



An Opportunity

Medical Home Model

Provider Successes

Community Health Centers

PRIMARY CARE AND HIV/AIDS

Clinical care for people living with HIV/AIDS (PLWHA) is about much more than managing antiretroviral therapy (ART) and addressing its side effects. The outpatient medical needs of PLWHA are complex and can be best addressed in the broad context of comprehensive primary care.

The advent of ART set a high bar in the treatment of HIV/AIDS. It is surpassed only by comprehensive primary care that includes ART, which is now the gold standard for addressing the needs of PLWHA. This standard is being met in clinics across America, where interdisciplinary teams are addressing HIV/AIDS in the context of primary care for the whole person. Primary care for underserved PLWHA is not new to the Ryan White HIV/AIDS Program, but today a variety of initiatives are increasing its availability. The result is patients living longer, healthier lives.

WHAT IS PRIMARY CARE?

No consensus exists on the definition of primary care. Some definitions delineate types of services; some focus on who provides services and where; and some outline broad concepts, staying away from the specifics of primary care services. The American Academy of Family Physicians' definition of primary care is a useful example:

Primary care is that care provided by physicians specifically trained for and skilled in comprehensive first contact and continuing care for persons with any undiagnosed sign, symptom, or health concern (the "undifferentiated" patient) not limited by problem origin (biological, behavioral, or social), organ system, or diagnosis.

Primary care includes health promotion, disease prevention, health maintenance, counseling, patient education, diagnosis and treatment of acute and chronic illnesses in a variety of health care settings (e.g., office, inpatient,

DID YOU KNOW?

- ▶ There is no one single definition of primary care.
- ▶ Many Ryan White HIV/AIDS Program grantees have already adopted the medical home model within their practices.
- ▶ Patients who receive comprehensive primary care in a single location are more likely to be retained in care.



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Addressing the complex needs of people living with HIV/AIDS must be done within the broad context of comprehensive primary care. We recognize that retention in care and adherence to antiretroviral therapy requires an interdisciplinary approach and that these components are best achieved when facilitated within a medical home.

The concept of a medical home—where PLWHA can access all of their care needs—is rooted in the history of the Ryan White HIV/AIDS Program. And today, in fact, one-stop shops aren't the anomaly: They're the norm.

As PLWHA age, their health care demands increase and thus require a broader, more primary care approach. As a result, HIV and infectious disease doctors increasingly need to become accustomed to delivering primary care. Conversely, as HIV clinics increasingly reach and exceed capacity, primary care doctors will need to become more familiar with HIV care and treatment. This is where AIDS Education and Training Centers are so integral in preparing providers in the fight against HIV, both today and well into tomorrow. The result will be healthier patients and more productive lives.

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critical care, long-term care, home care, day care, etc.). Primary care is performed and managed by a personal physician often collaborating with other health professionals, and utilizing consultation or referral as appropriate.¹

Definitions are simply guides, however. Primary care, at root, is a philosophy, and the services offered and the way in which they are offered should be modified and adapted to reflect the needs of individual patients as well as the needs of the local patient population. In the context of the Ryan White HIV/AIDS Program, the scope of primary care services may differ from site to site because of differences in patient needs, provider capacity, funding, or availability of other primary care resources in the community.

Effective primary care programs for PLWHA share the following characteristics:

- Clinics offer a nonjudgmental, supportive environment because of the sensitive nature of issues that must be discussed.
- Clinics use a multidisciplinary approach relying on the special skills of nurses, pharmacists, nutritionists, social workers, and case managers to help physicians address patients' needs regarding housing, insurance, mental health and substance abuse treatment, and other supportive services.
- Providers and other clinic staff are prepared to conduct appropriate interventions and make timely referrals to community resources and institutions.
- Primary care providers coordinate care and maintains close communication among providers across disciplines.
- Individual office visits are long enough to allow a thorough evaluation.
- Providers see patients frequently for good continuity of care, and clinic scheduling is flexible so that patients with acute problems can be seen quickly.
- A range of medical resources, including providers with subspecialties and laboratory expertise, are in place.
- Patient education is a vital aspect of care that begins during the initial evaluation and continues throughout the course of care.²

