengthen collaborations with and education of individuals and agencies (both private and public) that impact the health of people living with HIV and AIDS and those at increased risk for acquiring HIV. Mindful that HIV prevention and care efforts exist in the context of social inequity, stigma, and discrimination, programs must focus on services for those disproportionately impacted by HIV, and services must be delivered in a way that is sensitive to social environments and root causes of inequity. While addressing the entire array of social determinants of health **(see Figure 1)** may be outside of the scope and ability of many programs, every effort should be made to acknowledge and incorporate them into programming.

Figure 1: Social Determinants of Health Source: Healthy People 2020

Self-Determination: Activities should honor an individual's autonomy in decision-making and voluntary participation. Programs must give participants full and factual information and recommendations, while leaving the decisions to them. For example, while planners and practitioners often speak of "linking" people to care, it is necessary to acknowledge that people choose to enter care; the primary action is taken by the person, not the person providing assistance or guidance.

Sexual Health Promotion: The World Health Organization defines sexual health as "…a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well

as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected, and fulfilled."

While awareness of the risk of sexual behaviors must be disseminated through culturally appropriate sex education, sex as a component of a healthy life and aspects of healthy sexual relationships must also be incorporated into the curriculum. Sex education must emphasize the importance of respect toward self and others in all sexual relationships and the right of all persons to have sexual relationships characterized foremost by autonomous decision-making and mutual respect.

V. Introduction

A. National Ending the HIV Epidemic (EHE) Initiative

In the State of the Union Address on February 5, 2019, President Donald J. Trump announced his Administration's goal to end the HIV epidemic in the United States within 10 years. To achieve this goal and address the ongoing public health crisis of HIV, the proposed Ending the HIV Epidemic: A Plan for America aims to leverage the powerful data and tools now available to reduce new HIV infections in the United States by 75% in five years and by 90% by 2030 (www.HIV.gov).

CDC analysis of HIV data found that more than 50% of new HIV diagnoses occurred in only 48 counties/cities, Washington, D.C., and San Juan, Puerto Rico. Seven states were also determined to have a substantial rural burden (www.CDC.gov/endhiv). In 2020, these 57 geographic areas became the main focus of financial and technical resources from the federal level (Phase I) with efforts expanding to other geographic locations over the subsequent 10 years. Baltimore City is one of these Phase I jurisdictions and has worked to develop this plan focusing on the four national pillars of 1) Diagnose, 2) Treat, 3) Prevent and 4) Respond, as well as a Baltimore priority pillar/foundation that focuses on "Educate, Transform and Inform."

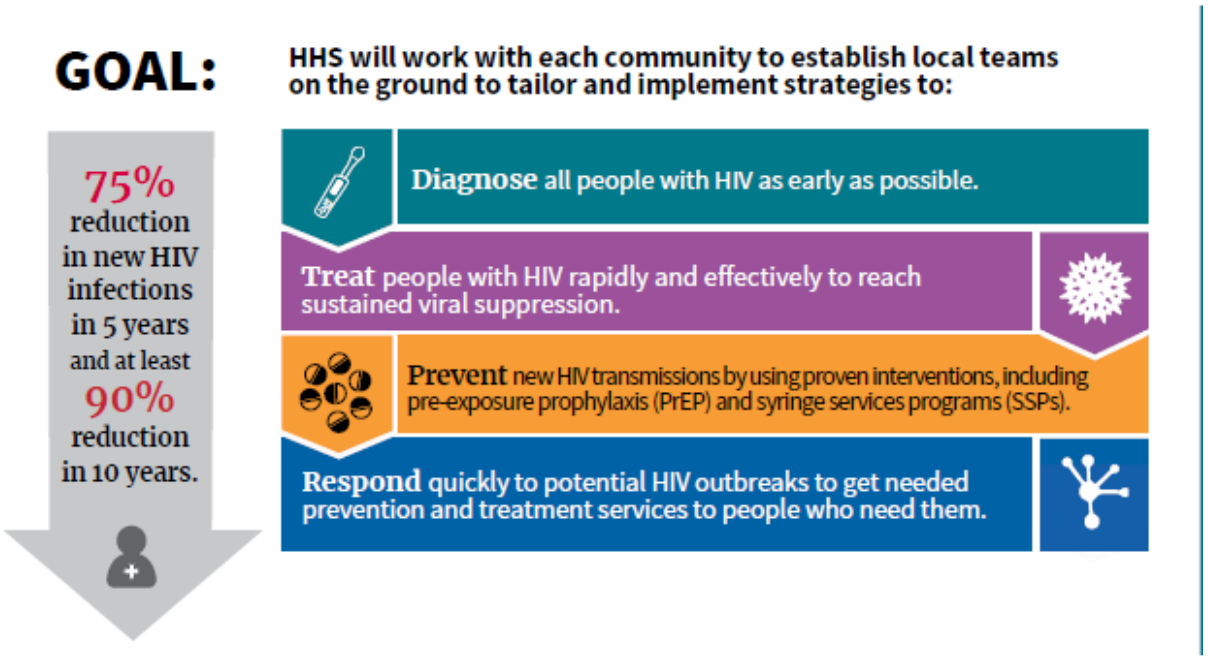


Figure 2: National EHE Plan Pillars- www.HIV.gov

B. A Brief Summary of HIV in Baltimore

The number of new HIV diagnoses reported for Baltimore City in 2018 was 224, a drastic decrease from the high point in 1991 (1,384). The highest number of new HIV diagnoses is in individuals between 20 and 29 years of age. There have been zero pediatric diagnoses of HIV over the last 2 years. At the end of 2018, there were 11,036 people in Baltimore living with an HIV diagnosis, of which the largest age category was those between 50 and 59 years of age (34%).

VI. Engagement and Plan Development Process

Community engagement is a vital element to the development of the Baltimore City Ending the HIV Epidemic Plan. The Baltimore City Health Department has a long-standing **principle of ensuring community engagement and incorporating community perspective** in all of its planning, implementation, and evaluation activities. In the last few years, the bureau of HIV/STI Prevention and Clinical Services and the Ryan White Program have been facilitating listening tours, community conversations, and community workshops to help translate ideas and feedback into planning and programming. This approach has guided the development of this Ending the HIV Epidemic Plan.

Maryland/Baltimore Integrated HIV Plan: A Foundation to Ending the HIV Epidemic Plan

Baltimore and the State of Maryland have developed several HIV prevention and treatment plans over the last decade with the current **"Maryland Integrated HIV Plan 2018-2022: A Comprehensive, Coordinated Response to HIV for Baltimore and Maryland,"** (referred to as the "Maryland/Baltimore Integrated Plan") serving as the cornerstone for this EHE plan. The Maryland/Baltimore Integrated Plan was developed during more than three years to address the 2020 National HIV/AIDS plan. Officials at the Maryland Department of Health (MDH) and the Baltimore City Health Department (BCHD) facilitated discussions with community stakeholders and various planning bodies including the Baltimore EMA Ryan White HIV Services Planning Council, Baltimore HIV Planning Group, and the Maryland HIV Planning Group to create a common framework for Maryland's HIV plan to ensure consistency across the state. The Maryland/Baltimore Integrated HIV plan was the result of those discussions.

Planning Bodies

Regular presentation, feedback, and consultation with both the **Baltimore EMA Ryan White Services Planning Council** (and its sub-committees) and the **Baltimore HIV Planning Group and Commission,** including their members and their wider networks have and will continue to guide the structure and technical direction of the EHE plan development.

Since 1992, the **Greater Baltimore EMA HIV Health Services Planning Council** has served as the lead community voice in the HIV service planning and allocation of approximately $16 million in Ryan White Part A funding annually. Appointed by the Mayor of Baltimore City, the Planning Council is made up of 40 members and six committees. Its membership is composed of HIV providers, university hospitals, community clinics, government agencies, substance use providers, formerly incarcerated individuals, community leaders, and consumers. Over 33% of the membership are people living with HIV. The Planning Council has been key to involving new community voices to identify the continuing needs of vulnerable communities in the region. Through the Ryan White program, the Planning Council conducts listening sessions, town hall meetings and stakeholder focus groups to help inform planning. In 2020, the Planning Council is leading a community-driven project to design and implement the first status-neutral needs assessment survey in the region.

Formerly the Baltimore City Commission on HIV/AIDS and established by an Act of the Baltimore City Council in 2002, the **Baltimore City HIV Planning Group and Commission (HPG)** is the official HIV prevention planning body of the City of Baltimore. The group was officially commissioned by the Mayor of Baltimore City in 2014,

after considerable consultations and collaboration with local stakeholders and in response to the CDC's directive of the existence of such a body when Baltimore City became a directly funded jurisdiction under the PS12-1201: *Comprehensive HIV Prevention for Health Departments* grant. The HPG was established to work with BCHD by providing informed guidance to the agency for the development and implementation of HIV prevention planning.

The HPG is composed of key stakeholders directly and indirectly involved in the continuum of HIV care, including representatives from faith and recovery communities, community-based organizations, universities/research institutions, charitable foundations, business, the criminal justice system, education, persons living with HIV, persons affected by HIV, physicians, and prevention, treatment, and mental health providers. In alignment with the goals of the National HIV/AIDS Strategy, the HPG is entrusted with providing guidance on HIV prevention activities.

Local Community Partners

Community engagement has also extended beyond our planning bodies, to include:

- Classic town halls open to the public
- Listening tours focused on key populations
- Group meetings with providers
- Meetings with local community-based organizations
- One-to-one meetings with key stakeholders and institutions
- Community-driven discussions and story-telling including Baltimore in Conversation
- Creation of EndHIVBaltimore.com website

Some of these platforms have used open dialogue with guiding questions, some have used group activities, while others have employed needs and recommendation brainstorming by each EHE pillar. Qualitative data from these events has been collected, analyzed, and regularly shared back to the community, as well as presented to the EHE prevention and care committee and the EHE working group. A concerted effort has been made to include "new voices" that represent communities impacted by HIV. This has included focused group discussions with the ballroom community, transwomen, transmen, black women, youth, religious leaders, and the LatinX community, among others.

The development of the EHE plan has been **rooted in community input and insight**. **Appendix B** includes the list of engagement sessions we have facilitated since learning about the National EHE initiative (Early 2019). **Appendix C** lists the meetings and topics of the Internal BCHD EHE Prevention and Care Committee, and **Appendix D** includes feedback from our community EHE working group.

Dedicated effort is made to have all aspects of community involvement meaningfully integrated into the plan, as mirrored in similar processes related to Baltimore's recent Community Health Assessment- 2017, the State of Health in Baltimore- 2017 and Healthy Baltimore 2020. In conjunction with larger BCHD values and practices, community participation is a fundamental part of the work.

There are several important aspects of this. First, we ensure we are respecting the time, experience, and expertise of our community members. Second, we format each engagement process to best meet the needs of each group.

For example, for some that might mean an independent health department event, whereas for others, it may mean incorporating our program into already existing meetings or gatherings. Third, we ensure the listening sessions are transparent, both in their purpose, and the messages we receive during the session. Fourth, we are committed to accountability on BCHD's part. We are incorporating follow up and follow through, to ensure the comments and suggestions we receive are acted on. Presenting draft outlines and draft content back to communities helps them to see their voices reflected in the plan's design and content, reducing feelings of "community engagement fatigue."

Programmatic Reflection

As the community perspective has informed the process and plan, so too has an **internal BCHD evaluation and reflection on past and current programming**. Internal discussions have been held with prevention staff, field operations, clinical staff, the epidemiology team, and other key implementing partners to review both processes and outcomes. A bi-monthly Continuous Quality Improvement (CQI) meeting also helps support this process. Review and discussion of Ryan White and Prevention sub-grantees and their activities has also informed decisions on ongoing needs and barriers, access to services, efficiency in funding, and quality of services.

Data-driven

Epidemiological data provided by MDH has been coupled with BCHD testing and linkage data, Ryan White CareWare data, Behavioral Surveillance data (BESURE), general health data on Baltimore, and several other sources of data on the general population, specific population sub-sets, and people living with HIV to help paint a picture of the situation in which prevention and care systems sit. The **situational analysis** will be further developed as the community engagement process continues and with the implementation of a **status neutral consumer needs assessment survey** planned for implementation in late 2020. This status neutral survey is being developed as a collaboration among the Ryan White Planning Council, the Baltimore HIV Planning Group, BCHD, the health authorities of the surrounding EMA, providers, and the community. The objective is to gather barrier and need information from people living with HIV and those who are HIV-negative from Baltimore and the surrounding communities. Results will be analyzed and a multi-stakeholder, representative group will examine the results to determine strategies and activities to meet these needs and address highlighted barriers. This information will then be used to update, adapt and further detail this EHE plan.

Final Review

Concurrence on the final EHE plan will be garnered from the key Baltimore City Planning bodies in November 2020. Leading up to this, the EHE plan will be open for public comment/feedback via www.EndHIVBaltimore.com. Public feedback will be integrated into the final draft and shared to the Greater Baltimore EMA Ryan White Health Services Planning Council, Baltimore's HIV Planning Group and Commission, and the EHE working group. Members of these groups will have their final say on any concerns, plan strong points, and recommendations for final changes or additions before voting on each key section of the plan with a proclamation of either concurrence, concurrence with reservations, or non-concurrence. **Baltimore City's EHE plan will remain a living document**, regularly monitored, reviewed, and updated in an iterative process that reflects updates in data, technologies, best practices, ongoing feedback from community stakeholders, significant shifts in funding, efficiency and efficacy of proposed strategies/activities, etc.

VII. Epidemiology

Introduction

While HIV prevention efforts in Baltimore City have made significant progress since the beginning of the epidemic, the incidence rate of HIV among people aged 13+ remains high with an overall rate of 43.9/100,000[1]. This is 2.2 times the rate of overall rate of HIV among people aged 13+ in Maryland in 2018 (19.6/100,000), 3.0 times higher than the 2017 national rate, and 3.5 times higher than the Healthy People 2020 goal. In addition, Baltimore has a large number of persons living with HIV as a result of the high rates of HIV the city has endured since the beginning of the epidemic. This situation is complicated by socio-economic and health disparities that challenge HIV prevention, treatment, and adherence. These disparities put disproportionately affected populations at greater risks for becoming HIV-positive.

HIV Incidence in Baltimore City

According to the 2018 Baltimore City Annual HIV Epidemiological Profile[2], 224 new cases of HIV were reported in 2018. This represents a 1.3% decrease from 2017, and the possible beginning of a leveling in the rate of reduction that has occurred since 2010. Of the 224 new HIV diagnoses in Baltimore City in 2018; 168 (75%) were men, while 56 (25%) were women. One hundred eighty-two (81%) of the 224 new cases of HIV in 2018 were African Americans, while this same demographic group makes up 63.7% of Baltimore's population. Underlying systemic socio-economic infrastructures have perpetuated these disparities since 2010.

While the overall trend from 2010 to 2018 for incident HIV has been downward, the proportion of new cases among young adults aged 20-39 years has continued to increase. This 20-year age group accounted for 61% of all of the incident cases of HIV in Baltimore in 2018. In contrast, the same age group constituted 39% of all new cases in 2010. This demographic shift in HIV incidence is showing a worrying trend, since the 20-39 age group has historically been challenging to test, engage and retain in care.

A review of incident cases of HIV by exposure categories showed that men who have sex with men (MSM) represented 56% of the new cases of HIV in 2018 and heterosexual transmission represented 33% of all new cases, indicating that the HIV epidemic in Baltimore is primarily sexually transmitted (89%). However, it is important to note that the exposure category of IDU has not been eliminated and its rate of decline has been negligible since 2014, consistently accounting for 10% or more of new cases. Incidence in this exposure category must be monitored carefully due its demonstrated capacity to lead to transmission when contaminated needles are shared.

An estimated 12% of those living with HIV in Maryland remain unaware of their HIV-positive status. A standardized algorithm is used to estimate the proportion of people who are unaware of their HIV status. Among those unaware of their HIV-positive status 61% are among those under 34 years of age, 28% are non-Hispanic black or Hispanic, 14.3% are MSM, and 13.3% have heterosexual exposure as a risk factor. The persons who experience the highest incidence of HIV are also the most likely to be unaware of their status.

HIV Prevalence

There are several differences in the demographics and exposure categories of people living with HIV compared to those who are newly diagnosed. In Baltimore City, in 2018, there were 11,036 people greater than 13 years of age living with HIV of whom 7,098 (68%) were men, 3,781 (34%) were women, 8 (< 1%) were transgender men and 149 (2%) were transgender women. In 2018, women comprised 25% of incident cases while comprising 34% of people living with HIV in 2018.

The age of most people who are living with HIV is substantially different than those who are currently becoming infected. While 36% of incident cases were under 30 in 2018, 82% of people living with HIV are greater than 30 years; 57.7% greater than 50 years.

Figure 3 shows the race/ethnicity of people living with HIV in Baltimore in 2018. The relative proportion of African Americans to other races in Baltimore has not changed dramatically in the last 20 years; 86% in 2000 and 85% in 1990.

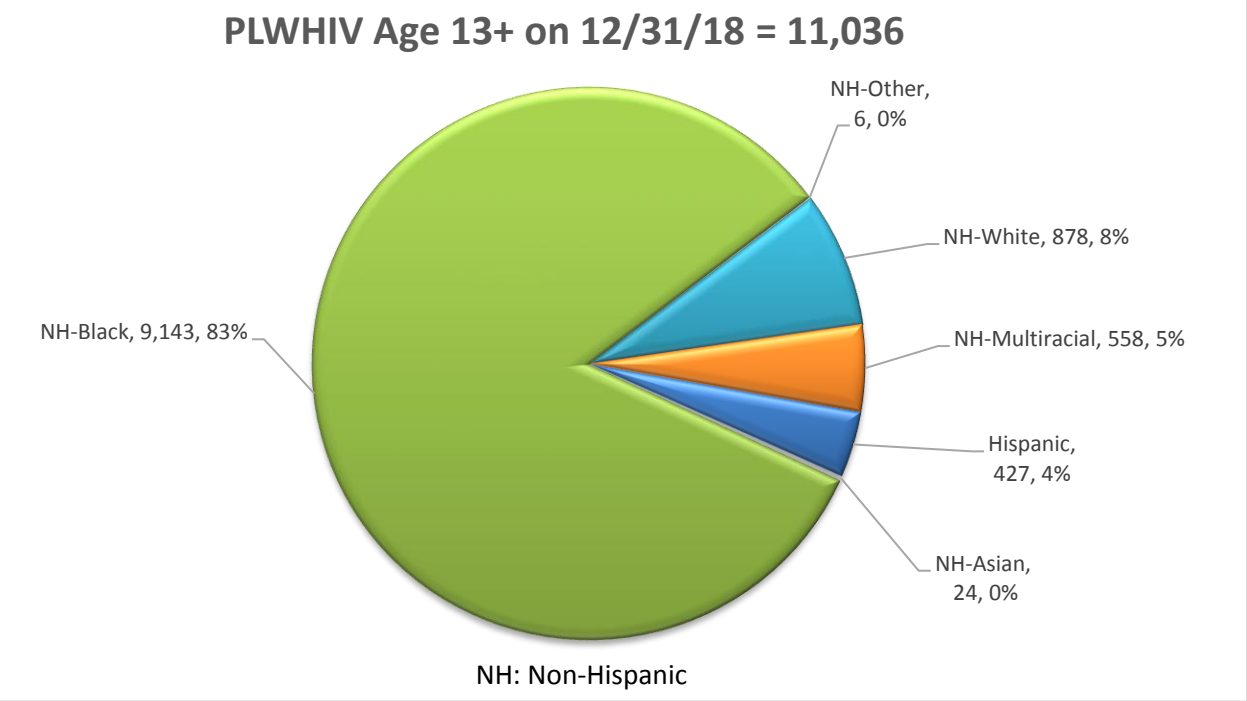


Figure 3: Distribution of people living with HIV by race/ethnicity in Baltimore City, 2018.

Source: Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health - HIV in Baltimore City-2019

In the case of reported exposure category among all people living with diagnosed HIV, about 32% reported Male to Male sexual contact (MSM), 30.7% reported Injection Drug Use and 30.8% reported Heterosexual contact as their exposure category.

Figure 4 shows the geographic distribution of people living with HIV in Baltimore City in 2018. The highest prevalence zip codes of people living with HIV/AIDS are in 21201, 21202, 21205, 21217, 21223 and 21222.

