

# Los Angeles County Five-Year Comprehensive HIV Plan (2013-2017)

March 2013



*LOS ANGELES COUNTY  
COMMISSION ON HIV*



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## INTRODUCTION

This *Comprehensive HIV Plan 2013-2017* is Los Angeles County's (LAC) first fully integrated HIV plan that addresses the full continuum of services from prevention and testing to linkage to care, treatment, and retention of persons living with HIV, including AIDS (PLWH). The plan itself is the result of more than a year-long community planning effort involving members from the LAC HIV Prevention Planning Committee (PPC), Commissioners from the Commission on HIV (Commission) (the local Ryan White planning council), staff of the LAC Department of Public Health Division of HIV and STD Programs (DHSP), and interested stakeholders from the community, including PLWH. This plan represents LAC's fullest expression of actualizing the vision set forth in the National HIV/AIDS Strategy:

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

Now thirty years into the HIV/AIDS epidemic with 77,886 cumulative cases of HIV and AIDS,<sup>1</sup> and an estimated total of 58,000 PLWH, Los Angeles County remains the second largest epicenter of HIV/AIDS in the United States (U.S.). LAC's epidemic continues to most severely impact gay and non-gay-identified men who have sex with men (MSM) as male-to-male sex is the primary driver of the epidemic in LAC. It has also significantly impacted communities of color, especially Latinos and African Americans; transgender persons; youth, particularly young MSM, and among women, African Americans and Latinas. LAC's epidemic is aging and PLWH who are over the age of 50 now comprise 37.2% of the epidemic, followed by 36.2% of PLWH who are 40-49 years. Among newly reported cases (from 2008 to 2010), HIV is increasing among all racial/ethnic communities and among MSM. Alarming, nearly one-third (30.2%) of new HIV cases are among young adults between the ages of 20-29 years.

Los Angeles County is at a crossroads. The disease burden for HIV is increasing steadily as PLWH are living longer, and an estimated 1,500 to 2,500 people are newly infected annually. Without new paradigms for prevention, testing, linkage to care, and care services, LAC will not be able to curtail its growing epidemic. New planning tools and strategies, such as syndemic planning; geospatial analysis; high-impact interventions; aggressive testing, early identification of undiagnosed HIV positive persons, and linkage to care services; focused efforts on expansion of Medi-Cal under LAC's new low-income health plan *Healthy Way LA* as a bridge to healthcare reform; and targeted efforts to engage, re-engage, and retain PLWH in care, are integral components of LAC's plan to achieve the goals outlined in the NHAS: (1) Reducing new HIV infections; (2) Increasing access to care and improving health outcomes of people living with HIV; and (3) Reducing HIV-related disparities and health inequities.

This document presents Los Angeles County's blueprint for action. It outlines the extent of LAC's local HIV epidemic and describes the communities who are most impacted. It also describes the scope of HIV services currently available across LAC's continuum. Framed against the growing need for services in LAC in order to meet the goals of the NHAS, the plan identifies key barriers to accessing services, as well as identified gaps. This detail provides the foundation for LAC's action plan over the next five years, including how the County will measure its success in achieving stated goals and objectives.

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<sup>1</sup> As HIV reporting began in 2002, the 77,886 reflects only AIDS cases reported prior to that year and is therefore an undercount.

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## I. BACKGROUND

### A. Catalysts for Change

Much has changed in the thirty years of the HIV/AIDS epidemic. Prominent among these changes is the tremendous success of antiretroviral treatment, which has moved HIV from an acute to a chronic disease and holds great promise in stemming transmission of HIV to negative persons. Advances in research, legislation, and use of new technologies impact the design and delivery of HIV services across the continuum, from social marketing and prevention—to HIV testing and early identification of individuals with HIV and AIDS—to linkage to care, and the ongoing care, treatment, and retention of persons living with HIV, including AIDS (PLWH).

In just three years since the *Los Angeles HIV Prevention Plan 2009-2013* and the *County of Los Angeles HIV/AIDS Comprehensive Care Plan 2009-2011*, there have been tremendous changes nationally, including:

- October 30, 2009: Ryan White Treatment Extension Act of 2009 signed;
- March 31, 2010: Affordable Care Act signed;
- July 13, 2010: National HIV/AIDS Strategy announced;
- August 13, 2010: Enhanced Comprehensive HIV Prevention Planning Project launched;
- October 2010: 12 Cities Project launched;
- December 2, 2010: Healthy People 2020 released; and
- June 30, 2011: Centers for Disease Control and Prevention's (CDC) High Impact HIV Prevention strategy launched.

Each of these landmark events has resulted in change, which has impacted the delivery of HIV services in Los Angeles County (LAC). The promulgation of the first-ever National HIV/AIDS Strategy (NHAS) however, stands out among them. The three goals of the NHAS are to:<sup>2</sup>

1. Reduce new HIV infections;
2. Increase access to care and improve health outcomes for people living with HIV; and
3. Reduce HIV-related disparities and health inequities.

Many of the other national initiatives are efforts designed to put the NHAS into action. LAC has been at the leading edge of these efforts as part of the CDC's Enhanced Comprehensive HIV Prevention Planning (ECHPP) project. Through the CDC's Flagship HIV Prevention Agreement (January 2012) in response to Funding Opportunity Announcement (FOA) PS12-1201: *Comprehensive Human Immunodeficiency Virus (HIV) Prevention Programs for Health Departments*, LAC continues to advance the NHAS through the CDC's *High Impact HIV Prevention* initiative. Changes in the Ryan White Treatment Extension Act of 2009 require jurisdictions, for the first time, to estimate and describe their efforts regarding the *early identification of individuals with HIV and AIDS* (EIIHA). As LAC looks forward to 2014, two upcoming major events are the full implementation of the *Affordable Care Act*, as well as the legislative *reauthorization of the Ryan White Program*. The full impact of these is certain to bring major change to the HIV/AIDS prevention and care landscape.

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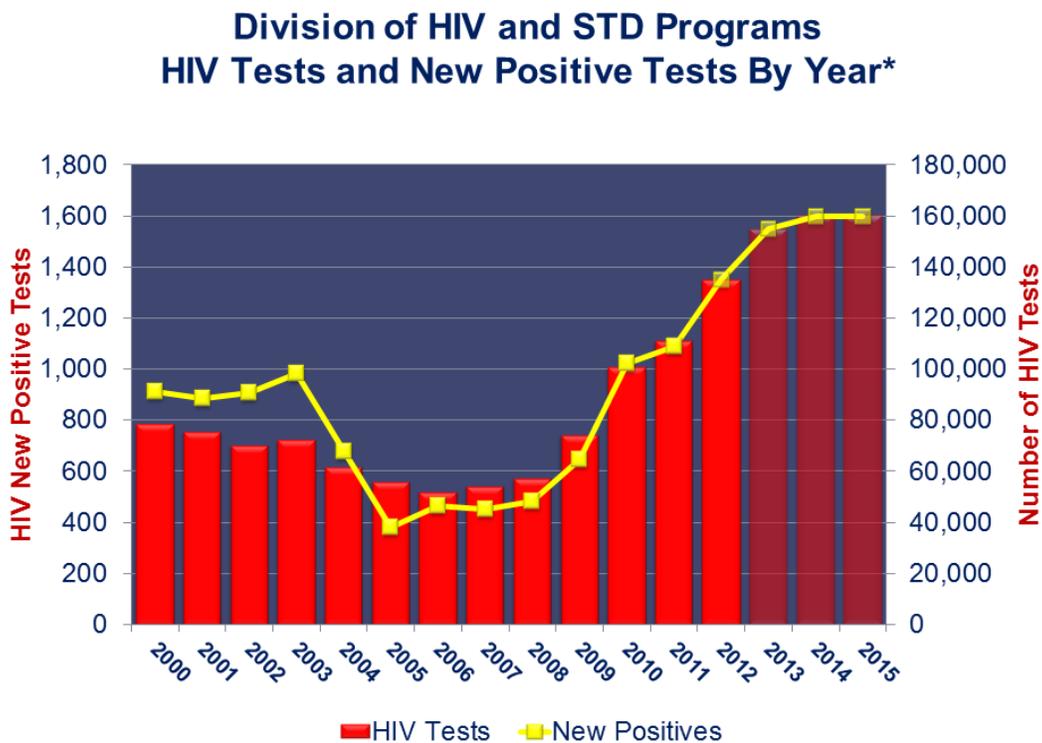
<sup>2</sup> The White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States. July 2010. <http://www.whitehouse.gov/sites/default/files/uploads/NHAS.pdf>.

❖ **Unsustainable Disease Burden**

LAC, which is the most populous county in the United States (U.S.) with 9.8 million residents<sup>3</sup> spanning over 4,000 square miles, has the second largest HIV/AIDS epidemic in the U.S. There are more than 77,886 cumulative cases of HIV,<sup>4</sup> and an estimated total of 58,000 PLWH<sup>5</sup> as of December 31, 2011, of whom an estimated 10,500 PLWH remain undiagnosed and unaware of their HIV infection. Locally, LAC has an increasing disease burden with an estimated 1,500 to 2,500 new HIV infections annually.

Given the magnitude of LAC’s growing epidemic, increasing pharmaceutical and other costs, and increasing competitiveness over scarce resources, the public health response to HIV in LAC requires bold innovation. Figure 1 shows the dramatic increase in the identification of newly diagnosed HIV positive individuals after the introduction of routine, opt-out testing in 2009-2010. As LAC implements its “New Directions in Testing” model as part of its local implementation of the NHAS, the number of new HIV positive individuals identified is projected to escalate (Figure 1).

**Figure 1. HIV Tests and New Positive Tests by Year, Division of HIV and STD Programs**



Includes all HIV testing supported by Public Health, HIV and STD Programs with projected numbers based on internal goals (2013-15)

Data Source: Division of HIV and STD Programs, HIV Testing Services, 2012

<sup>3</sup> U.S. Census Bureau, Census 2010.

<sup>4</sup> HIV Epidemiology, Division of HIV and STD Programs, Los Angeles County Department of Public Health. 2011 Annual Surveillance Report, February 2012: 1-36.

<sup>5</sup> Division of HIV and STD Programs. 2012 Estimate of Persons Living with HIV and AIDS in Los Angeles County, March 2012.

The major drivers of LAC’s epidemic include: (1) high proportion of undiagnosed people (i.e., remaining unaware of HIV infection); (2) social and sexual networks; (3) drug use, particularly alcohol and methamphetamine use; (4) community viral load; (5) poor economic and environmental conditions; and (6) homophobia, transphobia, stigma, and shame. The availability of a number of new tools (e.g., geo-spatial analysis) gives LAC great hope that it can stem its HIV epidemic and make a positive difference in the lives of its residents.

## ***B. Re-assessing the HIV Epidemic in Los Angeles County***

### **❖ Focus on Syndemic Planning and Spatial Epidemiology**

Foremost among these tools is a shift to syndemic planning, which looks at two or more diseases and their relationship with each other. Syndemic planning focuses on the connections among co-factors of disease. Using “spatial epidemiology” (i.e., mapping of disease using geographic information systems technology), the LAC Division of HIV and STD Programs (DHSP) completed a “geospatial analysis” of 2009 newly diagnosed HIV cases across the county. This analysis revealed that new HIV cases are clustered in specific geographic areas. Using a syndemic approach, DHSP further mapped early syphilis and gonorrhea cases. When the maps from these STIs were overlaid with the map of new HIV cases, five cluster areas clearly emerged, which accounted for 81.8% of newly diagnosed PLWH. To focus efforts in order to create high impact, LAC now has as part of its toolbox a powerful method for identifying the regions where individuals are at highest risk for acquiring or transmitting HIV and other STIs.

As additional HIV/STI and other data (e.g., poverty and homelessness) are added to the model, LAC will be able to target resources more strategically in areas of greatest need. Although this model has been primarily used for HIV prevention and testing services, the potential of planning for care and treatment services will evolve over these next five years.

### **❖ Using Cost and Data to Predict Outcomes**

DHSP is collaborating with other LAC Department of Public Health partners to determine the optimal use of prevention strategies to achieve the highest impact in addressing the NHAS goals and objectives. A current initiative focuses on HIV testing:

- ***Modeling HIV Testing to Reduce Unaware HIV Infections***—this activity is to assist DHSP in determining how much increase in HIV testing will need to occur by 2015 to reach NHAS goals.

In addition, in 2010-11, DHSP partnered with RAND Corporation to develop a systematic approach when selecting highest impact interventions by target population.

- ***Robust Decision Making***—this is a conceptual framework that can be used to recognize more explicitly the trade-offs among different resource allocation scenarios in order to achieve reductions in HIV transmission in LAC (e.g., prioritizing linkage and retention in care for those with HIV; HIV testing investments for MSM vs. health education/risk reduction (HE/RR) programming for MSM; targeted condom distribution vs. broader community-wide distribution).

Such tools will ensure that DHSP, the HIV Prevention Planning Committee (PPC), and the Commission on HIV (Commission) are able to make data driven, evidence-based decisions regarding selected services/interventions and the allocations of resources to support them.

#### ❖ **Improved Use of Surveillance and Laboratory Information**

Recent changes in California law by Senate Bill (SB) 422 in 2011 allow surveillance data to be used for case finding. LAC's surveillance system (i.e., enhanced HIV/AIDS Reporting System or eHARS) is also able to track early engagement and retention in care as viral load and CD4 counts are entered into the system for PLWH countywide. The DHSP has formed a Linkage and Retention Workgroup to explore the opportunities for using surveillance and laboratory information for such tracking. This workgroup is developing strategies to identify PLWH without suppressed viral loads, as well as identifying those providers that are experiencing challenges in achieving viral suppression among their patients.

Being able to track linkage to care and viral load suppression through eHARS will allow LAC to more accurately assess its progress in attaining the NHAS goals, particularly those related to increasing access to care, improving health outcomes, and reducing HIV-related disparities.

### ***C. Structural Changes Within the Department of Public Health***

Prior to 2011, the HIV Epidemiology Program (HEP), Sexually Transmitted Disease Program (STDP), and the Office of AIDS Programs and Policy (OAPP) operated as independent programs. Consistent with CDC's 2009 recommendations and guidance for health department (HD) program coordination and service integration (PCSI), the LAC DPH began the integration of OAPP, STDP, and HEP into one consolidated program—the Division of HIV and STD Programs, effective February 2011. The integration began in steps, with administration, finance, contracting and procurement, and human resources management being integrated first. This was followed by data management, grants management, and quality management. The last elements to be integrated are program planning and direct service delivery activities, research and evaluation. Initial integration of these three departments into the new Division of HIV and STD Programs (DHSP) occurred in August 2011. Once fully completed, DPH expects the integrated program will reduce duplication of services, maximize all available resources, and see clients holistically rather than through the disparate lenses of disease prevention and treatment.

The newly-formed DHSP coordinates the County's response to HIV and all STDs using an integrated prevention and treatment approach that combines surveillance, planning, data management and analysis, and geographic mapping to design and implement data-driven programming in the geographic areas with highest disease morbidity. DHSP works in collaboration with community-based organizations (CBOs), governmental bodies, advocates and PLWH. DHSP is the administrative agency for funding from the Health Resources and Services Administration (HRSA), the Centers for Disease Control and Prevention (CDC), the Substance Abuse and Mental Health Services Administration (SAMHSA), the State of California Office of AIDS (OA), and the County of Los Angeles Department of Public Health (DPH). DHSP uses these fiscal resources to manage approximately 200 contracts specific to HIV within a network of nearly 100 CBOs and ten County departments in an effort to maximize access to the full continuum of services for persons living with and at risk for HIV.

[Note: Although the integration is fairly recent, for consistency, all references to any of the three individual merged entities will refer to its new name—Division of HIV and STD Programs (DHSP) regardless of the time periods of such references (i.e., prior to October 2011).]

#### ***D. Evolution of HIV/AIDS Planning in Los Angeles County***

As the jurisdiction with the second largest number of PLWH in the U.S., LAC has been at the forefront of community planning since the beginning of the epidemic. Community engagement is central to LAC's vision and approach in maintaining a comprehensive continuum of HIV services to respond to the epidemic. Through active participation of community members including PLWH, service providers, researchers, public health officials, government representatives, faith communities, and other key stakeholders, LAC has established a system of HIV prevention and care services that is responsive to the diversity of the County's 9.8 million residents, including an estimated 58,000 PLWH.

Formal HIV/AIDS planning began in LAC in 1988 with the release of the *Comprehensive Service Plan*, prepared by Peat, Marwick & Company. Building on this initial plan, a group of community activists formed the County/Community Planning Council in 1990. Staff members of HIV/AIDS community service providers, LAC HIV prevention planning staff, and other stakeholders comprised the membership of this planning council, predating the CDC's national directive for locally-based community planning in 1993. The County/Community Planning Council collaborated with LAC's AIDS Program Office (now known as the Division of HIV and STD Programs) to prepare the first Los Angeles County HIV Strategic Plan. The plan guided both HIV prevention and care services for three years from July 1990 through June 1993.

In early 1994, the Planning Council approved the 1993-1996 HIV Strategic Plan. The community planning process became more robust as the Planning Council fostered broader community input and participation through public hearings, focus groups, subcommittees and task forces, with support from the LAC Department of Health Services (DHS), and the HIV Epidemiology Program (now part of DHSP). During this period, the County completed a comprehensive needs assessment regarding HIV education, counseling and testing, and care services, with HIV prevention services comprising a relatively small portion of the overall plan.

In 1995, the Los Angeles County Board of Supervisors passed a new County ordinance and created the Los Angeles County Commission on HIV Health Services (Commission). The Commission replaced the former Planning Council and remains to date the community planning group for HIV-related care services. To better address HIV prevention needs, the Commission established the Los Angeles County HIV Prevention Planning Committee (PPC) as a select committee of the Commission. The purpose of the PPC was to serve as the CDC-mandated community planning group (CPG) with responsibility for making recommendations regarding targeted HIV risk groups and the full complement of prevention interventions in LAC.

In May 2005, a County ordinance was subsequently approved by the LAC Board of Supervisors that restructured the local Ryan White planning body (Commission on HIV Health Services) and reorganized its reporting hierarchy. This structural change established two distinct planning bodies with no formal reporting linkage (the PPC had been a select committee of the Commission since its inception in 1994). While the PPC forwards recommendations to the local administrative agency (DHSP) for HIV prevention activities, the renamed Commission on HIV

(Commission) forwards directives to the administrative agency for care-related services and functions as the local Ryan White Program Part A planning council. The Director of DHSP appoints PPC members, while the Board of Supervisors appoints Commission members, and the Commission office is organized within the Executive Office of the Board of Supervisors.

Both the PPC and the Commission have always worked collaboratively to address critical local HIV prevention and care integration issues. Largely as a result of the changing HIV prevention, care, and treatment landscape on a national level (e.g., the NHAS, increased recognition that treatment is prevention, TLC+), as well as on a local level (e.g., the selection of LAC to participate in the ECHPP pilot as well as the 12 Cities Project), over the past two years LAC has witnessed a significant increase in joint HIV planning activities.

In August of 2009, the PPC and the Commission created the Collaboration and Integration Task Force to coordinate, collaborate, and integrate activities conducted by the PPC and the Commission. The main goals of this task force were to:

- Explore the possibility of integrating the care and prevention plans, or at a minimum, portions of the plans;
- Incorporate the prevention perspective into the continuum of care;
- Plan annual joint meetings of the planning bodies;
- Increase communication and cross training between the two bodies.

Soon after, interest in the *Testing and Linkage to Care, Plus Treatment* (or TLC+) framework rapidly began to grow. Encouraged by a TLC+ presentation by the Office of AIDS Programs and Policy (OAPP) Medical Director in October 2010 (prior to the departmental restructuring, which resulted in the creation of DHSP), the task force recognized the intersection of prevention and care inherent in the TLC+ framework and decided to create a county-wide TLC+ plan.

In October of 2011, a Joint Commission/PPC meeting was held, where the two bodies discussed how the Commission and PPC could further collaborate. At that meeting, the two planning bodies voted to create a joint HIV Plan for Los Angeles County, which would include care and prevention. The task force (then renamed the “Continuum Integration Task Force”) was charged with developing a work plan, timeline and schedule, to ensure the completion of an integrated Comprehensive HIV Plan.

As the Commission and the PPC look towards the future of HIV planning in LAC, both planning groups have begun discussions separately and together about the possible integration of HIV community planning into a single entity. Both community planning bodies—the Commission and the PPC—initiated the conversation regarding joint planning in mid-2012. In October 2012, an all day joint planning meeting was held to discuss this important next step. The design and structure of a unified planning body will continue to evolve into 2013.

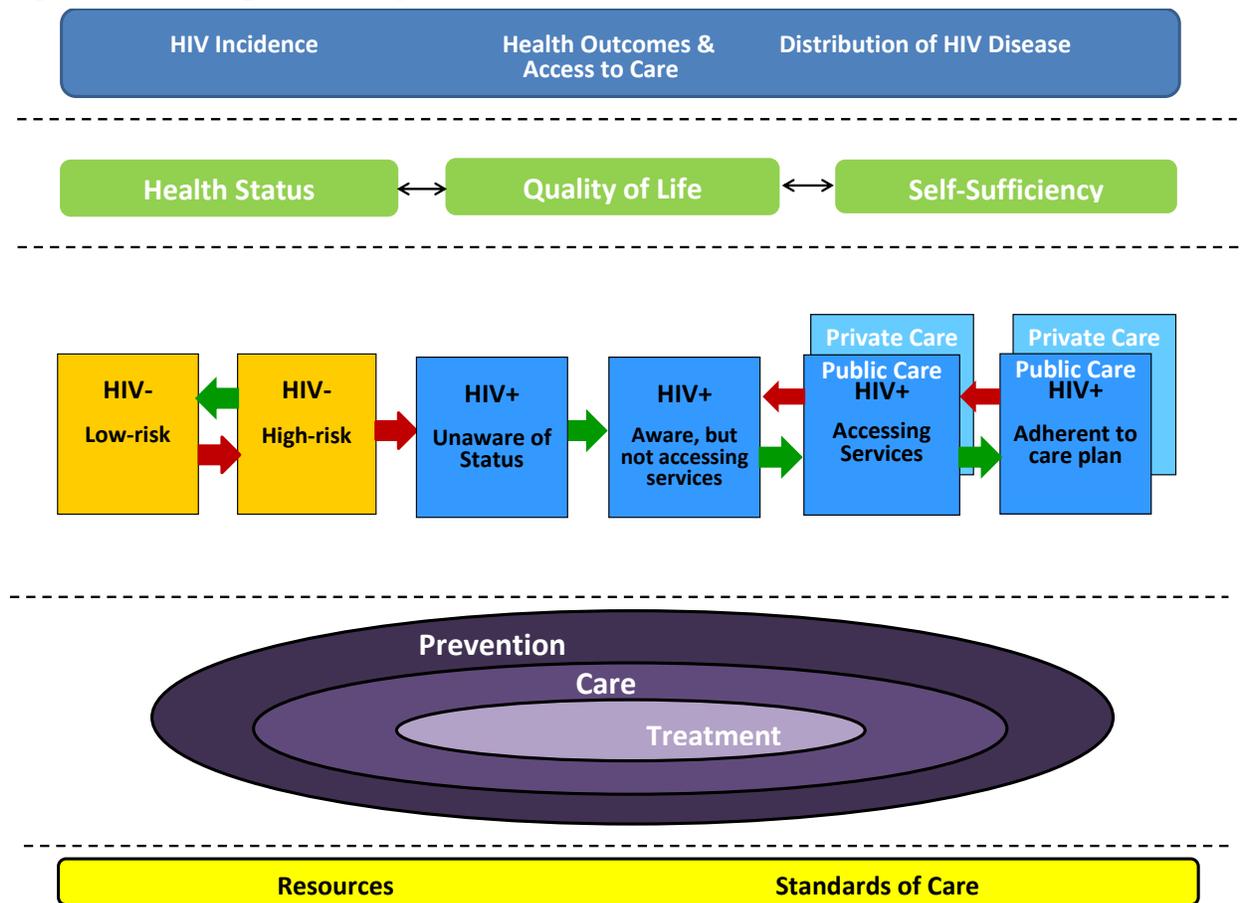
### ***E. Los Angeles County’s Continuum of HIV Services***

In 2011, members of the Commission and the PPC revised LAC’s existing *HIV/AIDS Continuum of Care* to reflect significant changes in the field of HIV (e.g., the National HIV/AIDS Strategy; the concept of “treatment as prevention,” etc.). The new *Continuum of HIV Services* (Figure 2) is

intended to guide LAC as it employs multiple strategies to increase access to, as well as participation and retention in HIV prevention, testing, care, and treatment services. LAC’s *Continuum of HIV Services* is a comprehensive path from HIV prevention to treatment that addresses the needs of individuals affected by HIV, including HIV-negative people at low- or high-risk for acquiring HIV, those who have HIV but are unaware of their HIV infection, those who are aware of their infection but not receiving care (including newly diagnosed individuals), and those who are receiving care services, as well as those adhering to care plans.

Like LAC’s previous *Continuum of Care*, the updated *Continuum of HIV Services* (Figure 2) was created using a systems thinking approach. “Systems thinking” is a way of understanding things that emphasizes the relationships *among* a system’s parts, in addition to understanding each part individually. As a result, the current continuum depicts the connections between HIV/AIDS services, the populations those services are intended to reach, and both the individual-level outcomes and population-level impacts those services are designed to achieve.

**Figure 2. Los Angeles County’s Continuum of HIV Services**



❖ **Population Flow Map**

The population flow map is the core of the continuum (represented by the orange and blue boxes in the center of Figure 2) illustrating the pathways individuals take or may take related to their

risk<sup>6</sup> of acquiring HIV, becoming aware of their HIV infection, accessing needed services and adhering to their care plan. The boxes in this diagram, collectively, represent all of the people in LAC as they are identified with respect to HIV disease. The boxes are mutually exclusive—meaning that at any given time each person can only be included in one box (i.e., population group). The orange boxes depict HIV negative individuals and the blue boxes depict HIV positive individuals. The arrows represent the fluidity and movement of individuals between populations. For example, HIV negative individuals who are low risk may engage in a risky behavior (e.g., unprotected sex with an HIV positive person). At that point, a low-risk person moves into the high-risk population group. At the same time, a high risk person can adopt healthier behaviors and move into the HIV negative low risk group. People either remain static in their box (which is the goal for those who are HIV-negative and at low risk for acquiring HIV, or for those who are HIV positive and adhering to their care plans) or move into different boxes. The desired direction is from right to left for those who are HIV negative (i.e., from high to low risk), and from left to right for those who are HIV positive (i.e., from being unaware of their HIV infection to aware and fully adherent to their care plan). The goals are: (1) to prevent HIV negative individuals from becoming HIV positive, and (2) if an individual is HIV positive to become aware of his/her infection, linked to care and fully adherent to a care plan.

#### ❖ Resources and Standards of Care

Through the appropriate allocation of sufficient resources, LAC's *Continuum of HIV Services* is designed to *interrupt* undesired movement (e.g., low risk to high risk, HIV negative to HIV positive, HIV positive and adherent to treatment to dropping out of care). Resources (depicted by the yellow bar on the bottom) and the standards of care that guide their implementation are the foundation of LAC's system of prevention and care. A system without funds, facilities and personnel (volunteer or otherwise)—bereft of resources—is not capable of offering prevention, care or treatment services. Resources must be allocated sufficiently to affect the green arrows and facilitate peoples' movement from right to left (for HIV negative people) and from left to right (for HIV positive people). For example, depending on how many HIV positive people are accessing services but not adherent to their care plans, more services that encourage adherence to care plans may be needed, supporting additional resource allocations.

Standards of care define the norms and minimum expectations of services and interventions. In LAC, service delivery is guided by a set of well-developed written guidelines to which provider compliance is expected and monitored.

#### ❖ Interventions/Services

The three purple concentric circles above the yellow bar (resources and standards of care) and below the population flow map (boxes) represent the major types of services/interventions (prevention, care, and treatment) which can be implemented to support and promote healthy

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<sup>6</sup> **How LAC defines "risk":** A person's risk for acquiring or transmitting HIV is based on several factors, including their behavioral practices (specifically their unprotected sexual and/or high risk injection drug use behaviors); with whom and where they may be engaging in these behaviors (e.g., with gay men, with transgender women, in a community with high or low viral load, etc.); and any protective measures they may or may not take with respect to those behaviors (e.g., being adherent to their HIV medication, condom use, using clean needles). Risk is not just about any one individual factor. Instead, it is determined by a multitude of individual and community-level factors.

behaviors that move a person into low risk of acquiring or transmitting HIV, and/or support linkage to and retention in care. No single set of services can effectively address the wide range of ethnicities, social identities, risk behaviors, clinical needs and service expectations of those living with or at risk for HIV in LAC. The most effective service delivery lies in a continuum of services that ensures access to and entry into prevention and care at any point, and coordinates services specific to each person's needs. Concentric circles are used to depict how services/interventions in LAC's continuum of prevention, care and treatment are categorized and how those categories relate to each other.

LAC defines "treatment" services/interventions as those services/interventions that involve HIV-related medical treatment, whether for HIV-positive individuals (e.g., antiretroviral therapy) or for HIV-negative individuals (e.g., pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP)). "Care" services/interventions are defined as all Ryan White core and support services, which also includes medical treatment. "Prevention" services/interventions include all services/interventions meant to prevent the transmission or acquisition of HIV, including care and treatment services. Treatment services can be categorized as prevention services because of the potential impact of treatment to reduce individual viral load. However, there are some prevention activities (e.g., behavioral interventions targeting high risk HIV negative individuals) that are not categorized as either care or treatment.

In order to prevent duplication of services, DHSP, the Commission, and the PPC work collaboratively to integrate Ryan White and CDC-funded services into the broader LAC service systems by coordinating with other service systems (e.g., Medi-Cal, Department of Mental Health (DMH), Housing Opportunities for People with AIDS (HOPWA), Substance Abuse Prevention and Control program (SAPC), private providers, etc.).

#### ❖ **Population-Based Impact and Health Outcomes**

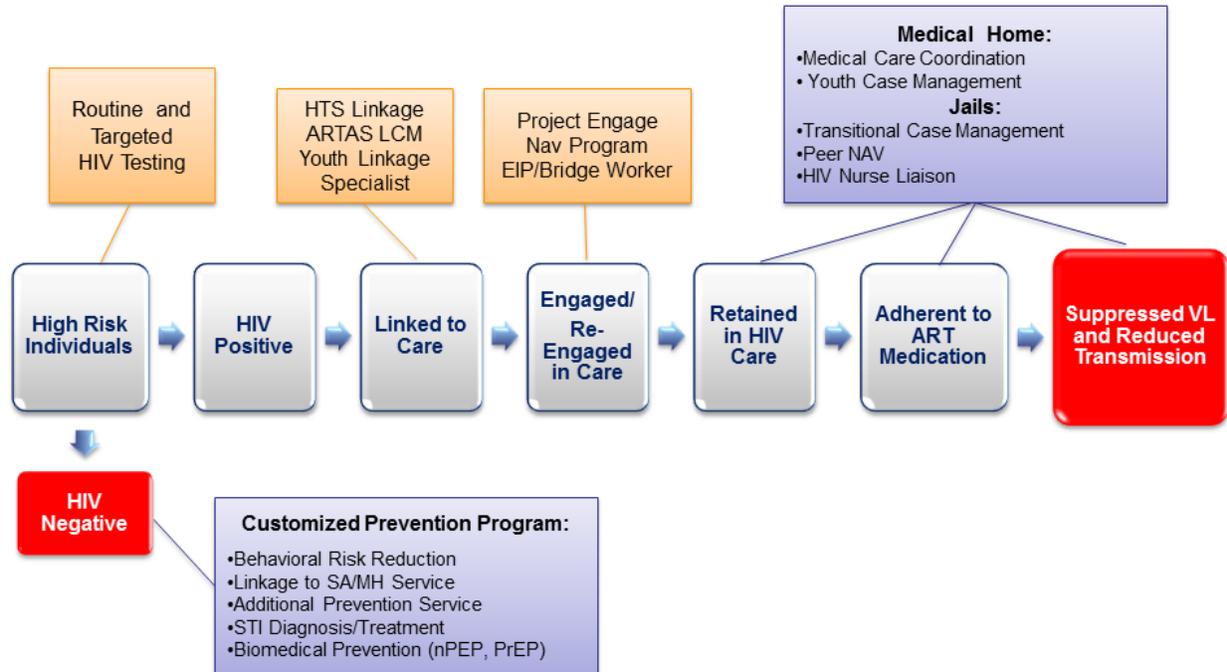
The overall mission of LAC's *Continuum of HIV Services* is expressed within the first two tiers of the diagram (i.e., population impact and health outcomes) (Figure 2). Given sufficient and appropriate resources, culturally responsive and effective service delivery, and full participation of targeted populations, including those who are most vulnerable, LAC's *Continuum of HIV Services* aims to achieve improved health outcomes for individuals in three distinct areas: (1) health status, (2) quality of life, and (3) self-sufficiency (depicted by light green bars). Combined, these outcomes support the NHAS to yield population-level results (depicted by blue bar): (1) reduced HIV incidence, (2) improved health outcomes and increased access to care, and (3) reduced HIV-related disparities, which reduces the disproportionate distribution of HIV among LAC's highly impacted communities.

#### **F. Testing, Linkage to Care, Plus Treatment (TLC+) Framework**

The *Testing and Linkage to Care Plus (TLC+)* framework (Figure 3) complements LAC's *Continuum of HIV Services* by providing a comprehensive range of innovative interventions and program enhancements. These address HIV testing, timely linkage to HIV care for those who test positive, identification and linkage of PLWHA who are not in care, re-engagement of those who have fallen out of care, longer term retention in care among those initially linked, and optimal medication adherence for individuals who are prescribed ART medications.

Figure 3. Testing and Linkage to Care Plus (TLC+) Framework

## Los Angeles County TLC+ Framework



### G. Overview of the Los Angeles County Comprehensive HIV Plan: 2013-2017

The *Los Angeles County Comprehensive HIV Plan: 2013-2017* (Plan) breaks new ground towards the coordination and integration of efforts across LAC’s Continuum of HIV Services. This document presents LAC’s blueprint for action. It outlines the extent of LAC’s local HIV/AIDS epidemic and describes the communities who are most impacted. The Plan then describes the scope of HIV services currently available across LAC’s continuum. Framed against the growing need for services in LAC in order to meet the goals of the NHAS, the Plan identifies key barriers to accessing services, as well as identified gaps. This information provides the foundation for LAC’s action plan over the next five years, including how the County will measure its success in achieving stated goals and objectives.

To the greatest extent possible, each chapter is organized by the key populations being served by LAC’s Continuum of HIV Services (e.g., persons at risk for HIV, HIV positive persons unaware of their HIV infection, etc.). This manner of organizing the document was chosen in order to create a fresh, unified Plan that looks radically different from previous HIV prevention and comprehensive care plans that were designed primarily around funder requirements (i.e., the Centers for Disease Control and Prevention and the Health Resources and Services Administration HIV/AIDS Bureau).

LAC's bold new Plan contains six major chapters: (1) Introduction and Background; (2) Epidemiologic Overview; (3) Los Angeles County's Continuum of HIV Services; (4) Community Needs, Barriers, and Gaps; (5) Los Angeles County's Action Plan for HIV Services; and (6) Measuring Results. Much of the content within each section synthesizes information that can be found in numerous other documents within the County. However, the Plan brings all the pieces together in a concise format, while at the same time presenting a new exposition of the material. The Appendices include important information to augment the information discussed within the Plan.

As LAC's new *Comprehensive HIV Services Plan* is intended to be a living document, the DHSP, together with its community partners, will review the Plan and update it as needed to reflect new information unavailable at the time of this writing. At minimum, the Plan will be reviewed annually to ensure that it articulates, as best as possible, Los Angeles County's plan for addressing the goals of the National HIV/AIDS Strategy and meets the needs of the estimated 58,000 PLWH within the County. During this annual review, progress will be documented on how LAC is doing in achieving its stated goals and objectives.

Everything that this plan represents echoes the vision of the NHAS. LAC hopes to...

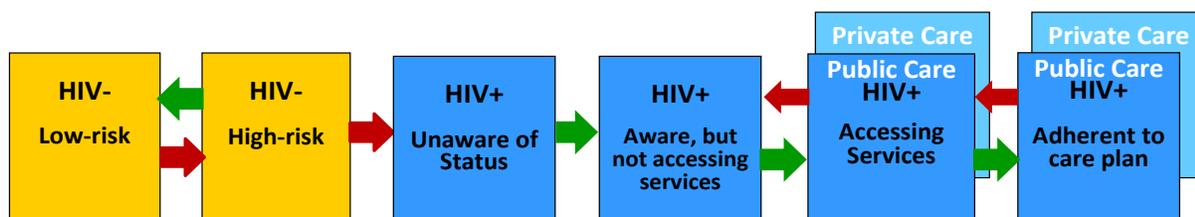
*...become a place where new HIV infections are rare and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination.*

## II. EPIDEMIOLOGIC OVERVIEW

### A. Introduction

The epidemiologic overview presented here provides a succinct description of LAC, including its geography and population, using updated data from the U.S. Census Bureau’s 2010 census; LAC’s current syndemic planning model; social determinants of health and their impact in LAC; 2010 sexually transmitted infections (STI) in LAC; and a comprehensive description of the HIV epidemic in LAC, including persons unaware of their HIV infection, newly diagnosed individuals, persons aware of their HIV infection but not in care, and persons who are in care and those who are adherent to their care plans. The description of the HIV epidemic in LAC is designed to follow the *population flow map* (Figure 4) component of the Los Angeles County Continuum of HIV Services (Figure 2).

**Figure 4. Population Flow Map of the Continuum of HIV Services**



LAC regularly produces a comprehensive HIV epidemiologic profile, which is to meet guidelines outlined by the CDC as well as local needs defined by DHSP and its community partners, the Commission and the PPC. The most recent epidemiological profile was completed in 2010 and covers the 2009 data period—*Epidemiologic Profile of HIV and AIDS in Los Angeles County, 2009*. It is available at <http://publichealth.lacounty.gov/wwwfiles/ph/hae/hiv/2009-epi.pdf>. This profile synthesizes surveillance data and research, and highlights changing patterns and emerging trends among the socio-demographic groups most affected by the epidemic. DHSP also compiles an annual HIV surveillance report that is posted on its website each spring, which can be found by clicking the *HIV/AIDS Statistics and Reports* link on its homepage at <http://publichealth.lacounty.gov/hiv/>.

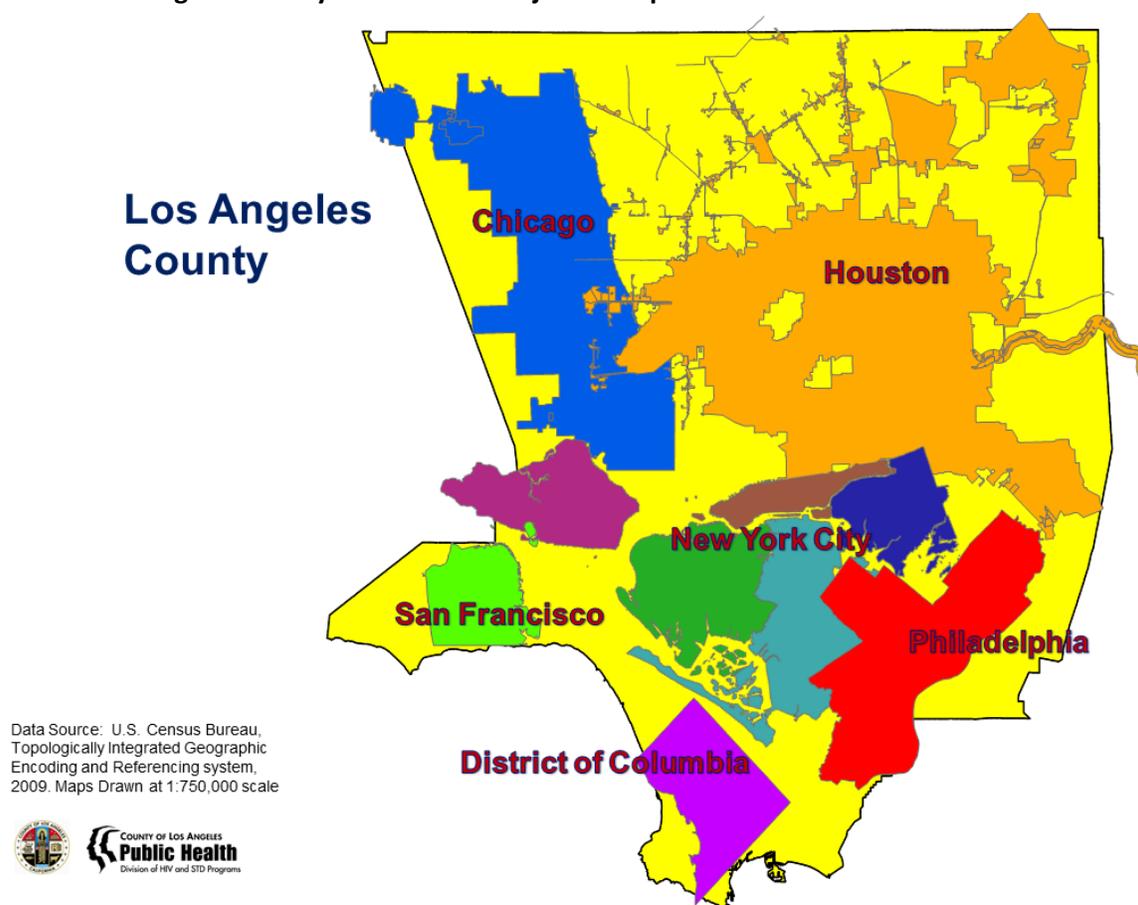
The epidemiologic overview presented here does not replace these reports but augments these essential documents. It is hoped that the new organization of HIV data clearly linking it to the population flow map will stimulate fresh, innovative thinking regarding service needs and gaps, as well as barriers to care among LAC’s increasingly diverse population. The extensive HIV data will also provide clear evidence of the highly impacted populations in LAC whom services are designed to serve. This evidence base will then become the foundation of LAC’s plan over the next five years. The vision, goals, and objectives outlined in that plan are designed to interrupt and reduce transmission of HIV in LAC, and increase access to testing, medical care, and other medical and supportive services for the estimated 58,000 PLWH in LAC.

## B. Description of Los Angeles County

### ❖ Geography

LAC has a diverse geography with 81 miles of ocean shoreline, mountain ranges with 10,000-foot peaks, densely populated valleys, and a sparsely populated desert. LAC's 88 incorporated cities and unincorporated areas span 4,084 square miles,<sup>7</sup> making it one of the largest counties in the United States (US). LAC comprises 2.6% of California's total land area and is larger in size than the states of Delaware and Rhode Island combined.<sup>8</sup> Figure 5 illustrates the immense size of LAC in comparison to six other major metropolitan areas. All six areas combined including San Francisco (City and County), the District of Columbia, Philadelphia, Houston, Chicago, and all five boroughs of New York City fit within the borders of LAC.

Figure 5. Los Angeles County with Six U.S. Major Metropolitan Areas



Because of its large expanse and to facilitate health planning, LAC is divided into eight (8) geographical regions known as service planning areas (SPAs). The SPAs range in size, diversity, and population density, from rural to densely urban. Six of the eight SPAs have more than a

<sup>7</sup> Los Angeles County. Available at: <http://www.lacounty.info/>.

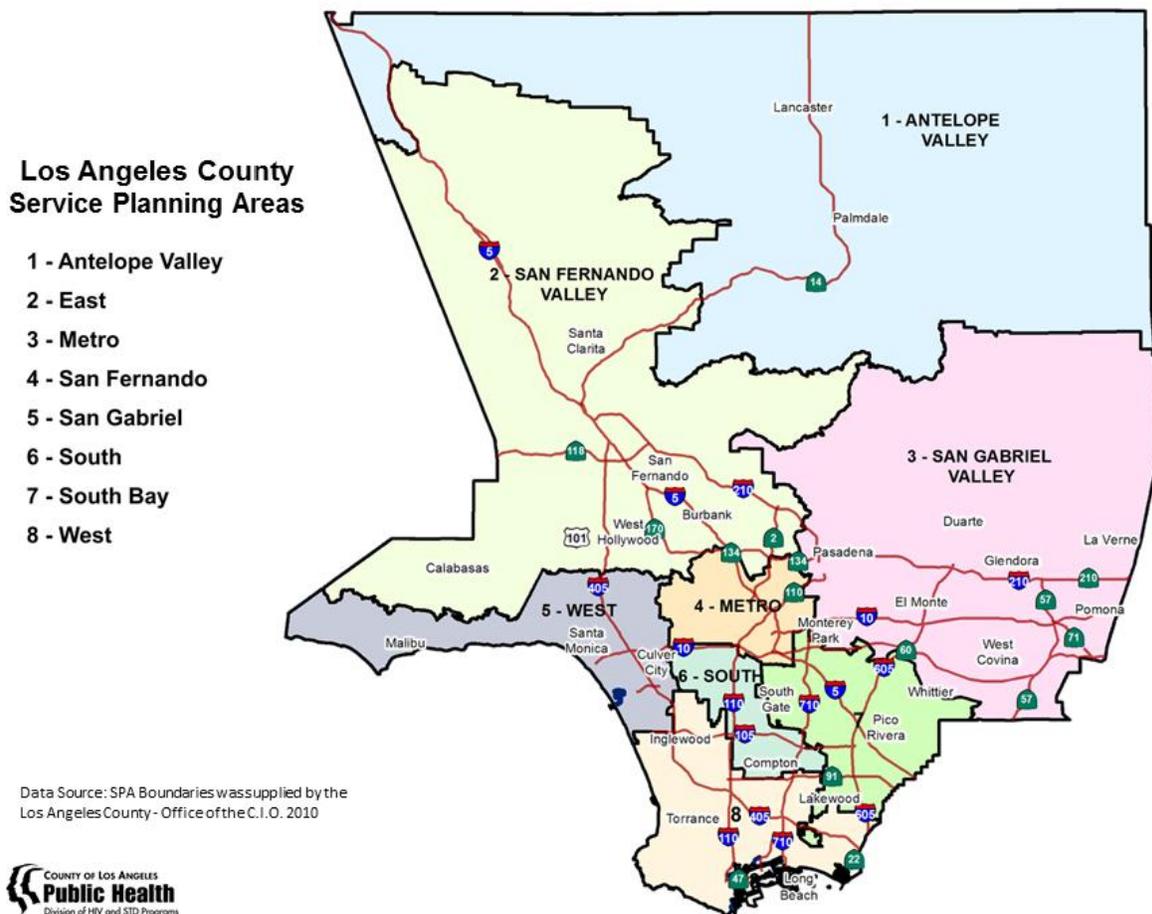
<sup>8</sup> The US50. Fast Facts Study Guide: State Areas. Available at: <http://www.theus50.com/area.php>.

million residents each. The LAC DPH collects and disseminates a wide variety of health information (e.g., HIV/AIDS cases, sexually transmitted infections, birth rates, etc.) by SPA in order to understand the needs of residents within these regions. Each SPA has an Area Health Office that is responsible for planning public health and clinical services according to the health needs of local communities.

As seen in Figure 6, the eight SPAs include:

1. SPA 1 (Antelope Valley),
2. SPA 2 (San Fernando Valley),
3. SPA 3 (San Gabriel Valley),
4. SPA 4 (Metro),
5. SPA 5 (West),
6. SPA 6 (South),
7. SPA 7 (East), and
8. SPA 8 (South Bay)

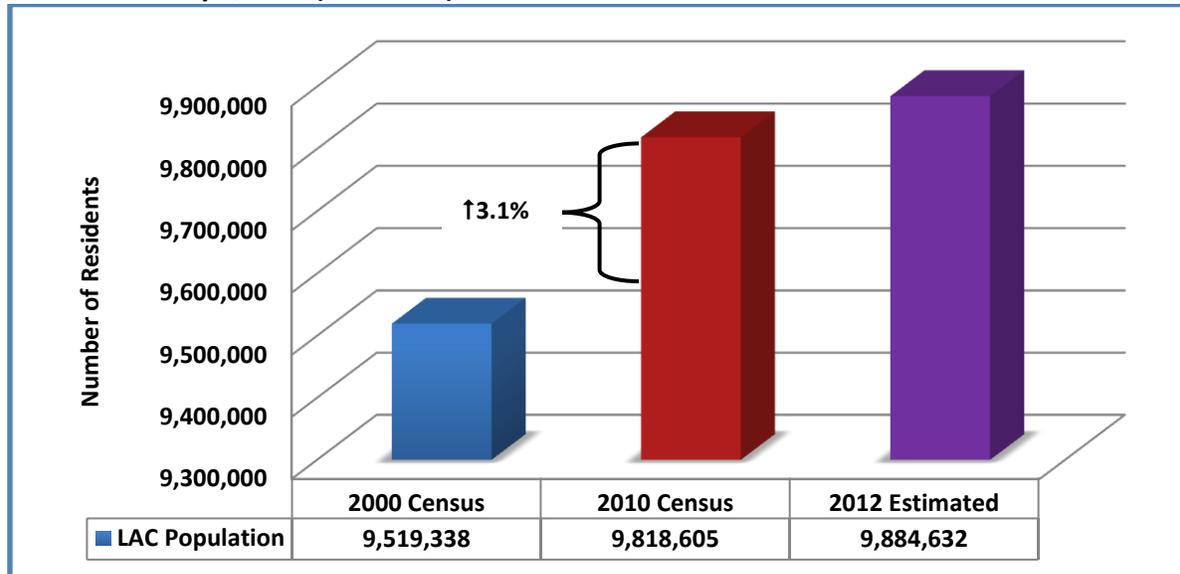
**Figure 6. Map of Los Angeles County with Service Planning Areas**



## ❖ Population

With 9.9 million residents as of January 1, 2012<sup>9</sup>, LAC is the most populous county in the U.S. and has a population larger than 42 of the 50 states.<sup>10</sup> As seen in Figure 7, LAC's population grew by 3.1% (299,267 persons) during the ten-year U.S. Census period from 2000 to 2010; it ranked third among California's 58 counties with the largest numeric growth.<sup>11</sup> Since the 2010 Census through January 1, 2012, LAC's population grew by an additional 66,027 persons.

**Figure 7. Los Angeles County Population as of the US Census 2000, US Census 2010, and January 1, 2012 (estimated)**



Source: State of California, Department of Finance

LAC is racially and ethnically diverse, with 47.7% Latinos, 27.8% Whites, 13.9% Asian/Pacific Islanders, 8.3% African-Americans, 2.3% multiple or other races/ethnicities, and 0.2% American Indians/Alaskan Natives.<sup>12</sup> According to the 2011 American Community Survey (ACS), 35.1% of LAC residents are foreign born, and 53.1% of these residents are not U.S. citizens.<sup>13</sup> The ACS also reports that 57% of LAC's population over five years old speaks a language other than English at home, and 26.4% of this population speaks English less than "very well."

Figure 8 depicts the increasing diversity in LAC from the U.S. Census 2000 to 2010. Latinos had the largest numeric growth of any racial/ethnic population; in 2000, they comprised 44.6% of the total population and 47.7% in 2010. Although smaller in number, Asian and Pacific Islanders

<sup>9</sup> State of California, Department of Finance, *E-1 Population Estimates for Cities, Counties, and the State with Annual Percent Change — January 1, 2011 and 2012*. Sacramento, California, May 2012.

<sup>10</sup> U.S. Census Bureau, Population Division. Table 1. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2011 (NST-EST2011-01), December 2011.

<sup>11</sup> State of California, Department of Finance, Demographic Research Center, State Census Data Center. Redistricting Data Summary File. Table 1: Total Population 2000 and 2010 Incorporated Cities by County in California. Generated on 3/8/2011 from [http://www.dof.ca.gov/research/demographic/state\\_census\\_data\\_center/census\\_2010/view.php#DP](http://www.dof.ca.gov/research/demographic/state_census_data_center/census_2010/view.php#DP).

<sup>12</sup> U.S. Census Bureau, 2010 Census.

<sup>13</sup> U.S. Census Bureau, 2011 American Community Survey (one year estimates).

were the fastest growing population; they comprised 12.1% of LAC’s total population in 2000 and 13.7% in 2010. The largest decline was in the White population, which comprised 31.1% of LAC’s general population in 2000 and 27.8% in 2010. There was also a significant decline in the percentage of African Americans living in LAC, from 9.5% in 2000 to 8.3% in 2010. Native Americans also declined slightly as they represented 0.3% of LAC’s population in 2000 and 0.2% in 2010.<sup>14</sup> However, it is important to note that LAC has one of the largest urban concentrations of Native Americans in the United States (U.S.).<sup>15 16</sup>

**Figure 8. Comparison of Racial/Ethnic Composition of Los Angeles County’s General Population from the U.S. Census 2000 to 2010: Latino or Hispanic and Race**

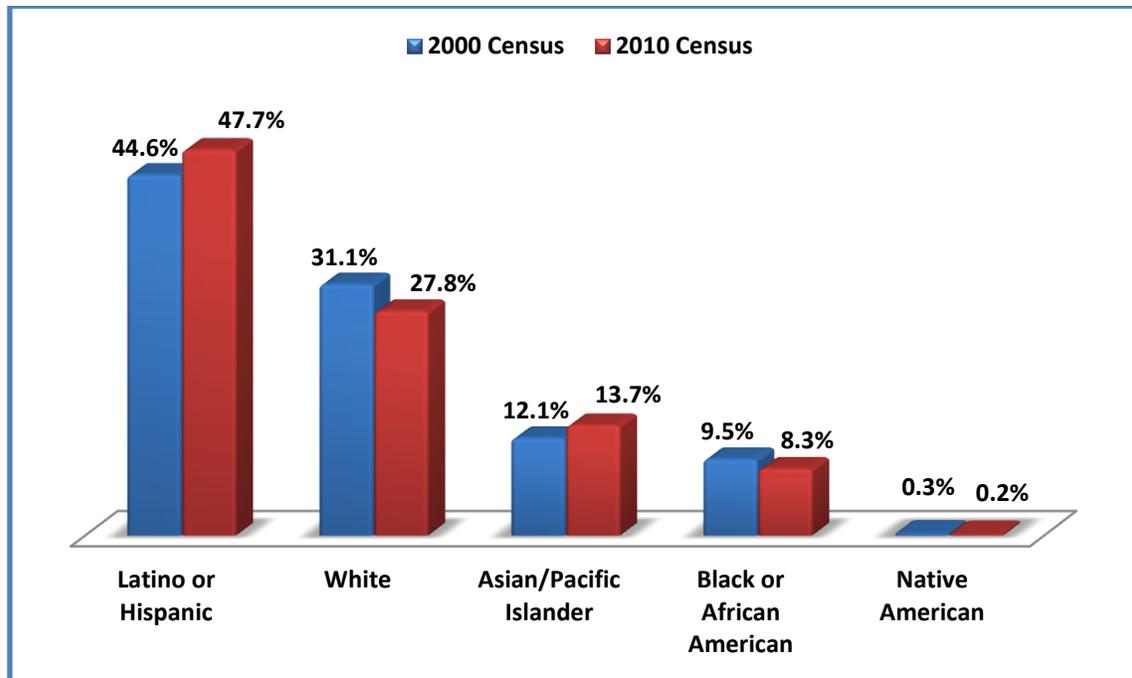


Table 1 provides in detail the population changes in LAC from 2000 to 2010 by race/ethnicity. As seen, the largest increases are among Latinos and Asian/Pacific Islanders. Latinos increased by nearly a half million people (445,676), a 10.5% increase. Asian/Pacific Islanders increased by 200,301 persons (17.5%). The most significant decline was among Whites, which decreased by 231,293 persons or 7.8%, followed by African Americans, which decreased by 86,386 persons (9.6%). Native Americans experienced the largest percentage decrease of any population group, 26.3%, 6,723 persons. The percentage decrease is especially large because of the small size of the total population. However as noted earlier, LAC has the largest urban population of Native Americans in the nation, making this a significant demographic change.