PRIMARY CARE: AN EVOLUTION OF OPPORTUNITY

Since the first HIV antibody tests were developed in 1985, primary care settings have offered great promise for identifying PLWHA.³ Too often, however, HIV screening and testing have not been offered to

patients because those services have been viewed as outside the context of primary care. Over time, government agencies, advocates, and communities have worked with primary care providers to increase access to HIV screening and testing. Today, with 50,000 new HIV infections occurring each year,^{4,5} the primary care setting provides more opportunity than ever for reaching people who are unaware of their status. As Cheryl Modica of the National Association of Community Health Centers explains, “Screening for HIV should be as routine as testing for cholesterol and blood sugar.”⁶

For PLWHA, the primary care environment has much to offer. Many HIV-infected persons are treated by primary care providers; specialists are brought in only for complex cases. Pill burden has been dramatically reduced: Two “one pill, once a day” HIV treatment regimens are now available, new drugs have fewer side effects than their predecessors, and people starting HIV medications or switching medications have many options.

Primary care teams working in a coordinated fashion can greatly improve the lives of PLWHA by effectively treating HIV disease simultaneously with other medical conditions. Without the benefit of a primary care team working from a “home base,” many PLWHA are left to coordinate multiple drugs for co-existing conditions on their own. HIV drugs may interact with other medications and, consequently, may increase side effects; toxicity; or treatment failure, when drugs stop working because an interaction has lowered the amount of one—or both drugs—in the bloodstream.⁷ Side effects from drug levels that are too high can lead to treatment discontinuation, whereas when drug levels are too low, resistance can develop, meaning that a single drug—or an entire family of drugs—may stop working. For example, some statin drugs, which lower cholesterol, may interact with HIV protease inhibitors, and some HIV protease inhibitors increase lipids.⁸ Even inhaled steroids used to treat asthma can have a potentially fatal interaction with ritonavir, a drug commonly used in small doses with HIV protease inhibitors to boost drug levels.⁹ Having a provider who stays on top of these complex medication issues is crucial.

Although highly active antiretroviral therapy (HAART) has dramatically altered the prognosis for HIV disease, late presentation for treatment and prolonged immunosuppression increase the risk of cancers related (as well as those typically unrelated) to AIDS, end-stage liver disease, and infections.^{10,11} Clearly, comprehensive primary care obtained early in disease course can be life saving and life extending for PLWHA. The Ryan White HIV/AIDS Program has created such a primary care infrastructure, and many provider sites now act as “one-stop shops.” This structure provides clients easy access to a full continuum of primary care all in one place, and it facilitates long-term retention in care, adherence to treatment, and improved health outcomes.

AN AGING POPULATION OF PLWHA

Twenty years ago, when the life expectancy for PLWHA was much shorter than it is today, providers rarely saw PLWHA with primary care needs associated with aging. In the pre-HAART

era, treatments offered comparatively short-term promise. Care teams and PLWHA worked together to slow disease progression, fight opportunistic infections, and control symptoms as best they could. A great deal of attention was given to addressing basic human needs and, as disease progressed, providing palliative care. Because HIV disease progression was much more rapid, the range of primary care services needed by PLWHA was not as broad as it is today.

When introduced in 1995, HAART ushered in a new era of hope, and clinicians switched their focus from short-term and palliative care to learning to navigate HAART, address its side effects, and support adherence. With increases in funding and research, the HIV/AIDS clinical setting emerged as a key venue for HIV/AIDS treatment. Providers’ capacity to manage the disease has been improving ever since.

The quantum leap in HIV/AIDS treatment over the past 16 years has been matched by the enormous success of the Ryan White HIV/AIDS Program in ensuring that underserved populations have access to treatment. The results are decreased mortality and longer, healthier lives. This enormous progress, however, has not mitigated the need for outpatient medi-

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cal services among underserved PLWHA. In fact, the need for primary care services has increased, reflecting the benefits of controlled HIV disease: reduced acute care needs and the most wondrous blessing of all—time.

