CHAPTER 4: CURRENT CONTINUUM OF CARE.

4.1. Introduction.

This chapter outlines the continuum of care currently available in the Baltimore EMA. The term "continuum of care" describes "a set of services and linking mechanisms that respond to an individual's or family's changing needs for HIV prevention and care. The continuum of care is the complete system of providers and available resources (Ryan White-funded and others) for people at risk for, or living with, HIV and their families within a particular geographic service area, from primary care to supportive services" (IGS 2011c).

The HIV service continuum ranges from services for those unaware of their HIV status to those fully engaged in care. Available services in the EMA span from prevention programs to reduce the spread of HIV to hospice services for end-of-life care. Additionally, numerous treatment and support services ensure that HIV-infected individuals are able to live stable and healthy lives. Described in this chapter are the 17 Ryan White Part A funded service categories that compose the Baltimore EMA's current continuum of care as of fiscal year 2011.

The continuum is a result of evidence-based strategic planning. The Baltimore EMA continuum of care is based on needs determined by local demographic and epidemic data, in addition to being compliant with current HRSA guidance. In chapter 3, the most pressing needs of PLWH/As in the Baltimore EMA were determined using a variety of sources: the HRSA unmet need framework, the 2010 consumer survey, PLWH/A Committee feedback, and various stakeholder meetings. These sources informed the comprehensive and evidence-based assessment of need in the EMA in which the continuum of care is anchored.

HRSA's continuum-of-care model frames the continuum of care in the EMA. In June 2011, the planning council voted to expand the continuum of care to include prevention as a cross-cutting goal (Slaughter 2011). Table 4.1 illustrates the continuum of care currently in place within the EMA.

Table 4.1.

<table>
<tr><th colspan="6">HRSA's Continuum of Care Model</th></tr>
<tr><td>1. Unaware of HIV Status</td><td>2. Aware of HIV status but not in care</td><td>3. May be in care but not HIV care</td><td>4. Entered HIV primary medical care but lost to follow up</td><td>5. In and out of HIV care (infrequent user)</td><td>6. Fully engaged in HIV primary medical care</td></tr>
<tr><td colspan="6">Prevention</td></tr>
<tr><td>EIIHA</td><td colspan="5">Care</td></tr>
<tr><td>Goal 1: Prevention</td><td colspan="2">Goal 2: Engage clients in HIV care</td><td colspan="2">Goal 3: Stabilize clients in HIV care</td><td>Goal 4: Maintain clients in HIV care</td></tr>
</table>

Source: Slaughter 2011.

The following four goals are addressed in the current continuum of care:

- Prevention, to reduce the number of new PLWH/As and maximize the number of individuals that know their serostatus.
- Engagement, to help PLWH/As to enter care.
- Stabilization, to keep PLWH/As in care through core medical services.
- Maintenance, to continue care throughout the lifecycle through support services.

4.2. Regulations.

Ryan White services are provided within the context of national regulations and local oversight. This environment ensures federal funding is spent appropriately across the country and effectively within each jurisdiction. The following sub-sections briefly outline Ryan White federal regulations.

4.2.1. Early Identification.

Since the publication of the last comprehensive plan, Ryan White has been reauthorized, the Ryan White HIV/AIDS Treatment Extension Act of 2009. This act, the most recent iteration of the Ryan White legislation, adds new requirements to determine the size and demographics of those unaware of their HIV status in addition to those who know their status. As seen in the Baltimore EMA FY 2011 Part A application, the Early Identification of Individuals with HIV/AIDS (EIIHA) initiative began a multi-dimensional approach to identifying and informing unaware individuals of their status (BCHD 2010).

The EMA coordinates with religious organizations to incorporate HIV prevention programming. Faith and religion play a particularly strong role in black communities.

4.2.2. Percentage Core Medical.

The act continues to emphasize that the focus of the continuum of care must be on core medical services. As stated in the 2006 act, at least 75 percent of total Ryan White Part A funding for direct services must be allocated to core medical services. The remaining funds (i.e., up to 25 percent of direct service funds) are available for support services proven to help individuals attain and remain in care.

Primary medical care, therefore, is the focal point of the continuum of care in the Baltimore EMA. For FY 2012, the planning council has set aside approximately 40 percent of the direct service component of the anticipated Part A award for outpatient ambulatory health services (OAHS). Overall, the planning council allocated over 76 percent of direct service funds for core medical services for FY 2012 (IGS 2011a).

4.2.3. Funding of Last Resort.

Another legislative requirement is that Ryan White Part A be the funding stream of last resort. Individuals receiving services paid for by Part A dollars must have no other resources available to pay for these services. Since Ryan White is not meant to be a long-term entitlement program (like Medicaid or Medicare), planning and research begins to locate long-term or permanent services/ entitlements as soon as Ryan White Part A funding begins for an individual. Planners, providers and consumers must be aware of and use other (more long-term) funding streams available to them. This helps ensure the continuation of funding through Ryan White for life-saving treatment and care for individuals most in need.

4.2.4. HRSA Guidance.

HRSA provides periodic guidance for the implementation of the Ryan White program. The agency works closely with planning council leadership and the grantee to provide support as leadership works to refine services, change reporting systems, and make other adjustments to meet the requirements of the 2009 legislation.

