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Acronyms

AIDS - Acquired Immune Deficiency Syndrome

ASO – AIDS Service Organization

BPHC – Boston Public Health Commission

EMA – Eligible Metropolitan Area

CDC – Centers for Disease Control & Prevention

FY – Fiscal Year

IDU – Injection Drug User

HAART - Highly Active Antiretroviral Therapy

HBV – Hepatitis B Virus

HCV – Hepatitis C Virus

HDAP/ADAP – HIV/AIDS Drug Assistance Program

HIV - Human Immunodeficiency Virus

HOPWA – Housing Opportunities for People With AIDS

HUD – Housing and Urban Development

JSI – John Snow, Inc

PLWH – People Living With HIV

MAI – Minority AIDS Initiative

NH – New Hampshire

NHDHHS – New Hampshire Department of Health & Human Services

MA - Massachusetts

MDPH – Massachusetts Department of Public Health

MSM – Men who have Sex with Men

RFP – Request for Proposals

STD/STI – Sexually Transmitted Disease/Infection

VOE – Voices of Experience - Needs Assessment

Introduction

The 2008 Needs Assessment is intended to identify the potential service needs and services available to people living with HIV; to examine the capacity of the current service system and the resources available; to assess whether resources are being expended to populations most in need and to emerging populations; and whether PLWH can effectively obtain and maintain HIV health and health related services.

Objectives

The objective of the Needs Assessment is to provide information on the HIV service system so the Planning Council may make informed decisions related to the prioritization of Ryan White Part A service categories and the Ryan White Part A funding allocations process.

Methods

This Needs Assessment was conducted in several steps. A picture of the epidemic was drawn using surveillance data from Massachusetts, New Hampshire, the Centers for Disease Control and Prevention as well as United States census data. Prevalence and incidence data was used to note trends in the local epidemic and identify emerging populations infected and affected by HIV/AIDS. Demographic factors such as race, gender, age, and mode of transmission were cross-referenced with payer-provided utilization data and examined to determine if all populations affected were accessing a full range of services. Provider capacity to serve all PLWH in the Boston EMA was estimated using both consumer- and provider-completed surveys. A literature review was conducted and included Part A funded Quality Management and Evaluation reports in addition to other documents published by the Massachusetts Department of Public Health (MDPH) and other payers in the Boston EMA. The literature review estimated barriers to accessing primary medical care services by examining consumer access to needed services, poverty and insurance, and housing and homelessness.

Limitations

Needs Assessments provide the basis for important decisions, taking into account payer, provider and consumer perspectives. Relying solely on data from some groups and not others introduces bias to this type of report. This Needs Assessment contains the most recent input available from each of these groups. Time and staffing constraints did not allow for consumer surveying to be completed in this project, which relies on information collected in FY 2002. Comparing demographic, funding, utilization, outcomes and survey information from different years decreases the validity of this Needs Assessment because there is variation in service definitions and PLWH demographics from year to year. To mitigate these limitations in the future, focus groups and additional consumer based input will be collected and effort will be made to encourage all payers and providers to create universal standards for data collection which would allow cross referencing of data.

Executive Summary

Every two years, an assessment of need among people living with HIV (PLWH) is conducted within the Boston Eligible Metropolitan Area (EMA). This document is produced by the Boston EMA HIV Health Services Planning Council, with assistance from Planning Council Support, to be an unbiased review of the needs of PLWH and how well these needs are being met. The key components of this review include the HIV/AIDS epidemiological profile of the Boston EMA, a description of the available service resources and their funding streams and a summary of the barriers to care faced by PLWH in the Boston EMA. These elements paint a picture of the health of the HIV care system and provide insight on areas of unmet need and barriers to PLWH receiving primary medical care. The conclusions and recommendations that come from this review are used by members of the Planning Council to set service priorities and make funding decisions.

Section I of this Needs Assessment describes the HIV/AIDS epidemiologic profile of the Boston EMA. Within the seven Massachusetts and three New Hampshire counties that make up the Boston EMA, there were 13,810 PLWH as of December 31, 2006 and 7,228 of them accessed the Part A system of care in FY 2006. The AIDS incidence rate has been decreasing since 1999 with the incidence rate as of December 31, 2006 at 22.3 cases per 100,000 individuals. In the two years proceeding December 31, 2006, 866 new AIDS cases and 443 new cases of HIV were reported. In terms of local demographics, the population of the Boston EMA as a whole is disproportionately White (83%) compared to the national population (69%), but Suffolk County (where the City of Boston is located) is more diverse (22% Black and 15% Hispanic). With that in mind, HIV/AIDS does not affect all segments of the population equally. People of color, particularly Black and Hispanic groups are disproportionately affected and infected by HIV. There are also differences by gender, where women compose an increasing proportion of PLWH (especially women of color). At 1% of the client base, transgender persons are also affected. Age plays a factor as well. While youth aged 13-24 account for only 3.05% of PLWH it is believed that many adult cases can be attributed to risk factors from their youth. The predominant mode of transmission among youths, men who have sex with men (MSM), is also the most prevalent among adults. Over 36% of HIV/AIDS cases have been attributed to MSM. Heterosexual contact and intravenous drug use (IDU) are the two other predominant modes of transmission.

Section II outlines the EMA's continuum of care which is an effective and flexible service system that spans prevention efforts, early intervention services, medical care, and health-related support services. Through the efforts of the HIV Services Planning Council and the Boston Public Health Commission (BPHC) AIDS Program (Grantee), Part A plays a leadership role in the development and maintenance of a comprehensive continuum of HIV treatment, care, and services in the region. The continuum of care is supported by a variety of funding streams including CDC, Massachusetts and New Hampshire general funds, City of Boston, Ryan White Parts A, B, C, D, Dental Reimbursement, SPNS programs, Minority AIDS Initiative funds, HOPWA housing funds, and Medicaid.

Section III of the Needs Assessment focuses on the resources available to PLWH in the Boston EMA. The Boston EMA is host to many services designed for those living with, or affected by HIV including primary medical care and ob/Gyn services, drug reimbursement, substance abuse services, transportation, case management, mental health services, housing, food and nutritional support, client advocacy, peer support, day care services, complementary therapies and HIV/AIDS prevention. These services are funded by a variety of payers including: Massachusetts and New Hampshire state Medicaid programs and substance abuse programs, private insurance plans, the national Medicare program, Massachusetts and New Hamp-

shire State Budget AIDS line items, Housing Opportunities for People with AIDS through the US Department of Housing and Urban Development and Federal Ryan White funds through Parts A, B, C, D, and F. In FY 2006, Part A filled gaps in services to critically underserved population, accounting for 5% of available funding within the Boston EMA and served 7,228 consumers. In contrast, it is estimated that 68% of funds for HIV/AIDS services come from state Medicaid programs, 12% from the MA state line item, Part B is 6% for MA, and all other payers contribute between 1% and 3%.

Section IV of the Needs Assessment combines the threads of the other sections to estimate the total unmet need of PLWH in the Boston EMA. Of the 13,810 PLWH in the Boston EMA, an estimated 4,015 are not accessing primary medical care. This number represents only part of the unmet need within the EMA; many more individuals may be only partially in care and not accessing the full range of services available to them. Particularly vulnerable populations; including Blacks, Hispanics, women, and the uninsured. One study that found that 22% of consumers were not in care over a 12 month period, but even more alarming was that 78% reported significant problems accessing care. Since higher CD4 counts, lower viral loads and improved adherence to antiretroviral regimens are reported when consumers have access to primary care services, it is important this unmet need is addressed.

Section V of the Needs Assessment describes issues that PLWH face in accessing resources in the Boston EMA in addition to co-morbidities that complicate a consumer's ability to stay in care. Part A funded-services are part of a broad continuum of care that provides services to the range of PLWH in the Boston EMA. Even so, over 30% of PLWH in the Boston EMA are not accessing services which stress the importance of understanding why consumers are not in care so barriers can be reduced or eliminated. Socio-demographic factors impact the complexity of providing care. For example, not all MSM self-identify as MSM and therefore underestimate their risk, youth lack the autonomy and resources of adults and often do not access care until later in their stage of disease, women are often more affected by federal funding and as primary caretakers may fear losing their children if they receive a mental health, substance abuse or HIV diagnosis. Trans-gender populations face stigma, discrimination and report a lack of culturally appropriate care and sensitivity on the part of providers. Insurance coverage is closely tied to poverty status and in turn, access to care. With over 80% of Part A clients falling below 300% of the Federal Poverty Level (FPL), income is a major factor affecting PLWH access to care in the Boston EMA. Homelessness also limits access to medical care and therefore may delay a diagnosis of HIV and other co-morbidities. Homeless PLWH are also often affected by a higher prevalence of opportunistic infections. Substance abuse and mental illness complicate diagnosis, treatment and adherence. Hepatitis as well as incarceration has been shown to complicate treatment and access to care. Individually these barriers may not prevent consumers from accessing or staying in care, but when multiple barriers or co-morbidities exist, the complexity of care and treatment increases dramatically.

In summary, this document is designed to discuss the total state of the HIV/AIDS epidemic in the Boston EMA. Starting with a discussion of the face of the local consumer, the Needs Assessment moves on to discuss available services followed by an evaluation of the available services to fulfill the needs of all PLWH in the Boston EMA. Reasons why consumers do not access health and health related services are provided in addition to a discussion of the unmet need of PLWH in the Boston EMA.

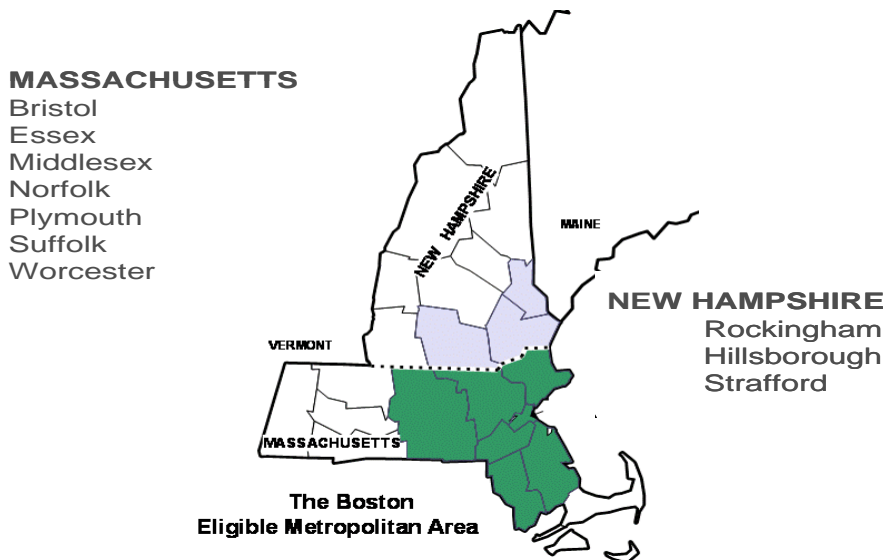
Section I: Epidemiology of HIV in the Boston EMA

This section provides information on the incidence and prevalence of HIV and AIDS within the Boston Eligible Metropolitan Area (EMA). In particular, it looks at a number of factors including location, race and ethnicity, gender, age, and mode of exposure.

Overview

We will first look at the EMA as a whole. An EMA is a geographic area that is highly impacted by HIV/AIDS and therefore eligible to receive Ryan White Part A funds. The Boston EMA makes up a ten County region in Massachusetts and New Hampshire. Figure one, below, shows the area in further detail.

Figure 1: The Boston Part A Eligible Metropolitan Area (EMA)



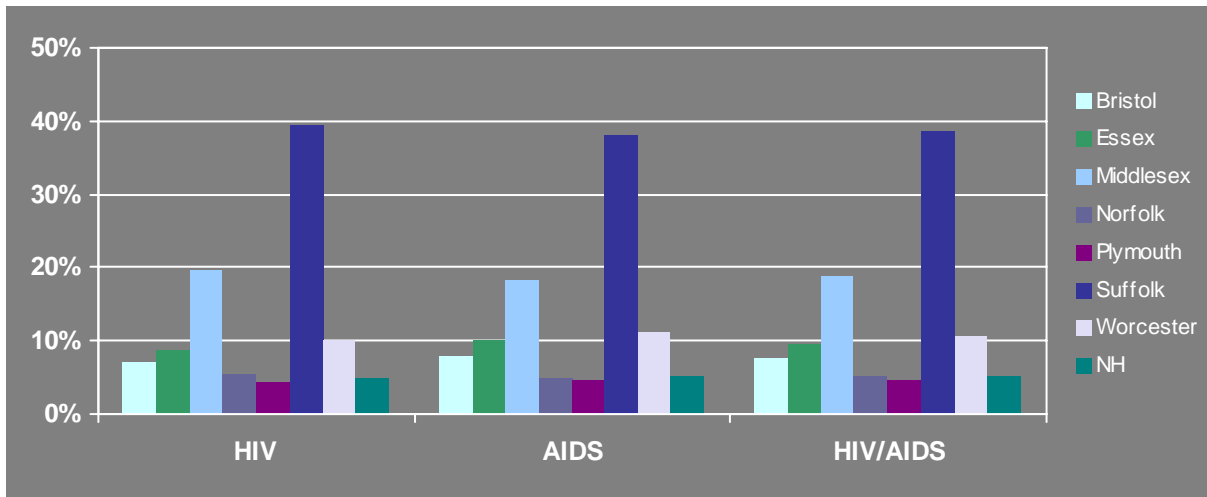
The race and ethnicity of the EMA varies, and this must be taken into account when determining the needs of the region. Overall, the population of the Boston EMA is disproportionately White compared to the national population: 83% White (vs. 69% nationally), 4.6% Black (vs. 12%), 6% Hispanic (vs. 13%), 3.9% Asian/Pacific Islander (vs. 3.7%), and 2.5% Native American (vs. 0.7%).² Further variations in race/ethnicity are highlighted when comparisons are made between regions of the Boston EMA particularly when looking at urban versus rural areas.