<sup>14</sup> This may undercount the total number of Native Americans/Alaska Natives in LAC as it represents “race alone” and does not represent Native Americans/Alaska Natives who document they are of mixed race, which is categorized as “two or more races” by the U.S. Census.

<sup>15</sup> U.S. Census Bureau, 2010 Census.

<sup>16</sup> National Urban Indian Family Coalition. Urban Indian America: The Status of American Indian and Alaska Native Children and Families Today, 2008. Available from: <http://www.aecf.org/KnowledgeCenter/Publications>.

**Table 1. Racial/Ethnic Characteristics of Los Angeles County’s Population for U.S. Census 2000 and 2010 and Percentage Change: Latino or Hispanic and Race**

Category		2000	2010	Numeric Change (+/-)	Percentage Change (+/-)
LAC Population (U.S. Census)		9,519,338	9,818,605	+299,267	+3.1%
Latino or Hispanic		4,242,213	4,687,889	+445,676	+10.5%
Race Alone	Asian/Pacific Islander	1,147,834	1,348,135	+200,301	+17.5%
	White	2,959,614	2,728,321	-231,293	-7.8%
	Black or African American	901,472	815,086	-86,386	-9.6%
	Two or more races	222,661	194,921	-27,740	-12.5%
	Native American	25,609	18,886	-6,723	-26.3%
	Some Other Race	19,935	25,367	+5,432	+ 27.2%

Source: U.S. Census 2000 and 2010.

### **C. Persons Living With and At Risk For HIV**

Most LAC residents fall somewhere along the “population flow map” (see Figure 3), which is the core of LAC’s *Continuum of HIV Services*. Some individuals may have absolutely no risk for HIV and this group is not represented on the *population flow map*. However, all other groups (depicted as boxes in Figure 3) are represented, from HIV negative low risk through HIV positive and adherent to one’s care plan. The following subsections describe the most currently available HIV epidemiologic data for these population groups represented within each box of the map. Following these descriptions in Section E, a syndemic summary profile is presented of LAC’s key populations.

#### **❖ Individuals at Risk for HIV**

**Introduction:** Persons at risk for HIV in LAC are extremely diverse. They belong to families and communities, live in neighborhoods, and are involved in numerous daily activities. Many HIV positive individuals are aware of their risk for HIV and other STIs and others are not aware of their infection. Awareness of HIV risk can be impeded by many factors such as lack of information about how HIV is transmitted; denial about one’s risk behavior; fear resulting from homophobia, transphobia, stigma, and/or discrimination; mental health issues; alcohol and/or substance abuse; and more. As discussed earlier, a person’s risk for HIV may change due to these many factors.

HIV “risk” includes both the risk for transmitting HIV and the risk for acquiring HIV. Thus, it is important to examine data related to both HIV prevalence (total number of PLWH) as well as those who are newly diagnosed with HIV. This is largely due to the groundbreaking research, which demonstrates that PLWH who are engaged in HIV medical care and adherent to antiretroviral therapy (ART) are 96% less likely to transmit HIV sexually to a non-infected person due to having suppressed viral load.<sup>17</sup> As sexual transmission is the primary driver of LAC’s HIV epidemic, the total number of PLWH in a population provide insight into the populations to whom services and interventions may be targeted in order to reduce their risk of transmitting HIV. The populations represented among newly diagnosed individuals with HIV shed light on potential “emerging populations” in which the epidemic is growing.

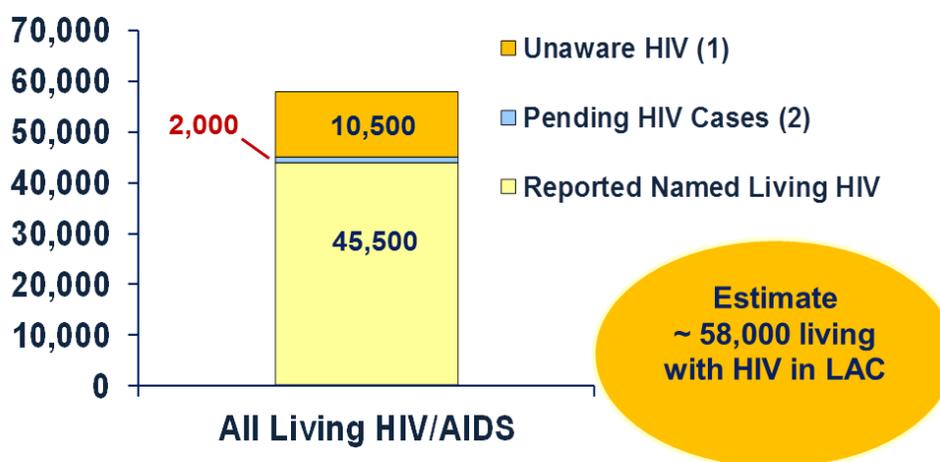
<sup>17</sup> Cohen MS, Ying CQ, McCauley M, et al. Prevention of HIV-1 Infection with Early Antiretroviral Therapy. *New England Journal of Medicine*, 2011; 365:493-505. Available from <http://www.nejm.org/doi/full/10.1056/NEJMoa1105243#t=articleTop>.

Thus, the following narrative examines risk for HIV through three different lenses: (1) changing patterns of the epidemic over the three years from December 2008 through December 2011, (2) rate of HIV per 100,000 population for total PLWH as well as for newly diagnosed individuals, and (3) proportion of the epidemic living with HIV as well as newly diagnosed individuals. Because individuals at risk for HIV are members of specific population groups, which can be organized by age, race, gender, or geographic area, the available epidemiologic data for each of these groups is presented here. The HIV surveillance data presented will identify populations with the highest burden of disease and serve as a surrogate for those persons at greatest risk for acquiring or transmitting HIV.

**Los Angeles County's HIV Epidemic:** Los Angeles County is a major epicenter of HIV in the U.S. with the second highest number of PLWH among metropolitan areas in the nation. As of December 31, 2011, LAC is home to an estimated 58,000 PLWH (Figure 9).<sup>18</sup> Of this number, 45,500 PLWH (rounded) have been officially reported through LAC's enhanced HIV/AIDS Reporting System (eHARS) as of December 31, 2012 and therefore were diagnosed and reported in LAC. There are also an estimated 2,000 HIV cases pending investigation that DHSP epidemiology staff expect to be unduplicated cases. Lastly, LAC estimates there are 10,500 PLWH currently undiagnosed and who are unaware of their HIV infection in accordance with the CDC's most current estimate of 18.1% of HIV positive persons unaware of their infection.<sup>19</sup>

**Figure 9. 2013 Estimated Number of Persons Living with HIV and AIDS in Los Angeles County**

### 2013 Estimated Number of Persons Living with HIV in Los Angeles County



(1) Estimate that 18.1% of HIV+ in LA County are unaware of their infection; modified from CDC estimate.  
 (2) Of 4,200 notifications pending investigation, estimate half of 2,000 who have detectable VL or confirmatory test to be unduplicated cases.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.

<sup>18</sup> This is a conservative estimate developed by HIV epidemiology staff at DHSP. It does not account for in-migration of PLWH who may have been diagnosed and reported in other local health jurisdictions outside of Los Angeles County.

<sup>19</sup> CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 U.S. dependent areas—2010. *HIV Surveillance Supplemental Report* 2012;17(No. 3, part A). Published June 2012.

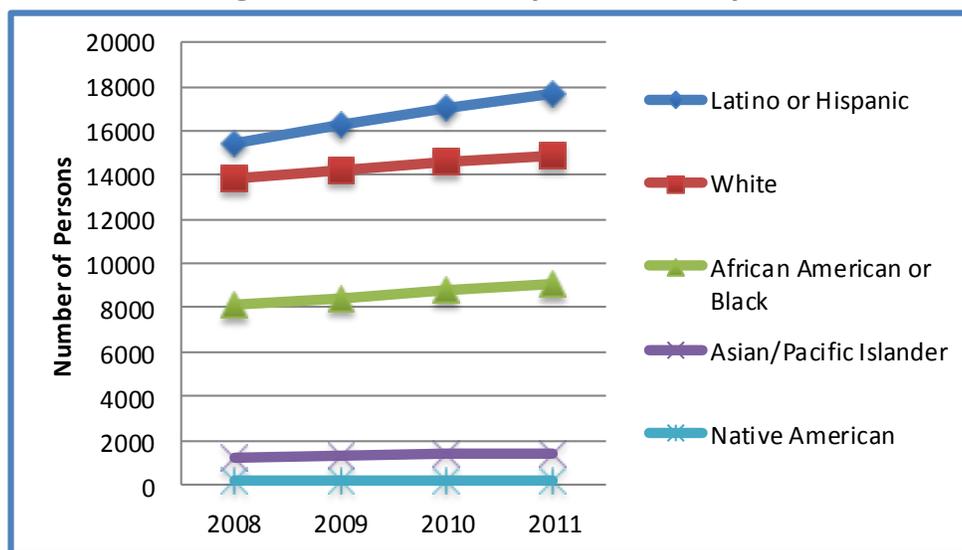
To assess persons at greatest risk for acquiring or transmitting HIV, HIV prevalence data (i.e., all living reported HIV cases) is used as a surrogate measure for identifying the populations with the highest “disease burden” (i.e., most number of cases). However, smaller populations can also be severely impacted by the epidemic. This is best seen by comparing the “prevalence rate” of HIV/AIDS per 100,000 population. Examining prevalence rates, as opposed to the total number of cases, allows for more reliable comparisons of populations of different sizes. A final method for assessing impact is to identify in which populations the “incidence” of HIV is increasing (i.e., newly diagnosed cases). When the incidence of HIV in a specific population group is relatively high or increasing, this identifies populations in which the epidemic is “emerging.”

The narrative that follows examines the impact of HIV/AIDS on specific population groups by examining prevalence, prevalence rate per 100,000 population, and three-year incidence rates for calendar years 2008 to 2010.<sup>20</sup> All data are from LAC’s eHARS and includes cases reported as of December 31, 2011. Geographic information presented is by service planning area (SPA).

### **HIGH-RISK/HIGH BURDEN POPULATIONS—BY RACE/ETHNICITY**

**Disease Burden—HIV Prevalence:** As seen in Figure 10, as of December 31, 2011, Latinos (17,675; 40.3%) comprise the largest number of PLWH in LAC among all racial/ethnic populations. Latino PLWH increased in number by 2,208 persons (14.3%) in the three-year period from December 31, 2008 to December 31, 2011. This was more than double the increase among both African Americans (998 persons; 12.3%) and Whites (992 persons; 7.1%). At the end of 2011, there were a total of 14,882 White PLWH and 9,105 African American PLWH. Although smaller in size, there were 1,437 Asian/Pacific Islander PLWH at the end of 2011, an increase of 206 persons (16.7%) from 2008; Native American PLWH totaled 193 persons, an increase of 21 persons (12.5%) during the three-year period.

**Figure 10. Three-Year Change in HIV Prevalence by Race/Ethnicity With 2008 Baseline**

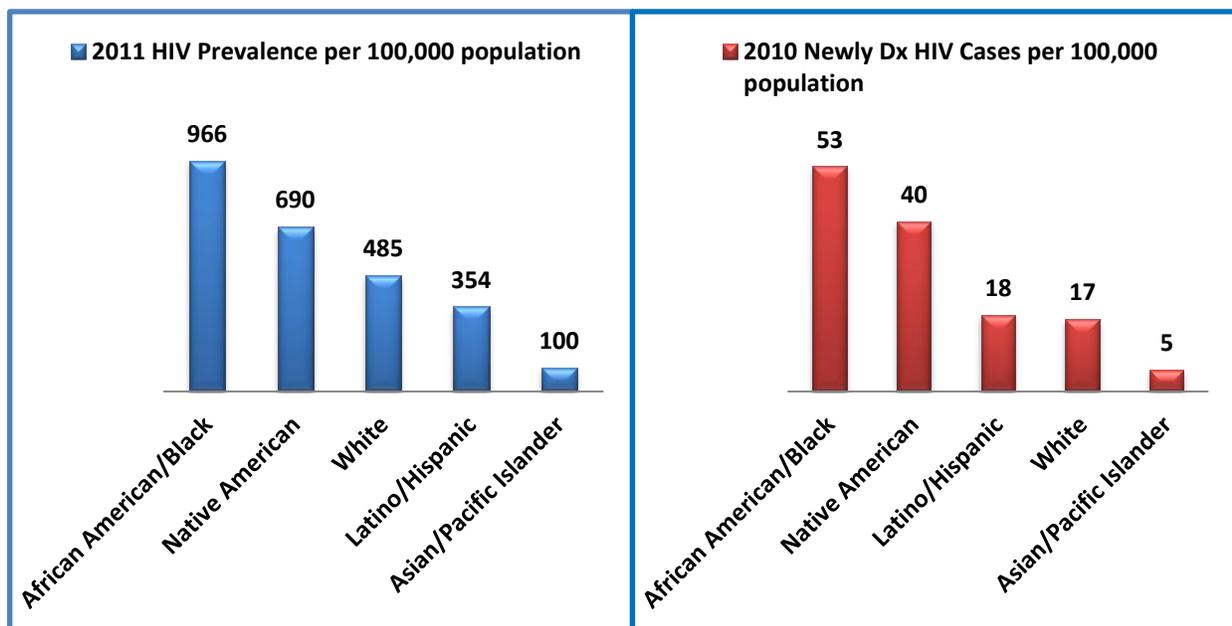


<sup>20</sup> For all Figures and data presented in this section: Prevalence data is from the LAC HARS as of February 28, 2012 and reported as of December 31, 2011. Incidence data is from LAC HARS as of March 13, 2012 and reported as of December 31, 2011. Rates were obtained from the LAC DHSP, 2011 Annual HIV Surveillance Report, February 2012.

**Disproportionate Impact:**<sup>21</sup> Although Latinos are the racial/ethnic group with the greatest HIV disease burden in terms of overall number and percentage of PLWH, they are not the most disproportionately impacted group. While the 2011 average prevalence rate of HIV in LAC is 420 per 100,000 population. African Americans at 966 per 100,000 are twice as likely as Whites (485 per 100,000) to be infected and nearly three times more likely than Latinos (354 per 100,000); Figure 11). Although a small population in size, Native Americans living with HIV (690 per 100,000) follow African Americans as the second most disproportionately impacted racial/ethnic population.

This same pattern occurs among newly diagnosed HIV positive persons (Figure 11).<sup>22</sup> When looking at newly diagnosed cases, only two population groups are higher than the County average of 20 per 100,000 population—African Americans (53 per 100,000) and Native Americans (40 per 100,000). Both are disproportionately impacted. Although Whites (485 per 100,000) have a significantly higher prevalence rate than Latinos (354 per 100,000), Latinos have a slightly higher HIV incidence rate (18 per 100,000) compared to Whites (17 per 100,000). Asian/Pacific Islanders have the lowest HIV prevalence and incidence of all racial/ethnic populations.

**Figure 11. 2011 HIV Prevalence and 2010 Newly Diagnosed (Dx) HIV Cases per 100,000 Population by Race/Ethnicity as of December 31, 2011**



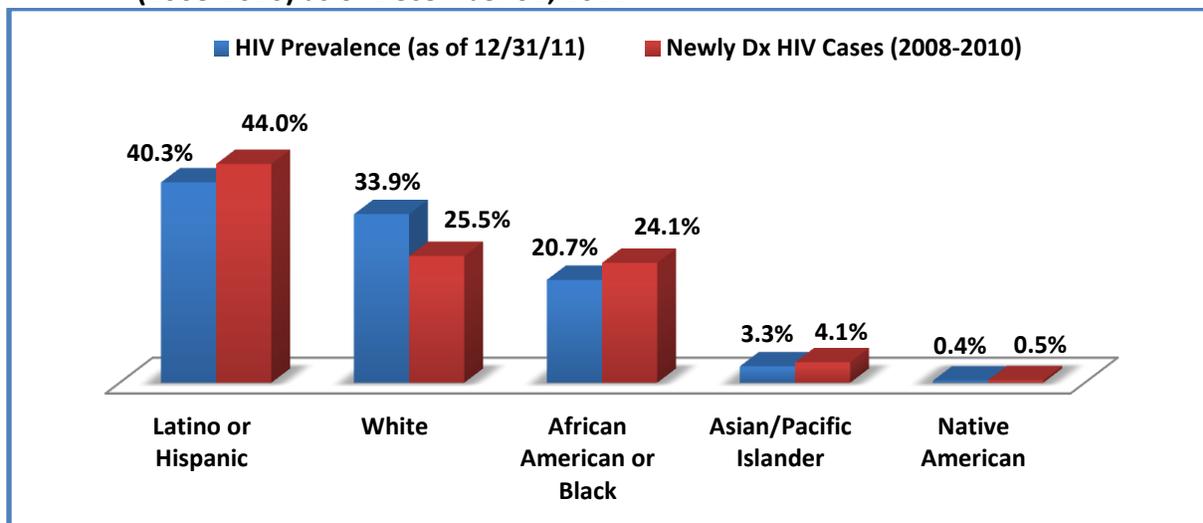
**Emerging Epidemic:** The epidemic in LAC is clearly one of increasing diversity (Figure 12). For every racial/ethnic group except Whites, there are a higher proportion of newly diagnosed HIV cases than HIV prevalent cases. The most striking differences are among Latinos and

<sup>21</sup> For all Figures that report 2011 prevalence and 2010 incidence rates per, the data was obtained from: HIV Epidemiology, Division of HIV and STD Programs, Los Angeles County Department of Public Health. 2011 Annual HIV Surveillance Report, February 2012: 1-36.

<sup>22</sup> Due to reporting delays, the 2010 HIV incidence rate is more stable and therefore presented here in lieu of the 2011 rate. Because of the larger numbers for HIV prevalence, the 2011 rate can be used.

African Americans. Latinos represent 44% of newly diagnosed persons and 40.3% of all PLWH. Similarly, African Americans represent 24.1% of newly diagnosed persons and 20.7% of all PLWH. Although the percentages are smaller for both Asian/Pacific Islanders and Native Americans, the trend is the same and both populations represent a higher proportion of newly diagnosed persons (4.1% and 0.5% respectively) than their representation among all PLWH (3.3% and 0.4% respectively). Whites are the only race/ethnicity that had fewer newly diagnosed persons (25.5%) compared to their representation among all PLWH (33.9%).

**Figure 12. Race/Ethnicity for 2011 HIV Prevalence and 3-Year Newly Diagnosed HIV Cases (2008-2010) as of December 31, 2011**

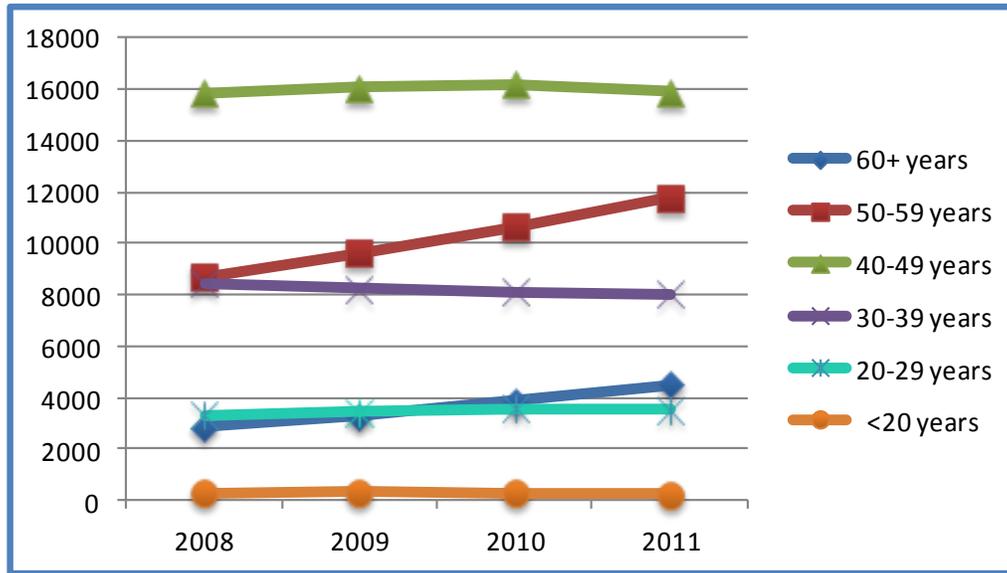


**HIGH-RISK/HIGH BURDEN POPULATIONS—BY AGE GROUP**

**Disease Burden—HIV Prevalence:** Age is not static; it changes every year and thus from year to year PLWH move into different age group categories.<sup>23</sup> Figure 13 clearly depicts LAC’s aging PLWH population. The most dramatic increases are among PLWH in the 50-59 year old (dark red) age group and the 60 years and older (dark blue) age group. The 50-59 year old group grew by 35.4% and the 60 years and older group grew by 57.3% over the three-year period from December 31, 2008 to December 31, 2011. Two other age groups showed smaller increases, PLWH aged 40 to 49 years increased by 0.3%, and PLWH aged 25-29 years increased by 6.1%. Middle aged PLWH 40-49 years represent the largest number of PLWH in all four years, followed by 50-59 year olds. The increase in these older age groups is expected to continue. Children living with HIV (not shown) aged 0-13 years represent 0.1% of total prevalence.

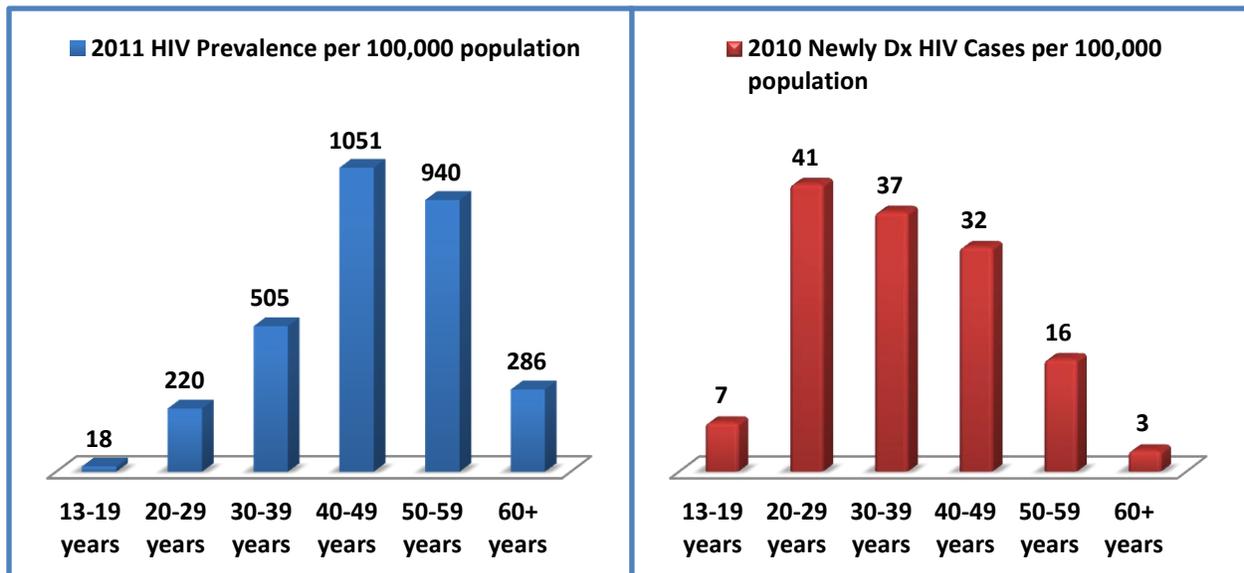
<sup>23</sup> LAC ages its HIV/AIDS prevalence and incidence data using a person’s reported date of birth and their date of diagnosis. In this way, the current age of PLWH is reflected in the data, regardless of whether or not an individual is a long-term survivor or a newly diagnosed person.

**Figure 13. Three-Year Trend in HIV Prevalence by Age Group with 2008 Baseline**



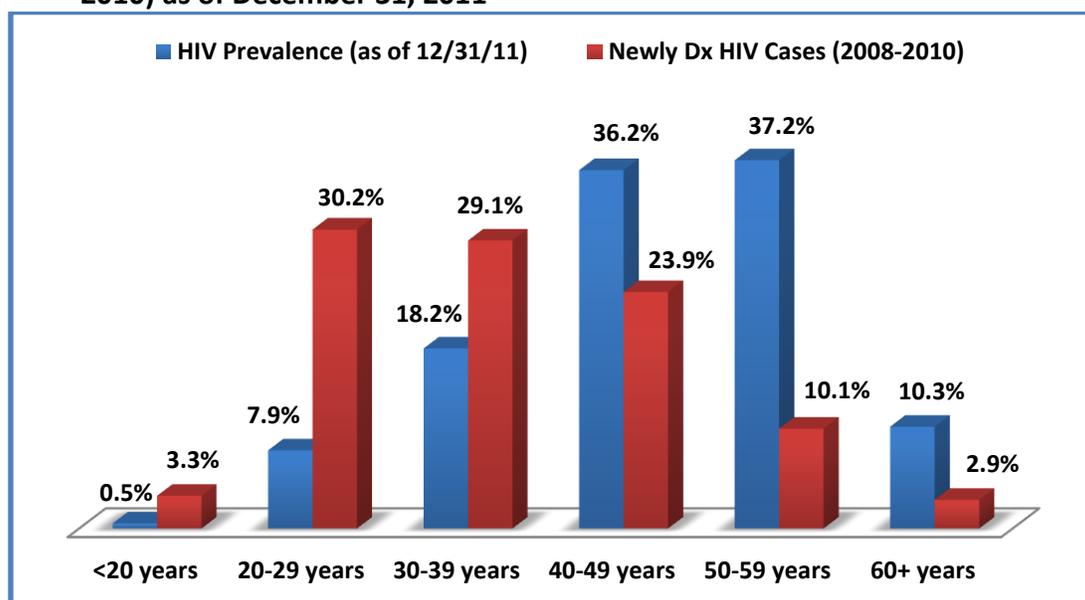
**Disproportionate Impact:** As expected, the HIV prevalence rate (Figure 14) is highest among 40-49 year olds (1,051 per 100,000 population) followed by 50-59 year olds (940 per 100,000 population). This follows the pattern discussed above with the aging of PLWH in LAC. However, a very different pattern is seen for HIV incidence rates of newly diagnosed persons (Figure 14). Two younger age groups have the highest HIV incidence rates: 20-29 year olds (41 per 100,000 population) and 30-39 year olds (37 per 100,000 population). Thus, young adults comprise the majority of newly diagnosed HIV positive persons. Although the rate for children 0-13 years old was too small for calculation and not included in Figure 14, there were six (6) new pediatric cases in the three-year period, all in 2010.

**Figure 14. 2011 HIV Prevalence and 2010 Newly Diagnosed HIV Cases per 100,000 Population by Age Group as of December 31, 2011**



**Emerging Populations:** This growth of new HIV infections among youth and young adults is even more clearly seen when comparing their representation (percentage) among total PLWH (prevalence) and newly diagnosed PLWH (incidence) (Figure 15). Combined, children, youth, and young adults up to 29 years of age comprise one-third (33.5%) of newly diagnosed persons, compared to their 8.4% prevalence among total PLWH. The most disproportionate are the 20-29 year olds (30.2% of newly diagnosed and 7.9% of total PLWH). The next most impacted age group among the newly diagnosed PLWH are persons 30 to 39 years (29.1%), which is also significantly greater than their proportion among all PLWH (18.2%).

**Figure 15. Age Group for 2011 HIV Prevalence and 3-Year Newly Diagnosed HIV Cases (2008-2010) as of December 31, 2011**



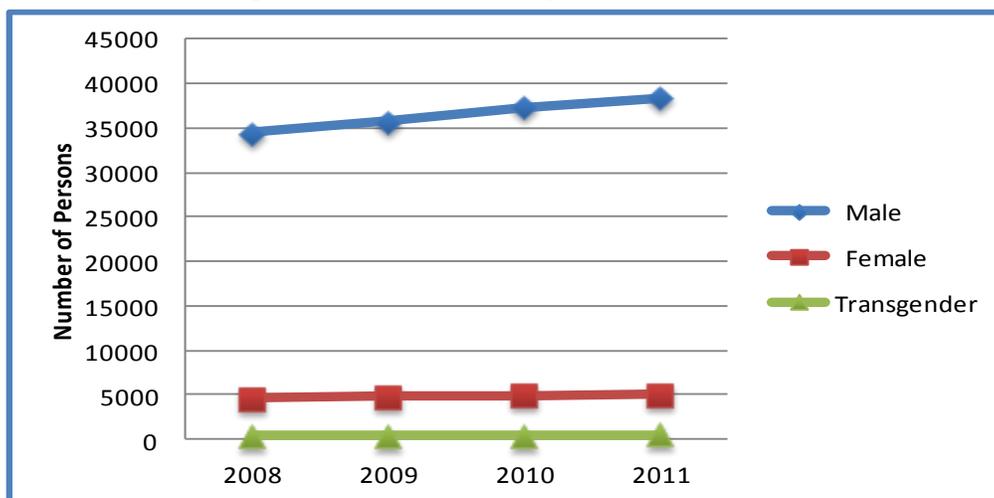
### **HIGH-RISK/HIGH BURDEN POPULATIONS—BY GENDER**

**Disease Burden—HIV Prevalence:** LAC’s HIV/AIDS epidemic is predominantly male. For each year from 2008 through 2011, males comprise the largest number of PLWH in LAC and that number is increasing (Figure 16). During the three years from 2008-2011, the total number of male PLWH increased by 3,980 persons (11.6%). The increase among females was 441 persons (9.6%). Among transgender persons, there was an increase of 43 (10.7%).

Sixty-four percent (64%) of all male PLWH are from communities of color.<sup>24</sup> The majority are Latino (40%) and African American (19%). Racial/ethnic disparities are even greater among female PLWH as 85% are from communities of color; 44% are Latina and 36% are African American.

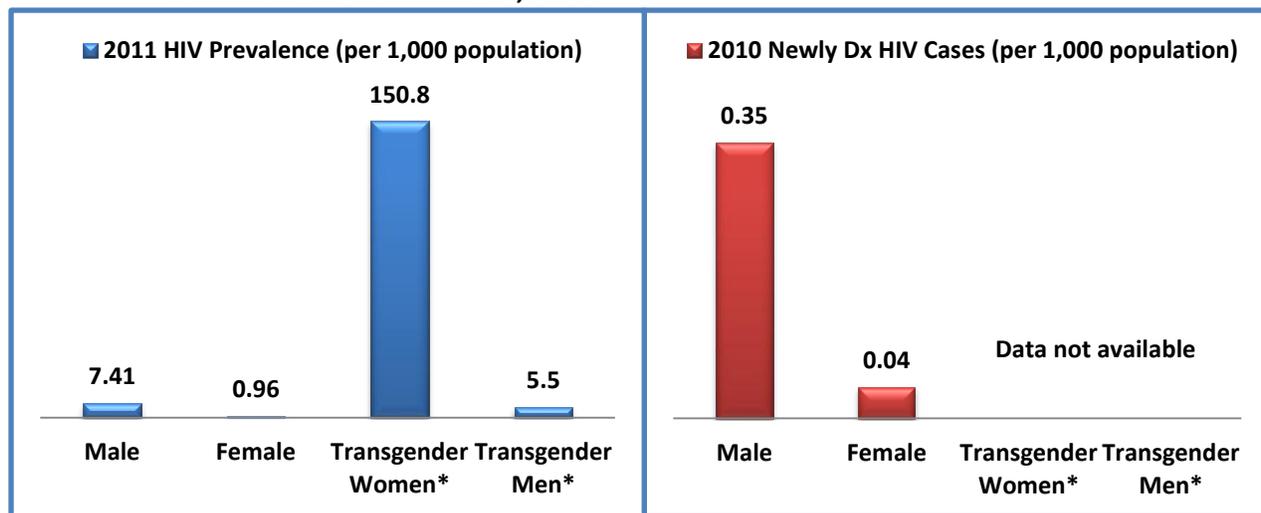
<sup>24</sup> 2011 HIV Annual Surveillance Report.

**Figure 16. Three-Year Change in HIV Prevalence by Gender with 2008 Baseline**



**Disproportionate Impact:** The 2011 prevalence of HIV among males (7.41 per 1,000) is nearly eight times higher than among females (0.96/1,000) (Figure 17).<sup>25</sup> Similarly, the 2010 rate of newly diagnosed HIV cases is also highest among males (0.35/1,000) versus females (0.04/1,000). Since the U.S. Census does not collect data to estimate the size of the transgender population, DHSP has used other methods to estimate the number of transgender residents in LAC.<sup>26</sup> DHSP estimates a total population of 7,214 transgender women and 7,214 transgender men, with an estimated HIV prevalence of 150.8 per 1,000 persons for transgender women, and 5.5 per 1,000 persons for transgender men. These rates are 20 times higher for transgender women than for males.

**Figure 17. 2011 HIV Prevalence and 2010 Newly Diagnosed HIV Cases per 1,000 Population by Gender as of December 31, 2011**



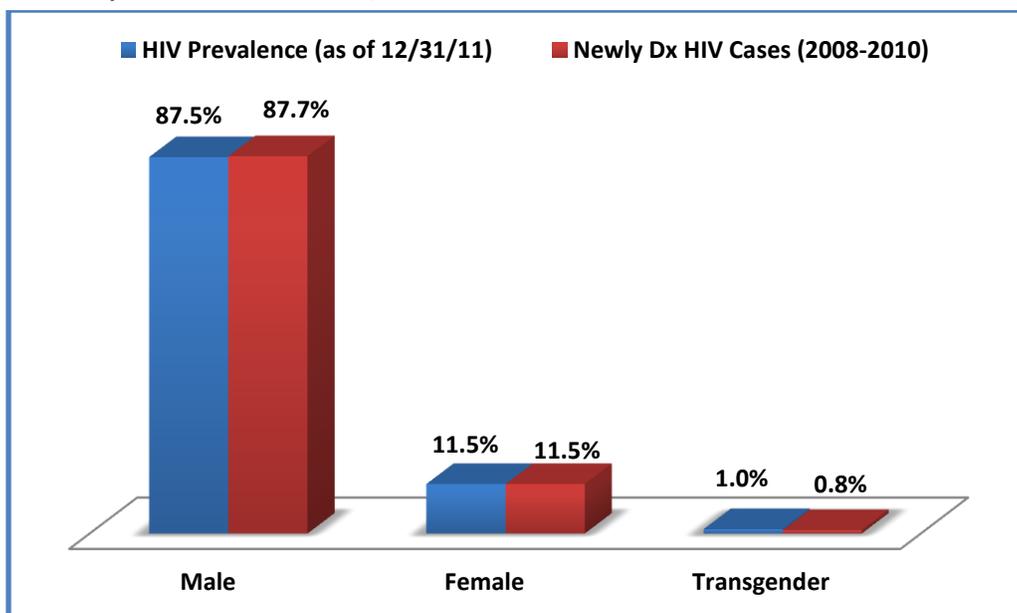
\* DHSP estimated prevalence per 1,000 population, 2012.

<sup>25</sup> Denominators of prevalence for males and females were reduced from 100,000 to 1,000 to facilitate comparisons to the transgender population in LAC, which is a fraction of the 100,000 usually used in these types of comparisons.

<sup>26</sup> Division of HIV and STD Programs, Los Angeles County Department of Public Health, Los Angeles County Transgender Population Estimates 2012.

**Emerging Populations:** When comparing the percentage of PLWH (Figure 18) and newly diagnosed individuals by gender, males are essentially the same among new HIV cases (87.7%) compared to all PLWH (87.5%). The proportion of females is 11.5% for both newly diagnosed and total PLWH. There was a slight decrease among transgender persons; 1.0% of all PLWH compared to 0.8% of newly diagnosed PLWH.

**Figure 18. Gender for 2011 HIV Prevalence and 3-Year Newly Diagnosed HIV Cases (2008-2010) as of December 31, 2011**

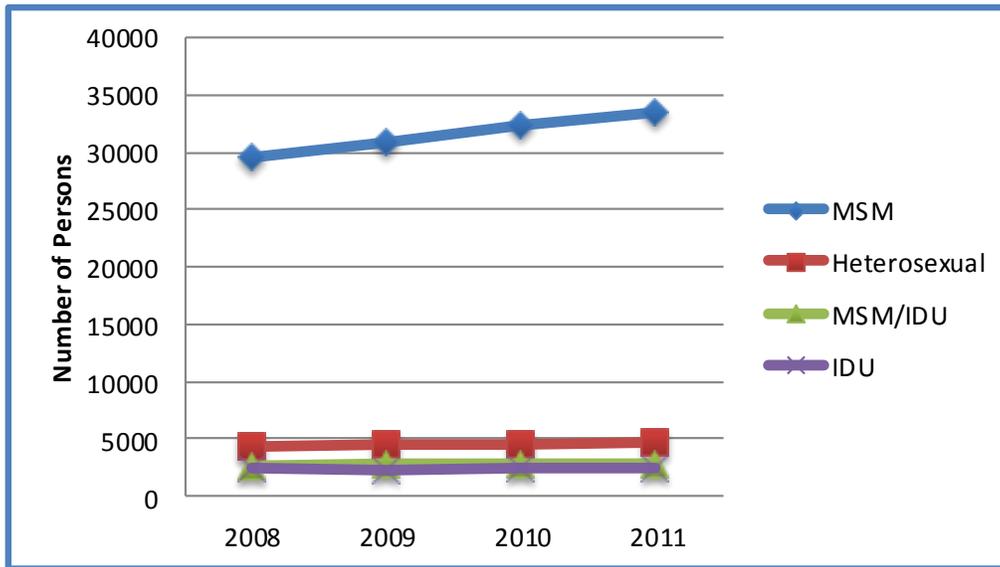


**HIGH-RISK/HIGH BURDEN POPULATIONS—BY RISK CATEGORY**

**Disease Burden—HIV Prevalence:** As seen in Figure 19, gay and non-gay identified men who have sex with men (MSM) bear the largest disease burden of any population in LAC. As of December 31, 2011, there were 33,526 MSM living with HIV/AIDS; there are an additional 2,804 MSM who also have a dual exposure of injection drug use (IDU). MSM represent 76.4% and MSM/IDU 6.4% of LAC’s HIV epidemic (82.8% total). Thus, four of every five PLWH are a gay or non-gay identified MSM. Between 2008 and 2011, HIV/AIDS prevalence among MSM and MSM/IDU increased by 15.8% (13.1% and 2.7% respectively) to a total of 3,946 persons (3,872 MSM and 74 MSM/IDU).

In 2011, heterosexual transmission accounts for the second largest number of PLWH in LAC (4,700 or 10.7%); this represents an increase of 437 persons or 10.3% since 2008. Sharing of injection paraphernalia (i.e., needles or “works”) represents 5.5% of all PLWH; this population grew by 2.5% from 2008 to 2011. Including the MSM/IDU transmission category, IDU is the risk exposure for 11.9% of all PLWH. In addition to drug use, sharing needles for tattoos (e.g., within the prison population), or injecting other substances such as steroids, vitamins, and hormones, may also transmit HIV. Perinatal transmission from mother to child accounts for only 0.6% of all HIV/AIDS cases from 2008 to 2011.

**Figure 19. Three-Year Change in HIV Prevalence by Transmission Risk Compared to 2008 Baseline**

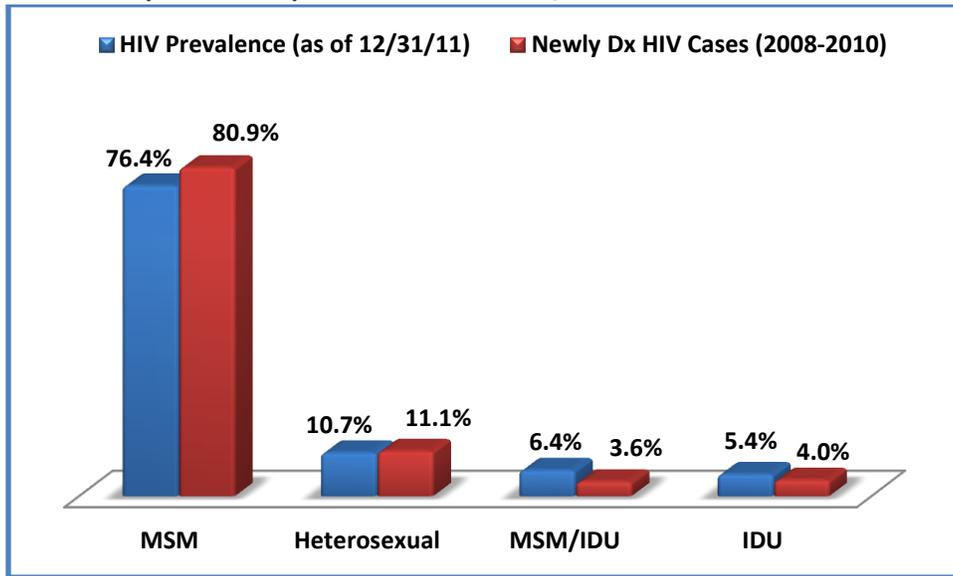


**Disproportionate Impact:** HIV prevalence and HIV newly diagnosed cases per 100,000 population are not available for HIV transmission risk categories, because the denominator needed for the calculation (i.e., total number of persons in each category within the general LAC population) cannot be determined accurately at this time. However, in 2007, HIV epidemiology staff estimated that gay and non-gay identified MSM had an HIV seroprevalence of 14.5%.

**Emerging Populations:** Among newly diagnosed PLWH, gay and non-gay identified MSM account for the vast majority (80.9%) of new HIV diagnoses (Figure 20). This is higher than their current representation among all PLWH (76.4%). Heterosexual transmission is about the same for both newly diagnosed PLWH (11.1%) and all PLWH (10.7%). For both the IDU and MSM/IDU transmission risk categories, they account for a lower percentage of newly diagnosed HIV cases (4.0% and 3.6% respectively) than PLWH (5.4% and 6.4% respectively).

Perinatal transmission has been nearly eliminated in LAC. There were four reported cases from 2008 to 2010 for infants born in LAC. This represents less than 0.1% of newly diagnosed HIV cases reported during those three years and a transmission rate of 1.6% for infants perinatally exposed to HIV.

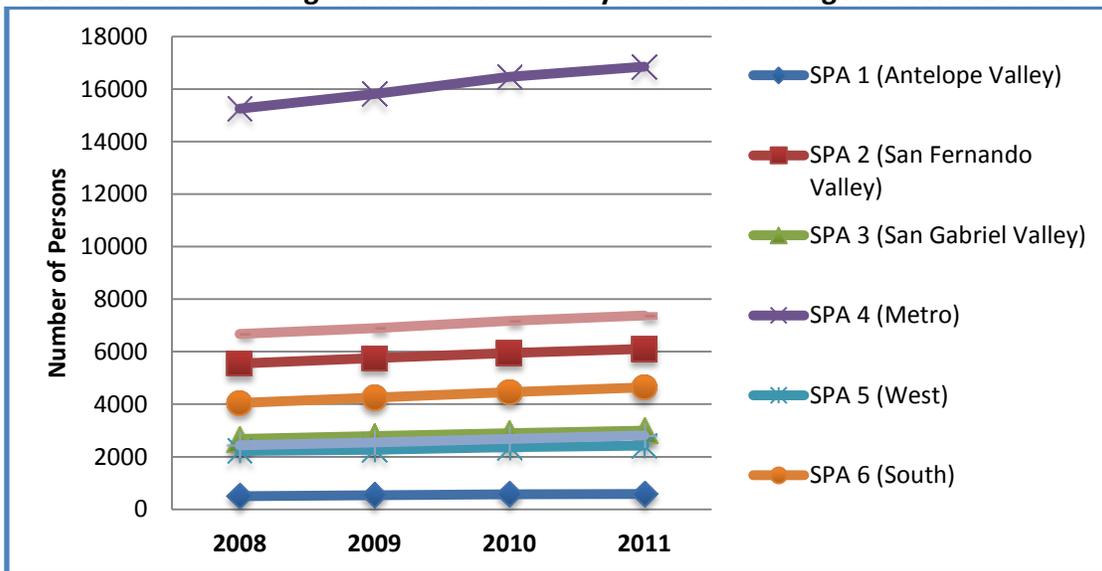
**Figure 20. Transmission Risk Category for 2011 HIV Prevalence and 3-Year Newly Diagnosed HIV Cases (2008-2011) as of December 31, 2011**



**HIGH-RISK/HIGH BURDEN POPULATIONS—BY SERVICE PLANNING AREA (SPA)**

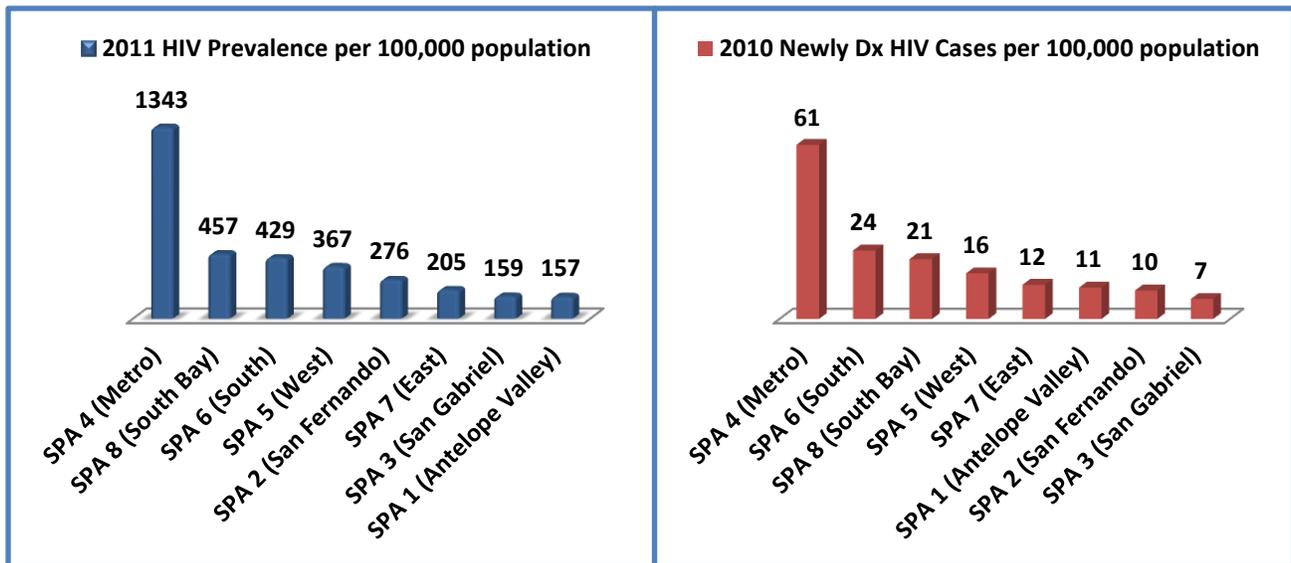
**Disease Burden—HIV Prevalence:** As seen in Figure 21, every SPA in LAC experienced an increase in the total number of PLWH. However, SPA 4 (Metro) has the highest burden of PLWH in LAC and is more than double that of any other SPA. In the three years from December 2008 to December 2011, SPA 4 increased by 1,601 PLWH, an increase of 10.5%. SPA 8 (South Bay), which is home to the City of Long Beach, experienced the second largest growth of PLWH (705 persons or 10.6%). SPA 6 (South) grew by 585 PLWH (14.4%). Although SPA 1 (Antelope Valley) has the fewest number of PLWH in LAC (590 PLWH), SPA 1 experienced the largest percentage increase (18.5%; 92 PLWH) of all SPAs.

**Figure 21. Three-Year Change in HIV Prevalence by Service Planning Area with 2008 Baseline**



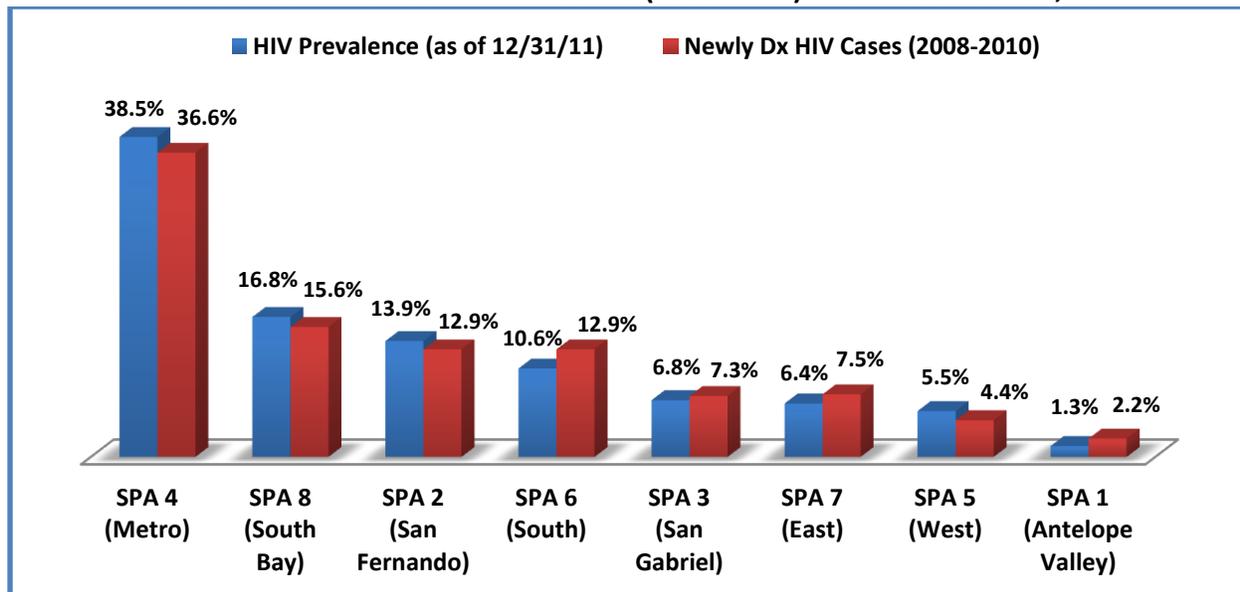
**Disproportionate Impact:** SPA 4 (Metro) stands out as the most disproportionately impacted area for both HIV prevalence and newly diagnosed cases. SPA 8 (South Bay) and SPA 6 (South) (Figure 22) each have higher rates of HIV prevalence than in LAC overall(420), and an HIV incidence rate higher than that of the County (20). Although SPA 8 (South Bay) has a higher rate per 100,000 population for all PLWH than SPA 6 (South), 457 compared to 429 respectively, SPA 6 (South) has the higher rate of newly diagnosed PLWH (24) compared to SPA 8 (South Bay) (21). For HIV prevalence, SPA 1 (Antelope Valley) ranks last (i.e., eighth). However for newly diagnosed cases, SPA 1 ranks sixth, suggesting an increasing trend.

**Figure 22. 2011 HIV Prevalence and 2010 Newly Diagnosed HIV Cases per 100,000 Population by Service Planning Area as of December 31, 2011**



**Emerging Populations:** Examining the differences between HIV prevalence and newly diagnosed HIV cases reveals geographic areas within LAC where the epidemic is changing. As seen in Figure 23, SPA 4 (Metro) has both the largest proportion of total PLWH (38.5%) as well as newly diagnosed PLWH (36.6%). The slightly lower proportion of newly diagnosed PLWH within this region may suggest that strategies to stem the epidemic in this region are working. However, it also may point to the fact that the epidemic is growing (i.e., emerging) in other geographic areas of LAC. Four SPAs show a larger proportion of newly diagnosed HIV cases than their total proportion of all PLWH. SPA 6 (South) has the most dramatic difference with 12.9% of newly diagnosed PLWH and only 10.6% of all PLWH. Other SPAs with smaller increases include: SPA 7 (East), SPA 1 (Antelope Valley), and SPA 3 (San Gabriel Valley).

**Figure 23. Percentage of Population by Service Planning Area (SPA) for 2011 HIV/AIDS Prevalence and 3-Year HIV Incidence (2008-2011) as of December 31, 2011**



❖ **HIV Positive Individuals Unaware of their Infection**

**Introduction:** In LAC, individuals who are unaware of their HIV infection consist of two groups of people: (1) HIV positive persons who have not been tested for HIV, and (2) HIV positive persons who have been tested for HIV but did not receive their test results. LAC has a long history of estimating its total population of PLWH, including those persons who are unaware of their HIV infection. The legislative mandate for this estimation occurred on October 30, 2009, as one of the amendments to the Ryan White HIV/AIDS Treatment Extension Act of 2009. The U.S. Congress amended the general grant provisions and charged jurisdictions to identify “the size and demographics of the estimated population of individuals with HIV/AIDS who are unaware of their HIV status.”<sup>27</sup>

To standardize the methodology for estimating the size of the HIV positive unaware (i.e., undiagnosed) population, in 2010, the Centers for Disease Control and Prevention (CDC) developed the *Estimated Back Calculation (EBC) Methodology*. This standardized tool allows local health jurisdictions of all sizes to estimate the size of their local HIV positive unaware population. The EBC methodology was based on the CDC’s 2006 national estimate that 21% of all PLWH in the U.S. are undiagnosed and therefore unaware of their HIV infection.<sup>28</sup> The Health Resources and Services Administration (HRSA) HIV/AIDS Bureau (HAB) included, for the first time, the EBC methodology in its Fiscal Year (FY) 2011 Ryan White Part A application for funding. The CDC formula for the EBC methodology was:

$$\begin{aligned}
 & \text{National Proportion Undiagnosed HIV (21\%)} = p \\
 & \text{Number of individuals diagnosed with HIV and living as of December 31, 2009} = N \\
 & \text{Local Undiagnosed} = \frac{p}{(1-p)} \times N
 \end{aligned}$$

<sup>27</sup> Ryan White HIV/AIDS Treatment Extension Act of 2009, 42 U.S.C. 201, 111th Cong. § 2602 (2009).

<sup>28</sup> CDC. HIV prevalence estimates—United States, 2006. *MMWR* 2008; 57(39):1073-76.

More recently, the CDC (2009 data) estimates that 18.1% of PLWH remain undiagnosed.<sup>29</sup> Another CDC report acknowledges that the proportion of undiagnosed persons is not equal across racial/ethnic and other population groups, citing higher percentages for black or African American MSM (25.7%), American Indians or Alaska Natives (25.0%), Asians or Pacific Islanders (25.9%), and persons less than 35 years (13-24 years: 58.9%; 25-34 years: 31.5%) among others.<sup>30</sup>

Identifying undiagnosed HIV positive individuals who are unaware of their infection is a vital component of local HIV prevention efforts as research has shown that they disproportionately contribute to new HIV infections. A recent study estimates that 49% of new HIV cases are transmitted from undiagnosed persons.<sup>31</sup> Thus, the importance of identifying this population and getting them tested and linked to care is imperative. This will not only improve the personal health outcomes of individuals who are newly diagnosed with HIV but it will also reduce community viral load and forward transmission of HIV. However, identifying this population begins with accurately estimating their size and characteristics in order to develop effective strategies and target resources.

**Estimate of HIV Positive Individuals who are Unaware of their Infection:**

Table 2 presents this adjusted estimate using the CDC’s EBC methodology. Applying this percentage to current reported and estimated pending HIV cases yields 10,498 HIV positive persons who are undiagnosed and unaware of their HIV infection (rounded to 10,500 in Figure 9).

**Table 2. Estimate of Los Angeles County’s 2012 Undiagnosed HIV Positive Population using the CDC’s Estimated Back Calculation Methodology**

Formula Component	Description	Total
<i>p</i>	<i>Estimate of undiagnosed HIV in LAC</i>	<i>18.1%</i>
<i>N</i>	<i>Number of individuals diagnosed and living with HIV in LAC as of 12/31/2012, including 45,500 reported cases in eHARS, 2,000 pending cases</i>	<i>47,500 (rounded)</i>
<i>EBC Formula</i>	$[p/(1-p)] \times N$	
<i>Results</i>	$[18.1\% / (1-18.1\%)] \times 47,500$	<i>10,498</i>

**Demographic Characteristics of Undiagnosed HIV Positive Persons:** The CDC’s EBC methodology provides a raw number estimate of total PLWH in LAC who are unaware of their HIV infection. It does not provide any indicator of who this population is, i.e., demographic and other characteristics. Applying the formula to LAC’s current HIV prevalence data by demographic category would not give an accurate estimate of the HIV positive unaware population. This is because HIV/AIDS prevalence includes LAC’s total epidemic, old and new, and does not reflect the changing face of HIV in the County. However, newly diagnosed individuals are the population group most recently undiagnosed. This population provides a good surrogate for describing the characteristics of undiagnosed individuals.