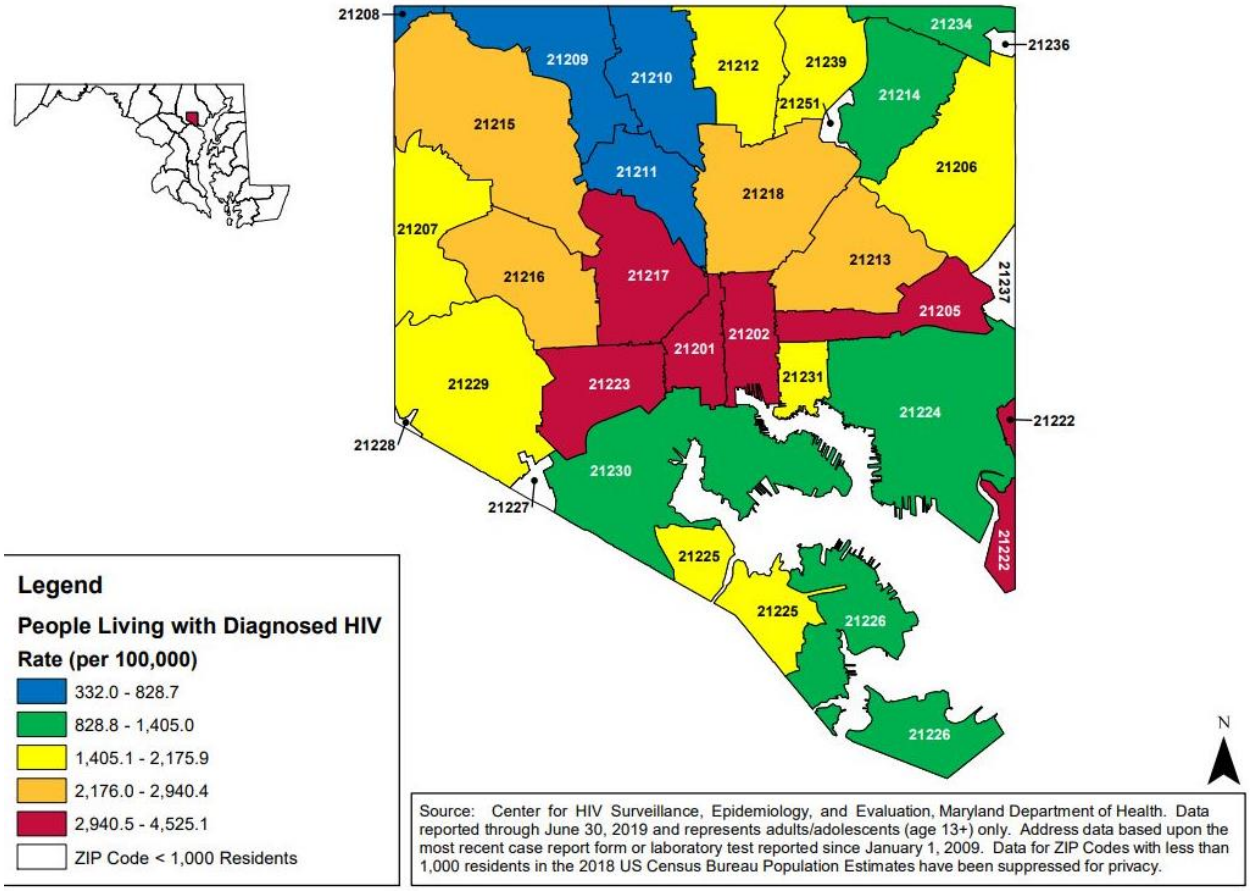


Figure 4: Geographic distribution of people living with HIV in Baltimore City, 2018.

Source: Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health – Baltimore-City –Living-Rate

Baltimore City has an estimated 12,484 individuals aged 13+ living with HIV. Of those, 11,036 (88.4%) are diagnosed HIV/AIDS, 8,970 (72%) are retained in HIV care and 7,412 (59.4%) have a suppressed Viral Load (**Figure 5**).

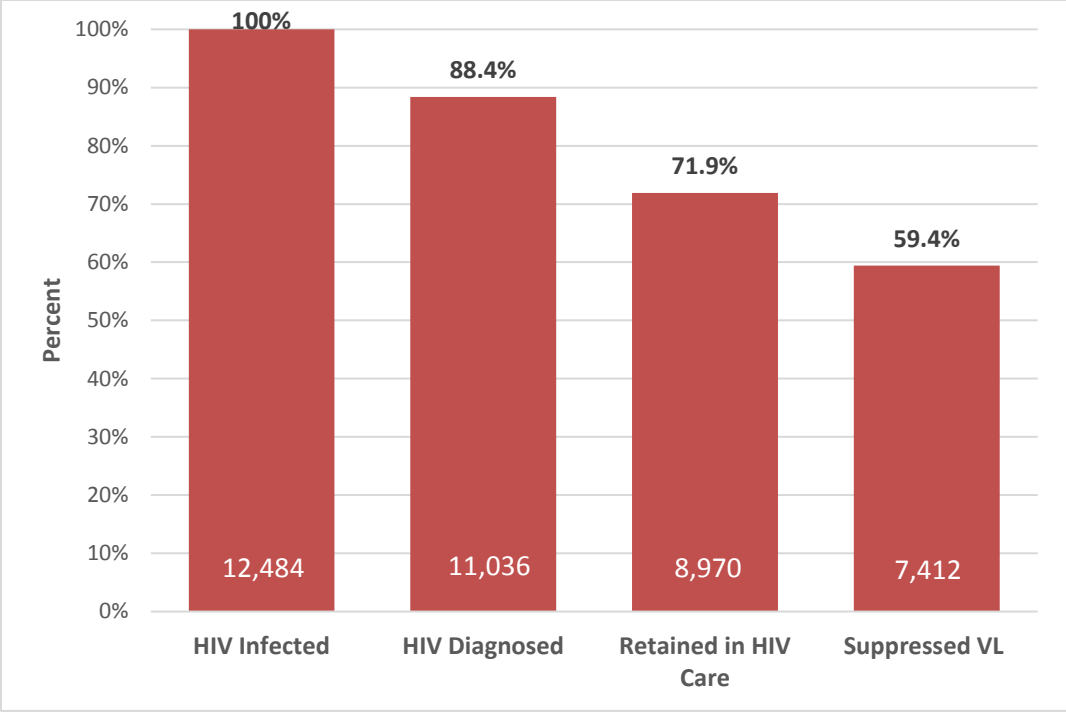


Figure 5: Prevalence-Based Estimated HIV Continuum of Care among People Aged 13+, 2018
Among current Baltimore City residents living with HIV

Source: Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health – Baltimore-City –HIV-Annual-Epidemiological-Profile-2018

Populations at High Risk of HIV Infection

It can be challenging to define populations who are at "high risk" of HIV transmission. This categorization can also unintentionally imply individual fault. Defining such populations locally is a community-centric endeavor and must be done so with the clear denotation that "risk" or "high risk" in this instance is often as much or more a manifestation of societal systems as it is attributable to the behavior of a specific individual.

HIV Incidence in Baltimore City has steadily declined in the last 10 years, yet there are a few groups in the population that continue to be at high risk for HIV, particularly in terms of their demographic factors, geographic distribution and transmission/risk factors. Baltimore also has very high rates of other STIs, and BCHD's outreach program offers both syphilis and HIV testing, as well as gonorrhea and chlamydia NAAT testing.

Based on the 2018 Baltimore City Annual HIV Epidemiological Profile[3], the risk factors for HIV transmission in Baltimore have remained largely the same, with MSM exposure largely driving the epidemic as MSM contributed more than 50% of new HIV diagnosis in the last 5 years. In addition, the youth and young adults continue to be disproportionately affected by HIV, as 65.6% of newly diagnosed cases in 2018 were among people between ages 13-39 years (ages 13-19: 4.5%; 20-29: 32.1%; 30-39: 29.0%). In addition, over 80% of new diagnoses were African Americans. For these reasons, prevention strategies employed to reach those at greatest risk of being exposed to HIV should be inclusive of MSM and young people of color.

Geographically, the top five zip codes where 45% of the newly diagnosed cases in 2018 resided at the time of diagnosis should be targeted for prevention and outreach: 21215 (9.8%), 21213 (11.2%), 21218 (8.9%), 21224(7.6%) and 21217 (7.6%).

In 2018, we noticed a shift in the syphilis epidemic that was consistent with national trends. While primary and secondary syphilis (P&S) cases in prior years were highly concentrated in MSM, the P&S rates for women in Baltimore City went up from 7.30/100,000 to 44.77/100,000. Of note, P&S rate in white females went up from 1.07/100,000 in 2017 to 27.74/100,000 in 2018. As a result of an in-depth analysis of our partner services interviews, we initiated expanded outreach testing in response to this shift in demographics. This confirmed ongoing heterosexual transmission as well as cases among people who cited commercial sex work and people who inject drugs as risk factors. For this reason, BCHD initiated 'syphilis blitz" outreach beginning in May 2018 in areas with high rates of commercial sex work and drug use. Some people were found to be co-infected with HIV and syphilis; people mono-infected with HIV infection were also diagnosed through these efforts. BCHD plans to continue work aimed at reducing new syphilis infections, with the development and expansion of culturally sensitive programs.

In Baltimore, the implementation of syringe services programs (SSP) has been credited as one of the primary reasons for the significant drop in new cases of HIV. Baltimore's SSP has more than 20,000 registered clients, with around 4,000 actively participating. In as much as we have a robust syringe exchange program in place, it is extremely important to continue to test PWID to ensure that new transmission clusters in this population are identified and addressed.

Lastly, the plan's strategies will also ensure focus on other high-risk, data-poor, or insufficiently engaged populations not limited to those newly-released from incarceration, unstably housed individuals, LatinX community, transgender, immigrant community, and Native Americans.

VIII. Situational Analysis

All of the needs, gaps, and barriers to prevention and care cited below are critical for reflection and action to achieve the goals of Ending the HIV Epidemic. However, understanding the realities of limited human and financial resources, the EHE working group (external to BCHD) and BCHD staff (internal) have scored the below challenges and needs to help prioritize focus and resources into Priority level 1 (highest), Priority level 2 (second highest) or unmarked (third-level priority). Each issue was scored based on 4 factors:

- **Size/Reach-** Number and percentage of people impacted
- **Bias-** Degree to which it affects marginalized populations
- **Impact-** Degree to which it affects prevention or care outcomes
- **Manageability-** degree to which we can control or influence it

These priority levels can be used as guidance when new projects are developed and new funding becomes available. As all social determinants of health work in unison to influence individual health outcomes, none were deemed to be more important than another and therefore they were not prioritized.

A. Social Determinants of Health

Implementation strategies targeting the 4 main pillars of test, treat, prevent, and respond can only be successful through an understanding and initiation of interventions addressing broader structural and societal systems. Many of these are underlying, "upstream" determinants of health that have an important impact on HIV treatment and prevention. While individual choices and behaviors are key variables in HIV outcomes, they do not occur in a vacuum. Social determinants have a significant influence on HIV outcomes by establishing an environment that shapes, constrains, or promotes individual development, opportunities, and networks.[4]

While the overall mortality rate in Baltimore City has declined over the past decade, the crude mortality rate in the city remains about 30% higher than the rest of Maryland,[5] and among key health outcomes ranks last compared to other jurisdictions.[6] A comparison between neighborhoods with the highest life expectancy and those with the lowest life expectancy in Baltimore City shows an unacceptable 20-year difference.[7]

Substance use

Addressing substance use is a necessary part of ending the HIV epidemic in Baltimore, as one in 10 residents have a dependence on drugs or alcohol, and dependency can increase risk for HIV.[8] In particular, drugs that are injected increase an individual's risk for HIV when equipment for injection is shared. In 2018 alone, there were 888 overdose deaths in Baltimore City, a 16% increase over 2017 and 9th highest rate out of any county in the US.[9]

Mental Health

Mental health is another important issue in Baltimore and is often cited in BCHD's community engagement work as a risk factor and subsequent unmet need for HIV infection, as well as, retention, adherence and viral suppression in those living with HIV. As many of the newly-diagnosed cases of HIV are in the younger populations, data showing that 17% of high school students in Baltimore City have attempted suicide in the last year (2017)[10] demonstrates a potentially dangerous correlation between mental well-being, risk behavior and HIV infection.

Stigma

Widespread stigma against certain demographic groups including LGBTQ, people who use drugs, people dealing with mental health issues, and people living with HIV has made efforts to mobilize a city-wide response to HIV prevention and treatment that much more difficult. Preconceptions of public servants, service providers, and the larger community have pushed many of these populations further away from accessing services and have contributed to their further marginalization. BCHD community engagement over the past several years has repeatedly highlighted stigma as one of the biggest barriers to improved health and wellness outcomes.

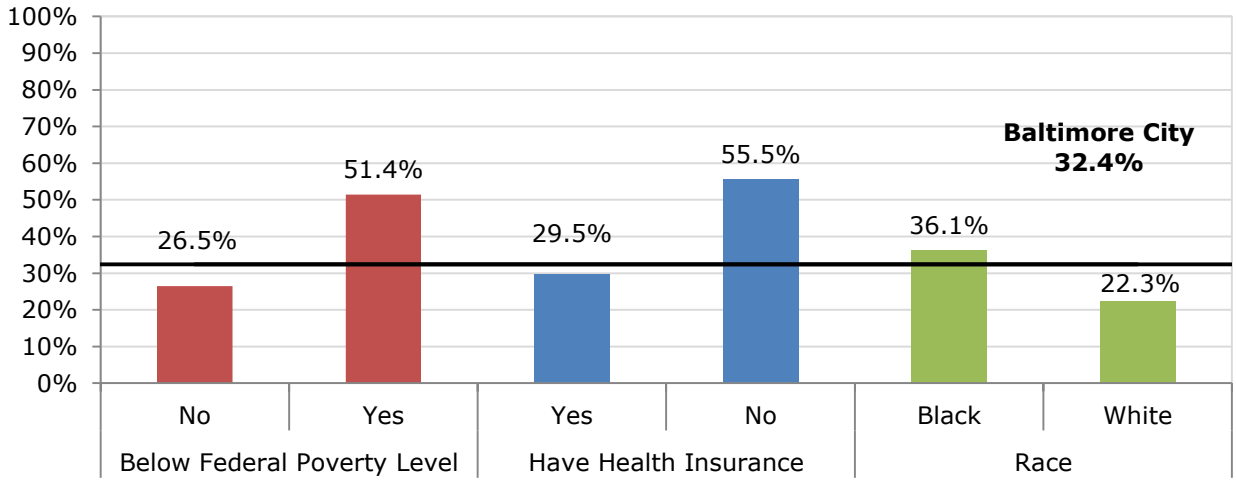
Poverty

Over 23% of Baltimore City residents live in poverty, including 34.2% of children under 18 years of age.[11] Financial status plays a significant role in the health of Baltimore City residents. Approximately one-third of Baltimore households earn less than $25,000 and are more likely to be uninsured and have unmet medical needs. Significant health disparities are highlighted when comparing the dichotomy between the lowest income earners (less than $15,000) and the highest income earners (greater than $75,000). According to the Behavioral Risk Factor Surveillance System (BRFSS) survey,[12] those making less than $15,000 a year are 36 times more likely to be uninsured, 25 times more likely to have unmet healthcare needs, and 6.8 times more likely to have "poor" or "fair" health status compared to those making more than $75,000 per year. Research across the board corroborates that level of income directly affects overall health.

Health Care Access

Thirty-two percent of the city's population uses urgent clinics and emergency departments (EDs) as significant sources of healthcare.[13] Clear inequities can be seen by poverty, health insurance status and race (**Figure 6**). Lack of access to primary care means that they often have less access to preventive health information, HIV testing and PrEP; and if HIV-positive, they face challenges in linkage to treatment.

Figure 6: Percentage of Residents who Normally Seek Healthcare in an Urgent Clinic or Emergency Department by Poverty Status, Health Insurance Status, and Race, 2014.



Source: Baltimore City Health Department 2014 Community Health Survey.

Housing

Maslow's hierarchy of needs and universal principles of self-preservation put food and shelter above all in terms of life priorities. A total absence of housing or transient (unstable) housing puts individuals, especially women and children at extreme risk for adverse health outcomes, including HIV infection.[14] According to the most recent Baltimore City "Point-in-Time Count", as of January 22, 2017, there were 2,699 people estimated to be homeless in Baltimore City.[15] This number, however, is not an estimate of those experiencing homelessness or unstable housing, but merely a count of those in shelters willing to participate in a survey on that particular night. Stakeholder engagement, whether with community, providers or HIV planning bodies has repeatedly highlighted a lack of housing as one of the biggest risk factors for poor outcomes in HIV prevention and treatment in Baltimore.

Trauma

Exposure to a lifetime of trauma cannot be overlooked as a driving factor in health outcomes. Data shows that nearly three out of four middle school students in Baltimore have been in a physical fight (75.6%, 2016) in the recent past.[16] Additionally, an estimated 46.1% of Baltimore City adults have experienced between three and eight adverse childhood experiences (ACEs).[17] The 2018 crime rate in Baltimore, MD was 817 (City-Data.com crime index), which was three times greater than the U.S. average. It was higher than in 99.0% of U.S. cities.[18] Research has shown a correlation between exposure to ACEs and poor health outcomes.

Medical and Public Health Mistrust

Individual experiences of trauma can be augmented with historical, population-level trauma like the Tuskegee experiments and the proliferation for profit of Henrietta Lack's cells by one of the largest medical institutions and providers in the city. Shared experiences with negative attitudes of providers toward certain socio-demographic populations, difficult-to-navigate health systems, complicated insurance enrollment and deductibles, etc. have created a commonly held and internalized trauma and mistrust in some communities that can manifest as avoidance of healthcare services, and in some cases complete disregard and distrust of public health messaging and programming.

Education

In 2015, 17.5% of Baltimore City residents aged 25 years and older did not possess a high school diploma or its equivalency.[19] The percentage of students missing 20 or more days of school is 15% among elementary students, 15.2% among middle school students, and 38.7% among high school students. There is strong evidence that school absenteeism increases the likelihood of dropping out prior to graduation and subsequently puts students at increased risk for substance abuse, gang involvement, and criminal activity.[20] Limited education often correlates with lower health literacy and fewer economic opportunities in the future, both risk factors for poor health outcomes.

Opportunities

Although Baltimore faces many health challenges, it's also a city with dedicated civic and faith leaders, strong community voices, and a motivated network of health department programs and key implementation partners who are committed to improving the quality of life for Baltimore City residents. Baltimore is also home to a large number of hospitals, public health and medical schools, health care providers, Federally Qualified Health Centers,

non-profit organizations, philanthropic organizations, faith-based institutions, various coalitions and individual community leaders, all working toward educating, supporting, transforming and ultimately improving the health of City residents. The Baltimore City Local Health Improvement Council, the Greater Baltimore Ryan White Planning Council and the Baltimore City HIV Planning Group are all reflections of this diversity of stakeholders who work tirelessly toward improved health and an end to the HIV epidemic in Baltimore.

A cross-cutting program of note in Baltimore City that aims to address many of the noted needs and gaps above is the **Accountable Health Communities (AHC) project**. Funded by the Centers for Medicare and Medicaid Services, this initiative aims to provide access to services for social needs in Baltimore. AHC seeks to address the underlying social determinants of poor health, improve health outcomes in vulnerable populations, and reduce health care utilization and costs. Eligible Medicare and Medicaid beneficiaries (who have had two ER visits in the last year) are screened for health-related social needs and then navigated to community services through the support of HealthCare Access Maryland (HCAM). AHC activities have connected beneficiaries to services related to food insecurity, transportation, housing, education, finances, employment, safety, mental health, and substance use. This project has also created an online resource directory for key medical and social services throughout Baltimore and the surrounding area, which eventually aims to improve identification, referral and appointments related to these services (Charmcare.org).

Improved accessibility to these services will make it easier for Baltimoreans to learn about, obtain, and remain engaged with HIV-related education, prevention, testing, treatment, counseling, and other services.

B. Diagnose

Rapid tests and conventional lab-based HIV testing are available across the city through clinical sites, CBOs and outreach activities. In 2018, BCHD and its partners alone conducted more than 45,000 HIV tests. Despite this, according to the 2018 Baltimore HIV Epidemiological Profile, more than 1,000 people living in Baltimore are unaware of their HIV status. In addition, in 2017, 27.5% of persons newly diagnosed with HIV in Maryland were diagnosed late in their HIV infection (defined as being diagnosed with AIDS within 12 months of the initial HIV diagnosis).

Since 2007, Maryland law has required providers to offer an HIV test to all pregnant women during their first trimester. However, in 2015 only 72% of pregnant women interviewed as part of the Maryland Pregnancy Risk Assessment Monitoring System (PRAMS) reported that HIV testing was discussed during prenatal visits and only 64% reported getting an HIV test. As of 2016, Maryland regulations also require providers to offer an HIV test to all pregnant women during the third trimester of pregnancy. In 2017, Maryland had an estimated 164 births in HIV-positive women, with 1 perinatal transmission.

Strengths

- **BCHD outreach program**

BCHD has an HIV testing program that conducts HIV testing throughout the city. The program has three mobile clinics that provide testing services at community events, in conjunction with community partners (such as CBOs, drug treatment centers, homeless shelters, schools, and colleges), health fairs, and by community request. The program also uses geographic coding to determine high-burden areas to conduct focused outreach services and testing. HIV and syphilis testing are available, and BCHD is working to add hepatitis C testing.

- **Diversity of City testing partners**

A significant number of both clinical and non-clinical stakeholders in Baltimore provide HIV testing services through a number of different methods, including fixed sites, event testing, mobile testing, and at-home testing. BCHD supports HIV testing across several clinical and non-clinical partners, by supporting HIV testing staff, HIV testing supplies, technical assistance, and/or HIV testing laboratory services. Through these programs we also ensure timely linkage of those who test positive, and referrals of those testing negative for PrEP and other preventive services.

Additionally, many other EDs, health centers, and other clinical and non-clinical provider organizations contribute to HIV testing and diagnosis independent of BCHD (subgrant) funding.

- **BCHD clinics**

BCHD's Sexual Health and Wellness Clinics have two sites. Through these clinics we offer free HIV, STI, and HCV testing. The clinics are open five days a week during business hours. Through its programs, BCHD supports testing that results in up to 50-75% of all new HIV diagnoses annually in the City.

Challenges and Needs

Education and awareness (which also address stigma) (Priority Level 1)

Increased education for both providers and the general public around HIV testing is needed. Providers can benefit from education regarding CDC guidelines on HIV testing, training on discussing sexual health and wellness **with all patients**, discussing sexual health with sex positive messaging, normalizing sexual health discussions as part of clinical encounters, and ensuring a safe and stigma-free clinical environment to discuss sexual health.

Among the public, addressing the stigma associated with HIV is essential. Without addressing stigma, we will not be able to reach our HIV testing goals. Stigma, fear, misunderstanding, and mistrust all play a large role in not getting testing for HIV – just as much as accessibility and availability of the HIV tests themselves. Community feedback has highlighted that more education and awareness is needed to increase the demand and willingness for testing.

