Phase I Progress Report: Building the Strategy to End AIDS in Fulton County

Fulton County Task Force On HIV / AIDS

December 1, 2015

OUR Time Is NOW

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Greetings:

Exactly one year ago, on World AIDS Day 2014, we heard data about the ongoing challenge of HIV/AIDS in our own community. We were reminded that Georgia ranks second among states for rates of new diagnoses of HIV in the US, that it remains in the top 5 causes of death for black men between the ages of 20 and 54 in Georgia, and is the leading cause of death among black men between the ages of 35 and 44. Twenty-five percent of those infected with HIV in Georgia live in Fulton County, making ours the county with the greatest number of cases and highest rate of infection. These statistics are staggering, particularly now when highly effective prevention measures are available and when effective medical therapy for those infected with HIV can virtually stop new infections while preserving health in the affected individual.

These data led us to ask ourselves one simple question, "How can we respond and best address the needs of those living in Fulton County?" The result of that query led us to draft a resolution establishing the Fulton County Task Force for HIV/AIDS. The Task Force, composed of individuals with expertise in issues associated with the HIV/AIDS epidemic as well as the passion to solve the crisis, set an ambitious goal: to develop a comprehensive Strategy to End AIDS in Fulton County. This effect, which is still on-going, has benefitted from contributions from local, regional and national experts. Most importantly, they have sought the advice of the residents of our communities, those affected by HIV/AIDS, those in heavily impacted groups and all others interested in this challenge. Today, one year later, the group will release a Phase I Progress Report on the Strategy. This document outlines the initial objectives that will guide the development of programs, policy and other action items all targeted to prevent new HIV infections and optimize care for those with HIV infection. Such guidance is critically necessary. Cities like San Francisco, Vancouver, and Washington, DC, have dramatically decreased their rates of new infections with a comprehensive strategy to fight HIV and AIDS locally.

We believe the time is now for Fulton County to join the ranks of communities like these and to set an example for others in the state to follow. We support the work of the Fulton County Task Force on HIV/AIDS and hope you will join with us in a bold commitment to End AIDS in Fulton County.

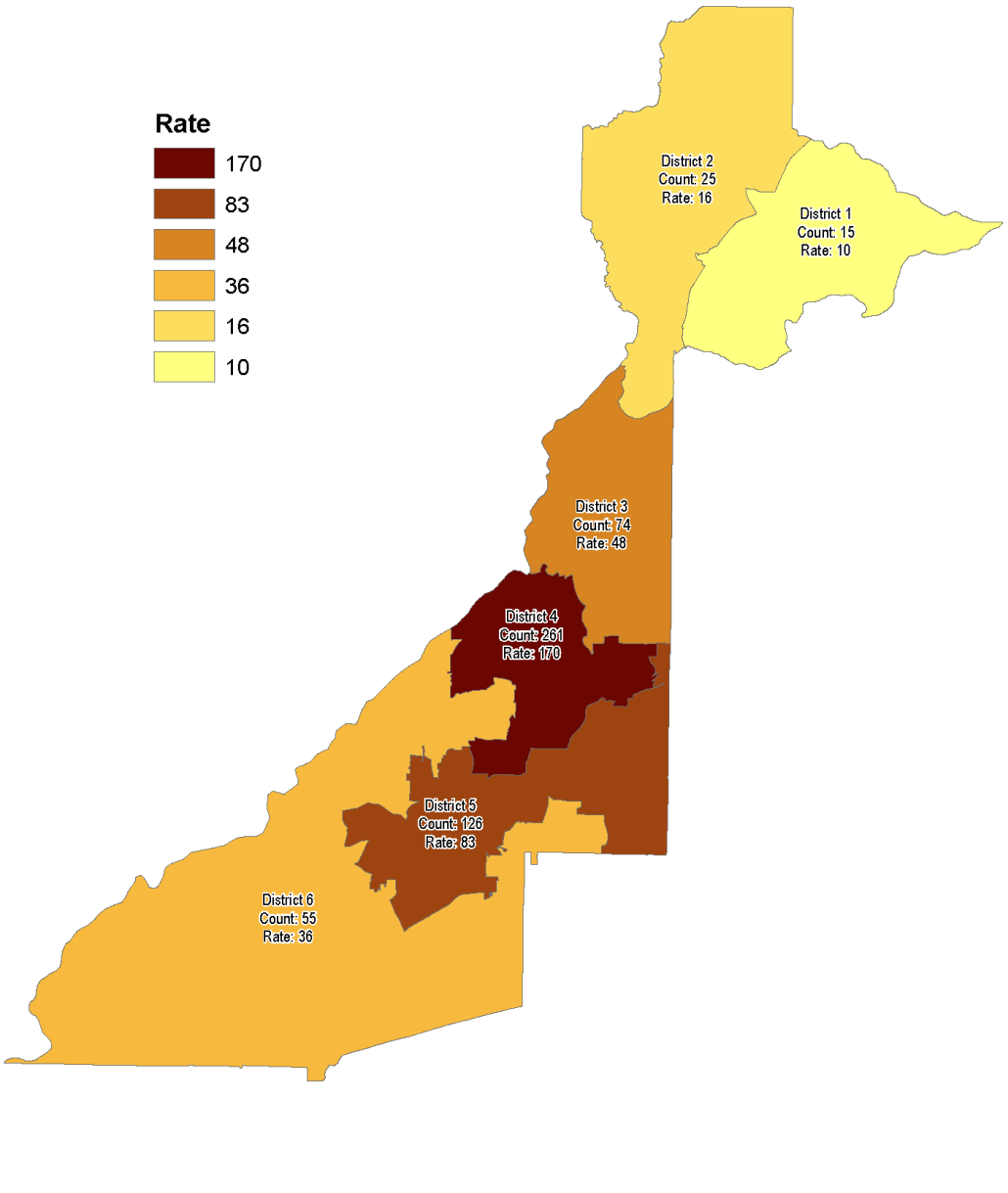
Sincerely,

John H. Eaves, Ph.D.
Chairman
Fulton County Board of Commissioners

Sincerely,

Joan P. Garner
Commissioner, District 4
Fulton County Board of Commissioners

New HIV diagnoses and rates per 100,000 people by county commission district, Fulton County, 2013



Office of Health Indicators for Planning (OHIP)
Georgia Department of Public Health

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Created: October, 2015
Source: Department of Public Health
Data classification method: Natural Breaks (Jenks)
Projection: Georgia Statewide Lambert Conformal Conic

GLOSSARY

Acute HIV infection: Early stage of HIV infection that extends approximately 1 - 4 weeks from initial infection until the body produces sufficient HIV antibodies to be detected by an HIV antibody test. Acute HIV infection can be diagnosed with an HIV RNA test that is positive before HIV antibodies are present.

AIDS (Acquired Immunodeficiency Syndrome): An epidemiological term used to define the advanced stage of HIV infection when the CD4 count is < 200 cells/uL now also called CDC Stage 3.

Antiretroviral (ARV/ART): A drug used to prevent a retrovirus, such as HIV, from replicating. The term primarily refers to drugs used to treat HIV also known as antiretroviral therapy (ART).

CD4 Cell Count: The number of T-helper lymphocytes per microliter (μL) of blood (which is equal to about 1/50th of a drop of blood). The CD4 count is a good predictor of immunity. As CD4 cell count declines, the risk of developing opportunistic infections increases. The normal adult range for CD4 cell counts is 500 – 1500/ μL . A CD4 count of 200 or less is an AIDS-defining condition.

Co-infection: When a person has two or more infections at the same time. For example, a person infected with HIV may also be co-infected with hepatitis C (HCV) or tuberculosis (TB) or both.

Hepatitis C Virus (HCV) Infection: A type of virus that causes inflammation of the liver (hepatitis). Hepatitis C virus (HCV) is usually transmitted through blood but can also be transmitted sexually, mainly among men who have sex with men (MSM). HCV infection progresses more rapidly in people co-infected with HIV than in people without HIV.

HIV Care Continuum: Successful management of HIV requires that a person be diagnosed, linked to care, started on ART, retained in care and that the patient adheres to both ART and care. The Care Continuum is a term used to describe this process. It is also known as the HIV Care Cascade.

HIV RNA: The genetic material of the human immunodeficiency virus (HIV). It can be measured in the blood and reported as copies/ml. The goal of antiretroviral therapy is to decrease the amount of HIV RNA in the blood to levels below the limit of detection.

HRSA (Health Resources and Services Administration): The agency of the U.S. Department of Health and Human Services that administers various primary care programs for the medically underserved, including the Ryan White HIV/AIDS Program.

Injection Drug Use: A method of using illegal drugs in which the drugs are injected into a vein, into a muscle, or under the skin with a needle. Blood-borne viruses, including HIV and hepatitis B and C, can be transmitted via shared needles or other shared drug injection equipment.

Linkage To Care: The process that leads a patient to enter care after diagnosis. In HIV it refers to the initiation of HIV outpatient care. The goal of the NHAS is that a person completes a visit with an HIV medical provider ≤30 days after their HIV diagnosis.

Linkage Navigation Services: A process of service delivery to help a person obtain timely, essential and appropriate HIV/STD/HCV- related medical and social services to optimize his/her health and prevent HIV transmission.

Opt-out HIV Screening/Testing: Performing an HIV test after notifying the patient that the test is normally performed but that he/she may elect to decline or defer testing. Assent is then assumed unless the patient declines testing.

Partner Services: Services that are offered to persons with HIV infection, syphilis, gonorrhea, or chlamydial infection AND to their partners.

Perinatal Transmission: When an HIV-infected mother passes HIV to her infant during pregnancy, labor and delivery, or breastfeeding (through breast milk). Antiretroviral (ARV) drugs are given to HIV-infected women during pregnancy and to their infants after birth to reduce the risk of perinatal transmission.

Post-exposure Prophylaxis (PEP): Short-term treatment started as soon as possible after a high-risk exposure, like unprotected sex, to an infectious agent, such as HIV. The purpose of post-exposure prophylaxis (PEP) is to reduce the risk of infection after exposure.

Pre-exposure Prophylaxis (PrEP): An HIV prevention method for people who are HIV negative and at high risk of HIV infection. Pre-exposure prophylaxis (PrEP) involves taking a specific combination of HIV medicines daily to prevent infection if exposed to HIV. PrEP should be combined with condoms and other HIV prevention interventions.

Re-engagement: When a person who has dropped out of outpatient care for HIV begins to make and keep appointments again (see "Retention")

Retention: Retention in care means keeping patients engaged in outpatient care. An estimated 50% of persons living with HIV in the US are not retained in care. Retention is essential to providing ongoing treatment to all HIV-infected persons, including those not yet receiving ART. Retention is not necessarily "all or nothing" and some patients may exhibit a cyclical in-and-out pattern of care (see: "Re-engagement").

Ryan White HIV/AIDS Act of 2009 (Ryan White HIV/AIDS Program): Enacted in 2009, this legislation reauthorized the Ryan White Program, formerly called the Ryan White CARE Act and the Ryan White HIV/AIDS Treatment Modernization Act of 2006.

Serostatus: The state of either having or not having detectable antibodies against a specific antigen, as measured by a blood test (serologic test). For example, HIV seropositive means that a person has detectable antibodies to HIV; seronegative means that a person does not have detectable HIV antibodies.

Syringe Exchange Programs: A social service that allows injecting drug users (IDUs) to obtain clean hypodermic needles and associated paraphernalia at little or no cost.

Targeted HIV Testing: Any screening process that is geared to meet a particular population. Populations identified for targeted testing fall are considered high risk for exposure to HIV.

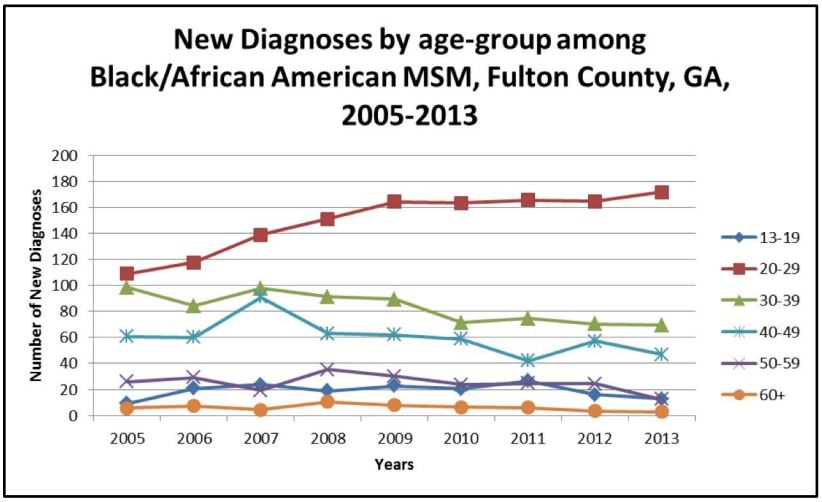
Viral Load: In relation to HIV, the quantity of HIV RNA in the blood. Viral load is used as a predictor of disease progression and risk of transmission. Viral load test results are expressed as the number of copies per milliliter of blood plasma.

Viral Suppression: Suppressing or reducing the function and replication of a virus. Viral suppression is the goal of a successful HIV treatment regimen.

Introduction: OUR Time Is NOW!

Bellevue Hospital in New York City closed its AIDS ward in June 2012. New HIV infections in South Africa decreased 58% between 2009 and 2014 [UNAIDS, 2015]. Cuba eliminated mother-to-child HIV transmission in 2015 [WHO, 2015]. Even the District of Columbia (DC), America's most HIV-affected jurisdiction, decreased its HIV diagnoses by 57% over eight years [DC DOH, 2015]. Globally, and even in highly affected American cities like San Francisco, there are goals of "Getting to Zero," meaning zero AIDS deaths, zero new HIV infections, and zero discrimination [SF Zero, 2015]. The White House tells us an "AIDS-free Generation" is within our reach [White House, 2011]. The world around us has changed in remarkable ways with the advent of potent and tolerable drugs to treat and prevent HIV, and the discovery that effective treatment of HIV not only saves lives and keeps people healthy, but also sharply decreases HIV transmission to others. Additionally, in 2012, a medication to prevent HIV infection was licensed by the Food and Drug Administration (FDA). US cities, states, and countries that have benefitted most from these advances are those that have had the political will to use their knowledge and resources to change the course of the HIV/AIDS epidemic.