For example, 91% of Bristol County is White compared to 58% of the population of Suffolk County (Boston); 1% of the population in the NH counties is Black compared to 22% of Suffolk County; 2% of Norfolk County is of Hispanic origin compared to 15% in Suffolk County; and 1% of the population in NH identify as Native American, Asian/Pacific Islander, or other, compared with 10.6% in Middlesex County.^{3 4}

The Ryan White Act provides funding for the Boston Eligible Metropolitan Area (EMA) and other urban areas most heavily impacted by the HIV/AIDS epidemic. The Boston EMA contains a large number of independently organized and governed regions within its 6,451 square miles, comprised of more than 350 cities/towns within ten counties in Massachusetts (7 counties) and New Hampshire (3 counties). The Boston EMA includes both urban centers and rural areas.¹

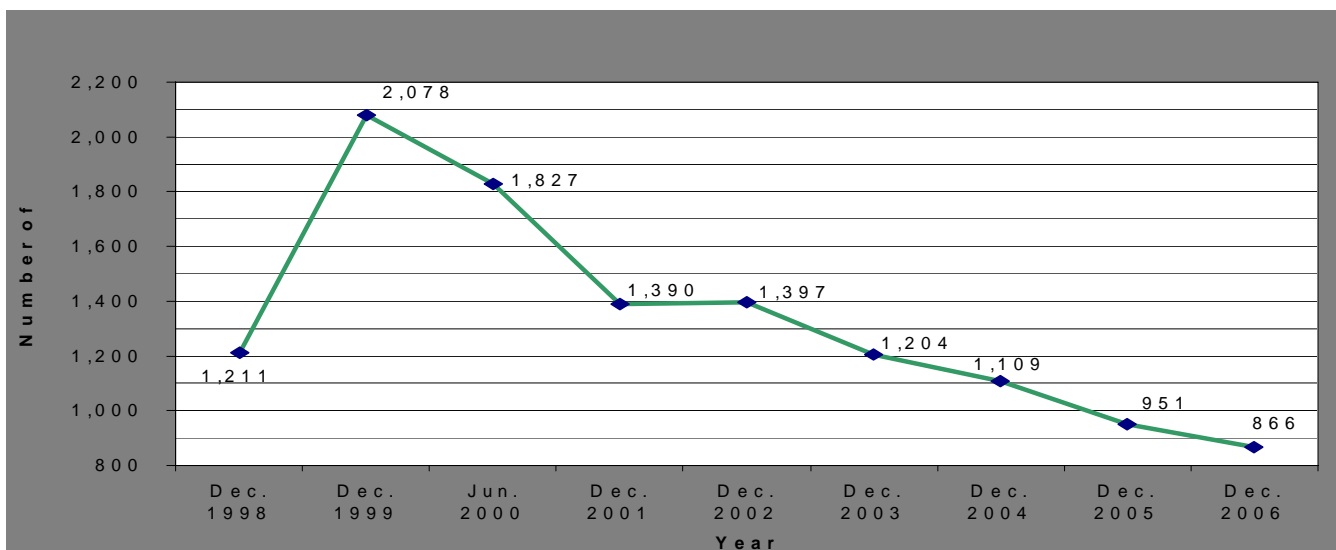
Now that we have examined the overall population of the EMA, we will look at how HIV and AIDS have affected this population. As of December 31, 2006, there were a reported 13,810 PLWH in the Boston EMA, an increase over the 13,400 cases reported as of December 31, 2005. Figure 2 (below) illustrates the proportional representation of HIV/AIDS prevalence by county within the Boston EMA. Twenty-five percent of PLWH are unaware of their status, and therefore it is estimated that there are an additional 2,037 prevalent HIV cases in the Boston EMA (6,112 cases reported). Further, Figure 2 shows that the majority of HIV and AIDS cases are focused around urban centers.⁵

Figure 2: Boston EMA County Specific HIV/AIDS Prevalence



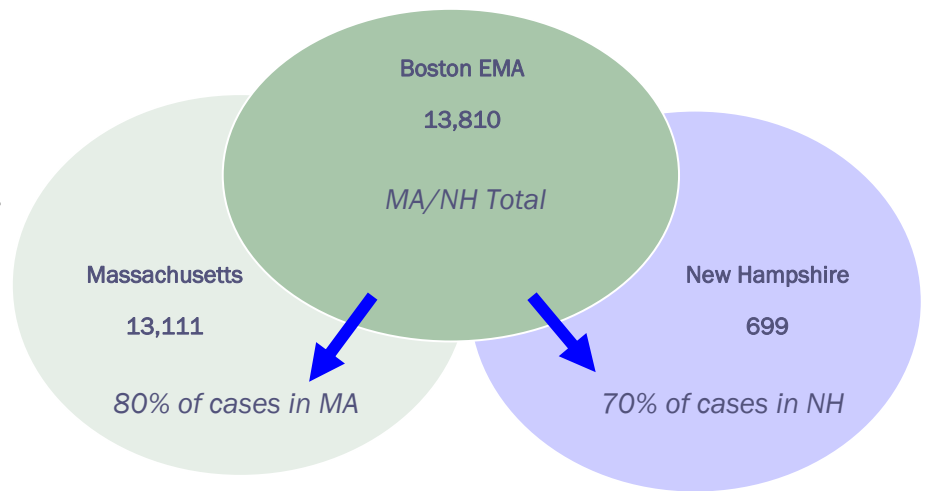
When we look at the epidemic over time, we see that AIDS incidence is on the decline. Figure 3 depicts this decline in incidence from 1999 through 2006. During this same period, 443 new HIV cases were reported, with about half among Blacks and Hispanics.⁶ Currently, the Boston EMA has an annual incidence rate of 22.3 AIDS cases per 100,000 population, and there were 866 new AIDS cases reported in the past two-year period (1/1/05-12/31/06).⁷

Figure 3: AIDS Incidence in the Boston EMA



Seventy-nine percent of the total reported number of living HIV/AIDS cases for both MA and NH live in the Boston EMA. The EMA's seven counties in Massachusetts represent 80% of the total reported HIV/AIDS cases for the Commonwealth of Massachusetts. The three New Hampshire counties within the EMA account for 70% of the total reported cases for that state.⁸ Figure 4, shows the distribution of cases across regions of the EMA.

Figure 4: HIV/AIDS Prevalence in the Boston EMA, MA & NH



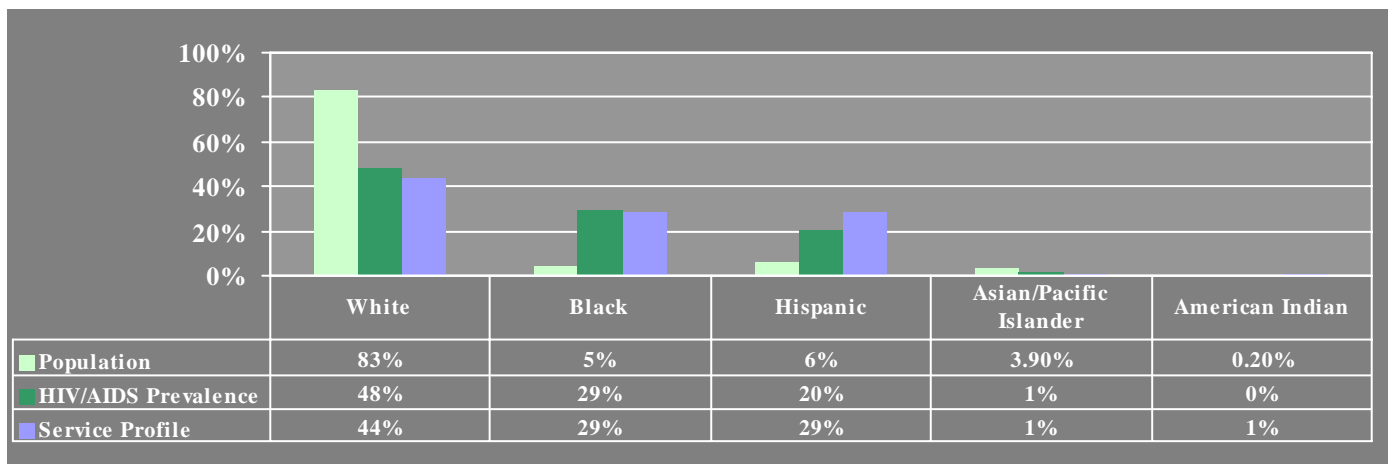
After looking at the EMA as a whole, we will now look at specific demographic factors within the EMA such as race and ethnicity, gender, age, and mode of exposure.

Demographic Groups

Race & Ethnicity

Among those with HIV/AIDS in the EMA, minorities are disproportionately represented. Blacks and Hispanics disproportionately account for a far greater number of cases than would be expected given their smaller share of the total population. In fact, Blacks account for 30.4% of the AIDS prevalence and 33.5% of the AIDS incidence yet they represent only 4.6% of the overall population.⁹ While Hispanics make up 6% of the EMA population compared to 13% nationally, they account for 20.3% of the prevalent HIV/AIDS cases in the Boston EMA and 17% nationally. Combined, Blacks and Hispanics comprise 11% of the EMA population in 2000 and 50% of PLWH.¹⁰ The proportion of Blacks and Hispanics among new HIV cases increased in recent years (1999 to 2005) compared to the pre-1999 period. While 83% of the Boston EMA population is White, compared to 69% nationally, the proportion of people living with AIDS who are White is disproportionately low both locally (47.2% EMA) and nationally (35%).¹¹

Figure 5: Boston EMA HIV/AIDS Prevalence by Race & Ethnicity

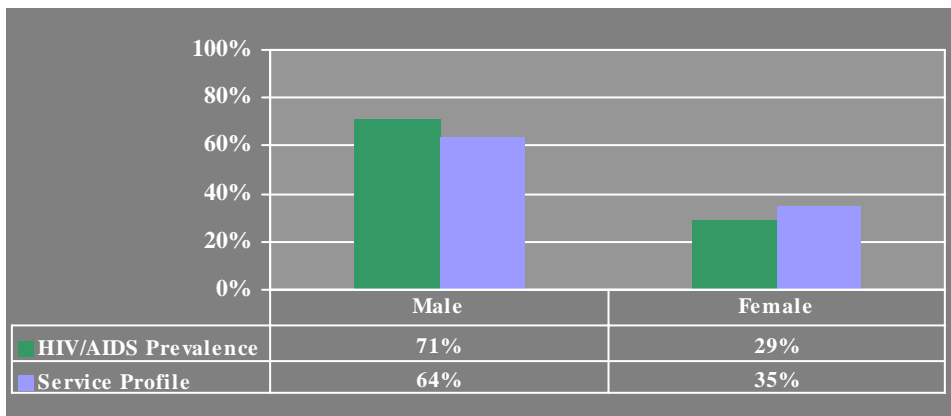


Gender

Males account for 71% of the EMA’s reported HIV/AIDS prevalence compared to 73% of the national cases.¹² Although the proportion of annually diagnosed cases of MSM in the EMA had dropped every year since 1990, and the absolute number had dropped every year since 1993, in 2005-2006 there was a 7.5% increase (compared to the last two-year period) in the number of incident HIV cases among MSM.¹³ Hispanic and Black MSM living with AIDS in the EMA are somewhat younger than White MSM living with AIDS, with more than a quarter of Hispanic and Black MSM living with AIDS under the age of 40. The Metro Boston region of the EMA has more MSM living with HIV/AIDS than the rest of the regions combined.¹⁴ Across all regions of the EMA, the overwhelming majority of MSM living with HIV/AIDS are White. Twenty-six percent of the men diagnosed in the EMA who attribute HIV/AIDS transmission to MSM contact are from communities of color. The percentage of men who acquired HIV/AIDS through reported heterosexual sex (including presumed) has increased over time, and of these men, about half are Black. Among injection drug users living with AIDS in the EMA, 67% are male.^{15 16}

The number of new HIV/AIDS cases among women has increased over time in the EMA. The proportion of women with HIV/AIDS is also overrepresented in the EMA (29%) when compared to the U.S. population (18%).¹⁷ In the Boston EMA, 28% of the new AIDS cases in the last two years are women compared to 23% of the prevalent national cases. Much of this increase has been among women of color, who made up more of the new HIV cases for females in 2005 than in 1999.¹⁸ In the Boston EMA, Black women account for 44% of living HIV/AIDS cases among women, while Hispanic women make up 23%. Approximately 60% of AIDS cases among women are related to Injection Drug Use (IDU), either due to a personal history of IDU or that of a sexual partner. The mode of exposure for reported cases of HIV/AIDS among women differs by race and ethnicity. White women were almost four times as likely as Black and Hispanic women to be infected through IDU. The principle mode of transmission for Hispanic women is heterosexual sex (44%, with an additional 21% presumed heterosexual transmission). Likewise, 43% of cases among for Black women were classified as presumed heterosexual transmission (29% heterosexual transmission). The proportion of HIV-infected women of color in the Boston EMA is disproportionately high compared to their representation in the general population.¹⁹

Figure 6: Boston EMA HIV/AIDS Prevalence by Gender



Transgender

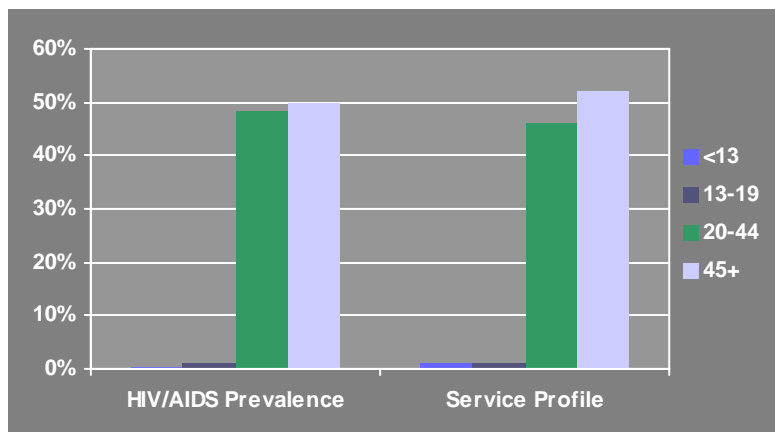
Estimated HIV infection rates among specific transgender populations range from 14%- 69% nationally. The highest prevalence may be among male-to-female (MTF) transgender sex workers.²⁰ The Boston EMA Part A Client Utilization data estimates that fifty-four transgender individuals receive Part A services, equaling 1% of the total client base.²¹

Age

As of December 31, 2006 there was a total of 421 youth aged 13-24 living with HIV/AIDS in the Boston EMA. Surveillance trends show that a disproportionate number of youth are being diagnosed with HIV/AIDS in the Boston EMA through MSM transmission.²² In 2005 and 2006, there were 124 new HIV/AIDS cases diagnosed among all youth ages 13-24 throughout the Boston EMA. Of these new cases, 48% (59 cases) were among MSM 13-24 years old. An additional 39% were attributed to heterosexual (12 cases) and presumed heterosexual (36 cases) transmission. More than one quarter of all living HIV/AIDS cases among youth were newly diagnosed in 2005 and 2006. Additionally, given the incubation period from initial infection to AIDS diagnosis, many cases diagnosed among adults are the result of behaviors engaged in during adolescence.²³

Among all age groups, the largest proportion of PLWH is in the 20-44 year old range. According to a June 2007 fact sheet from the MDPH, a greater proportion of adolescents and young adults recently diagnosed with an HIV infection were exposed through MSM activity than among people diagnosed at age 25 years or above. A smaller proportion was exposed through IDU and a similar proportion was exposed through heterosexual sex with partners with known risk or HIV status. Adolescents and young adults diagnosed with HIV infection within the three-year period 2003 to 2005 were 60% male and 40% female. In contrast, 72% of people diagnosed with HIV infection at age 25 years or above were male and 28% female.²⁴

Figure 7: Boston EMA HIV/AIDS Prevalence by Age



people diagnosed with HIV infection at age 25 years or above were male and 28% female.²⁴

The next largest proportion of HIV/AIDS cases can be found in the 45 and older group. Together, these two groups account for 99% of all HIV and AIDS cases. Children and adolescents account for less than 1% of the estimated HIV/AIDS prevalence in the EMA.²⁵

Mode of Exposure

Injection Drug Use (IDU)

Injection drug users accounted for 19% of the new AIDS cases reported during the last two years, a large decrease from 37.7% in 2003-2004. Women account for 36% of all persons living with HIV/AIDS with transmission attributed to IDU. People of color are disproportionately represented among cases associated with IDU. Blacks and Hispanics combined account for 55% of living HIV/AIDS cases attributed to IDU and make up 50% of all living HIV/AIDS cases.²⁶ Among IDU HIV/AIDS cases in the Boston EMA and within each racial/ethnic group, men consistently comprise a greater proportion of cases. This fact is most dramatic among Hispanics, where men make up almost three times the number of IDU HIV/AIDS cases as women.^{27 28} In most regions of the EMA, there are a higher proportion of White and Black women injection drug users with AIDS than among Hispanic injection drug users. Within the Central and Northeast regions of the EMA, Hispanic men comprise the single greatest number of injection drug use AIDS cases. White men account for the largest number of IDU AIDS cases in the Southeast and Metro West regions of the EMA. Black men account for the greatest number of IDU AIDS cases in the central Boston region.