Focus on Youth (Priority Level 1)

Current HIV testing structures in the city need to be improved to be more youth-friendly. Overall youth testing numbers are low, especially given the disproportionate percentage of new infections in these age groups. Community feedback has highlighted the need to increase number of testing locations, types of testing locations, testing marketing, and incentives to be more appropriate for younger populations.

Missed testing opportunities in clinical settings (Priority Level 2)

A large number of those diagnosed with HIV are diagnosed years after infection. On average, in Maryland, individuals are diagnosed six years after infection. There are most certainly missed opportunities to conduct an HIV test in clinical settings during that period. More information on these missed opportunities is important to address how we can decrease the time from infection to diagnosis (addressed in Response Pillar).

Low Rapid Start and <30 days linkage to treatment (Priority Level 2)

The number of new diagnoses served through rapid start (same day provision of medicine) remains low, as many testing providers do not have in place sufficient protocols and systems to initiate rapid start. Even for those who are not provided their medicine on the day of diagnosis, the goal is to ensure that new positives are linked to HIV treatment within 30 days. Unfortunately, for 21.4%[21] of all new cases in Baltimore City, they do not reach treatment within this timeline.

Other identified gaps, barriers and needs- social determinants discussed above, insufficient access to self-testing, more/improved testing incentives, expanded testing hours, expanded locations, more awareness/education on HIV testing, and coupling HIV testing with other regular check-ups to normalize HIV testing.

C. Treat

Strengths

- **Ryan White Programming (BCHD)**

The strength of the Ryan White program and funding in Baltimore is a major asset that has played a significant role in the success of HIV treatment outcomes. The Ryan White Program ensures high quality care to individuals living with HIV in and around the City (Baltimore Eligible Metropolitan Area [EMA] comprises Baltimore City and six surrounding counties).

Baltimore is home to two internationally recognized academic institutions, both with extensive track records in HIV research and treatment. Baltimore residents living with HIV receive high quality care from experts across a wide spectrum of medical subspecialties. In addition, Baltimore hosts a number of local care providers who have a long history of providing exceptional HIV care, including FQHCs, AIDS service organizations (ASOs) and HMOs, including Kaiser Permanente, which nationally has the second largest total HIV client-base in the U.S. Finally, there are a range of care options for special populations including youth and LGBTQ communities.

In general, HIV care is well-distributed across the city, although some "care deserts" remain, especially when considering access to public transportation.

Ryan White subgrantees have created and integrated patient centered models of care in Baltimore City to encompass all stages of the HIV Care Cascade beyond the diagnosis pillar. Among Ryan White recipients, viral suppression has been increasing over the years, reaching 89% (of those retained in care) in 2018.

Two key strategies utilized by Ryan White recipients are:

- **Screening and treating behavioral health disorders:** utilizing a client-centered approach that has been demonstrated to improve patient adherence to appointments.
- **Getting to Zero+ (GTZ):** JHU REACH Initiative- BCHD has been supporting GTZ programming at two HIV care providers to help individual providers understand better their patient panels and to develop personalized strategies across disciplines within these institutions to improve retention, adherence and ultimately viral suppression.

- **Access to Medications**

The Maryland Drug Assistance Program (MADAP) ensures that people living with HIV/AIDS in Maryland who are not Medicaid-eligible have access to the medication they need to stay healthy. This program is statewide and is funded primarily through the Ryan White CARE Act. MADAP pays for medications for eligible clients with no insurance and helps clients with insurance by paying for eligible co-pay and deductible costs so they can get their medication.

- **The BCHD Sexual Health and Wellness Clinics**

These clinics have provided HIV continuity care for more than 25 years in two locations in east and west Baltimore. Approximately 25 people a year are diagnosed with HIV in the clinics, and are rapidly engaged in care on the day of diagnosis. The clinics also serve as referral site for the linkage to care team, and as a safety-net for patients without insurance or who do not thrive in other clinical settings. The clinics offer multi-disciplinary, patient-centered care that is flexible and accessible.

- **Linkage to care and partner services**

Linkage-to-care specialists provide linkage services to people living with HIV who are not enrolled in HIV primary medical care or who have fallen out of care for six months or longer. For people who are newly diagnosed with HIV, Disease Intervention Specialists (DIS) conduct partner services interviews and provide linkage to care services.

The SOAR program is a collaboration between BCHD's Ryan White Program, the Maryland State Division of Corrections, and the Department of Public Safety and Correctional Services. The SOAR Program is designed to provide clients with pre-release visits to begin discharge planning and linkage to both medical care and support services.

- **Rapid Start Partnerships**

The BCHD is part of the Baltimore Rapid Start Coalition, which launched in the summer of 2019. The Coalition comprises the four largest HIV treatment clinics in Baltimore. It is developing best practices documents for **rapid initiation of antiretroviral therapy** for patients newly diagnosed with HIV, rapid initiation of PrEP, and rapid initiation of nPEP for those HIV-negative. Participating partners are implementing these best practices, and the aim will be to evaluate clinical outcomes in the coming year(s). The ultimate goal is to have consistent access for patients to receive rapid services throughout Baltimore.

- **HIV DOT program**

BCHD offers a city-wide HIV Directly Observed Therapy (DOT) program. Any patient in the city who is HIV-positive and struggling to achieve viral load suppression can be referred by their provider for home visits by the HIV DOT community health workers. DOT workers help patients navigate their health needs through assistance with refilling medications and attending medical appointments, and can help to build self-efficacy.

Challenges and Needs

Access to quality & comprehensive treatment (Priority Level 1)

Given the more than 11,000 Baltimore residents living with HIV, the city needs to increase the number and methods of providers to increase access and improve utilization. Expanding geographic coverage, types of

providers (primary care, specialty, etc.), telemedicine, mobile care, hours of operation, payment flexibility, transport support, etc. will all be vital in getting and keeping individuals in care.

Additionally, as the HIV population in Baltimore continues to age, ongoing efforts need to be mobilized to plan, prepare, and adapt for the complexities and needs of this population.

Training of providers and medical systems to provide culturally appropriate care (Priority Level 1)
Community engagement and patient satisfaction survey efforts throughout the city regularly highlight misunderstanding, bias, prejudice, communication difficulty and stigma as significant barriers to accessing and continuing clinical and non-clinical services.

Lack of adequate peer and social support (Priority Level 2)
Discussions with people living with HIV, community, family, case managers, social workers, and providers have revealed how an HIV diagnosis isolates an individual. External and internalized stigma can exacerbate isolation and loneliness. Unfortunately, feedback has also informed us that existing peer support and supportive social networks in the city are missing or insufficient.

Healthcare/service navigation (Priority Level 2)
Registering for health insurance, understanding coverage, identifying service providers, booking appointments, moving between providers for different services can be overwhelming for most people. Barriers and gaps in navigating insurance and services are regularly cited as reasons why individuals do not access or stay (retained) in care services.

Other key gaps, barriers, and needs- social determinants discussed above, limited family/social support, incorrect client contact information (resulting in inability to follow-up with clients), low levels of client readiness for entering or maintaining care, distance/cost of accessing treatment, insufficient workforce, lack of diversity in staffing, insufficient outreach worker staff salary, and inability of providers to share data between one another.

D. Prevent

Strengths

Great strides have been made in the prevention of HIV. Since its high point in the early 1990s, the number of new HIV diagnoses in Baltimore in 2018 has been the lowest it has ever been since the beginning of the HIV era in the mid-1980s, with a 70% decline in the past 10 years. **(Figure 7**)

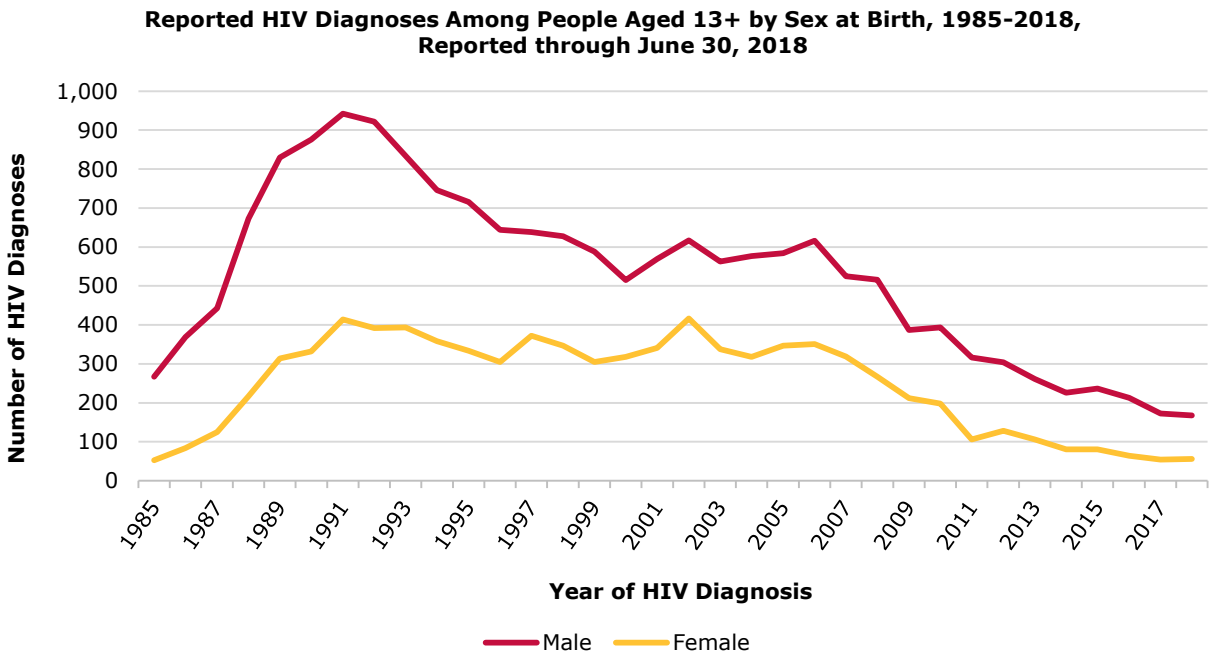


Figure 7: New HIV Diagnosis Trends in Baltimore, year over year

Source: Baltimore Epidemiological Profile 2018

Several key programs have been responsible for this significant and sustained decline. Some are briefly mentioned below, and more detail is provided in the "Plan" section:

- **Syringe Exchange**

Baltimore City has one of the oldest and most well-established syringe exchange programs in the nation. Now a distribution rather than exchange model, the program has increased availability of clean syringes and operates in 16 locations around the City, with two community-based sites.

- **STI prevention activities and partner services**

BCHD has a robust STI prevention program that includes mobile STI testing, distribution of condoms, sexual health education, outreach, partner services and free sexual health and wellness clinics. Partner services is offered to all city residents who are newly diagnosed with HIV and/or syphilis. Partner services interviews include helping the individual to understand the disease, conducting linkage to care for medical treatment, risk reduction counseling, disclosure assistance (if requested) and confidential partner notification. Through the partner services interview process, sex and needle-sharing partners are referred for testing and if positive, interviewed and referred for HIV care, if not already in HIV care. The process also informs all negative partners of their exposure and provides them with referral information for PrEP. In 2018, 455 interviews were completed, eight additional people infected with HIV were identified, and 74 partners without HIV were interviewed.

- **Condom distribution program**

BCHD's condom distribution program ensures improved access to condoms and education about condoms through monthly mailings to individuals who sign-up for the program, through provision of condoms at fixed sites (ie. Universities, clubs, barbershops), and through the distribution of condoms through partner organizations and city events. In 2018, approximately 80,000 condoms were distributed by BCHD. BCHD is not alone in improving access to free condoms. Other clinical sites and community-based organizations provide condoms to people entering their doors and to the community at-large through their outreach events.

- **Treatment as Prevention (U=U)**

The successes in HIV treatment in Baltimore has also contributed to the reduction in new cases. Eighty% of all new transmissions of HIV are attributable to those who are HIV-positive but not diagnosed or those who have been diagnosed but are not in care. This can be explained by the concept of **Treatment as Prevention,** which is also known as Undetectable = Untransmittable (U=U). Individuals who are adherent to their HIV medications and suppress the virus in their blood to levels that are undetectable (unable to be counted) by laboratory testing for at least six months cannot transmit HIV to their sexual partners. This has been shown in extensive research worldwide. Simply put, the more HIV-positive individuals in Baltimore who are on and adherent to treatment, the less new infections will occur. A community-led U=U campaign is active in Baltimore.

- **HIV Planning Group**

The HIV Planning Group has been an excellent source of technical expertise and advice on planning, monitoring and evaluating prevention activities. It has key in promoting U=U activities, promoting support of elderly individuals living with HIV, and a key partner in promoting Baltimore's Ending the HIV Epidemic plan.

- **PrEP infrastructure**

Baltimore City has the foundations for a strong PrEP infrastructure, in large part due to CDC funding for establishment of PrEP demonstration programs. This includes a robust peer navigator system. The city has several specialty PrEP clinics, and some clinics providing routine primary care are also prescribing PrEP.

Challenges and Needs

PrEP Uptake, Accessibility, and Feasibility (Priority Level 1)

Uptake of PrEP remains low, especially among those with disproportionate risk. Awareness of PrEP among the general public and providers, stigma associated with PrEP, and logistical and operational challenges of getting on and maintaining PrEP are barriers, especially for those who can most benefit from it. Access to nPEP remains a challenge as well. Further challenges are outlined in the "Plan" section below.

Condom availability (Priority Level 1)

BCHD has a condom mailing program and regularly distributes condoms to some fixed partner sites. However, need far outstrips supply, and the limited locations affect accessibility. Free condoms, available to those who need and want them, is a low- cost, effective way to reduce HIV and STI transmission.

Drug Use Disorders (Priority Level 1)

Within the IDU cohort population, 62.2% of BESURE respondents said that they had shared injecting equipment in the past 12 months, despite the City's expansive and highly recognized syringe exchange program. Unfortunately, Baltimore has not been spared from the nationwide increase in opioid addiction, overdose, and death. In 2017, there were 761 drug and alcohol-related intoxication deaths in Baltimore City, more than double the number of homicides.[22] Widespread drug use and drug addiction remains one of the highest public health problems in Baltimore, and therefore continued planning, programming and surveillance must be ensured to prevent transmission within these networks.

Limited Status neutral systems and resources (Priority Level 2)

People who are living with HIV have access to a wide range of valuable resources due to the continued funding of the Ryan White Program. These funds can be used to offset many of the social determinants of health that can lead to increased risk of contracting HIV, such as housing assistance, referral to substance abuse treatment, and even emergency financial assistance. However, this comprehensive landscape of services is not necessarily available to people who are HIV-negative. While Ryan White funding does cover some preventive services, awareness and ease of navigation are likely barriers for those who are HIV-negative. Increasingly, there is recognition that addressing these needs in a status-neutral manner will have an impact on reducing HIV transmission. In the absence of a dedicated funding stream such as Ryan White, these services can be incredibly fragmented due to a separation in services (ie. no comprehensive care home as for HIV services) and the complexities of insurance coverage.

Other key gaps, barriers and needs- Social determinants discussed previously; insufficient sex education and HIV awareness (addressed under foundational pillar); need for alternative testing sites and methodology; more telehealth (ie. telePrEP); more peer navigation; expanded SSP services; PrEP in schools; implementation of social networking strategies among peers; comprehensive prevention training; expedited partner therapy;, and support with health insurance.

E. Respond

Strengths

- **Strong surveillance networks**

There are multiple partners in Baltimore City's ability to identify new cases and work to prevent HIV transmission as mandated by Maryland law. BCHD uses MDH HIV-related data to assist in the provision of services to newly positive individuals and to support efforts to help clients who have fallen out of care get re-linked to medical services. This data can also be used to identify HIV clusters and inform appropriate response for prevention of further transmission.

- **DIS and Linkage to Care**

Baltimore City Health Department's HIV/STD Prevention Program has a robust HIV Partner Services program that is perpetually working to improve the effectiveness of its outcomes. In 2018, the program completed 455 HIV interviews on new HIV cases and their voluntarily disclosed partners. Partner Service staff help link new cases to care, inform individuals about transmission risk and assist disclosed partners to access testing, and in some cases, subsequent care. BCHD outreach staff also work with Partner Services and surveillance to test for HIV in high

prevalence areas and to help locate people who were out of care for linkage services. BCHD linkage-to-care specialists use surveillance data and provider referrals to locate individuals never in care or who have dropped out of care and support them in their journey to treatment and care.

- **Data driven HIV testing**

BCHD works with Johns Hopkins University to improve its understanding of physical and online meeting places. To this end, BCHD has added fields to our interview records that ask people where they meet their sex partners. This information is also used to help plan where mobile testing units will be deployed. We are also asking about dating apps when people we interview for syphilis and HIV identify dating apps as where they have met their sex partners. Our response in using apps is still in development, but currently involves increasing prevention and testing visibility on high-traffic sites.

- **Partnership with Department of Public Safety and Correctional Services**

BCHD also has worked in collaboration with the Department of Public Safety and Correctional Services and MDH to operate an HIV and syphilis testing program for arrestees for more than 20 years. This program and the intelligence gathered from syphilis and HIV interviews have also contributed significantly to cluster and outbreak response.

- **The Blitz**

In response to a shift in demographics and risk factors of syphilis cases as well as a higher proportion of reported heterosexual transmission BCHD began the Blitz syphilis intervention. This intervention uses partner services data to inform outreach testing.

To combat an increase in syphilis among commercial sex workers, people indicating payment for sex, and PWID, BCHD began testing at street locations identified during partner services interviews. Testing hours were altered to match the hours that patients reported picking up sex workers, engaging in sex work or buying/using drugs. The expanded Blitz testing hours are 12am-8am (pre-COVID). Due to budget and staffing limitations the outreach team conducts Blitz testing two days per week (Wednesday and Saturday). The disease prevalence in 2018 at the Blitz locations was more than three times higher than the prevalence found at traditional outreach locations. Targeted outreach activities and testing events assist in increased disease identification and treatment, thus interrupting disease transmission and reducing the burden of disease in Baltimore City.

Challenges and Needs

Technology (Priority Level 1)

While data is an invaluable tool in being proactive in prevention and responding to new risk, data systems can and often do act as impediments to being as reactive and informed as desired. Improved data communication between State surveillance data and Ryan White Careware data would allow for better identification of clients in need of supplemental support and care, and better understanding of our local epidemiology and resource needs. There is very little interoperability between numerous software packages used by BCHD and MDH. There is also no linkage to the National Electronic Disease Surveillance System, where all reported cases of Hepatitis A, B, and C are kept. In addition, BCHD programs are not electronically linked. BCHD does not have the data systems or staff support to produce the reports needed on a timely basis to have an actionable understanding of local epidemiology and disease transmission.

Late Diagnoses (Priority Level 1)

The average time from HIV infection to HIV diagnosis in Maryland is an unacceptably high six years. More than 21% of new HIV diagnoses develop an AIDS diagnoses within 12 months (MDH epidemiologic data 2018). These cases represent a failure of the health system and HIV prevention efforts in general.

Other key gaps, barriers and needs- Slow turnaround time on viral load processing; outdated lab technology; increased access to Careware and Ryan White analytics; improve surveillance communication and sharing between labs, Department of Corrections, outreach, and DIS; build in response collaboration with providers, CBOs and pharmacies; build trust and be transparent with community in terms of surveillance and clusters.

IX. Baltimore Youth and HIV

Youth and young adults in Baltimore City are disproportionately affected by the HIV epidemic and therefore warrant a closer look. Although they make up approximately 16% of Baltimore City's population[23], nearly 30% of new HIV diagnoses in 2018 were among individuals between the ages of 13 and 29[24]. The younger they are, the less likely they are to be diagnosed, thus less likely to be linked to care or virally suppressed[25]. In fact, in 2017, more than two-thirds (72.1%) of Baltimore City youth had never been tested for HIV, leaving a gap in diagnosis and treatment for those who may not be aware of their status[26].

Regarding treatment among youth, in 2018, 57% of Baltimore City youth diagnosed with HIV were virally suppressed.[27] Treatment as prevention is one of the most highly effective options for achieving HIV prevention, making viral suppression critical in the fight to end the HIV epidemic.[28]

Although PrEP use data among this population in Baltimore City is not readily available, national statistics show that less than 1 in 4 Americans at substantial risk for HIV are using PrEP.[29] Additional prevention challenges include socioeconomic status, substance use, high rates of STDs, and inadequate sexual education.[30] Regarding socioeconomic status, 34.2% of youth have experienced extreme economic hardship, compared to 21.1% statewide.[31] For the 2018-19 school year, more than half (52.7%) of Baltimore City Public School students were classified as low income.[32] In 2016, more than 1,400 people under the age of 25 experienced homelessness.[33] A number of Baltimore City youth also report the use of an illegal substance at least once (marijuana: 46.9%; cocaine: 6.8%; inhalants: 11.6%; heroin: 7.6%; methamphetamines: 7.1%; ecstasy: 7.1%; prescription pain medication: 13.2%).[34] Youth are also disproportionately affected by gonorrhea and chlamydia, indicators of increased HIV risk. The rates of chlamydia and gonorrhea among city youth and young adults (15-24) are 4,737 per 100,000 and 1,449.3 per 100,000, respectively.[35] Many Baltimore youth are sexually active (34.9%), do not use condoms (38.9%), and report using alcohol or drugs before last sexual intercourse (21.0%), all of which may influence their decision to engage in safer sex practices.[36] More than half (56.3%) of Baltimore City youth has had at least one adverse childhood experience, and nearly a third (30.7%) has had two or more adverse childhood experiences, this may indicate a need to address trauma in HIV prevention strategies for this population.[37] Community members, particularly youth who frequently interface with BCHD, have expressed concern about the lack of adequate sexual education in their schools, which contributes to their lack of knowledge regarding sexual health and HIV/STI prevention. Youth, as well as adult community members from several EHE listening tours, have expressed the need to not only have adequate sexual education in all schools, but to provide this information much earlier than high school. There were a number of youth also unaware of their rights regarding sexual health services in the state of Maryland, particularly regarding HIV/STI testing and prevention. Despite the number of youth organizations in the City, several comments from the EHE listening tours identified that youth do not feel engaged nor properly informed.

