ELEMENT 3: CURRENT SNAPSHOT SUMMARY OF A SITUATIONAL ANALYSIS

Pillar 1: Diagnose

The *2020 Houston HIV Care Services Prevention Needs Assessment* was a collaborative effort between the Ryan White Planning Council, HIV Prevention Community Planning Group, Ryan White Grant Administration, Houston Health Department Bureau of HIV/STD and Viral Hepatitis Prevention, The Resource Group, Harris Health System, and Housing Opportunities for Persons with AIDS (HOPWA).

The social and economic circumstances of individuals can directly influence their health status and access to care. Factors such as employment, income, food insecurity, medical coverage, housing, and transportation may serve as gateways or barriers to health. These factors are often the underlying causes for health disparities in certain populations. The *2020 Houston HIV Care Services Needs Assessment* asked participants about these social and economic circumstances.

Methodology

Data was gathered from multiple sources on the number of HIV cases, the number of People Living with HIV (PLWH) who are not in care, the needs and service barriers of PLWH, and current resources available to meet those needs. Special emphasis was placed on gathering information about the need for services funded by the Ryan White HIV/AIDS Program and on the socio-economic and behavioral conditions experienced by PLWH that may influence their need for and access to services both today and in the future.

The *2020 Houston Area HIV Care Services Needs Assessment* consisted of data collected using a 54-question paper or electronic survey of open-ended, multiple choice, and scaled questions addressing the following topic areas: 1) HIV services, needs, and barriers to care; 2) Communication with HIV medical providers; 3) HIV diagnosis history; 4) HIV care history including linkage to care; 5) Non-HIV co-occurring health concerns (incl. mental health); 6) Substance use; 7) Housing, transportation, and social support; 8) Financial resources; 9)Demographics; and 10)HIV prevention activities.

Surveys were administered (1) in prescheduled group sessions at Ryan White HIV/AIDS Program providers, HIV Prevention providers, housing facilities, support groups, Harris County community centers, and specific community locations and organizations serving special populations and (2) online via word of mouth, print, and social media advertising. Staff contacts at each physical location were responsible for session promotion and participant recruitment. Out-of-care consumers were recruited through flyers, word of mouth, print advertisement, and staff promotion. Inclusion criteria were an HIV diagnosis and residency in counties in the greater Houston Area. Participants were self-selected and self-identified according to these criteria.

Surveys were self-administered in English, Spanish, and large-print formats, with staff and bilingual interpreters available for verbal interviewing. Participation was voluntary, anonymous, and monetarily incentivized; and respondents were advised of these conditions verbally and in writing. Most surveys were completed in 30 to 40 minutes. Surveys were reviewed on-site by trained staff, interns, and interpreters for completion and translation of written comments; completed surveys were also logged in a centralized tracking database. In total, 589 consumer surveys were collected from April 2019 to February 2020 during 47 survey sessions at 27 survey sites and online.

Testing and Diagnosis

The *2020 Houston HIV Care Services Needs Assessment* asked participants to share information from when they were first diagnosed, including when and where they were diagnosed. This information helps identify effective locations for HIV testing in the Houston Area toward the goal of increasing the proportion of PLWH who are aware of their status.

The most common location for being diagnosed with HIV was a Harris Health System facility (including but not limited to Thomas Street Health Center, Ben Taub, and LBJ Hospitals) at 23%, followed by receipt of diagnosis at an HIV clinic or organization (19%), outside the Houston area (18%), jail or prison (8%), or a private doctor's office or clinic (8%). At 1% each, blood donation centers, community testing events/health fairs, and emergency rooms were cited least often.

The average length of time since HIV diagnosis among needs assessment participants was 13 years. More participants were diagnosed between 2010 and 2020 than any other period. Newly diagnosed participants (diagnosed 2018-2020) comprised 9% of the sample, while recently diagnosed participants (diagnosed 2014-2020) made up 24% of the sample.

This initiative identified Harris County as a priority county due to the high rate and number of new HIV diagnoses, and plans to introduce additional resources, technology, and technical assistance to support local HIV prevention and treatment activities.

Pillar 2: Prevent

HIV Prevention Service Needs for PLWH

Overall, 57% of participants said they had received information in the past year, a 15% decrease from 67% in 2016. Those who had received information were then asked to identify the source of this information and the types of prevention information received. The source of HIV prevention information cited most often was an HIV clinic, including Federally Qualified Health Centers (FQHCs) and Harris Health System (HHS) at 53% of all reported sources. This was followed by housing programs (11%); doctors, nurses, or clinicians (9%); an HIV group or program (6%); and the internet (6%). At less than 1%, social media, mobile outreach, and colleges or universities were reported least.

The topic of the HIV prevention information provided most often by participants was PrEP at 20%. This was followed by condom use (17%), undetectable = untransmittable (U=U) or treatment as prevention (TasP) (14%), unspecified information from print materials (10%), and HIV and other health conditions (5%). At 1% each, status disclosure, use of the Blue Book resource Guide, and information on cleaning injection equipment were reported least.