4.3. Prevention.

The continuum of care begins with prevention. Health education and risk reduction interventions, needle exchange, testing and identification of PLWH/As, HIV/STI partner services, and linkage-to-care activities are key strategies to reduce new transmission of HIV, prevent uninfected individuals from contracting the disease, and reduce transmission rates.

Local health departments, community-based organizations, community health centers, substance-abuse treatment centers and universities implement HIV-prevention interventions in the Baltimore EMA. They are targeted to the priority populations identified by Maryland's Community Planning Group and Regional Advisory Committee. (See chapter 6 for additional information on Maryland's HIV-prevention planning process and priority populations.) The geographical areas and risk populations served are determined by the epidemiological data in each region/jurisdiction to ensure that HIV-prevention services are provided to individuals at the greatest risk of HIV infection. HIV-prevention providers utilize evidence-based interventions that are culturally appropriate for the individuals and communities they serve (DHMH 2012). The following sections discuss prevention programs and initiatives in place within the EMA.

4.3.2. Priority Populations' Prevention.

IDEHA and BCHD provide funding, technical assistance and capacity-building activities to local health departments and community-based organizations to implement a variety of primary and secondary prevention programs. Risk reduction, education and prevention interventions are incorporated into prevention programs targeted to identified priority populations.

4.3.2.1. Prevention with Positives.

Individual and group interventions are used to educate PLWH/As on important skills to help them reduce transmission rates. Participants of prevention-with-positives programs learn skills for making safer choices, developing healthy relationships, and adhering to their HIV treatment regimens. These programs also help HIV-infected individuals cope with the stress of living with HIV. Evidence-based curricula currently utilized in the Baltimore EMA include the Healthy Relationships and Positive Wellness and Renewal (POWER) programs (DHMH 2011e).

According to the planning council's standards of care for outpatient ambulatory health services, all Ryan White-funded patients should receive counseling regarding risk reduction and HIV prevention at each clinic visit. This counseling must be documented in the patient's medical record (IGS 2011e).

4.3.2.2. Prevention for Heterosexuals.

Local health departments, community health centers and substance-abuse treatment centers have the capacity to implement prevention programming for high-risk heterosexual men, women and youth who are HIV negative, but at a high risk for HIV infection. Evidence-based curricula, such as Pharaoh and SISTA, provide HIV risk-reduction information and build skills for negotiating safer sex and proper condom use (DHMH 2011e). (SISTA stands for Sisters Informing Sisters about Topics on AIDS.)

HIV prevention providers utilize evidence-based interventions that are culturally appropriate for the individuals and communities they serve.

Street and community outreach activities engage high-risk youth, both hetero- and homosexual. Small health-education groups facilitate HIV-prevention discussions that are focused on skill-building activities, health education, teen pregnancy prevention, drug-abuse prevention and communication. Youth are recruited to serve as peer mentors within their social networks (DHMH 2011e).

4.3.2.3. Prevention for Racial Minorities.

Due to the disproportionate impact of HIV/AIDS on two racial/ethnic minority groups — African-Americans and Hispanics — many HIV-prevention activities described in this chapter are targeted to these groups. IDEHA and BCHD partner with a variety of organizations to outreach to racial/ethnic minority communities and ensure the availability of culturally competent HIV-prevention services. For example, the EMA coordinates with religious organizations to incorporate HIV-prevention programming. Faith and religion play a particularly strong role in black communities.

IDEHA implements a Statewide Faith Based Community Initiative (FBCI) to collaborate with leaders and members of all faiths in the state to

raise awareness about HIV/AIDS, develop responsible, effective communication about HIV/AIDS prevention in communities of faith, and facilitate healthy dialogue about HIV/AIDS. This initiative was launched in 2005 and is a component of IDEHA's overall effort to reach African-American communities (DHMH 2011f).

IDEHA and BCHD partner to ensure the availability of culturally and linguistically appropriate HIV prevention for Hispanics in the Baltimore/Towson MSA. These services include HIV testing, sexually transmitted infection/HIV partner services, and health education sessions that are delivered in Spanish by bilingual staff.

4.3.2.4. Prevention for Sexual Minorities.

The most common mode of HIV transmission in the EMA is through MSM contact, accounting for 35.9 of all HIV-transmission in 2008 (DHMH 2010). The Healthy Relationships and POWER interventions are provided by community-based organizations to MSM and transgender populations. Providers receive "Living Out Loud: How To Serve Transgender Clients Where They Are," a cultural competence training for those who provide health care to transgender people (DHMH 2011e). This training helps providers understand the medical and social needs of their transgender patients in order to provide them the best quality care.

Clients identified through outreach are often transient and have a history of non-compliance that impacts their successful linkage to care.

4.3.2.5. Prevention for IDUs.

Transmission by means of injection drug use accounted for 27.2 percent of the 2008 new diagnoses of HIV in the Baltimore EMA (DHMH 2010). Baltimore City, with its heroin and crack epidemics, poses unique challenges to organizations looking to prevent the spread of blood-borne diseases among injection drug users.