X. Key State and Local Laws and Policies

A. Opt-out testing

A new law effective July 1, 2015 regarding opt-out HIV testing, House Bill 978, allows HIV testing in health facilities to be part of routine care and the general informed consent regards of the person's risk. It removes the need for HIV-specific consent and simplifies the pre-test information. This law should mean more healthcare providers are implementing routinized testing of all their patients for HIV, unfortunately, however this is not yet the case in Baltimore.

B. Perinatal testing

Maryland Code, Health-General § 18-338.2, Sec. 10.18.08.07- Testing Requirements for Pregnant Women Receiving Prenatal Care requires that providers test pregnant women in the first and third trimesters of pregnancy, unless the patients declines. The addition of the 3rd trimester testing requirement came about on October 1, 2016 as a result of some previous cases where women tested negative during the first trimester but then later acquired HIV unbeknown to the provider before delivery.

C. Adolescent consent

Maryland Code, Health-General, §20-102- A minor has the same capacity as an adult to consent to medical treatment if, in the judgment of the attending physician, the life or health of the minor would be affected adversely by delaying treatment to obtain the consent of another individual.

While the language is vague, this code does allow providers to provide testing and treatment to minors for STIs and HIV without first seeking parent/guardian consent.

D. Sexual Health Education Policy

Baltimore City Public Schools Board Policies & Regulations; Section A - Foundations and Basic Commitments:

Title- *Wellness, Nutrition, and Physical Activity Policy*

Adopted- June 9, 2015

A. Comprehensive Health Education

1. The comprehensive school health education curriculum will be a planned, sequential curriculum that addresses the physical, intellectual, emotional, and social dimensions of health.

2. All schools will comply with COMAR 13A.04.18 and ensure that comprehensive health education is taught by certified health education teachers.

3. Comprehensive health education will be implemented as a required component of the instructional program for grades Pre-k - 8.

4. Comprehensive health education will be implemented as a required component of the instructional program for grades 9-12 as a 0.5 credit to comply with graduation requirements, enabling students to meet graduation requirements, select health education electives and provide access to curriculum for non-diploma bound students.

While Maryland's Health Education Framework is much more detailed and covers sexual health learning objectives for K – 12, similar guidance for sexual health education for Baltimore Public schools (above) is missing. Additional efforts should be dedicated to following and applying State guidance.

E. HIV reporting

Maryland Code, Health-General Article §18-201.1/2- A physician caring for a patient that the physician knows is infected with HIV or is AIDS-defined must report the individual to the health officer of the county where the physician provides care to the patient within 48 hours of diagnosis or of entry into their care. The physician report must be on a form approved by the Secretary of the Department of Health and Mental Hygiene (DHMH 1140).

10.18.02.06- All laboratories must submit a report to the health officer for the jurisdiction where the laboratory is located, within 48 hours after an examination of a specimen from a human body shows one of the following:

(a) A positive result on a test designed to confirm in a sample the presence of HIV infection in accordance with Health-General Article, §18-207(b)(1), Annotated Code of Maryland;

(b) A test result showing a level of HIV viral load in an individual not known to be HIV-negative; or

(c) A CD4+ count in an individual not known to be HIV-negative;

While both the physician and laboratory are required to report new cases to the health department, the reality is in most cases, the laboratories report and many physicians do not. As the process of the lab report passing through all of the steps before becoming known to the staff in the field requires time, direct communication from a provider to BCHD immediately after a positive result would expedite the response process and improve the efficacy of public health interventions.

F. HIV criminalization

Maryland Code, Health-General § 18-601.1 (2016)- Exposure of other individuals – By individual with human immunodeficiency virus. Prohibited act - An individual who has the human immunodeficiency virus may not knowingly transfer or attempt to transfer the human immunodeficiency virus to another individual.

While removal of this law would be a significant positive step for de-stigmatization of people living with HIV and would go a long way in helping improve prevention and treatment recommendations, the reality is that the ambiguity in the law has meant it has not yet been used in the criminal prosecution of anyone in Maryland.

XI. Key Stakeholders and Resources

Stakeholders and partners

At the Federal level, the US Department of Health and Human Services (HHS) will lead the coordination of funding and technical support. The direct provision of funds and technical support will be funneled through the Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), Indian Health Service (IHS), National Institutes of Health (NIH), Office of the HHS Assistant Secretary for Health, and Substance Abuse and Mental Health Services Administration (SAMHSA).

At the State level, the Maryland Department of Health (MDH) is the lead coordinating entity. In addition to Baltimore City, Prince George and Montgomery counties are also included in the first phase of priority jurisdictions. While Baltimore City has its own unique needs, strengths, and challenges and will develop a city-specific plan, it will coordinate with MDH to ensure that the State, counties, and Baltimore City are coordinated in their response. Relationships and collaboration with key, State-level stakeholders (i.e., Medicaid, Medicare) will be managed by MDH and communicated to BCHD.

Within Baltimore City, a united front of traditional and non-traditional stakeholders continues to form around EHE. Public health staff and clinical providers are joined by social service providers and community-based organizations. Schools, law enforcement, corrections, religious organizations, pharmacies, private businesses, academic institutions, and housing (among others) have been recruited into the EHE process through the Ryan White Planning Council, HPG, or through direct one-to-one outreach by BCHD. Finally the most important stakeholder of all, the community, has and will continue to be instrumental in planning, implementing, monitoring and updating interventions. The general population and people living with HIV are engaged through regular, ongoing community discussions, sexual health events, online platforms (BCHD and associated sites), the City's 2 planning bodies (Ryan White Planning Council and HIV Planning Group) and the EHE plan development working group.

Resources and Funding

While EHE-specific funding will be available for Baltimore city, these resources are finite, especially given the amount of work and stakeholders who play key roles. Much of the funding from the federal government (HRSA and CDC) and the state will pass through BCHD, while other federal funding will be provided directly to academic institutions, health centers and community-based organizations.

These resources, however, constitute only a small percentage of what's needed to achieve a 90% reduction in new cases. Other, non-specific EHE funding sources and programs must be leveraged to work toward this goal (including insurance reimbursement and 340 B funding).

Existing medical institutions and providers not currently working on HIV must commit to supporting this initiative in terms of awareness, education, testing, and referral. These institutions must also be willing to accept resources on offer from BCHD or other federally-funded agencies providing technical support (i.e., AETCs).

Government services, including schools, law enforcement, housing, social services, etc must incorporate sexual health and wellness into their existing programs, raising awareness and linking people to preventive services and treatment when possible.

Finally, as biomedical interventions can only take us so far in ending the epidemic, all public, private, and community-based organizations need also to be cognizant of the social determinants of health and wellness and be well-informed on disparities in Baltimore. Efforts toward social justice, equity, economic independence, and self-realization must find a way into all policies and programming within the city, in order that the true root causes of the HIV epidemic begin to be exposed and addressed.

XII. Ending the HIV Epidemic Plan

A. Ending the HIV Epidemic Goals

The Baltimore City Ending the HIV Epidemic Plan has three primary goals, monitored by the 6 AHEAD Dashboard indicators (https://ahead.hiv.gov/).

Goal 1- Improve Health Equity through the reduction of health disparities associated with race, ethnicity, sexuality, gender, age, socioeconomic standing, and residency status

Indicators: Incidence; Knowledge of status; Diagnosis; PrEP coverage; Linkage to Care; Viral suppression- by above demographics

Goal 2 -Decrease the incidence of new HIV cases in Baltimore by 75% by 2025 and by 90% by 2030

Indicators: Incidence; Knowledge of status; Diagnosis

Goal 3- Increase access to care and improve health outcomes for people living with HIV/AIDS

Indicators: Linkage to Care; Viral suppression (plus 1 non-AHEAD indicator- Retention)

B. Pillars, strategies and activities

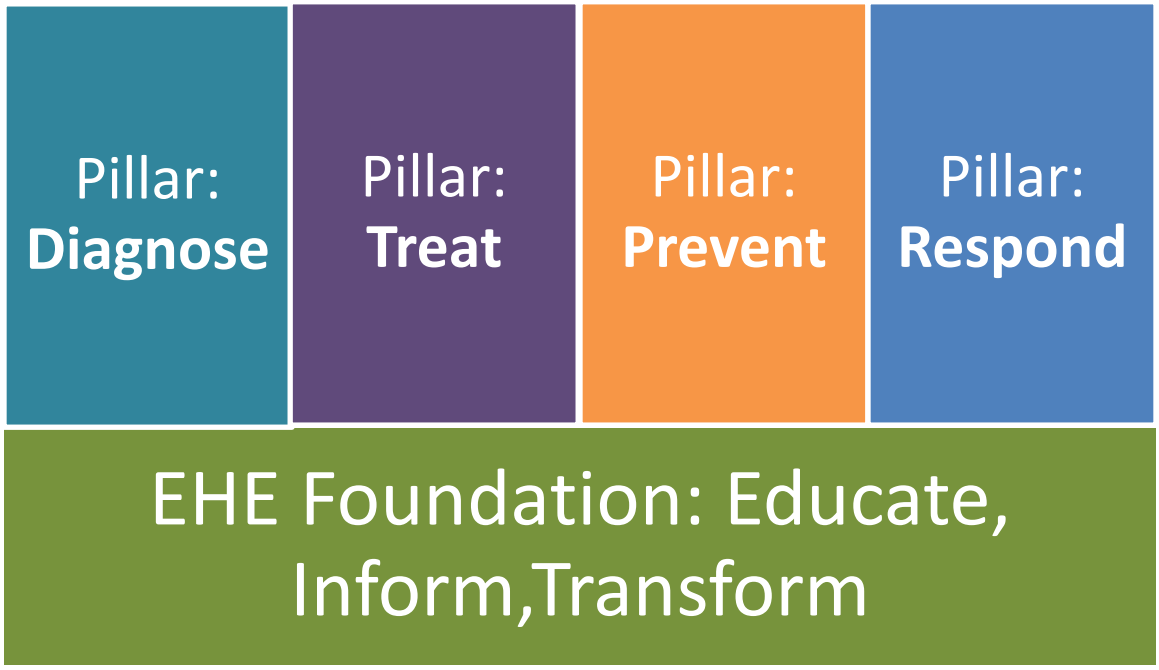


Figure 8: Baltimore's Adaptation on the National EHE structure.

1. **EHE Foundation:** Educate, Transform, Inform

Objectives:

- **Improve health literacy for all**
- **Reduce stigma associated with HIV and other STIs**
- **Address and reduce medical and public health mistrust**
- **Improve communication and dialogue around sexual health, HIV and the underlying social issues and determinants**
- **Strengthen programming through use of data, multi-agency collaboration, and sharing of best practices**

A lack of HIV knowledge and awareness among the general population causes stigma and discrimination against people living with HIV, as well as a lack of risk identification and fear of diagnosis. We need accurate information about HIV transmission, prevention, and testing, and how to support others without stigma and judgment. There must also be efforts to heighten HIV awareness and urgency among the general public. Extensive public information campaigns on HIV of the 1990s have gone silent leading many to believe that HIV is no longer an issue. Updated information on the epidemic, testing, prevention, and treatment are not well known by the public.

Community mobilization, outreach, broader visibility, and general messaging are recommended strategies to increase awareness, urgency, and information available to the general population. BCHD and its partners will continue to work to educate Baltimoreans about HIV.

Improved knowledge coupled with reduced stigma and medical/governmental distrust will lay a foundation and augment outcomes achieved through the strategies under *Diagnose, Treat, Prevent, and Respond*.

Additionally, HIV stakeholders must capitalize on data, community input, and best practices from BCHD, CBOs, clinical providers, academia, and others to continually improve access to appropriate, quality services.

Strategy 1: Community Mobilization and Outreach

New outreach efforts and broadened community participation are required to re-energize community-based HIV prevention efforts. Addressing stigma is the foundation to all other aspects of the plan mentioned in this document. We plan to do this through several methods. One is by story-telling, and providing a voice and a spotlight to those not traditionally heard from in our communities. We also must provide a space to build empathy among providers, among one another, and among communities. We must highlight HIV and sexual health and normalize the conversation around sexual health and well-being, and bring in the voices and leadership of community leaders and social influencers. And we also must do the listening that informs and advances all of our activities listed in the plan. This is all done with a mix of qualitative and quantitative analytic methods.

i. **Key Activities:**

- **Baltimore in Conversation, Baltimore in Action-** These CDC-recognized, BCHD-led activities of story-telling and follow-up interventions have given a voice to individuals and communities often overlooked and have served as judgement-free platforms to initiate discussions of lived experience, stigma, mistrust, and other topics essential in understanding and improving HIV prevention and care outcomes.
- **Community Engagement Activities-** CBOs, clinical providers, government service providers, religious groups, and others must continue outreach and engagement with diverse communities to ensure that their voices are heard and that activities and interventions are driven by the communities themselves.
    - Listening tours, town halls, tabling, events, working groups, and community conversations on racism, as examples
- **Expanded Stakeholder Engagement-** BCHD and other HIV actors should continue to identify non-traditional, existing interests groups, networks, initiatives and service providers that can be engaged in discussions around sexual health and wellness, including HIV prevention and care.
- **Large Community Events-** Large events bringing together a multitude of organizers and participants should be implemented to ignite and continue momentum of EHE collaboration.
- **EHE Baltimore Website (EndHIVBaltimore.com)-** BCHD and its network of HIV prevention and care partners launched an EHE website in 2020 that serves as a central clearinghouse of information and resources, collection point of community feedback, and a virtual call to action.
- **EHE virtual HIV museum-** BCHD will lead a multi-stakeholder development of a virtual HIV museum to commemorate the 40th anniversary of HIV. This process and its final product will create community buy-in and engagement and will "bring to life" the HIV epidemic for key communities who have so far been disassociated.

ii. **Addressing Health Disparities –**

Certain populations are disproportionately affected by the HIV epidemic and this requires system-level policy and program changes. However, on a community and individual level, prejudice, stigma, discrimination and mistrust can also be addressed one story and one conversation at a time. These activities can give the community a voice and promote community-driven initiatives for change. They can also ensure that communities are linked to available support services through active referral and follow-up (where possible) to address comprehensive needs around employment, nutrition, housing, substance use treatment, mental health, insurance, primary care, etc.

iii. **Key partners/Collaboration-** Community-based organizations, people living with HIV/AIDS, LGBTQ community/Mayor's Commission on LGBTQ, youth groups/Mayor's Commission on Youth, community leaders and social innovators, Maryland Institute College of the Arts (MICA), dating apps and social media, religious leaders and groups, barbers and beauty salons, nail salons, housing developments, middle/high schools, colleges/universities/HBCUs, fraternities and sororities, entertainment centers/clubs, senior centers/residential facilities, resettlement and immigration services, and clinical providers, among others

iv. **Potential Funding-** CDC 18-1802; CDC 20-2010, private/philanthropic funding (ie. HIV museum)

v. **Estimated annual budget allocated -** $300,000 - $500,000

vi. **Outputs and Data Source-**

- # people reached by campaigns; # of youth reached

Data Source: BCHD Social Innovations Team and BCHD subgrantees

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Strategy 2: Sex education for city's youth

Throughout the Ending the HIV Epidemic engagement process the recommendation for earlier and more comprehensive sexual education in Baltimore City schools was put forth at nearly every event, regardless of the type of participants. Over the last five years, BCHD's Maternal and Child Health Bureau has supported sexual health education in Title X clinics and public schools through its federally-funded UCHOOSE project. It has provided Baltimore City Public Schools with separate curricula for middle schools and high schools. More than 10,000 students have been reached every year since the project's inception, and institutional capacity has been built in several middle and high schools.

Need for quality sexual health education is unquestionable. Analysis of the National Survey of Family Growth indicated that formal sex education is associated with increased use of contraception and protection, and more careful partner selection.

The National HIV/AIDS Strategy identifies comprehensive sexual education as a necessary structural intervention:

Comprehensive sexual education for school-aged youth, an important example of a structural intervention, has not been brought to scale across the country, with only some jurisdictions providing fundamental and essential health and risk-behavior education to their students. To improve outcomes for youth along the HIV care continuum, young people must understand the benefits of early diagnosis as well as staying engaged in care and adhering to treatment.

The Maryland Department of Education provides standards for curricula in two domains relevant to this Plan: Family Life and Human Sexuality: *"Students will demonstrate the ability to use human development knowledge, social skills, and health enhancing strategies to promote positive relationships and healthy growth and development throughout the life cycle,"* and Disease Prevention and Control: *"Students will demonstrate the ability to apply prevention and treatment knowledge, skills, and strategies to reduce susceptibility and manage disease."* These provide a base standard for sexual health education for Baltimore. Local school systems are required to have community representation reviewing and commenting on instructional material.

The success of health and sexual health education in Baltimore schools is strongly dependent on individual principals and dedicated teachers. A one-size-fits-all approach is unlikely to succeed. More work must be done to develop a sustainable, long-term system of integrating sexual health education into the existing objectives and priorities of schools. Parents need to be involved in the content and discussions, whether in-person or through innovative methods like on-line courses or platforms. Efforts also need to be made to explore introducing the seeds of sexual health and wellness even earlier than the current middle school starting point.

i. **Key Activities:**

- **Support and expand sexual education programming in Baltimore City Schools** – This includes supporting existing school curriculum guidance committees (facilitated now in part by BCHD's MCH bureau), studying online platforms that would allow parents to get more involved in sexual health literacy and discussions with their children, providing direct support (technical assistance and funding) to City Schools to enhance sex education, and discussing further integration with school health clinics.
- **Develop sex education programs in conjunction with other partners to reach youth who might not be reached via school-based programming-** Working with youth-centers, park and recreation locations and activities, Safe Streets, barber shop coalitions, GED programs, certification programs, apprenticeship programs, trade schools, and other relevant groups to design informal discussions and activities around sexual health and wellness targeted at out-of-school youth and adolescents.
- **Develop programs for parents and guardians to improve their knowledge base and to provide opportunities for parent/youth discussion**- Facilitate discussions and provide talking points for parents to engage their children in sexual health and wellness talks.

ii. **Addressing Health Disparities –**

Efforts to improve sexual health education in schools will be developed from a gender-positive and self-realization perspective. Significant focus will be on helping youth make informed and healthy choices on relationships and sexual behavior. Education focused on consent and individual rights will be a key component and the learning process will be guided by youth themselves.

iii. **Key partners/Collaboration-** Baltimore City Schools, School Board, Parent Teacher Associations, Maryland Department of Education, HHS Office of Adolescent Health, sexual health education guidance committee (MCH), BCHD Bureau of School Health, Mayor's Commission on Youth, BCHD Youth Advisory Council, colleges/universities/HBCUs, barber shops, beauty salons, faith organizations, youth groups/centers, AETC, among others

iv. **Potential Funding –** Baltimore City Schools**,** HHS Office of Population Affairs (BCHD MCH grant), CDC 18-1802, CDC 20-2010

v. **Estimated annual budget allocated -** $1.2 million

vi. **Outputs and Data Source**

- # of schools reached
- # of teachers trained
- # of students receiving sexual health education
- # of sexual health education activities targeted to out-of-school youth
- % change in Baltimore youth sexual behaviors related to unintended pregnancy and sexually transmitted diseases, including HIV infection (in YRBSS)

Data source: BCHD MCH, BCHD Prevention subgrantees, Youth Risk Behavioral Surveillance system

Strategy 3: HIV Laws and Policies- awareness and advocacy

In 2014 the US Department of Justice urged states to re-evaluate their HIV-specific criminal statutes to determine whether they are 1) supported by scientific-evidence, and 2) the most appropriate means to meet the intended purpose of these laws—preventing transmission of HIV. Additionally, the 2020 National HIV/AIDS Strategy includes a recommendation that states ensure that any HIV-specific statutes are consistent with "current scientific knowledge of HIV transmission and support public health approaches to preventing and treating HIV."

There is no scientific evidence to support that HIV-specific criminal laws change behaviors; such laws are an ineffective means of curbing HIV transmission. Studies show that individuals who are aware of their HIV status are far less likely to transmit the virus than those who are unaware of their status. In fact, laws criminalizing transmission of HIV may encourage individuals to avoid diagnosis, because knowledge of a diagnosis may place them at risk of prosecution. National and statewide HIV prevention and education efforts are more effective strategies for reducing transmission of HIV.

In Maryland, the section of statute that criminalizes the transmission of HIV is Health-General Article, §18-601.1. The statute fails to indicate whether disclosure of status or the use of preventive measures, such as condoms, pre-exposure prophylaxis, and antiretroviral medications, are an affirmative defense to prosecution under the law.

Additionally, enforcement of Health-General Article §18-601.1 counteracts public health efforts to encourage HIV screening and ensure that every individual is aware of his or her HIV status.