For hundreds of thousands of PLWHA, HAART has brought improved health and well-being along with the chance for a fuller, more meaningful life. As a result, the population of PLWHA who are older adults has increased. In 2008, for example, 44 percent of Ryan White HIV/AIDS Program clients were 45 to 64 years old, a 15 percent increase since 2002. The demographics of Ryan White clients mirror the current U.S. epidemic: 50 percent of PLWHA will be age 50 or older by 2015.¹²

Age often brings health problems, such as hypertension, heart disease, cancer, type 2 diabetes, arthritis, and increased risk for a multitude of other conditions. Meanwhile, PLWHA still experience high rates of comorbidities that require coordinated care from a team of providers. In addition, HIV medications themselves are linked with various side effects requiring attention, including abnormally high cholesterol and triglycerides and insulin resistance, a prediabetic condition.^{13,14} Finally, HIV/AIDS remains a disease that strikes disproportionately among the poor and medically underserved—people who suffer higher rates of a host of diseases. But whether a PLWHA is young or old, rich or poor, he or she needs a place, in the medical sense, to call home.

HOME: MORE THAN WHERE THE HAART IS

Inconsistent access to primary care contributes to PLWHA's lack of awareness of their HIV status. The CDC estimates that 21 percent of HIV-infected persons are unaware that they are positive.¹⁵ This group often presents for care late in disease progression: An estimated 35 to 45 percent of people with newly diagnosed HIV infection develop AIDS within 1 year after diagnosis.¹⁶

The concept of a *medical home*, also known as the *advanced primary care model*, "is emerging as a leading model for efficient management and delivery of quality care," according to the U.S. Department of Health and Human Services.¹⁷ A medical home involves a team of providers led by a personal physician who serves as the patient's primary point of contact and care coordinator.¹⁷ The team takes a patient-centered approach to care and focuses on the medical needs of the patient in the context of his or her life. The medical home model emphasizes coordinated care and prevention and attends to the patient's emotional and other needs in addition to medical problems.¹⁸

Medically underserved populations traditionally suffer high rates of other diseases and conditions, many of which are entirely preventable or treatable, in part because of lack of access to care. The relationship between undiagnosed and untreated disease and poor access to primary care under-

There is no doubt whatsoever in the value of ongoing primary care as it relates to preventing, diagnosing, and treating chronic disease.

scores the importance of having a medical home. Medical homes provide a coordinated, comprehensive approach to the interdependent medical needs of patients with chronic diseases, including HIV/AIDS.

Most people associated with the Ryan White HIV/AIDS Program would observe that providers funded through the program are already using this approach. Michael Saag, professor of medicine and director of the Alabama Center for AIDS Research in Birmingham, concurs: "An unintended, but extremely positive consequence of the Ryan White [HIV/AIDS Program]," he writes in *The AIDS Reader*, "has been the establishment of the comprehensive delivery of multiple services for patients with a complex disease." He adds, "Comprehensive, highly coordinated primary care and psychosocial services are routinely provided at most Ryan White-funded clinics."¹⁹

PLWHA need better access to the kind of routine primary care services that Saag describes. But how can cash- and time-strapped providers, both within and outside the Ryan White HIV/AIDS Program community, build and maintain primary care systems in the context of growing demand in terms of both the number of PLWHA who need primary care and the depth of services required?

These questions have no easy answers. What is clear, however, is that lifelong comprehensive primary care is critical

to address many of America's health problems. Although tension exists between creating greater access to primary care and controlling health care costs, there is no doubt whatsoever in the value of ongoing primary care as it relates to preventing, diagnosing, and treating chronic disease. Comprehensive primary care clearly stands to benefit PLWHA who are unaware of their status; through regular access to primary care, they are more likely to encounter appropriate prevention and testing services for a variety of treatable conditions, including HIV infection.

PATH: A PROVIDER BUILDS A RESPONSE

The Brooklyn Hospital Center's Program for AIDS Treatment and Health (PATH) provides comprehensive primary care services for 1,370 HIV-positive primary care patients. PATH has two one-stop-shop locations with state-of-the-art HIV medical and psychosocial care for adults, children, teens, and families. "We try to manage all of the patient's medical issues as well as their HIV/AIDS," says Leonard Berkowitz, PATH's medical director.

"PATH patients are not referred out for management of hepatitis B or C infection, and we also treat chronic conditions such as diabetes, hypertension, and hyperlipidemias. We have access to experts in all specialties at The Brooklyn Hospital Center for highly complex cases where referral is required," explains Berkowitz. PATH also provides treatment for common acute conditions, such as upper respiratory infections. The consolidation of primary care services has a vigorous health maintenance component, including yearly tuberculosis testing, annual pelvic and Pap smears, influenza vaccines, and dental and eye care. Treatment and care are provided by a large multidisciplinary team that includes an attending physician, nurse practitioners, a nurse-midwife, a psychiatrist, medical residents, and an American Association of HIV Medicine-certified graduate fellow.