<sup>29</sup> CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 U.S. dependent areas—2010. *HIV Surveillance Supplemental Report* 2012;17(No. 3, part A). Published June 2012.

<sup>30</sup> Centers for Disease Control and Prevention. Prevalence of Undiagnosed HIV Infection Among Persons Aged ≥13 Years — National HIV Surveillance System, United States, 2005–2008. *MMWR* 2012;61 (Suppl; June 15, 2012):57-64.

<sup>31</sup> Hall HI et al. *HIV transmissions from persons with HIV who are aware and unaware of their infection, United States*. *AIDS* 26, online edition. DOI: 10.1097/QAD013e328351f73f, 2012

Table 3 presents a best guess estimate of HIV positive undiagnosed individuals in LAC by demographic and geographic characteristics. It uses the proportion of each subpopulation among newly diagnosed individuals for the three years from 2008 to 2010 as the basis for the calculation. This percentage is multiplied by 10,500 (estimate of 2013 undiagnosed individuals). The result is a numeric estimate of the number of PLWH by subpopulation who is HIV positive and unaware of their infection. An important limitation of this estimate is that it uses 18.1% as the average percentage of undiagnosed HIV positive individuals across all subpopulations. As noted in the CDC report cited earlier, the actual percentage of persons undiagnosed varies considerably for various subpopulation groups. Thus, it is only a starting point for identifying the demographic and geographic characteristics of the undiagnosed HIV positive population.

**Table 3. Estimate of HIV Positive Unaware Persons by Race/Ethnicity, Gender, Age, Risk Category, and Service Planning Area for Selected Subpopulations Using 2008-2010 HIV Newly Diagnosed Data as a Surrogate to Calculate Percent of Population**

Characteristic		Percent Newly Diagnosed Persons (2008-2010)	Numeric Estimate of HIV Positive Unaware
<b>Total</b>	HIV Positive Persons Unaware of Infection	100%	10,500
<b>Race/Ethnicity</b>	Latino or Hispanic	44.0%	4,620
	White	25.5%	2,678
	African American or Black	24.1%	2,531
	Asian/Pacific Islander	4.1%	431
	Native American	0.5%	53
<b>Gender</b>	Male	87.7%	9,209
	Female	11.5%	1,208
	Transgender	0.8%	84
<b>Age at Diagnosis</b>	13-19 years	3.3%	347
	20-29 years	30.3%	3,182
	30-39 years	29.2%	3,066
	40-49 years	24.0%	2,520
	50-59 years	10.2%	1,071
	60 years and older	2.9%	305
<b>Risk Category</b>	MSM	80.9%	8,495
	MSM/IDU	3.6%	378
	IDU	4.0%	420
	Heterosexual	11.1%	1,166
<b>Service Planning Area</b>	(1) Antelope Valley	2.2%	231
	(2) San Fernando Valley	12.9%	1,355
	(3) San Gabriel Valley	7.3%	767
	(4) Metro	36.8%	3,864
	(5) West	4.4%	462
	(6) South	12.9%	1,355
	(7) East	7.5%	788
	(8) South Bay	15.6%	1,638

Source: Los Angeles County, 2011 Annual HIV Surveillance Report, February 2012.

Note: May not add to 10,500 for every category due to rounding and/or not all populations presented in Table.

## ❖ HIV Positive Individuals Who are Aware but Not in Care

**Introduction:** Not all PLWH who know their HIV infection are actively engaged in “primary medical care.” Some PLWH may never have been in care, while others are inconsistently in care. That is, they may have dropped out of care, may come back into care, and dropped out of care again. Whether or not a person is engaged in primary medical care is influenced by many factors, including but not limited to: personal issues, active substance use, mental health issues, homelessness or unstable housing, stigma and/or discrimination, etc.

The Health Resources and Services Administration (HRSA) HIV/AIDS Bureau (HAB) provides guidance to local health jurisdictions on how to estimate the size of this population, using their *Unmet Need Framework*. HRSA refers to PLWH who are aware of their HIV infection but not in HIV primary medical care as PLWH with “unmet need.” For this estimate, LAC defines “primary medical care” as receiving a viral load or CD4 test, or being on antiretroviral therapy (ARV) during the most recently completed calendar year. Each year, DHSP updates LAC’s estimate of PLWH who are out of care for planning purposes. As part of this estimate, DHSP also describes the demographic characteristics of PLWH who are out of care.

**2011 Estimate of PLWH who are Out of Care (Unmet Need):** To develop its estimate of PLWH who are not in care, DHSP first estimates the number of unduplicated PLWH in care and then subtracts this number from total reported HIV cases who are diagnosed and aware of their HIV infection. The formula for estimating unmet need is:

$$\begin{aligned} & \text{Total number of PLWH (aware of HIV positive infection)} \\ - & \text{Total number of PLWH “in care”} \\ = & \text{Unmet need (i.e., PLWH who are aware of infection but not in care)} \end{aligned}$$

DHSP obtains the most updated count available of PLWH who are documented as receiving care from the California Office of AIDS (OA). This count contains unduplicated client level data from eHARS, Medi-Cal and the AIDS Drug Assistance Program (ADAP) for LAC. These data are linked with LAC’s local Ryan White Casewatch client-level data for the same time period in order to analyze care patterns. Since 2010, LAC’s eHARS data has contained a complete year of full lab reporting, which include PLWH in both public and private care. As a result, no additional adjustments are required for PLWH in private care as was the case in past years.

Table 4 presents LAC’s 2011 estimate of PLWH out of care. As seen, LAC estimates that in 2011, there was a total 33.2% of PLWH (18,668 persons) who were aware of their HIV infection but not in care. PLWA were more likely than PLWH to be in care. Only 29.6% of PLWA/aware were not in care compared to 37.2% of PLWH/aware. [Note: Medi-Cal data for 2011 were not included in the 2011 database because OA requested, but was unable to obtain, Medi-Cal data for this year. To make sure Medi-Cal clients were considered in the 2011 estimate for unmet need, DHSP used Medi-Cal data from 2010 for the estimate.]

When looking at LAC’s trend over the past four years (Table 5), the overall percentage of unmet need has been steadily decreasing. Between 2008 and 2011, the overall unmet need percentage in LAC went from 37.1% to 33.2%. This is strong evidence that LAC’s recent efforts implementing its TLC+ initiative are working. For example, LINK LA uses peer navigators to link PLWHA released from the County jails to HIV medical care. The LAC PATH project combines social network testing of high-risk individuals and clinical linkage specialists to immediately engage newly diagnosed individuals in medical care. DHSP also implemented the HIV Rapid Testing

Algorithm (RTA), a testing methodology that uses different rapid tests to confirm an original rapid test result, at all rapid testing sites after the demonstration project (2007-2009) found that 100% of HIV-positive clients at the RTA sites received their results and were referred to care on the same day. Increasingly, linkage-to-care efforts in LAC are coordinated with the DHSP's Public Health Investigators so that linkage to medical care after HIV diagnosis and service referral can be systematically tracked and followed.

**Table 4. Estimate of Los Angeles County's Calendar Year 2010 Unmet Need Population**

Population Size		Value	Data Source(s)	
A.	Number of persons living with AIDS (PLWA) in 2011/aware of infection	29,606	Linked databases of HARS, Casewatch, ADAP, and Medi-Cal	
B.	Number of persons living with HIV (PLWH) in 2011/aware of infection	26,660	Linked databases of HARS, Casewatch, ADAP, and Medi-Cal	
C.	Total number of HIV+ aware in 2011	56,266		
Care Patterns		Value	Data Source(s)	
D.	Number of PLWA/aware who received primary medical care as defined during 2011	20,851	Linked databases of HARS, Casewatch, ADAP, and Medi-Cal	
E.	Number of PLWH/aware who received primary medical care as defined during 2011	16,747	Linked databases of HARS, Casewatch, ADAP, and Medi-Cal	
F.	Number of HIV+ aware who received primary medical care as defined during 2011	37,598		
Calculated Results		Value	%	Calculation
G.	Number of PLWA who did not receive HIV primary medical care as defined	8,755	29.6%	Value= A – D; Percent = G/A
H.	Number of PLWH who did not receive HIV primary medical care as defined	9,913	37.2%	Value= B – E; Percent = H/B
I.	Number of HIV+/aware who did not receive HIV primary medical care as defined	18,668	33.2%	Value= G + H; Percent = I/C

**Table 5. Estimated Unmet Need\* in Los Angeles County for Calendar Years 2008 – 2011**

Year	PLWA		PLWH		TOTAL	
	Number	Percent	Number	Percent	Number	Percent
2008	9,392	35.4%	10,506	38.7%	19,898	37.1%
2009	10,084	37.4%	8,677	33.0%	18,761	35.2%
2010	8,845	29.4%	9,964	39.2%	18,809	33.9%
2011	8,755	29.6%	9,913	37.2%	18,668	33.2%

\*Unmet need is defined as not receiving a viral load, CD4 test, or anti-retroviral therapy in a 12-month period.

**Demographic Characteristics of PLWH with Unmet Need:** In addition to estimating the overall number and percentage of HIV positive individuals who are aware but not in care, DHSP also uses the combined dataset of eHARS, ADAP, Medi-Cal and Casewatch to determine who and where the unmet need populations are in LAC. Table 6 below describes the demographic characteristics of LAC's unmet need population. Among the 56,266 individuals in the linked database, 18,668 were not in primary medical care as defined by HRSA. These data provide important clues to the characteristics and locations of those who are out of care in LAC: HIV positive individuals who are women, minorities and mixed race individuals, and young people under 24 years of age were less likely to receive care.

**Table 6. Demographic Characteristics of Individuals Diagnosed with HIV in 2011 with Unmet Need**

		Not in Care as defined by HRSA		Total PLWH in Matched Database		% with Unmet Need (n/N)
		n	%	N	%	%
<b>Total</b>		<b>18,668</b>	<b>100%</b>	<b>56,266</b>	<b>100%</b>	<b>33.2%</b>
<b>Gender</b>	Male	13,298	71.2%	46,293	82.3%	28.7%
	Female	5,364	28.7%	9,966	17.7%	53.8%
	Unknown	6	0.0%	7	0.0%	85.7%
<b>Race/ Ethnicity</b>	White	6,177	33.1%	17,021	30.3%	36.3%
	African American	6,159	33.0%	12,690	22.6%	48.5%
	Latino/a	9,535	51.1%	22,840	40.6%	41.7%
	Asian/Pacific Islander	1,202	6.4%	2,383	4.2%	50.4%
	American/Alaskan. Native	232	1.2%	316	0.6%	73.4%
	Mixed/Other/Unknown	667	3.6%	1,016	1.8%	65.6%
<b>Age</b>	< 13	324	1.7%	383	0.7%	84.6%
	13-24	1,707	9.1%	3,256	5.8%	52.4%
	25-49	10,358	55.5%	34,703	61.7%	29.8%
	≥50	6,275	33.6%	17,911	31.8%	35.0%
	Unknown	10	0.1%	13	0.0%	76.9%

Source: Linked CA databases of HARS, ADAP data and local client data from Casewatch, 2011.

Although women are a significantly smaller population of total PLWH, they are nearly twice as likely as men to be out of primary medical care (53.8% of female versus 28.7% of male PLWH). The racial/ethnic populations most deeply impacted by the epidemic (i.e., African Americans, Latinos) are those also most likely to be out of care (48.5% and 41.7% respectively). Native Americans (73.4%) and Asian/Pacific Islanders (50.4%) are also more likely than Whites (36.3%) to be out of care. Among age groups, youth (13-24 years) are more likely than older populations to be out of care.<sup>32</sup>

Another analysis using the 2007-2009 surveillance data to assess disparities in unmet need revealed similar results to DHSP's unmet need estimate. Among individuals newly diagnosed with HIV (N=6,841), characteristics associated with delayed linkage to care included being female, African American, Latino, and 13-44 years of age, and heterosexual transmission risk.<sup>33</sup>

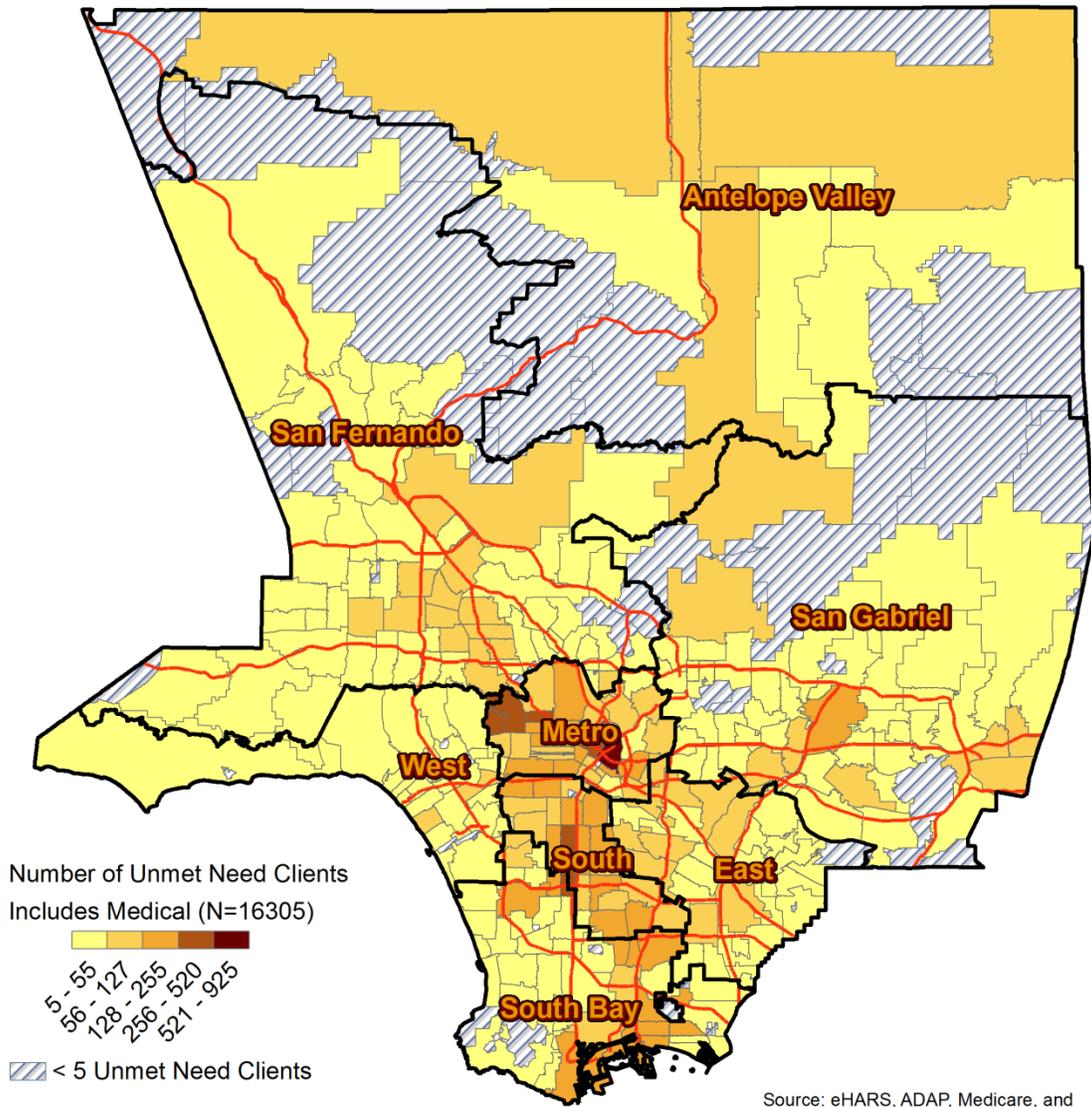
The map in Figure 24 shows the distribution of the unmet need individuals across the eight SPAs in LAC. This will help target efforts to locate HIV positive individuals who are aware of their HIV infection but not in care and connect them to medical care.

<sup>32</sup> Further investigation is needed for the pediatric cases (<13 years) in the dataset. As LAC's total reported HIV/AIDS prevalence of this population is only 42 HIV positive children as of December 31, 2011 (2011 Annual HIV Surveillance Summary), this is dramatically less than the 383 reported children in the linked dataset.

<sup>33</sup> Yunyin W. Hu, et. al. Using Laboratory Surveillance Data to Estimate Engagement in Care Among Persons Living with HIV in Los Angeles County, 2009. AIDS PATIENT CARE and STDs, Volume 26, Number 8, 2012.

Figure 24. Distribution of HIV Positive Individuals with Unmet Need in Los Angeles County (FY 2010-2011)

UNMET NEED CLIENTS, LOS ANGELES COUNTY, FY10-11



## ❖ HIV Positive Individuals Who are Accessing Services / Adherent to Care Plan

**Introduction:** LAC recognizes that there is a continuum of “engagement” in care. Some PLWH may access a broad spectrum of HIV-related services, including but not limited to: housing, mental health services, substance abuse treatment, medical care coordination, dental care, transportation, and much more. Some PLWH may receive these services and may not be accessing HIV medical care for a variety of reasons. However, the vision is that all PLWH in LAC have equal access to and fully participate in this broad continuum of services, including HIV medical care. Without a common reporting system that spans public and private service providers the data for PLWH receiving any services other than HIV primary medical care is not readily available countywide. Thus, quantifying this population is not possible.

However, with changes in California legislation, LAC has begun to use HIV surveillance data to examine timeliness of initial linkage to, access, and retention in medical care through the monitoring of reported viral load. Although using this methodology is in its infancy, it offers great potential for also identifying and following up with PLWH who are aware of their HIV infection and not linked to care. LAC considers linkage to care timely when there is a viral load test result present within 90 days of HIV diagnosis. LAC defines “retention in care” as a PLWH having at least two HIV medical care visits within a 12-month period at least three months apart. This definition is consistent with the most recent national guidelines.<sup>34</sup> Currently in LAC, adherence or retention is evidenced by viral load as the monitoring of CD4 count is not yet possible through the surveillance system (i.e., eHARS). As the updated HIV treatment guidelines (March 2012) recommend the initiation of ART for all PLWH regardless of CD4 count, in the future, LAC will be able to track the impact of ART on both individual and community viral load over time through eHARS.<sup>35</sup>

Despite the limitations, it is important to estimate the size and characteristics of PLWH who are retained in care in order to develop strategies and interventions that address barriers to care and promote retention and treatment adherence. The following section presents LAC’s estimates of PLWH who are *retained* in care as a surrogate measure for PLWH who are treatment adherent.

### ***Estimating the Number of PLWH Engaged in (Accessing Services) and Retained in HIV Primary Medical Care (Treatment adherent):***

Researchers in LAC recently completed the first study examining retention in care using HIV surveillance data for all PLWH reported as of December 31, 2009 (prevalent HIV or AIDS cases).<sup>36</sup> They examined demographic and other characteristics of PLWH who were retained in care as defined earlier. After completing a statistical analysis, the research team identified the statistically significant demographic or other characteristics associated with poor and successful retention in care (Table 7).

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<sup>34</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. 1–239. Available at <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>.

<sup>35</sup> Ibid.

<sup>36</sup> Yunyin W. Hu, et. al. Using Laboratory Surveillance Data to Estimate Engagement in Care Among Persons Living with HIV in Los Angeles County, 2009. AIDS Patient Care and STDs, Volume 26, Number 8, 2012.

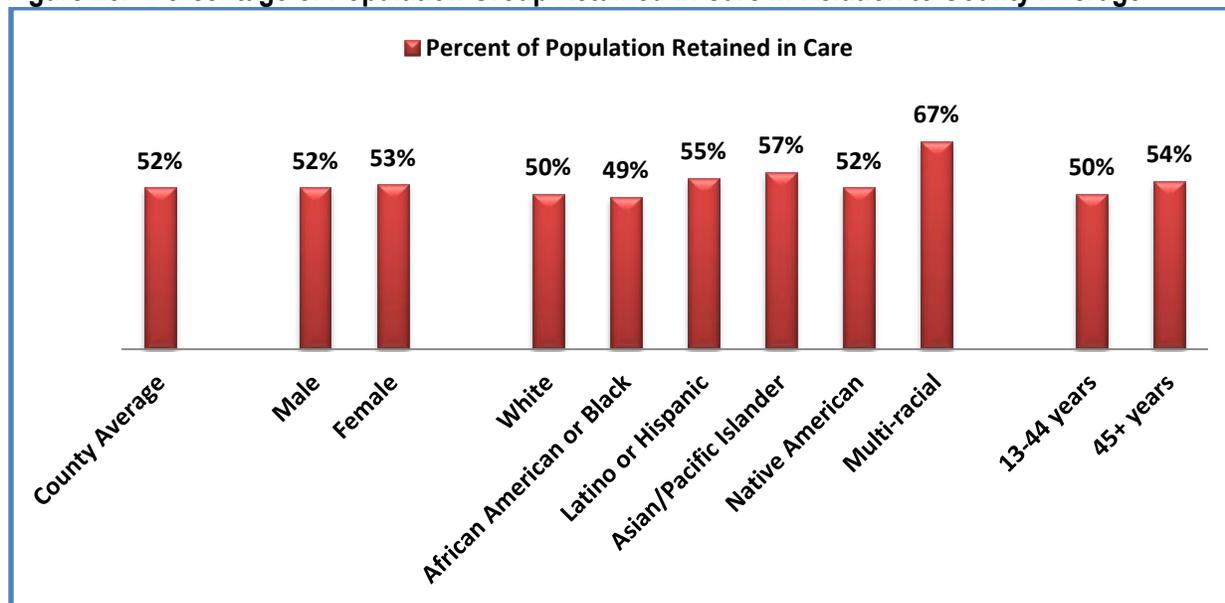
**Table 7. Characteristics of HIV Positive Persons with Poor/Successful Retention in Care (2 viral loads completed at least 90 days apart within calendar year), 2009**

Poor Retention in Care	Successful Retention in Care
<p><i>Individuals who are...</i></p> <ul style="list-style-type: none"> <li>• Male</li> <li>• Age 44 years or younger</li> <li>• IDU mode of transmission</li> <li>• Incarcerated at time of diagnosis</li> <li>• Diagnosed pre-HAART</li> <li>• Diagnosed at a public/Federal facility</li> <li>• Concurrently diagnosed with HIV and AIDS within one month of HIV diagnosis</li> </ul>	<p><i>Individuals who are...</i></p> <ul style="list-style-type: none"> <li>• Latino</li> <li>• Asian</li> <li>• Multi-race</li> <li>• Not born in the United States</li> </ul>

Source: Hu et al. Using Laboratory Surveillance Data to Estimate Engagement in Care Among PLWH in LAC, 2012.

As seen in Table 7, PLWH with the best retention in HIV primary medical care were PLWH who identified as Latino, Asian, Multi-race, or not born in the U.S. Figure 25 displays the level of retention within each of the demographic population groups. Although not statistically significant, females and PLWH aged 45 years and older also showed higher levels of retention (53% and 54% respectively) than the LAC average (52%).<sup>37</sup> Again, although not a statistically significant difference, African Americans had the lowest level of retention (49%) among these demographic categories.

**Figure 25. Percentage of Population Group Retained in Care in Relation to County Average**



Source: Hu et al. (2012)

In 2011, DHSP completed an analysis of Ryan White (RW) client data to examine retention in RW-funded HIV medical care. Using Casewatch data, a multivariate regression model was

<sup>37</sup> Note: This study did not examine transgender persons as the number was too small to include in the analysis.

constructed using data for RW clients who went to at least one medical outpatient visit during February 2009 – March 2010 (n=14,875).<sup>38</sup> Poor retention in care (outcome variable) was defined as fewer than two medical outpatient visits in a span of one year, in which one visit was at least 90 days apart from a previous visit. The model included race, age, gender, poverty, homelessness, health insurance status, immigration status, substance use, incarceration, mental health history, antiretroviral medication use, CD4 count, and undetectable viral load status.

The predictors of poor retention in care included RW clients: (1) who were living in unstable housing (homeless or transitional housing) (AOR: 1.4; 95% CI: 1.1-1.7); (2) with no health insurance or public health insurance (AOR: 0.7; 95% CI: 0.5-0.8; AOR: 0.6; 95% CI: 0.5-0.7); (3) who were recently incarcerated (AOR: 1.7; 95% CI: 1.4-2.1); and (4) with a CD4 count less than 200 (AOR: 1.4; 95% CI: 1.2-1.6). RW clients who were living in unstable housing were 1.4 times more likely to report poor retention in care than those with permanent housing. Those with no health insurance or public health insurance were 0.7 and 0.6 times less likely to fall out of care, respectively, compared to those with private health insurance. RW clients who had been recently incarcerated were 1.7 times more likely to fall out of care compared to those never incarcerated, and those with CD4 counts less than 200 were 1.4 times more likely to fall out of care compared to those with CD4 counts greater than 500.

Although this study was based on 2009 data, it provides a baseline for retention in HIV primary medical care for the County of 52%. This is the percentage of PLWH who are actively engaged in medical care and seeing their physician at least twice during the year (90 days apart). If applied to 2011 HIV prevalence (43,905 PLWH), there were an estimated 22,831 PLWH who are considered successfully *retained* (i.e., adherent to care plan) in care. The remaining 21,074 PLWH are either not in HIV primary medical care at all or are marginally in care and may be at risk of dropping out of care. As seen in Table 6, a total of 18,668 PLWH are aware of their HIV infection and not in HIV primary medical care. The remaining 4,163 PLWH may be those who are marginally in care and/or at risk of falling out of care. [Note: As these numbers are derived from various sources and varying time periods, it is important to use them solely as a starting point for future planning.]

#### **D. Social Determinants of Health**

The World Health Organization (WHO) describes social determinants of health as...

*...the conditions and circumstances into which people are born, grow, live, work, socialize, and form relationships and the systems that are in place to deal with health and wellness.*<sup>39</sup>

The University of California Los Angeles (UCLA) Center for HIV Identification, Prevention and Treatment Services (CHIPTS) further organizes and describes social determinants in three layers: (1) community networks, (2) living and working conditions, and (3) socio-economics and environment. They interrelate with each other in addition to biology and genetics. Collectively

<sup>38</sup> Data Source: Casewatch YR 19 (Feb. '09 – Mar. '10): Limited to Ryan White clients with one or more medical outpatient visit.

<sup>39</sup> Commission on Social Determinants of Health (CSDH). *Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health*. Geneva: World Health Organization; 2008.

they drive health inequities,<sup>40</sup> which are further defined as the *unjust and avoidable differences in health status and health outcomes among groups of people.*<sup>41</sup>

The increasing understanding of social determinants as having an impact on the health and well-being of people has become widely accepted. Healthy People (HP) 2020 includes a new section on social determinants, which emphasizes the need to understand these factors and their impact on health. HP2020 lists examples of social determinants, including:<sup>42</sup> Availability of resources to meet daily needs (e.g., safe housing and local food markets)

- Access to educational, economic, and job opportunities
- Access to health care services
- Quality of education and job training
- Availability of community-based resources in support of community living and opportunities for recreational and leisure-time activities
- Transportation options
- Social support
- Social norms and attitudes (e.g., discrimination, racism, and distrust of government)
- Exposure to crime, violence, and social disorder (e.g., presence of trash and lack of cooperation in a community)
- Socioeconomic conditions (e.g., concentrated poverty and the stressful conditions that accompany it)
- Language/Literacy
- Access to mass media and emerging technologies (e.g., cell phones, the Internet, and social media)
- Culture

Social determinants play an important role in facilitating or impeding one's optimal health and well being. Populations that are disproportionately impacted by social determinants experience greater health disparities. The CDC's 2010 White Paper describes this succinctly:<sup>43</sup>

*Social determinants, which are complex, integrated, and overlapping social structures and economic systems, are linked to lack of opportunity and to a lack of resources to protect, improve, and maintain health. Structural and societal factors such as social and physical environments, and availability, cost of, and access to health services, create pathways or barriers to good health.*

This White Paper cites many studies that illustrate the disproportionate impact of social determinants on PLWH. The following are key examples of study findings:<sup>44</sup>

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<sup>40</sup> Center for HIV Identification, Prevention and Treatment Services and Center for Strengthening Youth Prevention Paradigms. *HIV prevention at the structural level: the role of social determinants of health and HIV*. Los Angeles, CA; 2012.

<sup>41</sup> *Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health.*

<sup>42</sup> Healthy People 2020. Accessed from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=39>.

<sup>43</sup> Centers for Disease Control and Prevention. *Establishing a Holistic Framework to Reduce Inequities in HIV, Viral Hepatitis, STDs, and Tuberculosis in the United States*. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; October 2010. Available from: <http://www.cdc.gov/socialdeterminants/docs/SDH-White-Paper-2010.pdf>.

- HIV-infected persons with low literacy levels had less general knowledge of their disease and disease management and were more likely to be non-adherent to treatment than those with higher literacy.
- Black MSM at lower income levels are more likely to engage in sexual behaviors that put them at greater risk for acquiring STDs, compared to black MSM with higher income levels.
- Heterosexual men and women living below the poverty line were twice as likely to have HIV infection (2.4%) as those living above it (1.2%),
- Other social determinants of health—including homelessness, unemployment, and low education level—were independently associated with HIV infection.
- Income was shown to be an important predictor of a lack of health insurance among persons with HIV and, consequently, may be a reason why they are less likely to receive treatment.

Reducing health disparities is a primary goal of both the Patient Protection and Affordable Care Act (ACA) and the National HIV/AIDS Strategy (NHAS). However, although the ACA is focused on expanding health insurance coverage, lack of health insurance is only one of the many barriers that prevent the full participation of individuals, including PLWH in prevention, testing, treatment, and care services for HIV, STIs, and other health issues. The connection between social determinants, including homophobia, transphobia, stigma, homelessness and poverty combined with co-morbidities (e.g., addiction, mental illness, STI infection and hepatitis) fuel LAC's complex epidemic.

Although a full discussion of social determinants in LAC is not possible here, a brief discussion of the three key social determinants (i.e., lack of health insurance, poverty, and homelessness) and two important co-morbidities (i.e., mental illness and substance abuse) are described as they greatly impact PLWH's ability to reach their maximum health potential.

#### ❖ **Lack of Health Insurance**

LAC has one of the highest rates of uninsured individuals among all California counties. According to the 2009 California Health Interview Survey (CHIS), 17% of LAC residents were uninsured, and 23.7% of residents under the age of 65 were uninsured for some of the time during the past year.<sup>45</sup> This compares to 14.5% of all California residents who were uninsured at the time of survey. The 2009 CHIS reveals that there are disparities among health insurance coverage when examined by race/ethnicity. Lack of health insurance among LAC residents ranges from 6.2% among Native Americans to 21.2% among Latinos. It also varies geographically. The lowest percentage of uninsured is in SPA 8: South Bay (12.8%) and highest in SPA 6: South (26.4%). SPA 4: Metro (21.9%) had the second highest concentration of uninsured residents and SPA 7: East (20.8%) had the third highest.

Estimates of uninsured PLWH in LAC reflect those persons receiving Ryan White-funded services and do not reflect the full population of PLWH in the County. Thus, they must be

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<sup>44</sup> Ibid.

<sup>45</sup> University of California Los Angeles. California Health Interview Survey, 2009. Accessed February 28, 2012 at: [www.askchis.org](http://www.askchis.org).

interpreted with caution. The two most recent estimates of uninsured PLWH vary. Findings from the 2011 *Los Angeles Coordinated HIV Needs Assessment-Care (LACHNA-Care)*, which consisted of a representative sample of 450 PLWH receiving Ryan White funded services in LAC, revealed that 55.6% of PLWH surveyed were uninsured.<sup>46</sup> An earlier analysis of the 2010 Ryan White client data, conducted by staff from DHSP revealed that 63% of all clients had no insurance; of these, over half (56%) were Latino/a.

Lack of insurance among low-income people in LAC underscores the severity of need for additional resources for medical and support services. As part of California's *Bridge to Health Care Reform* (Affordable Care Act), California received a Medicaid 1115 Waiver (1115 Waiver) in 2009 to expand health insurance coverage to uninsured residents up to 133% of the federal poverty level (FPL). The 1115 Waiver led to the creation of Low Income Health Plans (LIHPs) throughout the State; Los Angeles County's LIHP has been named *Healthy Way LA*.<sup>47</sup> The LAC Department of Health Services (DHS) is targeting an enrollment of 550,000 residents into the new *Healthy Way LA* program.<sup>48</sup> DHSP estimates that 5,000 PLWH currently receiving Ryan White medical services will be eligible to enroll in this program. *Healthy Way LA* represents a major step forward to reducing the number of uninsured persons, including PLWH in LAC.

### ❖ Poverty

Low socioeconomic status is a powerful determinant of individual risk for HIV infection, health care access, and health outcomes. Poverty is particularly associated with increased morbidity and premature mortality. The CHIS 2009 found that 22.7% of LAC residents lived below FPL, compared to the state-wide rate of 17.8%. Similar to the uninsured, poverty is not equally distributed among LAC residents. Residents from LAC's diverse communities of color experience poverty at a significantly higher rate than White residents. According to CHIS 2009, 6.4% of Whites live below 100% of the FPL. Thirty-five percent (35.2%) of Latinos are living below 100% of the FPL, making them 5.5 times more likely than Whites to be living in poverty. African Americans are the second most impacted group by poverty; 22% live below 100% of the FPL. About 13.6% of Native Americans and 14.4% of Asian/Pacific Islanders live in poverty. Sixty-four percent (64.2%) of PLWH responding to the 2011 LACHNA-Care survey reported living below 100% FPL.

Geographically, poverty is also unequally distributed across the county. Compared to 22.7% in LAC overall, residents in SPA 5 (West) have the lowest level of poverty in LAC (12.2%). The rate of poverty for residents of SPA 6 (South) was more than twice as high (48.9%) as the county average and four times as high as SPA 5 (Metro). Other SPAs, which also have a higher than average proportion of residents living in poverty include: SPA 4 (Metro) (29%), SPA 8 (South Bay) (22.6%), SPA 7 (East) (22.2%), and SPA 1 (Antelope Valley) (21.6%). With lower rates than the county average, only 15% of SPA 2 (San Fernando Valley) residents and 17.3% of SPA 3 (San Gabriel Valley) residents live below 100% FPL.

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<sup>46</sup> Division of HIV and STD Programs, Los Angeles County Department of Public Health and the Los Angeles County Commission on HIV, *Los Angeles Coordinated HIV Needs Assessment-Care (LACHNA-Care): 2011 Final Report*, December 2011:1-153.

<sup>47</sup> Los Angeles County Commission on HIV. *Program/Planning News*. HCR Brief #2: Commission Role in Health Care Reform, July 14, 2011.

<sup>48</sup> Los Angeles County Health Services. *More Information on HWLA*. Accessed March 15, 2012 at: [www.ladhs.org/wps/portal/HWLA](http://www.ladhs.org/wps/portal/HWLA).

While the FPL is the official measure of poverty used to determine income eligibility for most public benefits programs, the measure is an outdated one, developed in the 1960s and based solely on the cost of the basic food budget needed to meet minimum nutritional requirements. The FPL does not take into account costs for housing, transportation, health care, and other necessary living expenses. Thus, estimates of poverty in LAC based on the FPL more likely reflect a picture of people living in *extreme* poverty. Continuing rates of high unemployment in LAC compound the effects of existing poverty. As of August 2012, the seasonally adjusted unemployment rate in LAC was 11.0%, compared to 10.6% in California and 8.1% nationally.<sup>49</sup>

### ❖ Homelessness

In December 2011, the U.S. Department of Housing and Urban Development (HUD) clarified and expanded the definition of “homeless,” which included “*an individual or family who resided in shelter or a place not meant for human habitation and who is exiting an institution where he or she temporarily resided.*”<sup>50</sup> A “chronically homeless” person is defined as “*an unaccompanied disabled person who has been continuously homeless for over one year or has had at least four episodes of homelessness in three years; or a family is considered chronically homeless if at least one member meets the definition of chronic homelessness.*”<sup>51 52</sup> The National Health Care for the Homeless Council (NHCHC) notes the interrelatedness between health, homelessness, and access to care. In short, homeless persons are “*exposed to the elements, disease, violence, unsanitary conditions, malnutrition, stress and addictive substances.*”<sup>53</sup> The NHCHC further states that “*the majority of homeless people do not have health insurance or the ability to pay for needed care...*” In addition to poverty and lack of insurance, homeless persons may encounter other barriers to accessing medical care and/or other supportive services, including but not limited to lack of knowledge about where to go for services, lack of transportation, co-existing mental health disorders and/or active substance abuse, as well as stigma and discrimination.

The Los Angeles Homeless Services Authority (LAHSA) is responsible for conducting the largest homeless count in the U.S. LAHSA’s biennial homeless count covers over 4,000 square miles of Los Angeles County, excluding the cities of Pasadena, Glendale, and Long Beach, which complete their own homeless counts. The *2011 Greater Los Angeles Homeless Count* (GLAHC) reported that on any given night, there are 51,340 homeless persons in LAC, including all cities.<sup>54</sup> This was a decrease of 3.2% from the 2009 homeless count (53,046 persons). Individually, the Los Angeles Continuum of Care (CoC) found 45,422 homeless persons; the Pasadena CoC found 1,216 homeless persons; Glendale CoC found 412 homeless persons; and the Long Beach CoC found 4,290 homeless persons. Despite the decrease in the point-in-time

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<sup>49</sup> State of California Employment Development Department, Labor Market Information Division. Los Angeles-Long Beach-Glendale Metropolitan Division (Los Angeles County), September 21, 2012. Accessed October 3, 2012 at: [http://www.calmis.ca.gov/file/1fmonth/la\\$pbs.pdf](http://www.calmis.ca.gov/file/1fmonth/la$pbs.pdf).

<sup>50</sup> “Homeless Emergency Assistance and Rapid Transition to Housing: Defining “Homeless.” Federal Register 76:233 (December 5, 2011) p. 75995. Available from: [http://www.hudhre.info/documents/HEARTH\\_HomelessDefinition\\_FinalRule.pdf](http://www.hudhre.info/documents/HEARTH_HomelessDefinition_FinalRule.pdf).

<sup>51</sup> U.S. Department of Housing and Urban Development.

<sup>52</sup> An “unaccompanied disabled person” refers to a person with a disabling condition who is travelling alone.

<sup>53</sup> National Health Care for the Homeless Council. “Homelessness & Health: What’s the Connection?” January 2010. Available from: [http://www.nhchc.org/wp-content/uploads/2011/09/HIn\\_health\\_factsheet\\_Jan10.pdf](http://www.nhchc.org/wp-content/uploads/2011/09/HIn_health_factsheet_Jan10.pdf).

<sup>54</sup> This includes aggregate number from the four homeless counts conducted in LAC: Los Angeles,

estimate of homeless persons, LAHSA's 2011 annualized estimate of 120,070 homeless persons in the Los Angeles CoC was significantly higher (24.8%) than in 2009 (96,169).<sup>55</sup> As this annualized number excludes Pasadena, Glendale, and Long Beach, this should be considered as a low estimate of the total annualized number of homeless persons in LAC.

Due to significant differences in the demographic and other data collected across the four homeless counts, they cannot be compared. The Los Angeles CoC represents 88.5% of all homeless persons counted in the County. The Los Angeles CoC found that 65.4% of homeless were male and 34.6% female. African Americans (43.7%) represented the largest racial group of the homeless population, followed by Latino/as (27.7%), Whites (24.9%), Asian/Pacific Islanders (2.3%), and Native Americans (1.4%). Twenty-four percent (24%) of Los Angeles CoC's homeless were chronically homeless; 2% had HIV/AIDS; 33% were mentally ill; 34% had a substance abuse problem; 18% were veterans; 10% were survivors of domestic violence; 13% were children under 18; and 7.2% were 62 years and older.

To more accurately geographically assess the distribution of homeless persons by SPA the homeless counts for the Pasadena CoC, Glendale CoC, and Long Beach CoC were added to the respective SPA in which each city is located. Thus, for this discussion, the count for the Pasadena CoC was assigned to SPA 3: San Gabriel Valley; the Glendale CoC count was added to SPA 2: San Fernando Valley; and the Long Beach CoC count was added to SPA 8: South Bay. Table 8 reflects the results of this analysis. Because the boundaries for each of the four counts do not overlap, it is reasonable to assume that the total represents an unduplicated number.

**Table 8. 2011 Point-In-Time Count of Homeless Persons by Service Planning Area (n=51,340)**

CoC	SPA 1	SPA 2	SPA 3	SPA 4	SPA 5	SPA 6	SPA 7	SPA 8
Los Angeles	1,412	4,727	3,918	11,571	3,512	8,735	4,759	6,788
Pasadena			1,216					
Glendale		412						
Long Beach								4,290
Total	1,412	5,139	5,134	11,571	3,512	8,735	4,759	11,078
Percent	2.8%	10.0%	10.0%	22.5%	6.8%	17.0%	9.3%	21.6%

Source: 2011 Greater Los Angeles Homeless Count, August 2011

As seen in Table 8, SPA 4: Metro (22.5%), SPA 8: South Bay (21.6%), and SPA 6: South (17.0%) are the SPAs most highly impacted by homelessness. Together they have nearly two-thirds (61.1%) of all homeless persons in LAC. As discussed earlier, these three SPAs have the highest rates of poverty in the County. SPA 4: Metro and SPA 6: South also have the highest rates of being uninsured in LAC.

According to the research report by Inter-University Consortium Against Homelessness, in LAC, 20,000 people released from jail or prison become homeless each year; 8,400 homeless mental health patients were treated by the County Department of Mental Health; and 8,500 homeless substance users were treated by the County Substance Abuse Prevention and Control Program.<sup>56</sup>

<sup>55</sup> Los Angeles Homeless Services Authority, 2011 Greater Los Angeles Homeless Count Report, 2011:1-52.

<sup>56</sup> Inter-University Consortium Against Homelessness. Ending Homelessness in Los Angeles. January 2007. Available from [http://www.bringlahome.org/docs/Ending\\_Homelessness\\_in\\_LA%202007.pdf](http://www.bringlahome.org/docs/Ending_Homelessness_in_LA%202007.pdf).

Additionally, the report states that about 30,000 homeless each year are veterans. In 2009, LAC DHSP HIV epidemiology staff estimated there were 4,960 homeless PLWH in LAC, representing 10.1% of all people diagnosed with HIV and AIDS in LAC.<sup>57</sup>

### ❖ Mental Illness

The impact of mental illness can greatly impair a person’s ability to make positive choices about their health and well-being. A dual diagnosis of mental illness with an alcohol and/or substance disorder further challenges such decisions. A new report from the Substance Abuse and Mental Health Services Administration (SAMHSA) reveals that in 2010, one in five adults (20%), 18 years and older, experienced mental illness in the past year; the estimate is 19.5% for large metropolitan areas.<sup>58</sup> As of the 2010 U.S. Census, 75% of LAC’s population (7,368,214) were adults age 18 years and older.<sup>59</sup> Applying the percentage (19.5%) of adults experiencing mental illness in the past year to LAC’s adult population, there are an estimated 1,436,802 LAC residents with mental illness. However, the SAMHSA report also indicates that persons living in poverty are more severely impacted by mental illness and in 2010, 29.5% of those living below 100% of the federal poverty level (FPL) experienced mental illness in the past year, and 23.3% of persons between 100% and 199% FPL, and 17% of persons 200% or more of the FPL experienced mental illness. With the high level of poverty in Los Angeles County among adults 18 years and older (20.3% below 100% FPL and 19.5% of residents between 100% and 199% FPL according to the 2009 CHIS), the estimated prevalence of mental illness among adults in LAC is higher (20.8%) than the national average for comparable metropolitan areas. Table 9 outlines these results.

**Table 9. Estimated Prevalence of Mental Illness in Los Angeles County’s Adult Population**

Poverty Level	Adults (≥18 yrs) in Poverty (1)	Population (2) (Adults ≥18 yrs)	Mental Illness Prevalence (3)	Prevalence of Mental Illness in LAC
0-99% FPL	20.3%	1,495,747	29.5%	441,245
100-199% FPL	19.5%	1,436,802	23.3%	334,775
200% FPL and above	60.1%	4,435,665	17.0%	754,063
Total	100.0%	7,368,214	<b>20.8%</b>	1,530,083

(1) UCLA, 2009 California Health Interview Survey, [www.askchis.com](http://www.askchis.com).

(2) U.S. Census Bureau, 2010 Census

(3) SAMHSA, 2010 National Survey on Drug Use and Health

Mental illness can affect the progression of HIV disease, medication adherence, and the likelihood of engaging in high-risk behaviors that may result in HIV transmission. Twenty-one percent (21%) of Ryan White clients receiving services in FY 2010 self-reported a recent history of mental illness.<sup>60</sup> Although this is consistent with LAC’s revised estimate of mental illness in the general population, it may underestimate the actual prevalence of mental illness in this

<sup>57</sup> HIV Epidemiology Program, Los Angeles County Department of Public Health, An Epidemiologic Profile of HIV and AIDS in Los Angeles County, 2009:1-151.

<sup>58</sup> Substance Abuse and Mental Health Services Administration, Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-42, HHS Publication No. (SMA) 11-4667. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2012.

<sup>59</sup> Source: U.S. Census Bureau, 2010 Census. Summary File 1, Table PCT12.

<sup>60</sup> Division of HIV and STD Programs, Casewatch Ryan White Client Data System, February 28, 2011.

population as Ryan White clients are even more disproportionately impacted by poverty. According to the 2011 Los Angeles Coordinated HIV Needs Assessment—Care, 90.4% of Ryan White clients live below 200% FPL; 64.4% at or below 100% FPL and 26% live below 200% FPL.<sup>61</sup> Applying these percentages based on poverty level to the Ryan White population (19,234)<sup>62</sup> results in an estimated 26.7% prevalence of mental illness among PLWH in LAC.

Co-occurring disorders further impair a person’s ability to function in life. In its 2002 report to Congress, SAMHSA defines people with co-occurring mental and substance abuse disorders: *Individuals who have at least one mental disorder as well as an alcohol or drug use disorder.*<sup>63</sup> The report estimates that about fifteen percent (15%) of adults with a diagnosable mental disorder also have a co-occurring substance abuse disorder.

### ❖ Substance Abuse

Unlike other parts of the country, the connection between substance use and HIV in LAC centers on unsafe sex while under the influence of alcohol or other drugs, rather than needle sharing. Substance abuse interferes with both adherence to medication regimens and treatment efficacy. Thus, in LAC, analysis of injection drug use alone does not characterize the impact of substance abuse on HIV infection. Prevalence of other drug/alcohol use must be considered.

There are several key indicators of drug and alcohol risk in the general population, including but not limited to *past month alcohol use, past month binge drinking, and past month illicit drug use, and admissions to alcohol and other drug treatment*, among others. Table 10 presents available data on some of the alcohol and drug-related indicators for LAC and California.

**Table 10. Selected Indicators from the National Survey on Drug Use and Health (NSDUH) 2006-2008 for Los Angeles County and California<sup>64</sup>**

Indicator	LA County	California
Alcohol use in past month, aged 12 or older	46.2%	49.7%
Alcohol use in past month, aged 12 to 20	22.7%	25.6%
Binge alcohol use in past month, aged 12 or older	20.4%	21.5%
Binge alcohol use in past month, aged 12 to 20	13.5%	16.9%
Illicit drug use in past month, aged 12 and older	7.8%	9.3%
Illicit drug use in past month, other than marijuana, aged 12 and older	3.6%	4.1%
Alcohol dependence or abuse in past year, aged 12 and older	7.5%	8.0%
Illicit drug dependence or abuse in past year, aged 12 and older	2.5%	2.8%
Dependence on or abuse of illicit drugs or alcohol in past year, aged 12 and older	8.8%	9.4%

<sup>61</sup> Division of HIV and STD Programs, Los Angeles County Department of Public Health and the Los Angeles County Commission on HIV, Los Angeles Coordinated HIV Needs Assessment-Care (LACHNA-Care): 2011 Final Report, December 2011:1-153.

<sup>62</sup> Division of HIV and STD Programs, Casewatch Ryan White Client Data System, February 28, 2011.

<sup>63</sup> SAMHSA. Report to Congress on the Prevention and Treatment of Co-Occurring Substance Abuse Disorders and Mental Disorders, November 2002. Available from: <http://www.samhsa.gov/reports/congress2002/chap1ucod.htm>.

<sup>64</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2010). *Substate estimates from the 2006-2008 National Surveys on Drug Use and Health*. Rockville, MD. This is a web only report and is available at: <http://oas.samhsa.gov/substate2k10/toc.cfm>.

The National Survey on Drug Use and Health (NSDUH) examined binge alcohol<sup>65</sup> use in the past 30 days. For youth aged 12 to 20 years, binge use was 13.5% compared to 20.4% among all persons aged 12 years and older. The 2009 California Health Interview Survey (CHIS) further asked respondents about binge use over the course of a year. The 2009 CHIS found that 27% of adults (18 years and older) reported binge use of alcohol. However, there were significant differences by gender: males (34.3%) and females (20.1%).

In Fiscal Year 2009-2010, the LAC Substance Abuse Prevention and Control Program reported there were 60,629 total admissions to publicly-funded treatment programs; one-sixth (18% or 10,947) of total admissions identified methamphetamine (meth) as their primary problem.<sup>66</sup> Among gay or non-gay identified MSM in LAC, meth use is frequently associated with increased sexual activity and unsafe sex.<sup>67</sup> Meth-using MSM are much more likely to have casual sex, multiple sexual partners and report inconsistent condom use than MSM who do not use meth. Meth users have numerous clinical challenges such as poor treatment engagement rates, high drop-out rates, high relapse rates, severe paranoia, and declining oral health. A 2005 San Francisco study among meth-using MSM found that meth users were three times more likely than non-meth users to be infected with HIV.<sup>68</sup> In 2005, the LAC Department of Public Health estimated the prevalence of meth use in the past year in LAC to be 1.4% of all adults 18 years and older.<sup>69</sup> The LAC report further identified that meth use was highest among LAC MSM (4.0%), and youth 18 to 29 years old (3.1%). Other research has shown that there have been increases in non-injection meth use among MSM, non-MSM and Latino men diagnosed with AIDS.<sup>70</sup>

### ***E. A New Model: Using Syndemic Planning with Spatial Epidemiology***

For more than ten years, Los Angeles County has included geography as part of its toolkit for allocating HIV prevention and testing resources. This began with simply using the percentage of total people living with HIV and AIDS (PLWH) reported by service planning area (SPA). This SPA-based method evolved into the Geographic Estimate of Need (GEN), which included additional SPA-level indicators such as poverty and sexually transmitted infections (STIs). The GEN was an early attempt to account for other socioeconomic and health indicators to measure disease burden and determine the SPAs most highly impacted by HIV/AIDS. The GEN model was updated and used in the *Los Angeles County HIV Prevention Plan: 2009-2013*. At that time, the Office of AIDS Programs and Policy (now the Division of HIV and STD Programs) also began using HIV testing data by zip code to identify “hot spot” zip codes. These *hot spots* were areas in Los Angeles County with the largest number of newly diagnosed HIV cases. In recent years, DHSP has begun using “spatial epidemiology” to examine disease trends through a new geographic lens. Geographic information systems (GIS) technology allows us to create maps and pinpoint at a more local level (i.e., neighborhoods) where the HIV epidemic is located.

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<sup>65</sup> Binge use is defined as 5 or more drinks on one occasion for males and 4 or more drinks for females.

<sup>66</sup> Substance Abuse Prevention and Control, Los Angeles County Participant Reporting System, FY 2009-2010 data.

<sup>67</sup> Wohl et al, *AIDS and Behavior* 2008;12:705-712.

<sup>68</sup> Buchacz K, McFarland W, Kellogg TA, et al. Amphetamine use is associated with increased HIV incidence among men who have sex with men in San Francisco [Research Letters]. *AIDS* 2005;19:1423-1424.

<sup>69</sup> Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health, *Methamphetamine Use in Los Angeles County Adults*, LA Health; October 2006.

<sup>70</sup> Wohl et al, *JAIDS* 2007;vol 45, number 15, pp 601-602.

In 2009, the CDC outlined its HIV/STD program collaboration and service integration (PCSI) strategic priority. PCSI was designed to *strengthen collaborative work across disease areas and integrate services that are provided by related programs.*<sup>71</sup> This laid the groundwork for a new approach to planning in LAC—a syndemic approach (i.e., multi-disease).

The CDC describes a syndemic orientation:

*Whereas the usual public health approach begins by defining the disease in question, a syndemic orientation first defines the people in question. With this frame of reference, it goes on to identify links among the entire set of issues that create excess burden of disease among the group's members... In virtually all societies, the heaviest burden of disease falls upon those who are socially marginalized, disenfranchised, or oppressed.*<sup>72</sup>

At minimum, a syndemic approach to health planning requires examining the interrelationship between two or more diseases when assessing disease burden in a population. As LAC had already used multiple social and health indicators in its GEN model, a syndemic approach is consistent with this planning approach. However, advances in GIS technology now allow the geographic mapping of HIV and other diseases and/or indicators at the neighborhood level versus at the zip code level. Thus, using GIS and spatial statistical analysis provide an effective tool in identifying smaller-area disease trends.

Although previous SPA-based planning was useful at the time as the best method available for allocating HIV prevention resources geographically, the uneven distribution of HIV cannot be explained by SPA boundaries.<sup>73</sup> Figure 26 depicts SPA 8 (South Bay). As seen, the HIV case density varies across the SPA from light yellow (low density) to dark red (high density). The downtown Long Beach and adjacent neighborhoods (dark red) had the highest concentration of new HIV cases in 2009. Thus, targeting highly-impacted neighborhoods rather than SPAs will have the greatest impact on the epidemic. With spatial epidemiology (i.e., geographic mapping of disease trends), LAC is able to more readily identify those areas of each SPA where there are higher concentrations of PLWH.

Thus, with newer GIS technology, SPA-based planning is no longer the most effective method for identifying areas of greater disease burden across LAC's 4,084 square miles. Using GIS for geographically mapping HIV at the neighborhood level gives LAC a more effective tool to align with the NHAS and target HIV/STI prevention efforts in communities where HIV is most heavily concentrated.