Additionally, Health-General Article, §18-601.1 is not necessary to prosecute individuals who knowingly transmit HIV to others. Individuals whose actions are so egregious as to demonstrate a specific intent to transmit HIV to another can and have been prosecuted under Maryland's other existing criminal laws, including the reckless endangerment statute.

i. **Key Activities:**
   - Engage with state and local education and sexual health agencies and stakeholders
   - Provide local STI and HIV data to advocates, local planning bodies, and local decision-makers
   - Engage the judicial system and law enforcement regarding the negative impacts of criminalization

ii. **Addressing Health Disparities –**

Understanding that the HIV epidemic disproportionately impacts the African-American and MSM populations in Baltimore City, efforts to de-criminalize HIV will help de-stigmatize HIV in general and reduce its negative associations with certain communities. Efforts should also be parlayed, when possible into the larger movement toward reducing mass incarceration and over criminalization.

iii. **Key partners/Collaboration-** MDH, local lobbyists, law enforcement, Baltimore City Office of Civil Rights, human rights CBOs, AETC

iv. **Potential Funding-** No specific budget required

v. **Estimated annual budget allocated-** None

vi. **Outputs and Data Source**

- # of engagement/education sessions with community
- # of engagement/education sessions with decision makers/service providers

Data source: Meeting minutes (All Partners)

Strategy 4: General Community Messaging

In 1988, the US Surgeon General, Dr. C. Everett Koop, distributed a brochure called Understanding AIDS to every household in the country. Dr. Koop's message said, in part, "Some of the issues involved in this brochure may not be things you are used to discussing openly. I can easily understand that. But now you must discuss them. We all must know about AIDS. Read this brochure and talk about it with those you love. Get involved." Around the same time, other high profile awareness efforts, such as the red ribbon campaign and public service announcements reached a broad audience across the US.

Today few mass communication products still exist that are geared to a wide audience and focused on basic HIV education and anti-stigma messages. Most current campaigns focus on specific vulnerable populations. In order to ensure that all Baltimoreans have accurate and current HIV information and in an effort to reduce stigma, Baltimore City needs social marketing and educational campaigns that target the general population with basic HIV information and the promotion of support and acceptance of people living with HIV. In addition, messaging must be repetitive and provocative in order to garner sustained attention and saturation.

i. **Key Activities:**

- **Engage in sustained marketing and communication efforts directed at general audience with a focus on basic sexual health, HIV education, and stigma reduction**- Campaign should focus on a wide-array of marketing media with regular review of data to shift resources to the most effective channels. Myths and rumors abound and general understanding on HIV often comes from information that's more than 20 years out of date (when the last HIV campaigns were prominent).
- **Develop indicators that measure HIV knowledge and reduced stigma and add those indicators to the Maryland Behavioral Risk Factor Surveillance System** (BRFSS)- Effective measures of campaign impact are essential to guide how and where campaigns are implemented.
- **Engage key social influencers and community leaders in communication campaigns-** Messaging from recognized and respected members of the community have proven to be more effective at achieving campaign results. Additionally, messaging from people living with HIV also makes the message more impactful.

ii. **Addressing Health Disparities –** While this strategy focuses on improving the overall HIV literacy of Baltimore, different communities need to be reached using variations on the campaign and the campaign messengers. By ensuring that both the message and the messenger are appropriate to different

audiences, we can increase the likelihood that the message will have the desired effect. For communities disproportionately affected by HIV, we must make certain that messaging is designed by those communities, for those communities.

iii. **Key partners/Collaboration-** Online media and dating apps, radio, TV and print media, Mayor's Office, Maryland Institute College of Art (MICA), faith-based organizations, barbers and beauty salons, nail salons, housing developments, colleges/universities/HBCUs, fraternities and sororities, entertainment centers/clubs, senior centers/residential facilities, and any organizations who have access to our communities.

iv. **Potential Funding -** CDC 18-1802, CDC 20-2010, HRSA, clinical and CBO provider funding sources

v. **Estimated annual budget allocated -** $400,000 -$600,000

vi. **Outputs and Data Source**

- # of individuals reached
- # of impressions (views)

Data source: BCHD or BCHD sub-grantees

Strategy 5: Data-informed and collaborative programming

A plethora of data, knowledge, expertise and best practices related to sexual health exists nationally, at the state level and specific to Baltimore City. The difficultly comes in coordinating and packaging these resources for the benefit of improved public health programming. How can symbiotic relationships be nurtured between academic research and public health planning? How can best practices in one organization be shared and considered for adaptation within another institution in a timely manner? BCHD will take the lead to help improve coordination, planning, and sharing between these entities and stakeholders.

i. **Key Activities:**

- **Quality Improvement (Internal)-** Support internal quality improvement processes within BCHD and other sexual health/HIV stakeholders to improve efficiency, resource allocation, and health outcomes. This process will also allow stakeholders to better understand their best practices that can be shared to other stakeholders.
- **Coordination and Sharing (External)-** Coordinate planning and sharing of data, knowledge, expertise and best practices amongst government institutions, providers, academia, research entities, CBOs, communities and people living with HIV to inform planning and programming in Baltimore City. This can be done through development of partnerships, creation of MOUs that outline collaboration, establishment/improvement of sharing platforms and support of collaboratives and other mixed-entity working groups. Bi-lateral partnerships should also be actively sought.

ii. **Addressing Health Disparities –** All HIV prevention and care activities need to be monitored and evaluated using demographic data including race, ethnicity, gender, sex partner preference, age, and location. This

information is essential in determining outcomes and impact on disproportionately affected communities and can then help identify which interventions have the greatest impact on specific communities.

iii. **Key partners/Collaboration**

- Academia and research: CFAR, AETC, CCHR, CTUs, Morgan State, Johns Hopkins, University of Maryland, etc., planning bodies: Ryan White Planning Council and HPG, Maryland Department of Health, CDC, HRSA, SAMSHA, IHA, NIH, MEDCHI, IMPACT Collaborative, Rapid Initiation Collaborative

iv. **Potential Funding –** CFAR, AETC, and academic partner funding

v. **Estimated annual budget allocated -** NA

vi. **Outputs and Data Source**

- # of new coordinating/sharing platforms
- # of coordinating/sharing meetings
- # of co-designed, co-planned and/or co-implemented activities

Data source: Meeting minutes, MOUs

Workforce Development Strategy

- **Create awareness and educate the general population and providers on social determinants of health, health disparities, and structural racism-** The CDC and multiple individual states are recognizing and declaring that racism is a significant threat to public health. Stakeholders in Baltimore have a role in continuing to bring this to light in order that change can follow.
- **Recruitment of voices and messengers from the community-** No one knows the community better than the community itself. Community leaders should be supported in their capacity development, and government, private, and CBO activities should collaborate with them to foster partnerships, build trust, design programming, implement activities and monitor and evaluate outcomes.
- **Build career tracks for community educators and health workers**- Many leaders in the Ending the HIV Epidemic Initiative are volunteers or hold positions with little or no opportunity for growth or advancement (ie. peer navigators). Baltimore city will focus on supporting the certification of CHWs and to expand career pathways for these frontline workers. Recruitment of paid staff, whether by government, providers or CBOs should look first to community leaders and volunteers.
- **Pay for work of community members-** The city often engages individuals to support information gathering, research, surveying, event organization, population mobilization, etc but with minimal or no benefits for them. This plan is a call to all stakeholders to valorize the time, efforts, experience and know-how of these populations by ensuring that they are rightfully compensated for their efforts, whether financial or otherwise.
- **Use of social influencers-** In this modern era, across all disciplines and vocations, evidence points clearly to the value of social influencers. Sexual health and HIV stakeholders in the city are encouraged and recommended to capitalize on this method of behavior change to help spread and legitimize messaging for the benefit of the individual and the wider society.

Indicators: ie. Diversity of BCHD HIV/STI staff and volunteers **To be established in 2021**

2. Pillar 1- Diagnose

Objectives:

- **Normalize and integrate HIV testing as part of standard care**
- **Diagnose all Baltimoreans as early as possible**
- **Increase number of youth tested for HIV**

Early diagnosis results in improved health outcomes for people living with HIV and decreased rates of HIV transmission. The Maryland Department of Health estimates that on average, persons living with HIV in Baltimore City are diagnosed about six and a half years after infection; therefore, ending HIV in Baltimore City must include strategies that result in a reduction of the time from HIV infection to diagnosis.

Based on the Baltimore Epidemiological Profile, from 2010 to 2018, Baltimore City experienced a 57% decrease in new HIV diagnoses going from 593 new diagnoses to 224. Of the reported 224 persons newly diagnosed with HIV in 2018, 64% were males, 83% were Non-Hispanic Black, and 33% (the highest percentage age group) were between the ages of 20-29. This trend has continued over the past few years, making it apparent that a focus on access to HIV prevention education and testing for youth and young adults should be a priority. HIV infection in Baltimore has a "dual-peak". While the 33% of new diagnoses occur in ages 20-29, the largest percentage of people living with diagnosed HIV and AIDS (about 35%) are between the ages 50-59.

While approaches to HIV prevention may differ slightly according to demographics and socio-economic factors, people living with HIV who are unaware of their status need access to culturally competent, confidential, and free HIV testing services, ideally integrated into ongoing primary health care. Reaching undiagnosed people living with HIV requires effective use of data for prioritized HIV testing, the provision of HIV/STI partner services, and outreach activities in non-traditional settings. Some undiagnosed people living with HIV may be unaware of their risk due to a lack of:

- Information about how HIV is transmitted or myths about which populations or communities are impacted by HIV
- Knowledge about the availability and success of HIV treatment
- Clinical providers who routinely address sexual health needs of patients and offer HIV testing
- Engagement in preventive primary health care
- Insufficient progress on reducing stigma and fear associated with HIV and HIV testing

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Strategy 1: Routinized Testing in Clinical Settings *(Structural)*

In 2006, CDC recommended that all people ages 13 – 64 get tested for HIV, and that HIV testing be a part of routine medical care. However, routine opt-out testing for HIV has not yet been integrated into many medical care settings, partly due to requirements for consent. In 2015 consent barriers were largely removed (House Bill 978), but incorporation of routine HIV testing into medical care has not yet been fully realized.

In addition, Baltimore City and other stakeholders must engage in promotional and educational efforts to ensure that providers, payers, and pregnant women are aware of and comply with the requirement of women to be tested for HIV in the first and third trimester of pregnancy.

i. **Key Activities:**
   - **Establish routine HIV testing programs in large hospital and care systems, particularly EDs and outpatient clinic systems**- There is a wide range of HIV testing in the city's EDs. Increased and routinized HIV testing in all city EDs is needed to ensure access to testing.
   - **Increase routine sexual health and HIV discussions and testing in primary care (including pediatricians) and urgent care settings-** This will include provider training and detailing, focusing on data, testing guidelines, applicable billing and reimbursement mechanisms, PrEP, etc. Baltimore City's Protect Baltimore is a provider detailing campaign targeting private medical practices and health centers in areas defined as high transmission areas for HIV. We plan to expand this program, to include CEUs, participation at medical conferences, and online material. This also includes working with provider training programs to increase awareness among providers and reduce stigma around HIV and STI testing and treatment. Work with primary care settings and their outreach initiatives to normalize HIV testing through integration into health check-ups involving blood pressure, blood sugar, etc.
   - **Work with payers to incentivize routine HIV testing.** In addition to working with providers, Baltimore City and other stakeholders can encourage payers to adopt routine HIV testing as a key quality measure and to consider enhanced reimbursement for HIV testing, particularly testing that results in new diagnoses of HIV.
   - **Evaluate missed opportunities for HIV diagnosis in those diagnosed late in the course of their infection.** Conduct a systematic review and robust analysis of those diagnosed late with HIV, and better understand "missed opportunities" for HIV diagnosis, to better inform HIV testing strategies in clinical settings and better understand cost savings associated with earlier diagnoses. (See also under "Respond" pillar)
   - **Improve HIV testing environment-** Ensure testing occurs in a setting that is stigma free, culturally appropriate, and where sexual health is discussed, valued, and integrated into overall care. All HIV testing should be accompanied by either linkage to care (if positive) or PrEP education and/or referral (if negative).

ii. **Addressing Health Disparities –** Routinizing HIV testing for all people in all healthcare settings will reduce disparities among different populations. Ensuring that these testing environments are stigma-free and welcoming to all will also promote improved access to testing across communities.

iii. **Key partners/Collaboration**
   - Health centers, EDs, urgent care and independent providers, pediatricians, Johns Hopkins CCHR, CFAR, AETCs, PTC

iv. **Potential Funding -**CDC 18-1802, CDC 20-2010, CDC 19-1901, Ryan White EIS, Ryan White EHE funding, 340 B pharmacy program

v. **Estimated annual budget allocated -** $700,000 - $1.5 million

vi. **Outputs and Data Source**
   - # of clinical provider locations receiving HIV testing detailing

- % of people tested for HIV out of all patients (to be defined) (BCHD sub-grantees only)

Data source: Detailing reports; BCHD clinical sub-grantees

Strategy 2: Priority Population Testing

Persons with the highest risk of HIV are often the least likely to engage in medical care, and thus may not be reached by routine testing. In order to ensure that they have access to testing, BCHD must develop grass roots capacity in vulnerable communities to provide prioritized HIV testing that is customized to the unique needs of each community. Implementing prioritized testing requires review of each community's epidemiological, resource, and cultural needs. Focusing on a population's access to health care system and environmental factors that increase vulnerability rather than risk behaviors, helps reduce stigma associated with HIV screening. Offering testing as part of a free, comprehensive health check that includes other diagnostics such as blood pressure and glucose levels, and offering these services in environments where community members feel welcome further reduces barriers to testing and creates important opportunities to reach otherwise underserved individuals.

Prior to the reduction in funding experienced in the CDC PS18-1802: Integrated HIV Prevention and Surveillance Programs for Health Departments grant, the Baltimore City Health Department funded an average of 45,000 HIV tests each year through community outreach and in clinical settings. Future efforts will focus on how to increase efficiency of focused testing programs.

i. **Key Activities:**
   - **Maximize efficiency of BCHD mobile testing using viral load and other data.** We need to increase the sophistication of BCHD surveillance and analysis activities to best use the data available to ensure our outreach and testing activities are optimized and efficient.
   - **Coordinate between outreach testing programs within the city to maximize reach and reduce overlap.** There are a multitude of mobile testing services across Baltimore, yet some communities still cite lack of accessible mobile services. Further coordination of available and expanding resources can help ensure equity and efficient use of resources.
   - **Identify vulnerable populations with high-barriers to health care access and develop testing engagement initiatives to overcome those barriers, with emphasis on reaching youth and young adults.** This includes different types of incentives that are not only motivating for marginalized and economically disadvantaged people, but can also serve as a subsistence support. Youth testing activities will be organized using venues, peers, and engagement methods appropriate to the interests of these communities.
   - **Develop testing opportunities that are culturally appropriate and accessible for the most vulnerable populations.** This includes identifying CBOs with existing relationships with vulnerable populations and leverage those relationships to build HIV testing programs. Identify key public events and venues to promote and implement testing.
   - **Support HIV testing with Syringe Services Programs.** BCHD has a strong and robust syringe exchange program, and can increase coordination with their programs, including co-location, awareness raising, and client referral.

- **Support HIV and STI testing through the BCHD Baltimore Disease Control Lab**. Ensure modern equipment and IT systems to provide low cost/free and timely testing to BCHD programs and city partners.
- **Improve HIV testing environment-** Ensure testing occurs in a setting that is stigma free, culturally appropriate, and where sexual health is discussed, valued, and integrated into overall care. This includes ensuring testing locations or mobile units provide broad health services and not just HIV/STI testing, which increases associated stigma. All HIV testing should be accompanied by either linkage to care (if positive) or PrEP education and/or referral (if negative).

ii. **Addressing Health Disparities –** We must provide capacity building technical assistance and financial support to community-based organizations run by communities most affected by the HIV epidemic. "Nothing for us, without us" must be the guiding principle in customizing testing.

iii. **Key partners/Collaboration-** Outreach programs conducting HIV testing, CBOs, Johns Hopkins CCHR, Community leaders/social influencers, Mayor's Commission on Youth, Mayor's Commission on LGBTQ, Youth Advisory Council BCHD, Baltimore City Safe Streets, BCHD Syringe Exchange Program, substance use disorder treatment facilities, Department of Corrections and Public Safety, Baltimore City Public Schools, colleges/universities/HBCUs, BCHD Partner Services, strip clubs, barbershops, beauty salons, Housing providers, among others.

iv. **Potential Funding -**CDC 18-1802, CDC 20-2010, CDC 19-1901, Ryan White EIS, 340 B Pharmacy program

v. **Estimated annual budget allocated -** $1.5- $2 million

vi. **Outputs and Data Source**

a. #/% of tests by demographic and geographic area
b. #/% of new and previous positives by demographic and geographic area
c. Positivity Rate (number of positives/total people tested)

Data source: BCHD and BCHD subgrantees; City-wide for lab tests (MDH)

Strategy 3: Testing in Non-traditional Settings

BCHD recognizes the increasing role that non-traditional testing can play in diagnosis of HIV. This includes home-based testing kits that are mailed to participant's homes or available in stores (such as drug stores) or distributed via CBOs.

Research has shown that home-based testing (self-testing) not only improves access and uptake, but is also deemed appropriate and convenient by users. With the known barriers to traditional HIV testing at clinical sites and even CBOs, Baltimore City is moving toward piloting a home-based testing programming that aims to minimize barriers and eventually serve as a long-term, sustainable home-testing program.

i. **Key Activities:**

- **Expand home-based STI/HIV testing, especially to those who may otherwise not seek out testing.** In 2019, BCHD began collaboration with Johns Hopkins "I Want the Kit"(IWTK) home-based testing program to make free home-based STI and HIV testing available for all residents of the city (14 or older for STI; 17 and older for HIV). Moving forward (and considering the COVID pandemic), BCHD will

continue to support the automation of the IWTK website and the expansion of services. Marketing of the program will be scaled-up and other city programs/partners will be linked into IWTK.
In addition to IWTK, provide other options in the city for provision of self-test kits including kiosks, mobile van Oraquick distribution, Oraquick distribution through CBOs and other community sites, etc.

- **Strengthen link between home-based testing and referral to PrEP/telePrEP-** Currently, IWTK is linked to the PrEPMaryland website, however, moving forward we will work to link PrEP navigation directly to the IWTK website. Other self-test distribution options should also support linkage to confirmation testing and PrEP.

ii. **Addressing Health Disparities –** Home-based testing will give people who face barriers to traditional testing the opportunity to access testing in the comfort of their home. We will ensure that disproportionately affected communities are regularly engaged and consulted in the evolution of the city's home-testing program and that this service is comprehensively marketed to these same communities.

iii. **Key partners/Collaboration-** Johns Hopkins's IWTK, Baltimore Crisis Response Inc., CBOs, PrEP Maryland/REACH, MDH/Virginia Health Department, CBOs, BCHD Partner Services

iv. **Potential Funding -**CDC 18-1802, CDC 20-2010, Ryan White EIS

v. **Estimated annual budget allocated -**$300,000 - $400,000

vi. **Outputs and Data Source**

- # of STI kits ordered/# returned/# positive by demographics
- # of HIV tests ordered by demographics
- # of people filling out the voluntary post-test survey
- % of users taking post-test survey that are satisfied with service
- # of IWTK site users
- # of PrEPMaryland website users coming from IWTK
- # of IWTK users linked to PrEP navigator

Data source: IWTK, PrEPMaryland

Strategy 4: Strengthen Partner Services

Partner Services is an activity in which trained staff, known as disease intervention specialists (DIS), offer assistance to persons newly diagnosed with HIV or other bacterial STIs by educating them about their disease, disease treatment, and future disease prevention, as well as notifying their sex and needle-sharing partners of their exposure. DIS interview newly -diagnosed individuals to identify their partners within a specific timeframe. This information is used to locate and confidentially notify partners of their exposure so that they may be linked to medical care for testing and treatment. The partner services program is voluntary, and DIS uphold the strictest standards to ensure patient confidentiality.

i. **Key Activities:**

- **Educate providers about partner services to increase receptiveness to the program-** Many providers are not aware of the activities of the health department and DIS. By incorporating DIS

and providers as part of a team approach, increased partnership between patients, providers, and DIS can increase efficiency of the public health system and better address disease transmission.

- **Provide increased training and support for DIS, with regular analysis of state-defined metrics for efficiency and effectiveness-** This includes implementing DIS phlebotomy and potentially STI testing in the field and establishing performance metrics for DIS (ie. time from provision of case to completed interview)
- **Increase fleet available for linkage to care and DIS activities-** These on-the-ground, outreach activities, which directly impact linkage to care, can be improved with an enhanced fleet of city vehicles for patient transportation.
- **Provide linkage to care and DIS with electronic devices-** Real-time access to electronic data entry and data systems will increase the efficiency of the entire surveillance and response system.
- **Arm DIS with phlebotomy and IWTK referral-** BCHD will support DIS in phlebotomy refresher training and will provide information and referral cards for IWTK. This will provide additional options for "contacts" to gain access to STI and HIV testing.

ii. **Addressing Health Disparities –** On-going training and coaching for DIS is critical for ensuring culturally appropriate and sensitive service provision. Improving DIS approach and interpersonal skills will improve trust-building and rapport, leading to better outcomes.

iii. **Key partners/Collaboration-** MDH, Baltimore City clinical providers, PTC, AETC, NASTAD

iv. **Potential Funding -** CDC 18-1802, CDC 19-1901, Ryan White State Special/EIS, MDH STI funding

v. **Estimated annual budget allocated -** $400,000 – $700,000

vi. **Outputs and Data Source**

- # of DIS interviews conducted
- # of individuals referred for/tested
- % of cases with sex and needle-sharing contacts identified and initiated for follow-up.

Data source: PRISM

Strategy 5: Integration of HIV and Hepatitis C/Tuberculosis Testing *(Structural)*

There are high rates of co-morbidity with HIV and hepatitis C, and an estimated 40,000-80,000 people have chronic hepatitis C in Maryland. Nationwide, only about 50% of people with hepatitis C are diagnosed and aware, leaving significant opportunity for improved testing and linkage to care. Hepatitis C testing guidelines have been risk-based, but in late 2019 have changed to recommend routine, opt-out testing for all adults. Given the new guidelines, traditional strategies to diagnose HIV and sexually transmitted infections should include hepatitis C testing.