Men who have sex with men

Within the Boston EMA, the MSM population continues to be deeply affected by the HIV/AIDS epidemic. Although the proportion of annually diagnosed HIV/AIDS cases among MSM in the EMA had dropped every year since 1990, and the absolute number had dropped every year since 1993, in 2005-2006 there was a 7.5% increase (compared to the last two-year period) in the number of incident HIV cases among MSM. Hispanic and Black MSM living with AIDS in the EMA are somewhat younger than White MSM living with AIDS, with more than a quarter of Hispanic and Black MSM living with AIDS under the age of 40.²⁹ The Metro Boston region of the EMA has more MSM living with HIV/AIDS than the rest of the regions combined. Across all regions of the EMA, the overwhelming majority of MSM living with HIV/AIDS are White. Twenty-six percent of the men diagnosed in the EMA who attribute HIV/AIDS transmission to MSM contact are from communities of color.³⁰

The White MSM community was the first and most profoundly affected by the emergence of the HIV/AIDS epidemic. Within the Boston EMA, the MSM population continues to be deeply affected. Seventy-two percent of MSM are white, reflecting the demographics of the EMA. MSM continues to be a major mode of transmission for HIV/AIDS in the Boston EMA, accounting for 36% of those living with AIDS, 45% of those living with HIV, and 40% of those living with HIV/AIDS as of 12/31/06 (including IDU/MSM).³¹

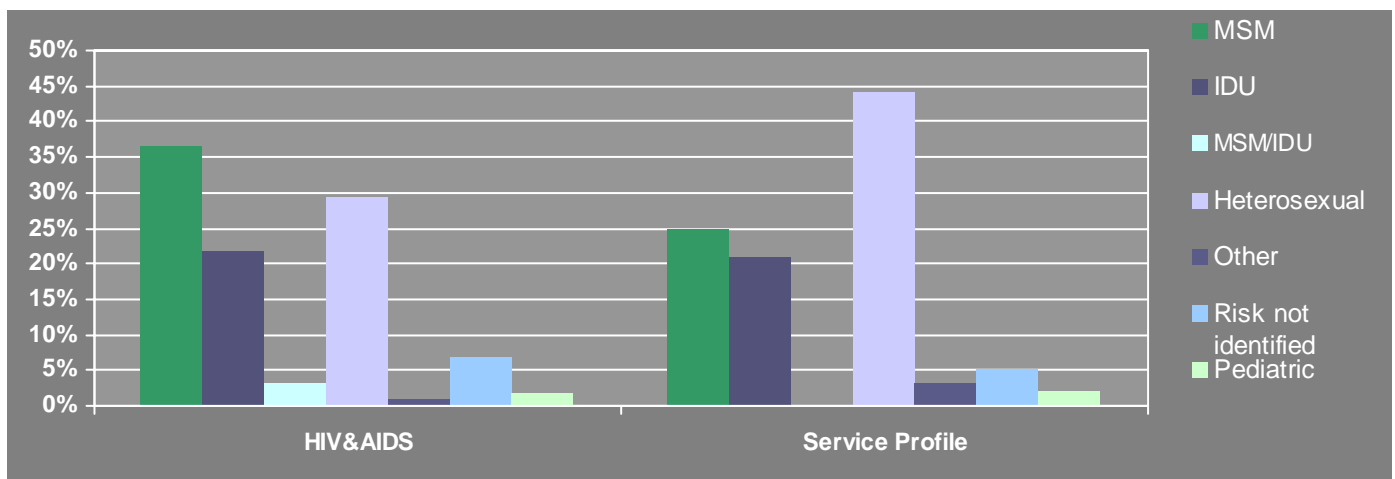
Heterosexual

Heterosexual transmission accounts for 35.8% of new AIDS cases within the EMA. This percentage exceeds the AIDS incidence rates of all other modes of exposure within in EMA, including, IDU (18.95%) and MSM (30.58%).³² Nationally, heterosexual transmission is becoming increasingly prevalent among women of color; making HIV the leading cause of death among black women ages 25-44.³³

Pediatric

There were six incident cases reported under children between January 1, 2005 and December 31, 2006; the changing epidemic in the EMA and preventative measures account for the low numbers of transmission to children.³⁴

Figure 8: Boston EMA HIV/AIDS Prevalence by Mode of Exposure



Conclusions

In summary, the epidemiological profile of HIV/AIDS in the Part A Boston EMA demonstrates the following changes: continued increases in prevalent HIV/AIDS cases across all regions of the EMA; a drop in HIV/AIDS cases attributed to IDU; an increase in cases attributed to heterosexual sex; and the continued trend in greater representation of women among prevalent cases, reflecting increasing numbers of women who were infected with HIV through sexual contact, principally by IDU partners, and who are now progressing to AIDS. Among racial and ethnic minorities, there continues to be a disproportionate number of HIV/AIDS cases relative to their population numbers in the EMA. Of particular note, Blacks and Hispanics make up more than half of HIV/AIDS cases attributable to IDU, and both Black men and women are disproportionately represented among heterosexual cases, which are on the rise. Additionally, AIDS prevalence data shows an aging of the population with a continued increase in the proportion of cases aged 45+.

Now that we have a picture of the epidemic within the EMA, we will shift our focus to the continuum of care available to affected populations.

Section II: Continuum of Care

This section describes the Boston EMA continuum of care. It presents the types of services which make up the continuum and the agencies that provide care.

The EMA's continuum of care is an effective and flexible service system that spans prevention efforts, early intervention services, medical care, and health-related support services. Through the efforts of the HIV Services Planning Council and the Boston Public Health Commission (BPHC), AIDS Program (Grantee), Part A plays a leadership role in the development and maintenance of a comprehensive continuum of HIV treatment, care, and services in the region. The continuum of care is supported by a variety of funding streams including CDC, Massachusetts and New Hampshire general funds, City of Boston, Ryan White Parts A, B, C, D, Dental Reimbursement, SPNS programs, Minority AIDS Initiative funds, HOPWA housing funds, and Medicaid. The EMA's integrated system of care enables PLWH to gain and maintain access to needed services and is able to adapt in a timely fashion to changing epidemiological trends and emerging needs. An ongoing challenge will be to preserve access to the core components of the continuum despite reduced resources and increased need.

The goals of the continuum are to: 1) *decrease the number of new infections, 2) increase the number of people who know their HIV status, and 3) link newly diagnosed and those who know their status but are not in care, to primary care and health-related support services in order to extend and improve their health and quality of life.* Within the EMA, the continuum of care has been successful in significantly lowering AIDS-related morbidity and mortality rates for those in care. Programs have focused their efforts on reaching PLWH who are not engaged in primary medical care, especially those who know their HIV status and those from disproportionately impacted communities. A spectrum of prevention services provides outreach, education, and referral services including those that encourage people to learn their status, those that target high risk groups, and those that link people to counseling and testing.

Core medical services for PLWH include primary care, drug reimbursement services, dental care, substance abuse treatment, and mental health services. A range of funding streams supports these services with Medicaid being the primary payer for medical services. Part A funded primary care programs include a program targeting homeless families living with HIV and programs specifically targeting communities of color. The majority of programs are located at community health centers, which are linked to counseling and testing services. Part A funded primary care programs ensure access for those who do not have any other form of medical coverage. Eight primary care programs (including two ob/Gyn specialty programs) are funded by Part A and located in a range of neighborhoods.

The combined funding streams allow for an open formulary of drug therapies to be available for PLWH. Coordinated planning by the EMA and the states has guaranteed the equitable availability of funds for HDAP services throughout the region. To maintain this equivalent access, the Council has allocated dollars proportional to the epidemic in the New Hampshire portion of the EMA. However, decreasing resources, reductions in Medicaid eligibility, and increased need has led both states to explore mechanisms for reducing ADAP eligibility, the creation of waiting lists, and/or limits to the formulary. In order to offset rising costs, New Hampshire instituted new eligibility requirements for all new clients enrolling in the NH ADAP program

during FY 2004 and FY 2005. As of October 1, 2004, all new clients were required to have a CD4 <350 certified by the physician on the NH CARE Program application. As of June 15, 2005, the NH ADAP requires CD4 <250 for all new clients. These new CD4 requirements do not apply to clients who had previously enrolled in NH ADAP. The program also dropped Hepatitis C medications and Fuzeon from its formulary on June 15, 2005; Fuzeon was restored to the NH formulary in 2007.³⁵

A network of dentists and dental practitioners, dentistry school clinics, and teaching hospitals provides dental diagnostic and therapeutic care. In addition to Part F programs, Part A funds an HIV Dental Ombudsman program which coordinates access to dentists throughout the EMA. For those without any form of coverage, Part A reimburses dentists for services to PLWH.

A range of mental health and substance abuse services are available to PLWH. Mental health programs provide individual, group, and family therapy. The continuum of substance abuse treatment modalities includes: acute treatment, residential rehabilitation services, and ambulatory services. Needle exchange programs also operate in Boston and Cambridge with funding from the state of Massachusetts. Substance abuse and mental health services play a critical role in HIV services and treatment by stabilizing patients, allowing them to become eligible for care and remain in treatment, and enabling clients to adhere to their medication regimens.

A range of health related supportive services are also available that assist PLWH to access and remain in care; link those who know their status and are not in care to the care system. These include housing, peer support, food/meals, transportation, and client advocacy services. Early in the epidemic, these programs existed as stand alone services. Now they have the goal of enhancing the ability of clients who are new to the system of care, as well as those who have been in care, to remain in treatment, adhere to drug therapy, and cope with activities of daily living.

Housing services include rental assistance, supportive services within housing programs, and housing search for transitional and permanent housing. HIV peer support services utilize consumers to provide services to other consumers. Peer support plays a vital role in assisting clients to access other services in the continuum, particularly for communities of color. Food programs include culturally appropriate home-delivered and congregate meals, food vouchers, nutritional supplements, and food pantry services. Transportation programs provide taxi vouchers, subway tokens, coordination of volunteer transportation, and agency-sponsored vans to transport clients to vital medical and social service appointments. Client advocacy provides assistance with financial and legal services, such as financial benefits, health insurance, immigration issues, and permanency planning.

Case management is the service component that ensures newly infected and underserved individuals gain access to care, while coordinating the care of ongoing clients. The Boston EMA's case management system is an extensive, multi-leveled, coordinated system of care. Within the EMA, case management programs provide a continuum of information/referral, advocacy, and comprehensive medical and/or social case management services. With the changing needs of PLWH, many programs typically utilize a triage system consisting of three different levels of care. One level provides information and referral for people

who do not need more intensive case management services. Another level provides transitional case management, crisis intervention, and short-term crisis case management. The third level provides ongoing intensive services for clients with complex needs.

A mix of medical and social case management services is provided to clients who are served at community health centers, hospitals and AIDS Service Organizations (ASOs). Medical case management is provided by a nurse case manager who can monitor the course of a client’s disease, provide adherence support, monitor the side effects, and coordinate access to a range of specialty care. The coordination of care among social case managers, medical case managers, and primary care physicians, alleviates barriers to service and provides clients with comprehensive HIV medical care.

With the addition of Minority AIDS Initiative (MAI) grant funds in FY 2007, the EMA has added to its existing capacity by funding additional culturally competent community based organizations. Agencies who received funding through the Part A MAI were based in communities of color and funded to provide case management and peer support in the community. MAI programs located at community health centers in minority neighborhoods have been particularly effective in engaging consumers in care and reducing health disparities.

This continuum of care available in the EMA has continued to succeed at increasing access to care and decreasing disparities in access across all services. One of the goals of the continuum of services is to ensure that the service utilization profile is reflective of the epidemic and is serving populations who have been disproportionately impacted by HIV and traditionally underserved. Within the EMA, FY 2006 utilization data for Part A services demonstrates the success programs have had in providing access to these hard-to-reach populations (see appendix table 5).

Figure 9 shows some of the epidemiological information presented earlier. However, it elaborates to show that the service profile closely matches the profile of the epidemic with regard to race. Further evidence of the profile matching the epidemic can be seen in Figures 6, 7, and 8 (presented in Section 1) which show the service profile matching the epidemic in terms of gender, age, and mode of transmission.

Figure 9: Boston EMA Consumer Demographics and Part A Service Utilization

Demographic Group	AIDS Incidence 1/01/05 -12/31/06	HIV/AIDS Prevalence As of 12/31/06	Service Profile 3/1/06 – 2/28/07
White, Non -Hispanic	41.11%	48.29%	44.0%
Black, Non -Hispanic	33.49%	29.22%	29.1%
Hispanic	23.09%	20.28%	28.7%
Asian/Pacific Islander	.12%	1.45%	2.01%
American Indian	0.00%	0.12%	.96%

When awarding contracts, the Grantee is guided by a set of funding principles developed by the Council. These principles mandate that programs funded must provide culturally competent services that are accessible to all PLWH in the EMA. In addition, programs must be linked to the continuum of care in order to assure that clients have barrier free access to a full range of health-related supportive services. Programs are contractually required to describe their linkages with health access points and document how they follow-up on referrals to ensure that clients remain in care. Documentation of linkages is monitored through site visits. These principles have also been incorporated into the ongoing monitoring of programs.

The EMA has worked to ensure access for underserved populations by contracting with minority agencies as well as those that have a history of successfully targeting and reaching underserved populations. The current group of contracted Part A providers includes those who specialize in providing services to PLWH who are African American, Latino, Haitian, Portuguese, Brazilian, Cape Verdean, deaf, homeless, women, children, adolescents, MSM, those recently released from incarceration, and those with histories of mental illness and substance abuse.

The Grantee requires that all funded programs, regardless of service category, conduct a complete assessment and service care plan for their clients. At a minimum, this includes assessing the medical, financial, housing, mental health, and substance abuse service needs of the client. For those with unmet needs, programs are responsible for linking clients to appropriate internal or external services. Providers must demonstrate that they have appropriate linkages to other services, including primary care and support services, and that they follow-up on referrals to ensure that clients are not lost. All programs are contractually required to ensure that their clients are enrolled in primary care.

Conclusion

The continuum of care is a vast array of services that is customized to meet the needs of the population. Case Management, Housing, Supportive Health Services, Mental Health, Substance Abuse, Dental Drug, and Medical services are all included and linked together in an effort to decrease the number of new infections, increase those who know their status, and link primary care and supportive health services together. The service profile is matched to the profile of the epidemic with regard to gender, race and ethnicity, age, and mode of exposure. The Grantee is guided by funding principles which allow for the selection of culturally competent, community linked, and effective providers. This continuum is supported by a variety of funding sources which we will elaborate further on in the next section.