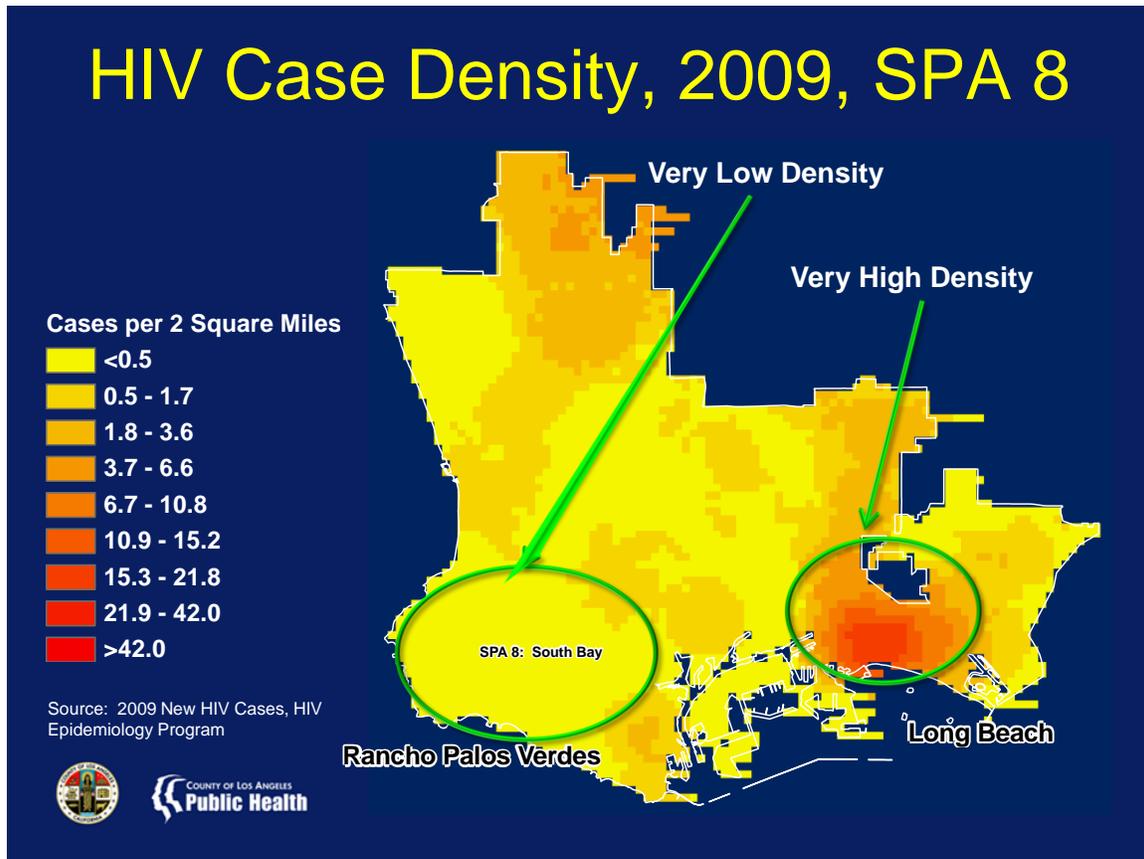
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<sup>71</sup> Centers for Disease Control and Prevention. Program Collaboration and Service Integration: Enhancing the Prevention and Control of HIV/AIDS, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis in the United States. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2009.

<sup>72</sup> CDC. Syndemics Overview: What Principles Characterize a Syndemic Orientation? Centers for Disease Control and Prevention: Atlanta, GA. 2001. Available from <http://www.cdc.gov/syndemics/overview-principles.htm>.

<sup>73</sup> Janson et al. NHPC, 2011.

Figure 26. 2009 Case Density for New HIV Cases in SPA 8 (South Bay)



In 2011, as part of the CDC-funded Enhanced Comprehensive HIV Prevention Planning (ECHPP) project, DHSP developed and used a syndemic planning model to focus on connections among HIV and STIs as determinants of risk for HIV disease. Using 2009 data, LAC conducted its first syndemic geospatial analysis to assess areas (clusters) where the co-occurring epidemics of HIV, syphilis, and gonorrhea are concentrated. Using accepted statistical methods (i.e., Nearest Neighbor Hierarchical Clustering), staff geo-coded and examined HIV, syphilis, and gonorrhea new infections from 2009 surveillance data to analyze HIV cases, syphilis with HIV co-infection, syphilis without HIV co-infection, and gonorrhea cases. Clusters were identified for each of these analyses and the five sets of clusters were overlaid. Further spatial analysis identified five syndemic cluster areas within the County. The five cluster areas represent 81.8% of new HIV cases, 81.9% of syphilis with HIV co-infection, 78.9% of Syphilis without HIV, and 79.0% of gonorrhea cases diagnosed in 2009. The five overlapping cluster areas that resulted were identified as syndemic clusters (Figure 27) and identified as the Central, South, Northwest, East, and North clusters (See Attachment B for individual cluster maps).

Figure 27. Five Syndemic Cluster Areas using Nearest Neighbor Hierarchical Clustering Methodology

### Nearest Neighbor Hierarchical Clustering Summary<sup>1</sup>

#### HIV/STI Clusters

- HIV Cases
- Syphilis and HIV co-Infection
- Syphilis, no HIV
- GC and HIV co-Infection
- GC, no HIV
- Los Angeles County

<sup>1</sup>Nearest Neighbor Hierarchical Clusters output at 1.0 standard deviations using fixed-distance band threshold

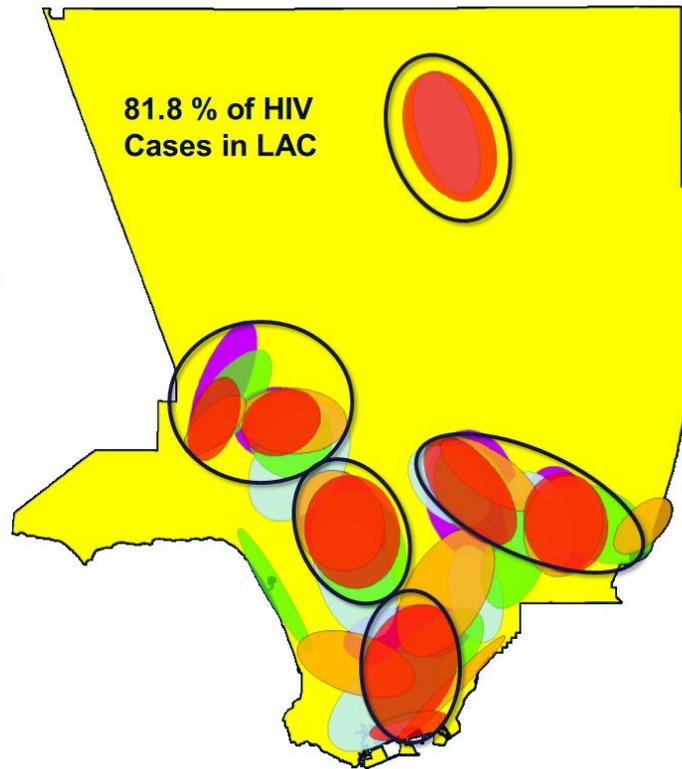
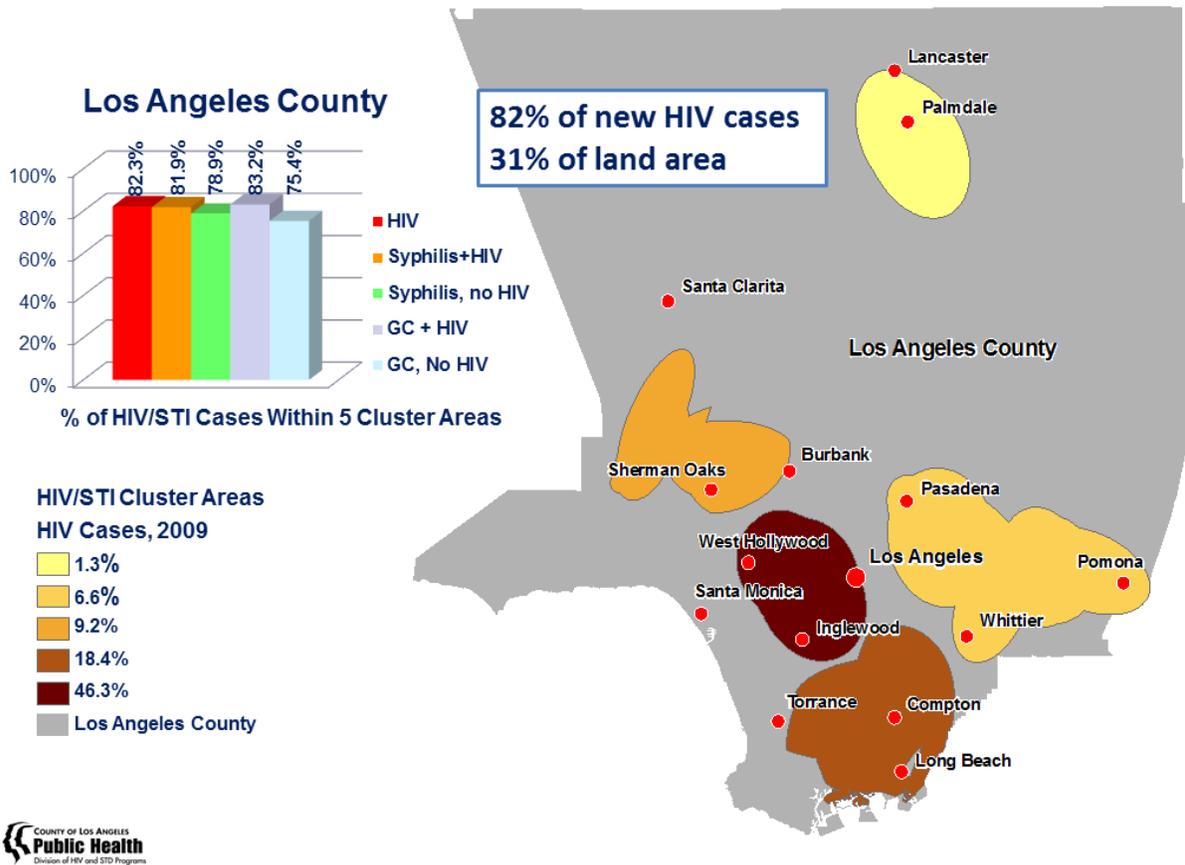


Figure 28 clearly shows that almost half (46.3%) of newly diagnosed PLWH reported in 2009 were in the Central Cluster (circle surrounding it). Leveraging GIS, in combination with a syndemic approach, the DHSP is able to more precisely identify areas of LAC with greatest disease burden.

**Figure 28. Los Angeles County with HIV/STI Cluster Areas: HIV Cases, 2009**



The use of spatial epidemiology has demonstrated that HIV and STI cases are not dispersed evenly but rather clustered in smaller areas within LAC. The identification of five (5) syndemic clusters, which represent the vast majority of new HIV and STI cases and are contained within 34.5% of the total land area of the County, provides health planners with a clear picture of the HIV and STI epicenters within LAC.

DHSP will continue to expand its use of syndemic planning and spatial epidemiology over the next five years. The limitations of the current maps are that they include only new HIV cases in one specific year (i.e., 2009). Key next steps will be to include newly diagnosed HIV cases in multiple years, total HIV/AIDS prevalence, and expand the syndemic model to examine other social determinants of health such as poverty, and other critical co-factors such as substance abuse. However, syndemic planning with spatial epidemiology represents LAC’s current best effort to understand the HIV/STI syndemic geographically in order to maximize resources for HIV services along the continuum of care. These maps will be crucial in the next steps of community and program planning in addressing the most impacted areas within LAC as well as better positioning LAC for meeting the NHAS goals

## ***F. Sexually Transmitted Infections (STI)***

The incidence and rate of newly-diagnosed cases of STIs is an important indicator of unprotected high risk sexual activity. Persons who are at risk for STIs are also at risk for HIV if they are engaged in unprotected sex with an HIV positive individual who may or may not know his/her HIV status. Research has shown that there is a strong association between HIV and other STIs. In fact, there is a two- to five-fold increased risk for HIV among persons who have other STIs.<sup>74</sup>

Using a syndemic planning approach for HIV, examining the impact of STIs in LAC is increasingly important. In the mapping that was completed and discussed in the previous section, not only were newly diagnosed HIV cases a component but also newly diagnosed gonorrhea, chlamydia, and syphilis cases for that year. It is not surprising then to see that the incidence of new STIs in LAC is considerably higher than in the State of California overall. In 2011, the rate for early syphilis in LAC was 11.2/100,000, compared with 5.5/100,000 in California overall. The gonorrhea rate in 2011 was 102.3/100,000, compared to 73.1/100,000 in California. The 2011 rate for chlamydia was 510.6/100,000, compared to 438.0/100,000 in California.<sup>75</sup>

Since 1999, LAC has experienced a resurgence of syphilis, with cases initially reported primarily among gay and non-gay identified MSM. Between 2001 and 2009, early syphilis in LAC increased dramatically, from 423 to 1,671 cases. In 2009, approximately 54% of people with syphilis were also HIV-infected; among gay and non-gay identified MSM with syphilis, the rate of co-infection was even higher, at 62%.<sup>76</sup>

While syphilis still predominantly occurs among gay and non-gay identified MSM, it has a significant impact on communities of color, especially women. In 2009, Latinos/as and African Americans constituted 44% and 16% respectively of early syphilis cases. Among female early syphilis cases, 30% were among African American women and 55% were among Latinas.<sup>77</sup> Moreover, some of these women only discovered that they had HIV/AIDS when they sought treatment for syphilis. Among all racial groups living with HIV/AIDS, African American women reported more STIs than other groups.<sup>78</sup>

The persistence of syphilis in LAC, particularly among gay and non-gay identified MSM and communities of color, presents an ongoing public health challenge. Emerging infected populations (such as women of color) also require focused testing and treatment efforts in order to reduce the incidence of new infections.

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<sup>74</sup> CDC. *Trends in Reportable Sexually Transmitted Diseases in the United States, 2005*, December 2006. Available from <http://www.cdc.gov/std/stats05/trends2005.htm>.

<sup>75</sup> California Department of Public Health, STD Control Branch. *California Local Health Jurisdiction STD Data Summaries, 2011 Provisional Data*, August 2012.

<sup>76</sup> Sexually Transmitted Disease Program, Los Angeles County Department of Public Health. *Early Syphilis Surveillance Summary*, May 31, 2010; pp 1-45.

<sup>77</sup> *Early Syphilis Surveillance Summary 2010*.

<sup>78</sup> Wohl et al: *JAIDS* 1998;19:413-420.

### III. KEY POPULATIONS IN LOS ANGELES COUNTY

#### A. Introduction

As seen in the data presented in the *Epidemiologic Overview*, there are many populations in LAC that are significantly impacted by HIV. The level of impact varies. One group may have among the largest number of PLWH but another group is underrepresented among persons accessing HIV medical care and another group delays HIV testing, which may result in poorer health outcomes or concurrent AIDS diagnosis. For other populations, the data is simply not available due to limitations in the data collection instruments and/or reporting systems. Yet, staff of local organizations know through experience and anecdotal client self-reporting that these populations face unique service delivery challenges and/or barriers that prevent their full participation in HIV services. When viewed through a syndemic lens, many of the populations impacted by HIV are also impacted by other diseases and/or social determinant of health indicators (e.g., poverty, education, unemployment), which make these populations especially vulnerable.

In planning for HIV care-related services, HIV positive individuals are the focus of services, particularly those who are low-income. In terms of prevention, historically, LAC has prioritized populations in order to better target HIV testing and prevention services. The CDC's new 2012 *HIV Planning Guidance* no longer requires this prioritization.<sup>79</sup> However, due to the size and complexity of LAC's HIV epidemic, the Commission on HIV/Prevention Planning Committee Comprehensive HIV Planning Task Force (Commission/PPC CHP Task Force) deemed it critical that this aspect of planning in LAC continue. Thus, in September 2012, a community sub-group of the Commission/PPC CHP Task Force met to discuss key populations in LAC.

These community partners began their deliberations with an overview of how the Commission and PPC identified special and priority populations in the past. The Commission's special populations were identified through available evidence, both quantitative and anecdotal or experiential; and the PPC's priority populations were identified through a detailed evidence-based process. The community group also identified six major reasons why LAC should continue to identify key populations locally. They believe that identifying key populations in LAC will help in:

1. Evaluating effectiveness of services;
2. Designing programs and services;
3. Informing resource allocations;
4. Ensuring accountability;
5. Promoting stakeholder awareness; and
6. Reducing disparities.

During this discussion, the workgroup acknowledged that the priority populations targeted for HIV testing and prevention services may not be exactly the same. However, as the discussion progressed, the community group reached consensus on what they identified as the "key" populations in LAC, including priority subpopulations. The key populations are populations

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<sup>79</sup> Centers for Disease Control and Prevention. HIV Planning Guidance, July 2012. Available from: [http://www.cdc.gov/hiv/topics/funding/PS12-1201/pdf/HIV\\_Planning\\_Guidance.pdf](http://www.cdc.gov/hiv/topics/funding/PS12-1201/pdf/HIV_Planning_Guidance.pdf).

where there is at least some data readily available, which demonstrates how they have been impacted by HIV. In addition to these key populations and their priority subpopulations, the workgroup identified several “populations of interest.” These populations have unique characteristics and/or barriers to accessing HIV services but the evidence may be more experiential and anecdotal than quantitative. They represent populations where additional data (e.g., needs assessment, research) is needed. Table 11 presents the key populations, priority subpopulations, and populations of interest identified by the Commission/PPC CHP Task Force.

**Table 11. Key Populations, Priority Subpopulations, and Populations of Interest**

Key Populations	Priority Subpopulations
<ul style="list-style-type: none"> <li>❖ HIV Positive</li> <li>❖ MSM</li> <li>❖ Women</li> <li>❖ Youth (13-24 years)</li> <li>❖ Transgender Persons</li> <li>❖ Persons who share injection paraphernalia (SIP)</li> </ul>	<ul style="list-style-type: none"> <li>❖ HIV Positive – undiagnosed &amp; not in care; sexual and/or needle sharing partners</li> <li>❖ African American and Latino MSM</li> <li>❖ African American Women and Latinas</li> <li>❖ Young MSM (YMSM)</li> <li>❖ Transgender Persons – Native American &amp; others</li> </ul>
Populations of Interest	
<ul style="list-style-type: none"> <li>● Homeless</li> <li>● Incarcerated / Post-incarcerated</li> <li>● Undocumented</li> <li>● Mentally ill</li> </ul>	<ul style="list-style-type: none"> <li>● Sex workers / sex for exchange</li> <li>● Persons with sensory impairments (i.e., partially sighted/blind, hearing impaired/deaf)</li> <li>● Asian/Pacific Islanders</li> <li>● Aging Persons (50 years and older)</li> </ul>

The following narrative presents some of the available evidence for the key populations identified and their priority subpopulations. Much of the HIV specific data has been taken from the *Epidemiologic Overview* as well as population-specific queries through LAC’s eHARS. Unless otherwise noted, all HIV data reflects HIV and AIDS cases reported through December 31, 2011 as of February 28, 2012. In some instances data was extracted at a different data point (e.g., data used in LAC’s Ryan White Part A application) and as a result, actual numbers will vary.

### ***B. Los Angeles County’s Key Populations***

#### **❖ HIV Positive Individuals**

HIV positive individuals are a *Key Population* for several reasons. First, they are the focus of and purpose for all care-related services, and second, with the increasing emphasis on *treatment as prevention*, HIV positive individuals are a key population for HIV testing and prevention services. In its *High Impact Prevention* initiative, 9 of the CDC’s 14 required interventions specifically target HIV positive individuals (Attachment A). These interventions blur the boundaries of prevention and care as several are specifically about linkage to and retention in care as well as adherence to treatment. Two important subpopulations of HIV positive individuals are the 18.1% in LAC who remain undiagnosed and therefore unaware of their HIV infection; and, among those aware of their HIV infection, the 33.2% who remain out of care. By

extension, the serodiscordant (i.e., HIV negative) sexual and needle sharing partners of HIV positive individuals are also an important subpopulation of HIV positive individuals.

HIV positive individuals are themselves a subpopulation of the general population. As such, they are disproportionately impacted by a number of key indicators including but not limited to STIs, poverty, mental illness, and homelessness. The presence of one or more co-morbidity and/or social determinant of health may impede an HIV positive person’s ability to access services along the entire continuum of HIV Services.

Annually, as part of its Ryan White Part A application for funding, DHSP gathers key data regarding the disproportionate impact of selected co-morbidities, particularly STIs, and social determinant of health indicators for the HIV positive population compared to the general population in LAC. Table 12 presents the data table included in LAC’s FY 2013 Ryan White Part A application, submitted to HRSA in October 2012.

**Table 12. Selected Co-Morbidities of Persons Living with HIV in Los Angeles County**

Co-Morbidities	General Population		PLWH/A*	
	Number	Rate (per 100,000)	Number	Rate (per 100,000)
Early Syphilis	1,921 (1)	19.4	1,071 (5)	2,438.0
Gonorrhea	10,089 (1)	102.3	1,604 (6)	3,651.0
Chlamydia	50,333 (1)	510.6	1,235 (6)	2,811.0
Tuberculosis	680 (2)	6.9	41 (7)	93.0
	Number	Percentage	Number	Percentage
Homelessness	120,070 (3)	1.2%	4,960 (8)	10.1% (8)
No Insurance (Including those without Medi-Cal and Medicare)	2,155,000 (4)	23.7%	18,417	41.9% (9)
Poverty (<300% FPL)	5,741,000 (4)	56.5%	32,791	74.6% (9)
Mental Illness	761,000 (4)	10.3%	7,819	17.8% (10)

Estimates are based on an estimated 43,928 diagnosed PLWH in Los Angeles County reported through December 31, 2011 as of July 31, 2012.<sup>80</sup>

(1) California Department of Public Health, STD Control Branch, 2011 provisional data reported through 8/7/2012.  
(2) Los Angeles County Tuberculosis Control Program, 2011 data reported as of 8/9/2012.  
(3) Los Angeles Homeless Services Authority, 2011 Greater Los Angeles Homeless Count.  
(4) UCLA Center for Health Policy Research, California Health Interview Survey (CHIS), 2009; mental illness defined as number of people who saw any healthcare provider for emotional/mental and/or alcohol/drug issues in the last 12 months.  
(5) Los Angeles County DHSP STD Program, Casewatch data, 2011 data as of October 2012.  
(6) Estimates based on Los Angeles County STD Clinic Morbidity Report, 2010, and California STD Control Branch provisional data through 8/7/2012.  
(7) Los Angeles County Tuberculosis Control Program, 2011 data reported as of 8/9/2012.  
(8) Los Angeles County HIV Epidemiology Program, *An Epidemiologic Profile of HIV and AIDS, 2009*.  
(9) Los Angeles County Ryan White Client Data 2011; CHIS 2009 for PLWH outside of Ryan White care system.  
(10) Los Angeles County Ryan White Client Data 2011; clients reported having active history of mental illness in the past 12 months.

<sup>80</sup> The total PLWH of 43,928 is higher than the 43,905 presented in the Epidemiologic Overview section of this plan as the data for the Part A application were reported as of July 31, 2012 versus February 28, 2012.

As seen, for every indicator presented, the rate or percentage is significantly higher within the HIV positive population than in the general LAC population. Thus, on average, HIV positive individuals are themselves considered a vulnerable population.

The importance of identifying undiagnosed individuals and linking them to care, as well as linking/re-linking HIV positive individuals who are not in care cannot be overstated. This is important for optimizing individual health outcomes but also as an important prevention strategy in stemming forward transmission of HIV.

Key data regarding the HIV positive population include:

- 58,000 persons estimated to be HIV positive in LAC, includes pending cases, and undiagnosed population (Figure 12);
  - LAC has the second largest HIV positive population among local jurisdictions in the nation; 2011 rate of HIV is 420 per 100,000 population<sup>81</sup>
  - Among the 43,905 reported cases as of December 31, 2011, 66.1% are persons of color; 87.5% are male; 37.1% are aged 50 years and older
  - Estimated 1,500 to 2,000 new infections annually
  - 30.4% of persons newly diagnosed with HIV (2008-2010) were diagnosed later in the disease process and received an AIDS diagnosis within the same calendar year
- 10,500 estimated HIV positive persons who are undiagnosed (see Table 5);
  - 49% of new HIV cases are transmitted from undiagnosed persons
- 18,668 estimated HIV positive persons who are aware of their HIV infection but not in care (does not include persons who may be marginally in care) (see Table 7);
  - From 2008 to 2011, estimate of HIV positive population who are not in care declined from 37.1% in 2008 to 33.2% in 2011 (see Table 8)
- 33% of newly diagnosed (2007-2009) had delayed linkage to care (i.e., linked to medical care more than 90 days after initial HIV diagnosis); 67% had timely linkage to care (i.e., within 90 days of initial HIV diagnosis)<sup>82</sup>
- 48% of PLWH (as of December 31, 2009) were not retained in care (i.e., had two viral load test results during 2009 at least 90 days apart); 52% of PLWH were retained in care<sup>83</sup>

#### ❖ Men who have sex with men (MSM)

The HIV epidemic in LAC is driven primarily through sexual contact, predominantly male-to-male sex. Thus, MSM represent the single largest impacted population group in LAC. As seen in Figures 29 and 30, Latino MSM, White MSM, and Black MSM stand out as the largest number of PLWH as well as newly diagnosed PLWH in the County. Among these three groups, Black MSM are the most disproportionately impacted as they represent 17.4% of all MSM PLWH and

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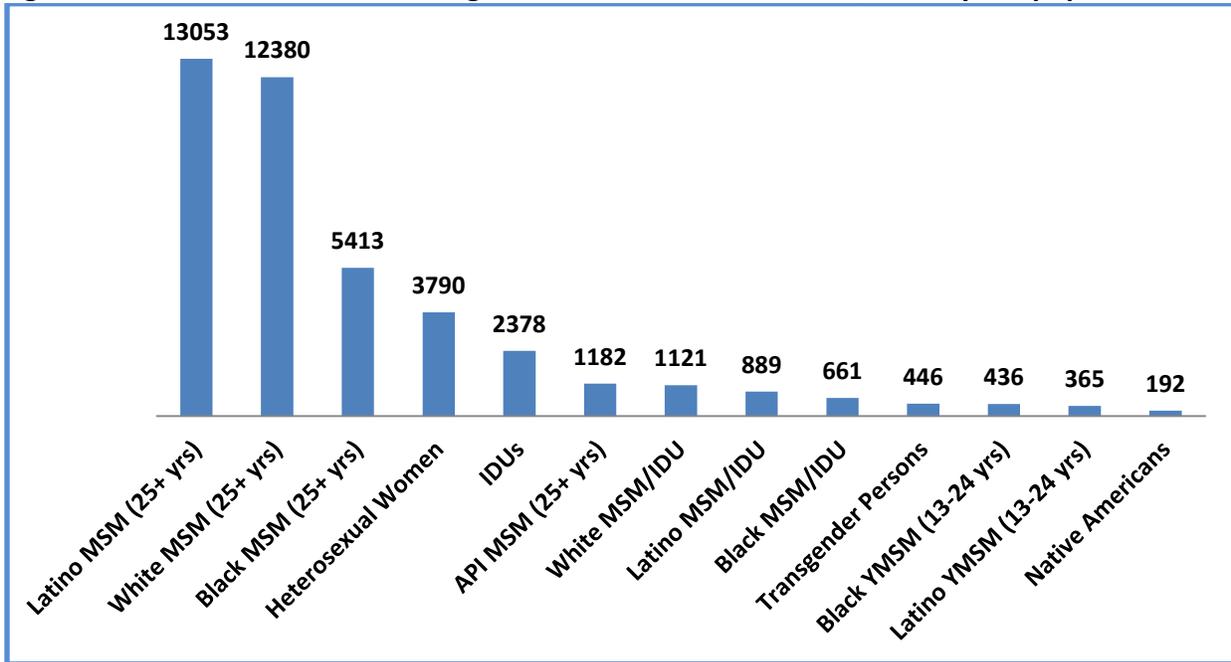
<sup>81</sup> HIV Epidemiology, Division of HIV and STD Programs, Los Angeles County Department of Public Health. 2011 Annual HIV Surveillance Report, February 2012: 1-36.

<sup>82</sup> Yunyin W. Hu, et. al. Using Laboratory Surveillance Data to Estimate Engagement in Care Among Persons Living with HIV in Los Angeles County, 2009. AIDS Patient Care and STDs, Volume 26, Number 8, 2012.

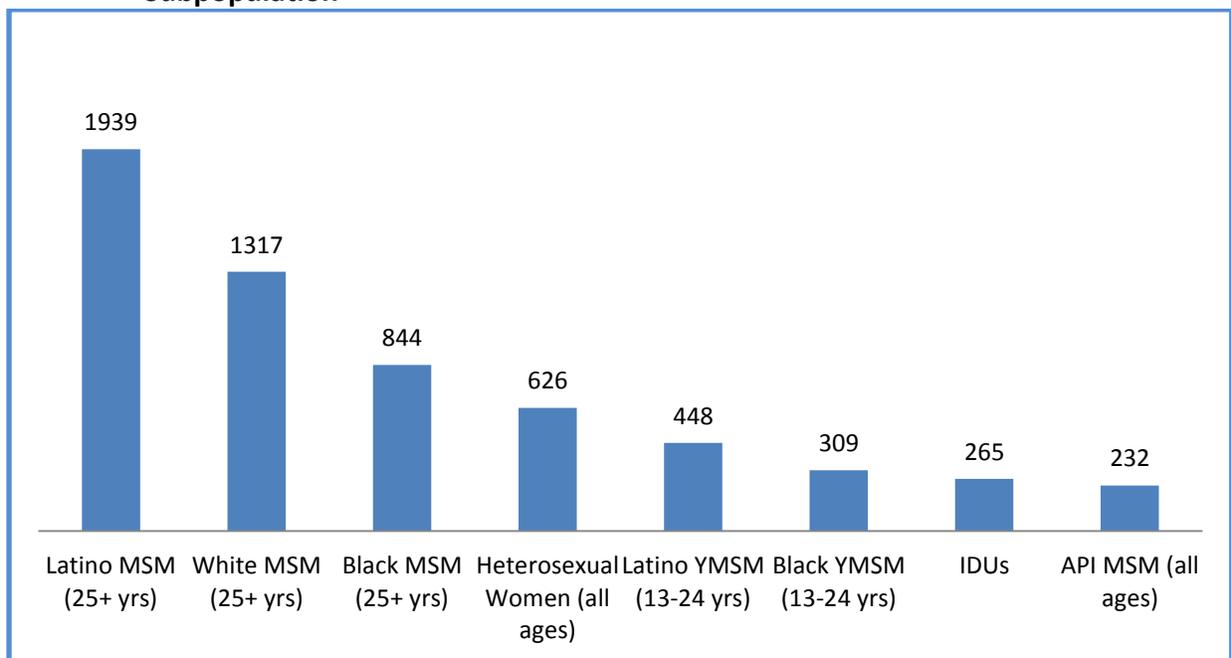
<sup>83</sup> Ibid.

21.6% of newly diagnosed MSM PLWH (Table 14) in LAC; African Americans comprise only 8.3% of all residents in LAC as of the U.S. Census 2010 (Table 1).

**Figure 29. Number of Persons Living with HIV as of December 31, 2011 by Subpopulation**



**Figure 30. Number of Persons Newly Diagnosed with HIV Infection (2008-2010) by Subpopulation**



**Table 13. Characteristics of and Geographic Distribution of MSM and MSM/IDU PLWH and Newly Diagnosed MSM and MSM/IDU**

Characteristic		MSM				MSM/IDU			
		PLWH (as of 12/31/11)		Newly Diagnosed HIV+ (2008-2010)		PLWH (as of 12/31/11)		Newly Diagnosed HIV+ (2008-2010)	
Status	AIDS	20,000	59.7%	1,397	26.2%	2,001	71.4%	55	23.2%
	HIV	13,526	40.3%	3,931	73.8%	803	28.6%	182	76.8%
	Total	33,526	100%	5,328	100%	2,804	100%	237	100%
Race/Ethnicity	White	12,505	37.3%	1,458	27.4%	1,121	40.0%	72	30.4%
	African American/Black	5,849	17.4%	1,153	21.6%	661	23.6%	59	24.9%
	Latino/Hispanic	13,417	40.0%	2,386	44.8%	889	31.7%	93	39.2%
	Asian/Pacific Islander	1,189	3.5%	298	5.6%	46	1.6%	7	3.0%
	Native American	123	0.4%	23	0.4%	30	1.1%	<5	--
Age Group	13-19 years	58	0.2%	172	3.2%	<5	--	8	3.4%
	20-29 years	2,781	8.3%	1,706	32.0%	152	5.4%	82	34.6%
	30-39 years	6,148	18.3%	1,569	29.4%	493	17.6%	75	31.6%
	40-49 years	12,243	36.5%	1,266	23.8%	1,138	40.6%	52	21.9%
	50-59 years	8,926	26.6%	480	9.0%	821	29.3%	17	7.2%
	60+ years	3,370	10.1%	135	2.5%	198	7.1%	<5	--
Service Planning Area	SPA 1 (Antelope Valley)	329	1.0%	88	1.7%	48	1.7%	10	4.2%
	SPA 2 (San Fernando Valley)	4,718	14.1%	685	12.9%	376	13.4%	25	10.5%
	SPA 3 (San Gabriel Valley)	2,160	6.4%	396	7.4%	165	5.9%	14	5.9%
	SPA 4 (Metro)	13,897	41.5%	2,087	39.2%	1,187	42.3%	108	45.6%
	SPA 5 (West)	1,969	5.9%	250	4.7%	135	4.8%	8	3.4%
	SPA 6 (South)	2,904	8.7%	602	11.3%	225	8.0%	21	8.9%
	SPA 7 (East)	2,048	6.1%	383	7.2%	147	5.2%	16	6.8%
	SPA 8 (South Bay)	5,436	16.2%	828	15.5%	513	18.3%	34	14.3%

Source: eHARS, data for cases reported through December 31, 2011 as of February 28, 2012

Note: Does not include "other/unknown" for race/ethnicity, risk, or SPA categories. Percentages may not add due to rounding. "--" indicates not able to calculate percentage due to numbers being <5.

Table 13 presents the demographic and geographic characteristics of PLWH and newly diagnosed PLWH who report MSM and MSM/IDU as their transmission risk categories.<sup>84</sup> The majority of MSM PLWH have an AIDS diagnosis (59.7%). For an MSM/IDU, 71.4% of this population has an AIDS diagnosis, which can contribute to poorer health outcomes.

When looking at the differences between all MSM PLWH and newly diagnosed, there is a significant increase (emerging population) among Latino MSM, African American MSM, and

<sup>84</sup> Because the HIV epidemic in LAC is primarily driven through sexual contact, Table 14 includes PLWH who report the dual exposure risk of MSM/IDU under MSM.

Asian/Pacific Islander MSM. Among MSM/IDU PLWH, there was a similar trend with a growing proportion of Latino MSM/IDU and African American MSM/IDU. In terms of age group, about 36% of MSM and MSM/IDU PLWH are aged 50 years and older. The most dramatic growth of new HIV cases is occurring among young MSM (YMSM) between the ages of 13 and 29 years old. YMSM 13-19 years old comprise only 0.2% of all MSM PLWH and 3.2% of newly diagnosed MSM PLWH. MSM PLWH 20-29 years old comprise an overwhelming 32% of newly diagnosed MSM PLWH compared to 8.3% of all MSM PLWH; they also comprise 34.6% of newly diagnosed MSM/IDU PLWH compared to 5.4% of all MSM/IDU PLWH. SPA 4 (Metro) is home to the vast majority of MSM and MSM/IDU PLWH (41.5% and 42.3% respectively). However, in terms of newly diagnosed cases of MSM, SPA 4 is declining and there are a growing number of newly diagnosed cases in SPA 1 (Antelope Valley), SPA 3 (San Gabriel Valley), SPA 6 (South), and SPA 7 (East). The most significant increase is in SPA 6 (South). Among MSM/IDU there is growth in SPA 4 (Metro). In terms of syndemic areas (HIV and STIs), both SPA 4 and SPA 6 are part of the Central Cluster (see Attachment C).

❖ **Women**

**Table 14. Characteristics of and Geographic Distribution of Female PLWH and Newly Diagnosed Females**

Characteristic		PLWH (as of 12/31/11)		Newly Diagnosed HIV+ (2008-2010)	
Status	AIDS diagnosis	2,906	57.5%	203	26.6%
	HIV	2,150	42.5%	560	73.4%
	Total	5,056	100%	763	100%
Race/ Ethnicity	White	760	15.0%	110	14.4%
	African American/Black	1,829	36.2%	297	38.9%
	Latino/Hispanic	2,237	44.2%	313	41.0%
	Asian/Pacific Islander	143	2.8%	25	3.3%
	Native American	29	0.6%	5	0.7%
Age Group	< 13 years	20	0.4%	<5	--
	13-19 years	70	1.4%	34	4.5%
	20-29 years	445	8.8%	168	22.0%
	30-39 years	1,080	21.4%	215	28.2%
	40-49 years	1,677	33.2%	179	23.5%
	50-59 years	1,210	23.9%	126	16.5%
	60+ years	554	11.0%	38	5.0%
Risk	Heterosexual	3,790	75.0%	626	82.0%
	IDU	1,067	21.1%	130	17.0%
Service Planning Area	SPA 1 (Antelope Valley)	140	2.8%	36	4.7%
	SPA 2 (San Fernando Valley)	667	13.2%	104	13.6%
	SPA 3 (San Gabriel Valley)	448	8.9%	47	6.2%
	SPA 4 (Metro)	1,100	21.8%	168	22.0%
	SPA 5 (West)	211	4.2%	25	3.3%
	SPA 6 (South)	1,069	21.1%	183	24.0%
	SPA 7 (East)	448	8.9%	78	10.2%
	SPA 8 (South Bay)	967	19.1%	120	15.7%

Source: eHARS, data for cases reported through December 31, 2011 as of February 28, 2012

Notes: Does not include "other/unknown" for race/ethnicity or SPA categories. Percentages may not add due to rounding.

--" indicates not able to calculate percentage due to numbers being <5.

There are similarities and significant differences among HIV positive females compared to MSM. Like MSM, the majority of female PLWH (57.5%) also have an AIDS diagnosis. Among newly diagnosed females, 26.6% were also diagnosed with AIDS within the same calendar year as their HIV diagnosis. HIV disease takes years to progress to AIDS. Thus, these women may be considered late testers among the newly diagnosed population. This is comparable to the 26.2% of newly diagnosed MSM PLWH who have an AIDS diagnosis in the same year as their new HIV diagnosis.

Latinos and African Americans comprise the vast majority of female PLWH (44.2% and 36.2% respectively, comprising 80.4% of all female PLWH). African Americans are the most disproportionately impacted as they make up only 8.3% of the general population. African Americans comprise 20.7% of all PLWH; thus among female PLWH, African Americans are the most disproportionately impacted racial/ethnic group. Similar to MSM, young women (13-20 years old) represent 26.5% of newly diagnosed female PLWH compared to 10.2% of all female PLWH. The 30-39 year old age group is also growing significantly (28.2% of newly diagnosed cases compared to 21.4% of all female PLWH).

Although the age groups differ slightly, these data suggest that women of childbearing years (13-44 years) are the most significantly impacted age group among newly diagnosed HIV cases. This is consistent with the fact that 75% of female PLWH identify heterosexual sex as their primary exposure risk; 82% of newly diagnosed females report heterosexual sex as their primary risk. IDU accounts for 21.1% of the risk among all female PLWH and 17% of the risk among newly diagnosed female PLWH.

Geographically, female PLWH are spread across the LAC. However, the most significant concentrations of female PLWH are in SPA 4 (Metro) (21.8%); SPA 6 (South) (21.1%); and SPA 8 (South Bay) (19.1%). Although a much smaller number, SPA 1 (Antelope Valley) is home to 2.8% of all female cases compared to 1.3% of all PLWH. In terms of where HIV is growing in numbers, SPA 6 (South) has the highest number of newly diagnosed female cases, comprising 24% of all newly diagnosed female PLWH.

#### ❖ Youth (13-24 years)

As seen in Table 16, YMSM (13-24 years) comprise 69.2% of all Youth PLWH (13-24 years) and 86% of all male Youth PLWH. They are therefore a critical subpopulation of this group. Females comprise 18.3% of Youth PLWH and transgender persons comprise 1.1% of Youth PLWH. The overwhelming majority of Youth PLWH are from communities of color (85.6%); Latinos represent the largest proportion (45.3%) followed by African Americans (36.9%). This pattern holds true among newly diagnosed youth; 46.2% are Latino and 33.7% are African American. Among YMSM, Latino and African Americans are the majority of PLWH and newly diagnosed PLWH. Although smaller in number, there is a growing trend among Asian/Pacific Islander Youth PLWH and YMSM PLWH as their percentage of newly diagnosed cases (3.6% and 4% respectively are significantly higher than their representation among all Youth PLWH and all YMSM PLWH (2.7% and 3.3% respectively).

In terms of risk, MSM represents 69.2% of all Youth PLWH. It is important to note that 16.2% of all Youth PLWH contracted HIV through perinatal transmission; this group represents the

second largest exposure category to MSM. Heterosexual sex represents the third largest risk (9.4%) category. Among newly diagnosed cases, MSM is growing and represents 85.1% of all reported exposure categories, followed by 8.9% heterosexual sex, and 3.6% MSM/IDU. Geographically, the largest proportions of Youth PLWH and YMSM are in SPA 4, followed by SPA 6 and SPA 8.

**Table 15. Characteristics of and Geographic Distribution of Youth PLWH (13-24 years) and Newly Diagnosed Youth (13-24 years)**

Characteristic		YOUTH				YMSM (13-24 years)			
		PLWH (as of 12/31/11)		Newly Diagnosed HIV+ (2008-2010)		PLWH (as of 12/31/11)		Newly Diagnosed HIV+ (2008-2010)	
Status	AIDS	288	23.6%	164	14.7%	161	19.1%	145	15.3%
	HIV	933	76.4%	950	85.3%	684	80.9%	803	84.8%
	Total	1,221	100%	1,114	100%	845	100%	947	100%
Race/Ethnicity	White	161	13.2%	160	14.4%	125	14.8%	141	14.9%
	African American/Black	451	36.9%	375	33.7%	312	36.9%	309	32.6%
	Latino/Hispanic	553	45.3%	515	46.2%	365	43.2%	448	47.3%
	Asian/Pacific Islander	33	2.7%	40	3.6%	28	3.3%	34	3.6%
	Native American	9	0.7%	--	--	7	0.8%	6	0.6%
Gender	Male	983	80.5%	995	89.3%	845	100%	947	100%
	Female	224	18.3%	106	9.5%				
	Transgender	14	1.1%	13	1.2%				
Risk	MSM	845	69.2%	948	85.1%	845	100%	947	100%
	MSM/IDU	33	2.7%	40	3.6%				
	IDU	24	2.0%	--	--				
	Heterosexual	115	9.4%	99	8.9%				
	Perinatal	198	16.2%	0	0%				
Service Planning Area	SPA 1 (Antelope Valley)	17	1.4%	19	1.7%	8	0.9%	11	1.2%
	SPA 2 (San Fernando Valley)	142	11.6%	148	13.3%	101	12.0%	122	12.9%
	SPA 3 (San Gabriel Valley)	90	7.4%	84	7.5%	61	7.2%	73	7.7%
	SPA 4 (Metro)	315	25.8%	320	28.7%	226	26.7%	283	29.9%
	SPA 5 (West)	42	3.4%	39	3.5%	30	3.6%	36	3.8%
	SPA 6 (South)	279	22.9%	212	19.0%	175	20.7%	174	18.4%
	SPA 7 (East)	109	8.9%	104	9.3%	78	9.2%	88	9.3%
	SPA 8 (South Bay)	226	18.5%	185	16.6%	165	19.5%	159	16.8%

Source: eHARS, data for cases reported through December 31, 2011 as of February 28, 2012

Note: Does not include "other/unknown" for race/ethnicity, risk, or SPA categories. Percentages may not add due to rounding.

"--" indicates not able to calculate percentage due to numbers being <5.

❖ Transgender Persons

**Table 16. Characteristics of and Geographic Distribution of Transgender PLWH and Newly Diagnosed Transgender Persons**

Characteristic		PLWH (as of 12/31/11)		Newly Diagnosed HIV+ (2008-2010)	
Status	AIDS diagnosis	266	59.6%	11	20.4%
	HIV	180	40.4%	43	79.6%
	Total	446	100%	54	100%
Race/ Ethnicity	White	36	8.1%	<5	--
	African American/Black	133	29.8%	17	31.5%
	Latino/Hispanic	244	54.7%	33	61.1%
	Other/Unknown	6	1.3%	<5	--
Age Group	13-19 years	<5	--	<5	--
	20-29 years	44	9.9%	27	50.0%
	30-39 years	124	27.8%	13	24.1%
	40-49 years	172	38.6%	8	14.8%
	50-59 years	93	20.9%	<5	--
Risk	MSM	348	78.0%	44	81.5%
	IDU	6	1.3%	<5	--
	MSM/IDU	79	17.7%	5	9.3%
	Heterosexual contact	13	2.9%	<5	--
Service Planning Area	SPA 1 (Antelope Valley)	<5	--	<5	--
	SPA 2 (San Fernando Valley)	70	15.7%	9	16.7%
	SPA 3 (San Gabriel Valley)	25	5.6%	<5	--
	SPA 4 (Metro)	204	45.7%	25	46.3%
	SPA 5 (West)	8	1.8%	<5	--
	SPA 6 (South)	53	11.9%	6	11.1%
	SPA 7 (East)	21	4.7%	<5	--
	SPA 8 (South Bay)	60	13.5%	6	11.1%

Source: eHARS, data for cases reported through December 31, 2011 as of February 28, 2012

Notes: Does not include "other/unknown" for race/ethnicity or SPA categories. Percentages may not add due to rounding. "--" indicates not able to calculate percentage due to numbers being <5.

Estimating the size of the transgender population remains a challenge. DHSP last estimated the size of this population in 2007, which was included in *An Epidemiologic Profile of HIV and AIDS, 2009*.<sup>85</sup> In 2012, DHSP completed its current estimate of the size of the transgender population, including estimates for both transgender women and transgender men.<sup>86</sup> This new estimate is based on a review of the available literature and extensive feedback from the LAC transgender community. The full report is available on the LAC website at: <http://publichealth.lacounty.gov/phcommon/public/reports/rptspubdisplay.cfm?unit=hiv&ou=ph&prog=hae>.

<sup>85</sup> HIV Epidemiology Program, Los Angeles County Department of Public Health, *An Epidemiologic Profile of HIV and AIDS in Los Angeles County, 2009*: 1-151.

<sup>86</sup> Division of HIV and STD Programs, Los Angeles County Department of Public Health, *Los Angeles County Transgender Population Estimates 2012*.

To summarize the findings of this report, LAC estimates that 0.1% to 0.3% of the total LAC population are transgender persons. Using LAC’s 2011 population, DHSP estimates there are “14,428 transgender persons living in LAC with a range of 7,214 to 21,642.”<sup>87</sup> Incorporating feedback from the transgender community, DHSP further estimates that 50% of all transgender persons are transgender women and 50% are transgender men. However, the HIV seroprevalence of these two populations is vastly different. Ninety-six percent (96%) of all living HIV cases as of December 2011, 96% are among transgender women and 4% are among transgender men. Thus, the estimated HIV prevalence among transgender women is 15.1% compared to 0.6% among transgender men. DHSP estimates that 21% of all HIV positive transgender persons are undiagnosed.<sup>88</sup> This compares to 18.1% undiagnosed HIV positive persons in LAC overall.<sup>89</sup> Adjusting for misclassification of transgender persons prior to 2002 when transgender was added as a gender option to the State HIV/AIDS case report, DHSP estimates there are a total of 1,088 HIV positive transgender women living in LAC and 40 transgender men.<sup>90</sup>

Among all persons newly testing HIV positive in LAC in 2010, the HIV prevalence among newly diagnosed transgender persons in publicly-funded HIV test sites was 5.8%. This was at least four times greater than other gender groups. It was also the single highest prevalence across all population groups being tested.<sup>91</sup>

As seen in Table 17, in terms of race/ethnicity, 89.4% of transgender PLWH are from communities of color with Latinos comprising the largest proportion (54.7%) followed by African Americans (29.8%). Latinos also comprise the largest proportion (61.1%) of newly diagnosed transgender PLWH. Transgender PLWH span all age groups with nearly two-thirds (66.4%) falling between the ages of 30 and 50 years old. However, among newly diagnosed transgender persons, an overwhelming 50% are young transgender persons between 20 to 29 years old, followed by 24.1% between 30 to 39 years old. Geographically, transgender PLWH are most concentrated in SPA 4 (Metro) (45.7%) followed by SPA 2 (San Fernando Valley), SPA 8 (South Bay), and SPA 6 (South). This pattern is the same for newly diagnosed transgender persons, except that SPA 8 and SPA 6 each comprise 11.1% of newly diagnosed individuals.

A larger proportion of transgender PLWH have an AIDS diagnosis (59.6%) (Table 17) than do the other key populations discussed. Yet, among newly diagnosed transgender PLWH, a smaller proportion (20.4%) have an AIDS diagnosis than the other key populations. This may suggest that targeted HIV testing efforts to transgender women and men are working, and they are being diagnosed earlier in the disease progression.

#### ❖ **Persons who Share Injection Paraphernalia (SIP)**

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<sup>87</sup> Ibid.

<sup>88</sup> Ibid.

<sup>89</sup> CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 U.S. dependent areas—2010. *HIV Surveillance Supplemental Report* 2012;17(No. 3, part A). Published June 2012.

<sup>90</sup> Division of HIV and STD Programs, Los Angeles County Department of Public Health, Los Angeles County Transgender Population Estimates 2012.

<sup>91</sup> Division of HIV and STD Programs, Los Angeles County Department of Public Health, HIV Testing Services Annual Report, January through December 2010, December 2011, 1- 36.

Although injection drug user (IDU) is the named category as reported on HIV surveillance data, LAC recognizes that HIV risk related to needle sharing goes beyond illegal substances and may include persons who inject steroids, vitamins, insulin, and hormones among others. Thus, the acronym SIP more broadly refers to those persons who share injection paraphernalia, which includes the sharing of needles regardless of the purpose (including tattoos), and also the sharing of injection paraphernalia (i.e., “works”).

Table 18 presents the demographic and geographic characteristics of persons who report IDU as their transmission risk category to the CDC. MSM/IDU were discussed earlier with MSM.

**Table 17. Characteristics of and Geographic Distribution of Injection Drug User (IDU) PLWH and Newly Diagnosed IDUs**

Characteristic		PLWH (as of 12/31/11)		Newly Diagnosed HIV+ (2008-2010)	
Status	AIDS diagnosis	1,757	72.7%	99	37.4%
	HIV	660	27.3%	166	62.6%
	Total	2,417	100%	265	100%
Race/ Ethnicity	White	638	26.4%	61	23.0%
	African American/Black	872	36.1%	98	37.0%
	Latino/Hispanic	821	34.0%	92	34.7%
	Asian/Pacific Islander	36	1.5%	6	2.3%
	Native American	15	0.6%	<5	--
Gender	Male	1,349	55.8%	134	50.6%
	Female	1,062	43.9%	128	48.3%
	Transgender	6	0.2%	<5	--
Age Group	13-19 years	0	0.0%	7	2.6%
	20-29 years	81	3.4%	43	16.2%
	30-39 years	271	11.2%	61	23.0%
	40-49 years	836	34.6%	83	31.3%
	50-59 years	854	35.3%	57	21.5%
	60+ years	375	1.6%	14	5.3%
Service Planning Area	SPA 1 (Antelope Valley)	71	2.9%	17	6.4%
	SPA 2 (San Fernando Valley)	304	12.6%	30	11.3%
	SPA 3 (San Gabriel Valley)	222	9.2%	26	9.8%
	SPA 4 (Metro)	659	27.3%	68	25.7%
	SPA 5 (West)	108	4.5%	7	2.6%
	SPA 6 (South)	391	16.2%	52	19.6%
	SPA 7 (East)	172	7.1%	19	7.2%
	SPA 8 (South Bay)	483	20.0%	45	17.0%

Source: eHARS, data for cases reported through December 31, 2011 as of February 28, 2012

Notes: Does not include “other/unknown” for race/ethnicity or SPA categories. Percentages may not add due to rounding.

“--” indicates not able to calculate percentage due to numbers being <5.

Across all key population groups, PLWH reporting IDU risk have the highest proportion of AIDS cases (72.7%) and among newly diagnosed IDU PLWH (37.4%). African Americans represent the largest proportion of IDU PLWH (36.1%) followed by Latinos (34%) and then Whites (26.4%). Among newly diagnosed cases, African Americans and Latinos comprise an even higher proportion (37% and 34.7%) showing an increasing trend within these racial/ethnic

groups. In terms of gender, although there are a higher proportion of males (55.8%), females comprise a significant proportion (43.9%). Transgender persons comprise a fraction (0.2%) of IDU PLWH. Unlike the other key populations, SIPs are generally older; 36.9% are 50 years and older. However, 16.2% of newly diagnosed IDUs are among younger persons (20-29 years old) and 2.6% are between the ages of 13-19 years old.. The geographic areas most heavily impacted are SPAs 4 (Metro), 6 (South), 8 (South Bay), and 2 (San Fernando Valley). However, as with female PLWH, there is a higher proportion of IDU PLWH (2.9%) in SPA 1 (Antelope Valley) compared to their 1.3% of all PLWH in LAC. Also significant is that among newly diagnosed SIPs, SPA 1 has an even higher proportion (6.4%). Although SPA 4 (Metro) has the largest number of new cases, SPA 6 (South) is where there are a growing number of new cases (19.6% of newly diagnosed compared to 16.2% of all IDU PLWH).

## IV. ASSESSING COMMUNITY NEEDS, BARRIERS & GAPS

### A. Introduction

When President Obama announced the National HIV/AIDS Strategy (NHAS) in July 2010, the direction of HIV services in the U.S. crystallized. The three goals of the NHAS define the need for and intent of HIV services nationally: (1) Reduce new HIV infections; (2) Increase access to care and improve health outcomes for people living with HIV; and (3) Reduce HIV-related disparities and health inequities.<sup>92</sup> Federal agencies have embraced these goals and are determining which services and interventions are needed in order to accomplish them. Both the CDC and HRSA have defined a set of “required/recommended” (CDC) and “core/support” (HRSA) services. As a result, much of the guesswork has been taken out of the needs assessment process as these agencies are now implementing legislative funding restrictions for services.

However, what still needs to be done locally is to estimate the level of need for services and the specific portfolio of services that will best reach LAC goals outlined in Chapter VI: Future Directions. The HIV service delivery landscape is changing as the division between prevention and care blurs with research clearly showing the effectiveness of antiretroviral therapy (ART) in stemming transmission of HIV through viral suppression.<sup>93</sup> This concept of “treatment as prevention” is catalyzing new efforts to identify individuals who are unaware of their HIV infection, as well as those who know of their infection but have never been in care or who have fallen out of care and link them to care.

As shown in the epidemiologic data presented, need may vary by specific population. The needs of dually diagnosed chronically homeless PLWH will have very different needs and different barriers to care than an African American MSM. To assist in assessing the level of services needed by PLWH, the Commission contracted with DHSP to complete a 2011 needs assessment for PLWH—*Los Angeles Coordinated HIV Needs Assessment-Care: 2011* (LACHNA-Care). The 2011 LACHNA-Care provides detailed information regarding the service needs, gaps in services, and barriers to care for PLWH.

This chapter is organized first by a general discussion of needs for HIV prevention, testing, and linkage to care; care and treatment of PLWH; and then capacity development needs. Recognizing that needs vary by broad population group identified on the *population flow map* of the *Continuum of HIV Services*, there is a brief description of the service needs, barriers to receiving services, and service gaps by population group. The two population groups—HIV positive (HIV+) accessing services and HIV+ accessing services who are adherent to treatment guidelines are combined. This chapter does not identify the many language, cultural, gender-based, and age-related needs of the many discrete populations impacted by HIV in LAC. The 2011 LACHNA-CARE (available at: <http://hivcommission-la.info/>) does provide some information regarding different population groups.

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<sup>92</sup> The White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States. July 2010. <http://www.whitehouse.gov/sites/default/files/uploads/NHAS.pdf>.