BCHD has increased hepatitis C testing through its programs over the last five years. The Sexual Health and Wellness Clinics have been offering the testing since 2014, leading to diagnosis and treatment of hundreds of patients. Since 2018, BCHD has had a mobile clinic that offers testing and treatment for HIV, STIs, and hepatitis C, as well as treatment for opioid use disorder, targeted to a population that uses drugs. Patients served on the mobile clinic have a high prevalence of HIV (>5%) and hepatitis C (>26%). BCHD's Syringe Exchange Program is

piloting having a dedicated hepatitis C linkage-to-care staff member on board to engage people in hepatitis C services, confirm prior testing information in the state database, and link patients to testing and treatment services. Finally, BCHD's outreach testing program will soon be rolling out hepatitis C testing as well. Patients presenting for HIV/STI testing will be looked up in the state database for hepatitis C status – if already known to be positive, they will be referred to the linkage to care team, and will otherwise be offered hepatitis C testing.

BCHD's Tuberculosis program is in the process of expanding to include testing for Latent TB and HIV. With the TB program's focus and networks in the LatinX community, foreign born community and homeless populations, integration of HIV education and testing will support improved access for these target populations.

i. **Key Activities:**
   - **Conduct needs analysis for hepatitis C testing, linkage, and treatment, highlighting where it intersects with HIV resources-** A needs analysis is being conducted as part of the Baltimore City hepatitis C strategy, which was begun in 2020. The strategy will help direct collaborative efforts and integration between HIV and hepatitis C efforts.
   - **Expand Hepatitis C testing in BCHD programs and other testing providers-** integrating it with existing HIV testing programs.
   - **Integration of HIV testing into the BCHD LTBI program**- The newly expanded LTBI program at BCHD will work to provide technical assistance to partners on both LTBI and HIV. Additionally, the LTBI program will work to provide routinized HIV testing among their clients.

ii. **Addressing Health Disparities –** Co-morbidities disproportionately affect certain communities and these integrated initiatives will endeavor to address them simultaneously. As both hepatitis and TB have a higher prevalence in foreign born populations, BCHD and other providers must use these contact opportunities to facilitate access to other needs like insurance, primary health care, social support and legal/immigration services through referrals and warm hand-offs to provider organizations.

iii. **Key partners/Collaboration-** MDH, clinical providers, substance use providers, homeless service providers, LatinX community organizations, immigrant-related services, and CBOs

iv. **Potential Funding-** CDC EHE funding, FOCUS, MDH HCV funding, Ryan White A & B, CDC TB Elimination grant

v. **Estimated annual budget allocated -** $700,000 - $800,000

vi. **Outputs and Data Source**
   - # of BCHD subgrantees supported for integrated HCV testing
   - # HCV tests conducted by BCHD
   - % of people tested from HIV by BCHD clinic and outreach who are also tested for HCV
   - # of LTBI tests
   - % of people tested for LTBI who are tested for HIV

Data source: PRISM, clinic EMR

Workforce Development strategy

- **Training of DIS in phlebotomy and motivational interviewing-** BCHD will re-train DIS in blood draws, in order to provide another option for clients in the field. BCHD will also focus on-the-job training and coaching of DIS to improve motivational interviewing and communication skills.
- **Create HIV testing champions within organizations to promote routinized/opt-out testing-** Identification and support of champions in healthcare institutions will be a priority of BCHD during the implementation period.
- **Support community educators and community health workers to promote testing-** Improved access points for HIV testing is half of the equation, however, individuals must also be willing to seek out and/or consent to testing. Reducing the stigma around HIV and HIV testing will help increase testing uptake. Also, promotion of gains in treatment, financial support for medical costs, and awareness of linkage and support services will likely reduce anxiety and increase people's willingness to know their status.
- **Provide capacity building support to CBOs and other community-friendly organizations to perform prevention and testing-** Community feedback has highlighted the fact that many people are not willing to walk into a health facility and ask for an HIV test. They are however, more likely to engage in a low-barrier community program that slowly builds trust and opens the door for health promotion, including HIV testing. BCHD will work with CBOs and other community programs that want to offer testing ways they can do so directly or link to a clinical provider for warm referrals.

Indicators: To be established in 2021

3. Pillar 2- Treat

Objectives:

1. **Link newly-diagnosed individuals, those never in care, and those who have dropped out of care to medical services in a timely manner**
2. **Increase retention of people in care through the elimination or mitigation of real and perceived barriers**
3. **Increase the number/percentage of people living with HIV who are able to achieve viral suppression through the provision of comprehensive and culturally competent services**

Early and sustained engagement in HIV medical care results in both improved health outcomes for people living with HIV and decreased HIV transmission. Care coordination is an integral part of successful care engagement. The Affordable Care Act and Medicaid expansion means many people living with HIV have insurance for the first time and may need education and coaching on how to best access and use coverage. Regardless of insurance coverage, there may be an insufficient number of accessible HIV care providers. Lack of coordination between organizations, providers, and funders makes qualifying for assistance challenging, which also contributes to lapses in care.

The five strategies in the Treat Pillar include: (1) linkage to and retention in care and viral suppression, (2) access to quality treatment, (3) access to medication, (4) peer support networks, (5) integration of HCV and TB care into HIV, and (6) building on workforce development. Key issues linked to HIV care outcomes like stigma, medical mistrust, education, and awareness are included in our overall foundational pillar, "Educate, Transform, and Inform."

Strategy 1: Linkage to Care, Retention in Care, and Viral Suppression

These three steps, in the continuum of care, follow a logical progression. First an individual must be linked or access medical care, then they must be retained or continue to engage in that care and finally they must adhere to their treatment regime and their HIV medication in order to achieve viral suppression. Timely and effective linkage to care and retention in care efforts have a direct impact on rapid and durable viral suppression. Additionally, many of the barriers and facilitators that affect whether a patient can pass through these stages are similar or inter-connected, and therefor are addressed collectively here.

For several years, Baltimore City HIV testing and partner services programs have focused on linkage to care (LTC) and have seen substantial improvements. The LTC program also offers linkage services to other providers who are unsuccessful in contacting their patients who have fallen out of care. The DIS link newly diagnosed clients to their provider of choice, ensure that they understand their diagnosis and assist with notifying any named contacts of their exposure.

Both LTC and DIS teams offer services to all people regardless of age, sex, socioeconomic status, race/ethnicity, sexual orientation, or insurance status. LTC and DIS make phone calls and conduct field visits to locate individuals for linkage-to-care and partner services interviews. When patients are located and care or treatment is needed, the staff will offer transportation services to first and second appointments.

A few key initiatives developed over the years are:

a. **Data to Care** is a public health strategy that uses State HIV surveillance data to identify HIV-diagnosed individuals not in care
b. **Partnerships for Care** is a collaboration between MDH, BCHD, and local providers whereby providers who have not seen a patient in more than six months can reach out to the state for help in learning about their care status and help re-locate and re-link them to care (through BCHD's linkage team).
c. **Accurint Search** matches Maryland HIV cases to a national database (Lexis-Nexis) to identify persons who had moved out of state and/or died out of state.
d. **Tri-state "Black Box" Project** This program integrates the surveillance data among Maryland, DC, and Virginia, to increase efficiency of linkage to care activities. Given the high level of travel in this geographic region, having a regional, as opposed to only state-wide, understanding of surveillance data as it pertains to access to care, helps with linkage activities. For example, Maryland, DC, and Virginia HIV Surveillance databases were matched and identified 11,300 Maryland cases in the DC data and 4,500 Maryland cases in the Virginia data, only half of which were previously known to be in more than one system.
e. **LEAN Retention in Care app** is a pilot app designed to allow patients to stay in contact with a linkage specialist regarding their HIV care appointments. The hope is that regular communication and reminders will increase the likelihood of a patient being retained in care. Broader population-level linkage to care efforts will be implemented as well. Increased efforts and efficiency are needed in population-wide retention-in-care activities.
f. **Charmcare** is a city-based website that serves as an online directory of social services and needs. HIV providers and wraparound services are listed, as well as resources for housing, education, legal services, mental health treatment, food security, substance abuse treatment, etc. The vision is for this to be kept up to date, and interactive with the ability to schedule services and provide electronic linkages in one system.

Retention in care and viral suppression outcomes are often more related to each individual provider than the client themselves. Programs to address retention and viral suppression differ by provider, ranging from robust, personalized services (ie. GTZ sites) down to an absence of any formalized protocols or support mechanisms.

i. Key Activities:

Key activities will continue to be informed annually by Ryan White Council Priority setting.

- **Improve efficiency of linkage to care activities at BCHD, with more of a focus on provider-specific activities such as partnerships for care and work with corrections**. (See above)

- **Expand rapid start ARV programming to improve retention and adherence**- Studies have shown that patients who immediately start ARV after diagnosis tend to have better outcomes than those who do not. City providers will continue to learn from the best practices and protocols developed under the Rapid Start Collaborative supported by Hopkins and the CFAR.
- **Develop city-wide retention in care program, based on findings of pilot retention app** (see above)*(structural)*
- **Develop city-wide, population-level viral suppression program to routinely evaluate and reach out to those who are not suppressed** *(Structural)*- Surveillance data and CareWare data can be used to ensure those with unsuppressed viral loads are receiving services, either through the provider or through other avenues. This may include development of a health-department based case management system for providers and/or individuals who are not eligible for or not otherwise enrolled in Ryan White programs.
- **Retention in care assistance for non-Ryan White HIV providers-** This includes Getting to Zero clinic-based activities such as retention and adherence case managers at clinics, promoting client tools and engagement strategies for care providers, and linking client data and viral suppression data for quality improvement feedback to providers and payers.
- **Increase availability of HIV DOT services-** We will increase awareness of BCHD's HIV DOT program to providers and patients.
- **Ensure appropriate care to people aging with HIV-** Those aging with HIV may require additional treatment integration, as their HIV is managed along with routine medical care of the geriatric population. Integration of geriatric care with high quality HIV care, including those newly infected with HIV later in life, and those living with HIV for many years, is essential to care for our aging population.
- **Support and expansion of Charmcare-** to develop it into a resource that allows for uniform and systematic referral of services for Ryan White and non-Ryan White providers. Having a city-wide, up-to-date referral and resource registration network will help ensure medical and non-medical case management services are uniformly high quality throughout the city.

ii. **Addressing Health Disparities –** HIV care outcomes differ by age, race, and gender. With Careware's robust pool of data, we can identify which types of services and programs are more effective (or less effective) at improving HIV outcomes for different communities. We need to couple this data with satisfaction surveys, needs assessment surveys, focus groups and other means of information gathering to ensure that disproportionately affected communities' needs and barriers are clear and that programming continually adapts to address those issues. Understanding the role of social determinants of health, we must ensure that all HIV care engagement opportunities are capitalized on to link individuals to other health and social needs.

iii. **Key partners/Collaboration**

- MDH, clinical and non-clinical providers, Charmcare, HCAM, AETC, CFAR

iv. **Potential Funding –** Ryan White funding, 340 B Pharmacy program

v. **Estimated annual budget allocated-** $6 - 8 Million

vi. **Outputs and Data Source**

- Required Ryan White indicators

- # of Linkage clients- broken down by outcome
- % of linked clients retained in care
- #/% retained for one year
- % individuals virally suppressed
- Durability of viral suppression
- # enrolled DOT clients

Data source: CareWare, PRISM, clinic EMR, eHARS

Strategy 2: Access to quality treatment -Expanded HIV Provider Networks and HIV-Informed systems Integration

There are several mechanisms by which we plan to increase HIV treatment networks. These include expanding HIV care into the primary care setting and telehealth. We will also focus on increasing quality of HIV care city-wide.

Stigma associated with HIV, especially at the beginning of the epidemic, led to the development of parallel health care and social services systems. During the early days of the epidemic, when less was known about transmission and the fear of interactions with HIV-positive persons was prevalent, there was a need to develop dedicated AIDS service organizations. Because separate systems were originally created to address HIV and AIDS, many larger health care and social service delivery systems are not HIV-informed and are therefore unequipped to respond to the needs of people living with HIV. In particular, people living with HIV are now surviving into their 50s, 60s, and 70s, and senior services (gerontology, and senior housing and assistance) are not adequately prepared to address their needs. In 2015, Ryan White Part A services were provided primarily to people over the age of 45 in the Baltimore Eligible Metropolitan Area.

Successful care coordination in broader systems requires identifying the needs of and providing stigma free care to all populations served. Vulnerable populations need sensitive delivery of services that allows for empowered health care decisions. This is accomplished not only in patient-provider interactions, but also through appropriate data collection and reporting systems, practice management, and delivery-system design.

In needs assessment and discussion, the following services were highlighted repeatedly: housing, transportation, dental, mental health, and substance abuse services, and support for medical and laboratory co-pays. For each of these categories, action items include the exploration of potential leverage points for integrating HIV-specific needs in larger systems. For example, in housing, by integrating Housing Opportunities for People Living with AIDS programs in existing homelessness, poverty, and workforce development programs, screening for HIV infection and HIV-informed delivery of services can be increased.

i. Key Activities:

Key activities will continue to be informed annually by Ryan White Council priority setting.

- **Engage additional FQHCs to expand primary care capacity to provide HIV-related medical care-** Provide funding and technical support.
- **Explore capacity, implementation, and payer systems for telehealth or other mobile delivery of HIV-related health services**- There is a high level of interest in expanding access to HIV care outside of our traditional brick and mortar clinical settings, especially from what we have learned during the COVID 19 pandemic. BCHD and both clinical and non-clinical partners will continue to develop their telemedicine options and accompanying variations on diagnostics to keep patients safe and improve access to these vital services.
- **Increase or add off hours at HIV provider sites (clinical and non-clinical) to improve access for certain populations-** By providing expanded hours we can meet the diverse needs of patients, while also supporting COVID social distancing recommendations.
- **Continue to develop care coordination amongst Ryan White providers-** By educating Ryan White providers on the services and resources of other Ryan White providers, we can continue to better match patient needs with appropriate services.
- **Identify transferable lessons learned from Ryan White providers to non-Ryan White provider systems-** Also highlighted under Strategy 5, Foundational Pillar.
- **Market services using appropriate communication media-** Community members have highlighted the need to have greater community awareness about service providers and their services.

ii. **Addressing Health Disparities –** Integrating clinical and social service for people with HIV, as well as HIV specialty and primary care, minimizes barriers in accessing comprehensive services. Integrating services also helps to normalize HIV care, reducing stigma associated with HIV and people living with HIV.

iii. Key partners/Collaboration

- Medical and non-medical providers, AETCs, CFAR, PTC

iv. Potential Funding – Ryan White funding, 340 B Pharmacy program

v. Estimated annual budget allocated- $2 – 4 Million

vi. Outputs and Data Source

- # RW subgrantees by type
- # training sessions for city providers on HIV
- Patient satisfaction metrics and survey results

Data source: AETC/PTC, CareWare, RW surveys

Strategy 3: Access to Medication

Maryland invests substantial resources to ensure access to medications through MADAP. MADAP helps to pay for 173 selected, prescribed drugs for individuals who are do not meet the income eligibility qualification for Medical Assistance who are uninsured. To qualify for MADAP, an individual's income must be between $12,553 and $54,150 a year. Income for couples must be between $16,897 and $72,850 a year. MADAP also offers help paying health insurance premiums for HIV-infected individuals. (Clients must pay 50% or more of the monthly health insurance premiums out-of-pocket.)

Traditionally, MADAP has paid for medications for HIV-positive persons. However, with the advent of the Affordable Care Act, MADAP has evolved into an insurance payment program. Approximately 85% of MADAP clients have some sort of insurance coverage, either through their employer, the health insurance marketplace established by the Affordable Care Act, or another qualifying entity. As a result, expenses associated with the program are on a downward trajectory. While the number of MADAP clients paying premiums has remained fairly steady, premium expenditures have decreased. MADAP co-pays and deductibles expenditures have fluctuated as has the number of clients paying them. MADAP drug purchase clients and expenditures have decreased.

As of January 1, 2020, MEDICAID MCOs in Maryland will adopt a carve-in policy on HIV medications. The exact impact of this on people living with HIV will depend on their current medication, their clinical details, and their MCO's updated formularies. These changes could affect which medications they can access and the co-pay associated with it. Patients, providers, case manager, and anyone else who assists patients will need to take a look at the updated formularies (and associated prior authorization requirements) for all MCOs to make a decision to stay with their current MCO or not, as the new carve-in policy goes into effect.

i. **Key Activities:**
   - **Assess MADAP systems to streamline and simplify application processes**- BCHD and case managers must provide regular feedback to MADAP to ensure an efficient system that meets the needs of people living with HIV.
   - **Analyze insurance plans (with new MEDICAID carve-in rules) for coverage of HIV-related services and medications**- BCHD and case managers must stay abreast of new carve-in rules and other MEDICAID medication updates in order to provide the quality insurance navigation for people living with HIV.
   - **Educate health insurance navigators on HIV and insurance coverage-** Based on the previous two strategies, work with MADAP and MEDICAID to provide trainings and informational sessions on medication coverage updates.

ii. **Addressing Health Disparities –** Working to support people living with HIV to access insurance and ultimately coverage of their medication, with the lowest co-pays and easiest access to the prescription pick-up will reduce disparities in medication adherence for many communities.

iii. **Key partners/Collaboration**
   - MADAP, MEDICAID, HIV advocacy groups, Pharmacies, Providers, AETC

iv. **Potential Funding-** MEDICAID, MADAP, Ryan White Funding

v. **Estimated annual budget allocated-** $100,000 (only activities above not including medicine)

vi. **Outputs and Data Source**
   - # PLWH with difficulty obtaining medications
   - # of MADAP/MEDICAID medication trainings/informational sessions for providers/case managers

Data source: CareWare, MADAP, MEDICAID

Strategy 4: Peer Support Networks

The purpose of peer support networks is to enable individuals with similar experiences to support one another to effectively deal with trauma or negative experiences. Additionally, peer support networks provide opportunities to collect feedback on delivery of care to improve future experiences. People living with HIV who work with health care practitioners as part of peer support networks often feel heard in a way that individual patient/provider interactions cannot produce.

i. **Key Activities:**
   - **Increase availability of peer support groups-** We will assess the availability of peer support groups, and then work to increase the number and type of groups available through clinical and community-based sites.
   - **Promotion of family and friends support mechanisms-** We will seek to increase resources (educational information, bus tokens, incentives) to ensure that family, friends, and other support networks have the tools they need to serve as a strong support network to people living with HIV.
   - **Counseling and help lines-** An HIV diagnosis can be an isolating experience, and that isolation can hamper being enrolled in care. Isolation is also a concern among older populations living with HIV, exacerbated by the isolation sometimes experienced by the elderly population in general. BCHD and providers must work to provide sufficient post-test counseling and warmlines/hotlines for those needing support.

ii. **Addressing Health Disparities –** In order to reduce disparities in certain communities, we must ensure that peer support groups and counseling services are available in multiple languages. Also, while peer support groups can be open to mixed participation, there is also value in facilitating support groups specific to certain communities that experience significant and/or unique barriers, like transgender communities, MSM, aging population, and youth, among others.

iii. **Key partners/Collaboration**
   - BHSB, BCRI, medical providers, non-medical providers, religious groups

iv. **Potential Funding-** Ryan White funding, CDC 20-2010

v. **Estimated annual budget allocated-** $200,000 - $300,000

vi. **Outputs and Data Source**
   - # of peer support groups available/by type
   - # of people living with HIV participating in peer support groups

Data source: RedCap, CareWare (BCHD subgrantees)

Strategy 5: Integrate HCV and TB care with HIV care *(structural)*

In an effort to develop stronger coordination of hepatitis C activities, BCHD recently hired a Hepatitis C Program Coordinator, who was formerly a linkage to care supervisor. BCHD has been a leader in linkage to care for hepatitis C, and has seamlessly integrated HIV and hepatitis C linkage within the same team. With this experience, the Hepatitis C Program Coordinator is working on a citywide hepatitis C needs assessment through

surveys and interviews with key service providers. Once this is complete, BCHD will draft a strategic plan for hepatitis C elimination, first for BCHD and later for the city as a whole. Momentum for hepatitis C is strong in Maryland, and BCHD recently helped plan the first annual Hepatitis Summit, which had strong attendance from many stakeholders across the state. Funding for hepatitis C activities remains limited, so scaling up of education, testing, linkage, and treatment efforts remains a challenge. Other jurisdictions have successfully developed micro-elimination plans for certain populations, including patients co-infected with HIV. The goal of curing hepatitis C in all people living with HIV in Baltimore is achievable.