Located in Brooklyn, New York, PATH's client base is more diverse than in many clinics. The center serves African-Americans, Caribbean-Americans, Asians, Arabs, Latinos, and Whites, and the staff reflects those demographics. PATH's patients embody characteristics that are reflected in clinics across America: a steady flow of newly diagnosed young and middle-aged patients and an aging client base with high rates of comorbidities and a high level of need for HIV and primary care services.

"We have a large number of patients who are over age 60, including many over 70 and two over 80," says Berkowitz. "Primary care visits have become increasingly complex over the past 5 years," he observes, not only as a result of aging clients and related comorbidities, "but also related to the very high rates of psychiatric illness and substance abuse in the more recently infected patients."

Patients receive a complete comprehensive physical annually, but "routine and follow-up visits have become so extensive they are almost as detailed as the annual physical," says Berkowitz. Those visits include: an interval medical history;

discussion of new issues; complete medications and adherence review; substance abuse review (including tobacco use and on-site smoking cessation counseling); mental health screening; physical examination; nutritional assessment and counseling; safer sex and prevention counseling; and management of ongoing medical conditions.

The scope of these visits reflects the significant need for primary care services among PLWHA. The multiple needs of PATH patients increase the need for more personnel, longer clinic hours, and greater funding. Despite these pressures, the PATH's commitment to providing onsite comprehensive primary care is unwavering.

In addition to general clinic services, the PATH Center's Family Program has provided comprehensive care for HIV-positive women and their families through a one-stop-shop model for the past 8 years. Although the number of HIV-positive newborns has dramatically decreased—only two have been born in the past 8 years—those who were born HIV positive years ago are now adolescents and young adults. To address health care and risk reduction needs among this population, PATH now emphasizes young adult and women's care, allowing the center to more readily direct funds to engaging youth ages 13 to 24. In this way, the PATH Center, like the Ryan White HIV/AIDS Program itself, has been able to continuously adapt as HIV and patient needs warrant.

By any measure, the PATH Center has been enormously successful in creating the comprehensive primary care program that PLWHA—indeed, all people—need. Berkowitz cites teamwork as the single most essential component of the center's success, and he notes that collaboration among all staff is the key to helping patients stay in care and adhere to treatment. Berkowitz stresses the integral role of case managers in helping patients overcome the many barriers that can impede their access to primary care and the involvement of peers in assisting with patient engagement. He also enthusiastically references the role of the center's clinical pharmacist in enhancing all aspects of care at the PATH Center: "Our pharmacist is extraordinarily dedicated and gifted and has begun aggressive programs of medication reconciliation, smoking cessation counseling, diabetes education, and more."

CONSUMER ORIENTATION LEADS TO EXPLOSIVE GROWTH

The high number of undiagnosed HIV infections and of PLWHA not receiving regular care are ongoing challenges for service providers.¹⁵ The story of the Harris County Hospital District (HCHD) in Houston, Texas, is one of an organization helping people overcome barriers to diagnosis and care and, in the process, experiencing extraordinary growth.

HCHD has built a welcoming primary care environment for more than 5,000 PLWHA. It is the Nation's fifth-largest public metropolitan health system, consisting of three hospitals, 13 community health centers (CHCs), and many school-based health clinics. It manages diverse funding streams to offer

comprehensive services to PLWHA. HCHD receives about 50 percent of its total funding from the county; it also receives funding from the Ryan White HIV/AIDS Program Parts A, C, and D. HCHD offers its primary care services to PLWHA primarily at two sites: Northwest Health Center and Thomas Street Health Center, which first received Ryan White HIV/AIDS Program funding in 1991 and is one of the Nation's oldest AIDS service organizations.

Pete Rodriguez, director of HIV services at HCHD, explains, "We had approximately 750 new HIV primary care patients in 2009 and over 900 in 2010. They come because we treat the whole patient *and* their HIV, and we do it in a single location. Patients do not want disjointed primary care."