Undetectable = untransmittable (U=U) and TasP

Undetectable = untransmittable (U=U) and TasP both refer to the use of anti-retroviral therapy (ART) medications to achieve a consistently undetectable viral load thereby preventing HIV transmission through sex. When asked whether they were aware of U=U before the day of survey, 76% of participants reported that they were aware.

Preexposure Prophylaxis (PrEP)

When asked if they had ever heard of PrEP, 80% of participants were PrEP aware, an increase from 56% PrEP aware participants in 2016. Awareness among PLWH of PrEP resources also increased substantially

between 2016 and 2020. Whereas 34% of participants knew where to refer someone for PrEP resources in 2016, the proportion of PrEP resource aware participants grew to 58% in 2020.

Condom Use

Forty-four (44%) of sexually active participants said they always use condoms during at least one type of sexual activity. Least frequent condom use was reported for oral sex with 55% of participants reporting no condom use for giving oral sex and 53% reporting no condom use for receiving oral sex. The most frequent consistent condom use was observed for vaginal sex, with 46% of participants reporting using a condom for every encounter. Moderate consistent condom use was reported for anal sex, with 36% of participant reporting condom use for anal insertive sex, and 33% reporting condom use for anal receptive sex.

When inconsistent condom use was reported, participants were asked about their reason for not using a condom. Participants were provided with a list of 21 common reasons for not using condoms and could write in their reasons. The most frequently selected reasons participants for not using condoms were only having one sexual partner (43%), having an undetectable viral load (34%), having a sexual partner who was HIV positive as well (24%), getting caught up in the moment (12%), and having a partner on PrEP (11%). The most common write-in reason for inconsistent condom use was the participant's partner refuses to use a condom or removes the condom during sex.

Status Disclosure

Participants were asked how frequently they disclose their HIV status to new sex partners. Overall, 49% stated they always disclose their HIV status with every partner, while 33% stated they never disclose their HIV status. Of those stating they never, the most common reason given was that their main sex partner already knows their HIV status.

When asked about partner HIV status, 47% of sexually active participants indicated that they had at least one sexual partner who was also living with HIV. Thirteen percent (13%) of participants reported that they had at least one sexual partner who was presumably HIV negative and taking PrEP, while 26% reported having at least one presumably HIV negative partner who was not taking PrEP. Sixteen percent (16%) reported that they did not know the HIV status of at least one sexual partner.

Injection Use

Participants were asked if they used a needle to inject any substance in the past 12 months. Substance was defined broadly to include medications, insulin, steroids, hormones, silicone, or drugs. For potential needle/equipment sharing, 47% only use new needles/equipment, and an additional 38% never share used needles/equipment. For needle/equipment cleaning, 39% only use new needles/equipment, and an additional 16% always clean their used needles/equipment with bleach.

Post-exposure prophylaxis (PeP)

Post-exposure prophylaxis (PeP) is a method for people who do not have HIV to prevent acquisition exposure through sex or needle sharing that occurred in the last 72 hours. For the first time, the *2020 Needs Assessment* measured awareness of PeP and resources to access PeP among PLWH. When asked if they had ever heard of PeP, 60% of participants were knowledgeable of PeP; however, only 52% of participants were aware of where to refer someone to access the intervention.

Barriers to HIV Prevention Services

Social, Structural, and Client-Specific Barriers

Stigma, discrimination, and violence against people with HIV persist. Though over 30 years have passed since HIV was first brought to the public's attention, PLWH continue to encounter stigmatization. Fear of being labeled, HIV status disclosure, legal issues, and/or divulging drug or alcohol usage to their HIV doctor were identified barriers to care for PLWH. Many of the population groups that are most impacted by HIV may also experience inequity based on other factors, such as race/ethnicity, sexual orientation, gender identity, or economic or legal circumstance.

Twenty-six percent (26%) of the *2020 Needs Assessment* participants reported experiencing some form of discrimination in the past 12 months, up from 20% in 2016. Most often this was discrimination in the form of being treated differently because of their positive status (25%), though less often this resulted in being denied services (5%) or being asked to leave a public place (3%).

Another 16% reported being threatened in the past 12 months, up from 13% in 2016. These were most often verbal harassment (11%) or threats of violence (10%) from someone the participant knew. Nine percent (9%) had been physically assaulted (most often by someone they knew), and 6% had been sexually assaulted. Reports of sexual assaults occurred in equal proportions with individuals known to the participants and strangers. Among transgender or gender non-conforming participants, reports of physical assault (13%) or sexual assault (21%) were higher. Five percent (5%) of participants reported current intimate partner violence.

Culturally, there is a resistance in much of Texas (and Houston) to discuss sexual health, sexual orientation, gender identity, and HIV/STD. Comprehensive sexual education is not taught in most schools and may even be restricted by sources of funding. Abstinence-plus education infuses strong abstinence messages, but the content of this education varies from district to district and even from school to school. This context may complicate the stigma experienced by those at higher risk for HIV and discourage conversations between patients and the medical community on sexual risk and HIV/STD testing.