In the wake of such progress, why do we need a Task Force on HIV/AIDS? Unfortunately, the citizens of Fulton County have not benefitted optimally from these game-changing successes. In fact, we have become one of the epicenters of the HIV epidemic in America. Nationally, Georgia ranks second and Atlanta ranks fifth in our rate of new HIV diagnoses [CDC 2013 Surveillance Report]. Here in Fulton County, the steady rise in new diagnoses among young black gay and bisexual men has continued unabated over the last decade [Georgia DPH, unpublished].

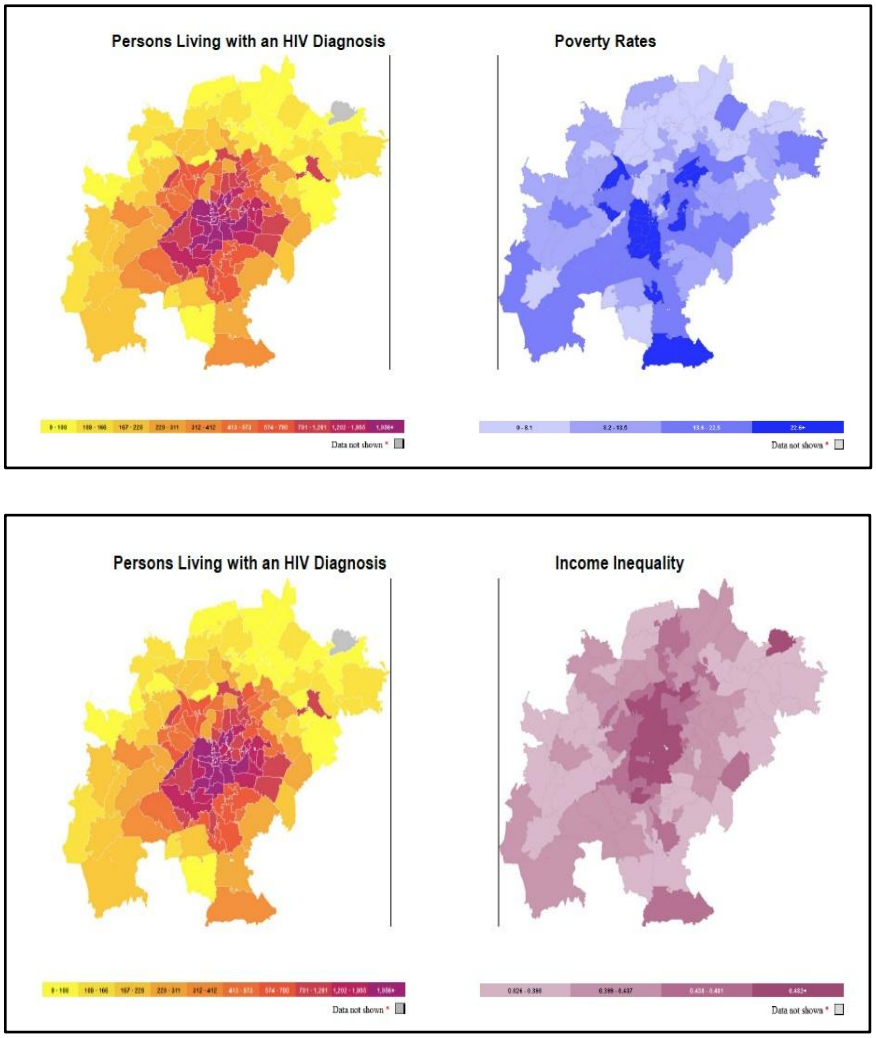


Rising numbers of new HIV infections among Black men who have sex with men (MSM}: Georgia Department of Public Health HIV Epidemiology Unit

As of 2014, there were about 15,101 persons living with HIV/AIDS in Fulton County. Fulton accounts for about 45% of HIV cases in the 20 county Atlanta Eligible Metropolitan Area (EMA). Metro Atlanta ranks ninth and 11th in deaths due to AIDS among men and women, respectively, even at a time when progression to AIDS is entirely preventable with antiretroviral therapy (ART) [CDC, April, 2015]. In 2014 alone, a testing program in the emergency department (ED) of Grady Memorial Hospital found that half of persons newly diagnosed with

HIV already had advanced immune destruction and met the definition of having AIDS [Unpublished data]. This lack of diagnosis and treatment was unacceptable in the early days of the epidemic, but it is inexcusable in 2015.

But our HIV/AIDS "problem" does not exist in isolation. Metro Atlanta is first in the country, and Georgia is third, in primary and secondary syphilis. Fulton is first in syphilis in Georgia and sixth in the US [CDC STD, 2015]. Our homeless shelters recently were the site of a tuberculosis (TB) outbreak, including drug-resistant TB, raising concerns at the local, state, and national levels. Thirty to 50% of this outbreak occurred in HIV-positive persons who were not in care. For persons with HIV, ART has been shown to lower greatly the risk of contracting TB. Cases of HCV, spread by needles and unprotected sex, are on the increase. And, like those affected by HIV, those with communicable diseases share similar health disparities and are affected by social determinants of health, such as poverty and income inequality, unstable housing, low educational attainment, lack of health insurance, unemployment, lack of food, poor transportation, and social attitudes that promote stigma and discrimination. In fact, maps of poverty and income inequality mirror those of HIV prevalence [AIDSVu, 2015]. Because social determinants like these are our greatest challenges, any plan that neglects these larger forces is doomed to fail.



HIV Prevalence, Poverty, and Income Inequality, 2012 (aidsvu.org/state/georgia/Atlanta/)

What will it take to turn Fulton County around? Planning is the first step. As President Dwight Eisenhower said about going to war, "Plans are worthless, but planning is everything." [American Presidency, 1957]. To date, we have been reactive and fragmented. We have not worked seamlessly together at the county, city, state, and national level. We have been controlled by our bureaucratic systems, instead of challenging and changing them to better serve our needs. The world around us has proven that, while we cannot yet cure HIV, we can indeed put an end to AIDS. It is time to put aside divisions, political ideologies, silos, and turfs. For once, with the support of the Fulton County Board of Commissioners, we have a window of opportunity to get the job done. OUR Time Is NOW. And this is the beginning of our plan to End AIDS in Fulton County.

About the Fulton County Task Force on HIV/AIDS

In December 2014, Board of Commissioners Chairman John Eaves and District 4 Commissioner Joan Garner proposed resolution #14-1109 creating and establishing a Task Force on HIV/AIDS for Fulton County. The resolution, approved at the December 17, 2014 Board meeting, envisioned that this entity would "provide input and recommendations in areas of public education, advocacy, treatment, prevention, housing and related issues pertaining to HIV/AIDS in Fulton County." The Task Force has met regularly to refine further its the mission and charter as a group. To accomplish the charge set forth by the Board, the Task Force recognized early that it was necessary to develop a comprehensive, evidence-based "Strategy to End AIDS in Fulton County" that can then be promoted and monitored to assess progress.

The resolution allowed for the Commissioners initially to appoint 14 members to the Task Force who reside in Fulton County, two to be appointed by each Commissioner. The members also recognized that an effective strategy would require individuals with significant, wide-ranging content expertise, many of whom work but do not reside in Fulton, to address appropriately the many areas that require attention in a truly comprehensive plan. Additional non-appointed contributors were invited to participate on the Task Force with other content experts serving as consultants. Key Fulton County leaders, such as the Director of the Fulton County Department of Health and Wellness (FCDHW) and the Director of Part A of the Ryan White HIV/AIDS Program (RWHAP) were named as *ex officio* Task Force Members. In 2016, the Director of the High Impact Prevention Program (HIPP) will become an *ex officio* member of as well. Co-Chairs of the Task Force were elected by the group and consist of an appointed member and a non-appointed contributor.

Building the Fulton County Strategy to End AIDS: Methodology

The Task Force's primary mission is to develop a comprehensive "Strategy to End AIDS in Fulton County." The Strategy requires clear goals and measurable objectives that can subsequently guide promotion, monitoring and reassessment over time. The Strategy will adopt the primary goals of the 2020 National HIV/AIDS Strategy (NHAS). These are to reduce HIV incidence, to increase access to care and improve health outcomes so that people living with HIV/AIDS can lead healthy, long lives, to reduce HIV-related health care disparities, and to achieve a more coordinated response to HIV/AIDS. The Task Force chose to create the

Strategy in two phases to balance the urgent need for such a Strategy in Fulton County with the necessity of careful thought, data collection, and broad-based input. The first phase, released on World AIDS Day 2015, includes draft objectives and is intended to serve as a living document to guide the development of Action Plans. The full strategy, including refined objectives and specific Action Plans with metrics and targets will be released in June 2016 in association with National HIV Testing Day.

The Task Force created four committees and an Executive Committee, each charged with evaluating needs and developing objectives and Action Plans in areas of critical importance for the Strategy. The Task Force co-chairs appointed committee chairs. As part of this process, each committee is charged with conducting an inventory of current HIV/AIDS resources and activities in the area of focus and a gap analysis. The committees are as follows:

1. *Prevention and Care*

   The Prevention and Care Committee is responsible for developing recommendations regarding HIV testing, prevention and care. Those recommendations include cross cutting structural issues related to the delivery of healthcare for persons at risk for and living with HIV in Fulton County and the role of the FCDHW in HIV care and prevention. As the largest committee with the broadest mission, there are three subcommittees: (1) Testing and Prevention, (2) Care, and (3) Resource Assessment, Gap and Cost Analysis. The third subcommittee will inventory all existing resources and analyze the gap between resources and plans, including cost analysis.

2. *Social Determinants of Health*

   The Social Determinants of Health Committee is responsible for developing recommendations regarding access to and provision of services that strengthen healthy lifestyles and reduce unmet needs and other health disparities for persons with and at risk for HIV infection.

3. *Data and Evaluation*

   The Data and Evaluation Committee is responsible for identifying data sources and developing and advising on pragmatic and scientifically sound metrics for the Strategy's objectives. The Committee also will help identify areas where data systems need strengthening or enhanced coordination.

4. *Policy*

   The Policy Committee is responsible for identifying policy needs to facilitate implementation of the Strategy, reduce stigma and healthcare disparities, and otherwise promote the health and wellbeing of persons with and at risk for HIV infection.

5. *Executive Committee*

   The Executive Committee is composed of the Co-Chairs of the Task Force and the Chairs of the Prevention and Care, Social Determinants of Health, Data and Evaluation, and Policy Committees. The Executive Committee is responsible for ensuring coordination among committees, identifying and recruiting appropriate individuals as Task Force advisors and members, issuing updates to the Board of Commissioners and providing oversight for monitoring the development, implementation and continued assessment of the Strategy.

Community Input and Engagement

Community input is essential to development of a comprehensive strategy that addresses the needs of those living with or at risk of HIV infection. The Task Force uses three main strategies to secure broad based input: public meetings, convening community listening sessions and soliciting input through a community survey. The Task Force hosts community listening sessions in every district in Fulton County and encourages any interested persons to attend. The listening sessions address two primary questions and allow ample time for discussion. The questions include: (1) *What should be done to prevent new HIV infections?* and (2) *What should be done to help people with HIV receive care and treatment?* A community input web-based survey tool also was widely distributed to allow individuals with a recommendation for an objective, Action Plan, or other feedback to submit these comments to the Task Force.

While this process is not yet complete, several common themes have emerged from both approaches. Many community participants have emphasized a need for better education around prevention strategies (including pre-exposure prophylaxis or PrEP), HIV testing, and the clinical outcomes associated with treatment. In particular, education targeted to unique and disproportionately affected populations, such as youth and transgendered individuals, is necessary and should be conducted at appropriate venues including schools. The use of social media campaigns depicting individuals popular among youth may be impactful and should be explored. Improved access to PrEP with increased consumer and provider awareness. Many participants mentioned the need to streamline enrollment into RWHAP services, including medical care, as the current process is burdensome and acts as a barrier to care. Transportation and housing services are important unmet needs mentioned frequently. Adequate access to substance use and mental health treatment and syringe exchange services is lacking and wanted.

Evaluation and Implementation Monitoring

An adequate evaluation and monitoring plan is required to realize fully the Strategy's goals. The Action Plans contained in the full Strategy will be linked to objectives that are specific, measurable, achievable, relevant, and time-oriented (SMART Objectives) with pre-specified metrics and targets to gauge success. Progress toward reaching the Strategy's targets will be assessed annually and detailed in a report to the Board of Commissioners. In addition, the Strategic Plan will be reassessed on a regular basis to incorporate new information.

Draft Objectives for the Strategy to End AIDS in Fulton County

HIV Testing

Knowledge of HIV Status

Why Is This Important?

Knowledge of HIV status is the first step toward empowerment over HIV. Individuals who know they have HIV can to take control of their health by getting HIV care, including ART. Undiagnosed persons forego the benefits of ART and often present to care with advanced disease, including opportunistic diseases indicative of AIDS. Data show that persons who learn that they have HIV are more likely to change their behavior so that they are less likely to spread HIV to others [Marks, 2005]. In addition, suppressing HIV through the use of ART greatly decreases HIV transmission [Cohen, 2011]. Likewise, a negative HIV test can empower an individual to increase efforts to stay negative, including the use of PrEP or post-exposure prophylaxis (PEP).

