

VIA ELECTRONIC SUBMISSION

Attention: HRSA-2012-0003
Ryan White HIV/AIDS Program

HIV Law Project thanks the Human Resources Service Administration for the opportunity to submit comments in response to the proposed reauthorization of the Ryan White CARE Act.

HIV Law Project was founded in 1989 to provide legal and advocacy services in New York City for underserved HIV-positive persons, including women and their families, immigrants, and communities of color. HIV Law Project was the first, and remains the only organization in New York City focused exclusively on legal advocacy for these communities. We have recently released a report entitled: "Investing in Health: Supportive Services for Women Living with HIV/AIDS". Much of the below is taken directly from the report, and amply demonstrates the necessity of Ryan White funded support services.

Supportive services are fundamental to making health care work for all people living with HIV/AIDS (PLWHA). Women living with HIV/AIDS face unique challenges to accessing and staying in care. Often low income, HIV-positive women tend to be significantly burdened by childcare and other responsibilities that regularly distract from or limit access to medical care. Social services help stabilize low-income individuals living with or at risk of HIV by providing a safe home, sufficient food, necessary child care, transportation to and from appointments, and an advocate to assist with pressing legal or mental health needs. When these needs are met, PLWHA can tend to the details and routines of their own health and healthcare.

Because of the strong impact they have on maintenance in care and treatment and improved health outcomes, supportive services are elemental to achieving this country's HIV policy objectives. The National HIV/AIDS Strategy for the United States (NHAS), released in July 2010, set out three main goals: 1) reducing the number of people who become infected with HIV, 2) increasing access to care and optimizing health outcomes for people living with HIV, and 3) reducing HIV-related health disparities.¹ Supportive social services are instrumental in achieving precisely these three goals. These services reduce health disparities by addressing the unique barriers and challenges faced by racial minorities, and marginalized and low-income communities living with HIV/AIDS; increase access to care, improving adherence and optimizing health outcomes; and reduce new infections by decreasing infectiousness through retention in care and minimizing risk-taking behaviors. Investment in social services is essential to realizing the triple goals of the NHAS.

Ryan White Care Act, Part D: Addressing The Unique Needs of Women Living with HIV/AIDS *Endemic Barriers Hinder Care and Treatment for Women Living with HIV/AIDS*

As the HIV epidemic in the United States increasingly impacts low-income individuals and people of color, the number of women living with HIV/AIDS has risen dramatically. Women represented a small minority of AIDS diagnoses in 1985 (8%), but this percentage more than doubled by 1995 (20%) and tripled by 2000 (27%), approximately where it remains today.² In the period between 1999 and 2003, new AIDS diagnoses among men rose only 1%, while diagnoses among women rose 15%.³

This growing number of women living with HIV/AIDS (WLWHA) experience unique challenges related to care. Research indicates that HIV-positive women have more difficulty accessing care than men.⁴ Women with HIV additionally have higher rates of expensive emergency room visits than men.⁵ One study of 2,864 PLWHA in the U.S. found that women were more likely than men to report needs competing with healthcare and that these competing needs strongly predicted high rates of hospitalization.⁶

WLWHA are also more likely than men to be poor. Nearly two-thirds of all women living with HIV and receiving medical care report annual incomes below \$10,000 (64%), compared with 41% of men.⁷ This is in part because WLWHA are less likely to be employed than HIV-positive men.⁸ WLWHA are also less likely to be privately insured than men with HIV (14% of women compared to 36% of men), and they are more likely to be on Medicaid than men (61% of women compared to 39% of men).⁹ Further, most WLWHA are caring not just for themselves, but also for others. In fact, a substantial majority of WLWHA lives with children under 18 (76%), compared to only a third of men with HIV/AIDS.¹⁰

HIV/AIDS related disparities are significant not only between men and women but also among women of different racial backgrounds. The well-documented relationships among HIV incidence, poverty and race that facilitate transmission, hinder treatment, and complicate outcomes are particularly marked among women of color. In 2009, the AIDS diagnosis rates for female racial minorities dwarfed those for White women. The diagnosis rate for Black women compared with that for White women was 23:1, for women of multiple races it was 8:1, and for Latinas it was 5:1.¹¹