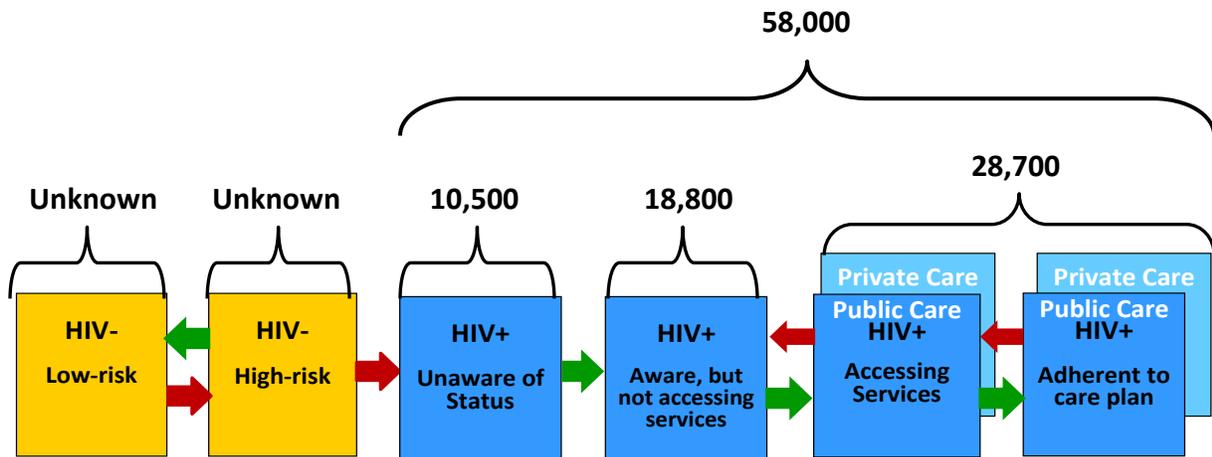
<sup>93</sup> Cohen MS, Ying CQ, McCauley M, et al. Prevention of HIV-1 Infection with Early Antiretroviral Therapy. *New England Journal of Medicine*, 2011; 365:493-505

## B. Service Needs

### ❖ Populations Needing Services along the Continuum of HIV Services

The populations “needing” services are those identified in the “population flow map” (Figure 27) represented as the core of LAC’s *Continuum of HIV Services* model (Figure 2). There are six population groups that access and participate in services along the continuum: (1) HIV negative, low risk; (2) HIV negative, high risk; (3) HIV positive, unaware of HIV infection; (4) HIV positive, aware of infection but not accessing services; (5) HIV positive, aware of infection and accessing services; and (6) HIV positive, aware of infection and adherent to care plan (i.e., successfully engaged and retained in care). As part of LAC’s “systems” approach, DHSP, in concert with its community partners, is working to estimate the size of the population in each group (Figure 31). The majority of this work has focused on quantifying the number of PLWH across the continuum (58,000). Estimating the number of HIV negative individuals who are low-risk or high-risk is difficult. As a result of this challenge, LAC analyzes the characteristics of PLWH to identify the highest burden/most impacted populations as a surrogate for describing the characteristics of HIV negative persons who are at greatest risk for acquiring HIV.

**Figure 31. Quantifying the Population Flow Map**



LAC conservatively estimates there are 58,000 PLWH in LAC in need of a broad spectrum of medical and supportive services that will diagnose a person’s HIV disease, link them to care, begin treatment, and retain them in care in order to support full adherence to their care plan. HIV negative individuals need a broad range of services/interventions that will help them maintain an HIV negative, low risk status. Additionally, LAC needs to create an environment that is free of racism, stigma, homophobia, transphobia, and shame; one that supports the dignity of every person through access to a set of basic essential services, including access to primary medical care for all. As more persons in the general population are fully engaged in medical care, they will have increased access to routine HIV testing, STI screening and treatment, pregnancy services, and much more, which serves as a protective factor against acquiring HIV.

## ❖ HIV Prevention, Testing, & Linkage to Care Services

During the past two years, the CDC has eliminated much of the guesswork regarding HIV-related service needs. As part of its efforts to achieve the goals of the NHAS, through its ECHPP and *High Impact HIV Prevention (HIHP)* initiatives, the CDC has disseminated a set of twenty-four interventions (fourteen (14) required and ten (10) recommended interventions) for local health jurisdictions to implement. Grounded in a strong scientific base, these interventions form the primary means through which LAC will achieve its own *high impact* locally to curtail transmission of HIV to uninfected individuals, and diagnose those individuals who are currently unaware of their HIV infection (Attachment A provides a complete list of all 24 interventions). A major change in the allowed use of CDC funding released in late 2011 now requires that a minimum of 75% of flagship prevention funds be used for required services and up to 25% of funds may be used for recommended services.

Among the 14 required interventions, nine (9) are targeted directly to HIV positive individuals. Only five (5) required interventions target other population groups (e.g., high risk individuals, and persons unaware of their HIV infection). All of the interventions are designed to address locally the needs identified in the NHAS goals (reduce new infection, increase access to care and improve health outcomes, and reduce health disparities). These 14 interventions represent the core HIV testing and prevention services needed as defined by CDC. Many of the CDC's ten "recommended" interventions address service needs that have been historically the purview of HIV awareness and prevention efforts targeting persons at highest risk of acquiring HIV.

## ❖ Care and Treatment Services for PLWH

As a recipient of Ryan White Part A funding, LAC is to assess the service needs of PLWH every three years. These service needs are then used to inform LAC's annual priority-setting process, which is completed by the Los Angeles County Commission on HIV (Commission). LAC completed its most recent needs assessment targeting PLWH in Fall 2011—*Los Angeles Coordinated HIV Needs Assessment-Care: 2011* (LACHNA-Care). This needs assessment surveyed clients currently receiving services through the Ryan White system of care. The survey reached 450 clients using a random sampling methodology, increasing the likelihood that survey participants were a representative sample of LAC's HIV/AIDS epidemic. Three hard-to-reach populations (e.g., transgender individuals, injection drug users, and youth) were oversampled. As a result of the strict sampling methodology used, high participation of service providers and clients, the findings are estimated to be generalizable to PLWH in the Ryan White system of care.<sup>94</sup> The final report, which details the complete findings for all respondents as well as key subpopulations, is available online at [http://hivcommission-la.info/cms1\\_173837.pdf](http://hivcommission-la.info/cms1_173837.pdf).

The needs assessment has several important limitations. First, the survey was primarily conducted among an in-care population (i.e., individuals who are currently receiving medical care or other services). For this reason very few individuals who are aware of their HIV infection but not in care were included. These individuals most likely have the greatest barriers to

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<sup>94</sup> Division of HIV and STD Programs, Los Angeles County Department of Public Health and the Los Angeles County Commission on HIV, Los Angeles Coordinated HIV Needs Assessment-Care (LACHNA-Care): 2011 Final Report, December 2011:1-153.

receiving a variety of services. Second, many services (such as residential care and housing services) have strict eligibility requirements. As a result, some individuals may have noted a gap (i.e., expressed a need for but did not receive it) but it was for a service for which they did not meet the eligibility requirements. Thus, some service gaps may be overestimated. Lastly, although this needs assessment is reasonably generalizable to the Ryan White population, it may not fully reflect the needs of all PLWH in LAC who are receiving services through private sources.

### ❖ **Capacity Development Needs**

DHSP has identified four key areas where the County is in need of building its own capacity in order to ensure that PLWH, especially those from vulnerable populations, are able to access services. These include:

1. **Outreach**: Despite an estimated 18,800 PLWH who are aware of their HIV infection but not in care (i.e., HRSA defines as “Unmet Need”), LAC’s system of care has never conducted focused outreach to this population. Historically, HIV prevention providers have conducted outreach as a component to recruit individuals into prevention activities as well as testing for HIV. PLWH who are not in care are hard-to-reach and experience multiple barriers to care. There are effective models being used across the U.S. that target this population. LAC would greatly benefit from learning about these models and having technical assistance provided to tailor and implement successful outreach strategies designed to find PLWH who are not in care.
2. **Oral Health Care**: Oral health care continues to rank among the highest needed services among PLWH (ranked 2<sup>nd</sup> in 2011 and ranked 1<sup>st</sup> with the greatest gap in care). With the virtual elimination of Denti-Cal in July 2009 as a payer of this service for low-income persons, the need has escalated beyond the current system’s capacity to address it. Allocating additional resources into the service category is only a stop-gap measure. DHSP would like to identify new models for service delivery that would help providers become more efficient in order to see more patients.
3. **Monitoring Viral Load**: DHSP’s current ability to track patient population viral loads for each service provider through its client software systems (i.e., Casewatch) is limited. Being able to do this at the County level will improve DHSP’s efforts in targeting its own capacity development services to those providers who experience ongoing challenges in achieving viral suppression among their patients.
4. **Healthy Way LA Transition (LAC’s low-income health plan)**: DHSP does not anticipate any challenges in transitioning eligible Ryan White clients to the new *Healthy Way LA* program as all Ryan White medical providers have been approved as *Healthy Way LA* providers. However, DHSP does anticipate there will be challenges with coordinating transitioned clients’ care with wrap-around services, since the payer sources are no longer the same. Additionally, DHSP anticipates there may be new challenges in getting care data from providers to use for overall care plan development. Due to the public health ramifications of successful HIV treatment (viral suppression) as

prevention, DHSP also needs to be able to continue to track linkage and retention in care, even though Ryan White is no longer the payer for medical care.

5. *Federally Qualified Health Centers (FQHC) and Indian Health Service Clinic:*  
Operated through HRSA's Bureau of Primary Care, FQHCs and Los Angeles County's Indian Health Service (IHS) funded clinic represent key partners in HIV prevention and testing of persons who are unaware of their HIV infection, as well as the potential treatment of PLWH. There is a network of 104 FQHCs and one IHS clinic. Several Los Angeles County HIV Ryan White clinics have achieved FQHC or FQHC Look-Alike status. DHSP is interested in exploring how best to partner with these organizations (e.g., increase their participation in the implementation of routine HIV testing through their sites). As LAC begins to conduct the necessary outreach to identify both the estimated 10,500 HIV positive persons who are unaware of their infection and the 16,800 persons who are aware of their HIV infection but not in care, new models of service delivery may be required to effectively expand LAC's capacity to bring these individuals into care.<sup>95</sup> The full implementation of Healthcare Reform in 2014 brings the expansion of Medicaid; however, it does not expand the number of providers willing and able to care for LAC's growing population of PLWH, which has already stretched an overburdened system of care.

### **C. HIV Negative Individuals (HIV-) at Risk for HIV**

HIV negative individuals consist of two groups of people, those who are at high risk of acquiring HIV and those who are at low-risk. Someone may go back and forth between these categories as a person who is low risk becomes high risk and vice versa. It is also important to recognize that a person's perception of their own risk may not be a good indicator of true risk. For example, a Latina who is in a monogamous relationship with her boyfriend or spouse may think that she is at low risk and as a result she has never been tested for HIV. However, if she does not know the HIV infection of her partner and whether or not he is also monogamous, she may be at greater risk for HIV than she realizes. Thus, although the woman perceives her own risk to be low, her actual risk may be high. A young African American MSM who is using meth or other drugs and may be experiencing depression or other mental illness may not be able to adequately assess his own risk. Denial about one's own risk behavior, stigma about HIV, fear of disclosure and discrimination, active substance use, and depression and/or other mental illness have a powerful influence on whether or not an individual adequately assesses his/her risk behavior. When persons engage in risk behavior within the five syndemic cluster areas where HIV and STIs are most prevalent, the risk for acquiring or transmitting HIV and other STIs increases exponentially.

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<sup>95</sup> Chu C, Selwyn PA. An Epidemic in Evolution: The Need for New Models of Care in the Chronic Disease Era. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 2011; Vol. 88, No. 3: 556-566.

**Table 18. Needs, Barriers, and Gaps for HIV Negative Individuals at Risk for HIV**

Need(s)	Barrier(s)	Gap(s)
Lack of awareness about risk and need for testing	Stigma, homophobia, transphobia, shame, denial; lack of information/ education	Limited resources available for increasing awareness
Prophylactic measures to prevent transmission (e.g., PEP, PrEP, condoms)	Costs associated with PEP and PrEP; religious and cultural norms related to condom use	Limited resources available
HIV testing	Operationalizing routine testing, stigma, homophobia, transphobia, shame, denial; do not know where to go to be tested for HIV	Insufficient HIV testing available
Referrals for medical and other services (e.g., substance abuse)	HIV testing/prevention staff have limited knowledge about the non-HIV service system; they are not supported to help HIV- persons navigate that system.	HIV- persons are competing for limited services that are available to the general community of 9.8 million people

HIV- individuals have multiple service needs that will help support them in remaining HIV negative. These include but are not limited to: (1) increased awareness about risk, (2) access to prophylactic measures (e.g., condoms, post-exposure prophylaxis, pre-exposure prophylaxis) to prevent transmission, (3) access to HIV testing in order to become aware of their HIV infection if unaware, and (4) referrals for their own medical and supportive services. However, multiple barriers impede access to these services, especially those related to homophobia, transphobia, stigma, and shame that still persist in the community. Through its Enhanced Comprehensive HIV Prevention Planning (ECHPP) initiative, LAC is piloting the implementation of routine testing in two emergency departments (EDs). However, the County is finding that widespread implementation of routine testing is difficult due to the individual site-specific barriers to operationalization. Questions such as: “how will it work in the clinic?” and “who is going to pay for it?” challenge successful implementation. DHSP is funding the two pilot sites but sustainable models need to be identified and implemented to expand countywide.

***D. HIV Positive Individuals Who are Unaware of their Infection***

The primary need for HIV positive individuals who have not been tested for HIV since acquiring the virus is to identify persons who are unaware of their HIV infection, and then get them tested and immediately linked to HIV primary medical care. Once they are engaged in the system of care, newly diagnosed PLWH will have access to the full continuum of HIV services in LAC depending upon their individual needs. With an estimated 10,500 persons unaware of their HIV infection (Figure 27) and an estimated 1,500-2,500 persons becoming newly infected with HIV, there are some system-level needs, including:

- Stigma, homophobia, transphobia, and shame still persist in LAC and are barriers to HIV testing;
- Increasing availability of and access to HIV testing in the County, especially in high-risk, high-prevalence geographic cluster regions; and
- Minimizing the time between initial diagnosis and linkage to care so that individuals are not lost to care and follow-up.

**Table 19. Needs, Barriers, and Gaps for HIV+ Individuals who are Unaware of Infection**

Need(s)	Barrier(s)	Gap(s)
Lack of awareness about risk and need for testing	Stigma, homophobia, transphobia, shame, denial	Limited resources available for increasing awareness
HIV testing	Stigma, homophobia, transphobia, shame, denial	Insufficient HIV testing available to diagnose HIV+ unaware
Linkage to care	Length of time between diagnosis and linkage	Lack of a universal seamless system countywide
Access to partner services	Inconsistent offering of service and follow-up	Lack of dedicated program staff
Co-morbidity and behavioral risk screening and interventions	Inconsistent implementation	Lack of resources; staff training
Linkage to other medical and social services	Inconsistent implementation	Lack of resources; staff training
Universal HIV testing of pregnant women	Inconsistent implementation of county opt-out protocol	Stronger policy and procedure that will eliminate perinatal transmission (6 cases in 2010)

With an estimated 10,500 PLWH who are unaware of their infection, outreach and HIV testing are the primary means for identifying undiagnosed infection. As these individuals are diagnosed and are linked to care, their increasing numbers will stretch limited resources.

***E. HIV Positive Individuals Who are Aware but Not in Care***

The primary service needs of HIV positive individuals who are aware but not in care (i.e., HRSA defines as “unmet need”), are centered on finding them, identifying what are their barriers to care, linking them back into care, and providing the necessary support so that they are able to stay in care and are adherent to their treatment plan. This is a very hard-to-reach population. The most immediate need of this population is Linkage to Care Services, which include outreach, early intervention services, and treatment education.

As part of its 2008 Los Angeles Coordinated HIV Needs Assessment (LACHNA), 134 survey respondents were surveyed about unmet need.<sup>96</sup> The unmet need survey indicates that employment, housing and immigration status are key factors contributing to lack of access and continuous HIV care. Approximately 46% of those who had never been in care work full-time or part-time. Of the foreign-born LACHNA respondents with unmet need, 58% were undocumented. The top five reasons identified by the HIV-positive individuals who did not enter care were: unstable housing; good health (don’t feel the need to see a doctor); unaware of free medical care; not ready to deal with HIV; and fear of discrimination/stigma. For those people who left and returned to care, the following reasons for leaving care were cited: substance abuse; unstable housing; good/improved health; incarceration; and unaware of free medical care (for those who never entered care). Reasons cited most frequently for returning to care were: illness; substance abuse treatment; overcoming depression; ready to deal with HIV; stabilized housing; heard about a new doctor or clinic; discovered that different medications or treatments are available; and/or encouraged by friends and family.

<sup>96</sup> Note: As a convenience sample, the 2008 LACHNA data may not be necessarily generalizable to the whole Ryan White population.

**Table 20. Needs, Barriers, and Gaps for HIV+ Individuals who are Aware but Out of Care**

Need(s)	Barrier(s)	Gap(s)
Identification and Linkage to care	Extremely hard-to-reach population; substance abuse; mental illness; homelessness	No focused effort for targeted outreach.
Access to partner services	Inconsistent offering of service and follow-up	Lack of a universal seamless system countywide
Access to partner services	Inconsistent offering of service and follow-up	Lack of dedicated program staff
Co-morbidity and behavioral risk screening and interventions	Inconsistent implementation	Lack of resources; staff training
Linkage to other medical and social services	Inconsistent implementation	Lack of resources; staff training

With an estimate 18,800 PLWH who are aware of their infection but not in care, the extent of the problem is huge. LAC lacks sufficient dedicated resources needed to identify this population and then link them to care. As they are linked to care and become engaged in services, the increasing numbers of persons in care will further stretch limited resources.

### ***F. HIV Positive Individuals who are Accessing Services / Adherent to Care***

#### **❖ HIV Prevention**

**Table 21. Prevention Needs, Barriers, and Gaps for HIV+ Individuals who are Accessing Services and/or HIV+ Individuals who are Adherent to Care Plan**

Need(s)	Barrier(s)	Gap(s)
Access to antiretroviral therapy (ART)	Variation across providers related to the initiation of ART among HIV+ patients; high pharmaceutical cost of ART	No countywide policy on the implementation of ART
Adherence to ART	Substance abuse, mental illness, dual diagnoses, homelessness, denial, medication side effects	Lack of funding to support treatment adherence counseling as well as address sufficiently identified barriers to adherence
Access to partner services	Inconsistent implementation	Lack of resources; staff training
Co-morbidity and behavioral risk screening and interventions	Inconsistent implementation	Lack of resources; staff training

In response to the latest research, which supports the paradigm of “treatment as prevention” resulting from viral load suppression, the guidelines for treatment of HIV infected adults and adolescents have been updated as of March 27, 2012 to recommend the initiation of antiretroviral therapy (ART) in all patients that are new to treatment.<sup>97</sup> Thus, the most urgent needs for HIV+ individuals who are accessing services is to increase their access to ART and support them in adherence to their treatment regimen (Table 21). Other needs of all HIV+ individuals include

<sup>97</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. 1–239. Available at <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>. Initiating Antiretroviral Therapy in Treatment-Naive Patients: Panel Recommendations, April 2, 2012, p. 3.

being offered ongoing partner services, particularly those who are in serodiscordant relationships, and regular screening for co-morbidities (e.g., STIs, hepatitis B and C) and ongoing risk behaviors.

### ❖ HIV-Related Care and Supportive Services

As noted earlier, LAC completed the LACHNA-Care needs assessment targeting PLWH in Fall 2011. This report presents detailed findings on the specific service needs of PLWH who are accessing care through the Ryan White system. Due to the quantitative nature of the results, the tables that follow are formatted differently from those with other populations. The survey also collected important information on barriers to care and organized the information by type of barrier: (1) structural, (2) organizational, and (3) individual. Structural barriers included: “too much paperwork or red tape or too many rules and regulations.” Organizational barriers included: “service provider was insensitive to my concerns; amount of “wait time” for an appointment or in the waiting room too long; or the organization provided me with the wrong referrals.” Individual barriers included: “I was not aware that a service or treatment was available to me; I was not aware of the location of service(s); or I did not know whom to ask for help.”

**Table 22. Top 10 Service Needs Reported by PLWH in the Ryan White System of Care, including Barriers and Gaps, Findings from the 2011 LACHNA-Care (n=450)**

Need(s)	Percent Need	Gap(s) (1)	Type of Barrier(s)		
			Structural	Organizational	Individual
<b>1. Medical outpatient care</b>	93.8%	--	--	--	--
<b>2. Oral health care</b>	82.9%	34.2%	22.0%	18.9%	53.8%
3. Psychosocial case management	79.8%	--	--	--	--
<b>4. AIDS Drug Assistance Program</b>	74.4%	--	--	--	--
5. Medical Transportation-bus passes	68.4%	17.6%	13.9%	11.1%	68.1%
6. Nutrition Support-Food Bank	59.1%	19.8%	NR	22.4%	69.7%
<b>7. Medical Nutrition Therapy</b>	54.4%	18.9%	10.0%	15.7%	68.6%
8. Rental Assistance	48.7%	28.0%	20.5%	30.8%	42.7%
<b>9. Mental Health, Psychiatry</b>	45.1%	--	--	--	--
<b>10. Medical Specialty</b>	38.9%	23.1%	33.3%	23.1%	35.9%

(1) Gaps are defined as someone reporting a “need” for a service but who did not “receive” the service.

-- indicates service was not in top 10 services with a gap and gaps not identified in the final LACHNA-Care report; NR= <5 respondents, too few to report.

**Bold** indicates a Ryan White Core service.

Among the top 10 services needed by PLWH, six (6) services also ranked among the top ten services PLWH identified with a gap. These services included: Oral Health Care, Medical Transportation Services-Bus Passes, Nutrition Support-Food Bank, Medical Nutrition Therapy, Rental Assistance, and Medical Specialty Services. Overall, Oral Health Care and Rental Assistance were the top two services with gaps. Other services included among the top ten services with gaps were: Short-term Rent, Mortgage, and Utility Assistance; Housing Case Management; Medical Transportation-Taxi Voucher; and Benefits Specialty.

When examining the specific barriers to services, the LACHNA-Care grouped barriers into three types—structural, organizational, and individual. The overwhelming barrier to accessing services

was identified as an “individual” or client-level barrier. As discussed earlier, these barriers were about a person’s individual knowledge of whether or not a service existed, where it was located, or whom to ask for help. In a county the size of Los Angeles, it is not surprising that there is a lack of information among PLWH about the availability of services, eligibility requirements, how to access the services, and where to go for help. Although LAC has a number of systems in place to help PLWH learn about and navigate the myriad systems of care (e.g., Medical Care Coordination service category, HIV LA Resource Directory), this lack of information about services points to a persistent, system-level problem and need.

The gap in oral health services also points to a larger provider-level barrier to care in terms of the system’s capacity for services. There are simply not enough oral health care services available to meet the demand for services. The “structural” barriers point to program-related problems with services (i.e., paperwork, red tape, rules and regulations). Clients have consistently complained about having to provide documentation at multiple points for proving eligibility for services.

Tables 23 and 24 depict the top ten (10) ranked services needed by race/ethnicity and by selected special populations: Youth, Transgender Persons, Currently Homeless, and IDU.

**Table 23. Top Ranked Service Needs Reported by PLWH in the Ryan White System of Care for All Respondents and By Racial/Ethnic Group (2011 LACHNA-Care)**

Need(s)	Ranking by Population Group				
	All (n=450)	White (n=93)	Latino (n=213)	African American (n=107)	Other (1) (n=30)
<b>Medical outpatient care</b>	1	1	1	1	1
<b>Oral health care</b>	2	7	5	2	2
Psychosocial case management	3	4	2	3	4
<b>AIDS Drug Assistance Program</b>	4	2	3	5	3
Medical Transportation-bus passes	5	--	4	4	5
Nutrition Support-Food Bank	6	6	8	6	6
<b>Medical Nutrition Therapy</b>	7	10	7	8	9
Rental Assistance	8	8	10	7	--
<b>Mental Health, Psychiatry</b>	9	5	6	9	8
<b>Medical Specialty</b>	10	--	9	--	7
Counseling and testing in care settings	--	3	--	--	--
Health education/risk reduction		9	--	--	--
Housing Case Management	--	--	--	10	--
Local pharmacy program/drug reimbursement		--	--	--	10

(1) Respondents identified as Asian and Pacific Islander, Native American, or Mixed Race. Numbers for each group are too small for analysis by themselves.

-- indicates service was not in top 10 services with a gap and gaps not identified in the final LACHNA-Care report.

**Bold indicates a Ryan White Core service**

**Table 24. Top Ranked Service Needs Reported by PLWH in the Ryan White System of Care for All Respondents and Selected Subpopulations (2011 LACHNA-Care)**

Need(s)	Ranking by Population Group				
	All (n=450)	Youth (n=31)	Transgender Persons (n=32)	Homeless (n=54)	IDU (n=32)
<b>Medical outpatient care</b>	1	3	1	1	1
<b>Oral health care</b>	2	1	2	3	2
Psychosocial case management	3	2	3	2	3
<b>AIDS Drug Assistance Program</b>	4	4	8	5	5
Medical Transportation-bus passes	5	5	4	4	4
Nutrition Support-Food Bank	6	--	5	6	6
<b>Medical Nutrition Therapy</b>	7	7	6	8	7
Rental Assistance	8	6	7	--	9
<b>Mental Health, Psychiatry</b>	9	--	9	7	10
<b>Medical Specialty</b>	10	--	--	--	--
Housing Case Management	--	8	--	10	8
Medical Transportation-bus tokens	--	9	--	--	--
Peer Support	--	--	10	--	--
Transitional Housing	--	--	--	9	--

-- indicates service was not in top 10 services with a gap and gaps not identified in the final LACHNA-Care report.

**Bold** indicates a Ryan White Core service.

In total, seven services (70%) are identified by all racial/ethnic groups as one of the top ten (10) needed services. These common needed services included: (1) Medical Outpatient Care, (2) Oral Health Care, (3) Psychosocial Case Management, (4) AIDS Drug Assistance Program (ADAP), (5) Nutrition Support-Food Bank, (6) Medical Nutrition Therapy, and (7) Mental Health, Psychiatry. Both Latinos and Other races/ethnicities identified Medical Specialty Services among their top ten needed services. There were a few services identified by only one population group: Whites were the only group to identify Counseling and Testing in the Care Setting, as well as Health Education/Risk Reduction services as needed services; African Americans identified a need for Housing Case Management; and “Other” races/ethnicities identified a need for Local Pharmacy Program/Drug Reimbursement.

When examining barriers by Race/Ethnicity, individual barriers represent the most consistently noted barrier for all population groups. Among some of the unique barriers, Latinos identified “structural” barriers as the most common reason for a gap in being able to access Medical Specialty services. As structural barriers include rules and regulations, Latinos who are not eligible for Medi-Cal may have difficulty accessing specialty medical services that are not HIV-related. Ryan White-funded medical services do not impose the same eligibility requirements as Medi-Cal, so they are easier to access, particularly for undocumented Latinos. The Other races/ethnicities population group also identified a structural barrier for Oral Health Care. Apart from these two services, the primary barriers identified were individual barriers. In terms of gaps in care, Oral Health Care and Rental Assistance ranked as the top two services with an identified service gap (needed but did not receive) for every racial/ethnic population group. Other gaps in care were similar to those identified by all PLWH respondents (Table 17).

Table 24 depicts service needs by selected population groups. With only one exception (transgender PLWH), all PLWH and selected subpopulations identified the same top five service categories, albeit in slightly different order. Transgender PLWH were the only group not to select ADAP among their top five service needs; it ranked 8<sup>th</sup>. The common services include: medical outpatient care, oral health care, psychosocial case management, ADAP, and medical transportation services in the form of bus passes. The variation between subpopulations is seen when identifying the next set of five services. Three populations identify housing case management among their top needed services: youth, currently homeless, and IDUs. Not one of these subpopulations identified medical specialty services among their top ten service needs. The remaining services needed reflect other life needs. For example, homeless PLWH rank transitional housing as important.

In terms of barriers to care, individual barriers were noted as the most common barrier cited across population groups. The only exception was for Transgender PLWH who reported a structural barrier to accessing Oral Health Care. This was the only service category that had a large enough response rate to identify the specific barriers. For all four subpopulations, the largest gaps in care were for Oral Health Care and Rental Assistance and these were ranked as the top two for every population group.

## V. LOS ANGELES COUNTY'S CONTINUUM OF HIV SERVICES

### A. Introduction

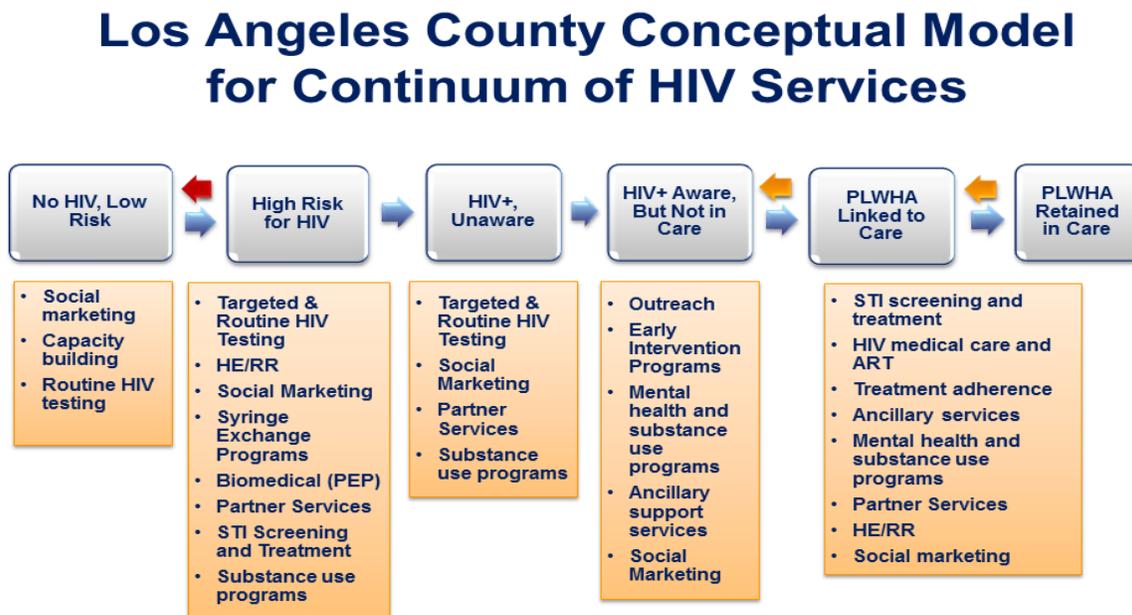
LAC has nearly 30 years of providing a broad range of services targeting persons at risk for or already infected with HIV. The epidemiologic data presented in the prior sections provide evidence for services targeted in high disease burden geographic areas and tailored to specific target populations. LAC's comprehensive portfolio of prevention and care interventions and activities are supported by a full array of resources. Due to the volume of resources in LAC, it is not possible to list every service and service provider in this plan. There are several comprehensive directories of HIV/AIDS Services in LAC. The *HIV L.A. Directory* is widely available at [www.hivla.org](http://www.hivla.org). Other community-based resource guides also exist for the County; prominent among them is the *Rainbow Resource Directory* ([www.resourcedirectory.com](http://www.resourcedirectory.com)). This is one of the most expansive privately available resource directories in LAC containing more than 20,000 listings, type of service, funding source, admission requirements, languages spoken, etc. Thus, the intent of this section is not to replicate these detailed directories but to describe broadly the services/interventions/resources available within the County as they relate to the specific populations needing these services.

DHSP, in collaboration with the PPC and the Commission, developed a conceptual model to depict the populations needing and receiving services, identifying examples of the services that individuals within each population group would likely utilize (Figure 32).

The resources available in the County are the foundation of the *LAC Conceptual Model for Continuum of HIV Services*, which includes the *TLC+ framework* and a full complement of care and treatment services for PLWH. These services are guided by well-defined Standards of Care to ensure their consistent implementation. The Commission and PPC describe the role of resources and Standards of Care within this continuum:

1. **Resources:** refer to the fundamental building blocks of a prevention and care system, and can come in many forms—funding, human resources, bricks-and-mortar, expertise and support. An all-volunteer service system that relies on contributions of time and effort, in-kind support and facilities can still drive a system of prevention and care, albeit perhaps a more limited one. However, a system without funds, facilities and personnel (volunteer or otherwise)—bereft of resources—is not capable of offering prevention, care or treatment services.
2. **Standards of Care:** while resources are the cornerstones of a system of prevention and care, the standards of care are its architecture. Without resources, a system cannot offer services; without standards, it cannot design and deliver services. Standards of care define the norms and minimum expectations of the intervention(s). In LA County, service delivery is guided by a set of well-developed written guidelines to which provider compliance is expected and monitored. Standards may incorporate outcomes, performance indicators, benchmarks and best practices, but are, at the very least, the accepted/mandated rules of service delivery. [All SOC are available online: <http://hivcommission-la.info/soc.asp>]

Figure 32. Los Angeles County Conceptual Model for Continuum of HIV Services



### A. Available Resources

Los Angeles County’s service delivery system is a complex one. CDC and Ryan White-funded services represent only a portion of the entire HIV service tapestry in LAC. For example, Ryan White Part A core medical services comprise only a fraction of the primary health care services available to people with HIV. Other resources available to PLWH include but are not limited to: Ryan White Part C and Part D funded sites; the Veteran’s Administration (VA); a network of 104 Federally Qualified Health Centers (FQHCs)<sup>98</sup> funded through HRSA’s Bureau of Primary Care; LAC’s Indian Health Service-funded clinic; public clinics and hospitals that are a part of LAC’s Department of Health Services; and private care through large health maintenance organizations (HMOs) such as Kaiser Permanente, as well as a host of private clinics and physician’s across LAC’s landscape. Similarly, DHSP has identified that publicly funded HIV testing comprises only one-third of the total testing available in the County. Ryan White Part A core and support services encompass a fraction of the services in LAC’s broader system of care that both HIV negative and HIV positive individuals can access. Many of the community-based supportive services are devoted to helping LAC residents who struggle with poverty, homelessness, and other community-level challenges.

Table 25 provides a snapshot of the types of services that address the needs of people living with or at risk for HIV across all population groups (HIV+ low risk, HIV+ high risk, HIV+ unaware, etc.). Included in this table are the CDC’s 14 required and 10 recommended interventions as well as LAC’s care-related service categories (Attachment D). As the interventions/services address the needs of multiple population groups, the narrative that follows is organized by service category or types of interventions so as to minimize redundancy in describing these services.

<sup>98</sup> List may be obtained online from <http://findahealthcenter.hrsa.gov/>.

**Table 25. Matrix of Interventions/Services by Population Group and Identified Funding Source(s)**

Funding Source		Service Categories / Interventions*	Population Group Needing Service/Intervention					
RW (Part)	Other		HIV- Low Risk	HIV- High Risk	HIV+ Undiagnosed (Unaware)	HIV+ Aware, Not Accessing Services	HIV+ Aware, Accessing Services	HIV+ Aware, Adherent to Care Plan
<b>POLICY/SYSTEM LEVEL INTERVENTIONS</b>								
	x	Structural/policy Initiatives	X	X	X	X	X	X
	x	HIV/STD surveillance data to prioritize risk counseling and partner services		X	X	X	X	X
	x	Antiretroviral treatment policies & procedures					X	X
<b>COMMUNITY LEVEL INTERVENTIONS</b>								
	X	Social Marketing	X	X	X	X	X	X
A	X	Community mobilization	X	X	X	X	X	X
	X	Community interventions that reduce HIV risk	X	X	X			
<b>INDIVIDUAL OR GROUP LEVEL INTERVENTIONS/SERVICES</b>								
	X	Condom Distribution		X	X	X	X	X
	x	Routine, opt-out screening	X	X	X			
	X	HIV Testing in non-clinical settings	X	X	X			
A, C, D	X	Linkage to Care, Treatment and Prevention Services			X	X		
A,C	X	Integrated hepatitis, TB, STD testing, partner services, vaccination, & treatment		X	X	X	X	X
A	X	Broadened linkages to/provision of services addressing social factors		X	X			
	X	Post-Exposure Prophylaxis (PEP)		X	X			
	X	Pre-Exposure Prophylaxis (PrEP)		X	X			
A	X	Behavioral risk screening & risk reduction interventions		X	X	X	X	X
	X	Partner services				X	X	X
	x	Prevention of perinatal transmission			X	X	X	X

Funding Source		Service Categories / Interventions*	Population Group Needing Service/Intervention					
RW (Part)	Other		HIV- Low Risk	HIV- High Risk	HIV+ Undiagnosed (Unaware)	HIV+ Aware, Not Accessing Services	HIV+ Aware, Accessing Services	HIV+ Aware, Adherent to Care Plan
A	X	Brief alcohol screening & interventions		X	X	X	X	X
A, C, D	X	Medical Outpatient/ Specialty					X	X
A	X	STD/hepatitis screening					X	X
A	X	Vision Services					X	X
A	X	Clinic/provider-delivered EBIs					X	X
A	X	Medication Assistance & Access					X	X
A	X	Interventions/strategies promoting adherence to ART					X	X
A, F	X	Oral Health Care					X	X
A	X	Long-Term and Palliative Care					X	X
A	X	Nutrition Support					X	X
A		Medical Care Coordination					X	X
A,C	X	Interventions/strategies to promote retention or re-engagement in care				X	X	X
A, C, D	X	Linkage to other medical/social services				X	X	X
A	X	Mental Health Services					X	X
A	X	Substance Abuse Services					X	X
A		Benefits Support					X	X
A	X	Home-Based Care					X	X
A		Retention in Care Services					X	X
	X	Rehabilitation Services					X	X
		Respite Care					X	X
	X	Housing Supportive Services					X	X
	X	Residential Care and Housing Services					X	X
A		Case Management-Transitional				X	X	X

## ***B. HIV Prevention, Testing, and Linkage to Care***

Through both its five-year Cooperative Agreement (Flagship Award) with the CDC and local County funds, DHSP supports a broad range of HIV prevention and intervention activities throughout LAC. Beginning January 2012 under its new Cooperative Agreement (Flagship Award), LAC received funding under three parts: (1) Category A: Core Services; (2) Category B: HIV Screening Initiatives in Healthcare Settings, and (3) Category C: Demonstration Projects and Innovation. DHSP also receives funds from the CDC as part of its ECHPP project, which supports enhanced planning activities intended to help local jurisdictions achieve the goals of the NHAS.

The following narrative briefly describes the broad types of programs/interventions that are core to LAC's HIV prevention, testing, and linkage to care service portfolio:

### ***HIV Counseling and Testing***

Through the use of effective modeling activities for HIV testing, syndemic planning, and geospatial analysis of newly diagnosed HIV positive individuals, DHSP has been able to focus its HIV counseling, testing, and referral efforts on those areas within the County with the highest disease burden and delivers services countywide through dozens of contracts. DHSP supports a variety of HIV testing models including: Targeted HIV counseling and testing (HCT) services in storefronts, substance abuse clinics, courts, mobile units, and in commercial sex venues; testing within social and sexual networks; jail-based testing; multiple morbidity testing; and routine HIV screening in health care settings to assist with identifying undiagnosed infection as well as counsel and educate those at elevated risk for acquiring HIV. During 2012, DHSP is expanding the use of the rapid testing algorithm (RTA) model, which uses a second or third rapid test to confirm HIV for the purpose of immediate referral to care.

### ***Linkage to Care Services***

Aggressive case finding is a key component in all of DHSP's program planning. DHSP ensures a smooth transition from diagnosis to care through the coordination of HIV Counseling and Testing (HCT), early intervention and wrap-around services with primary medical care. To ensure referrals and linkage to services for individuals informed of their infection, key strategies include the following:

- 1) The Early Intervention Programs (EIP) are designed to identify unaware PLWH and support them in their entry in and adherence to HIV treatment. EIP is supported through Ryan White Part A, Minority AIDS Initiative and County funding.
- 2) All of DHSP-funded HIV Counseling and Testing providers are required to refer HIV-positive clients to HIV care and track their linkage to care (LTC) whenever possible. Through their fee-for-service contracts, DHSP offers providers a financial incentive for both disclosure as well as linkage to medical care.

### ***Partner Services***

Partner Services (PS) are a broad array of services that are offered to persons with HIV, syphilis, gonorrhea, or Chlamydia infections and their partners. Public Health Investigators (PHIs) and Community Embedded Disease Intervention Specialists (CEDIS) identify partners and notify

them of their exposure through partner notification. Other elements of LAC's PS include: Prevention counseling; testing for other STDs, hepatitis, and TB; and linkage to medical evaluation, treatment, and referral to other services. All public health service providers regardless of their affiliation with the health department (HD) are required to report newly diagnosed HIV-positive cases to DHSP and offer PS. DHSP is currently working on a new PS plan that will be completed by 2016.

### ***Health Education and Risk Reduction (HE/RR)***

DHSP currently supports health education/risk reduction (HE/RR) contracts with CBOs throughout LAC. All HE/RR programs including interventions for HIV-positive individuals provide STD education. These projects are all evidence-based and are linked with HCT. DHSP anticipates releasing a new request for proposals (RFP) to re-solicit HE/RR programs beginning in 2013 with new services starting in 2014.

### ***Social Marketing***

DHSP, as well as numerous CBOs in LAC, have a long history of creating high-profile, highly effective social marketing campaigns targeting key populations at highest risk of acquiring or transmitting HIV. DHSP supports and promotes local and national social marketing campaigns. LAC's local Erase Doubt social marketing campaign targets African-American and Latino MSM and their female partners through strategic placement of media and promotional events in highly impacted neighborhoods. Another campaign, Dontthinkknow.org, targets young women of color and promotes screening for STIs. LAC has developed another campaign targeting MSM to promote syphilis testing (reallycheckyourself.org). The LA Condom and LASEXSYMBOL.com is a new campaign that began in 2012, and combines social marketing with an innovative condom distribution program.

### ***Condom Distribution***

All current HE/RR contracts have a line item in their budget for the purchase of condoms and the majority of HE/RR programs include outreach (distribution of educational materials and/or safe sex kits including condoms) services as part of their scope of work. Although the location of the currently funded individual- and group-level interventions are based on the "hot spot" analysis and are not likely to change in 2013, outreach and condom distribution sites will be re-evaluated following the completion of the syndemic mapping activity. The results of the syndemic mapping activity will provide specific neighborhoods, blocks, or street intersections to target outreach and condom distribution activities. Public Health Department STD clinics (12 clinics) also distribute condoms on-site.

Development of an "LA condom" and associated marketing program are underway. Free condoms are being distributed throughout high-risk areas of LAC through easily-accessible locations. A mobile phone application is in development that will map locations where both free condoms and free HIV testing are available.

### **Local City Efforts Addressing HIV Prevention and Testing Needs**

Several cities within highly impacted regions of LAC are actively involved in designing programs to curtail HIV within their respective jurisdiction. These initiatives include programs delivered through the City of Long Beach Health Department, City of Los Angeles, City of Pasadena, and the City of West Hollywood. Each local area determines the needs to be addressed in their community. Highlights of these initiatives include:

- City of Los Angeles: The City of Los Angeles is the most populous jurisdiction that provides dedicated HIV services to its residents. The City invests approximately \$1 million to support a variety of programs; about half supports the city's syringe exchange program. The City also funds other limited services including HIV testing, jail programs, case management, HE/RR programs, capacity building, and research. The City takes into account what is funded through LAC and tries to address gaps in service delivery. These programs and services are all managed through the AIDS Coordinator's office.
- City of West Hollywood: Similar to the City of Los Angeles, the City of West Hollywood also funds a variety of HIV-related programs that complement those services funded through the County. These include but are not limited to rent, utility, and pharmaceutical assistance; dental, mental health, and benefits counseling; and educational peer support and peer counseling. A highlight of the City's investment for HIV specific services is in the area of social marketing. Its current campaign--*I AM, WE ARE*--targets the LGBT community, including PLWH (available at <http://www.weholife.org/>).
- City of Long Beach: The City of Long Beach has its own health department and coordinates HIV, STD, TB services within the same division (i.e., Prevention Health Bureau). Key programs delivered through the city include HIV testing, partner services, condom distribution, HE/RR programs, outpatient medical care, benefits counseling, treatment adherence, and much more.
- City of Pasadena: The City of Pasadena also has its own health department. The City co-locates HIV and STI education within its Disease Prevention and Control Division. Services offered include HIV testing and HIV/STI education and prevention. The City also contracts with a community agency to provide HIV medical outpatient services.

### **Los Angeles Unified School District (LAUSD)**

The LAUSD receives funds from the CDC to develop age-appropriate lessons for students, to train teachers in strategies for preventing the spread of HIV/AIDS and other diseases that may be transmitted sexually (STDs), and for the prevention of teenage pregnancy. Its goals are to:

- Improve the quality of HIV/AIDS instruction within comprehensive health education courses in the District's secondary schools.
- Collaborate with community partners on HIV/AIDS to build capacity within Los Angeles.
- Develop and implement a parent education component.
- Monitor health education programs and health behaviors that put youth at risk for HIV infection. There will also be an emphasis on high risk populations, such as LGBTQ youth.

- Develop and maintain a Web site that aligns with their scope of work regarding school staff, students, parents, and our community partners.
- Maintain The HIV Program Review Panel and ensure that materials are approved for classroom use.

### ***Directly-Funded Federal Programs***

1. **CDC’s HIV Prevention for Community-Based Organizations:** The CDC directly funds 14 Los Angeles-based organizations through two programs: Program Announcement 10-1003, HIV Prevention Projects for Community-Based Organizations (CBOs) and Program Announcement 11-1113, HIV Prevention Projects for Young Men of Color Who Have Sex with Men and Young Transgender Persons of Color. Funds help support a variety of HIV testing and prevention services throughout LAC.
2. **Substance Abuse and Mental Health Services Administration (SAMHSA):** SAMHSA regularly funds HIV prevention and testing through its various divisions: Center for Substance Abuse Prevention (CSAP) and the Center for Substance Abuse Treatment (CSAT). A number of CBOs in Los Angeles County are directly-funded through SAMHSA to provide integrated substance abuse and HIV prevention programs, as well as rapid HIV testing through SAMHSA’s request for proposal process.

In late 2011, DHSP, in partnership with St. John’s Well Child and Family Center and UCLA, received direct funding from SAMHSA’s Center for Mental Health for a demonstration project titled Integrated Behavioral Health in Primary Care (IBHPC). This initiative is designed to provide co-located behavioral health interventions, HIV testing, and mental health and substance use screening within a primary care clinic setting.

### ***C. Care and Treatment for Persons Living with HIV/AIDS***

PLWH in Los Angeles County benefit from the many resources available to them through the Ryan White Treatment Extension Act of 2009 (Parts A, A-MAI, B, C, D, and F), as well as a broad range of medical and supportive services available outside of the Ryan White system. The Ryan White Program nationally is administered by the Health Resources and Services Administration (HRSA) HIV/AIDS Bureau (HAB). Ryan White services are an essential safety net for low-income PLWH in LAC. They comprise a major share of the full complement of care and treatment services within LAC’s *Continuum of HIV Services*.

#### **❖ HRSA’s Ryan White Programs**

**Part A:** The DHSP is responsible for the administration of Ryan White Part A funds in LAC. Through a competitive solicitation process, DHSP contracts with local governments and CBOs to provide services to income-eligible PLWH in the County. The Commission is responsible for completing the annual priority setting and resource allocation process, which gives DHSP direction on the services to be funded. Every three years, the Commission is also responsible for completing a needs assessment of PLWHA in LAC in order to inform the annual priority setting process. The needs assessment provides critical information from PLWH regarding their self-reported needs for specific services. Currently-funded Part A services for FY 2012 include:

Medical Outpatient/Specialty, Medication Assistance and Access, Oral Health Care, Linkage to Care Services (i.e., Early Intervention and Transitional Case Management), Benefits Support, Medical Care Coordination, Mental Health Services, Substance Abuse Services (residential), Retention in Care Services (i.e., Nutrition Support and Medical Transportation), Long-Term and Palliative Care, and Home Based Case Management. With the addition of Vision Services, these same services comprise the set of planned Ryan White services for LAC during FY 2013.

**Part A—Minority AIDS Initiative (MAI):** Part A—MAI funds are administered by DHSP. LAC’s fiscal year (FY) 2013 MAI plan allocates funding to support a broad array of linkage to care services in order to continue improving health outcomes and reducing disparities to access for racial/ethnic minorities. Racial/ethnic minorities represent vulnerable populations that these services target. For example, medical care coordination (MCC) integrates medical and non-medical case management, and uses a multidisciplinary approach to improve the health outcomes of individuals who are HIV-positive and have not accessed care, or who have dropped out of care. Outreach, early identification and access to treatment are important strategies to reduce health disparities among communities of color.

The MAI program plays an integral and critical role in the continuum of care, because it represents one of the most clearly directed efforts aimed at addressing unmet need (i.e., HIV positive individuals who are aware of their HIV infection but not in care) and serving disenfranchised populations of color. MAI-funded services enhance access to care and improve the clinical outcomes for populations of color by increasing linkages to critical core medical services such as oral health care, outreach to vulnerable and out-of-care populations, and supporting retention/adherence through medical care coordination.

**Part B:** Ryan White Part B is managed by the California Office of AIDS (OA). In California, Part B funds support the AIDS Drug Assistance Program (ADAP), and the OA-health insurance premium payment program, which pays health insurance premiums on behalf of people disabled because of HIV and at risk of losing their health insurance coverage. OA is currently in the process of expanding its eligibility criteria to cover more individuals. OA also started its Pre-Existing Condition Insurance Plan (OA-PCIP) in 2011 to provide insurance payments for eligible PLWH.

**Part C—Early Intervention Services (EIS):** Ryan White Part C—EIS is administered by HRSA through its HIV/AIDS Bureau. There are 13 directly-funded organizations providing EIS throughout LAC. A number of factors continue to exert pressure on the local HIV medical outpatient care system, including the increasing number of people who become eligible for RW services as a result of the economic recession; the increasing number of people of color with HIV/AIDS; the increasing proportion of these clients ineligible for Medi-Cal due to residency status or recent immigration; the prevalence of co-morbidities and the increasing complexity of care required; the cost of viral load monitoring and viral resistance testing; and supplemental medications. All LAC Part C grantees are also DHSP-contracted services providers. Each is expected to exhaust Part C resources before expending Part A funds for services supported by both funding streams.

**Part D:** Ryan White services to women, infants, children, youth and their families are coordinated with *Part D*-funded providers— Public Health Foundation Enterprises (PHFE) and

the LAC-University of Southern California (USC) Medical Center’s Maternal, Child and Adolescent (MCA) Program, and AltaMed Health Services. As the Part D grantee, PHFE’s Los Angeles Family AIDS Network (LAFAN) distributes funds to multiple agencies that support services designed for children, youth, women, and families. MCA operates a clinic for women and a special program to provide outreach and case management to connect young people to care and other needed services, including mental health and substance abuse treatment. AltaMed serves eastern LAC and provides a plethora of bi-lingual services, including medical treatment, to families in need.

**Part F, Dental Reimbursement Program:** In addition to providing direct services, HRSA’s Part F, Dental reimbursement program is designed for the education and training of oral health providers. LAC has two Part F-funded providers: the USC School of Dentistry and the University of California, Los Angeles School of Dentistry. Part F funds are a critical resource for oral health care in LAC as they augment Part A funds also being used.

**Part F, AIDS Education and Training Center (AETC):** The Pacific AIDS Education and Training Center (PAETC) is an affiliate of the University of California, San Francisco AIDS Research Institute, and is funded by HRSA under the Ryan White program. Through its three sites in Southern California (UCLA, USC, and Charles R. Drew University of Medicine and Science), the PAETC provides HIV/AIDS-related training, education, and information services specifically designed for health care providers, including physicians, nurses, physician assistants, nurse practitioners, dentists, dental hygienists, pharmacists, and other health care professionals. Their secondary target audience includes paraprofessionals and other allied professionals. Information may be accessed online through:

- USC: <http://keck.usc.edu/paetc/>
- UCLA: <http://aidsinstitute.ucla.edu/body.cfm?id=62>
- CDU: <http://www.hivtrainingcdcu.org/>

#### ❖ Los Angeles County Ryan White Service Categories

The Commission has worked diligently to design a system of care that is responsive to the needs of PLWH. As part of this design, the Commission has defined service categories that are meaningful to meet these needs. As a result, they include a set of services that provide access to HIV treatment and remove barriers to engagement, retention, and adherence to treatment. In 2011, the Commission consolidated 47 service categories into 16 service categories. These categories are functionally named and may include one or more of HRSA’s “core” and “support” service categories within them (see Attachment D for service category definitions). For example, LAC’s Medical Care Coordination service category includes two subcategories: medical case management (HRSA core service) and non-medical case management (HRSA support service). In addition, some discrete services within a broader service category (e.g., Workforce Entry/Re-Entry within the Rehabilitation Services category) are not a Ryan White service category at all. However, they address the broader holistic needs voiced by PLWH in LAC. As the Commission’s responsibility is to prioritize services and allocate funds accordingly, DHSP is then responsible for determining the payer of the service to ensure that a minimum of 75% of Part A funds are utilized for core services and a maximum of 25% of funds are used for support

services. Tables 21 and 22 match the HRSA Ryan White service categories and identify the corresponding LAC service category.

**Table 26. Matching RW Core Medical Services with Los Angeles County’s Service Categories**

<b>HRSA Ryan White Core Medical Services</b>	<b>Los Angeles County Service Category</b>
Outpatient/Ambulatory Health Services	Medical Outpatient/Specialty
AIDS Drug Assistance Program	Medication Assistance and Access
AIDS Pharmaceutical Assistance (local)	Medication Assistance and Access
Oral Health Services	Oral Health Care
Early Intervention Services	Linkage to Care Services
Health Insurance Premium and Cost-Sharing Assistance	Benefits Support
Home Health Care	Home-Based Care
Home and Community-Based Health Services	Home-Based Care
Hospice Services	Long-Term and Palliative Care
Mental Health Services	Mental Health Services
Medical Nutritional Therapy	Medical Nutrition Therapy
Medical Case Management	Medical Care Coordination
Substance Abuse Services Outpatient	Substance Abuse Services

**Table 27. Matching of RW Support Services with Los Angeles County’s Service Categories**

<b>HRSA Ryan White Support Services</b>	<b>Los Angeles County Consolidated Service Category</b>
Case Management (non-medical)	Medical Care Coordination
Child Care Services	Retention in Care Services
Emergency Financial Assistance	Housing Supportive Services
Food Bank/Home Delivered Meals	Retention in Care Services
Health Education/Risk Reduction (HE/RR)	Retention in Care Services
Housing Services	Residential Care and Housing Services
Legal Services	Retention in Care Services
Linguistic Services	Retention in Care Services
Medical Transportation Services	Retention in Care Services
Outreach Services	Linkage to Care Services
Psychosocial Support Services	Retention in Care Services
Referral for Health Care and Supportive Services	Medical Care Coordination
Rehabilitation Services	Rehabilitation Services
Respite Care	Respite Care
Treatment Adherence Counseling	Linkage to Care Services
Substance Abuse Services, Residential	Substance Abuse Services

❖ **Los Angeles County’s Annual Priority Setting: Linking Needs with Priorities**

Annually, the Commission’s Priorities and Planning Committee prioritizes care services targeting PLWH. Priority-setting is based on the most currently available assessment of service needs, which was the 2011 LACHNA-Care survey (available at: <http://hivcommission-la.info/>), and on the most recent two years of service utilization and expenditure data. As services are

prioritized, the Commission then makes allocation recommendations for these services, ensuring that Ryan White funds are used as *payer of last resort* and that other sources of funding for the same or similar services are considered. DHSP then determines which services are paid through its Ryan White Part A funding and which services are paid through Net County Cost (NCC) (part of LAC's general fund) or from other available resources at the time. The needs of PLWH are at the center of establishing service priorities and allocations.

#### ❖ **Other Resources for Care and Treatment of PLWH**

***Housing Opportunities for People with AIDS (HOPWA)***: The City of Los Angeles receives approximately \$12 million annually from the U.S. Department of Housing and Urban Development (HUD) in HOPWA funds. Coordinated through the Los Angeles Housing Department (LAHD), HOPWA funds are used locally for housing placement, assistance, housing specialists, informational services and housing supportive services. Rental assistance for PLWH is coordinated through four housing authorities (County of Los Angeles, City of Los Angeles, Long Beach and Pasadena). The lack of affordable housing in LAC remains a significant barrier for PLWH. In 2011, the Commission, in collaboration with DHSP, received a HOPWA award of \$1.375 million directly from HUD to develop an integrated HIV/AIDS Housing Plan to reduce the risk of homelessness and improve access to health care.