The Baltimore City Health Department operates a needle-exchange program (NEP) to slow the spread of diseases among IDUs and their sexual/needle-sharing partners. The NEP operates from a clinic-based site, and has mobile units and roving NEP workers. Morning, afternoon, evening and weekend stops occur at 20 locations throughout Baltimore City. NEP workers provide services in the adult entertainment district in Baltimore, known as "The Block" (IGS 2011e).

In 2010, the NEP program provided 1,877 individuals with 404,310 sterile needles, an average of 17 clean needles per participant (DHMH 2011f). A total of 9 million needles were distributed between 2010 and the inception of the program in 1994 (IGS 2011e). NEP also helps with substance-abuse treatment access for IDU. Through July 2009, 2,700 drug users had been referred to treatment.

Many interventions for substance abusers take place within substance-abuse treatment programs and community health centers. Evidence-based group level interventions include Project SMART and Extra Steps (DHMH 2011e). The success of prevention programs targeted at substance abusers is evident — chapter 2 shows that IDU as a mode of HIV transmission is decreasing. Substance-abuse treatment as a Ryan White-funded service category is elaborated on in section 4.5.5.

4.3.3. Testing and Identification.

Maryland employs many HIV-testing strategies to identify individuals unaware of their HIV status. Local health departments, community-based and faith-based organizations, community health centers, substance-abuse treatment centers, agencies that work with recent immigrants, hospital emergency departments, correctional facilities, STD clinics, and other agencies that serve high-risk clients provide HIV counseling, testing and referral services (BCHD 2010).

Individuals unaware of their status are more likely to engage in high-risk behaviors associated with HIV transmission. Conversely, PLWH/As who know their HIV status are more likely to change their behaviors to reduce their chances of infecting others (ONAP 2010). However, only a little over half (54 percent) of U.S. adults aged 18-66 report ever having been tested for HIV (Kaiser 2011).

In September 2006, the CDC recommended that routine HIV screening be implemented in health-care settings for all adults ages 13-64, and repeat screening for those at high risk (Kaiser 2011). As of July 2008, Maryland adopted opt-out testing, meaning that most adults will be notified and tested for HIV as a regular part of primary medical care unless a patient declines (Kaiser 2011). More information about routine testing is explained in section 5.2.1.

The increase in testing resulting from CDC recommendations and legislative changes aims to identify HIV-positive individuals earlier in their infection. This allows providers in the EMA to link PLWH/A to treatment services sooner, leading to reductions in HIV transmission rates.

4.3.4. Partner Services.

In Maryland, the process for ensuring the provision of partner services to persons reported to be HIV positive begins when the client obtains an HIV test. Post HIV test procedures include counseling and assistance to the individual to inform all sexual and needle-sharing partners that they may have been exposed to HIV (DHMH 2011f). HIV and STI partner services in the EMA are jointly funded by IDEHA's Center for HIV Prevention and its Center for STI Prevention.

Partner services include conducting interviews, partner elicitation, partner notification, HIV counseling and testing, STI screening and treatment, as well as linkage to HIV medical care and prevention services as appropriate (DHMH 2011f).

4.3.5. Treatment as Prevention.

Scientific data demonstrate that the impacts of HIV prevention are magnified when paired with comprehensive treatment interventions. The nationally developed "treatment is prevention" paradigm combines testing, linkage to care and stabilization of clients in treatment regimens (IGS 2011e). Prompt and sustained ART treatment can reduce an individual's viral load to lower his or her potential to transmit HIV, providing a preventative effect for sexual and needle-sharing partners (Project Inform 2011). Specific services related to linkage and care activities in the EMA are described in sections 4.4-4.6.

4.4. Engagement.

Providing support and guidance to HIV-positive individuals, and helping them to enter medical care soon after receiving their HIV test results, is critical. Section 4.3 demonstrated the connection between prevention, medical care, and reducing HIV transmission.

Early entry into services has been shown to improve medical/health outcomes and slow the progression from HIV to AIDS. Several HRSA service categories have been designed to identify, diagnose and link individuals to care. Outreach, non-medical case management and medical case management are crucial to effective engagement in the continuum of care in the Baltimore EMA.

4.4.1. Outreach.

Outreach programs identify people who are unaware of their HIV status and find those that have dropped out of care (i.e., case finding) so that they may become aware of, and enroll in, care and treatment services. These services may target high-risk communities or individuals. Outreach services do not include HIV counseling, testing or prevention education. Ryan White Part A (treatment) and prevention outreach services must be planned and coordinated together to avoid duplication of effort (ONAP 2010).

Outreach services often have been where PLWH/As first receive support overcoming fears due to stigma and discrimination.

Non-traditional outreach — such as street outreach, mobile testing, and testing in non-clinical sites — targets people in high-risk areas. Outreach workers may encounter individuals who know that they are HIV positive but have not received any HIV medical care. Clients identified through outreach are often transient and have a history of non-compliance that adversely impacts their successful linkage to care (BCHD 2011b).

Section 5.5 describes barriers that PLWH/As face, such as infrastructure and transportation barriers, not knowing where to receive care, navigating a complex medical system, and the expenses of co-pays and medications. Outreach workers help

clients mitigate these barriers to ensure they get back into and remain in care.