Similarly, although much less in number, cases of HIV and TB or LTBI exist in Baltimore. There is a certain medical complexity involved in treating TB in patients with HIV infection. BCHD's TB clinic is working to further develop protocols for treatment of such clients.

i. **Key Activities:**
   - **Assess and expand access of hepatitis C treatment, as it pertains to HIV care-** Support HIV providers in the integration of HCV treatment and/or collaboration with partner providers for HCV treatment referral. The Share the Cure program will continue to identify and support the hepatitis C treatment capacity training needs of providers.
   - **Develop and implement treatment protocols for individuals co-infected with TB/LTBI and HIV-** Develop BCHD's TB/LTBI program to serve as the referral site for co-infected patients.

ii. **Addressing Health Disparities –** Co-morbidities disproportionately affect certain communities and these integrated initiatives will endeavor to address them simultaneously. As both Hepatitis and TB have a higher prevalence in foreign born populations, BCHD and other city providers must use these contact opportunities to facilitate access to other needs like insurance, primary health care, social support and legal/immigration services through referrals and warm hand-offs with provider organizations.

iii. **Key partners/Collaboration-** MDH, Share the Cure, clinical providers, substance use providers, homeless service providers, LatinX community organizations

iv. **Potential Funding-** CDC 20-2010, FOCUS, MDH HCV funding, Ryan White A & B, CDC TB Elimination grant

v. **Estimated annual budget allocated-** $500,000 - $600,000

vi. **Outputs and Data Source –**
   - # of co-infected individuals treated for HCV (BCHD Clinics and RW providers)
   - # of co-infected individuals treated for TB/LTBI (BCHD TB clinic)

Data source: Careware, Clinic EMR

Workforce Development strategy

All workforce development needs and initiatives, particularly targeted toward providers, will be assessed, designed, implemented, and evaluated through capitalization of existing resources, including AETCs, PTC, MED CHI, CDC, NASTAD, NACCHO, and other recognized capacity building partners. Domain-specific partners and community-expertise will also be tapped from local institutions to complement provider needs.

- **Training in cultural competency, including training on LGBTQ competency and needs-** Baltimore has a diverse population and a significant population in which a language other than English is spoken at home. Baltimore is home to a large number of LGBTQ people. Baltimore's diverse population deserves a welcoming environment no matter where they seek health care services. This plan promotes cultural

responsiveness and cultural competence to ensure that the varied needs of all populations served are addressed. Cultural responsiveness refers to health care services that are respectful of, and relevant to, the health beliefs, health practices, culture, religion, and linguistic needs of diverse populations and communities. Cultural responsiveness requires knowledge and capacity specific to diverse populations at different levels of intervention: systemic, organizational, professional, and individual. Cultural competence is cultural responsiveness at the organizational level and requires that organizations have a defined set of values and principles and demonstrate behaviors, attitudes, policies and structures that enable them to work effectively across cultures. These trainings should also include health disparities by race and the role of social determinants of health.

- **Work with the State to explore provider licensing requirements that could include CMEs around cultural competency and LGBTQ care –** In order to promote capacity building around cultural competency and responsiveness, linking licensing and CMEs to these competencies would ensure their place in care.
- **Recruitment of more non-medical staff/case managers for linkage to social needs-** Community feedback has cited time and again that gaps in support staff numbers/availability has a greater impact on navigation, linkage, and retention outcomes compared to clinical staff. This includes community health workers, navigators, social workers, front desk support, etc.
- **Increase HIV and allied health professional workforce available to support the growing numbers of people living with HIV and aging-** As the average age of people living with HIV continues to increase, the inter-related complexities of gerontology (care for aging people) and HIV care require knowledgeable and well-trained staff. Additionally as older HIV providers retire, young clinicians often do not have sufficient historical knowledge or understanding of the epidemic to meet older patients "where they are."
- **"Preparing the Future" AETC-** This program will prepare students to work together to improve patient outcomes and reduce health disparities related to HIV. Inter-professional education provides classroom and hands-on curriculum specifically for health & human service professionals and will help participants incorporate key goals to end the epidemic.
- **Improved coordination and training on intra-service referral and referral resources like CharmCare-** In order to meet the full-spectrum of needs of people living with HIV, further training on and development of referral networks needs to be a priority.
- **Training on Trauma-informed care, Mental Health, and Substance Use-** These co-conditions often create barriers to HIV care, retention and adherence. Training for clinicians and non-clinicians on these topics will allow for more appropriate and effective client interactions, more effective screening of needs, and improved linkage to needed support.
- **Training on sexual health care-** We cannot address the HIV epidemic if we are afraid to speak openly and in detail about sex. Training for clinicians and certain non-clinicians should be on offer to improve providers" ability to have open and honest conversations about sex.
- **Advocate for recruitment of staff who represent the populations served-** People feel most comfortable engaging and receiving services from people who look like them. Efforts need to be made to encourage LGTBQI, people living with HIV and communities of color to enter career paths related to sexual health

and HIV. Recruitment and promotion of them needs to be prioritized in order to match the demographics of the patient population.

Indicators: To be established in 2021

4. Pillar 3- Prevent

Objective:

1. **Prevent transmission of HIV by using proven interventions and innovative ideas to help individuals reduce their risk, and address community-wide structural determinants affecting HIV health**

As highlighted in the Epidemiology overview, HIV does not impact all populations and communities equally. In Baltimore, HIV disproportionately affects African Americans; gay, bisexual and same-gender-loving men; people who inject drugs; transgender persons; youth; those living in poverty; and other vulnerable groups. Baltimoreans who are members of these populations or have high-risk social networks need access to risk reduction and supportive services to help them remain HIV-negative. In addition, members of vulnerable populations often live in environments that reinforce their vulnerability such as communities with a high prevalence of untreated HIV, poverty, racism, and gender inequality. Many may also suffer from limited health literacy and access to culturally competent health care. The societal systems we have created are often at the root of individual risk, as opposed to the behaviors that immediately lead to infection.

The strategies in the Prevent Pillar include: (1) Increasing access to and availability of PrEP and nPEP, (2) support SSP, (3) strengthen U=U, (4) enhance community-based capabilities, (5) status neutral programming, (6) Condom distribution, (7) address substance abuse, (8) incorporate HIV diagnosis strategies into an overall sexual health and wellness strategy, and (9) strengthen the BCHD Sexual Health and Wellness Clinics. Key strategies around stigma, medical mistrust, education, and awareness, all of which impact on prevention outcomes are included in our overall foundational pillar, "Educate, Transform, and Inform."

Strategy 1: Increase access to and availability of PrEP & PEP

In 2015, Baltimore City created partnerships with clinical and non-clinical stakeholders known as the IMPACT collaborative. The goal was to build availability of PrEP, strengthen outreach, testing, and prevention activities, while focusing on disproportionately affected communities. This collaborative endures today and provides a platform for an exchange of best practices for PrEP, enhanced data analysis for programmatic use, and inter-agency referral networks.

Although the IMPACT collaborative has been successful reaching priority populations, many challenges remain related to awareness, access, and adherence to PrEP. PrEP awareness among black and Hispanic MSM remains low. Data from the Behavioral Surveillance Research (BESURE) study, indicated that only 38.4% of MSM in Baltimore reported any knowledge about PrEP. While most attention to PrEP is focused on the MSM community, research also indicates low PrEP awareness among other priority populations such as black women and injecting drug users. Expanded outreach is needed to improve awareness and encourage PrEP uptake in communities with the greatest need.

While the IMPACT campaign provided trainings to healthcare providers on PrEP clinical efficacy and prescribing guidelines, gaps in knowledge and willingness to prescribe PrEP continue to exist. Additionally, there is a need to move beyond the HIV care community and increase education and awareness among primary care providers including women's health, adolescent health, college and university student health services, and family practices. We have participated in public health detailing through the IMPACT campaign, but a broader approach is necessary in order to increase knowledge, attitudes, and practices of providers regarding PrEP.

We continue to struggle with improving our PrEP continuum, particularly in moving from awareness, to willingness, to uptake. We have made significant strides by providing peer navigation services, but remain frustrated in our efforts to move clients beyond knowledge to behavior change. While an estimated 12,000 individuals in Baltimore meet CDC PrEP recommendation guidelines, only a small percentage of these have been prescribed PrEP. We recognize that, despite its proven effectiveness, PrEP uptake in communities of color remain low due to individual, community, and systemic barriers. This highlights the continual need for a comprehensive approach to HIV prevention that includes linkage to behavioral and supportive services, cost assistance for PrEP and associated costs (i.e. labs, office visits, co-pays, missed time at work, etc.), incorporating anti-stigma and medical mistrust themes into a public health framework. We also recognize the challenges inherent in PrEP – the need for frequent doctor appointments and blood draws, the challenges with staying on daily medication that is preventive in nature, challenges unique to youth including being on parental insurance plans and privacy; challenges with those who are unstably housed, and the overall negative stigma and silence associated with being on PrEP.

nPEP is available at emergency rooms, urgent care centers, and some health clinics. However, we have learned from our IMPACT partnerships that there remains a need to create an nPEP infrastructure to support nPEP adherence and linkage to PrEP and supportive services for at risk populations, specifically sexual assault survivors.

i. Key Activities:

- **Finalize a city-wide PrEP/nPEP strategy-** including development of nPEP protocols, definitions and measurement protocols for "PrEP adherence."
- **Continue support and development of the city-wide PrEP IMPACT Collaborative-** This includes expansion of the PrEP peer navigation and support programs and expansion of the number of providers offering PrEP or referring patients to PrEP programs. It also includes continuing to explore the ways to evaluate and measure the effectiveness of PrEP programs and the PrEP cascade.
- **Support systems for unique PrEP and nPEP delivery-** ie. TelePrEP and pharmacy-supported PrEP
- **Continue outreach to communities and persons that can benefit from PrEP-** including educating communities and providers on the access and appropriate use of nPEP. Demonstrate a wide-range of communities using PrEP to reduce stigma and normalize uptake.
- **Calculate costs for providing nPEP medication and insurance support for nPEP use-** Use these estimates to identify when and for whom nPEP is a financial barrier and address those barriers.

- **Explore development of a "PrEPDAP" (financial assistance to cover PrEP costs) fund at the state level-** similar to other states, and continue to research ways to pay for the laboratory and clinic visits of PrEP, two financial barriers that are not yet fully addressed.
- **Work with youth-based organizations to continue to address youth-specific challenges associated with PrEP**
- **Research the mechanisms and approaches of new prevention technologies (injectables, rings, etc) that are in development-** Truvada is not the only medicine available for preventing HIV and dozens of prevention methods are in the pipeline.

ii. **Addressing Health Disparities –** PrEP programs should recruit PrEP navigators who reflect the diversity of the communities that they aim to engage. Additionally, to reduce stigma and avoid turning away certain communities, PrEP marketing should focus on cross-sections of the population and should not focus only on particular communities. Use of Gilead's prescription assistance program and the federal government's ready, set, PrEP program can help clients overcome financial barriers previously associated with accessing PrEP medication. TelePrEP and free home-testing options can also help reduce barriers that some experienced accessing PrEP.

iii. **Key partners/Collaboration**
- Mercy hospital (nPEP), IMPACT collaborative partners, other clinical providers, school health, CBOs, CCHR, AETCs, CFAR, Gilead, youth-related organizations

iv. **Potential Funding –** CDC 18-1802, CDC 20-2010, Ryan White EIS funding, HRSA direct PrEP funding

v. **Estimated annual budget allocated -** $1 – 1.5 million

vi. **Outputs and Data Source**
- #/% of individuals at risk for HIV who are screened, referred, linked, prescribed and on PrEP from BCHD funded partners
- # of clinical/non clinical providers taking Coursera PrEP
- # of TelePrEP programs established (BCHD funded)
- Map nPEP services/data in the city

Data source: RedCap, CareWare, Clinic EMR

Strategy 2: Support Syringe Service Program

The dramatic reduction in new cases can be attributed in large part to the city's Syringe Service Program. Syringe services programs (SSPs) reduce the harms of sharing injection drug equipment, particularly the spread of HIV and Hepatitis C, and are largely responsible for reductions in HIV transmission among people who inject drugs. In 1994, 63% of the persons in Baltimore who were diagnosed with HIV identified injection drug equipment as the sole mode of exposure. That same year, BCHD launched its SSP, and in 2018, the proportion of new HIV infections attributed solely to injection drug equipment has declined to 10% (as per 2018 Baltimore HIV Epidemiological profile). Now a distribution rather than exchange model, the program has increased availability of clean syringes and operates in 16 locations around the City. Two additional, community-based SSPs are now also operating: the Baltimore Harm Reduction Center and Charm City Care Connection's syringe distribution program. In 2018, 23 new HIV infections in Baltimore City were attributable to equipment for injecting drugs, and ongoing

strengthening of SSPs is key to further reducing transmission of HIV among people who inject drugs. In addition to making clean equipment available, SSPs present opportunities to provide health education, testing, and linkage of clients to HIV and HCV treatment.

i. **Key Activities:**
   - **Maintain and expand SSPs in Baltimore, including some fixed sites-** In the face of the COVID pandemic, we must ensure that the access points for SSP remain robust and expand where and when possible.
   - **Establish HIV and HCV outbreak response plans that include access to clean syringes-** SSP will work with the BCHD Hepatitis C program and City HCV strategy to develop outbreak response plans to include injecting drug users.
   - **Monitor for injection drug use-related clusters and potential outbreaks**- in collaboration with MDH (see Pillar Respond)
   - **Continue community engagement to promote the acceptability of SSPs-** Through community outreach activities and campaigns we will continue to advocate for the maintenance and expansion of SSP highlighting the data and do no harm principles.
   - **Provide awareness, education and referral for PrEP to SSP clients-** Explore adding on-site PrEP services as part of the SSP service package.

ii. **Addressing Health Disparities –** Syringe Services Programs are intrinsically a social justice program because they provide direct services to often vulnerable, heavily stigmatized and underserved people. In their absence people with substance use disorders have increased risk for contracting HIV and or bloodborne infections such as hepatitis C. BCHD has demonstrated a commitment to social justice by maintaining its syringe services program since 1994.

iii. **Key partners/Collaboration**
   - MDH, law enforcement, National Institute on Drug Abuse, CFAR, local substance use treatment programs, CBOs, faith based organizations, FQHCs, local colleges and universities

iv. **Potential Funding**
   - MDH, Baltimore City, SAMSHA

v. **Estimated annual budget allocated-** $1.7 million (MDH and general city funds)

vi. **Outputs and Data Source**
   - # of SSP active clients
   - # of syringes distributed
   - #/% of SSP clients tested for HIV

Data source: SSP database

Strategy 3: Strengthen U=U movement

The successes in HIV treatment in Baltimore have also contributed to the reduction in new cases. The global U=U movement has its own community-led version in Baltimore City, which continues to educate the population around viral suppression and transmission.

Key Activities

- **Get the word out-** The main objective of the U=U campaign is to get the message out in order to promote retention and adherence, but also to reduce the stigma of people living with HIV to the wider community. This will be achieved through the development and updating of the U=U strategy and workplan, expansion of U=U membership and partners, and the development, implementation, and monitoring of U=U marketing, awareness, and education activities.

i. **Addressing Health Disparities** – U=U messaging is essential to reducing stigma related to HIV status. Not only does it build self-efficacy for individuals with HIV to remain adherent to ART, but it helps to reduce fear of status disclosure for those who are virally suppressed. Continuous U=U messaging to the public, especially to populations disproportionately impacted by HIV disease, also helps to normalize HIV by promoting it as a condition that can be prevented and maintained with adequate treatment rather than just an infectious disease.

ii. **Key partners/Collaboration-** NASTAD, Chase Brexton, MICA, clinical and non-clinical providers, pharmacies, schools, religious organizations, AETC, CFAR

iii. **Potential Funding**
- CDC 18-1802 funding, local foundations

iv. **Estimated annual budget allocated -** $100,000

v. **Outputs and Data Source**
- # of U=U members
- # of U=U campaign impressions
- # of U=U trainings/education sessions
- # of U=U materials/handouts distributed

Data source: Membership database; Marketing analytics

Strategy 4: Enhance community-based capabilities

With continuing stigma and mistrust in our communities, some CBOs have better access and rapport with certain communities than government or medical providers. These entities should be supported financially and through capacity building to help educate on HIV and increase access to testing, treatment and prevention.

i. **Key Activities:**
- **Support CBOs -** to provide safe, welcoming environments that speak to the lived experience of vulnerable populations, particularly transgender persons, young black gay, bisexual, and same-gender-loving men, and black women. Assist community programs to pursue government, foundation, industry, and corporate funding to support community-based programs. BCHD is exploring a mechanism to provide micro-grants to these types of organizations.
- **Develop the capacity-** of CBOs to address HIV, including financial and administrative duties through the provision of technical support and training.

- **Support community health workers-** to provide the outreach, linkage, and referrals to those who are most vulnerable. These workers can be linked to provider systems, CBOs, or community associations.

ii. **Addressing Health Disparities-** While the HIV epidemic has hit hardest communities of color, MSM, transgender, and youth, these communities are often not reflected in traditional clinical or even non-clinical organizations. To ensure that their voices are heard and their ideas are incorporated, smaller entities and community organizations formed and run by these communities must be supported. BCHD is developing a system of micro-granting and technical support that will allow formal and informal associations and organizations to have a role in EHE.

iii. **Key partners/collaboration-** CBOs community associations, community leaders and social innovators, religious leaders and groups, barbers and beauty salons, nail salons, housing developments, middle/high schools, colleges/universities/HBCUs, fraternities and sororities, entertainment centers/clubs, senior centers/residential facilities, LatinX and other immigrant serving organizations, NASTAD, AETC

iv. **Potential Funding –** CDC 20-2010, CDC 18-1802, MDH HIV community funding, private funds

v. **Estimated annual budget allocated -** $250,000 -$400,000

vi. **Outputs and Data Source –**

- # of BCHD micro-grants awarded to community organizations
- # of trainings/capacity building activities for community organizations (supported by BCHD funding)
- # of beneficiaries participating in microgrant activities

Data source: Redcap, micro-grants and micro-grant reporting

Strategy 5: Status Neutral Programming

HIV-focused education and intervention has often taken place separate from the broader context of people's lived experience. However, HIV prevention does not take place in a vacuum, and HIV prevention providers cannot respond to the full spectrum of the needs of vulnerable populations. The broader medical community, social services providers, employers, law enforcement, the faith community, and others must be responsive to the needs of vulnerable populations. Lack of responsive and welcoming services leaves vulnerable populations without sufficient access to services like housing support, jobs training, and adequate general health care.

Additionally, some services become available to these populations only once they become HIV-positive, which can create a perverse incentive for HIV acquisition. Factors associated with HIV such as unstable housing, depression and anxiety, and intimate partner violence are present for many before diagnosis and are significant contributors to risk and vulnerability. HIV funders, providers, and stakeholders should work to ensure adequate access to services for vulnerable populations that remain HIV-negative.

BCHD and partners will continue to address environmental impediments of vulnerable populations to accessing HIV services, including transitional housing among the housing insecure; and legal, financial, transportation, social services, education, and job development services. Specialized services and resources for youth will continue to

receive special attention. Improved services for non-English speaking populations and attention to welcoming environments for gay and bisexual men, transgender persons (particularly those of color), and black women and men will increase access and address mistrust of government and health care systems.

i. **Key Activities:**
   - **Build status neutral programming at BCHD and with partners-** This includes making social workers or case managers available to non-Ryan White patients and/or the patients seen by the linkage to care and DIS team, enhancing the role of peer navigators, evolution of CharmCare and HCAM, support of programs that enroll patients in insurance, and integration of HIV awareness and HIV-specific services into broader social and clinical services.
   - **Build stronger collaborations with other city agencies and CBOs that work in the arena of status neutral care-** This includes further developing collaborations with Mayor's Office of Housing, Corrections, Homeless Services, Baltimore City Schools, HOPWA, Medicare/Medicaid, University of Maryland's Exchange program, among others.
   - **Identify gaps in status neutral services and subsequently advocate for resources to close those gaps-** Using needs assessment surveys, patient satisfaction surveys, interviews, peer support group feedback and other means, BCHD and its partners will continue to identify gaps in services and work to address these through direct funding provision, partnership development, or advocacy toward other funding sources.

ii. **Addressing Health Disparities –** Certain communities are disproportionately affected by HIV and Baltimore is not an exception. Status neutral programming gives us an opportunity to "get upstream" from the problem and designate more appropriate efforts and resources to these communities so that we can proactively achieve health equity. We must maximize our relationships with service providers working on social determinants of health to ensure we address systemic injustices by bridging the gaps for these communities that these systems have created.

iii. **Key partners/Collaboration –** MDH, Mayor's Office of Housing, HOPWA, CBOs, Medicaid/Medicare, HCAM, Charmcare, UMD Law School legal clinic for PLWH, substance use providers, mental health and behavioral health providers, food programs, employment agencies, and AETC, among others

iv. **Potential Funding –** CDC 18-1802, CDC 20-2010, Ryan White EIS, MEDICAID (AHC)

v. **Estimated annual budget allocated -** $1.5 Million ++

vi. **Outputs and Data Source –**
   - # of at-risk individuals screened for social/support service needs
   - # of at-risk individuals with identified need
   - # of at-risk individuals referred to social/support services

Data source: RedCap, Careware

Strategy 6: Condom promotion and distribution (structural)

Because of persistent levels of condom-less sex and only partial uptake of condom use among vulnerable populations, HIV prevention efforts often focus on other strategies like PrEP. However, condoms continue to be a

low-cost, effective strategy to prevent HIV, other STIs, and unplanned pregnancy. Access to and use of condoms depends on availability, but also on reducing stigma associated with condom use. High profile branding and awareness campaigns can reduce stigma and increase condom use.

In 2011, CDC introduced a new funding category for condom distribution and identified condom distribution as a structural intervention to prevent HIV. Structural interventions are designed to implement or change laws, policies, physical structures, social or organizational structures, or standard operating procedures to effect environmental or societal change.

The CDC defines three As of condom distribution programs: available, accessible, and acceptable.

Available: Ensure that condoms are available in the places where members of the prioritized groups may frequent, such as pharmacies and condom dispensing machines. Also ensure that outreach workers who interact with these prioritized groups regularly and consistently have condoms available to distribute.

Accessible: Ensure unrestricted access by providing free condoms in multiple convenient locations.