Ideally, all PLWH would have access to services which would fully meet their needs. Unfortunately, this is not a reality. If the ideal situation - where everyone's needs are met - were represented by a bucket full of water, our current system would show some leaks.

Federal Ryan White funds are available to fill gaps and patch holes in the system, but it is the job of the Planning Council to decide how to apply these patches. The Needs Assessment, the first step in the Planning Council process is designed to give a snapshot of the problem. By examining the populations affected, the available resources, and what barriers exist, the Needs Assessment tells us where holes are, their size, and what it would take to fix them.

The Needs Assessment isn't a solution, but it is a blueprint. It will guide Planning Council members when they decide what to patch first through the priority setting process and how big of a patch to give through the Resource & Allocations process.

Section III: Resource Inventory

The Resource Inventory describes the available sources of funding within the Boston Eligible Metropolitan Area (EMA). This chapter discusses general eligibility requirements and benefits packages for each payer, as well as the client utilization of these resources.

Provider Descriptions

Ryan White Treatment Modernization Act of 2006

Part A – Funds for Cities (Formerly Title I)

The method for determining eligibility for Part A (formerly called Title I) funds gives priority to urban areas with the highest number of people living with AIDS; Metropolitan areas with a cumulative of more than 2,000 cases of AIDS during the most recent five-year period and a population of 50,000. The City of Boston receives Part A funding for the Boston EMA. For FY2007, Part A received \$12,861,137 and \$814,862 in Minority AIDS Initiative (MAI) funds.³⁶

Part B – Grants to States (Formerly Title II)

Part B provides formula funding to states and territories to improve the quality, availability, and organization of health care and support services for consumers. For FY2007, MA received \$19,567,006 and NH \$1,502,980 in Part B funding.³⁷

Part C Funds to Communities — Early Intervention Services (formerly Title III)

Part C supports comprehensive primary health care and other services for individuals who have been recently diagnosed with HIV. Part C funding has been awarded to five agencies located within the Boston EMA. A total of \$ 2,182,067 was awarded to MA Part C in FY 2007. A total of \$342,419 was awarded to NH Part C in FY 2006.³⁸

Part D - Support services for women, infants, children & youth (Formerly Title IV)

Part D provides funding for comprehensive, community-based, and family centered services to children, youth, and women living with HIV and their families. The total allocation to MA Part D in FY07 was \$1,671,671. A total of \$346,660 (for three years) was awarded to NH Part D in FY 2006.³⁹

Part F- Dental Reimbursement

The dental reimbursement program assists accredited dental schools and post-doctoral dental programs with uncompensated costs incurred in providing oral health care treatment to PLWH. There are five institutions that receive dental reimbursement through the Ryan White Act in the City of Boston. For FY 2007, these institutions received a total of \$1.3 million in dental reimbursement funds through the Ryan White Act Part F award.⁴⁰

Part F- AIDS Education and Training Centers (AETC)

The AETC Program is a network of 15 regional centers and 75 associated sites, which conduct targeted, multi-disciplinary clinical education and training programs for health care providers.⁴¹ In FY07 the NEAETC was allocated \$ 1,935,609.

Part F- Special Projects of National Significance (SPNS)

The SPNS program is intended to advance knowledge and skills in the delivery of health and support services to underserved PLWH. There are two SPNS projects in the Boston EMA, Part F was awarded \$899,863 in FY07.⁴²

Commonwealth of Massachusetts AIDS Line Item

MA provides funding for HIV/AIDS services through the *Department of Public Health* (DPH) AIDS budget line item (\$35.5 million in FY 2006).⁴³

New Hampshire State Funds

In FY 2005, NH provided state funds for HIV/AIDS services for the first time. In FY2007 \$242,524 was directed to the NH ADAP. Advocates and administrators in NH are working with the Governor and State House to increase the level of funding so that additional service categories can be funded within NH.⁴⁴

Medicaid

Medicaid is the federal health insurance program administered by states; each state sets its own guidelines regarding eligibility and service provision. Medicaid is the primary payer of health services for PLWH in the Boston EMA.⁴⁵ In MA, the standard Medicaid benefits package covers comprehensive primary and inpatient health services, including primary care, ob/Gyn, substance abuse, mental health, and transportation services.⁴⁶ Unlike MassHealth, NH Medicaid does not provide substance abuse services.⁴⁷ The NH system requires disability (AIDS diagnosis), an income limit of 75% FPL (currently \$7,092) and an assets limit of \$2,500. NH Medicaid does not account for how much spending goes to PLWH. NH state officials are working with the Federal government to create an HIV waiver program similar to that found in MA.^{48 49} Lastly, 48% of Part A consumers were Medicaid recipients in FY 2006, compared to 18% of the general population in MA and 10% of the general population in NH.⁵⁰

Commonwealth Care/Choice

The Health Reform Law of 2006 extends access to medical insurance to all MA residents who are US citizens and qualified aliens.⁵¹ *Commonwealth Care* is for uninsured citizens or qualified aliens aged nineteen years or older who earn less than 300% FPL (currently \$30,630).⁵² *Commonwealth Choice* provides non-subsidized, 'affordable' plans available for purchase through the Connector Board by those over 300% FPL (currently \$30,630), including uninsured people living with HIV/AIDS.⁵³

Private Insurance

Many PLWH have private medical insurance and are able to receive health services at one of the private hospitals or at a community health center. Of 6,253 unduplicated Part A consumers in FY 2006, only 654 were enrolled in private insurance programs.⁵⁴ This number is expected to increase as the Massachusetts Health Reform Law of 2006 is implemented and more MA consumers are enrolled in private health insurance programs.

Medicare

Medicare is the health insurance program that is administered by the Federal government. Eligibility for Medicare is limited to those who are at least 65 years old or who are disabled (AIDS diagnosis). Some people are eligible for both Medicaid and Medicare and are thus considered *dually-eligible*. People who are dually-eligible typically receive the most support from their Medicaid funded programs, as Medicaid services are usually more comprehensive in scope than Medicare services.⁵⁵ As of January 1, 2006 Medicare prescription drug coverage is available to everyone with Medicare (Part D). Private insurance companies provide drug coverage for beneficiaries who enroll and pay premiums. Medicare Part D plans have set prescription benefits that vary from plan to plan and co-payments range from \$0-\$5. Medicare Part D has a complex reimbursement and benefits system involving several stages of individual contribution. ADAP/HDAP funds assist in covering medication costs throughout these complicated stages. People who are dually-eligible continue to receive their prescription drug benefits through their Medicaid program.⁵⁶

Massachusetts Bureau of Substance Abuse Services (BSAS)

MA provides funding for substance abuse services through the DPH Substance Abuse Treatment line item. BSAS administers these funds, as well as federal funds received from the *Substance Abuse and Mental Health Services Administration* (SAMHSA). While HIV-status of clients is not collected, BSAS provides a range of HIV related services to injection drug users, HIV+ consumers, and others at high risk for HIV infection who are prioritized for admission to the services provided by BSAS programs. BSAS reported in FY 2007 that \$92.5 million was available for substance abuse treatment services in the EMA.⁵⁷

NH Bureau of Alcohol, Tobacco and Other Drugs

The majority of people receive substance abuse treatment services in detox, outpatient, intensive outpatient, short-term residential and low-intensity residential. Although the NH Bureau of Alcohol, Tobacco and Other Drugs does not prioritize PLWHA for substance abuse treatment services, all people entering substance abuse treatment receive a HIV risk assessment, access to counseling and testing referrals, and receive ongoing risk reduction education. The NH Bureau of Alcohol, Tobacco and Other Drugs reported \$11.5 million was available in NH for substance abuse services.⁵⁸

Housing Opportunities for People With AIDS (HOPWA)

The Boston EMA contains twelve HOPWA grantees. Ninety-percent of HOPWA funds are distributed to eligible metropolitan service areas through the formula award; 10% of HOPWA funds are awarded through competition for Special Projects of National Significance. In MA formula awards are allocated to Boston, Lynn, Lowell, Springfield, Worcester and MDPH. HOPWA formula awards to Rhode Island include funding which affects Bristol county in MA. In MA, HOPWA is used for emergency assistance, long-term rental assistance & services connected to housing. HOPWA was awarded \$286 million in FY07.⁵⁹

To examine the entire picture, we look at Figure 10, which represents the contribution of each payer to the HIV/AIDS continuum of care in the Boston EMA.

Comparing the demographics of the consumers using services in the Boston EMA across multiple funding streams helps assure there is proportional population-specific service delivery and outreach to all the impacted populations. Figure 11 illustrates the proportional representation of racial populations within multiple funding streams for FY 2006.⁶⁰

Figure 10: FY 2007 Funding Streams

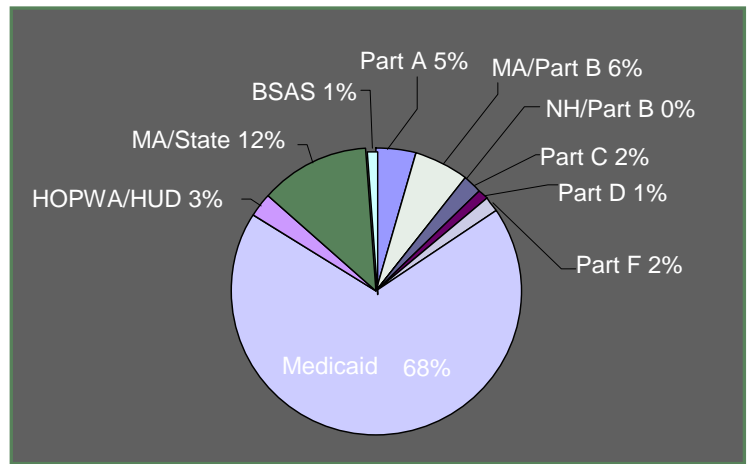
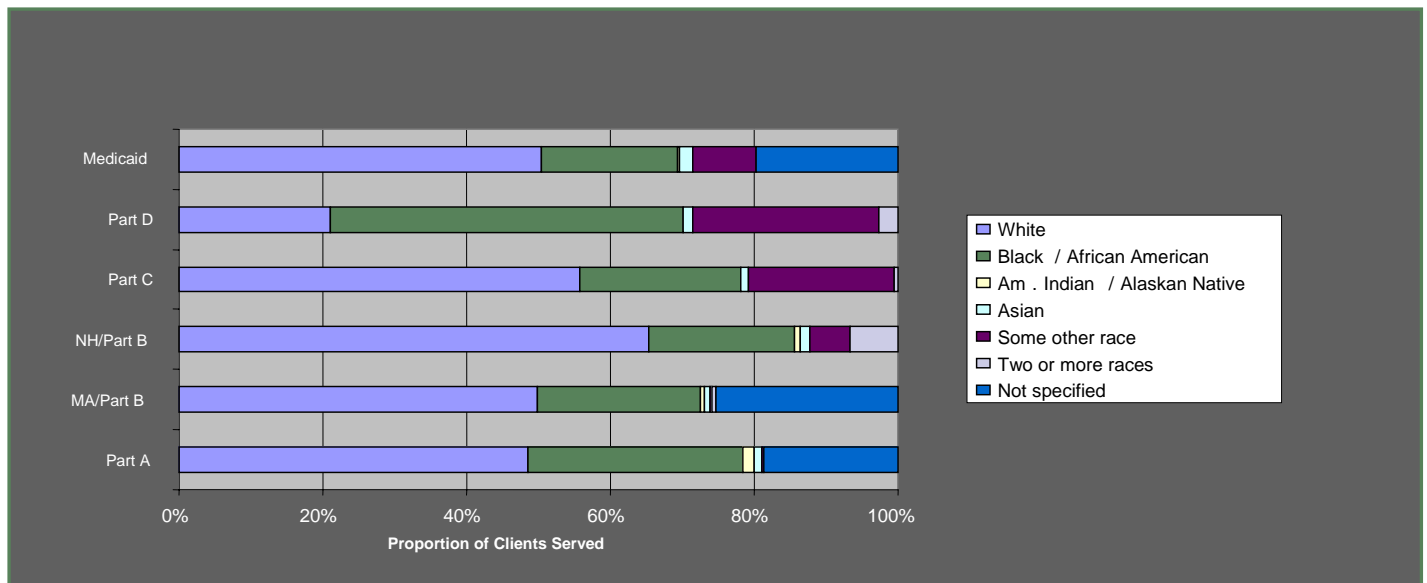


Figure 11: HIV/AIDS Client Utilization by Race



Conclusion

As diverse as the array of services provided is the variety of funding sources. Within the EMA there are over 10 payers with Medicare contributing the most dollars. Massachusetts State funds are second, and HOPWA, BSAS, NH Bureau of Alcohol, Tobacco and Other Drugs, Private Insurance, Medicaid, Commonwealth Care/Choice, NH state funds, and Ryan White dollars are all also contributing.

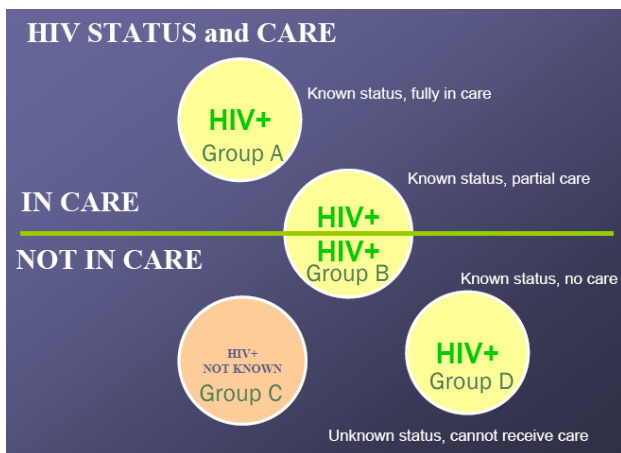
Section IV: Unmet Need

This section will examine the unmet need framework of the Boston EMA, and those PLWH in care vs. not in care.

Not in Care

The Continuum of Care and the Resource Inventory demonstrate the breadth of services available to consumers in the Boston EMA, but the reality is that there are still consumers who are not in care. A recent CDC study estimates that roughly 33% of consumers nationally are not receiving medical care.⁶¹ Additional research shows that vulnerable populations, especially blacks, Hispanics, women and the uninsured are most likely not to be receiving care and is particularly an issue among the immigrant community.⁶²

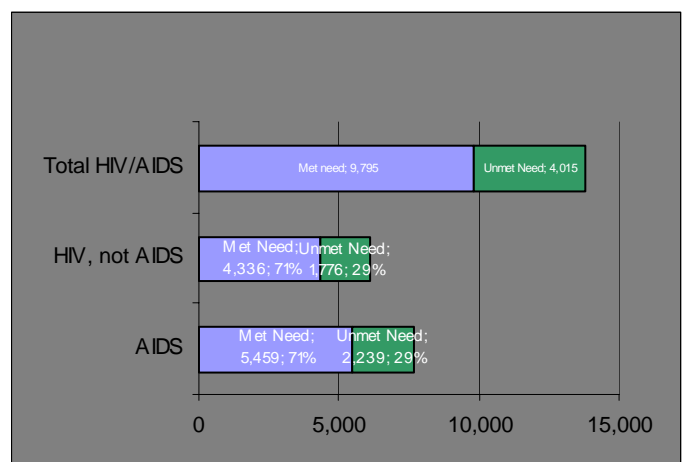
Figure 12: HIV and Care Status



HRSA defines individuals who are not in care as those consumers who know they have HIV and are not currently accessing HIV-related medical services; these individuals are said to have unmet need.⁶³ The 2000 reauthorization of the Ryan White Act mandated that EMA's identify and incorporate the needs of consumers not in care into the planning and allocation of Part A funds. Geographic location, culture and demographics help explain why some consumers do not receive care and data on these factors help the Planning Council implement appropriate strategies to bring all consumers in for care. Planning Council and the Planning Committee continue to work on a framework for assessing the unmet needs of consumers who are not in care.