Stigma and fear may prevent PLWH/As from seeking services, including testing and medical care. Fear and shame often prohibit PLWH/As from disclosing their status to friends, family, employers and others. Outreach services often have been where PLWH/As first receive support overcoming fears due to stigma and discrimination.

An innovative linkage-to-care program called SMILE (Strategic Multisite Initiative for the identification, Linkage, and Engagement in care of youth with undiagnosed HIV infection) is funded until June 2012 in Baltimore through the CDC and the National Institutes of Health (NIH) (Bishop 2011). SMILE uses a unique service-delivery model to provide community-wide resources to link youth to medical and supportive services. The program's youth-referral specialist is available on call and offers youths options about where to get care. Using referrals, case monitoring and direct linkage, youths are being successfully linked and engaged in care. In 18 months, from June 2010 to November 2011, SMILE enrolled 86 young people (Bishop 2011). Innovative outreach programs like SMILE help the Baltimore EMA establish a comprehensive continuum of care.

As of March 2011, there were eight Ryan White Part A-funded outreach providers in the EMA (BCHD 2011a).[9] Chase Braxton Health Services and the People's Community Health Center are among those that receive Ryan White Part C funding for outreach through early intervention services, in addition to Part A funding for outreach.[10] In FY 2010, 1,278 unduplicated clients with HIV were identified through street and site-based outreach (BCHD 2011b). Of those, 331 individuals were newly diagnosed and 929 had previously been lost to care (BCHD 2011b).

4.4.2. Non-Medical Case Management.

Non-medical case management successfully informs individuals about the variety of medical and support services and programs available to them. The service aids PLWH/As who receive medical care through public insurance programs and need supportive services to enter and maintain themselves in medical care. Non-medical case management includes the provision of advice and assistance in obtaining medical, social, community, legal, financial and other needed services. Services focus on ensuring that consumers have access to special HIV resources not offered by other service providers.

Activities should be based on immediate problem solving, not establishing long-term relationships or ongoing services. Providers may assist those who need support completing lengthy and complex processes for entitlement programs applications. This is beneficial for individuals confronting a crisis or a single issue (e.g., assistance applying for subsidized housing). All clients receive referrals to HIV medical services if they are not already enrolled in treatment.

Five providers in the Baltimore EMA offer non-medical case management (BCHD 2011a). In FY 2010, 1,155 clients received non-medical case management services. Nearly 13,000 service units, including face-to-face meetings, telephone calls, and other encounters were provided to PLWH/As (BCHD 2011b). Individuals may be referred to non-medical case management through non-Ryan White funded programs. Once individuals are successfully and fully linked to care, services are coordinated around primary medical care by medical case managers.

4.4.3. Medical Case Management.

Medical case management (including treatment adherence) incorporates client-centered services that link clients with health, psychological and other services. Medical case managers assess clients' needs, provide referrals and support to access HIV-related medical care, and help create personalized plans for care and treatment adherence. Through these ongoing need assessments, case managers ensure coordinated access to medically appropriate health and support services and continuity of care.

[9] All mention of providers in this chapter refers to Ryan White Part A-funded providers in FY 2010 unless otherwise noted.

[10] Ryan White Part C funds early intervention services related to HIV disease, provided by public and/or nonprofit private entities on an outpatient basis, including counseling, testing, referrals, clinical and diagnostic services, and periodic medical evaluations.

The medical case manager serves as the linchpin that synchronizes the essential services an HIV-positive person needs to maintain his or her health and quality of life. They typically work with individuals on a continuing basis to address long-term concerns and forge trusting relationships. Medical case managers help educate clients about HIV medications and manage medication side effects. As one of the most constant figures on a health-care team, the medical case manager often assesses and refers clients for mental health or substance-abuse treatment if those services are needed.

The planning council, through its Continuum of Care Committee, aims to improve Ryan White medical case management and prepare for changes in service provision by reviewing and revising the standards of care that govern these services. During the 2011 planning year, the committee extensively reviewed medical case management service standards under Part A and MAI, as well as those that govern Part B and Medicaid. By streamlining administrative and provider requirements the focus can be on providing the highest caliber care to clients.

There were 18 agencies providing medical case management services in the Baltimore EMA in FY 2010 (BCHD 2011a). That year, 2,982 clients received medical case management services (BCHD 2011b). Of these, 40 percent (1190 clients) received intensive case management services in the form of telephone, text, e-mail and face-to-face visits every six months (BCHD 2011b).

4.5. Stabilization.

The economic costs of helping an individual maintain his or her health are smaller than the costs of trying to reestablish the health of someone whose HIV infection has done irreversible damage to his or her body and immune system. Overall good health is dependant on the medical care and drug therapy needed to treat HIV and other co-morbid conditions. With advancements in medicine and technology, individuals with HIV/AIDS are better able to live full, active lives with proper treatment and disease management.

For fiscal year 2011, the Baltimore EMA funded a total of 17 service categories, consisting of 8 core medical services[11] and 9 support services[12] (BCHD 2011a). Support HIV services funded by the Ryan White Part A and MAI funds have been shown to facilitate client access to, and retention in HIV primary medical care.