Identification of persons with acute and early HIV infection is particularly challenging, but important from public health and personal health perspectives. Persons who are acutely infected with HIV may test negative on HIV antibody tests because their bodies have not yet had time to generate antibodies to respond to the infection. Persons with acute HIV infection typically have extremely high viral loads (VLs) and are extremely contagious during this period, with an estimated increase in infectivity of eight to 10 fold for male to female heterosexual transmission [Pilcher, 2004].

How Are We Doing?

The Centers for Disease Control and Prevention (CDC) estimates that 18.7% of Georgians are living with HIV infection but are unaware of their HIV serostatus, and that 20.8% of men who have sex with men (MSM) in Georgia are infected but undiagnosed [Hall, 2015]. Based on this estimate, and estimates of persons diagnosed with HIV in Fulton County through 2014, [DPH-unpublished]. there are about 2,824 persons in Fulton County who have HIV but are unaware of being infected. The *InvolveMENt* study at Emory University found that 13-15% of gay and bisexual men in this cohort were unaware of their HIV status, with no difference in serostatus awareness between white and black men [Sanchez, 2014]. Unfortunately, only 24% of persons who are diagnosed with HIV in Fulton County have a strong immune system with CD4 cell counts above 500/μL within three months of diagnosis, while at least 17% have CD4 below 200/μL, meeting CDC criteria for AIDS [DPH-unpublished]. As mentioned, recent data from the Grady Hospital ED found that half of persons who were newly diagnosed there already had AIDS. Surveillance data are lacking on the number of persons who were diagnosed during acute or early infection. Unfortunately, the number of persons tested using CDC prevention funding through FCDHW to date is far below our targeted number.

What Are Our Objectives?

1. *Increase the percentage of people living with HIV who know their serostatus to 90% (NHAS Indicator 1).*
2. *Decrease the percentage of people with AIDS at the time of diagnosis to < 10%.*
3. *Increase identification of persons with acute HIV infection.*

How Will We Get There?

Decreasing the number of persons who have HIV but are unaware of their status will require expansion of routine opt-out testing in healthcare settings, coordinated and strategic use of non-healthcare setting testing targeted toward disproportionately affected populations, as well as expansion of partner services to provide testing and education to partners and sexual networks of persons with HIV. Increased identification of acute HIV infection will require widespread use of new "4th generation" HIV tests that are able to detect HIV infection earlier than older tests, including during the acute phase. Point-of-care rapid 4th generation tests are available but are not widely used in Fulton County. State and County data systems must be modified to classify correctly persons identified with acute infection, and to use these data in a timely manner for maximal impact on prevention and care. While these systems are being developed, both providers and public health staff need education on the proper management of persons with acute infection, and the need to rapidly link them to medical care and other services to support retention in care.

Routine Opt-Out Testing in Healthcare Settings

Why Is This Important?

Studies have shown that persons with HIV often receive medical care for other issues without being offered screening for HIV. In South Carolina, three quarters of persons who presented with AIDS within a year of HIV diagnosis had been seen in healthcare settings at least once prior to their HIV diagnosis, and many were seen multiple times [MMWR, 2006]. Missed diagnoses mean that individuals with HIV may have advanced immune destruction and even clinical illness when finally diagnosed. This represents a public health failure in an era in which clinical progression to AIDS can be prevented by early treatment. In 2006, CDC recommended routine opt-out HIV screening for all pregnant women and persons aged 13-64 being seen in healthcare facilities [CDC, 2006]. Furthermore, the US Preventative Services Task Force (USPSTF) recommends routine opt-out screening for all pregnant women and persons aged 15-65, with a grade of "A," ensuring reimbursement by health insurance plans covered by the Patient Protection and Affordable Care Act (ACA) [Moyers, 2013]. In 2014, CDC changed its algorithm for HIV screening to institute 4th generation testing as the laboratory standard for HIV diagnosis [CDC, 2014]. This new method allows for earlier detection of HIV infection, and is less likely to miss acutely infected persons.

How Are We Doing?

Only one ED in Fulton County offers routine opt-out HIV screening. Grady Hospital ED was funded by Gilead Sciences to institute routine screening beginning in July 2013, through Gilead's HIV FOCUS Program. Through October 30, 2015, the Grady ED FOCUS Program performed 59,137 HIV screenings, (of 50,934 unique patients) finding 713 HIV-positives, including 454 newly diagnosed persons (0.89% of unique patients tested), and identifying 259 additional persons who were previously diagnosed but out of HIV care. Of all HIV positives, 352 (64%) were successfully linked to care [Shah, Bijal; personal communication]. There are currently no comprehensive local data on uptake of routine HIV screening in ambulatory care facilities, including public clinics, private practices, Federally Qualified Health Centers (FQHCs), or urgent care clinics. There also are no comprehensive data on routine opt out HIV screening

in an inpatient setting for hospitals in Fulton County. In 2014, FCDHW suspended HIV/sexually transmitted infection (STI) clinical services in its satellite clinics due to funding issues. From 2012 through 2014, about 18% of the program's HIV tests were conducted at those satellite clinics [FCDHW IPR, 2015].

What Are Our Objectives?

4. *Ensure that patients admitted to hospitals and treated at outpatient clinics under Fulton County's authority are offered routine opt-out HIV screening as per CDC and USPSTF recommendations.*
5. *Increase the number of healthcare sites not under Fulton County's authority offering routine opt-out HIV screening.*
6. *POLICY: Incorporate HIV and STI screening into student health services for Fulton County and Atlanta City high schools, as well as colleges and universities in Fulton County.*
7. *POLICY: Clarify Georgia law to ensure that it allows voluntary HIV testing of minors without parental consent, consistent with laws governing STI screening.*
8. *POLICY: Advocate for routine HIV screening to become part of new and emerging "core" measure sets used by public and private payers, including incorporation into Meaningful Use requirements of the Centers for Medicare and Medicaid Services (CMS).*

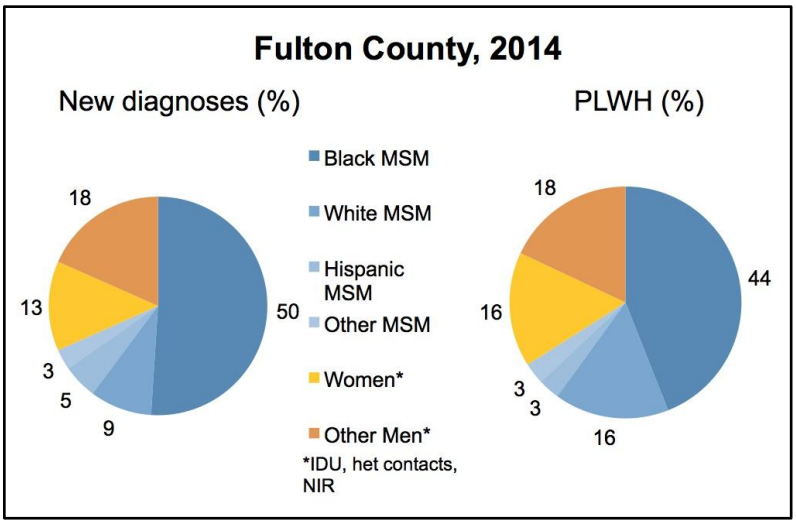
How Will We Get There?

Achieving these objectives requires an assessment of the policies and practices of healthcare facilities in Fulton County regarding routine opt-out HIV screening. Strategies for educating and incentivizing providers must be developed. Data sources are inadequate and metrics for provider and healthcare facility adherence are challenging. Laboratories are required by law to report positive HIV assays to the Georgia Department of Public Health (DPH), but there is no such reporting requirement for negative tests. Therefore, exploration of new data sources will be needed to assess provider adherence to this CDC and USPSTF recommendation. Advocating at the federal level for incorporation of routine HIV testing as a "core" measure and Meaningful Use requirement for healthcare providers will impact reimbursement and provide a strong incentive for providers to offer screening.

Targeted Testing for Disproportionately Affected Populations in Non-healthcare Settings

Why Is This Important?

Fulton County data demonstrate huge disparities in the prevalence and new diagnoses of HIV among certain populations. Black gay and bisexual men account for the largest proportion of people currently living with HIV (44%) and HIV new diagnoses (50%), suggesting that the disparity may be increasing over time. Overall, gay and bisexual men of all races and ethnicities account for two-thirds of people currently living with HIV, as well as new diagnoses. While the proportion of new diagnoses belonging to women has decreased slightly, African Americans account for 84% of new diagnoses among women.



Transgender populations also are disproportionately affected, with national estimates of HIV prevalence in transgender women as high as 47% [Melendez, 2007]. A 1993 study of Atlanta transgender women sex workers found a 68% HIV prevalence, and a 2001 study found a 35% overall HIV prevalence among transgender persons in San Francisco, although that prevalence increased to 65% in African American transgender women, an increased risk of nearly six-fold [Clements-Nolle, 2001]. In contrast, some CDC estimates of HIV prevalence among transgender persons are as low as 2.1% [CDC Transgender, Accessed 2015].

How Are We Doing?

FCDHW receives funding from CDC's PS12-1201 HIPP for targeted testing of disproportionately impacted populations. A total of 21,000 targeted tests in non-healthcare settings were projected over five years. By the end of 2014, only 9% of the 12,000 tests projected for the first three years of the project were conducted [FCDHW, unpublished data]. Of these tests, a minority were conducted in gay and bisexual men. There is a dearth of data with which to estimate the rates of new HIV diagnoses and HIV prevalence in transgender persons. In 2013, only 65 transgender persons were counted as living with HIV in the Atlanta Metropolitan Statistical Area (MSA) [DPH Epi, unpublished data]. The true HIV prevalence among transgender persons in Fulton County is unknown, and data collection is inadequate and must be improved. Targeted testing must be increased substantially in this population.

Georgia DPH has generated geocoded ZIP code maps for Fulton County to understand better where persons with newly diagnosed HIV infection reside. Nine priority ZIP codes, each with 24 or more new cases in 2014, were identified. An analysis of HIV testing by ZIP code showed that the locations of testing events did not align well with high prevalence ZIP codes. The most frequently tested ZIP code ranked 19th in new diagnoses and did not rank among top 20 ZIP codes for prevalent cases of HIV/AIDS. Only six of the top 10 ZIP codes for new diagnoses were included in the top ZIP codes for testing [FCDHW, unpublished data]. Increased attention to geocoded "hot spots" will be needed, and this will be achieved only by a more coordinated approach to testing.

At present, there is no centrally coordinated plan for geographic- or population-targeted HIV testing. Funded agencies are allowed to devise and implement their own plans without substantial direction from FCDHW or mandatory coordination with other funded agencies.

What Are Our Objectives?

9. *Ensure that 90% of targeted HIV testing is directed toward disproportionately affected populations and high prevalence geographic areas.*
10. *Make couples' HIV counseling and testing available at all HIV testing facilities.*
11. *Increase cultural sensitivity and competency of HIV testing providers working with disproportionately affected populations, especially young black gay and bisexual men and transgender populations/*

How Will We Get There?

Specific action plans will need to be designed with input from FCDHW program staff, community-based providers, epidemiologists, and, especially, consumers. FCDHW has had substantial challenges in the use of its CDC HIPP funding, and it is addressing these by instituting new leadership, providing more transparency (including through the Task Force), and increasing focus on structural impediments. A stronger and more centralized system for collaborating on targeting testing will need to be established to overcome the fragmentation that currently exists. Particular attention will need to be placed on creating data collection and analysis systems that adequately represent transgender persons, while additional training will be needed on the part of those performing HIV reporting in order to record data properly on case report forms.

Partner Services

Why Is This Important?

People who are newly diagnosed with HIV are likely to have had sexual or needle-sharing contact with one or more partners while being unaware of their status, thus putting others at risk for HIV transmission. Simply notifying partners, in a safe and confidential manner, without releasing information about the newly diagnosed person, can have an important impact on serostatus awareness. Partner services can enhance their prevention education, access to social and medical services, and linkage to HIV care if needed. Partner services are often thought of as "partner notification" only. However, CDC defines partner services much more broadly:

> "Other functions of partner services include prevention counseling, testing for HIV and other types of STDs (not necessarily limited to syphilis, gonorrhea, and chlamydial infection), hepatitis screening and vaccination, treatment or linkage to medical care, linkage or referral to other prevention services, and linkage or referral to other services (e.g., reproductive health services, prenatal care, substance abuse treatment, social support, housing assistance, legal services, and mental health services). The rationale for use of partner services is that appropriate use of public health resources to identify infected persons, notify their partners of their possible exposure, and provide infected persons and their partners a range of medical, prevention, and psychosocial services can have positive results including 1) positive behavior changes and reduced infectiousness; 2) decreased STD/HIV transmission; and 3) reduced STD/HIV incidence and improved public health" [CDC MMWR, 2008].

In addressing partner services, one must be cognizant of HIV criminalization laws, in which persons with HIV can be prosecuted, whether or not an HIV transmission took place.

How Are We Doing?

Partner services for newly diagnosed persons with HIV are tracked by FCDHW. Outcomes of linkage and retention services, especially for individuals out of care, are not easily accessed. In the first half of 2014, 141 confirmed newly diagnosed persons were referred for partner services, resulting in an average of 1.15 partners named [FCDHW IPR, 2015]

What Are Our Objectives?

12. *Ensure that culturally competent testing, education, and linkage services are offered to sexual and needle-sharing partners of 95% of newly diagnosed persons.*
13. *Ensure that culturally competent testing, education, and linkage services are offered to sexual and needle-sharing partners of 95% of patients being reengaged in care.*
14. *Ensure that HIV partner services are fully integrated into comprehensive linkage and reengagement strategies throughout the jurisdiction.*

How Will We Get There?