There are several reasons why consumers do not receive care (Figure 12). Group B includes consumers who drift in and out of care depending on the severity of their disease or symptoms and other factors. Group C consists of people who do not know they have HIV. Group D contains a variety of individuals including consumers who choose not to access services, consumers who do not know the importance of accessing services while being asymptomatic, consumers who have competing priorities that are more important and consumers with other issues like homelessness, mental illness and substance abuse that complicate accessing HIV services. Group D also includes consumers who do not know about available services and/or their eligibility for these services and consumers who are uninsured or fearful of the stigma associated with being identified as someone with HIV disease. While Group A represents the Met Need, Groups B, C, and D represent unmet need. Overall, more of the Need in the EMA is met than unmet. Figure 13 shows the relative percentages of met and unmet needs.

Figure 13: HIV/AIDS Prevalence, Met and Unmet Need in the Boston EMA as of December 2006



Unmet Need

Because eliminating unmet need is a primary focus of providing services we will examine this population more closely. The Unmet Need Framework guides EMAs in calculating the number of consumers who have unmet need, defined as being aware of HIV+ status, but not receiving a primary medical care appointment in the previous 12 months. This year, the Unmet Need Framework estimates there are 4,015 consumers who know they have HIV, but who are not receiving medical care (29% of the total number of consumers). Figure 13 represents the proportion of consumers who have unmet need in the Boston EMA. Refer to Table 3 in the appendix to review the full Unmet Needs Framework.

Estimates of unmet need in New Hampshire are prepared through a collaborative effort at the state level. Unduplicated numbers of consumers receiving primary medical care (based on CD4 count and viral load testing) during calendar year 2005 in the NH CARE program and Medicaid were generated through combination with HIV/AIDS Reporting System (HARS) data. The resulting estimate of met need for the EMA region of New Hampshire is 45%. New Hampshire does not generate unmet need estimates separately by AIDS and HIV diagnosis within the EMA region, nor do they break down their unmet need estimates for the EMA region by demographic and mode of exposure subpopulations. Statewide, 58% of Hispanic consumers, 51% of White consumers, 49% of Black consumers, 44% of Asian consumers, and 33% of American Indian consumers had unmet need for HIV primary medical care.

The estimate of unmet need for the Massachusetts region of the EMA is derived from a Suffolk University study, *People Living with HIV/AIDS Who Do Not Use Care Consistently*. This study is based on interviews with consumers living in the Greater Boston and Worcester areas of Massachusetts. Unlike other studies conducted in Massachusetts, this study is not limited to clients of the Part A and B systems, but also seeks out other consumers. Twenty-two percent of study participants had not seen a primary care provider within the past twelve months while 78% reported one or more visits. Because this study did not capture rates of CD4 count and viral load testing, and because some clients expressed inconsistent use of care (which could include a lack of CD4 count and viral load testing), the met need estimate for Massachusetts is 72.3% (the lower bound of the 95% confidence interval around the point estimate for met need of 78%). Another indicator for unmet need that the Boston EMA collects is use of ART when appropriate. JSI compiles this data for a sample of Part A clients through regular clinical chart reviews of ten Part A-funded primary care sites in Massachusetts.

Although data is not available to examine unmet need separately for people with HIV and those with AIDS in the Boston EMA, some generalities can be extrapolated based on the New Hampshire unmet need findings. Statewide in New Hampshire, a similar proportion of those living with AIDS and those living with HIV (aware, non-AIDS) have an unmet need (45.6% and 46.1%, respectively). Interestingly, 69% of those with an unknown diagnosis (HIV vs. AIDS) have an unmet need. New Hampshire notes in their report that this high need population is primarily a Medicaid-only population. Thirty percent of participants in the Suffolk study (Massachusetts only) had AIDS, with 26% HIV asymptomatic and 32% HIV symptomatic, but care patterns were not differentiated by diagnosis. The study found that PLWH who visited a primary care doctor were more likely to have a CD4 count above 500 than those who did not, but no further differentiation was made.

JSI clinical chart review and Suffolk consumer assessment data indicate that racial and ethnic minorities in the Boston EMA do encounter some barriers in accessing and maintaining primary medical care. However, during a time that the Boston EMA has used Ryan White dollars to fund essential medical and support services, the data also show great progress in connecting ethnic and racial minorities to primary medical care.

The estimation of unmet need continues to evolve. To improve the reliability of the unmet need estimate, it is essential to match data across systems of care. The Grantee continues to work with MDPH on developing a shared approach. The key element to this plan, a data sharing agreement with the Massachusetts Office of Medicaid has still not been finalized. Once in place the updated unmet need framework will reflect the proportion of consumers that receive primary medical care through private sources, as well as those for whom care is provided in publicly funded settings.

Conclusion

The Planning Council considers all unmet need data during their annual prioritization process. The priority and allocation for case management is based on the role the service plays in linking those with unmet needs to the continuum of HIV medical services and health related support services. Providers are also asked to submit plans for addressing unmet need as part their funding proposals. The population that represents unmet need is composed of those in partial care, out of care completely, or are unaware of their HIV positive status. As discussed earlier, the unmet need is addressed by the continuum of care. Goals of the continuum are to get individuals tested, into care, and coordinate care to ensure access is granted to all needed services. Data presented in this section demonstrates that while the EMA is reaching the majority of those in need, there are still significant gaps that need to be addressed. Many of the recommendations presented later on are a direct result of the unmet need.

Now that we have looked in Section I at the population in need, the available resources and the funding available to support them in Sections II and III, and the unmet need here in Section IV, we will next further examine unmet need in Section V by looking at the barriers to care and complicating factors which challenge the EMA in designing a service system able to meet the needs of all PLWH.

Section V: Co-morbidities & Barriers

This section will examine HIV co-morbidities and barriers to care observed within the Boston EMA.

Socio-demographic factors such as age, gender, race, sexual orientation, poverty, insurance status and homelessness significantly impact the complexity of providing care to PLWH in the Boston EMA. Other co-morbidities, such as substance abuse, chronic mental illness, hepatitis B and C, and STDs, further complicate the delivery of care and add barriers to receiving care. Because of the diversity of the local HIV/AIDS epidemic, it is essential to have culturally and linguistically appropriate health services available, further complicating access to care.

Men who have sex with men

Men who have sex with men, White

White MSM are a special population of concern due to ongoing elevated rates of STDs, which are an indicator of risky behavior. Over the last few years, Boston, the principal city of the EMA, has experienced a spike in primary/secondary syphilis case incidence. In Massachusetts, infectious syphilis cases among MSM quadrupled from 2000 (33 cases) to 2005 (159 cases). In 2006, roughly 80% of 117 syphilis cases in the Massachusetts portion of the EMA were reported among MSM. From 2001 to 2005, the percent of infectious syphilis cases among MSM living with HIV reported to MDPH increased from 12% to 52%. Aggressive social marketing campaigns in Massachusetts may have been one of the reasons behind a recent drop in new cases of syphilis and gonorrhea in 2006. In the New Hampshire counties of the EMA, however, a regional community health center has experienced a spike in syphilis among White MSM during 2007 and has notified its patients and the community. The ongoing incidence of syphilis cases and other STDs indicates risky sexual behavior. A new generation of young MSM did not witness the early effects of the epidemic on the MSM community and are engaging in behaviors that put them at risk.

Additionally, many suffer from message fatigue, such that common modes of communicating the risks of HIV are no longer as effective as they were at earlier phases of the epidemic. Finally, many White MSM now have the perception that HIV is a “manageable” disease.

Recreational drug use is an additional risk factor that creates barriers to care for White MSM and increases the complexity of care. Crystal methamphetamine (meth) has become increasingly prevalent in New England, especially among gay men. Doctors and social workers at a local health center have reported seeing an increase in patients with crystal meth dependency. A survey conducted of 1,000 gay men in Massachusetts during 2004, found that one in 10 participants had tried crystal meth at least once in the previous year, with 2% admitting to smoking, snorting, or injecting the drug at least once a week. In 2006, the same community health center reported that 23% of intake admissions reported using meth as a drug of concern. There is evidence that this highly addictive drug lowers inhibitions and may result in risky sexual behavior and increased HIV infections. Crystal meth, and other club drugs such as Ecstasy, “Special K,” and “G,” may cause complications for HIV+ users due to adherence failures, interactions with protease inhibitors, increased viral replication and a greater risk of HIV transmission.⁶⁴

Men of Color who have sex with men (MSM of Color)

The population of MSM of Color in the EMA comprises a wide range of races and ethnicities, including African Americans, Hispanics, Portuguese speakers (i.e., Cape Verdeans, Brazilians), Asian-Pacific Islanders and Sub-Saharan Africans. The issues facing each of these subgroups are similar: sexual identity and expression, stigma of MSM relationships in their specific communities, effects of discrimination based on sexual orientation and race, and difficulties navigating a complex healthcare system. However, the languages and cultures of MSM of Color are increasingly diverse and require services to be delivered in a culturally and linguistically appropriate manner in order to bring MSM of Color into care and maintain their access to the continuum of care.

Many MSM of Color perceive the established system of care to be structured by and for gay, white males. The perception is sufficient to cause MSM of Color not to seek out care providers who have a deep familiarity with HIV/AIDS treatment. Class differences, underscored by economic factors, also raise barriers to both communication and care. Gaps in cultural competency exacerbate the divide between providers and clients of color. Stigma surrounding same-sex relationships in communities of color leads to simultaneous *open* and *hidden* life styles with different social circles.

Another complication for the delivery of service to MSM of Color concerns immigration status. The Boston EMA has always had a high rate of new immigrants. While MA overall has a foreign born population of 12.2% (compared to the U.S. proportion of 11.1% in the 2000 Census), urban centers of the EMA have 17% or more of PLWH who are foreign born. Uncertain immigration status and fear of deportation becomes one more barrier to entering the care network for MSM of Color.

Language skills, educational attainment, and economic positioning (lower skilled employment) also create hurdles for navigating the system of care. Additionally, high rates of depression and substance abuse among MSM of Color create barriers to care. A lack of culturally and linguistically competent substance abuse and mental health counseling represents a service gap for this population.

Youth

Youth living with HIV/AIDS are another population of concern, since they have minimal income and typically lack the autonomy and resources that adults with HIV/AIDS have in making decisions about their health care.⁶⁵ Youth encounter more obstacles to obtaining services, such as the need for parental consent, financial concerns, and legal issues. In addition, youth of Color and homeless adolescents are two populations experiencing rising rates of HIV infection. These individuals are likely to remain outside the system of care until a much later stage in their HIV disease once infected.

Youth present a series of unique challenges to the HIV service delivery system. Young adults are in a developmental period marked by discovery and experimentation that comes with a range of physical and emotional changes. The combination of a high level of experimentation with sexual behavior and drugs, together with minimal HIV testing, makes youth a high risk group. According to 2005 National Youth Risk Behavior Survey of students in grades 9-12, 76% of students in Massachusetts and 73% in New Hampshire had used alcohol or illegal drugs during high school. With numerous studies showing a correlation between

illegal drug use, alcohol, unprotected sex, and HIV/STD transmission, these combined behaviors place youth at significant risk.

Women

Access to and utilization of HIV-related health care continues to be a significant problem for women living with HIV/AIDS. Barriers are even greater for women who are homeless, substance abusers, single parents, foreign-born or who have mental health problems. Among HIV-positive women, psychological distress poses a significant barrier to care. Many women delay accessing care because of fear, depression, and anxiety about their HIV-positive serostatus. High rates of discrimination, abuse, and domestic violence create additional challenges. Additional service gaps for women with children include daycare programs and respite care.

Transgender

Transgender people face stigma and discrimination, which exacerbates their HIV risk. The stigma of transgender status is associated with lower self-esteem, increased likelihood for substance abuse and lessened likelihood of safer sex practices. Social marginalization can result in the denial of educational, employment and housing opportunities.

There is a clear understanding in the HIV/AIDS research community that birth sex and gender identity are two clearly separate concepts. Still, the majority of HIV/AIDS research fails to accurately collect information on sex and gender. Many of the payers within the Boston EMA fail to accurately collect data on sex and gender. However, Ryan White Part A does collect client utilization data for the transgender population (please see appendix X).