As explained in the epidemiologic overview, there are some unique factors to Houston that contribute to barriers faced by residents. According to the United States Census American Community Survey, in 2018, 19.1% of Harris County residents had less than a high school diploma, 23.2% attained a high school diploma or equivalent. Overall, people in poverty was 16.2% with approximately 13.6% of individuals 18 to 64 years below the poverty level.[8] The *2020 Houston HIV Care Services Needs Assessment* indicated that majority of health insurance-related barriers occurred because the participant was under-insured or experiencing coverage gaps for needed services or medications (55%) or they were uninsured (25%).

Service linkage workers in the Houston Area work on a day-to-day basis with clients to mitigate any barriers to HIV medical care. A re-linkage to care demonstration project conducted by the Houston Health Department from 2012-2015 found that transportation was consistently cited as a top barrier to retention in care. Given the substantial geographic spread and limited public transportation system in the Houston Area, overcoming this barrier continues to be a challenge for both the HIV Prevention and Care systems.

[8]United States Census Bureau. (n.d.). American Community Survey. [2014—2018 ACS 5-Year Narrative Profile] Houston-The Woodlands-Sugar Land, TX Metro Area. Retrieved from https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2018/report.php?geotype=msa&msa=26420

Policy Barriers

Sexual and reproductive health policies in Texas—In 2015, Texas officials discontinued Planned Parenthood's HIV prevention funding. Operating in this capacity since 1988, this decision led to all HIV prevention services formerly offered by Planned Parenthood Gulf Coast to cease. Prior to this change, Planned Parenthood had been a major provider of HIV testing, counseling, and condom distribution in the Houston area. Before this decision, Planned Parenthood also lost its Texas Medicaid contract and was no longer eligible to participate in State-funded programs that provided cervical cancer screenings and breast exams to low-income women. Prior to 2015, funding to Planned Parenthood and other similar health care clinics throughout the state had been substantially reduced by legislative action, resulting in many of these clinics closing. Recently published research has shown adverse outcomes associated with these decisions.[9]

Texas law does not allow for the implementation of syringe exchange programs, which include the distribution of sterile needles, syringes, and other sterile injection supplies. Under Chapter 481.125 of the Texas Health and Safety Code, a person commits an offense if the person knowingly or intentionally uses or delivers, or possesses with intent to use or deliver, drug paraphernalia that can be used to inject a controlled substance into the human body. The punishment for one of these offenses ranges from a Class C misdemeanor to a state jail felony. The HHD created a Hepatitis C Task Force that discusses how to best meet the needs of those who continue to be at risk for contracting HCV and HIV through unsafe injection practices in light of these prohibitions.

The Affordable Care Act (ACA; Pub L No. 111–148), passed in 2010, was designed to help Americans gain health insurance coverage through a combination of premium subsidies and mandates. Texas is the second largest state by population in the country and the largest state that chose not to expand Medicaid under the ACA. As of July 2016, 31 states and Washington, DC, have decided to expand Medicaid.[10] Southern states represent eight of the 12 states that have not expanded Medicaid, which is the largest source of coverage for people with HIV in the U.S. People in the South face several access barriers that can prevent adequate receipt of HIV and other health care services. The lack of Medicaid expansion continues to place affordable healthcare out of the reach for many Southern residents, particularly Houston Area residents at risk for, or living with HIV.[11]

The impact of this decision is massive, especially given that Medicaid in its current form is only currently available to a small set of Texans. According to Texas Health and Human Services Commission, the primary categories of Medicaid-eligible individuals who may receive full benefits are: Children, pregnant women, and parent and caretaker relatives; SSI recipients; People age 65 and older and those with disabilities; and Former foster care youth. For most individuals, federal law requires states to determine financial eligibility for Medicaid and CHIP based on the Modified Adjusted Gross Income (MAGI) methodology and applies a five-percentage point income disregard. The MAGI methodology uses federal income tax rules for determining income and household composition and applies to children, pregnant women, and parents and caretaker relatives Medicaid eligibility groups. There is also not an asset test when determining Medicaid and CHIP eligibility under the MAGI methodology. The following groups do not use

[9]Stevenson A, Flores-Vazquez I, Allgeyer R, Schenkkan P, Potter J. Effect of Removal of Planned Parenthood from the Texas Women's Health Program. *N Engl J Med* 2016; 374:853-860.

[10] Pickett, Mark and Ho. Gain in Insurance Coverage and Residual Uninsurance Under the Affordable Care Act: Texas, 2013–2016, *American Journal of Public Health 2017,* 107:1, 120-126, doi: 10.2105/AJPH.2016.303510

[11] Centers for Disease Control and Prevention. BRFSS. https://chronicdata.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-SurveillanceSystem-BRFSS-P/dttw-5yxu, Accessed on May 27, 2016.

the MAGI methodology when determining eligibility: Emergency Medicaid; Foster care children; Medically needy; Individuals receiving SSI; and Medicaid programs for people age 65 and over and those with disabilities. In addition, these groups do have an asset test and allow for income disregards.[12] Statistics suggest that roughly 18%, or 3 million residents, still lack insurance coverage. A recent report estimates that 766,000 Texans would qualify for coverage under a Medicaid expansion.[7] Texas health care providers have faced grave financial consequences since the 2017 session of the Texas legislature did not pass legislation to expand Medicaid under the ACA.