Several factors emerge as key to the success of the organization in engaging PLWHA in primary care and addressing their needs:

- HIV testing at the hospital and its clinics has grown from approximately 39,000 tests in 2009 to 57,000 tests in 2010 as HCHD works towards increasing the routinization of HIV screening.
- Relationships with hospitals and social service organizations have been strengthened, thanks in part to the organization's Service Linkage Workers, who provide patient needs assessments and support for doctor visits when PLWHA are referred to providers outside the HCHD system. In addition, Memorial Hermann Health Systems, the largest private provider of health care in the area, is able to link uninsured HIV patients directly into HCHD's county system, thereby ensuring continuity of care. Patient retention rates are at 80 percent.
- Strong affiliations with local universities and private physicians, as well as staffing of faculty and residents, has helped position HCHD to address the increased patient numbers. This structure has helped create specialty clinics within HCHD, such as clinics for hepatitis C–HIV coinfecting patients as well as clinics for HIV-positive women and adolescents.
- In 2010, HCHD's infectious diseases team started the HIV/AIDS Transition Service to identify all inpatients with HIV within HCHD hospitals. Team members visited those patients to ensure their awareness of HCHD's HIV services and to assist with keeping appointments within the hospital system. For PLWHA who receive care outside the HCHD system, the HIV/AIDS Transition Service team notify their providers that their client is in hospital care.

"HCHD has a very strong patient advisory council that meets monthly," says Rodriguez, "and patients volunteer at the clinic." Patients are also involved in keeping people in care. For example, every new HIV patient is assigned a peer mentor, an approach that reduces no-show rates and supports retention in care.

As a public health entity comprising a network of organizations, HCHD brings many advantages to the field of

primary care for PLWHA, according to Nancy Miertschin, project manager, HIV Services Department of HCHD. “We started out as a health care organization,” she explains, “and that in itself has made us able to be more comprehensive than other medical services providers that started out as community-based organizations.”

But there have been disadvantages for the public health department, too, Miertschin recalls. “For a long time, we had the reputation of being part of the public system—the place that you go if you can’t pay to go anywhere else—and all the negative connotations that that brings.” The organization also had the reputation of being overly bureaucratic and often short on consumer orientation, Miertschin observes. “Our facilities were ugly and beat-up,” adds Rodriguez, “and nobody wanted to come. We weren’t well organized, and an appointment was an all-day affair. We’ve made a very conscious effort to turn that around.” Today’s patient advisory council, streamlined one-stop-shop services, and improved quality of care attest to that hard work.

If the story of HCHD is one of explosive growth, it is also one of putting the many pieces together that are necessary for building a thriving comprehensive primary care program for PLWHA. If one surveys the literature on what is required to construct a comprehensive primary care program for PLWHA in 2011 and beyond, HCHD has all the pieces in place.

RURAL MODEL

Compared with large urban areas, delivering HIV primary care in a rural setting brings with it a slew of additional challenges. Just ask Donna Sweet, primary care provider, founder of the HIV Clinic of the University of Kansas School of Medicine–Wichita Medical Practice Association, and professor of internal medicine at the University of Kansas School of Medicine–Wichita. “We do rural outreach in south central Kansas; we’ll go to southeast, southwest, northwest, covering about three-quarters of the State. We’ll pack up charts, immunizations, everything our patients need,” Sweet explains.

Sweet and her team have established relationships with CHCs and health departments all over the State, and they use those facilities when they come into town. “At our central site,” explains Sweet, referring to the clinic in Wichita, “we are what I deem a medical home with wrap-around services. Many of our patients only have Ryan White HIV/AIDS Program coverage, so we can [not only] offer HIV care but also help manage their diabetes, hypertension, etc.; but that’s harder to do in a rural setting.”

The most serious challenges Sweet and her team face are ones many HIV primary care providers are tackling—increased comorbidities, greater poverty, and lack of health insurance coverage. These daunting challenges are exacerbated by the fact that the primary care team operates in an area of the country that lacks public transportation and harbors rampant HIV stigma, making the provision of services in a safe, confidential setting especially difficult.

What Sweet and her team are working on now is a model she believes the entire country should be moving toward: one in which primary care providers begin addressing HIV as the chronic disease it has become. “We ask ourselves, ‘How do we get into primary care offices? Who will accept some mentoring?’ Because most Ryan White HIV/AIDS Program sites are at capacity, we need to find new primary care providers who are willing to address HIV,” Sweet explains.