Poverty and Insurance

It is estimated that only 14% of the Massachusetts (MA) population and 9% of the NH population live below 100% of the Federal Poverty Level (FPL). In FY 2006, 64% of Part A consumers reported living below 100% of FPL. Seventy-nine percent of the FY 2006 Boston EMA Part A consumers were below 200% of FPL, whereas 30% of the MA population and 23% of the NH population lived below 200% of the FPL during this same time period. The data revealed that 84% of Part A consumers were below 300% of the FPL in the Boston EMA; state poverty data are not collected using the 300% threshold.⁶⁶

Insurance coverage is often closely linked to poverty status, and therefore lack of health insurance can adversely impact health outcomes, including increased morbidity and mortality. The uninsured seek out medical care less often, use emergency care more frequently and are more likely to be hospitalized for chronic conditions that are exacerbated by delayed entry into care. According to one study, people who lost coverage were four times more likely to use emergency rooms for their care than people with coverage. Studies have demonstrated that uninsured PLWH are both less likely to be prescribed HAART therapies and to be adherent to their HIV medications over time.⁶⁷ For these reasons, low income PLWH and those without insurance are more likely than PLWH with higher incomes and with insurance to delay care and enter the health care system at a later stage in their illness.⁶⁸

In MA and NH, the number of uninsured adults remains significant. According to Kaiser Family Foundation data, during 2004-2005, 10% of non-elderly adults in MA and 10% in NH were uninsured, including those without Medicaid.⁶⁹ With new health care coverage available under health care reform, and accompanying outreach efforts, the hope is that the number of uninsured in MA will drop. Among Part A consumers whose insurance status was known, 9% were uninsured in FY 2006. People of color are disproportionately impoverished and uninsured. According to Census 2000 data, Blacks, Asians, and Hispanics are more likely than Whites to be uninsured. While 7% of White MA residents were living in poverty in 2000, one-third of the state's Hispanic residents and 21% of Black residents were impoverished.⁷⁰

Housing and Homelessness

Homeless persons use emergency room care more often due to factors such as lack of health insurance, lack of transportation, poor access to primary medical care, chronic alcohol and drug abuse, and mental illness. Additionally, their limited access to medical care delays the identification of HIV and co-morbidities, and contributes to the higher prevalence of opportunistic infections and other health problems.⁷¹ In the MA region of the EMA, 244 of the prevalent HIV/AIDS cases as of December 31, 2006 were homeless at the time of diagnosis. There also was a TB case rate of 58 per 100,000 among the homeless.⁷²

The prevalence of homelessness is higher among PLWH than the general population. An estimated one third to one half of PLWH are either homeless or in imminent danger of losing their homes.⁷³ Moreover, HIV/AIDS prevalence is up to nine times higher among the homeless than the general population. A recent study found that 65% of PLWH cited stable housing as their second greatest need (after health care).⁷⁴ In addition, the study found that 60% of PLWH will experience homelessness in their lifetime.⁷⁵ PLWH with stable housing are more likely than those with unstable housing to have a primary care doctor and to see a doctor or health care provider on a regular basis.⁷⁶ Of 6,253 Part A consumers served in FY 2006, 68% reported being permanently housed, 22% reported being non-permanently housed, institutionalized or other, and for 9% their housing status was unreported.⁷⁷ Of 466 PLWH surveyed in the *Voices of Experience* Boston EMA HIV Needs Assessment, 58% reported living in subsidized housing.⁷⁸

Homelessness rates are impacted by the high cost of housing. MA has some of the most prohibitive housing costs in the nation, and is dealing with a long-term housing crisis. A University of Massachusetts Boston study found that nearly 40% of all MA renters was shelter-poor (meaning they could not meet their non-housing expenses after paying their rent).⁷⁹ In addition, the number of families using Department of Transitional Assistance and privately-funded homeless shelter services increased by nearly 50% between 1995 and 2000. The number of individuals on the streets and in shelters during the City of Boston's annual single night census was 6,636 in 2006, compared to 4,896 ten years ago; the total number of homeless individuals in families increased by 13% between 2005 to 2006. In the ten year period from 1995-2005, there has been a 42% increase in the number of homeless women in shelters, and from 2005 to 2006, there has been an 85% increase in women living on the streets. Approximately 28,800 individuals were served by MA emergency shelters in 2003- 2004.⁸⁰ A US Department of Housing and Urban Development (HUD) program, HOPWA is the largest payer of housing services for PLWH in the Boston EMA, accounting for 54% of the total funding available for all HIV-related housing services in the EMA. However, continuing cuts in the state's operating budget since FY 2001 have decreased other housing services, such as housing vouchers

and transitional housing subsidies.

NH also has a persistent shortage of affordable housing. In 2006, only 12% of the state's two-bedroom apartments were affordable to very-low income households, and the statewide rental vacancy rate was less than 2%. In NH, 6,435 people received temporary housing and another 9,634 had to be turned away from shelters due to full capacity in state FY 2006. Nineteen PLWH were sheltered in state-funded homeless shelters during state FY 2006. In NH, HOPWA/HUD assisted 315 PLWH in FY 2005.⁸¹

Substance Abuse

Since the beginning of the HIV/AIDS epidemic, IDU has been a leading cause of HIV infection. IDU not only contributes to the spread of HIV through the sharing of syringes and other injection equipment among those who use, but also through transmission to the sexual partners and children of injection drug users. While the correlation between IDU and HIV infection is well documented, there is also a link between non-injection drug use and HIV. In a 2006 study researchers found through clinical chart reviews that of 598 PLWH in the Boston EMA, 20% had an active substance abuse problem.⁸² Additionally, out of 466 PLWH surveyed in the VOE study, 29% reported current substance abuse problems.⁸³

The MA BSAS reported that in 2007 20.3% percent of those admitted to substance abuse treatment services were homeless persons, and 76.2% were unemployed.⁸⁴ BSAS also reported that the total number of admissions to treatment was 106,684, which represents 85,000 individuals served throughout MA across all populations. It is estimated that 2.6% of these individuals are consumers resulting in an estimated 2,125 PLWH served in FY 2007.⁸⁵

In a survey conducted by BSAS, as of December 31, 2005, 30% (N=4,773) of the surveyed people living with HIV/AIDS in the Boston EMA were reported to have a history of IDU. An additional 6% (N=899) of PLWH were exposed to HIV through heterosexual sex with an injection drug user. Forty children were born to HIV-infected mothers who injected drugs and/or had sex with an injection drug user.

Mental Illness

Mental disorders are common in the United States and internationally. Nationally, an estimated 26.2 percent of Americans ages 18 and older, about one in four adults, suffer from a diagnosable mental disorder in a given year.¹ When applied to the 2004 U.S. Census residential population estimate for ages 18 and older, this figure translates to 57.7 million people.⁸⁶

Overall, eleven percent (531,000 people) of the adult population in MA and 12% (114,000 people) of the adult population in NH are living with serious psychological distress.⁸⁷ A clinical chart review study conducted by JSI using a sample population revealed that 31% of individuals served by Part A programs are depressed. In addition JSI reported that its experience with the chart review cohort has confirmed for many years that the rate of co-morbid mental health diagnoses is approximately 50%. Of the 598 PLWH in the Boston EMA, 49% had an active psychiatric diagnosis.⁷⁴ The VOE Needs Assessment supported the findings of the chart reviews and found that 37% of surveyed PLWH reported a diagnosed mental illness and 46% needed mental health treatment.⁷⁸

Sexually Transmitted Diseases (STDs)

Beyond homelessness, substance abuse, and mental illness, another co-morbidity that increases the complexity of receipt of care for PLWH is STDs. Studies show that STDs can greatly increase the risk of HIV transmission and can speed up the rate of HIV replication in exposed individuals. STDs are often harder to treat in HIV-positive individuals, causing chronic and drug-resistant infections. One percent of MA individuals diagnosed with an STD are HIV-positive.⁸⁸

Data from the CDC shows that 24% of MA women surveyed at various primary care and clinic sites in 2003 have high-risk HPV.⁸⁹ In MA, MSM represent a high-risk group for infectious syphilis. Of the 232 infectious syphilis cases reported in 2005, 167 (72%) were in MSM. Fifty-one percent (86/167) of the MSM with infectious syphilis were co-infected with HIV. The majority (58%, 97/167) of the infectious syphilis cases in MSM were reported in Suffolk County. In 2005, the racial/ethnic breakdown of infectious syphilis cases in MSM was white (79%), black (10%), Hispanic (9%), and other (2%). The median age of cases was 37.⁹⁰

Hepatitis

In the United States, Hepatitis C Virus (HCV) prevalence among PLWH is estimated to be 15 to 30 percent. A Hepatitis co-infection is an increasingly serious co-morbidity for PLWH. According to a MDPH survey, chronic Hepatitis B Virus (HBV) infection affects a reported 3.5% of PLWH in MA (n=857) and HCV infection affects a reported 13.3% of PLWH in MA.⁹¹ In 2005, a total of 644 cases of HBV were reported in the Boston EMA. In 2006, 269 HBV cases were reported in the MA EMA counties.⁹ In the NH portion of the EMA, 9 acute HBV cases were reported in 2006 (chronic HBV case counts not available).³

Shared epidemiological risks, such as unprotected sex and the sharing of syringes and other injection drug paraphernalia have resulted in higher incidence of both HBV and HCV among PLWH than among those not infected with HIV.⁹² Nationally, up to 40% of PLWH are also living with HCV; however, co-infection rates are as high as 90% for some subgroups, including HIV-positive IDUs. Of 466 PLWH surveyed in VOE, 18% were co-infected with HBV and 46% with HCV.⁹³ There are 3,303 MA residents co-infected with HIV and HCV (2,028 confirmed reported HCV and 1,275 probable reported HCV).⁹¹ Among them, more than 70% were exposed to HIV through IDU. Access to treatment for HIV and HCV is a significant problem for co-infected injection drug users, who often receive HAART later than non-users. In addition, studies have found that PLWH with chronic HBV or HCV infection have 2.5 to 3 times the risk of developing a serious liver enzyme elevation after starting an antiretroviral regimen that contains a protease inhibitor than PLWH without hepatitis.⁹¹

People who are co-infected with HCV and HIV are more likely than those with HCV alone to develop end-stage liver disease because HIV accelerates progression of HCV, even though it can be treated in PLWH. End-stage liver disease is preventable in many patients: The first steps are educating patients about HCV, providing appropriate screening and diagnosis, and assessing the need for HCV treatment, all in a supportive context.

Incarceration

A history of incarceration further increases an individual's risk for HIV infection as HIV/AIDS prevalence is greater among the incarcerated than the general population. According to a US Department of Justice report, inmates in the Northeast have the highest rate of HIV infection (4.1%).⁹⁴ Nationwide, minorities are disproportionately represented in corrections institutions. Furthermore, in MA prisons, 289 Black and 411 Hispanic incarcerated individuals are HIV+ (29% and 41.2% of the prison HIV caseload respectively), which means that over 70% of HIV+ incarcerated individuals are members of a minority population.⁹⁵ As of 9/1/07 there were 1,004 prevalent HIV/AIDS cases in MA who were diagnosed while incarcerated, some of whom may have since been released.⁹⁶ Over 70% of these cases are attributed to IDU and 70% are among racial and ethnic minorities.⁹⁷ Since individuals in the criminal justice system are eventually released into broader society and minorities comprise a disproportionate number of those incarcerated, it is important that culturally and linguistically appropriate services are targeted to individuals transitioning out of incarceration.

Conclusions

The range of co-morbid health issues facing PLWH has increased the complexity and cost of providing comprehensive quality care and support. People newly identified as HIV-positive in the Boston EMA are more likely to be further along in the progression of HIV disease, which is complicated by mental health and substance abuse issues, co-infection with STDs, HBV, HCV, and economic instability. The success of the system of care at dramatically reducing the AIDS morbidity and mortality rates has resulted in an increase in the numbers of PLWH who are in need of health-related support services. These factors and others will continue to impact the costs and complexity of care, and pose challenges to the care system in the Boston EMA.

Section VI: Implications and Conclusions

This section discusses how barriers to care and instances of unmet need create unique challenges to delivering services in the Boston EMA.

Advances in treatment and services that enable PLWH to live longer, together with new infections have led to an increase in the number of PLWH while the cost of services and medications is rising. Identifying PLWH who know their HIV status but are not in care and serving those with unmet need continues to present a challenge and additional cost to the service system. Further challenges include disparities in risk, infection rates, mortality, poverty, health insurance status, access to care among special populations and complex interactions among co-morbidities that affect the cost and complexity of care for PLWH. The rising costs of services, in particular ADAP, and the decreasing funding for supportive services, local factors such as a severe affordable housing crisis, as well as, federal factors such as revisions of the Ryan White legislation, create service delivery challenges.

Improvements in the medical care of HIV infection and the availability of a continuum of care, including early intervention services for PLWH, have resulted in a more than 60% decline in AIDS deaths since 1996. AIDS deaths, however, continue to be substantially higher for Blacks and Hispanics than for Whites. The number of new AIDS cases has also continued to decline in the Boston EMA, but there have been significant increases in the number and proportion of women, and people of color who make up the total number of AIDS cases as compared to national averages. The diversity of the EMA's epidemic increases the severity of need for services among PLWH, and impacts the type and range of services needed to bring people into care and keep them healthy. Regional variations in the demographics of the HIV epidemic in the EMA add additional challenges due to the need for culturally and linguistically appropriate strategies and types of services within each area.

The increase in co-morbidities, homelessness, and poverty affecting PLWH has meant that consumers entering care do so with a more complicated set of interconnected issues than in earlier years of the epidemic, and with a wide array of service needs. All of these factors combine to present multiple service delivery challenges that require the maintenance of a flexible continuum of care that can meet the varied needs of PLWH.

Since FY 2001, Massachusetts has implemented significant reductions to state-funded public health programs, including a \$19 million reduction for HIV/AIDS services (a 38% reduction since FY 2001) and an \$11 million reduction for substance abuse treatment. The FY 2005 reduction to the EMA's Part A award (\$1.2 million reduction) has also impacted the continuum of care. While core services for PLWH have been maintained as much as possible, HIV services like home care, day care, respite care, adoption/foster care, complementary therapies, STD services, positive prevention programs, counseling and testing, integrated HIV/STD/Hepatitis C services, services that link patients to health care and maintain residents in community-based housing, and substance abuse treatment for opiate-dependent PLWH have been reduced or eliminated. State funding for evaluation, technical assistance, and training for HIV/AIDS programs have mostly been eliminated and will impact the quality of services offered by health care and support service providers. With these ongoing reductions to critical health related support services maintaining people in medical care will continue to become more challenging.

Reductions in funding have destabilized the comprehensive, high quality continuum of HIV- related services that has been built in the Boston EMA. There is always a need for more money; core services need additional resources to maintain a growing system. However, the network of supportive services, such as peer support, food services, transportation and housing support, have played critical roles in helping PLWH gain and maintain their access to medical care. Therefore the challenge will be how to balance the need for both. Reduced funding also creates an incentive to develop economies of scale by supporting larger multi service organizations. The challenge is how to continue to support smaller community based organizations that are based in communities of color and have the cultural and linguistic capacity to reach those new to care and those who know their HIV status but are out of care. With more PLWH being identified and brought into care, the capacity of the services system will continue to be strained.

Section VII: Recommendations

The mandate of the Planning Council is to improve the quality of the lives of all people living with HIV/AIDS throughout the EMA by responding to their existing and emerging needs. The recommendations listed below are ways the Council, the Grantee, and the Boston EMA can continue responding to the Council's mission, both directly and indirectly.

Maintain a stable, high quality continuum of primary care and support services for people living with HIV/AIDS in the Boston EMA.

- Develop methods for bringing into care those who are HIV-positive but not in treatment.
- Maintain a continuum of care that reflects the needs of all people living with HIV/AIDS.
- Continue to review and revise existing standards of care for each service category, as needed and as services come up for bid, to ensure high quality services and develop new standards for new services, as needed.
- Continue to assess the need and appropriately allocate funds for core health services as well as health related support services that facilitate, enhance, support or sustain the delivery, continuity, or benefits of health services for individuals and families with HIV.

Improve the capacity of programs and agencies in the Boston EMA to meet the needs of their clients and to deliver high quality services.

- Ensure that local programs have knowledge of and access to recent grants awarded to the region for technical assistance and capacity building programs.

Facilitate collaboration among agencies in the planning and delivery of services to ensure comprehensive care for consumers.

- Guide agencies into closer collaborations through the Request for Proposals process in order to maximize efficiency and reduce program duplication.

Ensure coordination and collaboration with substance abuse service providers, including the Massachusetts Bureau of Substance Abuse Services, the EMA's largest funder of substance abuse services.

- Ensure continued representation from substance abuse service providers on the Planning Council.
- Continue to work with the Bureau of Substance Abuse Services to collect information annually on the range of services provided and clients served, in order to coordinate services, identify gaps in the continuum, and ensure that Part A funds are the payer of last resort.

Ensure coordination with the Massachusetts and New Hampshire Medicaid programs, the largest funders of services for people living with HIV in the EMA.

- Ensure representation from Medicaid on the Planning Council.
- Continue to work with the MA Office of Medicaid to collect information annually on the range of services provided, clients served, and eligibility requirements.

Reduce the complexity of the service system and the burdens to providers and consumers.