Health Department Barriers

Dedicated HIV funding in the Houston Area has not kept pace with need. Federal funding for HIV has increased significantly over the course of the epidemic. However, many local jurisdictions have seen funding decline or remain level over time. As business costs rise, level funding can translate into fewer dollars for direct services. Although numerous cities throughout the nation benefit from local investment in HIV/STD, the Houston Health Department receives zero dollars in general city revenue. The results of the financial inventory confirm just how dependent the Houston Area is on federal funding to maintain even the most basic HIV prevention services.

Since 2014, the HHD has utilized surveillance to identify persons that are potentially in need of re-linkage to HIV medical care. Record searches of HIV surveillance data are used prior to assignment of service linkage workers in order to prioritize those that appear to truly be out of care per gaps in HIV-related laboratory data. Through this work, the HHD has identified a challenge of completeness of reporting to surveillance by clinical trials and the Veteran's Administration (VA). While this challenge has been echoed across the nation from other jurisdictions regarding data from the VA, little attention has been placed on clinical trials.

Furthermore, many clinical trials report coded names to surveillance which cannot be interpreted by health departments. These gaps in data continue to hamper the efficient use of resources to identify and locate those in need of re-linkage to HIV medical care. The increased use of electronic medical records and health information exchanges has created an ever-growing demand that health departments evolve to incorporate a strong informatics core.

Informatics is often presented as the solution for enhanced efficiency and superior monitoring and evaluation of program outcomes. However, the structure and level of funding has not yet caught up to these demands. Informatics funding has mostly been awarded in silos separated by disease. At a local agency level, this has often translated to a small staff attempting to support multiple programs simultaneously that may or may not have informatics-specific funding. Additional investment from all program areas is also needed to support the initial investment in, and continual maintenance of, the necessary informatics infrastructure.

Program Barriers

In order to determine care status for re-linkage to care initiatives, multiple data systems must be checked for all relevant care appointments and CD4/viral load results. These systems include both HIV (eHARS) and STD (STD*MIS) surveillance databases, as well as the database for Ryan White Care in Houston (CPCDMS, managed by Harris County Public Health) and an electronic medical record system. Because

[11] Texas Health and Human Services Commission, Texas Medicaid and CHIP in Perspective, 11th Edition, February 2017, https://hhs.texas.gov/sites/default/files/documents/laws-regulations/reports-presentations/2017/medicaid-chip-perspective-11th-edition/11th-edition-chapter3.pdf

eHARS and STD*MIS do not receive messages in the format sent through electronic laboratory reporting (ELR), another data system running on the Maven platform, is also utilized by the HHD as the mechanism for receiving laboratory reports. In effect, this translates to five data systems that all may provide evidence of recent HIV medical care. No single entity in the Houston Area is the owner of both care and surveillance data systems; therefore, data is not matched between systems. This inability to match records necessitates manual data searches for each potential re-linkage client. Additional databases are also manually searched for locating information and incarceration status.

Multiple data systems managed by varied entities remains a challenge for efficient utilization of data by the Houston Area for both program planning and current initiatives. Voluntary HIV screening is offered in the Harris County Jail under a contract with TDSHS. Screening occurs during the inmate medical assessment, which takes place within 14 days of incarceration. Syphilis, chlamydia, and gonorrhea screening also occur at this time. If an inmate is released prior to the time of medical assessment, however, then screening for HIV/STD does not occur. Inmates who test positive for HIV or syphilis are counseled and offered partner services by HHD Disease Intervention Specialists (DIS) assigned to the jail. Currently, additional HIV/STD screening at time of release does not occur in the Houston Area.

Provider Barriers and Increased Stakeholder Representation

The Houston Area has a large and multi-tiered health care system administered by city, county, and state officials as well as by private and non-profit organizations, including the "largest medical center in the world." The size and complexity of this system can create challenges for individuals seeking health care as well as for providers seeking to coordinate care. The Houston Area is also the least densely populated major metropolitan area in the nation. Relatively long distances must be traveled to seek services even within the urban center. This creates challenges for providers attempting to reach individuals for HIV follow-up. In rural Houston Area locations, even longer distances must often be traveled to reach HIV medical services. The lack of HIV medical homes in many rural parts of the Houston Area further exacerbates this barrier to care.

From a survey of participants in the 2017 Comprehensive Planning process, the following stakeholders needed further representation and are necessary to more effectively improve outcomes along the HIV Care Continuum: primary education, managed care organizations, medical professional associations/medical societies/practice groups, the business community, and correctional/criminal justice. Additional representation is also critical from: community centers, chronic disease prevention, philanthropic organizations, workforce solutions, and alcohol/drug abuse providers. The ever-increasing collaboration between HIV prevention and medical providers for interventions such as PrEP and Data to Care necessitate a strong presence from HIV care and PrEP providers, including physicians, nurses, and pharmacists. Improvements to engage these medical professionals in future planning efforts was a goal prioritized through this Plan's development.