4.5.1 Outpatient/Ambulatory Health.

The provision of HIV treatment and care under Ryan White has been centered on outpatient/ambulatory health services. OAHS includes preventive care, screening, diagnosis and treatment of common physical and mental conditions. The planning council breaks OAHS into five subcategories: primary medical care (PMC), emergency medical (financial) assistance, PMC co-morbidity, viral load testing, and specialty laboratory services.

Overall good health is dependant on the medical care and drug therapy needed to treat HIV and other co-morbid conditions.

The Baltimore EMA, home to both the University of Maryland Medical Center and the Johns Hopkins Hospital, is fortunate to have a wealth of clinical expertise. There were 29 OAHS contracts, over 11 providers, funded through Ryan White Part A in FY 2010 (BCHD 2011a). These providers saw a total of 6,520 clients and provided 20,865 outpatient visits during that year (BCHD 2011b).

The need to address co-morbidities through the Ryan White continuum of care also falls under OAHS. Patients often suffer from co-morbid conditions such as hepatitis C, diabetes, lung cancer, substance-abuse issues, or heart disease upon entry into care. Treating HIV-positive individuals with multiple health conditions is complex — often requiring a team of medical specialists.

[11] The eight core medical services funded include OAHS, medical case management, health insurance premiums and cost-sharing assistance, mental health, substance-abuse treatment/outpatient, medical nutrition therapy, hospice; and oral health care.

[12] The nine support service categories funded include non-medical case management, food bank/home-delivered meals, housing, medical transportation, outreach, psychosocial support, substance-abuse treatment/residential, child care services, and legal services.

OAHS services also fund emergency financial assistance (EFA). Programs use EFA funds for drugs not on the MADAP formulary. In FY 2010, 997 clients received emergency medication co-pay assistance, 1,240 clients received emergency medical payment help, 115 clients received emergency professional services, and 97 clients received durable medical supplies (BCHD 2011b).

4.5.2. Medication Assistance.

Prescription drugs are often the most costly portion of medical care for PLWH/As. Many of the Ryan White consumers in the Baltimore EMA, already at a socio-economic disadvantage, require HIV medications that they are unable to afford. The Maryland AIDS Drug Assistance Program, funded by the Ryan White Part B program, helps consumers purchase the medications that are essential in managing HIV infection and co-morbid conditions. MADAP only pays for the 201 drugs on its formulary (DHMH 2011c). The formulary covers generic prescriptions for antiretrovirals, opportunistic infections and prophylaxis, hepatitis B and C, anorexia and wasting, as well as other categories of drugs that a PLWH/A might need (DHMH 2011c). Medicaid and the state's Primary Adult Care (PAC) program provide pharmaceutical assistance too.

Mental health services are a critical component of the continuum of care. Mental health conditions can obstruct individuals from seeking and adhering to primary medical care.

Since Ryan White is a payer of last resort, consumers are only eligible for MADAP if all other funding sources have been exhausted. There are about 4,000 MADAP consumers per month (DHMH 2011b). To be eligible for MADAP, consumers must: be HIV positive, earn less than 500 percent of the federal poverty level, be residents of Maryland, not be eligible for Medicaid or Primary Adult Care, and submit a complete MADAP application (DHMH 2011b).

4.5.3. Health Insurance Premiums and Cost-sharing Assistance.

Many PLWH/As have ongoing needs for services that provide financial assistance to maintain continuity of health insurance. Assistance in paying for health insurance premiums, co-payments and deductibles is provided under this service. There are currently three agencies in the Baltimore EMA that offer health insurance premium and cost-sharing assistance — Chase Brexton Health Services, the Johns Hopkins University Moore Clinic, and the University of Maryland Evelyn Jordan Center, all supported by Part A (BCHD 2010a). A total of 2,742 clients were assisted with ongoing medication co-pays of varying amounts while the approval for their other medication funding sources was pending (BCHD 2011b).

IDEHA also has an insurance-premium program, MADAP Plus, which covers health premiums and prescription drugs, ensuring that consumers retain health insurance and continue receiving health-care treatment. To qualify for MADAP Plus, funded under Ryan White Part B, consumers must: fill out an application; meet eligibility requirements for MADAP; have a qualifying insurance plan with prescription coverage that has a formulary comparable to MADAP's, a coverage gap greater than $2,500 and a deductible less than $1,000; and be responsible for paying more than 50 percent of the insurance premium (DHMH 2011a).

4.5.4. Mental Health Services.

Mental health services are a critical component of the continuum of care. Mental health conditions can obstruct individuals from seeking and adhering to primary medical care. Mental health services include psychological, psychiatric and counseling services offered to individuals with a diagnosed mental illness. Such services may be conducted in a group or individual setting and are provided by a licensed professional. In *The Greater Baltimore HIV Health Services Consumer Survey: Baltimore EMA, 2010* (referred to as the 2010 consumer survey), 58 percent of respondents indicated they needed mental health services (IGS 2011d).