- Explore establishing centers of excellence in HIV care to provide “one stop shopping” for services by consolidation of services where practical and efficient.
- Explore the feasibility of moving other services into collaborative arrangements.
- Explore the feasibility and impact of different contract cycles or structures (e.g., longer cycles, all services in single RFP, maintain existing structure, etc).

Develop methods for bringing into care those who are HIV-positive but not in treatment, with particular attention to eliminating the disparities in access and services among affected populations and historically underserved communities.

- Use guidance from HRSA and other EMAs to develop and implement strategies for bringing people into care who know their serostatus.
- Use support services contracts and existing bi-annual needs assessment activities to gather data on this population.
- Work collaboratively with the Massachusetts Part B program to gather this information on the needs of people with HIV/AIDS not in care to reduce burden and prevent duplication of effort.
- Maintain and strengthen links between counseling and testing sites and Part A funded programs to ensure a seamless continuum of care and to facilitate points of access to services after a person tests HIV positive.

Monitor and respond to programmatic changes in the Massachusetts Health Reform, the Medicaid waiver in Massachusetts and in expanding Medicaid eligibility to those who are HIV-positive.

- Monitor annual expenditure data from Medicaid, and utilization data from Part A and Part B/state programs to detect potential impacts of the expanded coverage.
- Adjust funding allocations appropriately to respond to the increased availability of some services to a greater proportion of people living with HIV/AIDS in the Boston EMA, and to the increased need for services not covered by Medicaid.

Develop greater collaboration with HIV prevention programs within the EMA.

- Ensure representation from the Massachusetts HIV/AIDS Bureau’s Prevention Programs and the New Hampshire Department of Health and Human Services Prevention Programs on the Council.

- Begin to collect funding and service program data on prevention programs in the EMA to be incorporated during the annual planning and resource allocation processes.

Ensure that the administrative mechanism is efficient, open, and rapidly allocates funds to the areas of greatest need.

- Continue providing a forum at Council meetings for the Grantee to report on its progress in allocating Part A funds
- Certify annually, by vote of the Council, that the Grantee has rapidly allocated funds in accordance with the Council priorities.

Develop skills among people living with HIV to assume leadership roles on the Council and in the community.

- Continue to develop and refine the Council orientation process to ensure that Council members get adequate information about the Council's work and about working with community members on the Council.
- Continue offering the Laptop Program for consumers and provide further training to empower their participation on the Council.
- Ensure that Council members are receiving training and technical assistance.

Ensure that the Council continues to be reflective of the epidemic in the EMA.

- Monitor HIV and AIDS surveillance data for emerging trends in the epidemic.
- Continue to develop and implement strategies annually for recruiting potential Council members from all affected populations throughout the EMA.
- Ensure that recruitment of applicants and final appointments meet membership requirements
- Sponsor annual presentations throughout the EMA to provide information about the Council and its work and to solicit interest and potential applicants.

Ensure that the Consumer membership of the Council continues to exceed the minimum requirements.

- Continue to develop and implement strategies annually for recruiting potential consumer members of the Council from all affected populations throughout the EMA.
- Sponsor annual presentations throughout the EMA to provide information about the Council and its work and to solicit interest and potential applicants, with particular focus on Consumer Advisory Boards and other consumer focused programs and spaces.

Table 1: AIDS Incidence, AIDS Prevalence and HIV Prevalence by Demographic Group and Exposure Category

Demographic Group/Exposure Category	AIDS INCIDENCE: 01/01/05 TO 12/31/06		AIDS PREVALENCE: AS OF 12/31/06		HIV PREVALENCE: AS OF 12/31/06		HIV/AIDS PREVALENCE: AS OF 12/31/06	
	<i>The number of new AIDS cases as reported to the CDC</i>		<i>The number of people living with AIDS</i>		<i>The number of people living with HIV (non-AIDS)</i>		<i>The number of people living with HIV (non-AIDS) and AIDS</i>	
<i>Race/Ethnicity</i>	#	% of Total	#	% of Total	#	% of Total	#	% of Total
White, not Hispanic	356	41.11%	3630	47.16%	3039	49.72%	6669	48.29%
Black, not Hispanic	290	33.49%	2336	30.35%	1699	27.80%	4035	29.22%
Hispanic	200	23.09%	1598	20.76%	1202	19.67%	2800	20.28%
Asian/Pacific Islander	1	0.12%	114	1.48%	86	1.41%	200	1.45%
American Indian/Alaska Native	0	0.00%	7	0.09%	10	0.16%	17	0.12%
Not Specified ¹	19	2.19%	13	0.17%	76	1.24%	89	0.64%
Total	866	100.00%	7698	100.00%	6112	100.00%	13810	100.00%
<i>Gender</i>	#	% of Total	#	% of Total	#	% of Total	#	% of Total
Male	620	71.59%	5549	72.08%	4262	69.73%	9811	71.04%
Female	246	28.41%	2149	27.92%	1850	30.27%	3999	28.96%
Total	866	100.00%	7698	100.00%	6112	100.00%	13810	100.00%
<i>Age at Diagnosis (years)²</i>	#	% of Total	#	% of Total	#	% of Total	#	% of Total
<13 years	1	0.12%	20	0.26%	54	0.88%	74	0.54%
13-19 years	10	1.15%	56	0.73%	96	1.57%	152	1.10%
20-44 years	542	62.59%	3304	42.92%	3389	55.45%	6693	48.46%
45 + years	313	36.14%	4318	56.09%	2573	42.10%	6891	49.90%
Total	866	100.00%	7698	100.00%	6112	100.00%	13810	100.00%
<i>Mode of Exposure, Adult</i>	#	% of Total	#	% of Total	#	% of Total	#	% of Total
Men who have sex with men (MSM)	263	30.58%	2509	33.02%	2498	41.90%	5007	36.92%

- ¹Includes multi-race (NH)
- ²Prevalent cases in the Massachusetts counties of the EMA are reported by current age
- ³Includes presumed heterosexual, unknown risk of partner and primary risk categories have been denied
- ⁴Includes hemophilia and cases with identified modes of transmission other than those listed above
- SOURCE: MDPH and NHDHHS

Table 2 (Right): Issues Affecting Access to Care for PLWH

ESTIMATED ANNUAL HIV CARE COSTS		
For PLWH without advanced disease	For PLWH with advanced disease	Data Source
<ul style="list-style-type: none"> • \$14,000 (includes \$1,700 for hospitalization) • \$249 monthly (does not include any medications) 	<ul style="list-style-type: none"> • \$34,000 (includes \$7,800 for hospitalization) • \$1,653 monthly (does not include any medications) 	<ul style="list-style-type: none"> • University of Alabama at Birmingham (UAB), 2002 cost analysis study. • Lifetime Cost of Current HIV Care in US (Medical Care), 2006 study
POVERTY STATUS		
Estimated percentage of people in EMA below 100% of FPL, 2004-2005	Estimated percentage of PLWH in EMA below 100% of FPL	Data Source
<ul style="list-style-type: none"> • 14% of MA population; 858,007 people • 9% of NH population; 110,303 people 	<ul style="list-style-type: none"> • 64% of Part A clients • 66% of PLWH surveyed for <i>VOE</i> 	<ul style="list-style-type: none"> • Kaiser Family Foundation, State Health Facts Online, 2004-2005. • BPHC, Part A client utilization data FY06. • Suffolk University, <i>Voices of Experience (VOE)</i>.
Estimated percentage of people in EMA below 200% of FPL, 2004-2005	Estimated percentage of PLWH in EMA below 200% of FPL	Data Source
<ul style="list-style-type: none"> • 30% of the MA population; 1,866,820 people • 23% of the NH population; 292,642 people 	<ul style="list-style-type: none"> • 79% of Part A clients 	<ul style="list-style-type: none"> • Kaiser Family Foundation State Health Facts Online, 2004-2005. • BPHC, Part A client utilization data FY06.
Estimated percentage of people in EMA below 300% of FPL	Estimated percentage of PLWH in EMA below 300% of FPL	Data Source
<ul style="list-style-type: none"> • Not available. 	<ul style="list-style-type: none"> • 84% of Part A clients 	<ul style="list-style-type: none"> • BPHC, Part A client utilization data FY06.
INSURANCE STATUS		
Estimated percentage and number of people in EMA without insurance coverage, including without Medicaid, 2004-2005	Estimated percentage of PLWH in the EMA without insurance coverage, including without Medicaid	Data Source
<ul style="list-style-type: none"> • 10% of MA population • 651,547 people • 10% of NH population • 128,243 people 	<ul style="list-style-type: none"> • 9% of Part A clients 	<ul style="list-style-type: none"> • Kaiser Family Foundation State Health Facts Online, 2004-2005. • BPHC, Part A client utilization data FY06.
UNEMPLOYMENT RATES		
Estimated percentage of people in EMA who were unemployed in July 2007	Estimated percentage of PLWH in EMA who were unemployed in July 2007	Data Source
<ul style="list-style-type: none"> • 5.2% in MA (up from 2.5% in July 2000) • 3.8% in NH (up from 3.0% in July 2000) 	<ul style="list-style-type: none"> • Not available. 	<ul style="list-style-type: none"> • United States Department of Labor, Bureau of Labor Statistics.
MEDICAID COVERAGE		
Estimated percentage and number of people in EMA with Medicaid coverage, 2004-2005	Estimated percentage and number of PLWH in EMA with Medicaid coverage, 2004	Data Source
<ul style="list-style-type: none"> • 18% in MA • 1,156,700 people • 10% in NH • 134,200 people 	<ul style="list-style-type: none"> • 48% of Part A clients • 82% of PLWH surveyed for <i>VOE</i> • 847 enrolled in MA using waiver 	<ul style="list-style-type: none"> • Kaiser Family Foundation State Health Facts Online, 2004-2005. • BPHC, Part A client utilization data FY06 • Suffolk University. <i>Voices of Experience</i>. • MA Office of Medicaid, 11/9/06.
	Estimated percentage of total funds for care for PLWH in the EMA from Medicaid	Data Source
	<ul style="list-style-type: none"> • 78% of Primary Care Funds • 85% of Medication Funds • 67% of Mental Health Funds • 39% of Substance Abuse Funds • 44% Women • 46% Caucasian • 20% Black • 10% Hispanic 	<ul style="list-style-type: none"> • PCS, <i>Funding for HIV/AIDS Care and Services in the Boston EMA, April 2007</i> • MA Office of Medicaid 11/9/06. • MDPH, Bureau of Substance Abuse Services 4/26/07. • NH Department of Health and Human Services 4/26/07. • RW Act Part A, B, C, D providers 3/07.
HOUSING AND HOMELESSNESS		
Among all people in the EMA	Among PLWH in the EMA	Data Source
<ul style="list-style-type: none"> • 35,000 families and unaccompanied individuals homeless in 2000 • Number of individuals on the streets and in shelters in Boston, MA in 12/2006: 6,636 	<ul style="list-style-type: none"> • Among Part A clients: <ul style="list-style-type: none"> - 68% permanently housed - 22% non-permanently housed, institutionalized or other 	<ul style="list-style-type: none"> • UMASS Boston, McCormack Institute: Center for Social Policy, <i>Meeting the Housing Needs of Lower-Income Massachusetts Residents, Report 2001</i>.

<ul style="list-style-type: none"> • Number served by emergency shelters in MA in 2003: 28,800 people • 6,435 people received temporary housing (emergency or transitional) and another 9,634 had to be turned away from shelters due to full capacity in New Hampshire during SFY2006 	<ul style="list-style-type: none"> - 9% housing status unreported • 58% of PLWH surveyed in <i>VOE</i> living in subsidized housing • 315 PLWH assisted by HOPWA programs in New Hampshire in SFY2006 • 19 PLWH sheltered in New Hampshire in SFY2006 • 224 PLWH (as of 12/31/06) in the Massachusetts EMA counties were homeless at time of diagnosis • 60% PLWH experience homelessness in lifetime • HIV/AIDS prevalence up to 9 times higher for homeless pops 	<ul style="list-style-type: none"> • Homeless in the City of Boston, Annual Census Report 2006. • The Center for Social Policy, John M. McCormack Graduate School of Policy Studies at UMass Boston, <i>Hard Numbers, Hard Times: Homeless Individuals in Massachusetts Emergency Shelters, 1999-2003</i>. • NH DHHS, Division of Behavioral Health, Emergency Shelter and Homeless Coordination Commission Annual Report, 7/1/05-6/30/06. • BPHC, Part A client utilization data FY06. • Suffolk University, <i>Voices of Experience (VOE)</i>. • AIDS Housing Corporation 2/8/07
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SUBSTANCE ABUSE

Prevalence within the general population within the EMA	Prevalence among PLWH in the EMA	Data Source								
<ul style="list-style-type: none"> • Total substance abuse admissions to treatment programs in MA in 2005: approx. 104,000 • Total substance abuse admissions to treatment programs in NH in 2006: 5,887 • Rank of most abused substance reported in treatment admissions in MA and NH in 2006: <table border="0"> <tr> <td>1. Alcohol</td> <td>1. Alcohol</td> </tr> <tr> <td>2. Heroin</td> <td>2. Marijuana</td> </tr> <tr> <td>3. Cocaine</td> <td>3. Cocaine/Crack</td> </tr> <tr> <td>4. Marijuana</td> <td>4. Heroin/Opioids</td> </tr> </table> • Past year heroin use reported by substance abuse treatment admissions in MA: 42.4% in FY2005 (up from 20% in FY1992) 	1. Alcohol	1. Alcohol	2. Heroin	2. Marijuana	3. Cocaine	3. Cocaine/Crack	4. Marijuana	4. Heroin/Opioids	<ul style="list-style-type: none"> • 29% of PLWH surveyed in <i>VOE</i> reported current substance abuse problems • 27% of female PLWH and 20% of male PLWH in the Massachusetts EMA counties with mode of exposure attributed to IDU 	<ul style="list-style-type: none"> • MDPH, Bureau of Substance Abuse Services presentation to the Planning Council, 4/26/07. • NH DHHS, Division of Alcohol and Drug Abuse Prevention and Recovery, 4/26/07. • Suffolk University, (<i>VOE</i>). • MDPH Surveillance Program, data as of July 2007.
1. Alcohol	1. Alcohol									
2. Heroin	2. Marijuana									
3. Cocaine	3. Cocaine/Crack									
4. Marijuana	4. Heroin/Opioids									

MENTAL ILLNESS

Prevalence within the general population within the EMA	Prevalence among PLWH in the EMA	Data Source
<ul style="list-style-type: none"> • Estimated percentage and number of adults with serious psychological distress (mental illness) in 2004-2005: • 531,000 or 11% of adult population in MA • 114,000 or 12% of adult population in NH 	<ul style="list-style-type: none"> • Percent of HIV-infected clients with active psychiatric diagnosis: 49% • Percentage of PLWH reporting a diagnosed mental illness in <i>VOE</i>: 37% • Percentage of PLWH reporting a need for mental health treatment in <i>VOE</i>: 46% 	<ul style="list-style-type: none"> • SAMHSA's Office of Applied Statistics, 2005. • John Snow Institute, Title I Clinical CQI Chart Review, 2006. • Suffolk University, <i>Voices of Experience (VOE)</i>.