Pillar 3: Treat

HIV Care Service Needs for PLWH

The *2020 Houston HIV Care Services Needs Assessment* results indicate that at 89%, primary care was the most needed funded service in the Houston Area, followed by local medication assistance at 79%, case management at 73%, oral health care at 72%, and vision care at 68%. Primary care had the highest need ranking of any core medical service, while ADAP enrollment worker received the highest need ranking of any support service. Compared to the last *Houston Area HIV Needs Assessmen*t conducted in 2016, need ranking decreased for most services. The percent of needs assessment participants reporting need for a

particular service decreased the most for case management and primary care, while the percent of those indicating a need for local medication assistance and early intervention services increased from 2016.

HIV Care Service Gaps

Participants in the *2020 Houston HIV Care Services Needs Assessment* were asked to indicate if each of the services they needed in the past 12 months was easy or difficult for them to access. If difficulty was reported, participants were then asked to provide a brief description of the barrier experienced. The most accessible service was ADAP enrollment worker at 97% ease of access, followed by local medication assistance at 94%, and case management at 92%. Local medication assistance had the highest accessibility ranking of any core medical service while ADAP enrollment worker received the highest accessibility ranking of any support service. Compared to the *2016 Needs Assessment*, reported accessibility remained stable on average. The greatest increase in percent of participants reporting ease of access was observed in local medication assistance, while the greatest decrease in accessibility was reported for early intervention services.

Reported service need and accessibility were analyzed by participant demographic and other characteristics, revealing the presence of potential disparities in access and service gaps for each service category assessed. For **sex at birth**, a greater proportion of females than males found ADAP enrollment, case management, day treatment, early intervention (jail only), hospice, medical nutrition therapy, primary HIV medical care, and substance abuse services more accessible, while a greater proportion of males than females found local HIV medication assistance, mental health services, oral health care, outreach services, transportation and vision care more accessible. There was no difference in service accessibility for health insurance assistance in males and females.

When assessed for **race/ethnicity**, a greater proportion of white participants found case management, health insurance assistance, local HIV medication assistance, and primary HIV medical care services more accessible than other race/ethnicity groups. A greater proportion of African American participants found vision care more accessible than other race/ethnicity groups. Hispanic/Latino participants found ADAP enrollment, early intervention (jail only), medical nutrition therapy, mental health services, oral health care, and transportation services more accessible than other race/ethnicity groups. Other/multiracial PLWH found day treatment and substance abuse services more accessible than did other race/ethnicities. Hispanic/Latino and African American participants found outreach services more accessible than did other race/ethnicities. White, Hispanic/Latino, and other/multiracial PLWH found hospice services more accessible than African American participants.

Assessment of **age groups** revealed a greater proportion of youth (ages 18-24) found ADAP enrollment, day treatment, early intervention (jail only), health insurance assistance, medical nutrition therapy,, mental health services, oral health care, and transportation services more accessible than other age groups. Participants ages 50 and older found case management, hospice, local HIV medication assistance, outreach, primary HIV medical care, substance abuse services, and vision services more accessible than any other age group. Participants (ages 25-49) did not report greater proportions in ease of access to any service.

Difficulty accessing HIV Care Services was assessed for special population groups. Compared to all participants, a greater proportion of **MSM** reported difficulty accessing health insurance assistance, local HIV medication assistance, early intervention (jail only), primary HIV medical care, hospice, outreach, and oral health care services. Participants with **housing instability** reported more difficulty accessing ADAP enrollment, case management, day treatment, health insurance assistance, local HIV medication

assistance, early intervention services, , mental health services, , substance abuse services, transportation services, outreach, vision, and medical nutrition therapy. Those who had been **released from jail or prison** in the past 12 months reported difficulty accessing case management, early intervention services, mental health services, oral health care, substance abuse services, outreach and transportation services. **Out of care** participants reported difficulty accessing ADAP enrollment, case management, primary HIV medical care, vision, oral health care and transportation services . **Rural** participants (those living outside Houston/Harris County) reported difficulty accessing Houston-based services like ADAP enrollment, health insurance assistance, local HIV medication assistance, mental health services, and primary HIV medical care. Participants whose answers indicated they were **transgender, or gender non-conforming** found case management, day treatment, early intervention (jail only), health insurance assistance, local HIV medication assistance, and outreach services difficult to access.

In addition to the HIV care services assessed, other services are allowable for funding by the Ryan White HIV/AIDS Program in local communities if there is a demonstrated need. Several of these other services have been funded by the Ryan White Program in the Houston Area in the past. The *2020 Houston HIV Care Services Needs Assessment* measured the need for these services to gauge any new or emerging service needs in the community. In addition, some of these services are currently funded through other HIV-specific non-Ryan White sources, namely housing-related services provided by the Housing Opportunities with People with AIDS (HOPWA) program, as indicated. Other/non-Ryan White funded HIV-related services were assessed to determine emerging needs for Houston Area PLWH. Of the 10 service options provided, housing (53%) was the most needed unfunded service, followed by food bank at 43% an increase of 12 percentage points from the *2016 Needs Assessment*. Health education/risk reduction (HE/RR) was selected third (41%), followed by psychosocial support services cited fourth (38%), and other professional services cited fifth (34%). Participants were also encouraged to write in other types of needed services. Services that were written in most often as a need (and that are not currently funded by Ryan White) were related to pharmacy, such as having medications delivered and automatic refills, at 37%. This was followed by insurance education at 16%, and housing coordination, social opportunities, coverage for medical equipment, and nutrition education, each at 8%.