She stresses that federally qualified health centers (FQHCs) and CHCs are often the only place where rural patients can access care locally. “Most people don’t have resources outside a CHC, so we’re trying to find some who will keep patients in-house rather than refer them out,” Sweet explains. This method of co-locating services assists with retention, particularly in rural Kansas, where it is not feasible for most patients to travel to see an HIV doctor.

Sweet’s model is to do some face-to-face mentoring with primary care doctors about the basics of HIV and thereafter hold regular phone calls; she lets them know they can contact her at any time with pressing questions. Sweet stresses, “There’s just not enough of us aging HIV docs, so there has to be this shift, not just in rural care but in HIV care, in general.”

Sweet suggests that providers, including primary care doctors who want to learn more about HIV, turn to the Ryan White AIDS Education and Training Centers (AETCs) for support. She also points to other models that may be more feasible for some providers, such as the University of New Mexico’s

If providers are willing to embrace what may seem at first unconventional or overwhelming, they could soon find what Sweet and others have: extraordinary results.

Project Extension for Community Healthcare Outcomes (Project ECHO). Project ECHO uses video distance-learning technology to bridge the gap between health care specialists and providers in underserved and often rural settings to share best practice protocols and case-based learning. The University of New Mexico is part of the Mountain Plains AETC. (Learn more about Project ECHO at http://echo.unm.edu/about_us.shtml and about the Mountain Plains AETC at www.mpaetc.org/default.asp.)

According to Sweet, the key to providing coordinated care in diverse parts of the State comes down to working with people who are willing to do phone-based medicine, developing strong relationships with community-based clinics, and having Ryan White HIV/AIDS Program funding. “We can’t do this work without Ryan White dollars, which is why I keep stressing that with the Affordable Care Act, there will still be a need for Ryan White,” she says.

Sweet’s dedication to her patients—and to all PLWHA in Kansas—is nothing short of inspiring. It illustrates what is

possible when providers work together for the greater good of their patients and when they are willing to take a chance on each other, whether by inviting HIV specialty mentoring at their site or video chatting with a doctor hundreds of miles away to discuss a patient case. If providers are willing to embrace what may seem at first unconventional or overwhelming, they could soon find what Sweet and others have: extraordinary results.

Sweet's approach allows so many PLWHA living in rural areas to truly call their primary care doctor's office their medical home, one where HIV care has now become co-located. According to Sweet, "Every good primary care provider *can* do this work. They just need to have an interest, and their local Ryan White HIV/AIDS Program clinic or AETC can help to develop that."

NURTURING PRIMARY CARE PROVIDERS

"Our annual State of HIV Primary Care Survey²⁰ shows that . . . 54 percent of primary care physicians reported they were treating HIV-positive patients," says Javier G. Salazar, senior director of programs for HealthHIV, a leading national non-profit and HRSA grantee working to integrate HIV care into primary care settings. The report underscores the need for "primary care providers and their organizations [to] be supported as they build their capacity to address the needs of clients living with HIV," says Salazar.

Several Ryan White HIV/AIDS Program activities and initiatives are working to expand the capacity of comprehensive primary care. The regional and national AETCs provide an array of training opportunities to organizations seeking to improve quality, expand services, and increase capacity. The Ryan White HIV/AIDS Program's Special Projects of National Significance (SPNS) work, such as the Hepatitis C Treatment Expansion initiative and the Enhancing Access to and Retention in HIV/AIDS Care for Women of Color initiative, provides new knowledge to grantees about special populations. The System Linkages and Access to Care for Populations at High Risk of HIV Infection initiative works to engage more PLWHA in primary HIV care.

Notwithstanding critical supports like the SPNS projects, the commitment to meet the primary care needs of underserved PLWHA exists in a reality fraught with tension. On the one hand are the growing need for services, stemming from successful treatment of HIV/AIDS itself; high HIV incidence; and financial need among PLWHA. On the other hand is the enormous pressure of limited operating funds coupled with provider and resource shortages.