The potent combination of poverty and family responsibilities raises endemic barriers to effective treatment for women living with HIV/AIDS. Research shows that lower socio-economic status contributes to decreased adherence to HIV therapy. This decreased adherence arises in large part from (1) financial constraints that limit ability to pay for transportation, child care, and other needed services, and (2) preoccupation with immediate concerns, such as poor or unstable housing.¹² The NHAS recognizes that “people with competing demands and challenges meeting their basic needs for housing, food, and child care often have problems staying in care.”¹³ Services for women must address both women’s unique caregiving responsibilities and the additional financial pressures experienced by so many WLWHA in order for care, treatment, and prevention strategies to be effective.^{14,15}

Social Services: Goals & Outcomes

Social Services Result in Beneficial Treatment and Public Health Outcomes

Recognizing that financial constraints and preoccupation with immediate needs present substantial barriers to accessing medical care, the NHAS underscores the fundamental role of social services in prevention strategies and encourages “policies to promote access to housing and supportive services ... that enable people living with HIV to obtain and adhere to HIV treatment.”¹⁶

Supportive services connect diagnosed individuals to care and help them remain in care and adhere to treatment regimens. Timely connection to and retention in medical care correlates both with better individual health outcomes for PLWHA and with better public health outcomes. Connection to care promotes adherence to treatment, a basic factor in the effectiveness of treatment, resulting in good

health. Further, a groundbreaking study recently found that early and regular treatment virtually eliminated the risk of transmission between sero-discordant, heterosexual partners.¹⁷ Thus, adherence to treatment is an essential component of good health for PLWHA and their partners.

Studies have shown that adherence to HAART depends not only on regular access to medicine but also on regular visits to a clinic and regular interaction with a healthcare provider. One study found that the number of days elapsed between clinic visits is positively correlated with higher viral loads.¹⁸ This means that PLWHA must physically visit the doctor in order to maintain regular treatment behaviors and lower viral load,¹⁹ rendering the removal of barriers to keeping these appointments essential. Another study of 423 patients receiving HAART between 1998 and 2004 found that the number of missed appointments and the number of days elapsed between each appointment strongly correlated with the occurrence of new AIDS-defining illnesses and death.²⁰ Additionally, patients receiving routine medical care are significantly less likely to engage in HIV risk behaviors, as demonstrated by a recent study that found that those who attended at least three appointments in the past six months were much less likely to engage in unprotected vaginal or anal intercourse.²¹

Again and again, social services are shown to promote adherence to treatment and retention in care. Accordingly, support services are essential to management and prevention of HIV/AIDS in the U.S., but they are also particularly crucial for WLWHA who have a unique need for these services.

Housing

Stable housing is the greatest unmet need of people living with HIV/AIDS.²² At the same time, HIV prevalence among the homeless population is nearly nine times that of the general population.²³ Half of all PLWHA—currently over 500,000 households—will require some form of housing assistance during their lifetimes.²⁴

Perhaps unsurprisingly, homeless or marginally housed PLWHA are more likely to delay treatment, less likely to have regular access to care, less likely to receive optimal drug therapy, and less likely to adhere to their medication regimen than are stably housed individuals.²⁵ In fact, one study found a non-adherence rate of 67% among homeless people living with HIV/AIDS in Boston.²⁶

The correlation between homelessness and HIV is further compounded for many women by histories of abuse. In fact, women who are homeless are more likely to have been, and to continue to be, survivors of abuse. This abuse can itself be a risk factor for HIV transmission, as women who have been abused are more likely to engage in greater sexual risk-taking behavior, such as exchanging sex for money or other goods.²⁷ Moreover, women in abusive relationships are often unable to control the terms of sexual engagement, including decisions about condom use.^{28,29} Homeless women may depend on abusive or coercive partners for basic necessities; as a result they are often unwilling or unable to negotiate safe sex and are all the more vulnerable to HIV infection.

Even where a history of abuse is not an issue, housing status is closely linked to risk-taking behavior. In a longitudinal study of HIV-infected individuals, persons whose housing status worsened were over three times as likely to exchange sex for money or other needed goods, while persons whose housing status

improved reduced their risk behaviors significantly, decreasing their chance of having unprotected sex by half.³⁰ Research has also shown that homeless or unstably housed persons were three to six times more likely to use drugs, share needles, or participate in transactional sex than stably housed persons with the same personal and service use characteristics.³¹

Given the extensive interplay between homelessness and HIV, it is unsurprising that stable housing has been shown to positively impact a person's ability to manage her HIV treatment. In a six-month longitudinal study of adherence to HAART regimens in New York City, residents in long-term housing were sixteen times more likely to report strong adherence to their treatment regimens than were unstably housed participants.³² Further, providing housing to those at risk for HIV is known to be one of the most effective interventions available to protect against infection.³³