The *2020 Houston HIV Care Services Needs Assessment* also examined service gaps along the HIV Care Continuum. Participants were asked questions to determine whether they had been passively referred or actively linked to care when first diagnosed. Eighty-four percent (84%) reported receiving a list of HIV clinics to go to for medical care, 75% were given an appointment for their first HIV medical visit, and 81% received an offer from someone to help them get into HIV medical care (service linkage). It is notable that most participants (59%) received their initial HIV diagnosis prior to 2010, when more sophisticated and readily available service linkage services became available in the Houston Area. When asked about barriers to early linkage to care, denial about HIV status was most often selected at 15%, followed by fear of HIV status disclosure (12%), and not knowing about available resources to pay for HIV medical care (9%). The most common written-in reason for delayed entry to care was incarceration at time of diagnosis. In addition to being asked if they were currently in care, participants were asked whether they had ever fallen out of care for 12 months or more since their initial HIV diagnosis. Thirty-two percent (32%) reported a history of being out of care, caused most often by substance use (12%), moving or relocating (11%), and having other priorities(10%). Participants were also asked about current medication adherence. Thirteen percent (13%) of participants reported not currently taking HIV medications, with most common reasons attributed to experiencing medication side effects (24%), followed by missing a refill (23%), expired eligibility (23%), and forgetting to take medications at 21%.

Barriers to HIV Care Services

Service Specific Barriers

For the first time in the *Houston HIV Care Services Needs Assessment* process, participants who reported difficulty accessing needed services were asked to provide a brief description of the barrier or barriers encountered, rather than choosing from a list of pre-selected barriers. These barriers were then grouped together into barrier types. Overall, the barrier types reported most often related to service education and awareness issues (19% of all reported barriers), interactions with staff (16%), wait-related issues (12%), administrative issues (10%), and issues related to health insurance coverage (10%). Housing concerns linked to homelessness or intimate partner violence were reported least often (1%). Overall, fewer barriers were reported in 2020 (415 barrier reports) than in previous *2016 Needs Assessment* (501 barrier reports), despite the increase in sample size in 2020.

All funded services were reported to have barriers, with an average of 35 reports of barriers per service. Participants reported the least barriers for Linguistic services (one barrier) and the most barriers for Oral Health Care (90 barriers). In total, 415reports of barriers across all services were indicated in the sample. Within education and awareness, knowledge of the availability of the service and where to go to access the service accounted for 81% of barriers reported. Being put on a waitlist accounted for a majority (56%) of wait-related barriers. Poor communication and/or follow up from staff members when contacting participants comprised a majority (53%) of barriers related to staff interactions. Almost all (84%) of eligibility barriers related to participants being told they did not meet eligibility requirements to receive the service or difficulty obtaining the required documentation to establish eligibility.

Among administrative issues, long or complex processes required to obtain services enough to create a burden to access comprised most (57%) the barriers reported. Most of the health insurance-related barriers occurred because the participant was underinsured or experiencing coverage gaps for needed services or medications (55%) or they were uninsured (25%). The largest proportion (91%) of transportation-related barriers occurred when participants had no access to transportation. Inability to afford the service accounted for all barriers relating to participant financial resources. The service being offered at a distance that was inaccessible to participants for most (76%) of accessibility-related barriers, though it is worth noting that low or no literacy and being recently released from incarceration both accounted for 12% of accessibility-related barriers. Receiving resources that were insufficient to meet participant needs accounted for most resource availability barriers. Intimate partner violence accounted for both reports of housing-related barriers. Instances in which the participant's employer did not provide sufficient sick/wellness leave to attend appointments comprised most (80%) employment-related barriers.

Pillar 4: Respond

The HHD was awarded funding from the CDC to utilize cluster detection and response HIV surveillance to identify active HIV transmission networks and implement HIV interventions for Hispanic/Latino men in September 2017. The HHD has been able to successfully utilize Secure HIV-TRACE to detect clusters since September 2018 and has investigated one cluster with five H/L men who have sex with men as a part of the grant activities. A significant accomplishment for HHD was identifying and instituting a community advisory board (CAB) with established stakeholders addressing the needs of the H/L MSM community.

Cluster detection and response activities are expansive and incorporate many different programs within the HHD. The Cluster Committee that was formed allowed the HHD to better navigate these different

programs and integrate them feasibly into cluster detection and response activities. Each program that did meet in the Cluster Committee acted as a subject matter expert and provided knowledge and a different perspective into how cluster prioritization and investigation should take place. HIV/STD Prevention provided essential knowledge in current investigation field work processes and informed on how the cluster investigation process should take place. HIV Service Linkage provided technical assistance in how they have conducted cluster investigations in the past by providing best practices and tools they used to engage cluster cases. Informatics provided insight into how the data systems currently implemented collect, manage and report on information as well as how to integrate all the data available to create a complete look at the cluster and their networks.