Time after time, Ryan White HIV/AIDS Program providers have exhibited an extraordinary capacity to grow with expanding need, but it is not realistic or sustainable for them to continue to absorb the growing demand for primary care. Provisions in the Patient Protection and Affordable Care Act (P. L. 111-148) will ease the financial circumstances of Ryan White HIV/AIDS Program clients and may, in turn, ease the

ONLINE RESOURCES

AETC National Center for HIV Care in Minority Communities: www.nchcmc.org

A Guide to Primary Care of People With HIV/AIDS: <ftp://ftp.hrsa.gov/hab/PCARE04.pdf>

Implementing HIV Services in Primary Care Settings: www.accelacast.com/programs/1/40087560/index.html

Mountain Plains AETC's 2009 HIV Sourcebook for the Primary Care Provider: www.mpaetc.org/downloads/mpaetc_sourcebook_09.pdf

National Committee for Quality Assurance's Patient-Centered Medical Home 2011: An Established Model of Care Coordination: www.ncqa.org/Portals/0/Programs/Recognition/2011PCMHbrochure_web.pdf

Primary Care Guidelines for the Management of Persons Infected With Human Immunodeficiency Virus: 2009 Update by the HIV Medicine Association of the Infectious Diseases Society of America: www.uphs.upenn.edu/bugdrug/antibiotic_manual/idsahivprimarycare2009.pdf

financial circumstances of providers. Specifically, the act will improve access to health insurance and health care services, expand Medicaid eligibility, and assist with prescription drug costs. It will not, however, reduce the need for new providers of primary care services to PLWHA.

OPENING NEW DOORS: EXPANDING CAPACITY AT COMMUNITY HEALTH CENTERS

At present, approximately 1,200 CHCs serve 23 million people each year at roughly 8,000 sites in all 50 States, the District of Columbia, and U.S. Territories. CHCs represent a vast reservoir of capacity for providing comprehensive primary care to people across America, including PLWHAs. About one-third of all Ryan White HIV/AIDS Program Part C grantees are CHCs, and it is estimated that CHCs (both Ryan White HIV/AIDS Program and non-Ryan White HIV/AIDS Program affiliates) provided care to approximately 95,000 PLWHA and processed about 690,000 HIV tests in 2009.

Among activities to expand CHC services to PLWHA is an exciting new collaboration between HRSA and HealthHIV. In 2010, a new Ryan White HIV/AIDS Program-funded AETC called the National Center for HIV Care in Minority Communities (NCHCMC) was founded. The Center is being funded over a 3-year period to develop, improve, and enhance the organizational capacity of CHCs not receiving Ryan White HIV/AIDS Program funds to provide primary medical care and treatment

to racial and ethnic minorities living with or affected by HIV/AIDS. The assistance occurs in three broad areas:

1. Transformation of clinic-based practice to expand primary care services to include HIV care and treatment.
2. The restructuring of HIV services to emphasize team-based care, patient-centered interactions, the building of partnerships, and revenue enhancement.
3. The addition of “wrap-around” services related to care coordination as well as staff training in cultural competency and HIV stigma.

In its first year of the program, the NCHCMC worked with 24 health centers. The centers selected in Year 1 deliver primary care services to more than 375,000 patients annually, including 1,769 PLWHA. These numbers illustrate the enormous opportunity the program offers in reaching underserved people from communities of color and offering them comprehensive primary care services on which their health and well-being depend.

HIV/AIDS: THE WORK CONTINUES

In July 2010 the National HIV/AIDS Strategy (NHAS) was announced. It represents a coordinated national response to the HIV epidemic. The NHAS is intended to be a concise plan that will identify a set of priorities and strategic action steps tied to measurable outcomes. The NHAS has three primary goals: (1) reduce

new infections, (2) increase access to care and improve health outcomes for PLWHA, and (3) reduce HIV-related disparities and health inequities. The Ryan White HIV/AIDS Program, CHCs, and other partners have key roles to play in meeting these goals, especially in increasing access to high-quality primary care.

Broadly focused primary care is in the best interest of PLWHA, because it provides the opportunity to receive coordinated care and management of all ambulatory medical needs, including HIV/AIDS. It also offers the best framework through which providers can address the needs of the whole person. Finally, primary care represents the promise of preventive care that must be capitalized upon if we are to stem the tide of HIV incidence in America.

HRSA is working with its partners to build primary care systems that are patient centered and reflect changes in the demographics of HIV/AIDS. They also reflect the evolution in HIV treatment. The response of providers working to build these systems reflects extraordinary creativity, local realities, and a commitment to meet the growing need for a broad range of services in an often challenging environment.