***Women, Infants, Children, and Youth (WICY)***: The following perinatal clinics in LAC offer comprehensive HIV services for women, infants, children, adolescents and their families:

- Children's Hospital Los Angeles (CHLA)
- LAC-University of Southern California (USC) Medical Center's Maternal, Child and Adolescent (MCA) Program
- Memorial Medical Center of Long Beach
- Mattel Children's Hospital at UCLA-CARE 4 Families Clinic
- Cedars Sinai Medical Center Pediatric Infectious Diseases Clinic
- Harbor UCLA Medical Center
- Kaiser Permanente-Bellflower HIV Clinic

***Primary Medical Care***: There are a number of public and private community resources available for primary medical care for PLWH. These include but are not limited to:

- Community Health Centers, including Federally Qualified Health Centers (FQHCs) and FQHC Look-Alike Health Centers, designated through HRSA's Bureau of Primary Care, are dedicated to serving low-income persons. There are 177 FQHCs and FQHC Look-Alikes located throughout the County. LAC's FQHCs represent an untapped partner in providing both HIV prevention (e.g., routine testing), as well as care services, for low-income PLWH (see <http://bphc.hrsa.gov/index.html> for more information on HRSA's Health Center program).
- United American Indian Involvement (UAI) operates the only Indian Health Service-funded clinic in LAC. They offer direct clinical services, case management, health education, substance abuse services, and mental health services. They also represent a potential new partner in the prevention of HIV, as well as treatment of PLWH.

- Veterans Affairs (VA) operates a number of acute care and outpatient medical care sites through the VA Greater Los Angeles Healthcare System and the VA Long Beach Healthcare System. The VA also offers medical transportation services to assist veterans in getting to their medical appointments.
- Kaiser Permanente is the largest non-profit integrated health system in the U.S. In Los Angeles County, it has four medical centers for emergency and acute care services as well as an extensive network of outpatient sites countywide. Kaiser Permanente provides extensive HIV/AIDS services for PLWH who have purchased their insurance coverage.

**Behavioral Health Services:** LAC offers both mental health and substance abuse screening and treatment services through their respective departments. These programs are available to any eligible individual within LAC.

- Mental Health Services: The Los Angeles County Department of Mental Health (DMH) provides an array of mental health and supportive services for clients, between the ages of 19 and 59, who live with serious mental illness and co-occurring substance use disorders. Mental health services are available through directly operated and contracted agencies throughout the County.
- Substance Abuse Services: Similarly, the LAC Substance Abuse Prevention and Control (SAPC) program funds a wide array of alcohol and other drug prevention, treatment, and recovery programs and services for individuals through contracts with over 150 community-based organizations. The primary recipients of County-funded alcohol and drug treatment, recovery, and intervention services are Los Angeles County residents, particularly those who are uninsured and/or underinsured.

**Major Payers of Services:** In addition to direct providers of services, when examining available resources in LAC, it is critical to identify other payers of services that are part of the Ryan White system of care. As each program has differing eligibility requirements, it is essential that PLWH are screened for these programs in order to ensure that Ryan White is payer of last resort. Table 28 presents a brief list of some of the major payers of medical and other Ryan White services in LAC. Although the list presented is not exhaustive, it does provide information on the larger programs available to eligible PLWH in LAC.

**Table 28. Selected List of Major Payers of Ryan White Services**

Service Category	Description
<b>Medical Outpatient/ Specialty</b>	<p><b>Medi-Cal:</b> This is a medical insurance program for eligible low-income individuals and is funded in part through the federal government and in part through the state. A person must meet residency requirements to be eligible for this program.</p>
	<p><b>Healthy Way LA (low-income health plan):</b> This new program is part of Los Angeles County’s Medicaid expansion and a “bridge to healthcare reform.” In LAC, individuals up to 133% of the federal poverty level (FPL) may be eligible for this program. A person must meet residency requirements to be eligible for this program.</p>
	<p><b>Healthy Families:</b> This is low cost insurance that provides health, dental, and vision coverage to children (up to their 19<sup>th</sup> birthday) who do not have insurance and do not qualify for no-cost Medi-Cal. This insurance pays most of a child’s costs for visits to doctors, dentists, eye doctors, and specialists. A person must meet residency requirements to be eligible for this program.</p>
	<p><b>Medicare:</b> Individuals age 65 years and older may be eligible for Medicare as well as persons with selected disabilities. Someone may be dually eligible for Medi-Cal, commonly referred to as “Medi-Medi.” If a person has both Medi-Cal and Medicare, Medicare is the primary payer of services. A person must meet residency requirements to be eligible for this program.</p>
	<p><b>California Children’s Services (CCS):</b> CCS is a state program for children with certain diseases or health problems. Children up to 21 years old are eligible to access health care and other needed services.</p>
<b>Oral Health Care</b>	<p><b>Denti-Cal:</b> Dental services for the following people are offered under the Denti-Cal program:</p> <ul style="list-style-type: none"> <li>a. Women 21 years of age or older who are pregnant will be eligible to receive pregnancy-related services or services to treat a condition that may cause a problem in pregnancy. These are services such as exams, cleanings and gum treatments, as well as emergency dental services for the relief of pain, infection or trauma.</li> <li>b. Children (under the age of 21)</li> </ul>
	<p><b>Federally Qualified Health Centers:</b> By Statute, required to provide preventive dental services (Section 330 of the Public Health Service Act (42 USCS § 254b)).</p>
<b>Retention in Care Services</b> <b>❖ Nutrition Support</b>	<p><b>Cal Fresh:</b> Federally known as the Supplemental Nutrition Assistance Program (SNAP), formerly Food Stamps. Provides direct financial assistance to purchase food. In California, persons who receive assistance through the Supplemental Security Income (SSI) or the State Supplemental Program (SSP) are not eligible for Cal Fresh.</p>

## ***E. Capacity Building and Technical Assistance***

### ***Directly-Funded Federal Resources***

- Centers for Disease Control Capacity Building Assistance (CBA): Capacity building is a key strategy for the promotion and sustainability of prevention programs. The Capacity Building Branch within the CDC Division of HIV/AIDS Prevention provides and coordinates capacity building assistance and related resources. The Capacity Building Branch focuses on improving the performance of the HIV prevention workforce by increasing the knowledge, skills, technology, and infrastructure to implement and sustain science-based and culturally appropriate interventions and HIV prevention strategies.

CBA is a free service and is made available through a variety of methods including; training, technical assistance (TA), and technology transfer to individuals, organizations and communities. The 31 CDC-funded organizations provide capacity building directly to communities, community-based organizations (CBOs) and health departments. CBA providers are partner organizations funded to assist in building the capacity of CDC directly-funded grantees to implement HIV prevention programs. CBA providers include state and local health departments and CBOs.

Both the LAC Department of Public Health and CBOs funded through the health department have access to all the CDC's CBA offerings through any CBA provider, since their scope is national. Los Angeles is home to three CDC-funded CBA providers:

1. Shared Action of AIDS Project Los Angeles (CBA for health departments and CBOs),
2. Center for Strengthening Youth Prevention Paradigms at Children's Hospital Los Angeles (CBA for Communities), and
3. Black AIDS Institute (CBA for Communities)

California is home to five additional CBA providers:

1. Asian and Pacific Islander American Health Forum (CBA for CBOs),
2. Asian & Pacific Islander Wellness Center (CBA for Communities),
3. CA STD/HIV Prevention Training Center (CBA for health departments and CBOs),
4. ETR Associates (CBA for CBOs), and
5. The Regents of the University of California (CBA for CBOs and Communities).

CBA may be accessed by contacting any of these organizations.

- Office of Minority Health: HIV and AIDS disproportionately impacts racial and ethnic communities in the United States. The Office of Minority Health's mission is to improve the health of racial and ethnic minority populations through the development of health policies and programs that will eliminate health disparities. Since 1999, the Capacity Building Division has focused its activities on improving the organizational capacity of agencies that provide HIV/AIDS services to these underserved communities.

The Capacity Building Division provides an array of Technical Assistance and Capacity Building Activities to health care agencies and programs throughout the United States and its Territories and Jurisdictions. Service delivery is provided to increase the strength and competence of an organization. The Capacity Building Division defines Technical Assistance as providing short-range, acute care to agencies and organizations. Capacity Building Activities are considered to be more long-range activities where services are provided typically over a 2 year time period. Areas of assistance include:

- Communications Assistance
- Community Outreach Services
- Cultural Competency Assistance
- Organizational Infrastructure
- Programmatic Design
- Tribal Initiatives on HIV

### ***Locally Available Resources***

- Los Angeles County Department of Public Health, Division of HIV and STD Programs (DHSP): DHSP works with governmental and non-governmental providers of HIV prevention and care services to support and enhance their capacity in the delivery of those services. Overall, DHSP's capacity building activities focus on:
  - ABCs of Hepatitis Partner Services
  - HIV, STD, Hepatitis and TB 101
  - Evidence-based Interventions (e.g. biomedical interventions)
  - Adapting EBIs and Public Health Strategies (e.g. ARTAS)
  - New Directions in HIV Testing
  - Promotion of Routine Testing
  - Client recruitment and retention
  - Client-centered services
  - Quality Management
  - Program Evaluation
  - Cultural Competency
  - Staff retention
  - Organizational Infrastructure and Program Sustainability Data collection and data submission
  - Utilization of data
  - Information systems and data management
- Center for HIV Identification, Prevention, & Treatment Services: The Center for HIV Identification, Prevention, and Treatment Services (CHIPTS), funded by the National Institute of Mental Health, leverages world class science to combat HIV globally, in partnership with communities, families, and individuals impacted by the pandemic. Strategies for integrating, promoting, and diffusing HIV detection, prevention, and care are their primary mission. Investigators from UCLA, Friends Research Institute, the Los Angeles County Department of Public Health, and research and community partners globally collaborate to achieve CHIPTS' mission. CHIPTS creates opportunities for scientific leadership, expertise, and infrastructure to be leveraged to create, understand, and evaluate: 1) structural and community level interventions; 2) models of adaptation and adoption of efficacious interventions; 3) strategies to reduce disparities for scientists, nations, communities, and individuals; and 4) research agendas that integrate behavioral, biomedical, and technological intervention strategies. The CHIPTS community promotes cutting edge science; fosters networks for and builds capacity of scientists, advocates, policy makers, and consumers.

CHIPTS offers a range of services including consultation on the development of new research projects and assistance with obtaining funds for these initiatives. CHIPTS provides technical assistance in HIV program development and evaluation and sponsors an annual conference for developing researchers to present their work. In addition, the Center hosts an annual policy forum for researchers, government officials, and the HIV community to discuss emerging HIV policy issues, as well as hosts a research colloquia series.

## VI. FUTURE DIRECTION FOR LOS ANGELES COUNTY'S HIV SERVICES

### A. Introduction

Given the scope of the HIV epidemic in LAC, “business as usual” is not an option. To prevent the infection of HIV among HIV negative persons, and effectively test, link to care, and treat those persons who are HIV positive, LAC must adopt new paradigms and models of service delivery. Without these, LAC will not be able to reach its own goals or those outlined in the NHAS. To reframe LAC’s approach, more than 20 community members representing the Commission, the PPC, DHSP, PLWH, service providers, and other stakeholders met to develop clear goals and objectives that will focus LAC’s efforts over the next five years. As the starting point of the discussion, the group stated their collective vision for the County:

*Eliminate HIV disease and its impact in Los Angeles County by creating a system that promotes optimal health outcomes and empowerment for individuals and populations at risk of, living with, and affected by HIV disease.*

These community partners proceeded to outline a set of five-year goals specific to LAC with measurable objectives, including three-year and five-year benchmarks. This work lays a solid foundation from which LAC can build its response to HIV. Through a consensus-based process, each community member weighed in on all goals and objectives, and the views of all were considered in their final formulation. Not surprising, the five goals developed specifically to meet the needs of LAC align well with the NHAS. The LAC goals are:

1. Eliminate new HIV infections;
2. Optimize health outcomes for all people living with HIV;
3. Ensure universal access to and maximize engagement with quality HIV care and related services;
4. Eliminate HIV-related health disparities; and
5. Create a seamless system, inclusive of public and private sectors that best responds to HIV and related social determinants of health.

The boldness of these goals is intentional as the collective wisdom of the community partners was to push LAC towards a higher standard.

The future direction of LAC builds upon its long history of HIV service provision and HIV specific programming. The lessons learned from both its successes and challenges are a guide in the development of LAC’s current action plan. This chapter outlines the goals and objectives that LAC has established in order to achieve the goals of the NHAS. It also describes LAC’s major successes and key challenges since 2009 when the previous community planning processes for care and prevention services were completed. Following this is an extensive description of LAC’s work plan for HIV services. This is complemented by a brief discussion of how LAC addresses fiscal uncertainty, which impacts programming and service delivery.

## ***B. Building on the Past***

### **❖ Successes**

Since 2009, the PPC, the Commission, and DHSP have worked diligently to ensure a full array of services across the *Continuum of HIV Services* to meet the needs of LAC's large and diverse population. With the second largest population of HIV positive individuals in the nation, developing a service delivery system that is responsive to their needs is an ongoing process. LAC has accomplished this within an environment greatly impacted by change, as well as tremendous budget cuts from the State of California.

Since the writing of its two major plans (*Los Angeles HIV Prevention Plan: 2009-2013* and the *County of Los Angeles HIV/AIDS Comprehensive Care Plan 2009-2011*), there has been significant change nationally, which has greatly impacted the prevention and care landscape in LAC. However, in spite of this change, LAC has achieved much success in several areas, including but not limited to:

- Participated in the Enhanced Comprehensive HIV Prevention Planning (ECHPP) pilot program;
- Developed and implemented a syndemic planning model for HIV prevention and testing services, which provides critical information regarding the high burden geographic areas in LAC;
- Approved and implemented a new Rapid Testing Algorithm (RTA), which facilitates linkage to care based upon two consecutive positive rapid HIV tests;
- Adopted and implemented the Testing, Linkage to Care Plus (TLC+) framework to support the early identification of new HIV positive individuals, as well as re-engagement of HIV positive individuals who are not in care;
- Piloted routine HIV testing in two emergency department (EDs) locations;
- Developed and launched the Erase Doubt social marketing campaign;
- Achieved a 1.2% (2010) HIV seroprevalence rate of among publicly-funded HIV tests;
- Achieved a “mature” name-based HIV surveillance system as recognized by the CDC;
- Expanded use of HIV surveillance data for assessing viral load and retention in care;
- Designed the Medical Care Coordination (MCC) service delivery model to improve access to care and support services for PLWH, including newly diagnosed individuals as well as PLWH who are aware of their HIV infection but are not in care (i.e., unmet need);
- Fee-for-service performance incentives for medical outpatient services;
- Planned for the successful transition of PLWH from Ryan White-funded Medical Outpatient/Specialty care services to *Healthy Way LA* as the bridge to health care reform;
- Developed pharmacy networks to ensure transition of PLWH from ADAP pharmacies to *Healthy Way LA* as another part of the bridge to health care reform;
- Expanded Oral Health Care services to additional service providers in order to address gaps in care, exacerbated by the virtual elimination of adult dental services through Denti-Cal;
- Provided Ryan White-funded core and support services to 20,014 PLWH in LAC during fiscal year (FY) 2011;

- Created an HIV-specific homeless services plan in collaboration with other county departments;
- Reduced percent of PLWH who are aware of HIV infection but not in care from 37.1% (2008) to 33.2% (2011); and
- Achieved an overall satisfaction with HIV care-related services as expressed by the 2011 Los Angeles Coordinated HIV Needs Assessment-Care (LACHNA-Care) survey respondents.

#### ❖ Addressing Challenges

Since 2009 LAC continues to address a number of key challenges regarding the delivery of HIV prevention, testing, linkage to care, and care services. Most prominent among these are:

- Planning, financing, and delivering HIV prevention, testing, and care services across 4,084 square miles, to an extraordinarily culturally and linguistically diverse population of 9.8 million residents, including an estimated 58,000 PLWH;
- Understanding the optimal mix of services needed to reduce new HIV infections;
- Case-finding of undiagnosed HIV positive individuals (i.e., HIV positive unaware) and HIV positive individuals who are aware of their HIV infection but not in care and linking them to care (i.e., unmet need);
- Increasing viral suppression of PLWH for both improved health outcomes among PLWH, as well as to prevent forward transmission of HIV through reduced community viral load;
- Ensuring parity in access to HIV prevention, testing, and care services for special populations, including but not limited to: MSM, transgender persons, youth, homeless, and injection drug users;
- Monitoring progress in achieving goals and objectives outlined in LAC's *Comprehensive HIV Plan*; and
- Maintaining continuity of services in a continuing era of severe budget deficits in California.

#### ❖ Addressing Los Angeles County's Key Challenges

Addressing these challenges is a key starting point for system improvement as LAC shapes its future direction over the next five years. LAC plans to implement the following measures:

1. *Planning, financing, and delivering HIV prevention, testing, and care services:* Continue to explore a unified community planning approach for HIV services that no longer separates HIV prevention from HIV care services. This unified approach may also expand to include STIs and/or other diseases/co-factors that impact PLWH's ability to receive services. DHSP and the Commission on HIV will explore new models of financing and service delivery for those service categories where there are the largest gaps in services (e.g., Oral Health Care). DHSP will continue to leverage existing resources (e.g., Community Health Centers, Department of Mental Health) and pursue new resources as they become available in order to expand HIV prevention, testing, and care services across LAC's 4,084 square miles. DHSP will expand its use of syndemic

planning and spatial epidemiology to target HIV prevention and testing resources, as well as identify its potential application in planning for HIV care-related services.

2. *Case-finding of undiagnosed HIV positive individuals and HIV positive individuals who are aware of their HIV infection but not in care and linking them to care:* DHSP will integrate the standard of care for Outreach into its Medical Care Coordination and Early Intervention Services contracts. DHSP, the PPC, and the Commission on HIV will continue to explore best practices across the U.S. for case-finding and adopt successful models as appropriate. DHSP will increase its efforts to use HIV surveillance data for case-finding purposes and develop protocols related to its use.
3. *Increasing viral suppression of PLWH:* DHSP will establish a system for using HIV surveillance and other data for regular monitoring of community viral load of PLWH in LAC. DHSP will utilize Casewatch to monitor viral load suppression of PLWH receiving Ryan White Part A services. DHSP will work with the Los Angeles County Department of Public Health to disseminate policies and procedures related to the provision of antiretroviral therapy (ART) for PLWH in accordance with current treatment guidelines countywide. DHSP and the Commission on HIV will continue to gather information regarding local service needs and barriers to care and treatment adherence among PLWH in order to prioritize and allocate resources to those services most needed by PLWH in LAC and where there are the largest gaps in care. DHSP and the Commission on HIV will explore best practices related to treatment adherence and implement where appropriate.
4. *Ensuring parity in access to HIV prevention, testing, and care services for special populations:* DHSP, the PPC, and the Commission on HIV will work together to identify the key vulnerable and/or highly impacted/ high burden populations to be tracked (e.g., transgender persons, youth, etc.). DHSP will establish a regular system for tracking and reporting on selected indicators that will demonstrate parity. DHSP, the PPC, and the Commission on HIV will continue to conduct studies and/or gather information from ad hoc work groups to provide information regarding the needs and barriers to care of these populations to inform decision-making.
5. *Monitoring progress in achieving the goals and objectives:* DHSP, the PPC, and the Commission on HIV will establish a system for monitoring the goals and objectives outlined in this plan. The PPC/Commission Comprehensive HIV Planning Task Force (Task Force), which includes representatives from DHSP, will reconvene at least annually to review LAC's progress in achieving the goals and objectives of the *Los Angeles County Comprehensive HIV Plan: 2013-2017*. At this time, the Task Force will make any recommended changes in the plan and present these recommendations to the PPC and the Commission on HIV for consideration and approval. In this way, LAC will truly operationalize its *Comprehensive HIV Plan: 2013-2017* and make it a living document that is responsive to changes that impact service delivery locally.
6. *Response in times of fiscal uncertainty:* LAC has become expert in contingency planning related to budget fluctuations. For its Ryan White-funded services, the Commission makes recommendations to account for different funding scenarios,

including a reduction in funding. As there are so many changes still in flux due to the anticipated migration of PLWH to *Healthy Way LA* as part of LAC's bridge to healthcare reform and the upcoming reauthorization of Ryan White legislation, the Priorities and Planning Committee of the Commission developed two sets of directives for funding scenarios (i.e., cost savings and funding reductions) versus specific allocations for LAC's FY 2013 Part A application. In the funding reduction scenario (i.e., lower Healthy Way LA enrollment than expected and significant budget cuts), directives require DHSP to hold certain core medical services harmless and to eliminate support services starting from those service categories with the lowest priority rankings. For the remainder of 2012 and all of 2013, the Commission will formally review Healthy Way LA enrollment patterns and service utilization data on a quarterly basis to determine if modifications to current allocations are necessary.

In addition to these efforts, DHSP remains abreast of anticipated funding changes in order to be as nimble as possible in their response. Following state cuts in HIV testing and prevention services, DHSP was able to maintain contracts by shifting contracts to HIV funds that it receives through the County's general fund. Also, DHSP regularly applies for available grant funds for HIV services to augment CDC and HRSA Ryan White funding. Fiscal uncertainty also gives rise to creative ideas on how to better leverage resources across the public and private health sector.

### **C. 2013-2017 Goals and Objectives**

In developing its overarching goals and five-year objectives, the community partners emphasized their intention that this plan be a *living* document that will be re-visited annually to assess LAC's progress towards achieving these targets. Objectives are written in *S.M.A.R.T.* format, which ensures that objectives are **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**ime Specific. The planning period for these goals and objectives is for five years, beginning January 1, 2013 through December 31, 2017. The community partners identified a three-year benchmark for each objective to ensure that LAC is on track in meeting them. These goals and objectives will serve as a dashboard for measuring the impact of LAC's programming along the continuum of HIV services (Table 29). Some of the objectives are themselves in a developmental format at this time and require additional work over the next year to determine an appropriate measure and then to establish a baseline by the three-year benchmark. Two good examples are the objectives related to reducing stigma in LAC and increasing system capacity. These are both noted in the plan at this early stage as the community recognizes their importance to the overall system of care but sufficient information is not available to determine an appropriate measure. Stigma and discrimination are key barriers to PLWH accessing services and they contribute to increased disparities among LAC's key populations and subpopulations. Increasing capacity of the LAC system of care is essential in order to bring into care the thousands of PLWH who are undiagnosed and those who are currently out of care.

**Table 29. Los Angeles County HIV Dashboard**

<b>LOS ANGELES COUNTY GOALS FOR HIV SERVICES:</b>								
Goal #1: Eliminate new HIV infections.								
Goal #2: Optimize health outcomes for all PLWH.								
Goal #3: Ensure universal access to and maximize engagement with quality HIV and related services.								
Goal #4: Eliminate HIV-related disparities.								
Goal #5: Create a seamless system, inclusive of public and private sectors that best responds to HIV and related social determinants of health.								
Objective	Baseline	3-Year Target	5-Year Target	Objective Addresses LAC Goal:				
				#1	#2	#3	#4	#5
1. By December 31, 2017, reduce the number of persons newly infected with HIV by 25%.	1,452-2,344	15% (1,234-1,992)	25% (1,089-1,758)	✓				
2. By December 31, 2017, increase the percentage of HIV positive individuals who know their HIV infection to 85%.	78.5%	82%	85%	✓	✓		✓	
3. By December 31, 2017, increase the proportion of all PLWH with undetectable viral loads to 50%.	26%	40%	50%	✓	✓		✓	
4. By December 31, 2017, increase the proportion of PLWH in key populations with undetectable viral loads by 25% from their population baseline.	TBD	15% improvement	25% improvement	✓	✓	✓	✓	
5. By December 31, 2017, increase the percentage of newly diagnosed PLWH who are linked to care within 90 days of diagnosis to 90%.	67%	75%	90%	✓	✓	✓	✓	
6. By December 31, 2017, decrease the percentage of PLWH who are aware of their HIV infection but not in care (HRSA-defined “unmet need”) to 25%.	33.2%	28.2%	25%	✓	✓	✓	✓	
7. By December 31, 2017, decrease the percentage of PLWH among key populations who are newly diagnosed with HIV and have a concurrent AIDS diagnosis in the same calendar year to be within 5% of the referent group (White PLWH).	26.5% (referent group)	36.5%	31.5%	✓	✓	✓	✓	
8. By December 31, 2017, lower the level of perceived stigma in LAC by 10%.	Establish measure	Establish baseline	10%	✓	✓	✓	✓	✓
9. By December 31, 2017, increase the system capacity in LAC to respond to HIV.	Establish measure	Establish baseline	TBD					✓

## ❖ Key Strategies to Achieve Goals and Objectives

Achieving these goals and objectives is only possible through a carefully planned service delivery system. LAC's current system is built upon its long history of delivering programs and services targeting populations along the entire *Continuum of HIV Services*. It has evolved to respond better to the needs of diverse populations impacted by HIV as well as to legislative, fiscal, policy and other environmental changes.

In discussing the future direction of HIV services in LAC, the community partners discussed the need for a broad range of strategies, interventions, activities, and services to be used. These included:

- **Testing/Linkage to Care Interventions** (e.g., early intervention programs; referral services; transitional case management; outreach; TLC+; ARTAS);
- **Behavioral Interventions** (e.g., evidence-based interventions (EBIs), support groups; substance and mental health treatment, harm reduction);
- **Bio-medical Interventions** (e.g., Pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP) and STI Treatment);
- **Educational/informational interventions** (e.g., social marketing, health education, sex education, condom distribution);
- **Policy/Regulatory Interventions** (e.g., condoms at bathhouses, mandatory testing);
- **Environmental/Community/Systems Interventions** (e.g., housing; community mobilization; addressing stigma and discrimination and sexism; universal HIV testing; social marketing); and
- **Whole Person Care/Treatment Interventions** (e.g., obstetrics/gynecology; vision care; medical care; mental health services; substance use treatment; dental; etc.).

As both HRSA and the CDC frame the future direction for national HIV services, they have a significant impact locally. In recent years, both HRSA and the CDC have prioritized services for local health jurisdictions (LHJ). In 2006, HRSA developed a set of eligible core medical and support services that LHJs could use Ryan White funds to support. The 2006 Ryan White legislation mandated that a minimum of 75% of Ryan White funds be used to support core medical services and a maximum of 25% of funds could be used for support services. In 2009, new Ryan White legislation further required that LHJs address the need for the early identification of individuals with HIV/AIDS (EIIHA). In order to achieve the goals of the NHAS through its ECHPP and *High Impact HIV Prevention* initiatives, the CDC in 2011 disseminated a set of fourteen required and ten recommended interventions for LHJs to implement, also mandating that 75% of its flagship prevention funds be used to support required intervention, and no more than 25% of funds may be used for recommended services. Among the 14 required interventions, nine (9) are targeted directly to HIV-positive individuals. Only five (5) required interventions that target other population groups (e.g., high risk individuals, and persons unaware of their HIV infection). Over the past three years, the distinction between HIV prevention and care services has been virtually eliminated. Nationally, all efforts are designed to address the needs identified in the NHAS goals (i.e., reduce new infection, increase access to care and improve health outcomes, and reduce health disparities).

Framing its local response over the next five years, LAC has adopted the testing, linkage to care, plus treatment framework (TLC+) as a way to strategically focus its programs and services. Currently, LAC is transitioning HIV prevention services to align with this framework. Care services are geared towards ensuring that PLWH have the supports necessary to become engaged and retained in care and adherent to treatment. TLC+ incorporates HIV testing, linkage to care (LTC), care services, and ancillary support services. This model addresses persons along the entire *Continuum of HIV Services*--from persons who are unaware of their HIV infection to HIV positive individuals who need to be fully engaged in care and accessing treatment and other services that promote retention. LAC will implement a set of projects, programs, and innovative activities during 2013-2017 that address different components of the TLC+ model. Table 30 provides a matrix of current programs that support TLC+. The matrix identifies: (1) the title of the program, (2) the funding source, and (3) the specific CDC required and/or recommended interventions that it addresses. As most programs have multiple components, the majority of programs listed address more than one CDC intervention.

Table 30 depicts LAC’s overall plan for the delivery of HIV-related programming over the next five years as it corresponds to the CDC’s required and recommended interventions, as well as HRSA’s core and support services (see also Attachment E for a detailed matrix of current programs operating).

**Table 30. Los Angeles County’s Implementation of the CDC’s Required and Recommended Interventions and HRSA’s Core and Support Services**

Intervention	Being Scaled up	May be Scaled up	Not likely to Change
<b><u>CDC Required Interventions:</u></b>			
1. Routine, opt-out HIV screening in clinical settings	✓		
2. HIV testing in non-clinical settings		✓	
3. Condom distribution prioritized to target HIV-positive (HIV+) persons and persons at high risk	✓		
4. Provision of Post-Exposure Prophylaxis	✓		
5. Efforts to change existing structures, policies, and regulations that are barriers to optimal care and treatment			✓
6. Linkage to HIV care, treatment and prevention services for those testing HIV+ and not in care	✓		
7. Interventions / strategies for promoting retention in or re-engagement in HIV care for HIV+ persons	✓		
8. Enforce policies and procedures for ensuring ART provision according to clinical practice guidelines	✓		
9. Interventions promoting ART treatment adherence for HIV+ persons	✓		
10. STD screening for HIV+ persons		✓	
11. Prevention of perinatal transmission			✓
12. Partner services for HIV+ persons	✓		
13. Behavioral risk screening and risk reduction for HIV+ persons at risk for HIV transmission		✓	
14. Linkage to other medical and social services for HIV+ persons			✓

Intervention	Being Scaled up	May be Scaled up	Not likely to Change
<b>CDC Recommended Interventions:</b>			◆
15. Condom distribution to the general population			◆
16. Targeted HIV and sexual health social marketing	✓		
17. Evidence-based clinic-wide prevention interventions for HIV+ persons at risk of acquiring HIV		✓	
18. Community interventions that reduce HIV risk	✓		
19. Behavioral risk screening followed by individual and group-level evidence-based interventions for HIV negative persons at high risk, particularly those in serodiscordant couples			✓
20. Integration of hepatitis, TB, STD testing, partner services, vaccination and treatment for HIV negative persons at high risk	✓		
21. Targeted use of HIV and STD surveillance data to prioritize risk reduction and partner services	✓		
22. Broadening linkages and provision of services for social factors influencing HIV incidence for HIV negative persons at high risk		✓	
23. Brief alcohol screening and interventions for HIV+ persons and high-risk HIV negative persons		✓	
24. Community mobilization			✓
<b>HRSA Core Services (Planned for FY 2013)</b>			✓
25. Medical Outpatient/Medical Specialty <sup>99</sup>	◆		✓
26. Medication Assistance and Access (Pharmaceutical Assistance)	✓		
27. Oral Health Care	✓		
28. Vision Services	✓		
29. Linkage to Care Services – Early Intervention Services			✓
30. Medical Care Coordination – Medical Case Management	✓		
31. Medical Nutrition Therapy			◆
32. Mental Health Services – Psychiatry and Psychotherapy			✓
33. Substance Abuse Services – Outpatient			◆
34. Long Term and Palliative Care – Hospice/Skilled Nursing			✓
35. Home Based Care – Home and Community Based Services			✓
<b>HRSA Support Services (Planned for FY 2013)</b>			✓
36. Medication Assistance and Access – ADAP Enrollment			✓
37. Linkage to Care Services – Transitional Case Management			✓
38. Benefits Support			✓
39. Medical Care Coordination – Non-Medical Case Management	✓		
40. Substance Abuse Services -- Residential			✓
41. Housing Supportive Services			◆
42. Residential Care and Housing Services			◆
43. Retention in Care Services – Nutrition Support			✓
44. Retention in Care Services – Medical Transportation			✓
45. Rehabilitation Services			◆
46. Respite Care			◆
<b>Legend: ◆ = Activity leveraged through community/other resources</b>			

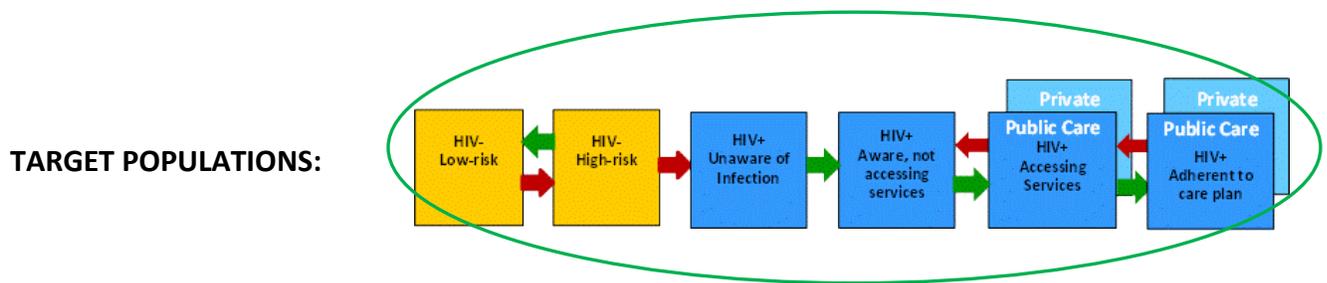
<sup>99</sup> With the implementation of Healthy Way LA, there will be significant scaling up of Medical Outpatient/Medical Specialty services in LAC as Ryan White clients are transitioned to this program. The Ryan White investment in these services will remain the same at least during FY 2013 until the provisions of health care reform are fully implemented.

#### D. Work Plan for HIV Services Along the Continuum

LAC’s continuum of HIV services continues to evolve in order to address changes in the epidemic, research, technology, and the environment. The County’s work plan over the next five years builds upon the past but also responds to these changes. As a living document, LAC will review this work plan each year to determine its progress in meeting program specific goals and objectives as well as achieving the broader LAC goals and objectives described earlier. This will allow LAC to be as nimble and responsive as possible. With both the anticipated reauthorization of Ryan White legislation in 2013 and the full implementation of health care reform in 2014, DHSP, the Commission, and the PPC expect they will continue to have significant impact on the design and delivery of HIV services in LAC.

The work plan that follows is organized according to the population(s) being targeted as represented in the Population Flow Map (Figure 4), which is at the center of the *Continuum of HIV Services* (Figure 2). Some services, programs, or interventions target only one population while others target multiple populations. To simplify the presentation of this information, a mini population flow map will be presented at the beginning with the relevant target populations circled. All services, programs, or interventions targeting the identified population(s) will follow. Additional background information is included where appropriate, as well as program specific goals, strategies, and objectives for each. It is hoped that this additional narrative will not duplicate but augment information presented in earlier sections of this plan.

#### ❖ Description of Programs, Services, and/or Interventions by Target Population



#### ➤ EFFORTS TO CHANGE EXISTING POLICIES AND REGULATIONS THAT ARE BARRIERS TO CREATING AN ENVIRONMENT FOR OPTIMAL HIV PREVENTION, CARE, AND TREATMENT

Los Angeles County’s past and current efforts to change existing structures, policies, and regulations that are barriers to creating an environment for optimal HIV prevention, care, and treatment include activities are listed below:

- Meetings and conversations with local, state, and federal legislators and policy makers; participation in UCHAPS and other bodies that influence policy.
- Supported and pursued successfully statewide legislation that removes barriers to HIV testing/screening. These include:

1. A bill requiring health care plans and health insurers to provide reimbursement for HIV testing when conducted as a routine screening for all patients, and not limited to risk based screening only; and
  2. A bill that reduces barriers to implementing HIV screening as a routine part of healthcare delivery by authorizing testing as part of the general consent for medical care and deleting provisions from existing law that required written informed consent and counseling to be provided with HIV testing in medical settings.
- Supported and pursued successfully legislation that mandates the reporting of new HIV cases by name in order to better map the statewide HIV burden and bring the County and state into compliance with CDC and HRSA guidelines for eligibility and funding.
  - Supported and pursued successfully legislation that requires labs to report all CD4 count test results to the local health officer within seven days of the completion of a CD4 count test. Persons identified through this process as living with HIV/AIDS are added to the existing State HIV case registry to provide a more accurate picture of the HIV epidemic in California, including easier identification of unmet need.
  - Currently working internally and with local and state partners and stakeholders to effectively implement the above state laws to propagate the most optimal HIV prevention, care and treatment environment possible.
  - In recognition of the public health crisis related to needle sharing and its relation to the transmission of infectious diseases, including HIV and hepatitis B and C, the County of Los Angeles implemented, in collaboration with the City of Los Angeles, a syringe exchange program in 2007 that is administered by five agencies at multiple sites. DHSP also played a large role in traversing the local bureaucratic barriers that existed leading up to implementation.
  - Looking to change legislation in pediatric HIV-exposure reporting. Currently in CA this is not reported
  - Following state authorization to use HIV surveillance data for partner tracing and linkage outreach, DHSP is developing protocols for identifying people with HIV infection who are not in care and dispatching teams to locate and link them to medical care.

DHSP in collaboration with other County of Los Angeles Department of Public Health Programs, as part of the planning process, are working together to address other structural barriers that can be addressed in order to provide improved HIV prevention services. DHSP uses the County of Los Angeles, Department of Public Health General Funds to support these activities.

In general, LAC and California have policies and laws that support and facilitate effective HIV prevention; however, several structural barriers to optimal prevention remain. The first goal is to work toward removing existing barriers to accessing syringes by educating LAC policy makers and law enforcement on the value and importance of providing sterile syringes, sterile injection equipment, and education to people who inject drugs, steroids, and hormones in order to prevent

acquiring or transmitting HIV transmission and other co-morbidities (e.g. hepatitis C). Current resources will be redirected in order to focus on increasing access to sterile syringes.

With regard to the second goal, current data systems do not allow DHSP to accurately track the level of routine HIV screening within health care centers in LAC, making it difficult to assess where to prioritize scale up (see Intervention #1). Therefore the second goal will address barriers to measuring success at scaling up routine opt-out HIV screening in medical settings, and also help areas for improvement in order to achieve optimal testing rates.

The third goal is to improve HIV and STD screening in commercial sex venues in LAC by increasing the amount of time screening is performed at each site, and increasing visibility of screening programs.

### **PROGRAM/INTERVENTION GOALS**

- Implement effective syringe access programs county-wide.
- Improve data collection and tracking for HIV testing in medical settings to facilitate measurement of HIV screening rates.
- Improve HIV/STD screening in Commercial Sex Venues (CSVs).

### **STRATEGIES TO BE USED**

1. Prevent disease and protect public safety through increased access to sterile syringes.
2. Work with LAC health care centers on accurately and consistently reporting HIV testing data to the Department of Public Health (DPH).
3. Work with DPH and CSV owners to monitor HIV/STD screening activities and ensure adherence to County ordinance.

### **MEASURABLE OBJECTIVES**

1. By March 31, 2013, provide syringe access services to approximately 2,800 clients and distribute 330,000 sterile syringes.
2. By March 31, 2013, improve data collection at all HIV testing programs by utilizing Evaluation Web (CDC supported data system) at 100% of HIV testing programs (including CDC Directly Funded Programs).
3. By March 31, 2013, identify and prioritize three non-DHSP funded clinics to work with on reporting their HIV testing data to LAC DPH.
4. By December 31, 2013, DHSP will meet with CSV owners to assess programs.
5. By December 31, 2017, increase the availability of HIV testing services to cover 75% of the operating hours of all CSVs within DPH jurisdiction.

<b>Data sources for Evaluation:</b> Los Angeles County Certified Needle Exchange Program, CSV Scopes of Work, eHARS, and HTS data system.
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➤ **SOCIAL MARKETING CAMPAIGNS**

In the summer of 2009, DHSP launched the Erase Doubt Campaign. Erase Doubt is an HIV prevention social marketing campaign aimed at reducing incidence of HIV in LAC. The purpose behind the Erase Doubt campaign is to:

1. Build a brand that will survive beyond the short-term marketing campaign. The logo (Figure 33) serves as a way to brand future HIV messages from DHSP and will continue to grow to be recognized and understood by all audiences.
2. Create a marketing strategy that would initially be effective with people of color (both men and women), but would also work with a general audience as the campaign evolves and spreads throughout the County in later years.
3. Motivate people to get tested for HIV, learn their results, and if necessary get treatment.

The second major campaign DHSP supports is the L.A. Condom campaign. The L.A. Condom campaign was developed to increase awareness of and promote the usage of condoms. The purpose of the campaign is to:

1. Make residents living in high-burden areas aware that free condoms are available
2. Partner with businesses and other organizations in high burden areas to distribute free condoms
3. Direct residents to where they can obtain the free condoms
4. Encourage residents to use condoms

**Figure 33. Erase Doubt and LA Condom Logos**



**PROGRAM/INTERVENTION GOALS**

1. To increase the visibility of the LAC Erase Doubt and LA Condom campaigns.
2. To increase awareness of free HIV and STD testing and treatment services available throughout LAC.
3. To increase awareness of free condoms available through the LA condom campaign.

## **STRATEGIES TO BE USED**

1. Increase the types of media being purchased in LAC (outdoor billboards, radio advertisements, etc.).
2. Increase the volume and types of media placements in geographic areas most impacted by HIV and STDs.
3. Sponsor testing events and participate in health fairs throughout LAC.

## **MEASUREABLE OBJECTIVES**

1. By December 31, 2013, sponsor at least 2 community HIV testing events.
2. By December 31, 2013, participate in at least 2 LAC health fairs.
3. By December 31, 2013, increase STD testing in Supervisorial District 2 by 30%.
4. By September 30, 2013, implement at least 2 types of media campaigns for STD testing in Supervisorial District 2.
5. By June 30, 2013, launch the LA Condom campaign.
6. By December 31, 2013, distribute 1,000,001 free condoms throughout LAC's geographic hotspots.

**Data sources for Evaluation:** Monthly reports; Program summaries; STD, Casewatch, and HTS data systems.

**Summary:** The health issues that are addressed in the Erase Doubt marketing campaign are knowledge of HIV status, HIV testing, treatment, and care. The rationale for a pervasive focus on testing is the need to promote awareness and erase doubt about HIV status and ultimately reduce the 10,500 undiagnosed cases of HIV in LAC. The Erase Doubt campaign contains other HIV prevention messages such as “Erase Doubt-know where to get tested” and “Erase Doubt-know your partner’s status.” Availability of treatment and care are also an important part of the messaging to reduce the annual number of new HIV infections by 25% and reduce the HIV transmission rate by 30% (NHAS goal).

Increased visibility of the Erase Doubt campaign aims to increase awareness of free testing and treatment services available throughout LAC by putting relevant information at the fingertips of the target audiences. Messages are posted on billboards and buses throughout high burden areas, and limited radio and television advertising enhance the promotion of free testing and treatment.

Los Angeles is the second most expensive media market in the U.S. The combination of the cost and the geographic vastness require DHSP to finely focus social marketing activities as well as leverage other national and local HIV awareness and condom distribution campaigns. Viral media such as Facebook and Twitter are being used to promote awareness of the campaigns and the Erase Doubt/LA Condom websites at relatively little cost. The websites provide continually updated information on the location and availability of local HIV/STD screening locations, free condoms, as well as specific events promoting HIV prevention and condom distribution throughout the county. The campaign also promotes the availability of the mobile testing fleet that provides free HIV and STD screening in high risk areas and special events.

## ➤ COMMUNITY MOBILIZATION

### PROGRAM/INTERVENTION GOALS

1. Engage community planning groups to address community mobilization.
2. Increase HIV awareness via faith-based communities, social networks, and popular opinion leaders.

### STRATEGIES TO BE USED

1. Continue working with the PPC, the COH, and other stakeholders/community planning groups.
2. Implement Phase II of DHSP's Social Marketing Campaign.
3. Continue to fund and support faith-based HIV prevention activities.
4. Implement additional social network testing programs in LAC.

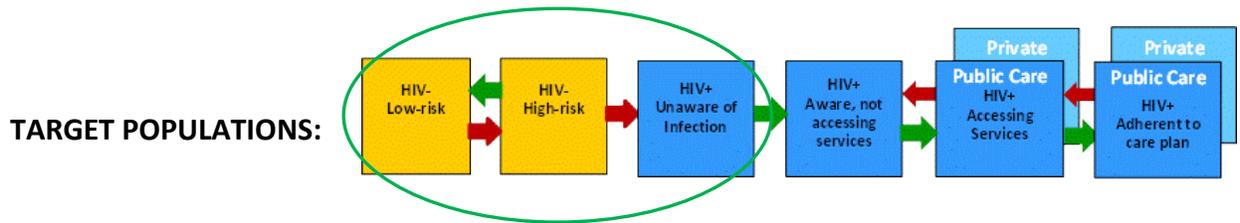
### MEASUREABLE OBJECTIVES

1. By December 31, 2013, convene at least 12 community planning meetings.
2. By March 31, 2013, support a church based HIV/STD health fair.
3. By September 30, 2013, fund an additional HIV prevention and faith-based HE/RR program. Increase from 1 to 2 programs.
4. By March 31, 2013, support at least 4 popular opinion leader interventions targeting gay men.
5. By March 31, 2013, support at least 2 social network testing programs for high risk negative and HIV-positive individuals among African-American, Latino, MSM, and crystal meth users.

**Data sources for Evaluation:** Meeting agendas and Contractor Monthly Reports.

**Summary:** By integrating community planning bodies, more comprehensive discussions with experts from a wider range of fields and consumers of various services can help inform and develop a better prevention and treatment service delivery system that is more responsive to the needs of communities most impacted by HIV/AIDS. Scaling up social marketing can help reduce stigma around STD and HIV in communities where stigma is often a barrier to testing and receiving prevention and/or care services. It is critical to engage the community (especially in Supervisorial District 2) in working with the health department to disseminate information about free HIV and STD testing as this area has the highest STD rates in LAC. In addition, the health department will implement 3 community-embedded disease intervention specialists (CEDIS) in Supervisorial District 2 to help screen residents for HIV and STDs, link them to care, provide referrals to other social support services, and stem the STD epidemic in this geographic area.

Efforts in engaging the faith-based community should also be elevated as individuals are often part of religious institutions or fellowship groups even before they start grade school. Therefore, religious institutions may be the most ideal venue to reach young MSM and deliver prevention messages. DHSP currently supports one faith-based prevention program and plans to scale up the number of faith-based programs serving young MSM of color in 2014.



➤ **ROUTINE, OPT-OUT SCREENING FOR HIV IN CLINICAL SETTINGS**

Currently 25 healthcare settings are funded or supported by DHSP to provide routine, opt-out HIV testing. They include:

- 12 Department of Public Health STD clinics;
- 1 community STD clinic;
- 1 urgent care center;
- 4 jail sites;
- 4 community health centers; and
- 1 emergency department.

Additionally, DHSP plans to implement three new routine testing programs (2 Urgent Care sites and one at an additional community clinic). The specific healthcare providers and sites are currently being selected by the internal Routine HIV Testing Workgroup.

As seen in Table 31, in 2011, a total of 41,860 tests were conducted in a routine testing site which represent 38.3% of all tests. The overall positivity rate for routine testing sites was 1.24% and 58% of clients were linked to care. Approximately 95% of HIV-positive testers were referred to partner services (PS). The majority of routine testing sites utilized rapid testing or the rapid testing algorithm (RTA) model.

**Table 31. DHSP-funded Routine Testing Programs HIV Positivity & New Positivity Rates, 2011**

Type of Testing Program	Number of HIV Tests	HIV Positivity Rate		HIV New Positivity Rate	
		N	%	N	%
Community Clinics, Emergency Departments	18,668	345	1.85%	243	1.30%
Public Health STD Clinics	23,192	174	0.75%	145	0.63%

**Table 32. DHSP-funded Routine Testing Programs HIV Positivity & New Positivity Rates, January-June, 2012**

Type of Testing Program	Number of HIV Tests	HIV Positivity Rate		HIV New Positivity Rate	
		N	%	N	%
Community Clinics, Emergency Departments	6,519	38	0.58%	34	0.52%
Public Health STD Clinics	15,333	227	1.48%	149	0.97%
Jails/Correctional Facility Clinics	4,865	23	0.47%	17	0.35%

**Table 33. Test Events and Positives Tests in Healthcare Settings by Gender, Race/Ethnicity, and HIV Risk Category, January-June, 2012**

	Healthcare Sites		
	Test Events	Newly- Diagnosed Positives	Previously- Diagnosed Positives
<b>Total</b>	26,717	200	88
<b>Gender</b>			
Male	17,049	186	87
Female	9,494	12	1
Transgender	145	2	0
Unknown	29	0	0
<b>Race/Ethnicity</b>			
Hispanic	11,385	84	23
Non-Hispanic	American Indian/Alaskan Native	89	0
	Asian	665	8
	Black/African-American	7,592	52
	Native Hawaiian/Pacific Islander	100	1
	White	4,993	42
	Multi-race	275	2
Unknown Race/Ethnicity	1,618	11	0
<b>HIV Risk Category</b>			
MSM		110	59
IDU		0	0
High-risk Heterosexual		2	0
MSM/IDU		0	0
Other Risk Category		0	0
Unknown Risk Category		88	29

Beginning in 2012, all HTS in jails were added to the routine testing portfolio. In the first six months of 2012 alone, there were a total of 26,717 tests performed in a healthcare setting. DHSP anticipates that over 52,000 tests will be conducted in 2012 and 56,000 tests in 2013 in routine healthcare environments. The increase in testing volume will be accomplished by providing routine testing in a second pod at LAC/USC, start up in a primary care setting in two high volume community clinics, and expanding services into urgent care settings and dental clinics.

DHSP previously utilized CDC Cooperative Agreement and Expanded Testing Program (ETP) funds to support routine testing programs, however all routine testing in healthcare settings is supported through the Flagship Category B award. A significant increase in financial and human resources is needed to scale up routine testing locally to levels that would allow DHSP to meet its goals.

**PROGRAM/INTERVENTION GOALS**

1. Implement routine opt-out HIV screening in urgent care and emergency departments located in areas with the highest burden of HIV.

2. Increase the number of individuals who know their HIV infection and normalize testing in health care settings.

### **STRATEGIES TO BE USED**

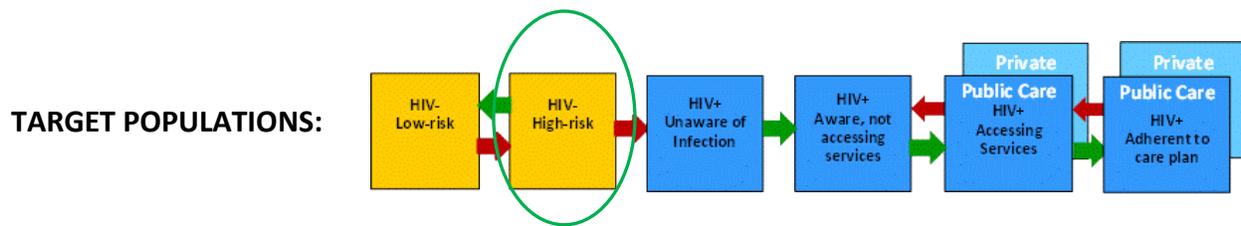
1. Assess the willingness of urgent care and emergency departments to implement routine opt-out screening.
2. Provide technical assistance to clinicians to enable implementation of a routine testing program including reimbursement mechanisms.
3. Increase the number of tests done through opt-out HIV testing in health care settings.

### **MEASURABLE OBJECTIVES**

1. By September 30, 2017, implement at least 3 routine opt out screening programs in an Urgent Care setting.  
[1<sup>st</sup> by March 31, 2013, 2<sup>nd</sup> by September 30, 2013, 3<sup>rd</sup> by September 30, 2017]
2. By March 31, 2013, conduct at least 300 HIV tests.
3. By September 30, 2013, expand testing in an Emergency Department from 1 to 2 pods. Testing volume will be increased from 10,000 to 15,000 annually.
4. By September 30, 2013, implement a pilot testing program in a high volume dental clinic. Within the 1<sup>st</sup> full year, test 3,000 individuals.
5. By September 30, 2013 (and annually thereafter), provide at least 30 trainings/technical assistance sessions for healthcare providers to enable implementation of a routine testing program and reimbursement.
6. By June 30, 2013, identify at least 530 previously undiagnosed HIV-positive individuals at DHSP supported routine HIV testing sites.
7. By September 30, 2013, at least 54,000 individuals tested at DHSP supported routine HIV testing programs will know their HIV status.

**Data sources for Evaluation:** DHSP HIV Testing Services (HTS) data system, DHSP training database, and DHSP Testing Methodology

**Summary:** Opt-out, routine testing has been and will continue to be an effective strategy in increasing testing volume. A newly considered opportunity for providing routine testing in a health care setting is to expand testing services into our Ryan White-funded dental clinics, where thousands of low-income, at risk residents of LAC receive free dental care. Additionally, in order to reach the 10,500 undiagnosed who probably do not engage in routine medical care, DHSP will concentrate efforts to implement routine testing programs in emergency departments and urgent care settings that attend to more transient populations. According to recent research, up to 49% of all new HIV cases were infected through having sex or sharing a need with a PLWHA who was unaware of their infection. In addition to increasing testing volume and identification of undiagnosed or unaware cases, this strategy may also locate previously diagnosed persons and link them to medical care.



➤ **PROVISION OF POST-EXPOSURE PROPHYLAXIS TO POPULATIONS AT GREATEST RISK**

Biomedical interventions such as non-occupational Post Exposure Prophylaxis (nPEP) are necessary for high risk groups who have not been successful in reducing their risk behaviors through traditional HIV prevention activities and programming. DHSP estimates the cost of an nPEP service delivery program to be approximately \$2,200/person if a two drug regimen is used.

DHSP, in collaboration with the University of California, Los Angeles (UCLA), Friends Research Institute Inc., and two community based clinics (LA Gay and Lesbian Center Sexual Health Program in Hollywood and OASIS clinic in South Los Angeles) conducted two nPEP pilot programs. The rationale for the pilot programs was to introduce biomedical/bio-behavioral intervention strategies as part of LAC’s overall prevention portfolio with the goal that the combination of available prevention strategies will reduce further HIV transmission. Funding for these pilot programs was supported through the County of Los Angeles Department of Public General Fund with PEP medications donated by pharmaceutical companies (see P-QUAD section below).

1). P-QUAD – This pilot program was developed in 2009 and was implemented on March 2, 2010 at two HIV care clinics, which also provide HIV prevention and testing. The program targeted HIV-negative individuals at highest risk for sexual and intravenous exposure to HIV. The pilot’s nPEP services provided a 28-day course of highly active antiretroviral therapy initiated within 72 hours after HIV exposure in combination with STD screening, education, and intensive behavioral risk reduction counseling. At the demonstration sites, after eligibility screening is performed, a baseline evaluation is conducted and an initial 14-day supply of PEP medications is provided. All subjects who received an initial medication supply were required to return to the site for follow-up evaluation, adherence counseling, and risk-reduction programming. PEP services are designed to be easily accessible, non-judgmental, culturally, ethnically, and linguistically appropriate to the relevant populations, community-based, and independent of ability to pay. They also provide vital linkages to substance use and sexual risk reduction services, HIV testing at four time-points during service delivery, and primary health care in the event of seroconversion. The P-QUAD program was supported by the County of Los Angeles Department of Public General Fund. Antiretroviral medication for the P-QUAD was donated by Pharmaceutical companies. Providers were given criteria in which they may initiate a two drug (Truvada or Combivir) regimen, and criteria for which they may add a third drug (Kaletra or Raltegravir) if it is suspected that the person was exposed to a known HIV-positive with suspected drug resistance. Given the successful implementation demonstrated in this pilot program, DHSP is expanding the nPEP service delivery program.

Findings to date show that combining CM behavioral intervention and nPEP among meth using MSM appears to be safe and feasible for HIV prevention. Time to PEP initiation and adherence rates appear comparable to non-meth using populations. Meth-using men who have sex with men demonstrated high rates of sexual risk behavior as evidenced by high prevalent STD rates.

### **PROGRAM/INTERVENTION GOALS**

1. Implement an nPEP service delivery program within Los Angeles County.
2. Increase the availability of EBIs for high risk HIV-negative persons (including those for HIV-discordant couples) at risk of transmitting HIV.