While the engagement with the Houston community has been quite successful, there are still concerns about the potential for cluster detection results to be used for HIV criminalization and/or to further justify deportation. The political climate around immigration issues is not ideal for an intervention encouraging a portion of this focus population to utilize public services. To overcome concerns about cluster detection results potentially being used for HIV criminalization, the HHD continues to educate stakeholders, community, and the HIV workforce about cluster analysis and lack of capabilities (e.g. no directionality, incompleteness of data, etc.). Furthermore, we share results of our internal reviews of HHD practices to safeguard surveillance data and defend against subpoenas and the fact that Texas has no specific HIV criminalization laws.

Data management and analysis has been incredibly time-intensive and challenging. The HHD must utilize approximately 8-10 sources of data (combination of disparate data systems and Excel files) to complete the reporting requirements. Planning for this has relied heavily on in-kind staff and our partnerships with other teams from various projects/grants. The staff have not fully overcome challenges in data management; however, they have been able to incorporate the cluster detection interview into our Maven system, the Houston Electronic Disease Surveillance System (HEDSS).[13]

The HHD has also been able to start cluster response activities of clusters identified as national priority clusters (5 or more new diagnoses within a cluster in the past 12 months). The staff identified a cluster of national priority in October 2019 and began cluster response activities in December 2019. Cluster response activities were ultimately halted in January 2020 due to the COVID-19 pandemic.[14] All staff conducting cluster detection and response activities were activated to assist with COVID-19 response activities, leading to a lack of capacity to conduct the necessary activities to successfully implement cluster detection and response.[13] [14] This lack of capacity was seen not only at the Houston Health Department, but everywhere in the City of Houston as many of the CBOs and hospitals were operating at limited capacity to help ensure that their patients and staff were safe during the pandemic. In addition to lack of capacity, field staff conducting public health follow-up activities were not permitted to go into the field to conduct cluster response activities.

Factors That Impact All Pillars

Financial Assessment

In 2016, the HHD , Harris County Public Health, and The Houston Regional HIV/AIDS Resource Group designed and conducted a survey of the financial and human resource capacity of agencies in the Houston Area. These agencies were past or current HIV prevention and care contractors along with administrative

[13] Note PS17-1711
[14] Note PS18-1802

agencies of prevention and care funding. In the current fiscal year, the total amount of HIV funding reported by the 17 agencies sampled was approximately $55.7 million.

Linkage to substance abuse/mental health services and translation services for PLWH were services that agencies reported FTEs but no funding allocation. Aside from the HIV services with 0 funding dollars, the **least funded** were financial assistance/services for PLWH ($5,000), food assistance/services for PLWH ($15,063), HIV advocacy ($65,000), patient navigation to any service regardless of HIV status ($48,650), research projects for PLWH ($30,484), and substance abuse services for PLWH ($48,280). Each of these services received less than $100,000 total.

The **most funded** were administration ($11,150,070), dental services for PLWH ($1,883,791), health insurance premium and cost sharing assistance for PLWH ($2,119,683), HIV medical care ($9,706,694), HIV testing ($4,155,405), housing assistance/services for PLWH ($7,666,817), HPV vaccinations ($1,048,569), linkage to HIV medical care ($3,966,101), medical case management for PLWH ($2,538,848), and partner services ($2,699,562). Each of these services received greater than $1 million in funding. The most well-funded HIV services, when factored together, impact all steps of the HIV Care Continuum, suggesting that funding is distributed in a manner that addresses the overall needs of the community.

The results below in the table demonstrate the lack of local investment in HIV prevention and care services in the Houston Area. This barrier has especially limited innovation to pilot new projects where funding opportunities may not yet exist.

Funding Source	Funding Amount	Percent of Total (%)
CDC	$16,576,706	26.30%
CMS	$367,627	0.58%
Gilead Sciences, Inc.	$841,142	1.33%
HRSA	$23,405,339	37.14%
HUD	$8,401,830	13.33%
Multiple Sources*	$7,398,727	11.74%
Other	$2,082,190	3.30%
SAMHSA	$3,953,808	6.27%
Total	**$63,027,369**	**100.00%**

**Multiple sources may include a combination of other sources listed that were reported together, such as HRSA + TDSHS + HUD. All funding from TDSHS (State Services) is included in this category.*

HIV Workforce Capacity

The Houston Area maintains approximately 486 full-time employees (FTEs) to direct HIV care and prevention services. The HIV service with the most FTEs is administration, with about 80 FTEs, followed by HIV medical care (72 FTEs), linkage to HIV medical care (67 FTEs), and HIV testing (51 FTEs). The HIV services with the fewest FTEs, with 1 FTE or less, total, were capacity building for HIV services, condom distribution, health insurance premium and cost sharing assistance for PLWH individuals, HIV advocacy, insurance navigation for PLWH individuals, linkage to substance abuse/mental health services, patient navigation to any service regardless of HIV status, program promotion, research projects for PLWH persons, and translation services for PLWH persons. The workforce categories with the fewest FTEs, with 1 FTE or less, total, were patient advocate, physical therapist, physician assistant, psychiatrist, public affairs specialist and translator. Additionally, financial assistance/services for HIV+ and food assistance/services for HIV+ were services that agencies reported providing (Appendix 4) but had 0 FTEs

reported. More support might be essential to execute these services and categories and addressing these needs may prove difficult without expanding capacity. Individual organizations must also properly evaluate their own business structures and collaborate with other partners to ensure the workforce capacity is operating efficiently and effectively. The HHD understands the importance of ongoing job training and education to ensure sustainable and successful staff. It is imperative to continually expand knowledge and training skills for optimal delivery of vital services.