Acceptable: Ensure community support for the use of condoms by producing products that are popular and supported by opinion leaders and public figures.

i. **Key Activities**
    - **Expand condom distribution program**- to CBOs and other partners, beyond the current web-based system of condom mailing.
    - **Market condom use**- as a safe, acceptable, and fun way to protect oneself from STIs, HIV, and unwanted pregnancy.

ii. **Addressing Health Disparities –** Condoms are effective but can be cost prohibitive for some people. Making condoms available free of cost and socially acceptable gives power to people in protecting their own well-being.

iii. **Key partners/Collaboration**
    - Maryland Correctional Enterprises (procurement), barbers and beauty salons, nail salons, housing developments, colleges, schools, youth centers, fraternities and sororities, entertainment centers/clubs

iv. **Potential Funding-** CDC 18-1802, CDC 20-2010

v. **Estimated annual budget allocated-** $50,000 - $100,000

vi. **Outputs and Data Source**
    - # of condoms distributed (BCHD)
    - # of people signed up for the condom mailing program (BCHD)
    - # of entities distributing condoms (BCHD)

Data source: EHE website, BCHD inventory

Strategy 7: Address Substance Use Disorders

BCHD has several interventions/activities focusing on substance abuse and the opioid epidemic. The Commissioner of Health chairs the Opioid Intervention Team (OIT), established by Executive Order as part of the Hogan Administration's 2017 Heroin and Opioid Prevention, Treatment, and Enforcement. The group is composed of several city agencies such as Baltimore City Police, Baltimore City Fire Department, and the Mayor's Office of Emergency Management. The OIT members also include treatment providers, peer support specialists, and community advocates. The vision of the OIT is to protect and reduce the impact of opioids and opioid-related deaths on the citizens and visitors of Baltimore City. With a mission to develop and implement a coordinated approach to address the opioid crisis impacting Baltimore City, the OIT is currently working on an updated City-Wide Response Plan.

BCHD is established with the state as an Opioid Response Program (ORP). The staff assigned to this work distribute naloxone and provide trainings city-wide. Our strategy will leverage existing resources to build collaborations and partnerships.

i. **Key Activities**
   - **Work with partners to collaborate to address opioid epidemic and other substance use disorders-** BCHD and BCHD partner outreach will work to increase substance misuse/overdose awareness, screening for substance misuse/abuse, and referral to treatment services.
   - **Ensure HIV/STI/Hep C prevention is incorporated in to drug misuse/abuse strategies and programs-** BCHD will assist substance use partner organization programs in the integration of HIV and HCV testing and linkage to care services. This may be through direct implementation by the partner organization or through the co-location of BCHD or BCHD partner services.

ii. **Addressing Health Disparities –** We must work from the "do no harm" principle in addressing substance use. We must understand that not everyone is ready for treatment, individuals have different levels of commitment and that substance use cessation efforts almost always require multiple efforts to succeed. Understanding where people are at and demonstrating fortitude in our support will help people reach successful outcomes, including prevention of HIV infection.

iii. **Key partners/Collaboration –** BCHD-funded partners, substance use/abuse service providers, religious groups, Mayor's Office among others

iv. **Potential Funding –** Federal Opioid funding, MDH, Baltimore City, CDC 18-1802, CDC 20-2010, FOCUS, Ryan White EIS

v. **Estimated annual budget allocated -** $3 million

vi. **Outputs and Data Source –**
   - # of HIV/Substance Use integrated partnerships
   - # of HIV tests provided at partner Substance Use treatment partner locations
   - #/% of BCHD and BCHD partner clients screened/referred for Substance Use treatment services

Data source: MOUs, PRISM, RedCap/CareWare

Strategy 8: Incorporate HIV diagnosis strategies into an overall sexual health and wellness strategy

A comprehensive strategy of sexual health and wellness, including all aspects of STIs, including HIV, family planning, sexual violence prevention, and education, is necessary to address HIV diagnosis and prevention. This strategy is inclusive of those listed above, and recognizes that HIV diagnosis goes hand-in-hand with STI diagnosis, and raising awareness of one should be done with the other. This recognizes that education provided to the public and providers should be inclusive of all aspects of sexual health and wellness. Our health is often thought of from a whole-person perspective, as opposed to the artificial definitions of HIV, STI, family planning, etc. that our systems have built. Our services should reflect this inclusive view of health and wellness.

i. **Key Activities:**
   - **Develop a city-wide sexual health strategy, inclusive of HIV, STIs, Family Planning, and overall sexual health and wellness.** Work in conjunction with BCHD's Bureaus of Maternal and Child Heath and School Health and the Office of Youth Violence Prevention, as well as external partners to develop plans and coordination mechanisms. Initially this work will focus on youth, and then expand to include all ages.
   - **Control of syphilis, gonorrhea, and chlamydia.** Recognizing the key roles other STIs have in the prediction of and susceptibility to HIV, it is imperative that we strengthen our activities pertaining to STI control in order to address HIV. This includes education, awareness, treatment, reporting, stigma reduction, and outbreak control activities.

ii. **Addressing Health Disparities –** BCHD facilitates a YOSHI (Youth Sexual Health Initiative) coalition that brings together a wide and diverse group of organizations working with youth throughout the city. Other stakeholders in the city use community advisory boards composed of youth or have youth ambassadors who work in their program planning, implementation and evaluation. Ensuring that youth actively participate in and lead these activities will improve health outcomes for this demographic.

iii. **Key partners/Collaboration-** BCHD bureaus and offices that work with youth, external youth-focused partners, schools, school boards, colleges/universities, libraries, Planned Parenthood, STI clinics

iv. **Potential Funding –** CDC 19-1901, CDC 18-1802, CDC 20-2010, HHS Office of Population Affairs (BCHD MCH grant)

v. **Estimated annual budget allocated -** $100,000

vi. **Outputs and Data Source**
   - Development of city-wide sexual health strategy
   - # of activities implemented form sexual health strategy

Data source: Sexual Health Strategy and workplan

Strategy 9: Strengthen the BCHD Sexual Health and Wellness Clinics

BCHD's sexual health and wellness clinics are an important cornerstone for HIV prevention. In the mid-1990s, the collapse of the clinics was seen as one of the three main factors inciting the syphilis outbreak. A large proportion

of the city's syphilis cases are diagnosed and treated by the STI clinics, and the clinics serve as a key location for HIV testing. The clinics are one of the few STI specialty clinics in Baltimore. They are also one of only a few free clinics, providing an important safety net service to those who are most vulnerable.

i. **Key Activities:**
   - **Maintain and continually improve BCHD sexual health and wellness clinics-** The clinics are integrated sexual health and wellness clinics, with STI and HIV diagnosis and treatment, partner services and linkage to care, PrEP, buprenorphine treatment, and hepatitis C. Increase staffing to allow for extended and weekend hours. Additional support staff and updated protocols/processes for improvement of clinic logistics, patient flow, and operations.
   - **Ensure BCHD STI clinics are at the forefront of culturally appropriate and LGBTQ friendly care and offering state of the art STI diagnostic and treatment-** Develop express testing services, improve patient result models (allowing for on-line results), increase efficiency of lab testing and results, expand social work services to the STI clinic, pursue hormone treatment for transgender patients.

ii. **Addressing Health Disparities –** Improving youth and LGBTQI-welcoming services is a core focus for the sexual health and wellness clinics. The clinics are working with BCHD's Social Innovations Team and various community advisory boards to incorporate feedback and recommendations from these communities.

iii. **Key partners/Collaboration-** Youth and LGBTQI community advisory boards , AETC, CFAR, PTC

iv. **Potential Funding –** CDC 19-1901, Ryan White Early Intervention Services, Ryan White Program Parts A&B, CDC EHE funding, Baltimore City

v. **Estimated annual budget allocated –** $6 Million+

vi. **Outputs and Data Source**
   - #/% of youth using BCHD clinic services
   - #/% of LGTBQI using BCHD clinic services
   - # of total patients served
   - Average wait time per appointment
   - Average visit time per patient

Data Source: Clinic EMR

Workforce Development strategy

- **Support training for all city testing staff in PrEP/PrEP referral, including sexual history taking for clinical providers-** Sexual history taking is often the entry point to helping identify individual risk and for starting a conversation about PrEP.
- **PrEP capacity and systems training will be required to help FQHCs implement PrEP programs funded under HRSA-** Linking new and existing PrEP programs to the capacity building resources available through CDC, NASTAD, AETC and PTC will help improve program outcomes.
- **Continue peer navigator development activities-** Peer navigators associated with PrEP/prevention programs are critical in helping patients along the continuum of PrEP services from awareness and

education to PrEP adherence. These navigators can benefit from interactions with their peers and access to key training.

- **Support CBO SSP capacity building (staffing and skills)-** SSP services in Baltimore are expanding to include partnerships with CBOs, which will require trained staff to support these efforts.
- **Expand awareness and use of Charmcare -** As part of the status neutral approach to linking clients to preventive support, knowledge on services available in the city is essential. Training on Charmcare and other resource directories will facilitate appropriate referrals.

Indicators: To be established in 2021

5. Pillar 4- Respond

Objective:

1. **Respond quickly to potential HIV outbreaks to provide prevention and treatment services to people who need them**

Baltimore City Health Department's approach to new cases of HIV will be to treat each new diagnosis as a Sentinel Event. Response to each event entails a quick alert of the public health system, rapid deployment of resources, timely linkage to care, and necessary support to patients and the medical system. The efficacy of this approach will be rooted in the collective of the strategies below.

Strategy 1: Cluster Surveillance and Response

The Maryland Department of Health works with local health departments and neighboring state health departments using standard public health methods to identify communities experiencing higher than expected numbers of HIV diagnoses. These clusters of HIV diagnoses may be early indicators of new and growing numbers of HIV infections or of the need for increased resources and services for affected communities. Clusters of HIV diagnoses are identified through a number of methods, including:

- Provider reporting of unusual numbers or patterns of diagnoses among a provider's patients
- Local health department identification of unusual numbers or patterns of diagnoses among people that come into contact with the health department
- Co-infections with other disease outbreaks, such as tuberculosis, syphilis, shigellosis, and hepatitis
- Health department review of epidemiological data to identify communities with higher than expected numbers of HIV diagnoses or communities with increasing trends of new diagnoses
- The analysis of laboratory test results to identify people with similar strains of the virus that might indicate communities experiencing recent and rapid HIV transmission

i. Key Activities

- **Capitalize on work under "Foundation" to build understanding and trust-** Engagement and partnership building with communities and community organizations are critical to quickly mobilize response activities when and where clusters are identified.
- **Use existing toolkit of HIV surveillance, prevention and field service programs to respond to identified clusters**. People living with HIV are connected to care and provided assistance with care retention with the goal of achieving and maintaining viral suppression since undetectable equals untransmittable (U=U). Individuals and community members identified to be at risk for HIV are offered testing, prevention education, and PrEP. Identified communities are assessed for other needs such as education, stigma reduction, and increased access to testing and other

health services. HIV cluster detection and response allows us to target our resources to the individuals and communities most in need to help drive down new infections.

ii. **Addressing Health Disparities –** Transparency in information sharing and engagement of a wide variety of community organizations will ensure that during cluster response there is local buy-in and interventions are appropriate and equitably implemented.

iii. **Key partners/Collaboration –** MDH, CBOs, clinical providers

iv. **Potential Funding –** MDH, CDC 18-1802, CDC 20-2010

v. **Estimated annual budget allocated -** $300,000

vi. **Outputs and Data Source**

- # of clusters identified and investigated
- #/% of individuals in clusters who are virally suppressed
- #/% of individuals in clusters who receive partner services
- # of HIV tests linked to clusters
- # of community partners involved in cluster response

Data source: EHARS, PRISM, Outbreak report

Strategy 2: HIV Morbidity Review

Our plan includes implementation of HIV morbidity and mortality review committees. Modeled after other public health review committees (infant mortality review board, congenital syphilis review board), the purpose of these committees includes a systematic review of cases newly diagnosed with HIV and deaths due to HIV. Goals will be to identify contributors to late diagnoses of HIV, late linkage to care, and to identify preventable causes of death. Outcome from these reviews will inform our diagnosis, treatment, and prevention interventions.

i. **Key Activities**

- **Create HIV morbidity and HIV mortality review committees** to meet at least semi-annually to review new cases of HIV and HIV-associated deaths

ii. **Addressing Health Disparities –** These committees will be purposeful in selecting cases that represent a wide variety of demographic backgrounds. Timelines, barriers and intervention points will be compared between cases to examine potential disparities between individuals with differing demographics.

iii. **Key partners/Collaboration –** BCHD, MDH, clinical providers, insurers, CBOs, planning bodies

iv. **Potential Funding –** MDH, CDC 20-2010

v. **Estimated annual budget allocated -** $50,000

vi. **Outputs and Data Source**

- Key factors associated with late diagnosis, late linkage to care, or non-adherence that can be addressed on a system-wide level

Data Source: PRISM, medical records, CRISP, provider interview, patient interview

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Strategy 3: Immediate linkage and support at high-risk venues

Staffing Blitz and the Block (see Situational Analysis) with cross-trained DIS and CHW staff, provide extra resources/incentives for new positives or those never-in-care or out-of-care who can be re-linked; ensure maximum effort to link clients at these locations to PrEP.

i. **Key Activities**
   - **Recruit and cross-train DIS and CHW staff to support outreach activities-** These staff members will have to work late evening and early mornings at key areas around the city. They will need to have social worker skills to help those newly diagnosed or those out of care to understand the seriousness of their situation and also the value of treatment.
   - **Develop referral and support systems adapted for individuals in high-risk environments-** New positives or out-of-care previously-identified positives found at Blitz or Block locations will likely not be concerned with care at that moment. They will be focused on their immediate social or work activities. Therefore, creative and motivating incentives, referral systems and one to one accompaniment must be created to ensure a successful linkage to care.

ii. **Addressing Health Disparities –** Focusing on increased resources for high-risk environments will contribute to a reduction in HIV-related disparities.

iii. **Key partners/Collaboration –** Syringe Exchange Program, high-risk venues (ie. strip clubs), AETC, PTC

iv. **Potential Funding –** RW EIS, RW EHE funding

v. **Estimated annual budget allocated-** $300,000

vi. **Outputs and Data Source**
   - # of people linked to care from high-risk sites

Data Source: PRISM, Insight, CareWare

Strategy 4: Provider Resource Line

Though HIV is a reportable disease, there is significant lag time between lab-based reporting for new diagnoses and linking those patients to care. Although providers are also supposed to report new diagnoses (Maryland Code, Health-General Article §18-201.1/2), many are not aware of this or consider the paperwork involved to be cumbersome and are unclear on the outcomes of their reporting. Currently, when a new HIV diagnosis is made through lab testing, the lab reports this directly to the Maryland Department of Health (MDH). There is a process at MDH to identify whether this is a true new diagnosis, and then the patient information is shared with BCHD in order to do field outreach to find the person and engage them in care. The average time from lab testing to BCHD being informed of the diagnosis is 30 days. This is unacceptably long, especially in an era of rapid antiretroviral initiation where patients should be started on treatment as soon as they are diagnosed.

The BCHD HIV Provider Line will be a centralized access point for our BCHD HIV patient services including:

- Provider reporting for new HIV diagnoses - this will include real-time confirmation of whether it is a true new diagnosis or identification of previously diagnoses patients and their last noted laboratory and care status records
- Same day referral to disease intervention specialists (for newly diagnosed) or linkage to care specialists (for those found to be out of care)
- Referrals to our HIV Directly Observed Therapy, which offers adherence support to any HIV-positive patient through home visitation and phone calls from a CHW
- Referrals for HIV continuity care at our Sexual Health and Wellness Clinics
- HIV provider consultation

Ultimately, the aim of the HIV Provider Line is to change the culture around HIV in Baltimore to view HIV diagnoses as immediately actionable. We aim to build a system in which all providers (1) know the HIV Provider Line number (410-396-LINK), (2) feel urgency to report a diagnosis on the same day, (3) understand that HIV treatment should be started right away, even the same day if possible, (4) understand that by calling, they are able to initiate services for patients right away, and (5) that patients can be seen in our clinics for care and/or receive adherence support services. Rollout of the HIV Provider Line will include advertising as part of the broader Ending the Epidemic campaign, though information dissemination and culture change will take time. Evaluation of the HIV Provider Line will include tracking individual calls and outcomes, and eventually evaluating overall time from diagnosis to linkage to care.

i. **Key Activities**
    - **Establishment and maintenance of Provider Resource Line**
    - **Incorporation of provider line information into detailing (under diagnose pillar) and other marketing efforts**
    - **Assess the potential to use the provider line to also serve as a resource line for people living with HIV**
ii. **Addressing Health Disparities –** Ensuring more timely notification of HIV-positive cases will translate into BCHD more rapidly linking them to medical care. Across-the-board improvements in linkage performance measures should support a narrowing in disparities between individuals of differing demographics.
iii. **Key partners/Collaboration –** MDH, Providers, CCHR
iv. **Potential Funding –** CDC 18-1802, CDC 20-2010
v. **Estimated annual budget allocated -** $150,000
vi. **Outputs and Data Source**
    - # of provider calls to warm line
    - #/% of individuals linked to care/total reported through warmline
    - # of providers/provider systems using the warmline

Data Source: Internal Warmline Database

Strategy 5: Electronic data systems and improvements to data sharing compatibility

Numerous data systems are used across which the same patients have bits and pieces of information, some of which is important to prevention and patient care. The integration of these data systems allows for a more complete picture of each patient, their service uptake and their remaining needs. This provides a better opportunity to provide more patient- centered prevention and care services.

i. **Key Activities**
   - **Data warehouse that maps different data systems so that within the "warehouse" they could be cross-checked and compared**
   - **Regular, systemic, and easy communication between PRISM and CareWare**
   - **New EMR at BCHD Sexual Health and Wellness Clinics**
   - **Digitizing BCHD outreach intake forms**
   - **Integration of a system in the new EMR that informs providers when patients have records in PRISM, CareWare, NEDSS, etc.**

ii. **Addressing Health Disparities –** Integrated data systems will improve the ability to provide personalized and timely services, which will contribute to an overall improvement in HIV-related outcomes as well as a narrowing of disparities.

iii. **Key partners/Collaboration –** BCHD Management Information Systems Office (information technology team), BCHD clinics, Ryan White, MDH

iv. **Potential Funding –** CDC 18-1802, CDC 20-2010, Ryan White

v. **Estimated annual budget allocated -** $200,000

vi. **Outputs and Data Source**
   - Integrated cross-data system reports

Workforce Development Strategies

- **Support to providers to report new cases to provider line-** This will be incorporated into existing detailing outreach (see Diagnose Pillar) and done through direct outreach to city providers.
- **Recruit and train hybrid DIS/CHW for deployment in high incidence locations**
- **Increase epidemiology capacity of BCHD HIV prevention team**- Recruitment of additional epidemiologists.
- **Focus on diversity in response staff to build trust in interactions with community**

Indicators: To be established in 2021.

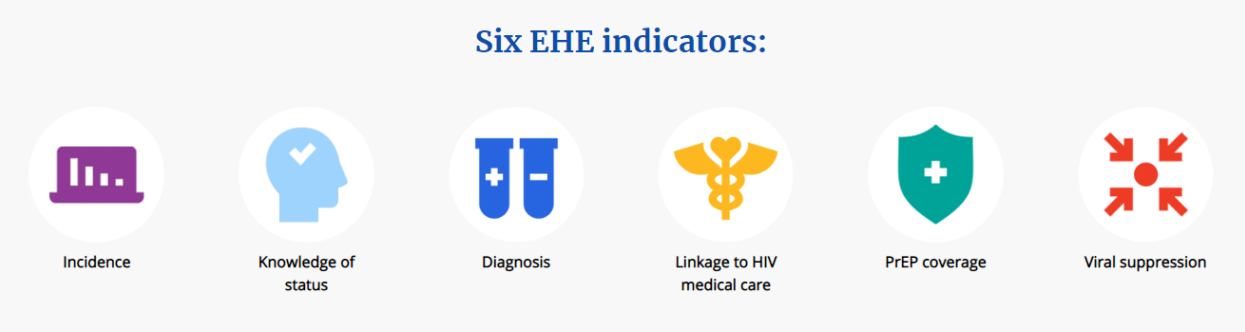
XIII. Monitoring and Evaluation

A. Work plan

Operationalization of this EHE plan rests with each City EHE stakeholder. BCHD, for example, will use this EHE plan to design and develop new grant applications. Those grants will serve as EHE work plans that will contribute to the goals, objectives and outcomes of this Baltimore City EHE plan.

B. Baselines and targets

Each strategy includes a number of indicators that can be measured using data from BCHD and its partners. Contributions to these indicators from stakeholders who do not traditionally report to BCHD may be gathered through various collaboratives or brought forth as part of the monitoring and evaluation process linked to this plan (below).



The progress toward the three goals associated with this plan will be tracked using the national EHE dashboard indicators:

- HIV incidence
- Knowledge of HIV status
- HIV diagnoses
- Linkage to HIV medical care
- PrEP coverage
- Viral suppression

A breakdown of these indicators by key demographic variables will allow us to track progress on the third goal related to health equity and a reduction in disparities.

C. Monitoring and Evaluation and Plan Adaptations

Baltimore City will regularly monitor its progress toward meeting the EHE Plan goals and strategies with its stakeholders, and revise its priority HIV strategies, activities, and indicators to best address HIV in Baltimore. BCHD staff will continue to meet on a regular basis with the various planning bodies (Baltimore EMA Ryan White Planning Council, Baltimore HIV Planning Group and the Maryland HIV Planning Group) to refine the common framework adopted in this document in order to ensure consistency and an approach to the work that emphasizes a joint mission.

EHE Plan monitoring and evaluation Process (To be further detailed in 2021)

- **Who:** BCHD, MDH, County HDs, HIV planning bodies, wider community
- **How:** Meeting between BCHD, MDH and planning bodies; review and contribution from wider community through End HIV Baltimore Website
- **Frequency:** Annually starting end of 2021

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