The CDC recommendations from 2008 have yet to be fully implemented and their potential realized. To optimize the benefit of partner services, it is essential to broaden current definitions and job descriptions to include intensive rapid linkage services for persons who are newly diagnosed, as well as rapid reengagement services for those who are out of care. At the same time, FCDHW partner services personnel should play an important role in assessing other needed services and providing true linkage, not just referrals, to critical services such as housing, transportation, and substance use and mental health treatment. Access is also needed for HIV seronegative individuals to biomedical prevention services such as PrEP when indicated. Education, training, and customer satisfaction feedback are necessary to ensure that partner services staff is perceived to be culturally competent by the individuals they serve. In addition to expanded provision of partner services, outcomes should be monitored and evaluated to ensure that these services enhance progress through the HIV Care Continuum. Due to overlapping funding streams for STI and HIV services, it will be important to ensure transparency and accountability regarding the allocation of funds, while ensuring efficient use of personnel and streamlining services for the recipient. Better integration of partner services into jurisdiction-wide linkage, retention, and reengagement efforts will be critical to success.

Program Collaboration and Service Integration: HIV, STI, Viral Hepatitis (VH), and TB

Why Is This Important?

People living with HIV often experience disproportionately high rates of other communicable diseases, particularly STIs, hepatitis B and C, and TB. HIV, STIs, and VH share risks and transmission routes. Certain STIs can increase HIV transmission. Diseases such as hepatitis C and TB have worse outcomes in persons with HIV. Public health funding streams tend to come from various agencies, notably CDC and the Health Resources Services Administration (HRSA), and balancing the streams is challenging while maintaining accountability. In 2009, CDC produced a white paper on "Program Collaboration and Service Integration"(PCSI). PCSI's goal is for programs to collaborate in providing "seamless comprehensive services from multiple programs without repeated registration procedures, waiting periods, or other administrative barriers." [CDC PCSI, 2009]. The framework for PCSI emphasizes joint planning and resource

coordination or sharing, to produce integrated "one-stop shopping" for consumers. Such an approach emphasizes programmatic efficiency and enhances user satisfaction.

How Are We Doing?

As an HIV epicenter and the "Syphilis Capital" of the nation, we have major challenges ahead. Our federally-funded HIV testing in non-healthcare settings is largely conducted by community-based organizations (CBOs) that have mixed or no access to testing for other communicable diseases. Routine opt-out testing for HIV is incorporated into all STI prevention activities at FCDHW. Outreach staff in the FCDHW Sexually Transmitted Disease (STD) Program is trained in HIV rapid testing and able to perform these tests in the field during investigations, though they may report to different programs than the HIV prevention staff, creating organizational challenges. Opt-out rapid HIV testing is part of the FCDHW TB Clinic's standard protocol for patients receiving TB screening and other clinic services. However, not all outreach staff members are trained in HIV rapid testing, so field screening for HIV during TB contact investigations (an important population to target) is still lacking. FCDHW has integrated testing services for persons visiting the STD clinic, but Disease Intervention Specialists (DISs) funded by HIV or STI funding streams, may not be fully cross trained, or may report to different programs, creating organizational challenges.

What Are Our Objectives?

15. *Increase access to testing for other STIs, VH, and TB in disproportionately affected populations being tested for HIV.*
16. *Increase testing for HIV in persons with, and being tested for, STIs, VH, and TB.*
17. *POLICY: Work with funding partners to ensure that funding streams allow for incorporation of HIV, STI, VH, and TB testing and linkage for disproportionately affected populations.*

How Will We Get There?

The key to realizing the promises of PCSI will be careful Action Planning, with all stakeholders at the table, and clear delineation of vision and goals. Where necessary, federal and State officials (including from STI, VH, and TB programs) may need to be involved to clarify contractual constraints regarding funds. PCSI Action Plans should focus on activities within FCDHW, as well as those taking place throughout the jurisdiction, regardless of funding mechanisms.

Systems Issues

Why Is This Important?

Two critical steps in the HIV Care Continuum include linkage to and retention in care [Gardner, 2011]. As addressed below in the corresponding sections, achieving HIV virologic suppression depends on these two steps. Additionally, long-term retention in care (longitudinal retention) is often not measured but is more challenging than retention early in the process [Colasanti, 2015]. While many efforts focus on providing linkage to care services at the time of diagnosis, identifying patients who do not link to care after diagnosis or are not retained in care after initial engagement in care can be challenging at the clinic level. Public health departments with access to laboratory reports of positive HIV diagnostic tests, viral loads, and CD4 results in the

enhanced HIV/AIDS Reporting System (eHARS) database can help identify individuals who have fallen off the Care Continuum at one of these steps, in other words a "Not In Care" (NIC) list. These individuals can then become the focus of targeted activities to either initially link or reengage them in care. The success of these methods, however, is critically dependent on the completeness and timeliness of reporting, and the sharing of this data with appropriate entities.

The CDC promotes "Data to Care" initiatives as a public health strategy to identify HIV-infected individuals that are NIC to lead to efforts to improve the HIV Care Continuum [CDC 'Description of North Carolina Care', accessed 2015]. Some states, like North Carolina, have comprehensive collaborative "Data to Care" plans in place with progress toward implementation [CDC Program Example, accessed 2015]. The RSVP Project in San Francisco [Buchacz, 2015]. using surveillance data did identify patients who were NIC, leading to contact with a subset of these individuals who accepted referral to linkage services. This experience led the group to underscore the importance of partnerships and medical providers with combination laboratory and medical record data to optimally target linkage and re-engagement efforts. In addition, collaborative systems like this can form the backbone of health information exchanges (HIE), as demonstrated in the Louisiana LaPhie project that led to linkage and retention in care in a significant proportion of identified patients [Magnus, 2012].

How Are We Doing?

In 2014, changes in policy (OGCA 24-12-21) led to an enhanced ability of the Georgia DPH to share AIDS confidential information with a physician that the patient has consulted for care. This has allowed several new initiatives consistent with the "Data to Care" campaign. Currently, a limited HIE is being piloted to identify NIC patients who have a visit at participating healthcare sites. In addition, enhanced collaborations with DPH are now possible to allow out of care lists from healthcare providers to be shared with DPH to determine confidentially the patient's care status. This is an important step to identify patients truly out of care and refine re-engagement interventions. Nevertheless, there remain challenges with adequate transmission of data from laboratories to the state.

What Are Our Objectives?

18. *Improve the timeliness and completeness of reporting to DPH of positive HIV diagnostic assays, HIV viral loads, and CD4 counts by hospitals in Fulton County.*
19. *Increase timeliness of data sharing between DPH and FCDHW to facilitate the use of surveillance data to improve linkage to and retention in HIV care.*
20. *Increase the use of surveillance data for improving the HIV Care Continuum, consistent with the CDC "Data to Care" initiative.*

How Will We Get There?

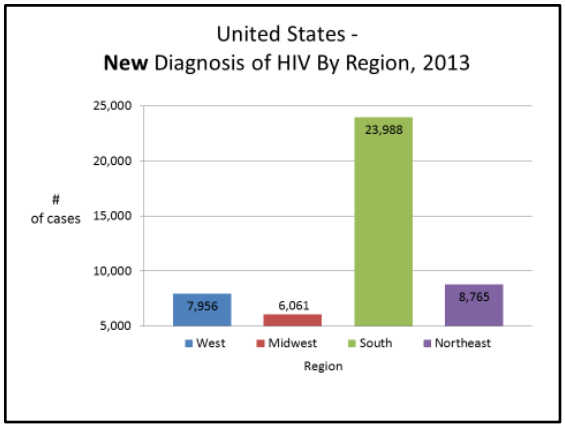
Improving the completeness of surveillance data requires additional support for DPH informatics activities required to support electronic laboratory reporting. Enhanced collaboration between DPH and the FCDHW is needed as well. Ultimately the impact of these interventions lies in the development of comprehensive strategies to use data to improve the Care Continuum longitudinally and at multiple intervention points. This approach would best

be accomplished with collaborative efforts between public health departments (including DPH and FCHDW) and healthcare providers. Development of a Fulton County Data to Care plan that will require significant collaboration across counties is urgently needed. A plan of this type will additionally identify new systems to facilitate this objective.

Preventing HIV Infection

Why Is This Important?

More than thirty years since the first report of a case of HIV infection, preventive interventions continue to be "front and center" in controlling the pandemic. While progress has been made and new infections have begun to decrease globally there are still approximately 2.1 million new infections occurring each year and we have made little progress in reducing HIV incidence in the highest risk groups. In the US, we have 50,000 new HIV infections per year. However, some groups like MSM, and in particular young MSM of color, continue to be disproportionately affected by HIV. In the past few years, several promising new prevention strategies have been demonstrated efficacy in clinical trials and are now being implemented, leading President Obama to look towards an "AIDS-free generation". HIV disproportionately affects Blacks in our community, and the epidemic is particularly severe among young Black gay and bisexual men. Recent data show that Black MSM have a 60% likelihood of having HIV by age 40. The risk is high, not because of increased risky sexual behavior compared to white men, but because there are high rates of HIV in their community.



How Are We Doing?

While HIV infections have declined substantially in many cities previously significantly impacted by the epidemic like San Francisco and Washington DC, sadly we have not seen the same in the Southeast. The South, including Fulton County, remains an epicenter for the disease, where new – and late - diagnoses continue.

What Are Our Objectives?

21. *Decrease the number of new diagnoses by at least 25% (NHAS Indicator 2).*
22. *Reduce disparities in the rate of new dx by at least 15% in the following disproportionately affected populations: young black gay and bisexual men, gay and bisexual men regardless of race/ethnicity, black females, transgender women. (NHAS Indicator 9 adapted)*

How Will We Get There?

It is critical that we improve retention in care and consequently virologic suppression to reduce the number of new diagnosis by at least 25%. Currently, the major gap in the HIV Care Continuum is retention in care and CDC estimates that most new infections are now occurring from people not retained in care (Skarbinski 2015). In addition, implementing combination prevention including scaling up PrEP among those at highest risk of HIV infection will also help in decreasing the number of new diagnoses. Thus, achieving this goal requires improvements in both prevention and care.

Biomedical Prevention: PrEP, PEP, TasP

Why Is This Important?

Biomedical prevention refers to the use of ARV agents to prevent HIV transmission. It comes in three forms:

1. **PrEP** (pre-exposure prophylaxis) is for individuals who are HIV-negative but who are at high risk of acquiring HIV. PrEP consists of taking a combination pill of tenofovir plus emtricitabine (Truvada®) every day. Both clinical trials and post-marketing studies have shown PrEP to be extremely (over 90%) effective in preventing HIV infection [Baeten, 2012; Grant, 2010; Thigpen, 2012; Volk, 2015]. In addition to its high efficacy and effectiveness, it gives HIV-negative individuals (particularly women) more control over their ability to protect themselves. Moreover, it takes the decision to protect oneself out of the "heat of the moment" and allows individuals to make that decision when they may be calmer and perhaps more rational.
2. **PEP** (post-exposure prophylaxis) is also for individuals who are HIV-negative, but is used in situations where individuals may not have been expecting to be exposed to HIV, such as a needlestick injury, when a condom breaks, or after a sexual assault. PEP consists of taking three different ARV drugs for one month after the exposure. It is also highly effective in preventing HIV infection [Roland, 2005], but for maximum effectiveness needs to be started within 72 hours of the exposure.
3. **TasP** (treatment as prevention) is for individuals who are HIV-positive and refers to the preventative effect of reducing their viral load to undetectable levels. When an individual with HIV has an undetectable viral load, transmitting the virus is extremely unlikely, either to a partner [Cohen, 2011; Del Romero, 2010; Donnell, 2010; Quinn, 2000; Reynolds, 2011]. or from pregnant women to their children [Mandelbrot, 2015]. It also has been shown that increasing ARV coverage in the community reduces the number of new infections [Das, 2010; Montaner, 2010].

How Are We Doing?

Tenofovir/emtricitabine was first approved by the FDA for PrEP in 2012. Nationwide, uptake was initially slow until 2014, when the CDC published updated guidelines specifically recommending PrEP for high-risk individuals; since then, there has been a significant rise in awareness and use of PrEP. CDC estimates that in the US about 25% of MSM (492,000 persons), 18.5% of PWID (115,000 persons) and 0.4% of heterosexually active adults (624,000 persons) have substantial risks of acquiring HIV and could benefit from PrEP, yet the number of people on PrEP is much smaller and thus significant scale-up is necessary (CDC Vital Signs, 2015).

One limitation to the use of PrEP is its cost. Truvada® is very expensive – up to $1,500 a month – though the manufacturer has a very generous patient assistance program (PAP) that covers the cost for those with low incomes. However, PrEP also requires frequent testing for HIV as well as monitoring of kidney function. Individuals with insurance can obtain the required care multiple ways, but those without insurance have more limited options. In Fulton County, currently only FCDHW provides true low- or no-cost PrEP to individuals without insurance through its recently opened clinic, nested within its busy STD clinic. Several agencies and have initiated or plan to initiate PrEP clinics, and a number of private physicians prescribe and follow patients on PrEP. At present there is no real-time inventory of PrEP providers to assist testing staff and other interested parties in locating PrEP services.

PEP is even harder to find. The cost of PEP for one month can exceed $3000. For healthcare workers exposed on the job, this cost is usually borne by their employers. However, non-

occupational PEP (nPEP) must either be covered by an individual's insurance or provided for free by a healthcare agency or a patient-assistance program. Because nPEP must be started immediately and patient assistance can take a few days to become active (especially over a weekend), any healthcare agency willing to prescribe nPEP much generally be willing to provide a few days of medication for free. In Fulton County, the Grady Hospital ED is currently the only agency willing to provide nPEP to uninsured individuals.

TasP requires viral suppression of persons living with HIV, but as mentioned previously, only a minority of individuals in Fulton County with HIV infection has fully-suppressed viral load. Fortunately, the Objectives that relate to increasing the number of individuals with an undetectable viral load not only protect the health of the individual with HIV, they also dramatically reduce transmission.

In the case of perinatal transmission, despite the fact that HIV testing is a part of routine prenatal care, there were still 15 mother-to-child transmission events in Fulton County between 2010 and 2014.