Needed Resources

The HHD utilizes the following strategies to obtain needed HIV prevention resources: 1) seek out and apply for new sources of funding, 2) ensure deduplication of effort by coordinating services in the jurisdiction, 3) collaborate with other agencies for funding opportunities and new initiatives, 4) expand areas for revenue generation (e.g., third party billing), and 5) solicit in-kind technical assistance from local researchers.

Below are some examples of how the HHD has confronted and closed service gaps:

The *2016 Prevention Needs Assessment* revealed that over 35% of the Houstonians sampled reported never having been tested for HIV. The HHD provides capacity building and technical assistance opportunities for agencies in the jurisdiction to scale up HIV testing, especially by seeking reimbursement that can support this activity. Health department STD clinics have also taken steps to implement third party billing for HIV/STD testing and services which will ultimately increase revenue and the ability to sustain and expand services.

Historically, there has not been enough funding to broadly blanket the community with social marketing campaigns. This is evident in the 2016 *Prevention Needs Assessment* where 33% of respondents reported they had not received any HIV or STD prevention messages in the past 12 months. In 2016, knowledge of PrEP was low. Currently, PrEP knowledge has improved in the Houston community. Of those who responded in the *2020 Needs Assessment*, only 20% of the participants had never heard of PrEP, a 24-point percent decrease from 44% of participants who were unaware of PrEP in 2016. Beginning prior to receipt of any PrEP-specific funding, the HHD acted as a convener of a PrEP Provider Advisory Group where providers could share best practices and collaborate, often reducing the burden on new providers and saving time and resources. The HHD was awarded funding for PrEP scale-up starting in 2015. Harnessing this capacity, the HHD is implementing extensive social marketing campaigns focused specifically on both PrEP and treatment as prevention.

For priority activities identified by the planning bodies, HIV Prevention and Care administrative agencies often collaborate on new funding opportunities to secure the capacity necessary to address needs. A recent example has been Houston's creation and scale-up of Data to Care activities. In the first joint Integrated HIV Prevention & Care Services Plan released in 2012, the community prioritized re-linkage to care efforts. At that time, there were at least 26 service linkage workers helping newly diagnosed people with HIV, but none were dedicated to relinkage. Harris County Public Health (HCPH) and the HHD cowrote a grant application in 2012 to secure funding from the Merck Foundation for re-linkage to care utilizing surveillance and care data (2012-2015). In 2016, the HHD succeeded in expanding this program with funding for three years from the CDC.

When new prevention interventions or a shift in priorities has been identified, the HHD has actively sought ways to support these activities. If funding opportunities are not yet available, the HHD partners with local researchers, community-based organizations, and other agencies to accomplish new tasks. In doing this, the jurisdiction can pilot new initiatives and is better prepared when new funding opportunities do arise.

In addition to seeking out new direct funding opportunities, the HHD partners with local researchers to secure enhanced expertise in some specialties, such as mathematical modeling. The HHD is often able to leverage existing staff for collaboration on research projects while gaining the advanced expertise of researchers to advise and provide new insight.

EHE Planning Updates

As the HHD moves from EHE planning to implementation, the HHD has recently launched the digital platform, in the form of an EHE dashboard at EHEhouston.org, to expand community engagement and seek input from the broader community. In addition, community forums and town hall discussions have been held throughout the jurisdiction. The HHD and its partners encourage transparency and continuously advocate HIV awareness, knowledge, and involvement for EHE planning and implementation.

While the EHE dashboard underwent development, the HHD created alternative surveys to ensure community feedback was received before finalizing the initial EHE plan. The surveys were distributed to engage stakeholders, planning bodies, and the general community in participating and providing feedback on the existing *2017 Comprehensive Plan* and the *2016 Houston Roadmap to End HIV Plan*. Feedback received has assisted HHD in aligning and developing a unified approach towards reaching one jurisdictional plan.

The surveys covered a wide range of topics related to the EHE planning process such as meeting logistics, population representation, planning objectives, activities, roles, challenges, outreach, staff support, workgroup expertise, leadership structure, stakeholder engagement, future planning recommendations and participation for ending the HIV Epidemic. The surveys were distributed via existing electronic survey mechanisms (e.g. Survey Monkey and Qualtrics) while the EHE dashboard was being developed to ensure continual community engagement prior to the development of the initial Houston EHE Plan.

The Ryan White Planning Council and Houston HIV Prevention Community Planning Group conducted the *2020 Needs Assessment* from April 2019 to February 2020. The assessment was approved July 9, 2020. The results were utilized in the creation of this initial EHE Plan and will inform future planning efforts.

HHD will determine the feasibility of including PrEP and cluster detection and response data in the Epidemiologic profile as these data are pertinent to the prevent and respond pillars of the EHE initiative. While referral to PrEP has improved, effective evaluation of PrEP has not been successful. HHD will also implement a PrEP continuum to measure PrEP awareness, uptake, adherence and care.