### **STRATEGIES TO BE USED**

1. Transition from nPEP pilot program to a public health service delivery model for nPEP that is sustainable and integrated with other HIV prevention interventions.
2. Develop referral network for nPEP service delivery, including the LAC sexual assault response team, community clinics serving patient populations with high rates of STDs and high reported risk behavior, local Emergency Departments and Urgent Care Clinics, HIV providers and providers of services to high risk individuals, particularly transgender individuals and youth.

### **MEASURABLE OBJECTIVES**

1. By September 30, 2013, deliver nPEP services to at least 600 individuals.
2. By March 31, 2013, convene at least 1 meeting of the LAC nPEP workgroup.
3. By March 31, 2013, develop provider outreach materials.

<b>Data sources for Evaluation:</b> nPEP data system and monthly reports.
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**Rationale:** There are an estimated 58,000 PLWHA in LAC, with 1,500-2,000 new infections in LAC each year. Most new HIV infections are attributed to sexual contact (94%) among high-risk populations. Biomedical interventions like nPEP are necessary for high risk groups who have been failed by traditional HIV prevention activities and programming. LAC will expand the prevention portfolio to include evidence based biomedical interventions that target the highest risk individuals with a recent known exposure from a known or unknown positive individual (as defined in the situational analysis above). Given the immense size and diversity of LAC, LAC can only support targeted nPEP availability in a limited number of venues that optimally engage and serve the highest-risk persons. Given the success of the pilot nPEP program, LAC will increase the availability of nPEP in target zip codes in central and south LAC.

### **➤ BEHAVIORAL RISK SCREENING FOLLOWED BY INDIVIDUAL AND GROUP-LEVEL INTERVENTIONS**

#### **PROGRAM/INTERVENTION GOALS**

1. Identify high-risk HIV-negative persons (including those for HIV-discordant couples) at risk of acquiring HIV.
2. Increase the availability of EBIs for high risk HIV-negative persons (including those for HIV-discordant couples) at risk of transmitting HIV.



**Table 34. Results of Targeted HIV Testing in Los Angeles County (January-June 2012)**

Year	Number of HIV Tests	Positives		New Positives	
		Number	Percent	Number	Percent
2010	45,179	592	1.31%	497	1.10%
2011	55,323	670	1.21%	609	1.10%
2012*	39,121	497	1.27%	447	1.14%

\*January 1, 2012 – June 30, 2012

In order to achieve the 2012 target of 78,000 HIV tests in nonclinical settings, modifications to the existing service delivery process were necessary. LAC's new testing model includes improvements and changes in the following program areas: Data collection and reporting, HIV counselor training and re-certification, HIV testing technology, PS, integrated HIV/STD testing, laboratory services, and performance-based fee-for-service reimbursement schedule. DHSP's New Directions HTS model has a combined cost reimbursement and performance-based fee-for-service structure for all DHSP-contracted HTS service providers. HTS contracts must document successful LTC for at least 85% of new HIV-positive persons, and submit 100% of all HIV-positive clients (index case) and any partner information to DPH to obtain maximum compensation.

**Table 35. HIV Tests and New Positivity by Modality in Non-Healthcare (Targeted) Settings, 2011**

Testing Modality	Number of HIV Tests	Positives		New Positives	
		Number	Percent	Number	Percent
Storefront	30,433	380	1.25%	343	1.13%
Mobile Testing Units (MTU)	18,796	150	0.80%	138	0.73%
Integrated Screening (formerly Multiple Morbidity Testing Units)	2,949	37	1.25%	28	0.95%
Social Network Testing (SNT)	818	35	4.28%	35	4.28%
Commercial Sex Venues (CSV)	1,868	66	3.53%	65	3.48%
PEP	459	2	0.44%	0	0%
Court-ordered	745	24	3.22%	14	1.88%
Drug Treatment	335	1	0.30%	1	0.30%

**Table 36. Demographic Characteristics and HIV Risk by Targeted Testing Modality (January 1, 2012- June 30, 2012)**

Demographic Characteristic		Number of HIV Tests	Positives		New Positives	
			Number	Percent	Number	Percent
<b>Gender</b>						
Male		26,942	445	1.65%	402	1.49%
Female		11,616	32	0.28%	30	0.26%
Transgender		560	19	3.39%	14	2.50%
Unknown Gender		3	1	33.3%	1	33.3%
<b>Race/Ethnicity</b>						
Hispanic		15,854	220	1.39%	200	1.26%
Non-Hispanic	American Indian/Alaskan Native	248	2	0.81%	2	0.81%
	Asian	1,973	13	0.66%	13	0.66%
	Black/African-American	9,343	148	1.58%	129	1.38%
	Native Hawaiian/Pacific Islander	270	1	0.37%	1	0.37%
	Whites	10,062	94	0.93%	85	0.84%
	Multi-race	881	9	1.02%	9	1.02%
Unknown Race/Ethnicity		490	10	2.04%	8	1.63%
<b>HIV Risk Category</b>						
MSM		11,488	312	2.72%	288	2.51%
IDU		2,119	12	0.57%	11	0.52%
High-risk Heterosexual		15,566	92	0.59%	78	0.50%
MSM/IDU		455	29	6.37%	23	5.05%
Unknown Risk Category		9,493	52	0.55%	47	0.50%

Prior to the implementation of the New Directions Testing Model in July 1, 2012, LTC rates fell below public health measure standards at a majority of targeted testing sites. One contributing factor is that not all targeted testing sites converted to the new RTA model. The RTA model uses a second or third rapid test to confirm the presence of HIV during the initial testing session, thereby assisting counselors in providing “conclusive” test results. If a positive test result is obtained, the counselor will immediately refer the client to care services during the same initial testing session. Currently, 73% of targeted testing sites use the RTA. The percentage of programs using RTA varies by testing modality, as does the yield and effectiveness of each modality.

The targeted testing modalities that have the highest new positivity rates are social network testing (4.28%), CSV (3.48%), and court-ordered programs (1.88%). See Table 35. These three testing modalities target populations at highest risk such as MSM, MSM/IDU, Black/African-American men, Latino men, and transgenders (see table 36). Additionally all CSV, SNT, and court-ordered sites are located in one of the five geographic clusters identified through syndemic planning and geospatial mapping.

While CSV, SNT, and court-ordered programs are very successful in diagnosing new cases of HIV among the populations at highest risk, they are not equally successful in getting the client to their first medical appointment. Programmatic improvements and continued implementation of the New Directions are necessary to advance LAC's targeted HIV testing program in non-healthcare settings; increase effectiveness and the efficiency of HIV testing programs; increase the validity, timeliness, and efficiency of data collection and reporting; improve opportunities for people to test, get linked into care, and receive appropriate referrals; and facilitate provision of more cost effective, high quality HTS by contracted agencies.

### **PROGRAM/INTERVENTION GOALS**

1. Re-assess provision of non-clinical HIV testing services to better target the epicenters of disease burden.
2. Identify new/innovative targeted testing strategies to identify new infections.

### **STRATEGIES TO BE USED**

1. Use syndemic spatial analysis (mapping) to better target HIV testing in non-clinical settings.
2. Implement rapid HIV testing algorithm at all rapid testing sites.
3. Implement social network testing among hard to reach populations, e.g. Latino and African-American young men who have sex with men.

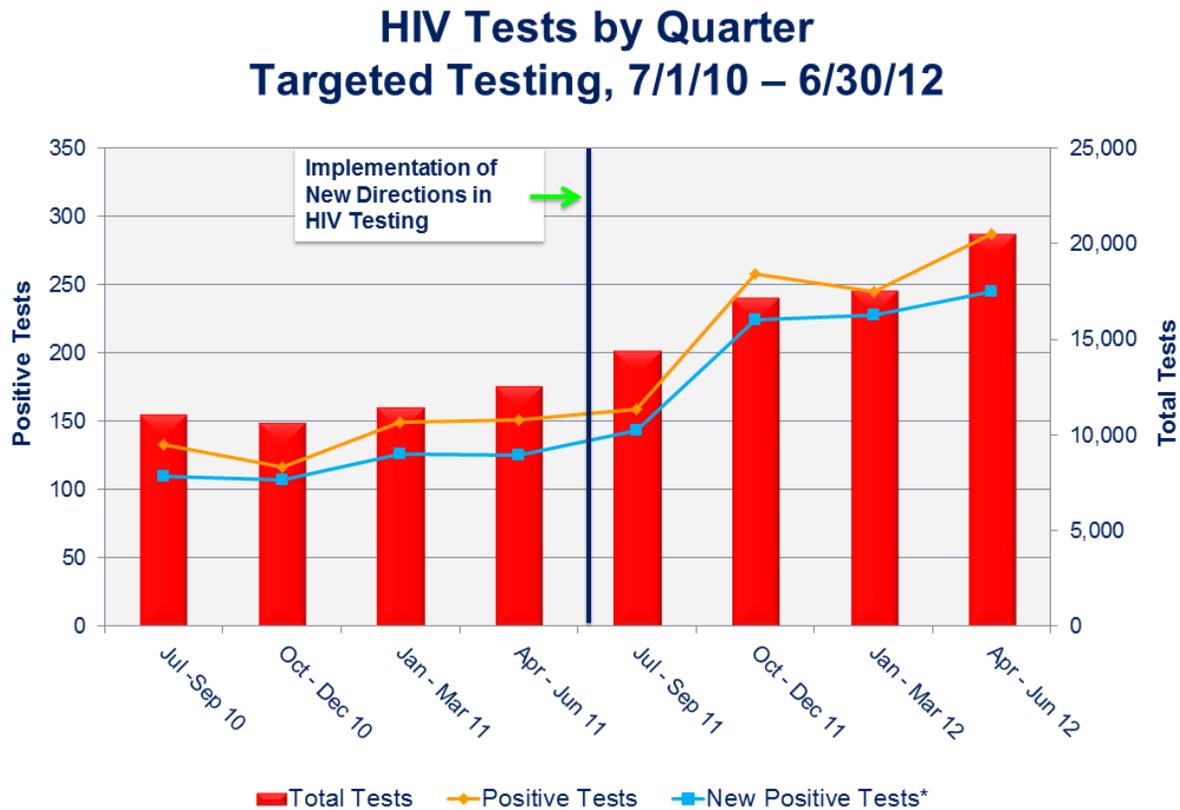
### **MEASURABLE OBJECTIVES**

1. By September 2013, DHSP will update syndemic maps and make them available online bi-annually.
2. By September 2013, 85% of targeted HIV testing sites will fall within the identified epicenters of disease burden.
3. By December 2017, 100% of targeted HIV testing sites will fall within the identified epicenters of disease burden.
4. By September, 2013, implement RTA at 80% of targeted HIV Counseling and Testing (HCT) sites.
5. By September 2013, identify at least 794 new HIV-positive testers across all targeted HCT programs.
6. By September, 2017, implement RTA at 90% of targeted HIV Counseling and Testing (HCT) sites.
7. By December 2017, identify at least 3,000 new HIV-positive testers across all targeted HCT programs.
8. By December, 2017, implement at least 4 additional social network testing programs in Los Angeles County.
9. By March 2013, DHSP will work with at least two additional agencies to integrate HIV and STD testing

<b>Data sources for Evaluation:</b> HTS data system and DHSP Quality Management Division, RTA Quality Assurance Plan Tracking Log
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**Summary:** Although the New Directions in Testing Model is still in its infancy, improvements in service delivery and program indicators are already evident.

Figure 34. Impact of The New Directions in Testing Model



Data Source: Division of HIV and STD Programs, HIV Testing Services as of 8/7/12  
 \*New positives reported by providers using Form A client data, previous

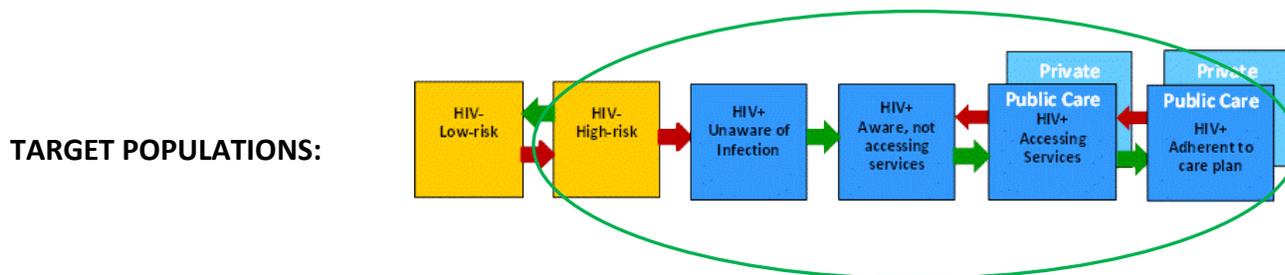
The average percentage of individuals who took an HIV test at a DHSP-contracted site and was linked to care between 2006 and 2010 was 68%. During the first half of 2011, approximately 70.7% of testers were linked to care. However, following the implementation of the New Directions in Testing Model, not only was there a steady increase in the number of tests performed, but the number of positives (both previous and new) dramatically increased between July 2011 and June 2012. The most noteworthy finding is that 79.2% of testers were linked to care following the implementation of the New Directions, an improvement owed largely to the restructuring of the reimbursement schedule for HIV testing services.

Ongoing review of the New Directions’ performance measures will identify the testing sites that have the highest testing volume, number of new positives, LTC rates, and highest provision of partner services. This information will help shape and inform future targeted testing programs as new contracts will begin in 2014. The success of targeted testing programs in non-health care settings is critical to DHSP’s ability to identify the 10,500 undiagnosed/unaware PLWHA in LAC and link them to care.

Implementing RTA in all targeted testing sites will also increase LTC rates. DHSP is committed to providing technical assistance so that within one year (September 2013) at least 90% of

targeted testing providers will have transitioned to the RTA model. Another strategy is to target the epicenters of disease burden through the use of effective modeling activities for HIV testing, syndemic planning, and geospatial analysis. DHSP has been able to identify those areas within the County with the highest disease burden; however, all of the targeted testing services are not located in the five cluster areas. For example, only 40%-50% of drug treatment, 66% of integrated screening (multiple morbidity testing), 60% of MTUs, and 50%-60% of storefronts are located in a high disease burden cluster. This may explain the lower positivity rates obtained at these testing sites compared to CSVs, SNT programs, and court-ordered programs that are within the cluster areas. DHSP will work with current contractors to increase the proportion who provide testing services in an identified epicenter of disease (cluster) to a minimum of 85%. The 2017 goal of 100% of targeted testing services located in an identified epicenter of disease will be achieved by the solicitation of targeted HTS contracts in 2013.

Promising and innovative targeted testing strategies will be piloted during this program period. DHSP received a grant award from California HIV Research Program to conduct a SNT project in bathhouses, provide health education risk reduction program for meth users, and expand a PEP project. Staff from AIDS Project Los Angeles will manage this 18 month pilot project that targets MSM, meth users, and African-American men. The results of this pilot project in conjunction with findings from the current SNT project run by Friends Research Institute and a SNT pilot project conducted by DHSP staff will help determine among which populations SNT projects are most effective (i.e. Non-Gay-Identified men). More data and pilot studies are also necessary to determine best practices and development of an intervention plan for SNT programs before the two additional SNT programs can be identified. However, there is no doubt that this is one of the best strategies to reach underserved populations such as Latino and African-American young MSM and NGI men.



➤ **TARGETED CONDOM DISTRIBUTION**

**PROGRAM/INTERVENTION GOALS**

1. Increase condom distribution to target priority populations.

**STRATEGIES TO BE USED**

1. Increase condom distribution to all sites offering HIV, STD, and/or viral hepatitis screenings and Ryan White Medical care.
2. Launch a pilot condom distribution program in LAC to make free condoms available to populations at highest risk for HIV and STDs (Phase One).
3. Design, market and distribute an “LA Condom” to brand condom use (Phase Two).

## **MEASURABLE OBJECTIVES**

1. By March 31, 2013, increase availability of condoms at HCT, HE/RR, and Ryan White medical sites (from 30 to 35 sites).
2. By March 31, 2013, distribute at least 300,000 condoms to the sites identified in objective 1.
3. By March 31, 2013, will have distributed at least 500,000 condoms.
4. By September 30, 2013, will make condoms available through a website and will develop a smart phone app.
5. By December 31, 2013, will have distributed 1,000,001 condoms.

**Data sources for Evaluation:** DHSP-contractor monthly invoices

**Summary:** There are an estimated 58,000 PLWHA in LAC, with 1,452-2,344 new infections in LAC each year and over 55,000 STDs reported in 2009 (74% Chlamydia, 14 % gonorrhea, 5% syphilis). Most new HIV infections are attributed to sexual contact (94%). Safer sex practices are critical to reducing HIV infection and transmission; both visibility of and access to condoms are crucial.

However, given the immense size and diversity of LAC, LAC can only support increased condom availability in a limited number of venues that optimally engage and serve the highest-risk populations (listed previously in Intervention #2) who confront condom access barriers (e.g. financial, community norms, behind the counter condom sales, and/or other availability issues). While condoms are routinely made available free of charge to current prevention program clients, the current condom availability, saturation, and consistency of access is unknown. Re-engagement of social forums like gay bars and clubs, bath houses, sex clubs, and “condom patrol” distribution in high burden areas is the first step in increasing both condom visibility and access. Development of an “LA condom” and associated marketing program are underway. Significant media investment will continually promote the availability of free condoms throughout LAC.

Condom distribution is not at the level needed to adequately target HIV-positive persons and persons at highest risk of acquiring HIV infection. DHSP’s goal is to scale up this intervention. LAC is employing a condom distribution program targeting people at high risk for transmitting or acquiring HIV and other STDs. The condom distribution program is a two-phased program. Phase One includes the distribution of generic condoms to people at increased risk through our existing service provider networks by allowing agencies to order condoms directly from the manufacturer and have them drop-shipped to the designated location for distribution. Phase Two of the program includes all of Phase One activities, and the introduction and distribution of a LAC-specific branded condom through expanded delivery sites that include local bars, clubs, restaurants, etc., located within high HIV burden geographic areas of the County. Phase One has been implemented and will be ongoing; Phase Two distribution of the branded condom will begin in early 2013.

LAC can only support condom distribution in a select number of venues that optimally engage and service the highest-risk populations who confront condom access barriers. Therefore, DHSP

will not invest in condom distribution for the general population during this funding period (2012-2017).

➤ **INTEGRATED HEPATITIS, TUBERCULOSIS, AND STD TESTING, PARTNER SERVICES, VACCINATION, AND TREATMENT**

**Background:** DHSP continues to collaborate with publicly funded STD clinics and CBOs to provide integrated HIV, STD, and hepatitis counseling, testing, screening, education, vaccination and referral services to individuals at high risk for one or more of these morbidities. Twelve DPH STD clinics throughout LAC provide free hepatitis screenings. DHSP and Los Angeles Sheriff's Department (LASD) collaborate to provide integrated HIV, STD, and hepatitis screenings upon intake in the Men's Central Jail. These services are made possible through the continued collaboration between DHSP, LASD and the Immunization Program.

Viral hepatitis, TB, and STD prevention services/screenings for HIV-positive persons are provided as a standard of care at Ryan White funded outpatient medical clinics throughout LAC. In addition, HIV treatment guidelines and SOC developed by the Los Angeles COH require hepatitis B and C screening and HBV vaccination of newly identified HIV clients entering care and for high risk populations that are currently in care. DHSP routinely monitors the percentage of clients that are screened for HBV, HCV, TB, and STDs and are provided PS, HBV vaccination, and ART according to SOC guidelines.

Measuring the provision of screening and treatment for multiple co-morbidities among HIV-positive and negative persons is an ongoing challenge across LAC. Other factors that contribute to disparities between sites are patient flow and inefficiencies in the system of service delivery and/or logistical challenges (i.e., space and or equipment constraints/barriers).

**PROGRAM/INTERVENTION GOALS**

1. Increase integrated HIV, STD, and viral hepatitis screening sites in Los Angeles County.
2. Increase provider capacity to provide integrated prevention messages and services.

**STRATEGIES TO BE USED**

1. Increase the number of targeted HIV testing venues that provided integrated screening e.g. commercial sex venues and jails.
2. Increase Program Collaboration Service Integration (PCSI) opportunities within Los Angeles County Department of Public Health (DPH).
3. Provide clinician and health care worker training to include prevention messages about HIV/STDs, and viral hepatitis.
4. Provide viral hepatitis A and B vaccines to prioritized high risk populations.

## **MEASURABLE OBJECTIVES**

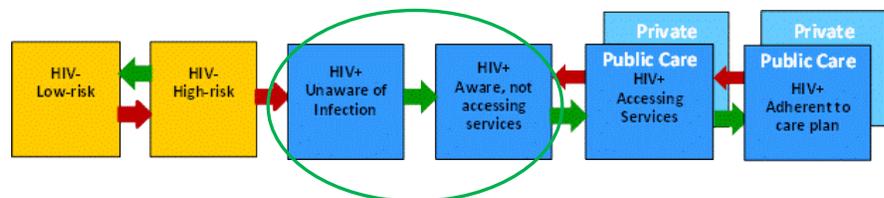
1. By September 30, 2013, redefine the scope of work for the commercial sex venue testing initiative and develop SMART goals.
2. By March 31, 2013, DHSP will support two (2) additional sites to conduct HIV/STD screenings.
3. By (date to be determined), implement Hepatitis A and B vaccination protocols in multiple morbidity mobile testing units, and nPEP programs.

**Data sources for Evaluation:** Meeting agendas and DHSP reports

**Summary:** Consistent with the principles outlined in the 2009 CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) White Paper related to PCSI, LAC continues to expand programmatic integration across multiple morbidities. With new legislation that supports data sharing among surveillance systems and new DHS/DPH workgroups focused on integrating and matching program data, DHSP will be able to more accurately measure this intervention in the future. The implementation of additional screening, prevention, and treatment services as pay-for-performance indicators in DHSP contracts will also increase the delivery of integrated wrap-around services. Additional syndemic planning and geospatial analysis will identify populations and geographic locations where integrated screening and treatment services are most needed. Once the populations and locations are selected, various workgroups and committees will assist in developing a protocol for integrated services while identifying solutions to current barriers and challenges (e.g., space and equipment constraints in some venues, provider capacity, identifying third party payer sources, etc.)

Integrating HIV, STD, and viral hepatitis screening will potentially improve cross program reach and efficiencies as well as reduce incident HIV and STD infections, and improved hepatitis screening, vaccination, and treatment referral efforts. It is clear from surveillance data that significant overlap exists among populations infected with HIV and syphilis, Chlamydia, and gonorrhea. Screening for multiple infections simultaneously is cost effective and increases likelihood of successful treatment and improved prevention messaging. Beginning in January 2013, the AVHPC will be relocated from DHSP to the Communicable Disease Control Program within DPH.

### **TARGET POPULATIONS:**



### **➤ LINKAGE TO HIV CARE, TREATMENT, AND PREVENTION SERVICES FOR HIV POSITIVE INDIVIDUALS NOT CURRENTLY IN CARE**

PLWHA who are aware of their HIV status but have not received a viral load, CD4 test, or ART in a 12-month period are classified as “unmet need” or “out of care” population. The estimated size of LAC’s unmet need population is 18,809 individuals. The methods used to calculate the size of this population are described in detail in the “2010 Estimate of Unmet Need” portion of

the Background section (see page 53). The Unmet Need population includes individuals who have never accessed HIV medical care as well as those who accessed services at one point but have not received care services in the past 12 months.

As previously indicated in the background section the overall percentage of unmet need has steadily decreased over the last few years among PLWHA. Between 2007 and 2010, the overall unmet need percentage in LAC decreased from 39.1% to 33.9%. This decrease could be attributed to special projects focusing on outreach and case management and extensive technical assistance on linkage to care for all DHSP care and prevention contracted providers. During 2005-2009 there was also increased emphasis on identifying effective service delivery models for HIV-positive incarcerated and re-entry populations.

Other changes in HIV testing also helped to increase linkage to care rates. The social network pilot project for young African-American MSM, use of community embedded disease intervention specialists (CEDIS) at sites with high HIV and STD rates (i.e. sexual health clinics), and evaluation of opt-out routine testing in primary care settings all proved to be effective methods in decreasing the size of the unmet need population. These new service delivery models were effective because they 1) were based on a client-centered model and/or 2) the testing services were co-located within healthcare settings.

Beginning in 2010, DHSP started to re-evaluate both care and prevention service delivery models to identify cost-effective, streamlined, integrated, and coordinated care and prevention services that reach all individuals along the population flow continuum. Through this new lens, DHSP launched the New Directions in Testing Model (see Intervention #2, pages 76-77 for more information) where fee-for-service reimbursement is partially based on LTC rates for all targeted testing in non-healthcare settings; opt-out testing programs in emergency departments and urgent care settings were created; transitional case managers in the jails, and LinkLA, a peer navigation intervention, help ensure post-released individuals access HIV medical and support services; HRSA MAI funds are used to support Early Intervention Programs (EIP) to provide medical care coordination for African-Americans, Latinos, and Asian/Pacific Islanders; a special program at USC MCA supported by RW Part D funds provides outreach and case management to connect young people to care and other needed services, including mental health and substance abuse treatment; integrated behavioral health and primary care program for African-Americans and Latinos is under development and supported by SAMHSA; and DHSP new solicitations and contracts focus on a range of wrap-around services that address mental health, substance use, and other co-morbidities as well as HIV treatment and prevention. In addition to changes in how integrated care and prevention services are being delivered, DHSP also devoted resources to finding where the unmet need population is located and where services are needed by strengthening collaborations for data matching and more extensive analysis including geospatial analysis of this population.

The programmatic changes outlined above continue to focus on integrating and coordinating care and prevention services and are effective in reducing the size of the unmet need population. However, among persons who are aware of their HIV infection and not currently in care, there are prominent disparities. As previously described in the Background section (see Table 9, page 44) women were 1.3 times more likely to be out of care compared to men, and individuals ages 40 years and older were 1.4 times more likely to be out of care compared to 30-39 year olds. Over

58% of HIV-positive youth (13-24 years of age) were out of care. Race/ethnicity was also a strong predictor of being out of care. However, the strongest predictor was stage of disease. Individuals who had an HIV (non-AIDS) diagnosis were 4.3 times more likely to be out of care than individuals with an AIDS diagnosis. Delays in treatment are associated with increases in HIV transmission, morbidity, and progression to AIDS diagnosis.

The local needs assessment survey, LACHNA (Los Angeles Coordinated HIV Needs Assessment), includes a series of unmet need questions for people who have HIV but are not currently receiving services, and for those who were out of care for more than a year in the last two years. The aggregated results provide data about why and in what circumstances PLWHA leave or do not enter care. The top five reasons identified by the HIV-positive individuals who did not enter care were: unstable housing; good health (don't feel the need to see a doctor); unaware of free medical care; not ready to deal with HIV; and fear of discrimination/stigma. For those people who left and returned to care, the following reasons for leaving care were cited: substance abuse; unstable housing; good/improved health; incarceration; and unaware of free medical care (for those who never entered care).

Future services to address the unmet need population will be tailored to 1) *Latino and African-American MSM*; 2) *Youth (ages 13-24)*; 3) *Transgender Individuals*; 4) *Latina and African-American Women*; 5) *Partners of HIV-positive Individuals*; and 6) *Incarcerated and Post-released Individuals*. These services will incorporate innovative strategies to locate these hard-to-reach populations; provide integrated services that address mental health, substance use, co-morbidities, and economic barriers; and procedures to help clients navigate through the system of care services.

### **PROGRAM/INTERVENTION GOALS**

1. Improve linkage to care among persons newly diagnosed with HIV.
2. Develop strategies to use existing public health/surveillance data to identify individuals newly diagnosed with HIV not in care.

### **STRATEGIES TO BE USED**

1. Provide educational and training opportunities to introduce TLC+ (e.g., production of TLC+ brief, host community meetings).
2. Implement innovative strategies to improve linkage to care among newly diagnosed individuals, e.g. placement of Youth linkage specialist, CEDIS, peer navigators.
3. Convene a Testing, Linkage to Care + (TLC+) workgroup among LAC Department of Public Health Programs.
4. Match DHSP HIV testing data with surveillance data to evaluate linkage to care rates from DHSP funded testing programs, and identify individuals who have not been linked to care.
5. Incentivize HIV testing providers for successful linkage to care for HIV-positive persons.

## **MEASURABLE OBJECTIVES**

1. By March 31, 2013, increase the number of CEDIS from 2 to 6.
2. By March 31, 2013, 50 referrals will be made in identifying HIV-positives persons who are out of care [Project Engage].
3. By September 30, 2013, 100 referrals will be made in identifying HIV-positive persons who are out of care [Project Engage].
4. By September 30, 2013, 100% of [newly diagnosed] persons who receive their HIV-positive test results at DHSP funded testing agencies will be referred to medical care.
5. By September 30, 2013, 75% of persons who receive their HIV-positive test results at DHSP funded testing agencies will attend an initial medical evaluation within 90 days of diagnosis.
6. By September 30, 2013, DHSP will convene at least two TLC+ workgroup meetings
7. By December 31, 2016, an updated HIV partner services protocol will be completed. The protocol will be for HIV and STD services with a focus on LTC for HIV-positive persons.
8. By March 31, 2013, develop a protocol with HIV Surveillance Program for matching HIV testing and HIV surveillance data systems.
9. By March 31, 2013 all HTS providers will receive 15% of their pay for performance budget for the 1<sup>st</sup> quarter if 85% of all HIV-positive testers are successfully linked into medical care.

**Data sources for Evaluation:** DHSP Ryan White data system, HIV Surveillance data, and DHSP HTS data system.

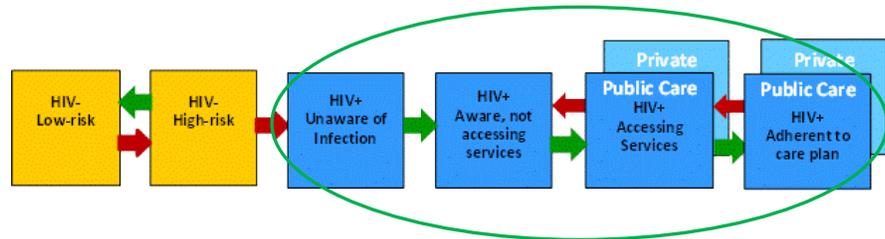
**Summary:** There are an estimated 18,800 PLWHA in LAC who are not accessing care services. DHSP's highest priority is linking the newly diagnosed to care within three months. Approximately 59% of individuals diagnosed at DHSP-supported testing sites are linked to care within 3 months and 54% county-wide are linked to care within 3 months. Both estimates are below the NHAS goals. By increasing, implementing, and refining the following activities we expect to improve linkage to care within LAC:

- Aligning HIV testing provider incentives to optimize linkage to care
- Adopting new HIV rapid testing algorithms that will result in expediting linkage to care activities
- Expanding partner services (including community embedded DIS)
- Expansion and improved targeting of early intervention and retention services
- Placement of linkage workers to facilitate expedited access to care among hard to reach out of care populations

An internal TLC+ workgroup has been established to plan, develop, implement, and evaluate TLC+ activities and system-wide programming to optimize linkage to HIV care, treatment and prevention services for those testing HIV-positive and not currently in care. Given the immense size and diversity of LAC, LAC needs a variety of activities and programming that consider geographic and socio-economic challenges to linkage to care locally. DHSP already supports a

wide range of services designed to link the newly diagnosed to care and promote care and treatment engagement, including: early intervention services, medical care coordination (a hybrid of medical and nonmedical case management), substance abuse treatment, mental health therapies, transportation, residential and housing services, benefits screening and enrollment, etc. Data show that each service will help some people in accessing and retaining medical treatment.

**TARGET POPULATIONS:**



➤ **PARTNER SERVICES**

Partner Services are a broad array of services that are offered to persons with HIV, syphilis, gonorrhea, or Chlamydia infections and their partners. Identifying partners and notifying them of their exposure through partner notification are two critical elements of these services. DHSP is responsible for the provision of PS to HIV-positive persons within LAC. LAC Sexually Transmitted Disease Program (now a part of DHSP) has the only legal authority to conduct partner notifications in the field. Thus PS are only provided by DHSP Public Health Investigators (PHIs) or trained staff at DHSP funded community partner agencies. PS programmatic activities are summarized below.

The Los Angeles County Public Health Laboratory routes each HIV-positive or inconclusive lab result to DHSP and the result is entered into an electronic database called STD\*CASEWATCH. The PS Manager at DHSP evaluates each of the results from STD\*CASEWATCH to determine if it is a new case that has not received previous PS, and if the client is deemed a "new" positive, the PS Manager assigns them accordingly for field follow-up.

HIV-positive cases from private providers who request assistance in notifying their patients as well as partners elicited from agencies that do not utilize the Los Angeles County Public Health Laboratory will fax elicitation interview information to DHSP. This information is also entered into STD\*CASEWATCH to be assigned accordingly by the PS manager for field follow-up. The only reports that are not entered into STD\*CASEWATCH are HIV tests conducted as a result of court ordered testing for sex crime offenders.

The cases are assigned by rank in priority, from highest to lowest:

1. Clients identified through special projects generally refer to studies that are being conducted (e.g., NAAT positive testing).
2. Court ordered clients who are mandatory for follow-up.
3. Sexual or drug using contacts of HIV-positive persons.
4. Newly identified HIV-positive.
5. Co-infected HIV/STD cases usually HIV and syphilis.
6. Cases that have had an STD within the past 12 months but may have previously received PS. The priority ranking is based on staff resources and frequency of the

reporting source. Case management on these cases ranges from an average of one week to two months.

DHSP's contracted community partners offer a range of PS to clients diagnosed with HIV. Community partners are trained to explore PS options with their clients including the use of inSPOT website for partner notification (<http://www.inspot.org/>). Upon the client's selection of the type of notification, the counselor provides respective services. If anonymous third party disclosure (also called provider referral) is selected, then the counselor will conduct the elicitation and forward the partner information to DHSP. If dual disclosure is selected then the counselor will encourage the client to bring in their partner(s), and will provide partner testing as appropriate. If self disclosure is chosen, then the counselor will coach the client on how to disclose to his/her sexual or needle-sharing partner(s). Please note that community partners do not conduct partner notifications in the field as part of anonymous third party disclosure.

PS activities are a highly effective strategy in identifying undiagnosed and unaware cases of HIV/AIDS. In 2009 1,223 partners were elicited by index patients and 359 partners were already aware of their positive HIV status. PS staff contacted the remaining 864 elicited partners, 49% took an HIV test, and a 22.8% positivity rate was attained (97 newly diagnosed positives out of 426 testers). In addition, DHSP funds network tracing of partners at DHSP-funded HIV care clinics. A total of 647 tests were conducted in RW medical outpatient clinics and 34 individuals were newly diagnosed at a positivity rate of 5.3%. Another successful strategy to increase the provision of PS is the implementation of CEDIS at clinics with high HIV burden. Currently CEDIS are placed at Los Angeles Gay and Lesbian Center (LAGLC), AIDS Healthcare Foundation, and at the J. Goodman Clinic within LAGLC. CEDIS assist newly diagnosed HIV-positive clients in navigating through the complex system of care, obtain social and other support services, and provide PS follow-up. CEDIS are often members of the community and the rapport they build with clients promotes engagement in care and facilitates PS activities.

There are approximately 1,500-2,000 new cases of HIV reported per year in LAC. In addition, the number of syphilis, Chlamydia, and rectal gonorrhea cases are staggering. With the proposed increases in routine screening of HIV and STD, the number of PS cases will grow. DHSP projects that the new HIV-positive case load will increase by approximately 882 cases per year. Additionally, only 26% of newly diagnosed HIV-positive clients accepted PS in 2010, which is below the local goal of 50%. Therefore a dramatic increase in resources is needed to adequately conduct PS. While streamlining processes and finding new and efficient ways to provide PS to clients is possible, a sizable increase in number of staff will still be needed to meet the demands of providing PS to all newly diagnosed HIV cases. Even if the demand of providing PS to all newly diagnosed HIV cases was met, the need for ongoing partner services will still be unmet.

### **PROGRAM/INTERVENTION GOALS**

1. To increase HIV case finding through partner services.

### **STRATEGIES TO BE USED**

1. Utilize HIV surveillance data for increasing delivery of partner services

2. Strategy 2: To increase the number of newly diagnosed HIV-positive clients who are offered partner services

### **MEASURABLE OBJECTIVES**

1. By March 31, 2013, 75% of eligible index patients will be interviewed for Partner Services
2. By March 31, 2013, 50% of newly diagnosed HIV-positive clients will accept Partner Services
3. By March 31, 2013, 50% of notified partners, not previously HIV-positive, will receive an HIV test
4. By March 31, 2013, 95% of all HIV-positive test results will be disclosed for those testing in the Partner Services program

<b>Data sources for Evaluation:</b> STD Program data and reports and HARS (HIV Surveillance)
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**Summary:** To meet the increasing PS case load, six additional CEDIS will be placed at CBOs or clinics with high HIV and STD morbidity. DHSP staff are currently assessing the opportunities and logistics of data sharing including the matching of HIV and STD cases across disparate data systems to allow for programmatic use of surveillance and laboratory data for PS and linkage to care follow up. Data sharing will decrease the amount of staff time utilized in de-duplicating cases and case identification and will provide more time for partner elicitation and counseling. PS is one of the HTS pay for performance measures implemented under the New Directions in Testing program, and DHSP will monitor this measure to see if it increases the percentage of clients that accept PS. DHSP staff are currently revising the PS Policies and Procedures Manual and drafting a new hierarchy for PS case reporting initiation and follow-up. Increase in scale of this intervention strategy will assist in reducing the number of unaware infections, combat health disparities, and increase access to care/improve health outcomes for PLWHA.

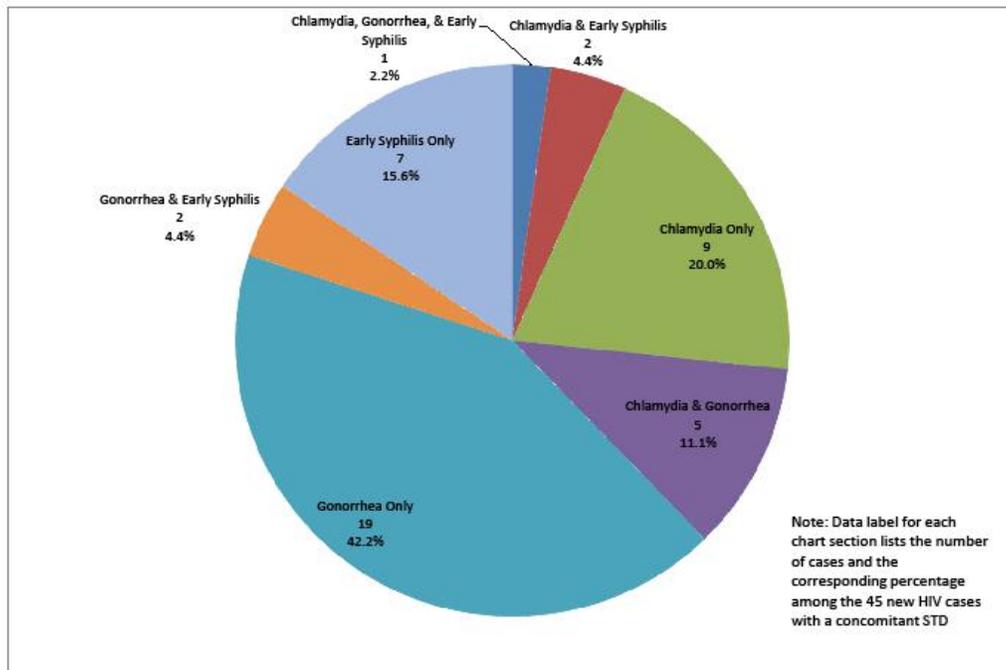
### ➤ **STD SCREENING**

Results from the syndemic planning and geospatial mapping exercise (previously described pages 24-27) showed strong associations and significant overlap of HIV, syphilis, gonorrhea and chlamydia epidemics. In 2010, a total of 131 new HIV cases were diagnosed at publicly funded health centers. Forty-five of the new HIV cases (34.4%) were also diagnosed with a concomitant STD during the same visit.

STDs may have atypical presentations and can cause significant morbidity in persons with HIV infection, and may increase the risk of HIV transmission. Thus, the appropriate diagnoses and treatments of STDs in this population are extremely important. However, both diagnosis and treatment should begin with routine screening for STDs among HIV-positive patients during HIV medical visits.

LAC Department of Public Health uses funding from CDC, RW, and the DPH General Fund to provide and promote STD testing throughout the County. Viral load, viral resistance testing, and STD screenings are part of the standard of care for all DHSP contracted medical outpatient providers for each medical visit. National HIV treatment guidelines state that STD screening should occur at baseline and annually for all PLWHA. Local standards of care (SOC) require that STD screening should occur more frequently for patients who report risk behaviors or have a recent history of a STD. The Policies and Procedures for STD screening and Treatment among PLWHA are listed below.

**Figure 35. Other STDs Diagnosed During Same Visit as HIV among Patients with New HIV January - December 2010 at all Publicly Funded Health Centers in LAC**



LAC has adopted a set of local policies and procedures for STD screening and treatment for HIV+ persons, these include:

1. DHSP policy for annual STD screening for all HIV+ patients, as well as more frequent (quarterly and symptom based) screening for individuals who have a recent STD or report risk behavior. This policy is included in all contracts with RW care providers, and is monitored annually to insure compliance with these screening recommendations.
2. STD Program has policies and procedures for partner services that include embedded Public Health Investigators at RW HIV clinics with high STD rates, to enhance screening, case identification, and surveillance activities for partners of these HIV+ patients.
3. The LAC Commission on HIV has established Standards of Care, based on the DHSP policy and guidelines, which are standards for all HIV providers in LAC regardless of funding source.

STD screening of all HIV-positive patients in DHSP funded medical outpatient sites is one performance indicator reviewed during annual audits. In 2009, all 33 DHSP HIV medical care sites were monitored for the percentage of patients who had at least one test for syphilis

performed within the fiscal year. On average, 99% of HIV-positive patients were screened for syphilis at least once with a range of 92% to 100% by site.

While DHSP funded outpatient medical sites consistently provide syphilis screening according to current guidelines for HIV-positive patients across all service sites, this is not true for Chlamydia and gonorrhea. An average of 98% of HIV-positive patients were screened for Chlamydia and gonorrhea, however this measure was as low as 71% at some sites, which is well below LAC's standard of care. This finding confirms the ongoing need for provider education regarding concomitant diseases.

The DHSP conducts ongoing surveillance of STDs in LAC, and prioritizes individuals co-infected with HIV and STDs for PS and elicitation as well as follow up on STD treatment in accordance with CDC and CA STD Treatment Guidelines. Currently there is no system in place to populate the RW system data base with results of STD treatment monitoring and follow up done by the DHSP. Despite ongoing matching of STD surveillance and treatment data with RW care data, the exact number of HIV+ positive persons in RW who have STDs, their treatment rates, and receipt of partner services cannot be accurately reported. Efforts continue to automate matching across data systems, and this will be critical in assuring that comprehensive STD treatment, follow up, and PS are deployed to all PLWHA in LAC.

#### **PROGRAM/INTERVENTION GOALS**

1. Routinely screen all Ryan White clients for STDs and viral hepatitis.

#### **STRATEGIES TO BE USED**

1. Enforce standards for all Ryan White providers regarding STD/hepatitis screening. Expand screening to include HWLA.
2. Develop protocol for regular matching/data sharing with STD surveillance and treatment monitoring data to identify opportunities to improve STD treatment rates and partner services delivery to HIV-positive individuals in RW system of care.

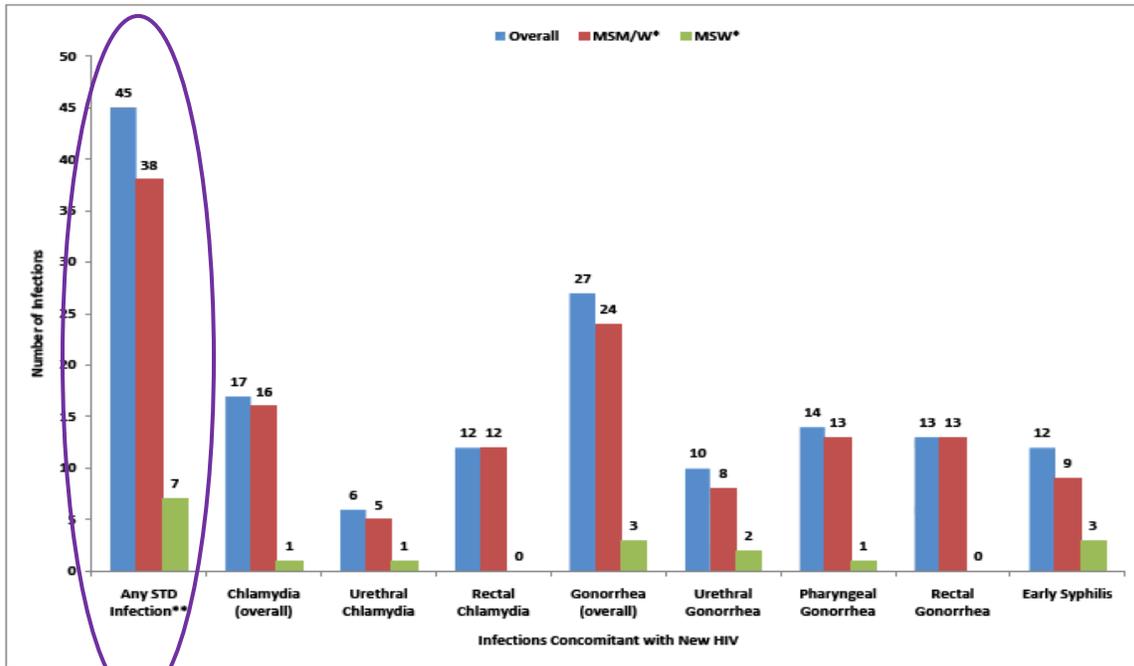
#### **MEASURABLE OBJECTIVES**

1. By December 31, 2013, establish matching protocol with STD Partner Services data base and Ryan White data base to identify rates of HIV/STD co-morbidity and STD treatment rates among Ryan White patients
2. By December 31, 2013, 90% of Ryan White clients with an STD were referred to partner services
3. By March 31, 2013, review 50% of contracts for STD/viral hepatitis screening to obtain benchmarks for performance
4. By September 30, 2013, 90% of all Ryan White clients screened for STDs/hepatitis C at least annually
5. By December 31, 2017, 95% of all RW and HWLA clients screened for STDs/hepatitis C at least annually

<b>Data sources for Evaluation:</b> Monitoring summaries and HIV Casewatch
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**Summary:** Of the 2,911 new HIV cases reported to PS in 2009, 36% were co-infected with Early Syphilis, 15% were co-infected with Chlamydia, and 14% were co-infected with Gonorrhea. The co-infected STD cases were not equally distributed among men and women. In 2010, not only were all co-infected cases of HIV and other STDs among men, but 84.4% were among MSM.

**Figure 36. Other STDs Diagnosed During Same Visit as HIV Diagnosis  
January - December 2010 at all Publicly Funded Health Centers in LAC**

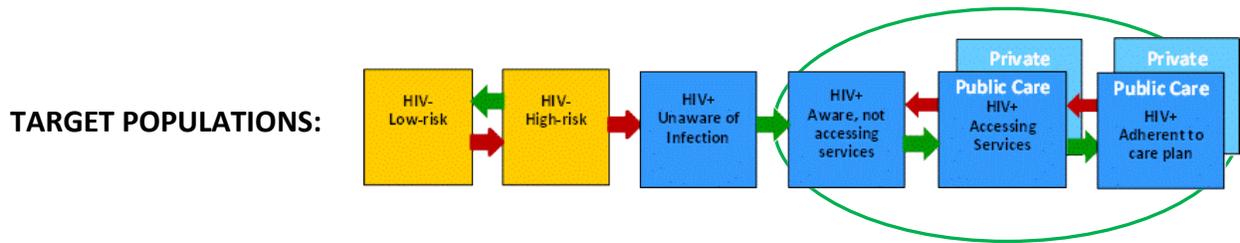


\*MSM/W = men who have sex with men, or men who have sex with men and women; MSW = men who have sex with women

\*\*Chlamydia, Gonorrhea, or Early Syphilis

Note1: Number of new HIV cases: Overall=131; MSM/W=94; MSW=22; Females=0

Given the overlapping syndemics of HIV, syphilis, Chlamydia, and gonorrhea in LAC, there is a need to enhance integrated HIV/STD screening among MSM, TG, and others in LAC at high risk. Although screening for STDs is already an important part of the SOC for RW medical outpatient providers, consistency across sites is critical. DHSP will be implementing a pay-for-performance structure to provide financial incentives for adherence to critical clinical guidelines, including STD screening. The strategies DHSP will support in order to effectively link PLWHA to care, provide PS, provide ART, re-engage or maintain adherence to ART or clinical case management will also assist in screening STDs and successful STD treatment.

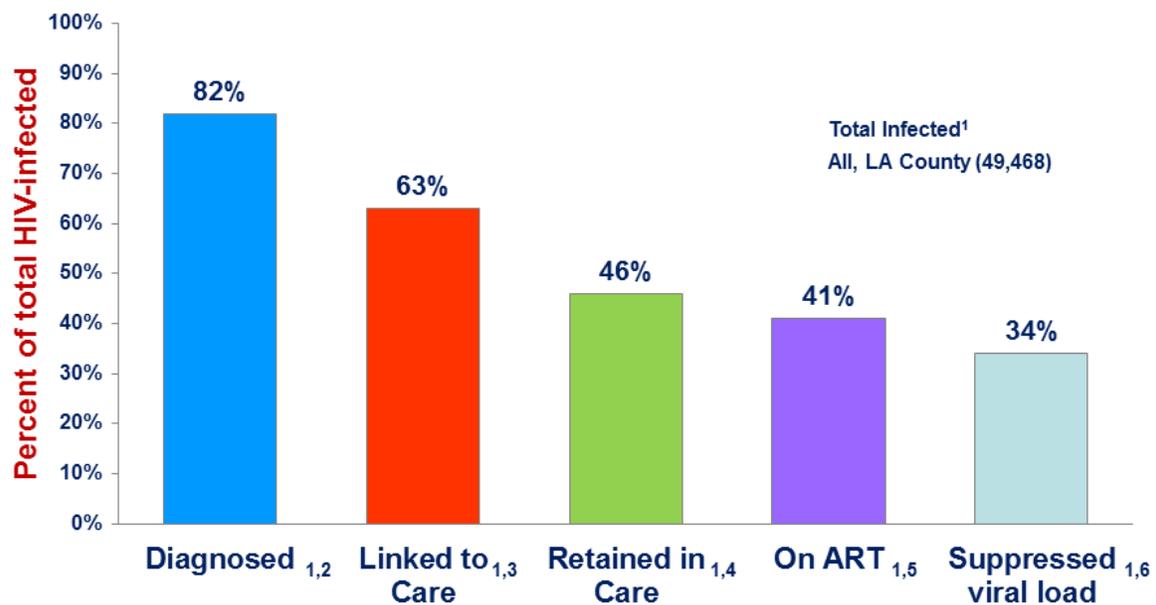


➤ **PROMOTING RETENTION IN OR RE-ENGAGEMENT IN CARE**

The TLC+ framework is LAC’s blueprint for identifying, engaging, and retaining HIV-positive individuals in medical care to achieve viral load suppression and prevent the transmission of HIV. Figure 37 displays the estimated percentages of PLWH in LAC within each stage of the HIV continuum of care in 2009 (see Attachment F for slides by race/ethnicity, gender, and age). As seen, of the 63% of PLWH who were linked to care; only 46% were retained in care. As a result, there is an ongoing need for strategies to effectively retain PLWH in care and treatment for the long term.

**Figure 37. Estimated Percent of HIV-Infected Persons in LAC in Stages of the HIV Care Continuum, 2009**

### Estimated Percent of HIV-Infected Persons in LAC in Stages of the HIV Care Continuum, 2009



<sup>1</sup> Denominator is # diagnosed w HIV through '08 & living at end of '09 plus an estimated 18% unaware of infection.

<sup>2</sup> Numerator is HIV + persons diagnosed through 12/31/08 and living with HIV at end of '09 minus unawares

<sup>3</sup> Numerator is persons w ≥1 CD4 or VL test within 3 months of diagnosis

<sup>4</sup> Numerator is persons w ≥2 CD4/VL tests at least 3 months apart in 2009

<sup>5</sup> % on ART from the Medical Monitoring Project (MMP) January-April 2009

<sup>6</sup> % on ART w VL <200 copies/ml from MMP January-April 2009

In order to optimize retention and adherence to treatment, program enhancements in the HIV medical homes are being undertaken, which include implementing Medical Care Coordination (MCC). The MCC model integrates medical case management and non-medical care management into a multi-disciplinary care coordination team at patients’ medical home in order

to optimize access, retention, and treatment adherence and improve patient health outcomes and self-management. The team focuses on the delivery of evidence-based interventions and patient-centered case management to address unmet needs (i.e. housing, transportation, food), identify and link to mental health and substance use services, provide HIV education and improve health literacy, provide risk reduction and treatment adherence counseling, and to coordinate management of co-morbidities and specialty care. It is planned that MCC will be in place in all HIV medical homes by March 2013.

In addition to the MCC model, DHSP supports a Youth Case Management program that provides intensive case management for HIV-positive adolescents and young adults, who have been shown to be at high risk for falling out of medical care. Another population that is disproportionately impacted by poor retention in care rates is the 500 or more HIV infected persons who are incarcerated in the Los Angeles Sheriff's Department (LASD) jail system. To assist this population, DHSP supports a jail-based HIV nurse liaison and transitional case management. The HIV nurse liaison works with jail HIV providers to address clients' medical needs, and the transitional case managers facilitate linkage to community medical care upon release from jail and address any unmet needs that may serve as barriers to care.

The HIV continuum of care in LAC is a comprehensive path from HIV prevention to treatment for individual clients affected by HIV. The system of care is designed to promote awareness of and access to HIV prevention, care and treatment services to reduce HIV incidence and relieve disease burden. As the grantee and administrator for the local Ryan White Program, DHSP has developed a robust care and treatment program that is linked to our HIV testing programs. DHSP contracts with over 33 medical outpatient delivery sites, and over 100 sites that deliver one or more of the following services to encourage client assessment, referral, linkage and retention in care:

- Medical outpatient and medical specialty services
- ADAP enrollment
- Benefits screening and enrollment
- Medical Care Coordination
- Oral health services
- Linkage to care services
- Residential care services (DHSP-funded)
- Housing services (HOPWA-funded)
- Substance use services
- Mental health treatment Nutrition support
- Medical transportation

An analysis of demographic predictors of poor retention in care among RW clients (2009-2010) found that as age increases, so does the likelihood that the client will be retained in care. RW clients between the ages 25 to 39 years are almost 1.5 times more likely to have poor retention in care compared to a client that is 50 years of age or older. Other factors that were associated with poor retention in care were incarceration, homelessness, and lack of health insurance.

## **PROGRAM/INTERVENTION GOALS**

1. Increase rates of retention in care in the Ryan White system of care.
2. Develop strategies to use existing public health/surveillance data to identify HIV-positive individuals not in care.

## **STRATEGIES TO BE USED**

1. Implement innovative strategies to improve retention in care among PLWHA by implementing an HIV Medical Care Coordination (MCC) model and a Retention Navigation Project in Los Angeles.
2. Convene a Testing, Linkage to Care + (TLC+) workgroup among Los Angeles County Department of Public Health Programs.
3. Matching DHSP HIV testing data with surveillance data to identify individuals who are out of care/not retained in care.

## **MEASURABLE OBJECTIVES**

1. By January 31, 2013, implement a navigation project designed to re-engage lost HIV clinic patients in HIV care.
2. By January 31, 2013, expand MCC model to 37 HIV medical homes.
3. Evaluate MCC model impact on retention rates at two medical care sites by September 30, 2013.
4. By March 31, 2013, achieve an 85% retention in care rate among Ryan White medical clients (at least 2 medical visits within a year 3 months apart).
5. By March 31, 2013, implement a protocol with HIV Surveillance Program for matching Ryan White and HIV surveillance data system to identify those out of care.
6. By March 31, 2017, will have located and linked 1500 individuals not in care by reviewing clinic and county databases to identify lost patients.