What Are Our Objectives?

23. *Ensure access to increase use of PrEP for eligible persons at high risk of HIV infection.*
24. *Ensure access to PEP for eligible persons following occupational or non-occupational exposure to HIV.*
25. *Eliminate perinatal HIV transmission in Fulton County.*

How Will We Get There?

There are already several aggressive campaigns to educate individuals about PrEP and nPEP, though more must be done, especially among young gay and bisexual men of color and among women, including transgender women. However, these educational initiatives can have no effect if PrEP and nPEP are not available. For insured individuals, the major initiative will be to increase provider awareness and comfort with providing these therapies. Both PEP and nPEP require ARV agents, which many physicians are uncomfortable prescribing. Therefore, educational initiatives targeting providers will be needed. Uninsured individuals must be provided more options for care. In the case of PrEP, the manufacturer's PAP makes the drug easy to obtain, but funding for medical care must be expanded. More clinics must be opened with geographic diversity. Weekend and night clinics with drop-in appointments must be made available. These additional clinics do not have to be costly. Because PrEP care is algorithmic, nurses working under protocols would be sufficient to cover the initial visits. Unlicensed outreach staff with medical supervision and standing orders for labs can be utilized for follow-up appointments. Still, even this funding must be obtained and maintained.

The cost of nPEP is higher, as the cost of drugs to cover the window until enrollment in a PAP begins can be significant. All EDs and urgent care facilities should be funded to cover the cost of ARVs for uninsured patients, and educated on how to assist patients in applying for PAPs.

All objectives related to testing, linkage to care, and retention in care will have an effect on reducing the transmission of HIV within Fulton County. However, we must make a particular

effort to target pregnant women, preferably in the prenatal period when ARVs can have maximum effect, though in accordance with CDC guidelines [Branson, 2006], *all* pregnant women should have repeat testing performed in the third trimester (preferably close to delivery) so that ARV prophylaxis can be given to the woman during delivery and to the baby immediately after delivery. Educational initiatives targeting obstetricians and midwives on these recommendations will be critical.

Prevention for People Who Inject Drugs

Why Is This Important?

People who inject drugs (PWID) are at high risk of HIV infection primarily through sharing of contaminated needles and syringes. The risk for transmission of HIV is highest in PWID who share needles and use drugs that are injected more often, such as cocaine or methamphetamines. Many PWID are also sexually active, so HIV infection among PWID raises the possibility of HIV transmission to sexual partners who do not inject drugs. Thus prevention of sexual transmission is also important for PWID.

The primary mode of preventing HIV transmission in PWID is to stop the use of injection drugs. Education programs that are culturally sensitive and geared to young audiences have the best chance of preventing drug use. Access to treatment centers is the best approach for individuals already using injection drugs. However, about 80% of active drug users in the US are not in substance abuse treatment because of choice or the unavailability of treatment centers. For PWID who do not wish to seek treatment or who are unable to gain access to treatment, the most effective way to prevent HIV infection is to avoid sharing needles and injection paraphernalia. In communities that have adopted programs that provide free needles and syringes for PWID there is strong evidence that these programs are effective in reducing HIV transmission and do not result in increased drug use among participants [Hurley, 1997]. However, access to sterile needles and syringes has been difficult in the US. In December 2011, the US Congress reinstated a ban on the use of federal funds for any program that distributes sterile needles or syringes for hypodermic injection of illegal drugs. Where clean needles cannot be obtained, PWID should be instructed that needles and syringes should be cleaned after each use, preferably with readily accessible virucidal cleansers such as chlorine bleach (diluted 1:10). As with sexual transmission, if PWID who are HIV infected are suppressed on ART the risk of transmission to other drug users also decreases. A randomized controlled trial conducted in PWID in Thailand demonstrated a 49% reduction in HIV acquisition when tenofovir was given as PrEP [Choopanya, 2013]. As a result the CDC has issued guidance for the use of PrEP among PWID but has recommended the use of co-formulated tenofovir plus emtricitabine rather than tenofovir alone as the preferred PrEP regimen among PWID [CDC MMWR, 2013]. However, this is an off label indication. PWID are also at risk of acquiring HBV and HCV through needle sharing, as well as being at high risk for STIs. Thus comprehensive care for PWID must include screening and treatment for all these conditions.

How Are We Doing?

In the US, 8% of all new HIV infections in 2010 were among PWID and 3% were among PWID who also engaged in male-male sex [CDC HIV Surveillance Supplemental Report (No. 4), 2012]. That same year, PWID comprised 22% of adults and adolescents living with HIV infection in the

US [CDC HIV Surveillance Supplemental Report (No. 3), 2012]. In 2013 PWID were estimated to comprise about 23% of persons with acute HBV infection [CDC Viral Hepatitis Surveillance, 2013]. A national probability survey, conducted from 1999 through 2002, showed that 48% of adults aged 20–59 years who tested antibody positive for HCV reported a history of injection drug use [Armstrong, 2006].

In a CDC study, the number of PWID in the US in 2011 was estimated to be 2.6% of the US population aged 13 years or older, representing over 6 million persons. Among lifetime PWID, the 2011 HIV diagnosis rate was 55 per 100,000 PWID; the rate of persons living with a diagnosis of HIV infection in 2010 was 2,147 per 100,000 PWID; and the 2011 HCV infection rate was 43,126 per 100,000 PWID [Lanski, 2014]

Data are unavailable on the number of PWID in Atlanta. Although heroin use in metropolitan Atlanta is low compared to other cities, a study conducted in 2013 found that in Atlanta there is an increase in heroin and methamphetamine use indicators [Dew, 2014]. This is not surprising as Georgia is both a final destination point for drug shipments and a smuggling corridor for drugs transported along the east coast.

What Are Our Objectives?

26. *Increase access to safe, free, and confidential syringe exchange in Fulton County.*
27. *Increase access to substance use and mental health treatment for PWID.*
28. *POLICY: Clarify the legality of syringe exchange for the legitimate medical purpose of preventing HIV, HBV and HCV, and other blood-borne infections in Fulton County.*
29. *POLICY: Advocate for use of local, Federal and philanthropic dollars to support syringe exchange programs.*

How Will We Get There?

The prevention and treatment of injection drug use are critical for reducing HIV transmission among PWID, and several studies have documented that significantly lower rates of drug use and related risk behavior are practiced by PWID who are in treatment [Metzger, 1998]. In addition, substance abuse treatment can serve as an entry point for medical care for PWID. However, the impact of substance abuse treatment on HIV infections has been observed only for those users who remain in treatment for at least one year [Metzger, 2003]. For this reason, brief detoxification programs are not considered effective strategies for HIV prevention unless they are followed by a longer course of treatment and thus Fulton County should make evidence-based drug treatment programs available for PWID, and not only brief detoxification. An integrated approach to service delivery for persons who use drugs that incorporates science-based prevention strategies is critical for the prevention of HIV and other infectious diseases among substance abusers. The removal of restrictions on the purchase of needles and syringes, the establishment of needle and syringe exchange and opioid-substitution programs in Fulton County are critically effective interventions for the prevention of HIV infection among PWIDs. In addition, community outreach that includes education about HIV transmission and prevention for PWID and the distribution of condoms and bleach kits are needed although the use of bleach was not found to be effective in studies in New York City and Baltimore [Titus,

1994; Vlahov, 1994]. Finally, PrEP must be made available to PWID in accordance to the CDC published guidance [CDC MMWR, 2013].

Condom Distribution

Why is this important?

The consistent use of latex condoms has been shown to be effective for the prevention of HIV transmission at the level of both the individual and the population [Johnson, 1994; CDC MMWR, 1993]. Multiple epidemiologic studies of heterosexual couples in which one partner is HIV positive and the other HIV negative indicate that the correct and consistent use of condoms can significantly reduce the transmission of HIV and other STDs [Weller, 1993]. In one study of HIV-seronegative women who had no exposure to HIV other than participation in a stable, monogamous relationship with an HIV-infected man the risk of acquiring HIV infection was six-fold greater for women whose partners were inconsistent (i.e., never or not always) condom users than for women who reported that their partners always used condoms [Saracco, 1993]. The effectiveness of condoms to prevent the heterosexual transmission of HIV has been estimated to be 87%, but it may range from 60% to 96% [Weller, 2004]. The effectiveness of condoms during anal intercourse is probably lower because condom breakage and slippage may be considerably higher than they are during vaginal intercourse [Silverman, 1997]. Condoms also are effective for the prevention of infection with other STIs beyond HIV, including HPV [Holmes, 2004; Winer, 2006].

How Are We Doing?

Fulton County condom distribution targets for 2012 – 2016 are shown in the table. Fulton has been increasing the number of condoms distributed by about 10% per year since 2012 and the target for 2016 is just below 2.5 million condoms of which around 30% are for HIV-infected individuals.

FY13 Condom Distribution Targets

Category A Objectives	Year 1 2012	Year 2 2013	Year 3 2014	Year 4 2015	Year 5 2016	Total
# condoms to be distributed	921,000	1,633,338	1,991,147	2,170,068	2,348,956	9,064,509
# condoms to HIV-positive individuals	249,600	442,651	539,620	588,109	636,590	2,456,570
# condoms to high risk negatives/ unknown status	671,400	1,190,687	1,451,527	1,581,958	1,712,366	6,607,938
# of female condoms provided	1,000	1,000	1,000	1,000	1,000	5,000

What are our Objectives?

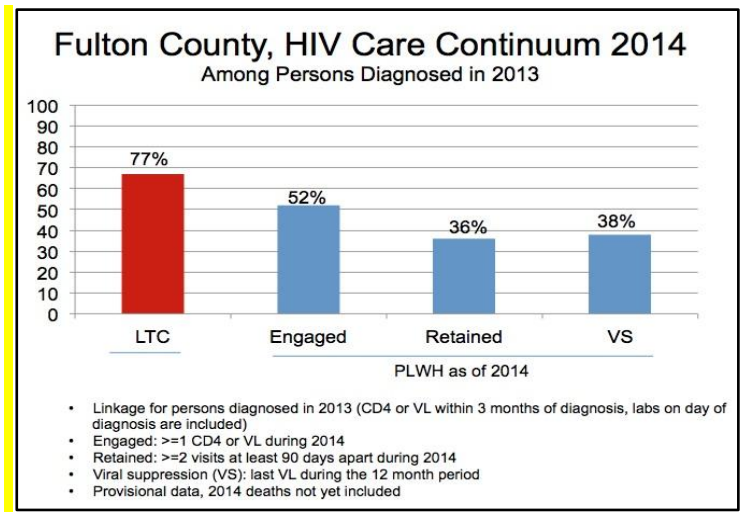
30. Increase the number of condoms distributed to HIV positive and high-risk seronegative persons to 3.5 million units per year.
31. Improve the coordination of condom distribution and education in Fulton County to achieve appropriate targeting and consistent access by HIV positive and disproportionately affected populations without HIV.

How Will We Get There?

In the era of Treatment as Prevention and PrEP, it is important to remember that condoms are still an important tool for the prevention of HIV and STIs, and that condom education and availability must be not only sustained but also enhanced as part of combination prevention. It will be important to develop the necessary partnerships with clinics that see HIV-infected persons and CBOs that serve at risk populations, to ensure that they have condoms available for distribution, and to ensure that coordination among them occurs so that there is synergy rather than duplication of effort.

Care and Treatment for Persons Living with HIV

The goal of HIV treatment is to improve the quality and length of life for people with HIV infection. This is optimally accomplished through rapid linkage to medical care following an HIV diagnosis, early provision of and continuous access to ART, maintenance of high levels of medication adherence, and consistent and continuous access to medical care. The Care Continuum is a useful construct that allows measurement of critical processes - diagnosis, linkage, engagement, and retention - that lead toward viral suppression. Each pillar of the care continuum offers substantial challenges, but is critical to success. In Fulton County, we have challenges across the spectrum of the continuum of care. Improving this continuum will translate into better health for people living with HIV and fewer new HIV infections.



The 2014 Fulton County HIV Care Continuum

Linkage To Care

Why Is This Important?

Early initiation of ART and retention in HIV care are central to achieving viral load suppression and reducing mortality and progression to AIDS [Mugavero, 2012; Mugavero, 2009]. Linkage to care is the first step in this process. Ideally persons should enter care immediately after diagnosis, but in the US, an estimated 25% of newly diagnosed persons do not present for HIV care within a year of diagnosis [Gardner, 2011]. In light of these and other data, the initial linkage goal of the 2010 NHAS aimed to have 85% of newly diagnosed patients linked to clinical care within three months of diagnosis. With increasing recognition that linkage to HIV care is critical to improving subsequent outcomes in the continuum, the NHAS 2020 bar was raised higher this year, with the goal of 85% of newly diagnosed patients linked to clinical care within one month [Office of National AIDS Policy, 2015]. Yet some jurisdictions have been even bolder in their goals. San Francisco's "Getting to Zero" campaign proposes same-day linkage to care and ART [SF Zero, 2015].

Nationally and locally, there are large disparities in linkage to care by race, gender, age, and transmission risk. Poor engagement in HIV care after diagnosis is associated with demographic, behavioral, and psychosocial risk factors, including nonwhite race/ethnicity, injection drug use, and fear of stigma [Dang, 2012; Krawczyk, 2006; Torian, 2008; Ndiaye, 2009]. In addition, we

know that delayed entry into medical care after HIV diagnosis is exacerbated by provider availability, clinic logistics, and decreases in funding for HIV services [Mugavero, 2011].