Investing in housing has been demonstrated to be cost-effective by "substantially reduc[ing] utilization of costly emergency and inpatient health care services."³⁴ While one study showed that unstably housed patients were more likely to make costly emergency room visits,³⁵ two large-scale intervention studies demonstrated that supportive housing for persons with HIV/AIDS both improved health outcomes and reduced the use of expensive emergency and inpatient health care services. Such savings in costly health care services greatly exceeded the cost of housing assistance.³⁶

While the HOPWA program provides federally-funded long-term housing, the short-term and stop-gap services provided by Ryan White are essential to preventing homelessness among PLWHA.³⁷ And as demonstrated above, housing assistance and supportive housing are indispensable and cost-efficient elements of HIV prevention and care.

Case Management

Managing HIV often includes confronting the challenges, stressors, and disruptions that accompany poverty. In order to access the range of services needed for treatment and social support, PLWHA must regularly overcome the barriers of a complex and fragmented service delivery system.³⁸ Case managers can significantly improve an individual's ability to manage her illness by connecting her with vital health care and social services and by helping oversee adherence to treatment plans.³⁹ Further, case managers can serve as the hub of a provider network so that the logistical aspects of essential support systems do not become excessively burdensome.

With particular respect to patients' physical health, case management can help patients overcome fears about treatment,⁴⁰ increase the likelihood that recently diagnosed patients will seek medical treatment,⁴¹ and positively influence the use of and adherence to antiretroviral therapy.^{42,43} A study based in ten American cities found that 78% of all PLWHA enrolled in case-management programs were linked to HIV medical care within six months of enrollment, representing a 30% increase over those without case-management services.⁴⁴ A study conducted over six months in 1997 of PLWHA who were receiving Ryan White ancillary assistance demonstrated that while 44% of people without case managers reported not having a regular place for healthcare, only 20% of people with case managers reported this.⁴⁵ Case managers not only connect people to care, they also connect them to the services, such as transportation, that allow them to remain in care, and as a result, improve treatment outcomes.⁴⁶

Because they support timely and uninterrupted access to treatment, case managers significantly improve health outcomes in a number of critical respects. A 2006 study of homeless and marginally housed individuals found that having case management was associated with improved adherence to antiretroviral therapy and improved CD4⁺ count.⁴⁷ This increase may be attributable to case managers' efforts in promoting medical compliance, including encouraging clients to adhere to treatment and care regimens, assisting in reporting side effects to primary care physicians, and checking in regularly to ensure timely prescriptions refills.⁴⁸

Mental Health

PLWHA with mental health conditions experience elevated rates of HIV-related morbidity and mortality.⁴⁹ This may be due in part to the fact that mental illness reduces an individual's ability to mount an effective immune response against the virus,⁵⁰ increases the likelihood of engaging in risk behaviors as a way to mitigate stress, and negatively affects motivation to alter risk behaviors or make other positive steps to increase quality of life.^{51,52} As a result, HIV disease progression is often more rapid in those who have mental health needs.⁵³

Mental health services are essential to helping WLWHA deal with abuse and histories of abuse. A shocking half of all women living with HIV have experienced sexual abuse.⁵⁴ This history often results in psychiatric conditions, including major depression, anxiety, post-traumatic stress, and substance use.⁵⁵ Mental health interventions have been shown to be effective in this context. In a 2004 study of women with a history of sexual violence, those who participated in an intervention examining their sexual histories and linking these experiences to their current decision-making were 150% more likely to reduce risky sexual behaviors (such as unprotected sex) than women who did not receive the intervention.⁵⁶ In addition, these women were more likely to adhere to their medication than those not enrolled in the intervention program.⁵⁷

Mental health interventions have the demonstrated potential to increase treatment adherence and to help reduce risk-taking behaviors, thereby slowing transmission of HIV. In a study published in 2007, HIV-positive participants in a mental health treatment program achieved decreases in the use of drugs and alcohol, as well as improvements in mental health.⁵⁸ Individuals in the study also demonstrated improved capacity to manage their disease progression, including increased usage of both antiretroviral and appropriate psychiatric medications.⁵⁹ One study found that, overall, clinics that employed a mental health professional had fewer missed appointments, and other research found that substance abuse services had a similar effect.⁶⁰

Finally, mental health services are cost-effective. The 2007 study demonstrated the potential cost-savings associated with these programs, most notably decreased emergency room visits and inpatient hospital stays for participants compared to individuals who did not receive the intervention.⁶¹ Another study noted that providing antidepressant therapy for women living with both HIV and depression resulted in decreased medical costs overall.⁶² Given the potential reductions in risk-taking behaviors, improved treatment adherence, improvements in mental health, and the cost savings associated with mental health interventions, it is clear that mental health services are an essential component of HIV care and prevention.