SEXUALLY TRANSMITTED DISEASES

Prevalence within the general population within the EMA	Prevalence among PLWH in the EMA	Data Source
<p>Rates in MA portion EMA between 99 and 04:</p> <ul style="list-style-type: none"> • Increase in Primary and Secondary Syphilis: 200% (to 1.8 cases per 100,000 in 2004), with 117 cases in 2006 • Increase in Chlamydia: 49.5% (to 207.7 per 100,000 in 2004), with 11,778 cases in 2006 • Increase in Gonorrhea: 23.7% (to 48 cases per 100,000 in 2004), with 1,869 cases in 2006 • Percentage increase in fluoroquinolone-resistant gonorrhea cases in MA from 2001 to 2004: 2467% (from 3 cases to 74); 79 ciprofloxacin-resistant cases reported in 2005 <p>Rates in NH portion EMA 2006:</p> <ul style="list-style-type: none"> • Primary and Secondary Syphilis: 1.2 per 100,000 • Chlamydia: 168.4 per 100,000, an increase by 15% over 2005 • Gonorrhea: 15.6 per 100,000 	<ul style="list-style-type: none"> • Percent of cumulative AIDS cases in MA through 4/2001 estimated to have a concurrent STD: 9.2% • Approx. percent of MSM among early syphilis cases in 2006 in MA EMA counties: 80%, with close to half (47%) of these self-reporting as HIV+ • Percent of MSM among early syphilis cases in 2006 in NH EMA counties: 90%, and 80% of the early syphilis cases were HIV+ 	<ul style="list-style-type: none"> • Centers for Disease Control and Prevention, 2003 STD <i>Surveillance Report</i>, November 15, 2004. • Center for Disease Control and Prevention, <i>Gonococcal Isolate Surveillance Project Annual Report – 2003</i>, and the 2005 Report • NH DHHS, Bureau of Communicable Disease Surveillance, July 2007. • MDPH, Surveillance Program, data as of July 2007.

HEPATITIS B		
Prevalence within the general population within the EMA	Prevalence among PLWH in the EMA	Data Source
<ul style="list-style-type: none"> • Up to 300,000 in MA at one point or currently infected • MA EMA counties: 36 acute and 233 chronic confirmed cases reported in 2006 • NH EMA counties: 9 acute cases reported in 2006 (chronic case counts not available) 	<ul style="list-style-type: none"> • 18% of PLWH surveyed for <i>VOE</i> 	<ul style="list-style-type: none"> • MDPH, <i>Facts About Hepatitis B Disease and Hepatitis B Vaccine</i>. • Suffolk University, <i>Voices of Experience (VOE)</i>. • MDPH, Surveillance Program, data as of July 2007. • NHDHHS, Bureau of Communicable Disease Surveillance, July 2007
HEPATITIS C		
Prevalence within the general population within the EMA	Prevalence among PLWH in the EMA	Data Source
<ul style="list-style-type: none"> • Over 110,000 in MA • MA EMA counties: 2,012 chronic confirmed cases reported in 2006 	<ul style="list-style-type: none"> • 46% of PLWH surveyed for <i>VOE</i> • 10,114 in MA 	<ul style="list-style-type: none"> • MDPH, Surveillance Program, data as of July 2007. • Suffolk University, <i>Voices of Experience (VOE)</i>.
FORMERLY INCARCERATED POPULATIONS		
Impact on service delivery by former prisoners who were released in the preceding 3 years and had HIV/AIDS diagnosis on the date of their release	Data Source	
<ul style="list-style-type: none"> • HIV/AIDS prevalence 1.7% greater among the incarcerated • NE inmates have the highest rate of HIV infection (4.1%) • Nationwide, minorities disproportionately represented in institutions • MA prisons, 289 Black and 411 Hispanic incarcerated individuals are HIV+ (29% and 41.2% of the prison HIV caseload respectively), which means that over 70% of HIV+ incarcerated individuals are members of a minority population. • 1,004 PLWH in MA were diagnosed while incarcerated (as of 9/1/07) 	<ul style="list-style-type: none"> • HIV in Prisons, 2004 (US Department of Justice)- revised 3/1/2007 • MDPH HIV/AIDS Summary Report, 9/2007 	

Table 3: Unmet Needs Estimate

Population Sizes		Value		Data Source(s)
Row A.	Number of persons living with AIDS (PLWA), as of 12/31/06	7,698		Living AIDS cases reported in the Boston EMA, from the Massachusetts Department of Public Health and the New Hampshire Department of Health and Human Services
Row B.	Number of persons living with HIV (PLWH)/non-AIDS/aware, as of 12/31/06	6,112		Living HIV (non-AIDS) cases reported in the Boston EMA, from the Massachusetts Department of Public Health and the New Hampshire Department of Health and Human Services
Row C.	Total number of HIV+/aware as of 12/31/06	13,810		
Care Patterns		Value		Data Source(s)
Row D.	Number of PLWA who received the specified HIV primary medical care during the 12-month period [1/1/06 – 12/31/06]	5,459		For NH region of EMA: proportion of cases with met need generated by the New Hampshire Department of Health and Human Services (HARS; NH CARE Program; Medicaid) For MA region of EMA: Suffolk University study
Row E.	Number of PLWH/non-AIDS/aware who received the specified HIV primary medical care during the 12-month period [1/1/06 – 12/31/06]	4,336		For NH region of EMA: proportion of cases with met need generated by the New Hampshire Department of Health and Human Services (HARS; NH CARE Program; Medicaid) For MA region of EMA: Suffolk University study
Row F.	Total number of HIV+/aware who received the specified HIV primary medical care during the 12-month period [1/1/06 – 12/31/06]	9,795		
Calculated Results		Value	Percent	Calculation
Row G.	Number of PLWA who did not receive the specified HIV primary medical care	2,239	29%	Value: Value A – Value D. Percent: Value G / Value A
Row H.	Number of PLWH/non-AIDS/aware who did not receive the specified HIV primary medical care	1,776	29%	Value: Value B – Value E. Percent: Value H / Value B
Row I.	Total HIV+/aware not	4,015	29%	Value: Value G + Value H. Percent:

Table 4: FY 2006 Funding Streams Analysis

Part A Service Categories	Part A	MA/Part B	NH/Part B	Part B	Part C	Part D	Part F	Medicaid	HOPWA/HUD	MA/State	BSAS	Total
Adoption/Foster Care	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,438,417	\$0	\$0	\$0	\$2,438,417
Case Management	\$2,104,611	\$623,948	\$3,549	\$335,874	\$649,037	\$649,037	\$0	\$293,635	\$1,934,768	\$1,281,031	\$0	\$7,226,452
Client Advocacy	\$388,206	\$0	\$0	\$103,301	\$45,427	\$45,427	\$300,000	\$0	\$70,404	\$375,104	\$0	\$1,282,443
Complementary Therapies	\$0	\$0	\$0	\$10,940	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,940
Day Care	\$0	\$110	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$121,279	\$0	\$121,788
Dental	\$552,935	\$0	\$0	\$135,679	\$0	\$0	\$1,338,725	\$845,032	\$0	\$114,850	\$0	\$2,987,221
Drug Reimbursement	\$469,327	\$10,377,248	\$145,319	\$35,816	\$0	\$0	\$0	\$93,069,621	\$435	\$5,446,645	\$0	\$109,544,410
Evaluation	\$27,560	\$338,832	\$20,053	\$13,497	\$26,538	\$0	\$0	\$0	\$3,589	\$0	\$0	\$430,069
Food Services	\$1,511,672	\$58,328	\$1,789	\$41,581	\$0	\$0	\$0	\$0	\$5,868	\$425,887	\$0	\$2,045,125
Housing	\$1,861,954	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,237,273	\$4,330,197	\$0	\$10,429,424
MAI	\$355,261	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$355,261
Mental Health	\$386,146	\$31,601	\$0	\$435,670	\$56,656	\$56,656	\$0	\$1,907,099	\$0	\$40,470	\$0	\$2,857,642
Peer Support	\$632,602	\$77,090	\$0	\$0	\$57,735	\$0	\$0	\$0	\$0	\$354,267	\$0	\$1,121,693
Primary Care	\$287,827	\$403,086	\$30,279	\$2,801,453	\$261,800	\$0	\$0	\$25,289,641	\$0	\$3,264,059	\$0	\$32,338,145
Quality Management	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
Respite Care	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$494	\$0	\$0	\$494
Substance Abuse	\$936,458	\$0	\$13,360	\$26,251	\$0	\$0	\$0	\$2,168,367	\$932	\$0	\$2,403,900	\$5,549,267
Support Services	\$285,345	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285,345
Transportation	\$367,021	\$33,422	\$0	\$9,325	\$27,758	\$27,758	\$0	\$4,804,605	\$3,956	\$42,516	\$0	\$5,288,602
Administrative/Program Support	\$666,957	\$214,989	\$69,789	\$622,877	\$800,441	\$0	\$0	\$0	\$33,231	\$287,122	\$0	\$2,695,407
Subtotal Title I Services	\$11,083,882	\$12,158,654	\$284,138	\$4,572,265	\$1,925,791	\$1,638,725	\$130,816,416	\$6,290,950	\$16,083,425	\$2,403,900	\$0	\$187,258,146
Additional Services	Part A	MA/Part B	NH/Part B	Part B	Part C	Part D	Part F	Medicaid	HOPWA/HUD	MA/State	BSAS	Total
Capacity Building/Technical Asst	\$0	\$0	\$8,640	\$1,751	\$37,355	\$292,982	\$0	\$43,539	\$0	\$0	\$0	\$384,266
Counseling & Testing	\$0	\$0	\$0	\$187,478	\$19,865	\$0	\$0	\$1,825,730	\$0	\$0	\$0	\$2,033,073
Education/Risk Reduction	\$0	\$0	\$0	\$40,325	\$123,558	\$546,899	\$0	\$0	\$0	\$0	\$0	\$710,782
Emergency Family Assistance	\$0	\$35,099	\$0	\$0	\$11,218	\$0	\$0	\$273,954	\$40,437	\$0	\$0	\$360,708
Home Health Care	\$0	\$375,914	\$7,503	\$0	\$0	\$0	\$0	\$7,694,410	\$0	\$710,693	\$0	\$8,788,521
In-Patient Care	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,725,168	\$0	\$0	\$0	\$27,725,168
Insurance Continuation	\$0	\$0	\$239,731	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$239,731
Outreach	\$0	\$50,496	\$0	\$67,349	\$70,505	\$0	\$0	\$45,290	\$25,794	\$0	\$0	\$259,433
Prevention/Education	\$0	\$0	\$0	\$27,399	\$118,719	\$0	\$0	\$0	\$7,226,632	\$0	\$0	\$7,372,751
Other Subtotal	\$0	\$1,944,577	\$8,640	\$398,173	\$350,867	\$1,495,726	\$1,169,891	\$53,284	\$4,538,566	\$0	\$0	\$9,959,724
Subtotal of Additional Services	\$0	\$2,406,085	\$264,514	\$722,476	\$732,088	\$2,335,606	\$36,589,469	\$416,067	\$14,367,852	\$0	\$0	\$57,834,157
Total of All Services	\$11,083,882	\$14,564,739	\$548,652	\$5,294,740	\$2,657,879	\$3,974,331	\$167,405,886	\$6,707,017	\$30,451,277	\$2,403,900	\$0	\$245,092,303

Table 5: FY 2006 Client Utilization Data

Demographic Group/Exposure Category	Part A		MA DPH Programs		NH Part B		Part C		Part D		MA/NH Medicaid	
	#	%	#	%	#	%	#	%	#	%	#	%
Race												
White	3509	49%	2013	50%	140	65%	2194	56%	220	21%	4832	50%
Black/ African American	2167	30%	912	23%	43	20%	884	22%	515	49%	1838	19%
Am. Indian/ Alaskan Native	109	2%	27	1%	2	1%	7	<1%	1	<1%	16	<1%
Asian	71	1%	32	1%	3	1%	42	1%	15	1%	179	2%
Some other race	23	<1%	5	<1%	12	6%	800	20%	269	26%	847	9%
Two or more races	0	0%	21	1%	14	7%	18	<1%	29	3%	0	0%
Not specified	1349	19%	1023	25%	0	0%	0	0%	0	0%	1890	20%
Total	7228	100%	4033	100%	214	100%	3945	100%	1049	100%	9602	100%
Ethnicity	#	%	#	%	#	%	#	%	#	%	#	%
Hispanic	1752	24%	1136	28%	37	17%	929	24%	278	27%	847	9%
Not Hispanic	4510	62%	2135	53%	177	83%	3014	76%	771	73%	6865	71%
Not specified	966	13%	762	19%	0	0%	2	<1%	0	0%	1890	20%
Total	7228	100%	4033	100%	214	100%	3945	100%	1049	100%	9602	100%
Gender	#	%	#	%	#	%	#	%	#	%	#	%
Male	4673	65%	2574	64%	146	68%	2759	70%	348	33%	5379	56%
Female	2491	34%	1437	36%	68	32%	1159	29%	699	67%	4223	44%
Transgendered	54	1%	4	0%	0	0%	27	1%	2	<1%	0	0%
Unknown	10	<1%	18	0%	0	0%	0	0%	0	0%	0	0%
Total	7228	100%	4033	100%	214	100%	3945	100%	1049	100%	9602	100%
Age	#	%	#	%	#	%	#	%	#	%	#	%
<13 years	170	2%	39	1%	2	1%	13	<1%	202	19%	901	9%
13-19 years	102	1%	50	1%	2	1%	50	1%	326	31%		
20-44 years	4187	58%	1832	45%	131	61%	2155	54%	385	37%	4786	50%
45+ years	2769	38%	2112	52%	79	37%	1738	44%	136	13%	3915	41%
Total	7228	100%	4033	100%	214	100%	3956	100%	1049	100%	9602	100%
Adult/Adolescent AIDS Exposures	#	%	#	%	#	%	#	%	#	%	#	%
Men who have sex w/men	2103	24%	762	19%	86	40%	1410	36%	70	9%	N/A	N/A
Injection drug users (IDU)	2166	24%	1439	36%	27	13%	1005	26%	95	12%	N/A	N/A
MSM/IDU	0	0%	66	2%	8	4%	61	2%	4	<1%	N/A	N/A
Heterosexual	3918	44%	1203	30%	82	38%	1119	29%	383	47%	N/A	N/A
Other/hemophilia/blood	508	6%	92	2%	3	1%	52	1%	102	12%	N/A	N/A
Risk not reported/identified	194	2%	400	10%	7	3%	238	6%	167	20%	N/A	N/A
Total	8889	100%	3962	100%	213	100%	3885	100%	821	100%	N/A	N/A
Pediatric AIDS Exposures	#	%	#	%	#	%	#	%	#	%	#	%
Mother with/at risk for HIV	242	100%	71	100%	1	100%	24	100%	109	92%	N/A	N/A
Other/hemophilia/blood	0	0%	0	0%	0	0%	0	0%	1	1%	N/A	N/A
Risk not reported/identified	0	0%	0	0%	0	0%	0	0%	8	7%	N/A	N/A
Total	242	100%	71	100%	1	100%	24	100%	118	100%	N/A	N/A

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