Evidence-based interventions linking newly diagnosed patients with care have been limited by our understanding of local barriers to initial medical contact [McCoy, 2009; Kempf, 2010; Ulett, 2009; Mugavero, 2007; Schwarcz, 2006]. While traditional studies have focused on patient-level characteristics of persons not engaged in care, structural factors are also recognized in models of healthcare utilization with an emphasis on factors such as housing and social or religious support [Andersen, 1995; Kilbourne, 2006; Kressin, 2001]. Some research suggests that interventions addressing structural issues may be more successful than person-specific interventions, particularly in the Southeast [Adimora, 2010]. Understanding the relationship between local geographic factors and initial linkage to care for HIV-infected persons and identifying solutions is critical for planning public health interventions.

How Are We Doing?

All laboratories are required to report positive HIV screening tests, CD4 cell counts, and HIV viral load assays to the Georgia DPH HIV epidemiology unit. DPH is working closely with hospitals and commercial laboratories to improve the timeliness and completeness of reporting. Linkage to care estimates are based upon this surveillance data set. A person is defined as "linked to HIV care" if they have received a CD4 or viral load during a specified time period, such as 30 or 90 days. This definition is based on the assumption that if a person has had a CD4 cell count or viral load, the patient is in a setting and/or in contact with a provider familiar with HIV and with the expertise to provide ART. RWHAP-funded providers point out, however, that getting a single laboratory test does not mean that patients have actually received medical visits. Patients entering RWHAP-funded clinics may have labs drawn on the day they are enrolled, but may not see a healthcare provider until weeks later, or may not return to care at all after the initial enrollment visit. Among the 703 adults and adolescents diagnosed with HIV infection in 2014 in Fulton County, 67-84% linked to HIV care within 90 days, and 49-75% within 30 days (depending upon the methodology that is used). Clearly we must do better.

Geospatial mapping of persons newly diagnosed with HIV in the metropolitan Atlanta area in 2012, and followed their outcomes over 18 months, was able to identify "hot spots" of poor linkage to care (greater than 90 days), and associated lack of viral suppression, in central Fulton County [Goswami, unpublished data]. Such techniques may be especially helpful to target effectively resources for linkage and re-engagement.

Moreover, linkage to care rates, like those for all pillars of the HIV Care Continuum, are not uniform across groups. Disparities exist at every turn, including those for age, race/ethnicity, gender and transmission mode. It should be noted here and throughout that there are insufficient data on transgender populations in Fulton County, and improving data collection is a separate need.

Our jurisdiction experienced challenges during late 2014 and early 2015, as several RWHPA-funded clinics had to stop accepting new patients because of budgetary constraints, and others accepted patients but their first visit was weeks from the date of clinic presentation.

What Are Our Objectives?

32. *Increase the proportion of diagnosed persons linked to care within three days to 85%.*
33. *Ensure that newly diagnosed persons in vulnerable populations (youth, those with mental health or substance use disorders, those with unstable housing, and those recently released from incarceration) receive linkage navigation services.*

How Will We Get There?

Our strategy takes a bold approach to linkage that far surpasses what we have achieved to date. The Prevention and Care Committee, by strong consensus, recommended shortening the goal for linkage to care to three days, essentially same-day linkage as has been targeted by San Francisco. As time elapses, the likelihood of losing vulnerable patients increases dramatically, particularly for those who are homeless or unstably housed, challenged by mental health and substance use disorders, who lack transportation resources, or are simply very young. Providing access to strengths-based case management after diagnosis to facilitate linkage to care and support services such as housing has proven to be effective and is recommended as an evidence-based intervention by the CDC [Gardner, 2005; Craw, 2008]. While we recognize that some individuals will not be ready to enter care immediately upon diagnoses, we will need strategies to better address the needs of these clients as well. No individual, however, should be turned away, or made to wait, when that person wants to be engaged in care.

To accomplish this admittedly lofty goal, we must create patient-friendly systems that accelerate and facilitate entry into care. Our old systems are fraught with substantial barriers to delivering care, and simply do not work for many patients. Our Action Plans over the next seven months will need to address these barriers and propose changes to existing systems along with the creation of new rapid linkage systems and strategies. For example, many partners have noted that even clinics within the RWHAP system have different requirements for entry to care, and sometimes add new requirements, such as photo identification, that pose significant barriers to patients and are not required by HRSA. Efforts must also include engagement with our hospitals, public and private, to ensure that their EDs and inpatient service providers are included in our new systems for care linkage. In addition, we aim to improve access to resources, such as locations for HIV clinics and other services, in collaboration with existing tools such as the DPH statewide Resource Hub, www.gacapus.com.

Recognizing the crisis in Fulton County, as well as the number and geographic proximity of HIV clinics to sites where HIV tests are performed, we believe it is feasible and essential that newly diagnosed patients, as well as those being reengaged in care, receive specially targeted services to facilitate their entry into the Care Continuum.

Retention and Reengagement in Care

Why Is This Important?

Since the initial description of the HIV Care Continuum [Gardner, 2011], it has been realized that the majority of HIV-infected persons in the US fail to achieve virologic suppression, a requirement for successful ART and necessary to reduce maximal transmission and alter the

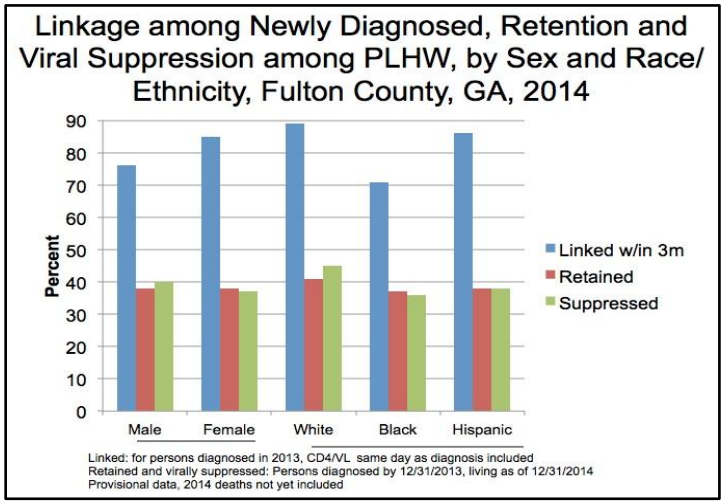
dynamics of the US epidemic. The Continuum further demonstrates that patients "fall off" the Continuum at a variety of critical points, each representing a focus for intervention. Among the steps in the Continuum, retention in care has proven to be the most challenging. As many as 50% of patients fail to be retained in care [Ryscavage, 2011; Rebeiro, 2013; CDC 'Vital Signs', 2011]. Defining retention in care has been difficult with no consensus definition but, the Institute of Medicine (IOM) has defined retention as a core indicator definition as follows: attendance at two provider visits ≥ 90 days apart within a 12-month period [Office of National AIDS Policy, 2010]. Poor retention in care is associated with clinical progression to symptomatic disease and death [Berg, 2005; Park, 2007; Giordano, 2007; Horberg, 2013; Mugavero, 2009; Mugavero, 2014]. In addition, recent data suggest that the majority of HIV transmissions stem from those who are not retained in care [Skarbinski, 2015].

Several studies have identified racial minorities, women, adolescents, drug users, and the uninsured as patient groups who are more likely to not be retained in care [Cope, 2015; Meditz, 2011]. These same groups are overrepresented among persons living with HIV/AIDS in the Southeast, and in particular in Fulton County. In addition, other barriers to care including stigma, social capital, conspiracy beliefs, religion, poverty, and education may play an important role in determining care outcomes. Improving retention in care will necessarily require addressing many of these factors.

The Care Continuum model has several limitations. First it fails to identify the population of persons that cycle in and out of care, a phenomenon that has been referred to as "churn" [Rebeiro, 2013]. In addition, many patients often virologically controlled for a period of time and measured as "retained" in the Continuum pillars are not retained over the long run and thus continuous retention represents another important focus for intervention [Colasanti, 2015]. Qualitative interviews with these patients support a role for both personal and structural reasons for falling out of care without reengagement [Ware, 2013] but the contribution of this group to the overall population not in care is unknown. Once a patient is not retained in care, he/she needs to be re-engaged in care, yet little is known about what interventions are most effective to do this.

How Are We Doing?

Among the 726 adults and adolescents diagnosed with HIV infection in 2013 in Fulton County, living as of 12/31/2014, 52% were minimally engaged in care with at least one CD4 or VL 4-15 months after diagnosis and 36% were retained in care with at least 2 CD4 or VL measures 4-15 months after diagnosis. Racial/ethnic disparities are apparent when examining these data. Only 36% of Blacks and 38% of Hispanic/Latinos were retained in care. Among Whites 40% were retained. Retention in care is also lower among young patients with only 35% of those aged 25-29 retained in care, compared with 40% of those aged 45-49.



Linkage, Retention, and Viral Suppression by Sex and Race/Ethnicity, Fulton County 2014

What Are Our Objectives?

34. *Increase the number of people retained in care to 90% of those diagnosed (NHAS Indicator 5).*
35. *Decrease the number of persons who are out of care by 50%.*
36. *Reengage individuals identified as out of care within 7 days.*
37. *Reengage individuals identified as out of care through Health Information Exchange sites within 3 days of identification.*
38. *Increase cultural sensitivity and competence of healthcare workers delivering HIV, substance use, and mental health care.*

How Will We Get There?

Currently there is only one randomized, controlled study of an intervention that has significantly increased retention in care [Gardner, 2012]. In the Antiretroviral Treatment and Access to Services (ARTAS) study, providing reminders improved clinic attendance by 7%. It is also recommended that clinics conduct systematic monitoring of retention in HIV care for all patients by tracking no-show rates and out of care patients [Thompson, 2012]. Clearly additional strategies are needed and will be explored.

Viral Suppression

Why Is This Important?

The HIV VL is the number of copies of the HIV per milliliter of blood. Most HIV-infected persons who are not taking ART, have VLs on the order of thousands to over 1 million copies of virus per milliliter of blood. Over time, high a VL damages the immune system, decreasing CD4 T-cells and increasing the risk of opportunistic infections (OIs), cardiovascular disease and cancers. Ultimately, an uncontrolled VL leads to progression to AIDS and eventually death, if untreated. Combination ART leads to a decline in the VL. When HIV-infected people are on effective ART and adherent to this therapy, the result is viral suppression. Continuous viral suppression is required to avoid viral resistance to medications and to optimize recovery of the immune system.

Achieving and maintaining viral suppression is the best marker of successful HIV treatment. The benefits of viral suppression are two-fold. First, viral suppression halts the progression of HIV and allows patients to live longer, healthier lives. Life-expectancy for patients with suppressed HIV now approaches that of the general population [Rodger, 2013]. Second, viral suppression decreases the risk of transmitting HIV from person to person. In communities where the total VL of all PLWHA (often called "community VL") has declined, a reduction in the number of new HIV infections has followed [Das, 2010]. Furthermore, a recent study demonstrates that taking ART and being virologically suppressed drastically reduces the risk of transmitting HIV from an infected partner to an uninfected partner [Cohen, 2011].

How Are We Doing?

The CDC estimates that only 30% of all HIV-infected persons (including those who are undiagnosed) are virally suppressed [Bradley, 2014]. The number varies greatly based on age, as only 13% of 18 – 24 year olds, 23% of 25 – 34 year olds and 27% of 35 – 44 year olds achieved viral suppression [Bradley, 2014]. The story is similar in Georgia, with an estimated 32% of HIV-infected persons virologically suppressed [GaDPH HIV Care Continuum, 2012]. Fewer blacks (35%) are virologically suppressed in Georgia, compared to whites (46%). As is the case nationally, younger patients have lower rates of viral suppression compared to their older counterparts. In Fulton County, 41% of persons diagnosed with HIV are virologically suppressed (note that this is among known diagnoses as opposed to among all HIV-infected persons) [GaDPH District 3-2 Fulton, 2012]. Racial and age related trends in Fulton County are similar to the state and national trends. Among patients who made it to clinic (engaged in care), 73% achieved viral suppression in 2011 [Doshi, 2014]. However, even among patients who have engaged in care only a minority (39%) maintain their viral suppression for three years in a row [Colasanti, 2015].

What Are Our Objectives?

39. *Increase the proportion of persons with diagnosed HIV who achieve HIV RNA levels <200 c/mL to 80%. (NHAS Indicator 6).*
40. *Increase the proportion of persons with diagnosed HIV who achieve continuous HIV RNA levels <200 c/mL to 80%.*

How Will We Get There?

Increasing the proportion of people living with HIV who achieve and maintain viral suppression will require improved linkage to care, retention in care, early prescribing of ART, and medication adherence. National and international guidelines now recommend ART for all persons living with HIV whereas previous guidelines had largely based this decision on a person's CD4 T-cell count. Educational outreach to HIV providers in Fulton County will emphasize this recommendation as a means of reaching 100% ART prescription. Providing ART as quickly as possible, and ensuring continuous drug supply, will require substantial improvement to current processes that sometimes delay access to initial ART by weeks or months. The final step to achieve viral suppression requires HIV positive persons to take their ART daily, without interruption. In order to achieve this, strategies to minimize barriers to medication adherence must be developed. We will work to maximize access to housing for the unstably housed, improve access to reliable food sources for persons with food insecurity, and

improve access to substance use treatment and mental health care for those in need of those services.

Quality of Care

Why Is This Important?

In the current era of effective ART, HIV positive individuals have the potential to live as long as an uninfected patient [Rodger, 2013]. Optimal outcomes however require early diagnosis, successful virologic suppression and appropriate management of comorbidities. Established guidelines for primary care have been developed [Aberg, 2013]. In addition, additional comorbidities known to increase the risk of poor outcomes such as substance use, mental illness and concurrent HCV infection must be addressed to achieve optimal individual and population outcomes [Walkup, 2008; Lacombe 2012].

How Are We Doing?

In Georgia, death rates due to HIV disease in 2012 were 4.2 per 100,000 population (age-adjusted) compared to a national rate of 2.3 per 100,000 population [AIDSVu, 2015]. Data from Georgia DPH indicated that for the years 2007-2011, HIV/AIDS was the leading cause of death in black men aged 35-44 years and in the top five causes of death for black men between the ages of 20 and 54 years [OASIS, 2014].