People addressing the HIV/AIDS epidemic have never been ones to step away from a challenge. Their tenacity and determination represent perhaps the Nation’s best hope of fulfilling the goals of the NHAS and improving the health and well-being of PLWHA.

➔ REFERENCES

¹American Academy of Family Physicians. *Primary care*. Available at: www.aafp.org/online/en/home/policy/policies/p/primarycare.html#Parsys0002. Accessed July 2011.

²Bartlett JD, Cheever LW, Johnson MP, et al. Primary care as chronic care. In Bartlett JG, Cheever LW, Johnson MP, et al. Eds. *A guide to primary care of people with HIV/AIDS*. Washington, DC: U.S. Department of Health and Human Services; 2004.

³Sowadsky R. HIV antibody tests—now you have several choices. *The Body*. June 1998. Available at: www.thebody.com/content/art2303.html. Accessed September 6, 2011.

⁴Prejean J, Song R, Hernandez A, et al. Estimated HIV incidence in the United States, 2006–2009. *PLoS ONE*. 2011;6(8):e17502.

⁵U.S. Centers for Disease Control and Prevention (CDC). *HIV surveillance report*. 2009; 21. Available at: www.cdc.gov/hiv/topics/surveillance/resources/reports/.

⁶Modica C. *Integrating HIV screening into routine primary care: a health center model*. Presentation at National Association of Community Health Centers Meeting; January 14, 2009; Philadelphia.

⁷Jiménez-Nácher I, Alvarez E, Morello J, et al. Approaches for understanding and predicting drug interactions in human immunodeficiency virus-infected patients. *Expert Opin Drug Metab Toxicol*. 2011;7:457–77.

⁸Aberg JA. Lipid management in patients who have HIV and are receiving HIV therapy. *Endocrinol Metab Clin North Am*. 2009;38(1):207–22.

⁹Josephson F. Drug–drug interactions in the treatment of HIV infection: focus on pharmacokinetic enhancement through CYP3A inhibition. *J Intern Med*. 2010;268(6):530–9.

¹⁰Marin B, Thiébaud R, Bucher HC, et al. Non-AIDS-defining deaths and immunodeficiency in the era of combination antiretroviral therapy. *AIDS*. 2009;23:1743–53.

¹¹Monforte A, Abrams D, Pradier C, et al; Data Collection on Adverse Events of Anti-HIV Drugs (D:A:D) Study Group. HIV-induced immunodeficiency and mortality from AIDS-defining and non-AIDS-defining malignancies. *AIDS*. 2008;22:2143–53.

¹²Kirk JB, Goetz MB. Human immunodeficiency virus in an aging population, a complication of success. *J Am Geriatr Soc*. 2009;57:2129–38.

¹³Wohl DA, McComsey G, Tebas P, et al. Current concepts in the diagnosis and management of metabolic complications of HIV infection and its therapy. *Clin Infect Dis*. 2006;43:645–53.

¹⁴Dubé MP, Cadden JJ. Lipid metabolism in treated HIV infection. *Best Pract Res Clin Endocrinol Metab*. 2011;25(3):429–42.

¹⁵CDC. *HIV in the United States*. July 2010. Available at: www.cdc.gov/hiv/resources/factsheets/PDF/us.pdf. Accessed July 1, 2011.

¹⁶Gardner E, McLees M, Steiner J, et al. The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection. *Clin Infect Dis*. 2011;52:793–800.

¹⁷U.S. Department of Health and Human Services. *Medicare–Medicaid advanced primary care demonstration initiative*. [Fact sheet]. Available at: www.healthreform.gov/newsroom/factsheet/medicalhomes.html. Accessed October 26, 2011.

¹⁸Academy Health. Medical homes and accountable care organizations: If we build it, will they come? *Research Insights*. 2009. Available at: www.academyhealth.org/files/publications/RschInsightMedHomes.pdf. Accessed September 4, 2011.

¹⁹Saag MS. Ryan White: an unintentional home builder. *AIDS Read*. 2009;19:166–8. Available at: www.theaidsreader.com/print/article/1145619/1408105?printable=true. Accessed July 2011.

²⁰HealthHIV. 2010 state of HIV primary care survey. May 12, 2010. Available at: www.healthhiv.org/modules/info/files/files_4beafed41e839.pdf.