There were five mental health service providers in the EMA, including two that offered pediatric mental health services in FY 2010 (BCHD 2011a). Organizations such as Chase Brexton have co-located primary care, substance-abuse treatment and mental health services to better serve clients with co-morbid diagnoses. In FY 2010, 644 unduplicated clients received mental health services and 3,612 service units were provided (BCHD 2011b).

Baltimore City designates a non-profit agency, Baltimore Mental Health Systems, Inc. (BMHS), to manage the city's public mental health system. BMHS oversees services to approximately 39,000 residents of Baltimore City who are either uninsured or who receive Medicaid (BMHS 2011). Maryland also provides state-funded mental health services.

4.5.5. Substance-abuse Treatment.

Substance abuse has been a major problem in the Baltimore EMA and plays a large role in the spread of HIV. IDU continues to be a prominent exposure category for HIV in the Baltimore EMA — with 27.3 percent of transmissions in 2008 attributed to IDU (DHMH 2010). Users of both injection and non-injection drugs may experience increased sexual risk-taking while high and/or engage in prostitution to obtain money for drugs, increasing their risk for HIV infection. Also, the use of crack cocaine can cause oral sores that increase the risk of HIV transmission through bodily fluids (IGS 2011e).

According to the 2010 consumer survey, 30.0 percent of consumers need outpatient substance-abuse treatment services and 13.3 percent needed residential substance-abuse treatment services (IGS 2011d).

Baltimore Substance Abuse Systems, Inc. (BSAS) administers substance-abuse treatment programs in Baltimore City. This organization manages 50 substance-abuse programs and has the capacity for 8,306 clients (IGS 2011e). As of January 2010, all Baltimore substance-abuse treatment programs serving the uninsured offered HIV testing to all clients, with pre- and post-test counseling offered on site (IGS 2011e). In addition, HIV-prevention topics are standard components of all programs. A collaborative initiative by BSAS, the Baltimore City Health Department and Baltimore Health Care Access, Inc. provides buprenorphine to combat opiate substance abuse in the Baltimore EMA (IGS 2011e).

In FY 2010, there were 10 Ryan White Part A providers of outpatient substance-abuse treatment in the Baltimore EMA (BCHD 2011a). Additional substance-abuse services were provided by the State of Maryland. In FY 2010, 298 clients received outpatient substance-abuse treatment with Ryan White funding in the EMA (BCHD 2011b).

Users of both injection and non-injection drugs may experience increased sexual risk-taking while high and/or engage in prostitution to obtain money for drugs, increasing their risk for HIV infection.

Residential substance-abuse treatment also is offered through Ryan White Part A funds in the EMA, but is funded as a support service. In FY 2010, 55 clients received residential substance-abuse treatment with Ryan White funding in the EMA (BCHD 2011b).

4.5.6. Medical Nutrition Therapy.

Licensed registered dietitians provide medical nutrition therapy to PLWH/As referred to medical nutrition therapy by their physicians. Clients receive a bioelectric impendence analysis (BIA) to estimate body composition and lean body mass (BCHD 2011b). PLWH/As with a history of medically related nutritional deficiencies can be prescribed food, nutritional services and supplements. The use of nutritional supplements (e.g., Boost or Ensure) is regulated under medical nutrition therapy so that it can be properly integrated into a comprehensive nutritional plan (IGS 2011c).

Demand is high for medical nutrition therapy in the Baltimore EMA, as evidenced by the 51.7 percent of respondents who reported needing this service in the 2010 consumer survey (IGS 2011d). Aggressive outreach has been done by physicians and case managers to enroll clients into medical nutrition therapy (BCHD 2011b).

The goal is not to maintain clients on the service, but to have their health improved enough so they no longer require food assistance.

Chase Brexton Health Services, Moveable Feast, and the University of Maryland Evelyn Jordan Center are the primary providers of medical nutrition therapy to Ryan White clients in the Baltimore EMA (BCHD 2011a). In FY 2010, 813 clients received nutritional counseling, 227 received liquid supplements, and 205 received BIA (BCHD 2011b).

4.5.7. Oral Health Care.

Proper oral hygiene and good overall oral health are just as critical to PLWH/As as mental and nutritional health. Oral health care includes diagnostic, preventive and treatment services. Missing teeth, periodontal disease and soft-tissue lesions can compromise a person's health and restrict consumption of necessary nutrition. Proper oral health care is essential in maintaining quality of life for PLWH/As. Tooth and mouth health is essential to uphold necessary caloric intake, especially since many medications require that they be taken with food (Bank 2012). IDUs are particularly vulnerable to oral diseases due to the effects of substance abuse (BCHD 2010).

Diagnostic and preventative procedures have been promoted in the EMA to prevent oral health complications that require expensive procedures and multiple visits (BCHD 2011b). According to the 2010 consumer survey, 45.2 percent of respondents that need oral health services do not receive them (IGS 2011d). Efforts to ensure that every Ryan White client is aware of Ryan White-funded oral health services and receives appropriate referrals have been underway. Five providers offered oral health care in the Baltimore EMA in FY 2010. In that year, 1,134 clients received oral health services (BCHD 2011b).