What Are Our Objectives?

41. Reduce the death rate among persons with diagnosed HIV infection by at least 33%. (NHAS Indicator 8).
42. Improve linkage to mental health and substance use treatment program.
43. Assure that HCV treatment is accessible for HIV co-infected patients.

How Will We Get There?

Reducing the death rate due to HIV disease will require many efforts detailed in each section of this Strategy. In addition, we must assess the needs to ensure adequate numbers of mental health and substance use treatment providers and provide assistance with linkage to providers and patients who are unaware of the available resources. HCV therapy is now highly effective and cost-effective despite high short-term costs [Najafzadeh, 2015]. Assistance with enrollment in PAPs, ongoing advocacy with pharmaceutical companies to provide affordable options for low income patients, advocacy with Georgia Medicaid to maintain effective formulary options with limited drug-ARV interactions and development of educational programs to assist providers managing therapy are all needed to optimize HCV therapy for dually-infected patients.

Structural Issues Affecting Healthcare Access and Delivery

Why is This Important?

Having excellent therapies for HIV is meaningless without adequate healthcare systems to deliver them. Decreased numbers of HIV-trained care providers threatens to undermine HIV care programs and add additional barriers to fulfilling care obligations for the increasing numbers of persons living with HIV. At the same time, we must explore every option to expand

care, including telemedicine and, especially, expansion of Medicaid. Budget tightening in Congress threatens to undermine key programs that support most of the HIV services we have in Fulton County.

How Are We Doing?

Unfortunately, even when funding is available, clinics report difficulties in finding physicians, nurses, including advanced practice nurses, and physician assistants. Difficulty in hiring staff results in fewer patient care slots, and lower clinic and private practice capacities. Public clinic sites often cannot match salaries that can be earned in the private sector. Physician training in HIV is often suboptimal, and many infectious disease (ID) programs are unable to fill their programs.

Georgia still maintains a high rate of uninsured persons, largely because of its relatively poor population, income inequality, and low level of educational achievement. Several RWHAP-funded clinics had to stop taking new patients in 2015 because of capacity issues and funding limitations.

What Are Our Objectives?

44. *Increase the HIV provider workforce and decrease provider attrition across care sites in Fulton County.*
45. *Expand the use of telemedicine to support HIV care in Fulton County.*
46. *Improve communications among healthcare providers across and within healthcare systems to enhance continuity of care for persons with HIV.*
47. *POLICY: Expand Medicaid to create expanded access to care.*
48. *POLICY: Advocate for continued and increased funding of the HRSA RWHAP, CDC HIV/STI/Viral Hepatitis/TB prevention programs, and the Housing and Urban Development (HUD) Housing Opportunities for Persons with AIDS (HOPWA) Program.*

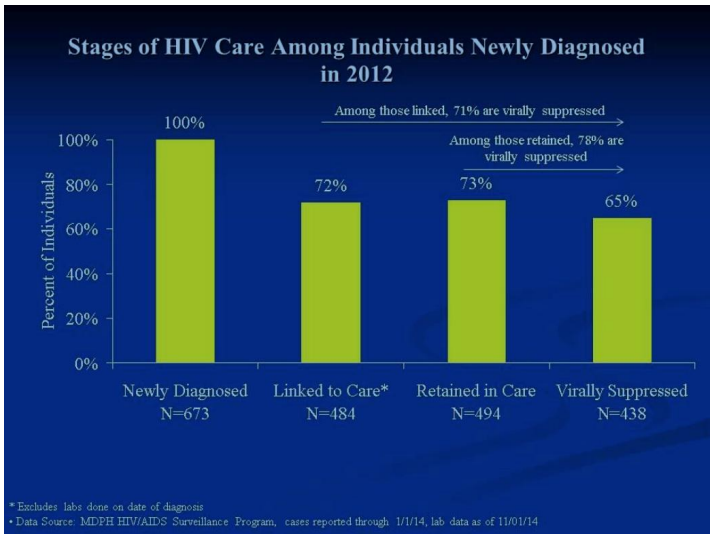
How Will We Get There?

We will need to develop activities and interventions that encourage and incentivize providers to pursue HIV medicine, starting early in their training, as well as encourage older providers to expand into HIV care. There are many resources that provide continuing medical education in HIV and related fields. Professional advocacy groups such as the HIV Medicine Association (HIVMA) of the Infectious Diseases Society of America (IDSA) and the American Academy of HIV Medicine (AAHIVM) have many resources for HIV education and ongoing professional training, and would be willing partners in these efforts. HIVMA publishes a guide to identifying qualified HIV providers [HIVMA, 2013]. Additional attention needs to be given to task-shifting opportunities that allow fuller use of persons who are not medical providers, but who can provide important services to patients, such as pharmacists and case managers.

Telemedicine is already expanding in Georgia and reimbursement is beginning to follow. While we often think of telemedicine as providing support for remote locations, it also can provide HIV specialty support for less experienced clinicians, as well as back up support for provision of PrEP.

The Georgia HIE can assist with identifying persons who are out of care and assist with linkage and reengagement. Transitioning of patients between clinics can be improved by integrating the RWHAP CAREWare system so that all sites have access to patient information, including eligibility determination documentation.

Expansion of Medicaid has been shown to save money for states by decreasing the amount of uncompensated care that is being provided, as well as underwriting the costs of expansion by at least 90% [CBPP, 2015]. HIV Care Continuum outcomes in Massachusetts illustrate the benefit of Medicaid expansion, with 72% engaged in care, 76% retained, and 65% virally suppressed, about twice the rates of retention and viral suppression seen in Fulton County [State of Massachusetts, 2014].



Finally, it is crucial to continue to advocate for funding, and increases in funding for federal programs that provide the overwhelming majority of money for state and local HIV services, including the CDC HIV/STI/VH/TB prevention programs, HRSA RWHAP and Minority AIDS Initiative, and HUD HOPWA program.

Structural Issues Affecting Fulton County Government, Including FCDCHW

Why Is This Important?

In Georgia, health responsibility is given to counties, not cities. Fulton is the largest Georgia county, and has a health infrastructure that differs from that of other counties, giving authority to the Board of Commissioners rather than the Georgia DPH for the appointment and supervision of its Health Director and the management its health department. It is crucial to the health of all citizens that the FCDHW has strong and effective leadership, and that its programs are capable of managing and neutralizing health threats, including the HIV epidemic and outbreaks of other communicable diseases.

How Are We Doing?

While resources are important, they are not the only component needed for successful programs. Having the leadership and vision needed to best use available resources is as – or more – important than resources. From 2012 to 2014, FCDHW was a very poor steward of federal HIV prevention monies awarded to it by CDC. In Year 1 of the PS12-1201 contract, FCDHW spent only 28% of its allocated funds, leaving $3.6 million unspent. In Year 2 of the contract, an additional $2.4 million was unspent (35% of allocated funding). While some of this funding was recaptured as carryover funding, several million dollars were reallocated to the core budget in Year 4, supplanting new funding and constituting a loss of funds that otherwise would have been awarded to Fulton County.

There are multiple reasons for this missed opportunity, including bureaucratic issues around hiring staff, awarding contracts, and the county's rules around the Request for Proposals (RFP) mechanism of procuring services from CBOs. Some of these are countywide processes, not under the authority of FCDHW. Lack of effective and responsive leadership, however, was a key issue behind the failure, including at the level of the Health Director. The impact of this failure of leadership goes beyond the HIV program. For example a TB outbreak in the County's homeless shelters raged out of control, including the emergence of a drug resistant strain, due in part to an ineffective response by FCDHW. In January 2015, new leadership assumed management of HIV prevention. In September, a Chief Clinical Officer position was created and filled by an ID physician through a memorandum of understanding with Emory University, and in October a new interim director was appointed to lead the agency. In addition, the newly hired County Manager has taken a hands-on interest in solving structural problems within the agency and across agencies. This change at all levels of leadership is heartening. It is clear that structural changes are needed, as well as a change in culture to embrace transparency, accountability, competence, and collaboration. One of the important roles of the Task Force is to advise the Board of Commissioners on matters affecting FCDHW's management of the county's HIV epidemic.

What Are Our Objectives?

49. *Ensure transparency regarding the use of federal, state, and county funds impacting HIV, STIs, VH, and TB by FCDHW.*
50. *Improve PCSI among HIV, STI, VH, and TB programs for prevention and care at FCDHW.*
51. *Ensure that structural changes affecting communicable diseases and RWHAP-funded services at FCDHW include a transparent and public process for input from program staff and stakeholders, and collaborative planning.*
52. *Evaluate and address hiring processes that impede timely implementation of HIV, STI, VH, and TB initiatives at FCDHW.*
53. *Evaluate and address contracting processes that impede timely implementation of HIV, STI, VH, and TB initiatives at FCDHW.*
54. Ensure that FCDHW is accountable for actions and outcomes designated as their responsibility in the *Strategy to End AIDS* in Fulton County.

How Will We Get There?

Substantial changes in leadership were needed at FCDHW and some have occurred. There are ongoing discussions about the optimal structure of agency programs, including those within Communicable Diseases. HIV prevention and care have long been fragmented, and these issues will be addressed within the next months. The long-term location and management of the RWHAP clinic is uncertain, as new options are being discussed. The building itself has structural issues that will not be easily addressed, and a move for the entire agency is likely. During this time of intense change, it will be extremely important to ensure that structures are enacted that will best serve the agency in the long term, as well as during this time of uncertainly. The Task Force will engage with FCDHW leadership and program staff, as well as with the Board of Commissioners, to ensure that planning occurs with transparency and the

involvement of stakeholders. The Task Force will also monitor the effects of changes in the grants managements system, hiring and contracting processes, and other areas with an eye on

Cross Cutting Objectives: Addressing Social Determinants of Health

What Are Social Determinants Of Health And Why Are They Important?

Social determinants of health (SDHs) are broadly defined as the conditions that characterize the environments in which people are born, grow, live, work, play, worship, and age, and that affect overall quality of life and health outcomes and risks [WHO Key Concepts, 2008; WHO Closing the Gap, 2008]. SDHs include conditions related to resource availability – including access to health insurance and health services, safe and affordable housing, food security, transportation, education, employment opportunities, and income supports. These resources have the potential to "enhance quality of life can have a significant influence on population health outcomes" [DHHS, 2015]. SDHs also include social attitudes that impact health, including racism, homophobia, transphobia, and discriminatory attitudes towards individuals on the basis of a health condition or disability [WHO Key Concepts, 2008; WHO Closing the Gap, 2008]. SDHs are shaped by the "distribution of power, wealth and resources on local, national and global levels" [WHO Key Concepts, 2008].

In 2008, the World Health Organization (WHO) set forth an overarching framework to address the wide reach of the SDHs, which national-level government agencies in the United States have since incorporated in domestic health programming and policy. The National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) of the CDC, and the Office of Disease Prevention and Health Promotion of DHHS are two such organizations [CDC Establishing a Holistic Framework, 2010]. SDHs are complex and interconnected social, cultural, economic, and physical conditions that critically impact health outcomes and risks experienced by people living with HIV and individuals at high risk for HIV infection in Fulton County. As such, it is critical that government agencies, providers, research institutions, non-governmental organizations, and other relevant entities are engaged across various sectors to address SDHs, and to do so in as comprehensive and integrated a manner as possible.

How Are We Doing?

HOUSING

The City of Atlanta is the recipient of HOPWA funds that benefit Fulton County residents and those of 28 other counties in metropolitan Atlanta. It is estimated that over 10,000 persons living with HIV/AIDS in the 29-county Atlanta Metropolitan Statistical Area (MSA) are currently in need of affordable housing. The unmet need for HIV housing for Fulton and DeKalb Counties combined exceeds 8,000 households and forecasts indicate that the population of persons living with HIV/AIDS needing housing assistance will double by 2019. In the Atlanta EMA, roughly 800 beds of permanent housing for PLWHA are funded, and another roughly 550 beds of temporary housing are available. Short-term rent, mortgage and/or utility assistance is available annually for about 675 PLWHA who are at risk of homelessness or need assistance to move into permanent housing [City of Atlanta, 2015]

Data from the Fulton County RWHAP show that 9% of clients of Part A-funded sites in 2014 were homeless or in unstable housing conditions. Consumer surveys, however, suggest that nearly 20% of respondents considered themselves unstably housed and 8% were homeless. For those who are housed, one-third of respondents indicated that the government or another local organization provided financial assistance for their housing. Of those receiving assistance, nearly one-quarter of respondents reported receiving assistance through Section 8, 19% received assistance from HOPWA, and 15% of respondents lived in public housing [RWHAP 2015 Consumer Survey, unpublished data].

TRANSPORTATION

Transportation problems are one of the top five barriers to healthcare access in the Atlanta metropolitan area. In the 2015 RWHAP consumer survey, 33% of HIV+ persons living in the Atlanta EMA cited no, or inadequate, transportation as a barrier to receipt of healthcare [RWHAP 2015 Consumer Survey, unpublished data]. These transportation problems are a long-standing issue. In 2011, 36% of HIV+ persons living in the Atlanta EMA cited no, or inadequate, transportation as a barrier to receipt of healthcare. The severity of transportation problems varies for different populations. For example, almost half of young MSM report that lack of transportation prevents access to healthcare. This is particularly troubling given the very high prevalence of HIV in this population in Atlanta. The transgender population is also disproportionately affected by transportation issues, as 62% report unmet transportation needs as barriers to healthcare access. For those released from prison or jail, 19% did not access care because of unmet transportation needs. Lack of transportation is a minimal barrier for other groups, such as those who are newly diagnosed or who had not obtained primary medical care for at least one year; 4% of both groups did not access care because they had no way to get to healthcare services.