<b>Data sources for Evaluation:</b> HIV Surveillance data, Care services monthly report, Meeting agendas, and DHSP HTS data system
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**Summary:** Engagement and retention in HIV care is a critical and necessary step for accessing HIV treatment, optimizing health outcomes, reducing health disparities, and reducing community viral load. By increasing, implementing, and refining the following activities we expect to improve retention in care within LAC:

- Expanding partner services to reach out of care populations (including outreach workers and CEDIS)
- Expansion and improved targeting of early intervention and retention services
- Placement of linkage workers to facilitate expedited access to care among hard to reach out of care populations
- Continued support of housing, substance use, mental health, and transportation services to optimize retention in care

- Implementation of medical care coordination (as described in the situational analysis)
- Implementation of newly NIDA funded peer navigation study targeting incarcerated populations
- Identify and implement methods and processes to improve data matching

➤ **LINKAGE TO OTHER MEDICAL AND SOCIAL SERVICES FOR HIV POSITIVE PERSONS**

As people with HIV live longer, service needs are becoming more complex. Co-morbidities of STDs, tuberculosis (TB), mental illness, substance abuse, homelessness, and incarceration complicate service delivery and undermine adherence to treatment in PLWHA. Approximately 10% of PLWHA in LAC are homeless and lack of housing is consistently listed as a barrier to engagement in care and treatment adherence. Another co-factor strongly associated with homelessness is poverty. Poverty is highly correlated with low literacy; poor nutrition; and poor access to health education, prevention services, and medical care resulting in increased morbidity and premature mortality.

Unlike other parts of the country, the connection between substance use and HIV in LAC centers on unsafe sex while under the influence of alcohol or other drugs, rather than needle sharing. Substance abuse not only interferes with ART adherence, treatment efficacy, and nutrition, but can also impact oral health (e.g. meth use). Another disorder strongly linked to substance use is mental illness. Similar to substance use, mental health disorders can also accelerate the progression of HIV disease and the likelihood of engaging in high-risk behaviors while curtailing engagement in care and medical adherence. In 2010, 21% of RW clients reported a recent history of mental illness. Only 69% of PLWHA who indicated using substances and reported mental health problems in 2009 received medical outpatient care compared to 80% of RW clients without addiction issues or mental illnesses.

The burden that STDs place on the treatment and management of HIV was described in previous interventions. However, it is important to add that PLWHA who are co-infected with HBV or HCV are more likely to develop end-stage liver disease than individuals who only have hepatitis. PLWHA also have an increased susceptibility to TB, requiring regular screening and immediate treatment of both latent and active TB. In 2010, 5.8% of reported cases of TB were co-infected with HIV (LAC TB Control Program, 2010 data).

LAC bears a tremendous burden in providing services for recently incarcerated individuals. In many cases, the formerly incarcerated are sicker upon release than they were prior to incarceration, and require more expensive, more complex HIV care following release.

Research suggests that individuals newly released from prison in LAC experience a four times greater rate of active TB; a nine to 10 times greater rate of hepatitis C; a five times higher rate of AIDS; a 1.5 to five times higher rate of mental illness; and higher rates of substance abuse and chronic diseases (J. B. Orr, 2006; RAND 2009). Most parolees have no medical insurance or stable sources of health care, often because they lack appropriate identification and any permanent address. As recently incarcerated people re-enter communities, a majority return to the most impoverished regions in the County—SPA 4, SPA 6, and certain neighborhoods in SPA 8. These are also areas with the highest concentrations of people living with HIV and AIDS, heightening the serious health care problems experienced in those communities.

As the grantee and administrator for the local Ryan White Program, DHSP has developed a robust care and treatment program that is linked to our HIV testing programs to address the comprehensive medical and social services needs of this population. DHSP contracts with over 33 medical outpatient delivery sites, and over 100 sites that deliver one or more of the following services to encourage client assessment, referral, linkage and retention in care:

- Medical outpatient and medical specialty services
- ADAP enrollment
- Benefits screening and enrollment
- Case Management (medical, nonmedical and transitional)
- Oral health services
- Linkage to care services
- Residential care services (DHSP-funded)
- Housing services (HOPWA- funded)
- Substance use treatment (in collaboration with the County's Substance Abuse Prevention and Control Program)
- Mental health treatment (in collaboration with the County's Department of Mental Health)
- Nutrition support
- Medical transportation

In addition to DHSP contracted services, other County programs or their subcontracted agencies (e.g. Substance Use Program, Department of Mental Health, LAC Sheriff's Department) offer medical and social services that PLWHA can access.

There is a plethora of medical and social services in LAC. However, there are multiple barriers that prevent PLWHA from accessing these services. As mentioned above some of the barriers are due to substance abuse, mental illness, homelessness, or lack of awareness of available services. Transportation, cultural competency, and independent service delivery systems are also barriers. Although medical specialty services (e.g. renal, ophthalmology, neurology, oncology, etc.) are available to PLWHA, these services may not be co-located at the patient's primary care medical home and/or there is a lack of coordinated care among treatment providers. When behavioral health and social services are added to the care service treatment plan, even more challenges with engagement are introduced.

### **PROGRAM/INTERVENTION GOALS**

1. Improve treatment engagement and health status of persons with HIV.
2. Link people with diagnosed HIV to medical care.

### **STRATEGIES TO BE USED**

1. Implement medical care coordination (MCC) to improve linkage to medical care and social services among HIV-positive individuals.
2. Implement pilot programs in identifying individuals who have not linked to care.

## **MEASURABLE OBJECTIVES**

1. By March 31, 2013, convene at least two TLC+ workgroup meetings to identify additional strategies and pilot programs that could be implemented to improve retention in care and referral to needed social services in the Ryan White system of care.
2. By March 31, 2013, utilize peer navigators to link out of care Latino MSM to HIV care and substance abuse services to improve access to HIV care [Navigation Program]

<b>Data sources for Evaluation:</b> DHSP Ryan White data system, HIV Surveillance data, and DHSP HIV testing data system, Healthy Way LA enrollment data
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**Summary:** Without addressing the challenges and barriers PLWHA face in obtaining medical and social services, the number of PLWHA out of care and non-adherent to treatment plans will continue to increase. The strategies DHSP will use to dismantle the silos created by past medical delivery systems were described in detail in other interventions (#6-13, pages 84-111) presented in this document. These strategies include:

- Outreach teams to locate persons out of care
- Transition case managers located within jails who will establish linkage to HIV medical care and other services upon release
- Peer navigators will be used to link post-released HIV-positive inmates and out of care Latino MSM to HIV care and substance abuse services to improve access to HIV care, rates of ART use, and reduce viral loads
- Early intervention workers that will actively locate unaware and out of care PLWHA and offer them comprehensive risk assessments and connect them to comprehensive medical care
- Youth focused linkage workers will improve the identification and linkage to care of youth with undiagnosed HIV infection
- Early adoption of elements of the Affordable Care Act
- MCC model that is a multi-disciplinary team that provides brief interventions and follow up activities for a period of 12 months.

Another strategy DHSP will pilot test in 2013-2014 is the integration of behavioral health services within a primary care setting. In this SAMHSA funded demonstration project, not only will services be co-located but there will also be monthly case conferencing to ensure that medical and social service needs of each patient are addressed. Based on the efficacy of this project, similar programs will be implemented in communities with high levels of co-morbid disease.

## **➤ PREVENTION OF PERINATAL TRANSMISSION**

As of April 2010, representatives from DHSP, HIV Epidemiology Program, and LA County's LAC+USC Medical Center formed a workgroup to assess current perinatal HIV prevention activities in the County. Workgroup members have also expressed a desire to continue the Perinatal Collaborative and mapped out a plan to re-engage former members, identify needs of

the collaborative, and provide recommended goals and objectives for the group. In 2010, workgroup members met five times and participated in the Eliminating Perinatal HIV Transmission in Southern California: A Gathering of Experts (described below).

On October 8, 2010, a meeting was convened to discuss missed opportunities for prevention of mother-to-child transmission of HIV in Southern California and to strategize solutions. Attendees were physicians, clinicians, nurses, coordinators, and public health staff from across Riverside, Orange, and Los Angeles counties. A total of 40 individuals participated in this event. During the Eliminating Perinatal HIV Transmission in Southern California: A Gathering of Experts event, data was reviewed, missed opportunities for prevention discussed, and strategies for improving PMTCT (Prevention of Mother to Child Transmission) were identified. After the meeting, smaller working groups were proposed to further develop strategies around the following areas:

1. Legislation/Policy (e.g., testing of pediatrics in foster care, exposure reporting, and mandatory testing)
2. Updating LA County Standards of Care (SOC)
3. Outreach and Education Efforts (e.g., testing male partners, labor and delivery, lactation)
4. Repeat 3rd Trimester Testing
5. Testing and Linkage to Care
6. Improved Adherence
7. Improved Linkage to Care
8. Perinatal Hepatitis B Initiative Collaboration (e.g., chart review data collection)

In December 2010, a meeting between three HIV Perinatal Collaborative members and the Perinatal Hepatitis B Coordinator for LAC convened to discuss the successes, challenges, and lessons learned from the well established Perinatal Hepatitis B Program. The outcome of this meeting was to set up a follow-up meeting with additional Perinatal Collaborative members and Perinatal Hepatitis B Program staff to explore the possibility of adding HIV testing questions to the perinatal Hepatitis B chart audits. This meeting was scheduled for March 2011. Other working groups such as the Standards of Care are expected to meet in 2011.

LAC receives CDC funding for the Enhanced Perinatal Surveillance Project (EPS). EPS is a longitudinal study linking mother-infant pairs through retrospective medical records review and data abstraction of both the mother and child's medical records. Funding for EPS was through 2011. Additional perinatal transmission activities are covered through the County of Los Angeles Department of Public General Fund and Ryan White (for pregnant women receiving Ryan White medical care).

DHSP currently provides a culturally competent Perinatal HIV training curriculum and training course for Public Health Nurses (PHNs) within LAC. The curriculum includes training regarding the epidemiology of HIV, current CDC guidance on HIV testing, California HIV laws, HIV transmission from mother to fetus, recommended antiretroviral treatments for perinatal HIV infection, culturally competent counseling for HIV-positive mothers, options for pregnancy, breastfeeding, and disclosure to family, common myths and facts, small group activities and resources for care.

Though the absolute number of women living with HIV or AIDS in LAC is relatively small compared to the number of men infected with HIV, the rise in new infections in recent years among women, especially women of color, is alarming. Many of these women do not perceive themselves to be at risk for HIV infection.

Among women overall, women of color make up 84% of living AIDS cases and 87% of new AIDS cases. HEP estimates there are about 6,155 women living with HIV and AIDS in LAC. The majority (83%) of these is women of color and 17% are White. African-American women in LAC have the highest HIV seroprevalence among all at-risk women, estimated at 6.3%, followed by Native American women (2.9%) and Latinas (2.4%) (HEP, 2008). Women of color living with HIV/AIDS experience particular barriers that may prevent them from accessing care, including poverty, lack of childcare, serving as single head of household, transportation challenges, and medical care not tailored to the specific needs of female patients. In FY 2010, the LAC RW service system provided medical outpatient care to 81% of women of color with HIV/AIDS, at an average of 6.5 visits per client, compared to an average of 5.3 visits for all clients. Twenty-four percent of these women received case management, a much higher proportion than that of RW clients overall (18%), indicating a need for assistance in coping with the multiple stressors and barriers in order to maintain their medical care.

All of the issues identified above highlight the need for innovative and culturally relevant perinatal prevention and treatment models that address the multiple stressors and barriers that HIV-positive, pregnant women of color face.

#### **PROGRAM/INTERVENTION GOALS**

1. Prevent perinatal transmission in HIV-positive pregnant women in Los Angeles County.

#### **STRATEGIES TO BE USED**

1. Increase HIV screening among pregnant women in Los Angeles County.
2. Ensure pregnant HIV-positive women in the Ryan White system of care are receiving appropriate HIV perinatal medical care and ART.

#### **MEASURABLE OBJECTIVES**

1. By March 2013, continue to work with the CA state OA and Perinatal HIV collaborative to build capacity in Los Angeles County labor and delivery units to expand HIV screening protocols among pregnant women to include a rapid HIV test at the time of delivery.
2. By June 30, 2013, submit to the Los Angeles County Commission of HIV (HIV care planning body) recommended perinatal standards of care for review and adoption.
3. By September 30, 2013, increase Ryan White provider awareness of perinatal HIV specialty clinics and LA County Standards of Care for pregnant women to receive perinatal HIV specialty care.

<b>Data sources for Evaluation:</b> Meeting notes and Standards of Care report
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**Summary:** LAC has a sizeable number of HIV-infected women of childbearing age, thus necessitating the need for intensified monitoring efforts. With more than 150,000 births

annually, LAC expects more than 270 HIV-infected women to give birth each year. This underscores the need for new and improved strategies to ensure that HIV-infected females have access to adequate prenatal care, timely HTC, and access to HIV-related care and wrap-around services in a medical home.

With the emphasis on further reducing perinatal HIV transmission in high prevalence areas, EPS activities will continue to be implemented to target and follow the progress toward maximal reduction of mother-to-child transmission. To further improve perinatal HIV prevention systems, staff will assess utilizing the FIMR/HIV Prevention Methodology. FIMR-HIV Methodology in LAC will provide an in-depth look at the systems that result in a perinatal HIV exposure or transmission. It will provide a mechanism to better understand factors associated with perinatal transmission which routine surveillance data cannot achieve.

DHSP will continue to work with community partners to ensure that proper HIV prevention, counseling, testing, and therapies are provided to women and infants during prenatal care, delivery, and postnatal care. Although the CDC ended funding of the EPS program as of December 2011, DHSP will continue to support the program at its current level in addition to engaging in other perinatal prevention activities. In order to preserve the low perinatal transmission rates in LAC the following activities will continue:

- Education monitoring and technical assistance for routine testing guidelines in the first and 3<sup>rd</sup> trimester as specified by CA state law and local standards of care
- Continuation of enhanced perinatal surveillance activities for exposed infants
- Monitoring and outreach, and linkage to perinatal specialty care services including access to ART for both mother and child to reduce risk of HIV perinatal transmission
- Provide HIV testing services in clinical and non-clinical settings to pregnant women and provide appropriate medical care and prevention referrals.

Each year, nearly 20% of all Part A funds are used to provide services to women, infants, children and youth. In FY 2010, 18.94% of Part A funds available for direct services were used for WICY populations. This percentage exceeds the 14.98% of HIV and AIDS cases reported among WICY populations. DHSP has been tracking Part A expenses and services for women, infants, children and youth since 2002. Contracted providers are required to document the number of WICY clients served and to track Part A funds spent on the WICY population. These data are reported in Casewatch, the data management system used for DHSP-funded HIV care services, and in monthly financial and program reports. The FY 2012 plan for RW Part A services includes these provisions to ensure that resources allocated.

#### ➤ **BEHAVIORAL RISK SCREENING FOLLOWED BY RISK REDUCTION INTERVENTIONS**

DHSP supports a broad range of programs targeting HIV-positive individuals that includes interventions designed for individuals (IDIs), interventions designed for groups (IDGs), community level interventions (CLI), and comprehensive risk counseling services (CRCS). Prevention for HIV-positive persons has been fully integrated into DHSP's prevention portfolio HE/RR since 2000. The current programs listed below will be in place until December 2013.

Evaluation of HE/RR programs for positives shows modest effect size among individual and group level interventions. Currently, DHSP does not capture follow-up data past 90 days and attrition rates are an ongoing challenge. Thus, the effectiveness of these HE/RR interventions in sustaining behavior change is unknown. Risk assessments followed by multi-session interventions focused on health education and risk reduction as stand-alone programs are not the most effective means of stemming forward transmission of HIV in LAC. However, one finding cannot be disputed. Clients enrolled in CRCS programs were more likely to complete the intervention and report successful behavior change at 30 days compared to other interventions.

**Table 37. HE/RR Prevention Interventions/Programs for HIV-Positive Persons**

<b>2011-2012 Interventions/Programs</b>	<b>Target Population Served</b>
Healthy Relationships	Gay Identified Men
Options	Gay Identified Men
Project AIM	Young Gay Identified Men
Outreach	Gay Identified Men
Interventions Delivered to Individuals (IDI)	Gay Identified Men
Interventions Delivered to Groups (IDG)	Gay Identified Men
Comprehensive Risk Counseling Services (CRCS)	Gay Identified Men

**PROGRAM/INTERVENTION GOALS**

1. Reduce risk behavior among HIV-positive persons (including HIV-discordant couples).
2. Improve access to mental health and substance use services for HIV-positive individuals in Ryan White system of care.

**STRATEGIES TO BE USED**

1. Deliver Evidence Based Interventions (EBIs) to reduce risk behavior among HIV-positive persons
2. Improve the data collection system to assess process and outcome measures for HE/RR programs
3. Provide comprehensive screening, referrals, and linkage to mental health and substance use services

**MEASURABLE OBJECTIVES**

1. By March 31, 2013, 95% of RW clients will receive HIV risk counseling at least once a year
2. By March 31, 2013, develop a plan to re-solicit all prevention programs for HIV-positive persons which will include strong outcome measures.
3. By December 31, 2013, HE/RR data will go into Evaluation Web (CDC-supported data system).
4. By December 31, 2017, fully evaluate effectiveness of behavioral health models(s), and if effective, can expand implementation.
5. By March 31, 2013, 95% of clients in Ryan White medical care should be screened for need of mental health and/or substance use services.

6. By March 31, 2013, 90% of clients in Ryan White medical care screened will receive a referral.
7. By March 31, 2013, 80% of clients in Ryan White medical care with a referral received a mental health and/or substance use service intake to initiate services.
8. By September 30, 2013, expand to DMH so other services are available.

**Data sources for Evaluation:** Ryan White data system and chart review (through monitoring) DHSP HE/RR data system and RW data system

**Summary:** Additional research and analysis are necessary to determine what interventions are most effective among subpopulations of HIV-positive individuals. Many of CDC’s EBIs for positives were developed for PLWHA as a singular target population. However, in LAC interventions for positives must be culturally relevant and tailored to each highly impacted population (i.e. MSM, non-gay identified MSM, youth, African-Americans, Latinos, etc.) Future HE/RR prevention interventions beginning in 2014 will be responsive to these needs. Based on the fact that intensive one-on-one individualized risk reduction interventions were most effective, DHSP is integrating HIV prevention into the comprehensive care model through Medical Care Coordination at the HIV medical home. The MCC team will provide screening not only for sexual risk but also for substance use and mental health issues. If the client could benefit from participating in a structured health education risk reduction intervention, the MCC staff will initiate the CDC EBI, “Options”. HIV-positive clients may also utilize case management services outside of the MCC model. Case management services will also provide health education and risk reduction counseling using motivational interviews. Another shift in the provision of HE/RR to HIV-positive individuals is the incorporation of HE/RR with biomedical interventions.

There is no doubt that the need for behavioral risk screening and HE/RR services for positives is necessary to curtail the transmission of HIV and reduce community viral loads. The extent to which these services will be expanded will be determined by the evaluation of outcomes as data collection improves.

➤ **USE OF HIV AND STD SURVEILLANCE DATA TO PRIORITIZE RISK REDUCTION COUNSELING AND PARTNER SERVICES**

State regulations have historically limited the use of HIV and STD surveillance data, including laboratory data. These regulations were revised with the passage of California Assembly Bill (AB) 2541 that allows the use of HIV surveillance information for public health purposes including partner services. DHSP (legacy HIV Epidemiology Program and STD Program) is currently assessing the logistics of data sharing including the matching of HIV and STD cases to allow for programmatic use of surveillance and laboratory data including partner services and linkage to care follow up.

**PROGRAM/INTERVENTION GOALS**

1. Use HIV and STD surveillance data to prioritize risk reduction counseling and partner services, and to evaluate linkage to care.

## **STRATEGIES TO BE USED**

1. Use Ryan White, HIV surveillance, and STD surveillance data to identify HIV-positive individuals with STDs, and their sexual network partners.

## **MEASURABLE OBJECTIVES**

1. By June 30, 2013, implement a protocol with HIV Surveillance Program for matching Ryan White, STD, and HIV surveillance data systems.

<b>Data sources for Evaluation:</b> HIV surveillance data, STD Program Data, Ryan White system of care data
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**Summary:** Access to real-time surveillance and laboratory data to inform programmatic activities including partner services and linkage to care follow-up is critical in order to effectively target interventions that will reduce forward HIV transmission to individuals at highest risk. DHSP currently uses the most current STD and HIV epidemiologic and surveillance data for eight important reasons:

1. Monitor incidence and prevalence;
2. Assess changes in the epidemic (e.g., emerging populations, populations with disproportionate disease burden, geographic dispersion of disease);
3. Evaluate program effectiveness in testing high risk negatives and persons unaware of their HIV status, linkage to care services and partner services, retention or “re-engagement” in care, and treatment adherence (e.g., monitoring community viral load);
4. Identify PLWHA who are not in care;
5. Streamline or find more effective methods of delivering Partner Services and case finding (for both Partner Services and Out of Care population);
6. Utilize a syndemic planning model;
7. Determine quality assurance; and
8. Identify the most cost-effective prevention strategies that will produce the greatest yield and have the greatest impact on reducing HIV transmission and increasing the health of PLWHA in Los Angeles County.

As a large urban health department, DHSP manages both the HIV/AIDS surveillance system (HARS) as well as the STD surveillance system (STD\*Casewatch). In addition, DHSP obtains data directly from hundreds of contracted HIV and STD programs via electronic transfer, scanning, or manual data entry. Data are also collected from non-contracted HIV testing sites such as independent health departments within Los Angeles County, directly funded CDC testing programs, and large agencies or healthcare settings in the Los Angeles area. These data populate DHSP’s HIV Testing database and RW Casewatch system. To complement the DHSP’s testing, RW Casewatch, STD surveillance, and HIV surveillance databases; DHSP also securely stores a number of datasets that represent needs assessments (e.g., LACHNA and LACHNA-Care), original epidemiologic studies, demonstration projects, and research projects. These data in totality assist DHSP in planning, evaluating, and conducting quality assurance to maximize prevention efforts in Los Angeles County.

➤ **POLICIES AND PROCEDURES THAT WILL LEAD TO THE PROVISION OF ANTIRETROVIRAL TREATMENT FOR HIV POSITIVE PERSONS**

As seen earlier in Figure 37, among the estimated number of PLWH in 2009, only 41% of individuals were on ART and 34% of all PLWH achieved viral load suppression.

**PROGRAM/INTERVENTION GOALS**

1. Ensure all Ryan White medical care patients have access to ART and are on ART consistent with Public Health Services (PHS) guidelines

**STRATEGIES TO BE USED**

1. Ensure high quality HIV medical care is available in the Ryan White system of care
2. Continue to monitor and promote ART for all PLWHA who meet treatment guidelines

**MEASURABLE OBJECTIVES**

1. By December 31, 2013, have HIV ART coverage rate of 90% in Ryan White system.
2. By December 31, 2013, achieve viral load suppression levels of 75% or greater for patients receiving primary HIV care in Ryan White system.

**Data sources for Evaluation:** Ryan White data system and Care Services monitoring report summary

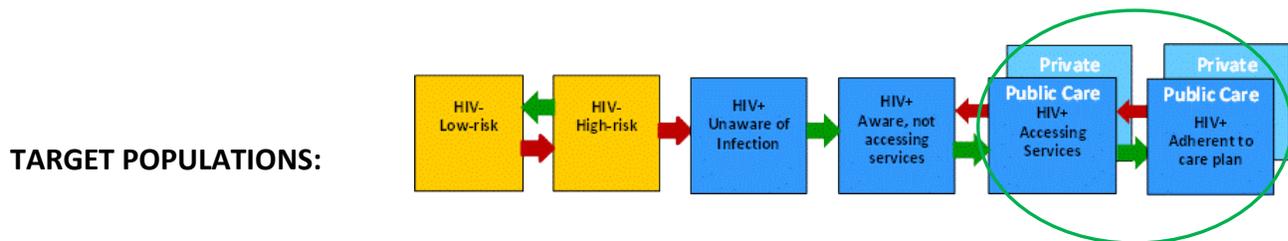
**Summary:** HIV patients receiving RW-funded treatment therapy in LAC are fortunate that California’s ADAP (funded by RW Part B, the State general fund and pharmaceutical rebates) has one of the most comprehensive medication formularies in the country, and that leadership throughout the State in multiple administrations has kept that formulary intact in spite of the State’s negative economic climate. As a result, it is not necessary for the planning council to allocate additional funds for necessary HIV medications. The Commission has included funding for local medication access and assistance beyond the ADAP formulary in the 57.8% allocation for medical outpatient/medical specialty/medication assistance and access.

In preparation for health care reform and in light of an ongoing stagnant state economy, the Commission consolidated its ADAP/ADAP Enrollment/ Local Drug Reimbursement/ Pharmacy Program services into a single Medication Assistance and Access standard in 2011. While LAC’s Low-Income Health Program (LIHP)—into which many of the current RW patients will be enrolled in 2012—will maintain the same formulary as ADAP, the Commission developed the new medication assistance/access service category to facilitate medications access if Affordable Care Act implementation in 2014 or the state’s continuing negative economic climate leads to formulary changes in the future.

DHSP’s goals and objectives will be met by implementing quality measures and pay for performance strategies to maximize ART coverage. By increasing, implementing, and refining the following activities DHSP expects to improve ART coverage among PLWHA within LAC:

- Establishing and promoting clinical standards of care for HIV treatment in partnership with COH or the local planning body and MAC
- Engaging the MAC for improving and implementing treatment guidelines
- Advocating for a robust ADAP program in California

ART treatment is predicated on ongoing engagement and retention in care. Thus all of the strategies and activities leading up to provision of ART must be met to ensure improvement in this intervention.



➤ **PROMOTING ADHERENCE TO ANTIRETROVIRAL MEDICATIONS**

In response to the latest research which supports the concept of “treatment as prevention” resulting from viral load suppression, DHHS guidelines for treatment of HIV infected adults and adolescents have been updated as of March 27, 2012 to recommend the initiation of ART in all patients new to treatment. Thus, the most urgent needs for PLWHA who are accessing services are to increase their access to ART (focus of Intervention #8) and support them in adherence to their treatment regimen.

Substance abuse, mental illness, co-morbidities/dual diagnoses, homelessness, denial, and side effects from medication are the most commonly cited reasons for non-adherence to antiretroviral medications for HIV-positive persons (LACHNA). Treatment adherence services are part of the MCC services, along with treatment education.

While direct DHSP funding for treatment adherence counseling programs has not been possible due to budgetary cuts, a policy, guidelines, and standards of care have been developed to ensure that treatment adherence assessment and counseling (TAC) is delivered in the HIV medical care setting routinely through the provision of medical care coordination services. Additionally there has been significant progress made in incorporating TAC into the required scope of work of HIV medical case managers in the RW system of care.

The following policies and procedures are in place regarding ART adherence counseling:

1. DHSP’s policy is that an assessment for ART adherence, and delivery of counseling for those with suboptimal adherence, is provided at a minimum of 2 medical visits a year for all patients in the Ryan White care system. Performance on this activity is monitored annually for all RW medical providers, and results of monitoring are presented below.

2. The scope of work and job descriptions for all medical case managers (nurse level) includes treatment education, ART adherence assessment, and counseling. Starting in 2010, all medical case managers in the RW system of care were monitored and measured on performance for assessing ART adherence, delivering adherence counseling, and demonstrating improvement in HIV viral load for non-adherent patients who had received intensive ART adherence counseling from the nurse case manager.
3. The LAC Commission on HIV has specific standards of care that were developed for ART treatment adherence assessment and counseling. These standards of care are incorporated into all HIV care contracts as a guide for delivery of quality HIV care.

DHSP analyzed Casewatch data to estimate the need for ART adherence counseling in the RW care system, and to identify any specific populations that would particularly benefit from targeted ART adherence interventions. This analysis also examined the patient and provider characteristics of clients on ART currently who continue to have detectable HIV viral load ( $\geq 200$  copies). Despite pharmacologic advances, there are a few populations on ART that have not achieved viral suppression rates of their peers. One-third of HIV-positive youth on ART have a detectable viral load. Approximately 31% of transgendered individuals and 27% of African-Americans also have detectable viral loads. However, the greatest disparity was found among HIV-positive persons living in South Los Angeles where 34.4% had detectable viral loads.

#### **PROGRAM/INTERVENTION GOALS**

1. Increase ART adherence among clients in Ryan White system of care

#### **STRATEGIES TO BE USED**

1. Measure ART adherence rates county-wide
2. Include treatment adherence counseling as a part of the activities conducted by the medical care coordination team

#### **MEASURABLE OBJECIVES**

1. By March 2013, develop an evaluation plan for examining impact of ARV treatment adherence interventions
2. By March 2013, implement targeted treatment adherence interventions as part of MCC
3. By September 2013, 100% of RWP contractors/sites will have adopted LAC Standards of Care in medical care programs.

**Data sources for Evaluation:** DHSP reports and meeting notes and Ryan White Casewatch data system

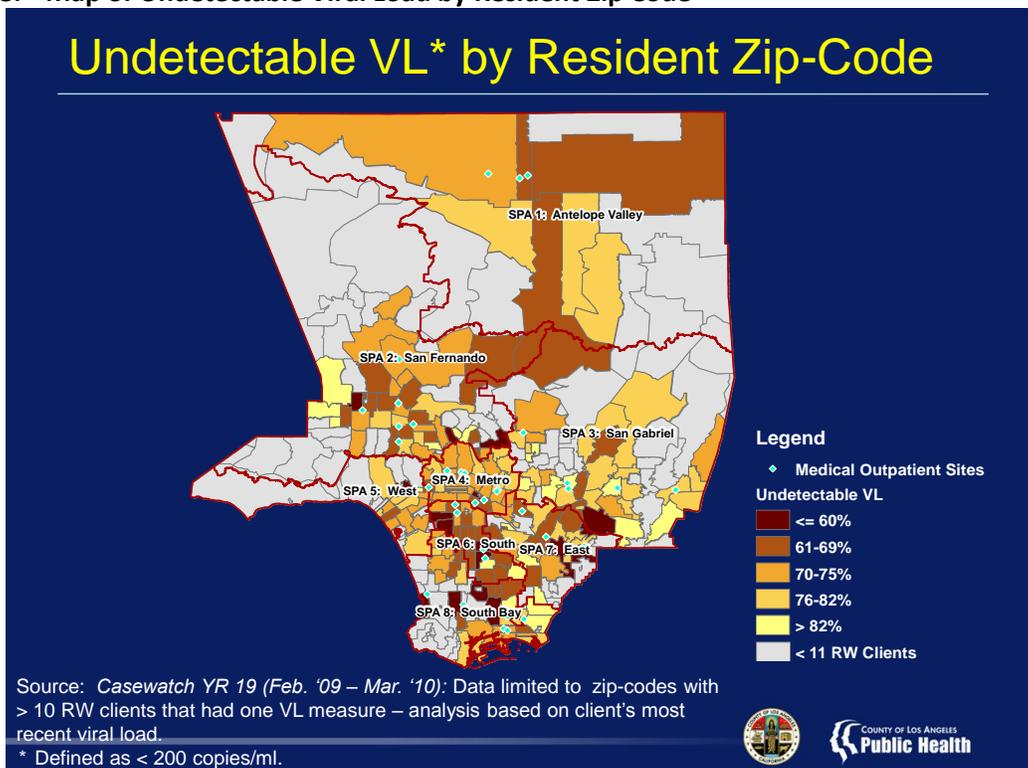
**Summary:** Local RW data suggest that of the 28% of PLWHA who are in care but not virally suppressed, a large proportion are prescribed ART they are intermittently and inconsistently taking their medication. Sophisticated mapping activities have drawn a picture of viral load burden throughout the county. Figure 28 is one such map that highlights the health disparity in

South Los Angeles compared to the rest of the County. The majority of HIV-positive persons residing in South Los Angeles are Latinos or African-Americans. Many of these individuals struggle with poverty, substance use, mental illness, unstable living situations, and lack reliable transportation. It is not surprising that this area has the lowest percent of clients with undetectable viral load.

DHSP will continue to use geospatial analysis and advanced mapping techniques to identify areas where viral burden is elevated, as well as identify where services (i.e. CEDIS, peer navigation, transitional case management, provider training, etc.) need to be scaled up.

Expansion of the MCC model; continuation of the youth linkage to care program; and the implementation of peer navigation, transitional case manager, and HIV nurse liaisons for incarcerated and re-entry populations will support treatment adherence in highly impacted populations by providing client-centered care, referrals for other support services, and assistance in navigating the complex system of care. To ensure that treatment adherence is optimized, LAC will continue to monitor providers for delivery of ART adherence counseling to their patients as a performance measure for the RW system of care and will monitor viral suppression as a proxy for ART adherence. Furthermore, California has one of the most robust ADAP formularies in the US, and LAC actively supports ADAP enrollment in clinical and non-clinical settings to ensure treatment continuity. DHSP will continue to pursue new sources of funding for this activity, and will also consider alterations in the current portfolio that may allow us to shift some resources to this critical prevention activity.

**Figure 38. Map of Undetectable Viral Load by Resident Zip Code**



## ***E. Coordinating Efforts to Address Gaps/Overlaps in Care***

Although some gaps in care exist as a result of insufficient capacity in the system to meet the demand for services (e.g., Oral Health Services), other gaps occur at a more individual level as a result of lack of information about available services and/or how to access them. As seen in the results of the 2011 LACHNA-Care, the latter is the primary barrier to services for PLWH in the Ryan White system of care. Los Angeles County plans to address gaps in four major ways: (1) monitor the services being delivered within the *Comprehensive Continuum of HIV Services* to determine if they are sufficient to meet needs of PLWH and help LAC achieve the goals outlined in this plan, (2) search for additional public and private resources to address identified gaps in care, (3) allocate Ryan White resources as needed to fill service gaps when other resources are insufficient or do not exist, and (4) identify new models of care delivery or financing that will allow LAC to expand services to address gaps. A key example is Oral Health Care. With the decimation of Denti-Cal in July 2009 for adult dental services, the gap in Oral Health Care has grown exponentially to the degree that it is ranked #1 as the service category with the largest gap among 2011 LACHNA-Care respondents. To address this gap, DHSP and the Commission are utilizing a multi-pronged approach: (1) currently in the process of adding three new service providers; (2) plan to expand contracts of existing service providers through savings achieved in Medical Outpatient/Specialty Services with the transition of PLWH into the *Healthy Way LA* program. In addition, LAC will continue to explore new models of service delivery as well as fee-for-service options to increase service delivery system's capacity to deliver Oral Health Care services to PLWH in LAC.

Overlaps in care most commonly exist when there are multiple payers for specific services (e.g., Medical Outpatient/Specialty care). To ensure that Ryan White funds are used as *payer of last resort*, LAC screens PLWH for Ryan White eligibility as well as to determine if they meet the eligibility criteria of another funding source. Currently, this eligibility screening process occurs in a fragmented fashion and PLWH may be required to submit eligibility documentation to multiple providers if they are seeking services from several organizations. To address overlaps in care, LAC is implementing two mechanisms through which it will minimize potential duplication of services: (1) development of a centralized eligibility screening and enrollment process, and (2) expansion of Medical Care Coordination services across LAC. Centralized eligibility screening will allow PLWH to apply and enroll for Ryan White programs only once. They will be given an "insurance" card that identifies their eligibility for services. Eligibility will be re-evaluated annually. PLWH will be able to enroll in Ryan White services at designated locations throughout LAC. DHSP expects that this centralized eligibility screening/enrollment program will be completed over the next 12 to 18 months and will be able to identify the ultimate payer source for a number of Ryan White services, including Medical Outpatient/Specialty care.

More immediately, DHSP and the Commission on HIV have developed the Medical Care Coordination (MCC) model, which represents a unique combination of traditional medical case management and non-medical case management services. DHSP has expanded MCC contracts to ensure that all Ryan White-funded Medical Outpatient/Specialty care providers are funded to provide co-located MCC services. The program will be funded through expected savings in Ryan White Medical Outpatient/Specialty care as PLWH are enrolled in LAC's low-income health plan (LIHP), *Healthy Way LA*, which is part of the County's bridge to health care reform. The purpose of MCC is to improve access to the range of core medical and support services needed

by PLWH to support their engagement, re-engagement, and retention in care as well as adherence to their HIV treatment regimen. All MCC services will be age appropriate, and culturally and linguistically responsive to the diversity of PLWH in LAC.

### **F. Ryan White's Collaboration with ECHPP**

The CDC's Enhanced Comprehensive HIV Prevention Planning (ECHPP) initiative was designed to help the nation achieve the goals of the NHAS. This is to be accomplished through the local implementation of a set of 14 required and 10 recommended interventions (Attachment A), which also form the basis of the CDC's *High Impact Prevention* initiative. The intersection between prevention and care is clearly articulated in the interventions as ten (10) of the fourteen (14) required interventions (71.4%) directly target or include HIV positive individuals as a primary target population. An additional four recommended interventions target directly or include HIV positive individuals as a target population. Thus, 18 of 24 interventions (75%) target HIV positive individuals in some manner.

Gone is the day when HIV prevention predominantly focused on HIV negative individuals. The message is clear: HIV treatment, specifically antiretroviral therapy (ART) is prevention. HIV positive individuals are a primary focus of HIV prevention efforts. Both prevention and care services are designed to help facilitate initial linkage and entry into care, long-term retention or re-engagement in care, and adherence to treatment. The silos between HIV prevention and HIV care services have been removed.

In Los Angeles County, community planning efforts are becoming more integrated as the two planning bodies—the Commission on HIV and the Prevention Planning Committee—work together in new ways. The two groups came together in the development of this plan with the express purpose of creating an integrated plan, which speaks to both care and prevention together. The joint PPC/Commission Comprehensive HIV Planning Task Force worked together to develop an integrated plan, which addresses ECHPP, Los Angeles County's Cooperative Agreement with the CDC, and Ryan White.

As Los Angeles County moves into the future over the next five years, there will be increased collaboration between HIV prevention and care as they work together towards common goals. Although ECHPP prioritizes services to HIV positive individuals (e.g., identification of HIV positive individuals, engagement/re-engagement in care, and treatment adherence), except for HIV testing, Ryan White is a major funder of these services. HIV prevention planners will continue to work closely with planners of Ryan White and other care services countywide.

### **G. Alignment with National and State Plans**

The *Los Angeles County Comprehensive HIV Plan: 2013--2017* is fully aligned with existing national and state initiatives, including the National HIV/AIDS Strategy (NHAS), Healthy People 2020, the Affordable Care Act, and the California's most recent *Statewide Coordinated Statement of Need* (2009). Los Angeles County has embraced the goals of the NHAS and these form the direction of the County's own goals. Several of the Healthy People 2020 objectives have been incorporated as objectives in this plan (e.g., HIV-13: increase the proportion of

persons living with HIV who know their serostatus, and HIV-9: increase the proportion of new HIV infections diagnosed before progression to AIDS).

As 2014 approaches with the expected full implementation of the health care reform, the Commission on HIV and DHSP have done extensive planning for the expected transition of PLWH from Ryan White medical services to *Healthy Way LA* (Los Angeles County's Low Income Health Plan or LIHP). This planning is part of the bridge to health care reform, which puts into action the Affordable Care Act. As part of this plan, Los Angeles County expects that fewer funds will be needed for Outpatient/Ambulatory Medical Care as PLWH are shifted onto *Healthy Way LA*. The savings will be used to increase coordination and access to services by funding Medical Care Coordination at all HIV primary care sites.

About 2 in every 5 persons diagnosed with HIV in California live in Los Angeles County.<sup>100</sup> As a result, both the high burden/disproportionately impacted populations, as well as needs and barriers to care, that are described in California's 2009 *Statewide Coordinated Statement of Need* (SCSN) reflect those identified in Los Angeles County.

## ***H. Response to Future State or Local Budget Cuts***

Currently, DHSP and the Commission are not anticipating any future state and/or local budget cuts. Should there be any cuts to the ADAP budget or changes in eligibility that would have a negative impact on PLWH in LAC, DHSP and the Commission would work together to ensure continuity of pharmacy services by shifting Ryan White Part A funds for local pharmacy services. DHSP and the Commission expect there will be significant cost savings in the Medical Outpatient/Specialty care service category as current Ryan White medical care clients are enrolled into *Healthy Way LA*.

### ***I. Community Planning for the HIV/STD Continuum of Prevention, Care And Treatment In Los Angeles County***

#### **❖ Introduction**

For more than 20 years, community planning has been a required component of HIV prevention, care and treatment programming discussions. Since the early days of the epidemic, when ACT UP galvanized the gay community's voice to demand more responsive prevention and treatment for HIV, community planning has provided an opportunity for people affected by HIV to become directly involved in prioritizing and allocating funds for prevention and treatment. Both the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) have mandated that community planning efforts be supported through the funds dispersed to local eligible metropolitan areas.

Now, thirty years into the epidemic, CDC has released new community planning guidelines that emphasize the need for evidence-based planning in order to meet the National HIV/AIDS Strategy's goals for decreasing new infections, diagnosing those already infected, and linking

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<sup>100</sup> HIV Epidemiology, Division of HIV and STD Programs, Los Angeles County Department of Public Health. 2011 Annual HIV Surveillance Report, February 2012: 1-36.

them to appropriate and effective medical care. Increasingly, the lines between prevention and treatment are being blurred as medical treatment is shown to reduce viral loads among the infected, and decreased viral loads have been shown to reduce the likelihood of disease transmission. These community planning guidelines come at a time when CDC is emphasizing public health program collaboration and integration in order to streamline disease prevention and treatment efforts, realize programmatic efficiencies, decrease duplication of efforts, and treat individuals as people and not as diseases. This coalescing of thought also comes at a time when health care reform is on the near horizon, requiring all of us to consider paying for the public's health in new and more efficient ways.

### ❖ **HIV/STD Planning 2013**

Currently, DHSP supports two separate community planning bodies, the local RW Part A Planning Council (COH), and the PPC. There is no community planning body for STDs. In addition, DHSP supports a MAC to provide a forum for discussing clinical guidance among physicians and other clinicians--and the ECHPP Scientific Advisory Committee.

The key deliverables for both community planning bodies have been the prioritization of services to be supported respectively using CDC and RW funds, and the allocation of those funds for programming, based on results of needs assessments and service utilization data. Historically, each body has prioritized and allocated funds individually for prevention or treatment, and without coordination or collaboration occurring between the planners. Just last year, the total allocations for HIV prevention, care and treatment programming from the respective community planning bodies exceeded \$50 million.

Evidence supports that HIV and STD prevention are strongly linked, and that STD infection further compromises an individual's likelihood of avoiding HIV infection. Treatment for STDs reduces susceptibility to HIV infection. Proper medical treatment for dually diagnosed PLWHA has been shown to reduce transmissibility of HIV, and recent studies have shown that reducing the "community viral load" by preventing new cases and suppressing the viral load of those already infected effectively reduce the likelihood of transmission events within those communities regardless of personal sexual behaviors. In effect, disease prevention becomes a medical model that our planning efforts must embrace, requiring a more sophisticated understanding of medical treatment, epidemiology and science than is currently required among the membership of either community planning body.

Further, with the award of funding in response to RFA 12-1201: Comprehensive HIV Prevention Planning Projects for Health Departments, CDC eliminated significant local latitude for the use of HIV prevention funds, developing a list of core prevention activities that must account for at least 75% of the jurisdiction's HIV prevention investment of CDC funding.

Like CDC, HRSA is also expecting more evidence-based planning for HIV care and treatment. In 2006, the RW Program required that at least 75% of a jurisdiction's Part A award be used to support core medical services for persons living with HIV. This requirement included the reporting of outcome measures designed to measure a person's health status, which was a significant departure from the use of RW funds to support ancillary social services. As national health reform efforts coalesce, it remains unclear how HRSA will require local jurisdictions to

support medical care, when a majority of low-income PLWHA will be covered by managed care plans that will support most of their medical needs. The role of community planning expected by HRSA also remains unclear, since the future of the RW program is unknown.

In September 2011, DHSP was notified by the SAMHSA that the DHSP proposal to support an integrated behavioral health and outpatient medical services project was funded. It is a grant requirement to construct a project advisory group to assist with planning and implementation of the program.

#### ❖ **Next Steps in Improving HIV/STD Program Planning**

Local discussions continue on the merits of coordinated, collaborative planning between the PPC and COH. The creation of a single, robust planning and advisory group for HIV and STD programmatic planning can serve multiple purposes. Chief among them is the consolidation of current community planning and advisory group efforts into one group, allowing for an integrated and streamlined process for considerate and thoughtful planning for the entire spectrum of service needs in order to address the HIV and STD prevention and treatment needs for LAC. A single group will increase the transparency of planning efforts across projects, and provide a forum for continued community engagement, while allowing DHSP to populate the group with the expertise necessary to make evidence-based recommendations and still meet federal planning requirements.

#### ❖ **Development of the Los Angeles County Comprehensive Jurisdictional HIV Plan**

The PPC and COH have worked diligently and collaboratively with the DHSP to create this Comprehensive Jurisdictional HIV Plan. The PPC provided input into the development of the Plan by creating a joint PPC/COH Comprehensive HIV Planning Task Force that focuses on the creation of a Comprehensive Plan for LAC. Task Force meetings take place twice a month and are attended by PPC members, commissioners, community members, and DHSP staff. The Task Force makes recommendations based on the NHAS, CDC-required high impact prevention, local epidemiologic data, research presentations, geo-mapping, syndemic cluster analysis, economic modeling, etc. to formulate a road map for a sophisticated HIV prevention response unique to LAC.

The PPC, in collaboration with the COH and DHSP will continue their work by updating this Jurisdictional HIV Prevention Plan at least annually. As each update is completed, the newly updated plan, along with a summary of the planning efforts that went into the update, will be made available to local planners and stakeholders and will be submitted to CDC.

## VII. MEASURING RESULTS

### A. Introduction

The overall LAC goals and objectives outlined in Table 29 (Los Angeles County HIV Dashboard, page 104) form the basis of LAC’s evaluation strategy. As these also support the goals of the NHAS, in measuring progress towards achieving its own goals, LAC will in turn be tracking its progress towards achieving the goals of the NHAS. By tracking its progress annually, the County will be able to “course correct” as needed as incremental success and/or challenges are identified over the next five years. This will ensure that the *Continuum of HIV Services* is working as intended, allowing the flexibility that will be needed during key changes (e.g., reauthorization of the Ryan White program legislation and the full implementation of the Affordable Care Act). The programs, services, and interventions that form LAC’s *Continuum of HIV Services* are designed to interrupt the undesired flow of individuals represented on the *population flow map* (e.g., HIV- low risk individuals becoming HIV- high risk, or HIV+ individuals accessing services to become an HIV+ person not accessing services or dropping out of care, and so on) (see Figure 2). By doing so, LAC’s *Continuum* is designed to achieve optimal health and well being for LAC residents individually, within their local communities, for the County as a whole, and ultimately nationally.

Therefore the plan for measuring success in the implementation of this *Comprehensive HIV Plan: 2013-2017* is focused on measuring LAC’s effectiveness on achieving the goals and objectives stated in the *Los Angeles County HIV Dashboard*. Working with the Commission and the PPC, DHSP is responsible for establishing the measures, collecting the data, and reporting out to the community these results. This evaluation effort will improve LAC’s ability to articulate its success in reducing HIV incidence, increasing access to care and improving health outcomes for PLWH, and reducing HIV-related disparities and health inequities among those communities most impacted by the epidemic.

### B. Measuring Los Angeles County’s Implementation of the Comprehensive HIV Plan: 2013-2017

In the previous chapter, LAC outlined a set of nine measurable objectives that it will track over the next five years. These objectives comprise the “dashboard” of performance measures that the County will track annually. To summarize, the measures include:

1. Estimated number of annual new HIV infections;
2. Percentage of HIV positive individuals who are aware of their infection;
3. Percentage of HIV positive individuals with undetectable viral load;
4. Percentage of HIV positive individuals who are members of key population groups with undetectable viral load (e.g., MSM, transgender persons, youth, etc.);
5. Percentage of newly identified positive testers who are linked to medical care within 90 days of diagnosis;
6. Percentage of HIV positive individuals who are aware of their HIV infection but not in care (i.e., unmet need population);

7. Percentage of newly diagnosed persons who also have an AIDS diagnosis in the same calendar year who are members of key population groups (e.g., MSM transgender persons, youth, etc.);
8. Level of perceived stigma in LAC (measure and baseline to be determined); and
9. Level of increased system capacity (measure and baseline to be determined).

As noted, DHSP has the major responsibility for setting up the systems and collecting the data at least annually to monitor these metrics over time. DHSP will include these metrics in their regular reporting to the Commission and the PPC. Each year, a community task force will convene to review LAC's progress in achieving stated objectives. For each of the objectives, LAC has developed a third year benchmark, which will help the Task Force know if LAC is on track in meeting its goals and objectives. As needed, the Task Force will develop any recommendations for the Commission, the PPC, and DHSP that may require additional action.

Having a focused number of objectives streamlines the monitoring and evaluation needed. Tracking these measures will help LAC identify the population and system-level impact that its continuum of HIV services is having. Ultimately, it will aid the County in measuring its progress towards meeting the goals of the NHAS. As LAC has never before tracked perceived stigma or system capacity to respond to HIV, these measures need to be developed and a baseline established no later than the end of Year 3.

The program-specific goals and objectives outlined in the work plan will aid LAC in achieving the goals and objectives outlined in the dashboard. DHSP will monitor these as part of its public funder requirements to the CDC and HRSA.

### ***C. Assessing the Success of Los Angeles County's Efforts to Address HIV Positive Individuals who are Unaware of their Status***

An important component of measuring success is assessing LAC's efforts related to identifying undiagnosed HIV positive persons (i.e., HIV positive unaware); it is the second measure of LAC's dashboard:

*By December 31, 2017, increase the percentage of HIV positive individuals who know their HIV infection to 85%.*

As part of the Ryan White reauthorization in 2009 (Ryan White Treatment Extension Act of 2009), new language was included in HRSA's Part A application guidance regarding the *early identification of individuals with HIV/AIDS* (EIIHA). Beginning FY 2011, LAC developed a three-part EIIHA strategy: (1) normalize HIV testing, (2) target the County's HIV response in high-risk, high prevalence geographic clusters using epidemiologic evidence, and (3) implement a seamless testing, linkage, and care plus treatment (TLC+) continuum. These EIIHA strategies correspond with programs, services, and/or interventions outlined in LAC's work plan presented in the previous chapter.

**Table 38. Alignment of Los Angeles County’s Strategy for the Early Identification of Individuals with HIV/AIDS (EIIHA or HIV+ Unaware) Plan with its 2013-2017 HIV Prevention Work Plan**

FY 2013 EIIHA Strategy	2013-2017 HIV Work Plan
1. Normalize HIV testing	<ul style="list-style-type: none"> <li>Routine, opt-out screening for HIV in clinical settings</li> <li>HIV social marketing campaigns targeted to relevant audiences</li> </ul>
2. Target HIV response in high-risk, high prevalence geographic clusters using epidemiologic evidence	<ul style="list-style-type: none"> <li>Targeted use of HIV and STD surveillance data to prioritize risk reduction counseling and partner services</li> </ul>
3. Implement a seamless testing, linkage, and care plus treatment (TLC+) continuum	<ul style="list-style-type: none"> <li>Implement linkage to care, treatment, and prevention services for those testing HIV positive and not currently in care</li> </ul>

As part of its EIIHA plan, DHSP identified six target groups as part of its EIIHA Matrix:

1. Latino and African American MSM
2. Young MSM (Ages 13-24)
3. Transgender Individuals
4. Latina and African American Women
5. Partners of HIV-positive Individuals
6. Incarcerated and Post-released Individuals

Each of these populations are consistent with LAC’s key populations/subpopulations and populations of interest discussed previously. Table 39 summarizes the essential activities that will be implemented in FY 2013, identifying each target group. Each activity is a component of LAC’s 2013-2017 work plan. In monitoring its work plan with a focus on how the target populations are impacted, LAC will also be monitoring the success of its EIIHA plan.

**Table 39. Essential Activities for Identifying HIV-positive Unaware Individuals in Los Angeles County**

Activities	Time Line	Target Groups in Matrix						Resp.
		T1	T2	T3	T4	T5	T6	
“Erase Doubt” social marketing	C E	√	√	√	√	√		D M
Routine testing in ER, urgent care, primary care sites	C E	√	√	√	√			D H
Routine testing in County jails	C E						√	D Sh
Transitional case managers / Link LA peer navigation	CE						√	D U Sh
Storefront, mobile target testing in high burden areas	C E	√	√	√	√			D P
Community events, test fairs, health fairs	C E		√		√			D P M
Perinatal testing and prevention	C				√			D H O
Partner Services	C E	√	√	√	√	√	√	D P
Social network testing	C E	√	√	√		√		D P
Testing at Public health and STD clinics	C E		√		√			D O
Early intervention services	C E	√			√			D P
HIV nucleic acid amplification testing	C E	√	√	√				D P
Transgender wellness center	N			√				D P
Commercial sex venues	C E	√	√	√				D P

Timeline: C = Currently implemented through 2012; E = Extended/Expanded in 2013; N = New Program

Responsible: D = DHSP; Sh = Sheriff’s Department; P = Providers/CBOs; H = hospitals/health centers; M = Media;

O = Other DPH Programs; U = UCLA

#### ***D. Using Data for Measuring Success***

In addition to tracking the goals and objectives outlined in the dashboard, LAC will also track progress towards achieving the program-specific objectives stated in its work plan for HIV services. To do this, a strong data collection system is essential. Currently, LAC uses two systems for tracking participant/client data: the CDC's EvalWeb, and Casewatch, which collects client level data of PLWH receiving Ryan White-funded services. Both systems are able to report demographic and service utilization data of participants/clients. Casewatch is further used to collect and report on health outcome data of PLWH. In addition to these systems, LAC is also improving its ability to use its surveillance system (eHARS) to track linkage to care, retention, and viral load for all PLWH in LAC.

DHSP has collected client-level data for PLWH receiving Ryan White services since 1994. LAC's current system--Casewatch--has been used since 2005. Originally designed as a case management system, Casewatch has expanded into a comprehensive Health Information Portability and Accountability Act (HIPAA)-compliant system that collects a wide spectrum of data, including client-level service utilization and clinical outcome data. It collects important demographic and service utilization data, medical and support service outcomes, and linkages and referrals to other service providers or systems of care. Clinical outcome indicators currently collected in Casewatch include quality of care measures such as CD4 count, viral load, STI and hepatitis screening and treatment. Client-level data from Casewatch are used for planning, monitoring, and quality improvement of Ryan White programs and services.

DHSP currently uses client level data for tracking changes in the system of care, including verifying linkage to care. All HIV Testing Services (HTS) contractors must document all linked referrals and referral follow-up for each person served. Additionally, DHSP utilizes Casewatch to assist with developing its estimate of PLWH who are aware of their HIV infection but not in care (Unmet Need). Client level data is matched with datasets from the California Office of AIDS in order to identify who is in care and who is not. The Commission uses service utilization data as part of its annual priority setting and resource allocation process. Service utilization patterns suggest whether or not the services are being accessed steadily and if usage patterns are consistent with the unmet need and demand data.

DHSP is continuously enhancing and modifying their data systems, and advancing strategies to strengthen data validity so that the data can be reliably used for analyzing trends, improving quality of care, and projecting need for the local care system. During the five years of the *Comprehensive HIV Plan*, LAC will rely heavily on the data provided through its current systems to measure success in achieving LAC's goals and objectives and tracking progress in the implementation of its work plan. LAC will also continue to improve its data collection systems so that client level, clinical outcome, and service utilization data can be collected for populations accessing services along the entire *Continuum of HIV Services*.