It is important to be mindful moving forward with health reform and the evolution of Ryan White funding that oral health services must be accessible in the EMA. Maryland Medicaid covers oral health for children, but offers very limited adult coverage. Ryan White, therefore, is the only funding stream that guarantees oral health for consumers utilizing public insurance (Bank 2012).

4.5.8. Hospice.

Hospice services provide room, board, nursing care, counseling, physician services and palliative therapeutics to patients in the terminal stages of illness. Although advances in medical care and antiretroviral treatment have reduced mortality rates, people are still dying of HIV and AIDS. There were 282 AIDS-related deaths in the Baltimore EMA in 2008 (DHMH 2010).

Eligible clients at the end stages of HIV/AIDS may access hospice services provided by Joseph Richey Hospice services. In FY 2010, 28 PLWH/As received hospice services. Inpatient care was provided to 18 clients for an average of 50 days, and in-home care was provided to 10 patients for an average of 14 days (BCHD 2011b).

4.6. Maintenance.

The ultimate goal is for all HIV-infected individuals to move seamlessly through the continuum, from HIV testing to full engagement in treatment. This continuum, however, is fluid — individuals are apt to drop in and out of HIV care, thus creating a need for support services to help clients adhere to medical care and receive support for competing needs.

The Ryan White legislation emphasizes that funding should be primarily allocated to medical services, yet allows 16 support services to be funded. These services have been shown to help individuals adhere to treatment regimens. Support services provide wraparound assistance to PLWH/As, promoting their full engagement in HIV care.

4.6.1. Psychosocial Support.

Psychosocial support services address the ongoing psychological and social concerns of PLWH/As and their families. Support activities include counseling — including child-abuse and -neglect counseling — HIV support groups, pastoral care, caregiver support, and bereavement counseling. Psychosocial support also provides specialized counseling to young PLWH/As as they transition from pediatric to adult care (BCHD 2011b).

These support services help PLWH/As and their families make informed decisions and better cope with the disease. Many PLWH/As need ongoing support because an HIV diagnosis may present many challenges that must be addressed before the individual is ready to fully engage in care. Chapter 5 discusses many of the barriers to care that consumers are faced with.

According to the 2010 consumer survey, 45.4 percent of respondents need psychosocial support services (IGS 2011d). Seven providers offer services in the Baltimore EMA (BCHD 2010a). In FY 2010, 506 unduplicated clients received services (BCHD 2011b).

4.6.2. Housing.

Ryan White-funded housing services provide short-term assistance to support emergency, temporary or transitional housing to enable PLWH/As and their families to access or maintain medical care. Emergency financial assistance is available to assist with emergency expenses related to essential utilities, housing, food, and medication when no other resources are available. Adequate housing and stable living conditions are essential for PLWH/As to maintain treatment. Section 3.4 elaborates on the importance of housing services.

The rate of homelessness in the Baltimore EMA is 213 per 100,000 people (HUD 2010). It was estimated more than 3,400 homeless people lived in Baltimore City in 2009 (HUD 2010). In 2010, 33.9 percent of consumer survey respondents reported a need for housing assistance (IGS 2011d). In FY 2010, 311 clients received short-term transition housing, 265 clients received emergency rental assistance, 294 clients received emergency utility assistance, and 530 clients received a housing action plan (BCHD 2011b).

As with all Ryan White services, providers and consumers must work together to find alternative long-term sources of support. Baltimore City's housing programs, consisting of the Housing Authority of Baltimore City (HABC) and the Baltimore City Department of Housing and Community Development (HCD), provide federally funded housing to low-income residents of the city. More than 20,000 residents were served through these programs in 2010 (HABC 2011).

The U.S. Department of Housing and Urban Development (HUD) offers Section 8 vouchers and operates the Housing Opportunities for Persons with HIV/AIDS (HOPWA) program. HOPWA provides housing assistance and related services to low-income PLWH/As and their families to help maintain housing stability, avoid homelessness and improve access to HIV care. The EMA received more than $8 million from HOPWA and served 3,280 PLWH/As during FY 2010 (Pollard 2011).

4.6.3. Food Bank/Delivered Meals.

Food security is critical to maintain PLWH/As in care. Without adequate food, it is difficult for individuals to prioritize their health care. Furthermore, insufficient levels of nutrition can have a direct impact upon the effectiveness of drugs used to treat HIV. The food bank/home-delivered meals support service provides household supplies, groceries or vouchers to purchase these products. Physicians refer consumers with medical limitations who are physically and/or medically unable to prepare their own meals or shop for groceries.

As with all Ryan White services, providers and consumers must work together to find alternative long-term sources of support.

This service is also closely tied to medical nutrition therapy, as providers in this category also stock and store liquid nutritional supplements. One provider delivers bags of groceries to HIV-positive individuals who are unable to shop for themselves. Moveable Feast provides 18 prepared home-delivered meals a week to PLWH/As who are unable to prepare their meals reliably and safely. The goal is not to maintain clients on the service indefinitely, but to have their health improved enough so they no longer require food assistance (Bonderenko 2011).

Six providers offered this service in the Baltimore EMA in FY 2010 (BCHD 2011a). In FY 2010,

809 clients were served through this service category, 9,728 bags of groceries, 5,211 liquid supplements, 71,223 home-delivered meals, and 1,283 emergency food assistance vouchers were distributed in the EMA (BCHD 2011b).