A study conducted by the Metropolitan Atlanta HIV Health Services Planning Council's Assessment Committee identified seven ZIP codes as the areas with the most disparate health outcomes in the Atlanta EMA; six of those seven ZIP codes are in Fulton County (30308, 30310, 30314, 30315, 30318, and 30331) [Planning Council, unpublished data]. Transportation is the number one challenge reported by HIV+ residents of those ZIP codes. In response, the Priorities Committee increased funds allocated to transportation from $89,200 in 2014 to $100,000 in 2015.

FOOD INSECURITY

Lack of food is a concern for many persons living with HIV/AIDS in the Atlanta EMA, making up two of the top three gaps in support services for HIV+ persons in Atlanta. Despite this need, the amount of RWHAP Part A funds allocated for food in the Atlanta EMA has decreased from $982,060 in FY2013-14 to $916,636 in FY 2015-16. The unmet need for prepared meals, food vouchers, and food pantry support increased from 14%, 40%, and 19%, respectively in 2011 to 36%, 52%, and 40% in 2015 [RWHAP 2015 Consumer Survey, unpublished data]. Georgia is one of only six states that impose a lifetime ban on Supplemental Nutrition Assistance Program assistance (SNAP; formerly known as Food Stamps) for persons who have a felony drug conviction [Georgia DHS ODIS, 2015]. Therefore, food assistance is essential for PLWHA who have a felony drug conviction.

CHILDCARE

The need for childcare is generally defined as needing someone to watch a person's child at a center or in a house when the person goes to the doctor. In 2015, 20% of survey respondents reported unmet need for childcare, an increase from 11% in 2011.

INCARCERATION

The Fulton County RWHAP estimates that 145 inmates living with HIV were released to the Atlanta EMA in 2014 and that 87% of released inmates were taking ART. This estimate does not include those in County jails. The 2011 consumer survey found 11% had been incarcerated for some duration in the previous year, of which 74% reported receiving HIV care while incarcerated, and only 37% received ARV medicines on discharge.

City and County jails are recommended venues for HIV screening. The Fulton County Jail is one of the 50 largest jails in the nation, with an average daily census of 2,269 detainees. An externally funded testing program in this jail found that 11,819 (65.0%) of the 18,183 jail entrants in 2011 consented to an HIV test, resulting in 130 positive tests, of which 41 were new diagnoses and 89 were previously diagnosed. Of 25,459 eligible participants in 2013, the testing consent rate rose from 65% in 2011 to 82%. In 2013 there were 218 positive tests, of which 80 were new diagnoses and 138 were previously diagnosed. Only 63% of these positives were linked to care [Spaulding, 2015]. The Georgia Department of Corrections (GDOC) operates two detention centers in Fulton County: Metro Transitional Center and Atlanta Transitional Center. GDOC provides medical care for all HIV+ inmates, includes ART for all inmates. GDOC performs mandatory HIV tests upon intake and exit and, during incarceration, if clinically indicated or requested. No jails or prisons in Georgia provide condoms.

VIOLENT TRAUMA INCLUDING INTIMATE PARTNER VIOLENCE

Healthcare providers recognize that patients may have past trauma, but few realize how prevalent it is and how much it affects patients' health. Intimate partner violence (IPV) is reported by 27% of PLWHA in the Atlanta EMA. While one in three women in the United States experiences IPV, this is true for one in two women living with HIV [FCRWP, 2015]. In fact, one out of every two HIV+ patients, regardless of gender, has a history of IPV and/or childhood sexual abuse. Having an abusive partner is associated with a higher risk for HIV and, for those living with HIV, worse health outcomes. Trauma due to IPV has been shown to negatively affect medication adherence and, for many survivors, lead to depression and posttraumatic stress disorder (PTSD).

EDUCATION

Schools are essential allies in the fight against HIV because the majority of new HIV infections in Atlanta are among young gay and bisexual men. Studies show that abstinence-only sex education is ineffective, yet Fulton County continues to choose an abstinence-only sex education curriculum, thus depriving youth of important evidence-based education on HIV and STI prevention. Schools also can play an important role in HIV screening. CDC recommends that persons aged 13-64 years routinely receive an HIV test during a healthcare visit unless he or she opts out. Up to 60% of young people living with HIV may be unaware of their HIV+ status [CDC MMWR, 2006]. Georgia law allows students to be tested for HIV or other STIs during school hours or on school grounds, yet this practice is uncommon or non-existent in

Atlanta school districts, including Fulton County. Colleges and universities in Fulton County, such as Georgia Tech, Georgia State, Morehouse, Clark Atlanta, and Spellman, provide comprehensive healthcare services to students. Incorporation of these campus clinics into the HIV healthcare network is essential to ensure the healthcare needs of Fulton County's HIV positive youth are met

Minors may consent to STI testing in Georgia without parental consent (O.C.G.A. § 31-17-7), but it is unclear whether that right extends to HIV testing. Whether minors may consent to HIV testing and treatment is not addressed under Georgia law but courts would likely determine that unemancipated minors may consent to HIV testing and treatment under Georgia's venereal disease consent statute. Georgia allows a doctor to inform a minor's parent if the minor receives HIV testing or treatment, raising confidentiality concerns that are a barrier to HIV testing and treatment of minors. This law should be clarified to assure that minors may consent to HIV as well as STI testing without parental consent.

JOB TRAINING AND READINESS

HIV disproportionately affects people of prime-working ages. Over 75% of Georgians diagnosed with HIV during 2013 were between the ages of 20 and 49. According to the 2011 consumer survey, 30% of HIV+ persons in the Atlanta EMA are looking for work. Georgia's unemployment rate is 5.7%, and Fulton County's unemployment rate is 5.8%. While programs assist with job training, these are not well integrated into HIV services. To assist PLWHA in obtaining jobs and income stability, partnerships with agencies such as the Georgia Department of Labor and the City of Atlanta's Workforce Development Agency, and with programs such as the Work Incentive Planning and Assistance (WIPA) Benefits Navigator Program at the Shepherd Center.

STIGMA AND DISCRIMINATION

Stigma and discrimination are barriers to testing and treatment. This is confirmed by the 2011 consumer survey, in which 31% of respondents cited a fear of others finding out as their reason for delayed HIV testing. For respondents who reported that they delayed care for over one year, had still not seen a doctor, or had chosen not to enter care, 22% cited stigma as the reason for the delay. Stigma's negative effect is not limited to healthcare. Of the 27% of survey respondents who were unstably housed or homeless, 20% of them cited a fear of others knowing their HIV positive status as a reason for their housing situation. Stigma can originate from many sources. For example, Georgia's HIV criminalization law creates stigma. Under current law, anyone who is aware of his or her HIV status is guilty of a felony if he or she fails to disclose that HIV status to a sexual or drug works partner, regardless of whether HIV transmission occurred, whether there was intent to infect the other person, or whether the other person already has HIV. This statute does not align with current HIV science and is a barrier to public health practices for HIV prevention and care.

SEX WORK

According to the CDC, there are few population-based studies of sex workers in the US or globally because sex work is a stigmatized occupation and illegal throughout most of the US and the world. Further, sex workers who work in settings where sex is encouraged and indirectly sold, such as massage parlors, the adult film industry, and exotic dance clubs, are

often not included in studies. This lack of data and understanding around sex work creates a significant barrier to HIV prevention efforts and other services.

What Are Our Objectives?

55. *HOUSING: Address suboptimal housing such that <5% of people with HIV are unstably housed. (NHAS Indicator 7 – adapted)*
56. *TRANSPORTATION: Reduce unmet need for affordable transportation to HIV and support services.*
57. *FOOD INSECURITY: Reduce unmet need for access to food and nutritional programs among people with HIV.*
58. *CHILDCARE: Reduce unmet need for childcare among people with HIV.*
59. *INCARCERATION*
    A. *Increase the provision of HIV prevention resources for incarcerated persons, including condom distribution and health and PrEP education.*
    B. *Ensure linkage to care and uninterrupted ART for PLWHA upon release from incarceration.*
    C. *Ensure that incarcerated persons receive HIV treatment according to current DHHS Antiretroviral Guidelines.*
    D. *Provide condoms along with HIV-related referrals including for housing, mental health and substance use treatment, employment readiness, and income support to HIV positive persons who are newly released from Fulton County jails.*
    E. *Require evidence based sexual and HIV education, including about HIV criminalization, for all incarcerated persons.*
    F. *POLICY: Offer opt-out HIV testing upon entry at Fulton County jails.*
    G. *POLICY: Eliminate policies or actions that stigmatize incarcerated people with HIV.*
    H. *POLICY: Provide access to condoms for all incarcerated persons.*
60. *VIOLENT TRAUMA INCLUDING INTIMATE PARTNER VIOLENCE: Implement trauma-informed care systems within HIV care sites to identify IPV and other trauma and to provide appropriate linkage to services.*
61. *EDUCATION*
    A. *Improve health literacy among agencies providing HIV prevention and care in Fulton County.*
    B. *Improve HIV health and treatment literacy among PLHIV receiving care and services.*
    C. *Implement evidence-based comprehensive sex and sexuality education for youth (ages 10-17) in Fulton County schools.*
    D. *Increase evidence-based community health literacy programming aimed at youth (ages 10-17).*
    E. *Implement evidence-based comprehensive sex and sexuality programs aimed at reaching persons 18-28 through community-based approaches.*
62. *JOB TRAINING AND READINESS: Increase partnerships between organizations providing locally relevant job training and HIV-service or healthcare agencies in order to provide employment opportunities for PLHIV and persons at high risk of HIV acquisition.*
63. *STIGMA AND DISCRIMINATION*

A. *Increase access to resources/interventions including peer support groups, counseling and education for persons with and at high risk for HIV infection, in order to reduce individual and interpersonal HIV stigma.*
B. *Reduce individual, interpersonal HIV stigma and discrimination among communities with, and at highest risk for, HIV infection.*
C. *Reduce the experience of stigma and discrimination based on gender identity and expression, sexual identity and expression, race/ethnicity, and socioeconomic status among PLWHA in*
    - *Healthcare institutions*
    - *Educational institutions*
    - *Criminal justice systems*
    - *Faith institutions*
    - *Government institutions*
D. *POLICY: Reform HIV criminalization laws to align with current HIV science and advance best public health practices for HIV prevention and care.*

64. *SEX WORK: Increase HIV prevention programming tailored to the unique needs of sex workers, including education on HIV transmission routes and risk, and information on how to access prevention technologies, such as condoms and PrEP.*

How Will We Get There?

Our SDH objectives are the most challenging of all. The ultimate goal is to minimize the impact of the social determinants of health on a person's risk of exposure to HIV or ability to achieve continuous viral suppression. These draft objectives are the first phase of an ongoing process. The next step in the process is to determine how to actualize the goals by developing a list of Action Plans for each goal that are Specific, Measurable, Attainable, Realistic, and Time-bound (SMART). Cross-sectoral and interdisciplinary expertise will be required to create SMART action plans for achieving these SDH objectives. In order to establish SMART Action Plans, it will be necessary to engage subject matter experts who are in a position to influence SDH-related programming and policies. For example, colleagues from HOPWA and the Atlanta Housing Authority will be invaluable in planning for our Action Plans under the Housing Objective. Building a partnership with the Fulton County Sheriff and the GDOC will be essential to the formation of Action Plans for the incarceration objectives. Educators and members of the school boards for Fulton County and the City of Atlanta could likewise provide guidance in the creation of action plans for the education objectives. Legislative and other governmental partners will be central to the achievement of our policy pbjectives. Going forward, the SDH committee will engage additional leaders, subject matter experts, and consumers specific to each SDH goal in order to focus our action planning, and then to monitor implementation and measure our progress.

Cross Cutting Objectives: Policy

Policy Objectives are woven through this document, and indicated in red text. Changing policy at a local, state, and national level may be one of our most effective interventions due to the myriad sequellae that cascade down from shifts in legislation, regulations, policies, and rules. Key targets for the upcoming years will include reform of Georgia's HIV criminalization laws,

Medicaid expansion, inclusion of evidence based sex education in city and county schools, and removal of barriers to syringe exchange on a local and national level.

Next Steps

This document, Phase I of the *Strategy to End AIDS in Fulton County*, represents only the beginning of the planning process. A full and comprehensive Strategy will be released in June 2016. To accomplish this, the Task Force plans several additional steps and ongoing initiatives. First, continued stakeholder engagement is a critical part of the process. Listening sessions in all districts of Fulton County will be held during Spring 2016. The survey tool will remain available through web access for additional recommendations. In addition, the Task Force will continue to engage representatives from highly affected populations, school officials, the correctional system, faith organizations, community based HIV/AIDS service organizations, housing services and many others. This document, representing phase I of the Strategy is a living document and continued community and external input is necessary to continue to refine and extend this work.

The goal of the Task Force is to refine objectives in the current document to ensure that all are SMART with identified metrics. Subsequently, Action Plans will be developed for each objective and lay the groundwork for implementing the Strategy. Many of these objectives will require a multi-tiered and multi-faceted approach. Gap and cost analyses will further inform the Action Plans and provide additional information to aid in prioritizing implementation. For example, high impact, low cost items will take priority over low impact, high cost action items. In addition to an implementation plan, the comprehensive Strategy must incorporate an implementation monitoring and evaluation plan to allow regular reassessment and adjustment by the Task Force. Ongoing progress reports will be submitted to the Board of Commissioners and the Strategy will be reviewed at the Task Force meetings at least annually. As many of the recommendations and initiatives contained in this plan will be influenced by of ongoing basic, clinical, and implementation science research, the Task Force expects that this document will continue to require revision and modernization into the future.

This Phase I Progress Report on the *Strategy to End AIDS in Fulton County* represents the first widespread initiative in our community to develop a countywide plan integrating biomedical, behavioral, social, and other measures in hopes of bending the curve of our devastating epidemic in our own community. The Task Force brings together individuals from all aspects of our fight against this disease. We are very pleased to present this document to you and look forward to working together with resolve toward a better future for those with or at risk for HIV infection.

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