4.6.4. Medical Transportation.

Inconsistent or inadequate transportation directly impacts the ability of Ryan White Part A consumers to adhere to treatment. Public transportation options in urban areas of the EMA, such as the light rail, subway, Charm City Circulator, and public buses do not offer sufficient services to accommodate the many passengers relying on public transportation. Rising costs, delays in service schedule, multiple transfer points, and insufficient routes and frequency pose multiple challenges to PLWH/As.

PLWH/As occasionally face unforeseeable and emergency situations that challenge their ability to obtain necessary resources.

Consumers in the surrounding counties often need to travel into the city to attend their primary medical care and/or specialist appointments. The EMA's suburban public transit options are limited. Section 5.5.1.2 further elaborates on the barriers created by transportation.

As a result, medical transportation is among the most demanded support services, with 56.6 percent of consumers in the Baltimore EMA needing service (IGS 2011d). Ryan White-funded transportation services provide transportation either directly or through a voucher, to core medical programs and many support programs.

Nine providers offered medical transportation services to Ryan White consumers in the Baltimore EMA in FY 2010 (BCHD 2011a). In FY 2010, 2,227 PLWH/As were provided bus tokens, van and taxi trips to medical and support service appointments (BCHD 2011b).

The Maryland Transit Administration (MTA) provides specialized service to people with disabilities that are unable to use fixed-route transportation and lift-equipped buses. The Mobility/Paratransit program operates in Baltimore City, Baltimore County and Anne Arundel County to provide curbside mobility service in these jurisdictions (MTA 2011). Additionally, transportation to medical appointments is funded by Medicaid and is coordinated through county health departments (Middleton 2011).

4.6.5. Other Part A Support Services.

Other Ryan White-funded services include child-care and legal services. Child-care services are provided for children of PLWH/As while their parents or guardians attend medical or support service appointments. In the EMA, one provider offered child-care services and 12 clients received care in FY 2010 (BCHD 2011b).

Ryan White-funded legal services help consumers with legal matters such as power-of-attorney forms, do-not-resuscitate orders, and ensuring access to entitlement programs. Three providers offered legal services and provided services to 271 clients in FY 2010 (BCHD 2011b).

PLWH/As occasionally face unforeseeable and emergency situations that challenge their ability to obtain necessary resources. Emergency financial assistance serves as a critical safety net for consumers by preventing eviction and the loss of utilities. Help with immediate needs such as help paying for emergency medication or transportation is also available. EFA is no longer a stand-alone category in the Baltimore EMA; EFA has been incorporated within the other services categories (IGS 2011c).

4.7. Monitoring.

The Baltimore EMA utilizes a number of mechanisms to monitor the continuum of care and ensure that services provided meet the needs of consumers. BCHD's Clinical Quality Management (CQM) program and its expenditure and service delivery (ESD) reports, along with InterGroup Services' on-line service "scorecards," are all tools created to monitor and evaluate the services within the continuum. The planning council uses priority setting and resource allocation, the triennial consumer survey, and its Evaluation and Continuum of Care committees to evaluate provider performance and reprogram funds within

the EMA. Chapter 9 elaborates on the monitoring processes used in the Baltimore EMA.

4.8. Other Resources.

The planning council maintains a complete listing of services and service providers in the Baltimore EMA available *via* the Internet. The fully interactive and searchable service directory can be accessed at: http://www.baltimorepc.org/v2/main/page.php?page_id=79.

POZ magazine also has an extensive on-line service directory of HIV care and services, featuring thousands of organizations nationwide — all searchable by ZIP code, company name, organization type, service provided and groups served. The site may be accessed at http://directory.poz.com.

HRSA has links to services on its web site (http://www.HRSA.gov).

The Maryland Community Services Locator (MDCSL), developed by the University of Maryland College Park, has a directory of approximately 9,000 health, social service and criminal-justice resource programs. Service information, maps and driving directions are provided. The searchable MDCSL directory can be accessed at: http://www.mdcsl.org.

For those without access to the Internet, a full listing of service providers in the Baltimore EMA, by service categories, can be found in BCHD's *Passport to Managed Care*, compiled by IGS, the PCSO contractor (IGS 2011b).

4.9. Conclusion.

The Baltimore EMA has a variety of comprehensive services grounded in HRSA's continuum-of-care model. Four goals are addressed in the EMA's continuum of care: prevention, engagement, stabilization, and maintenance.

The range of Ryan White services, combined with other federal, state, and local funding sources enable PLWH/As to live stable and healthy lives from diagnosis to death. The range of services beginning with prevention and continuing throughout an individuals treatment regimen and life stages ensure that consumers have the support to access and remain in medical care.

While the continuum of care was established to address all the needs mentioned in chapter 3, it is not without gaps in care, barriers to providers and consumers, and funding challenges. Fully meeting the medical and support service needs of all PLWH/As in the Baltimore EMA will continue to challenge planners. Chapter 5 discusses the barriers to service delivery in the EMA. Chapter 6 outlines the planning council's shared vision foundation of the ideal continuum of care.

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