Food/Nutrition

Good nutrition is vital for all people living with HIV. In addition to being an essential element of general good health—important when the body is under the stress of any disease—the specific progression of HIV/AIDS makes nutrition a salient concern for PLWHAs, their caregivers, and social service providers. A study in Atlanta found that food insufficiency was a better predictor of non-adherence to HIV treatment than years of education, employment status, income, housing, depression, social support, and non-alcohol substance use.⁶³

The need for increased nutrition in PLWHA was identified early in the epidemic, when the correlation between HIV infection and unintended weight loss was first noted.⁶⁴ Significant unintentional weight loss, known as “wasting,” was identified by the CDC in 1987 as one of the defining conditions of HIV/AIDS.⁶⁵ Wasting has tremendous implications for the health of PLWHA: loss of muscle mass inhibits the ability to maintain normal levels of activity,^{66,67} which in turn affects quality of life, health, and productivity.⁶⁸

In order to protect against the harms associated with disease-related weight loss and to maintain normal body weight and physical activity levels, HIV-positive individuals require roughly 10% more food energy than do their sero-negative counterparts,⁶⁹ and individuals living with an AIDS diagnosis are recommended to increase their intake by an additional 30%.⁷⁰ These nutritional requirements are even more demanding for PLWHA caring for HIV-positive dependents, as children living with HIV/AIDS require as much as 100% more food energy than their sero-negative counterparts to avoid weight-loss.⁷¹ It is essential that PLWHA maintain not only a calorie-rich but also well-balanced and healthy diet to maintain adequate nutrition.⁷² Adequate food resources and nutritional guidance are critical to addressing these increased needs in order to prevent the negative effects on disease management and health outcomes that accompany significant weight loss and malnutrition.

Women living with HIV/AIDS in particular require food resources and guidance as many of the same factors that put women at risk for HIV—poverty, racial and economic segregation, childcare responsibilities, and unstable housing—also impede the ability of women living with HIV/AIDS to maintain adequate nutrition.^{73,74} More than 10% of female HIV patients report having foregone medical care to pay for basic necessities, while 7% report having gone without food or other basic necessities in order to pay for the cost of their medical treatment.⁷⁵ Such trade-offs can have devastating impacts upon a woman’s health and wellbeing, and the health of her family as well.

Ensuring that women with HIV have access to quality food, receive regular nutritional counseling and maintain appropriate levels of physical activity can significantly reduce the complications associated with wasting and malnutrition.^{76,77} First, access to food and nutrition counseling can support effective drug therapy.^{78,79} Optimal food consumption also promotes absorption of medication, and regular meals can reduce medications’ side effects, increasing the likelihood of compliance with treatment such as HAART.⁸⁰

By slowing disease progression and reducing complications associated with HIV treatment, nutrition services have the potential to be a cost-saving measure. In fact, while in-home food delivery services average approximately \$1,500 per person, per year⁸¹, the average hospital stay for a PLWHA in 2007

was over 13 days, at an average cost of over \$2,000 a day in 2006.^{82,83} Consequently, food services have the potential to reduce significantly the need for expensive medical services. As food programs and nutritional counseling can greatly improve physiological health outcomes and promote increased activity levels that allow patients to better meet their families' basic needs, these services should be considered an integral aspect of HIV support and treatment programs.

Childcare and Mothering Concerns

Women often bear the brunt of childcare and domestic responsibilities.⁸⁴ This burden is felt acutely by HIV-positive women, who are overwhelmingly the primary or sole providers for their children.^{85,86} In New York City, for example, women head 79% of those households with children that receive public assistance from the HIV/AIDS Services Administration.⁸⁷ Familial obligations can have a significant impact on an HIV-positive woman's ability to manage her illness. In one survey of Indiana HIV service providers, 73% found childcare to be an overwhelming need among their female clients; 42% of those same providers found that childcare needs were not met at all and 46% stated that the need was only somewhat met.⁸⁸ Notably, childcare responsibilities were cited by more providers (59%) than any other single factor as an overwhelming barrier to service usage by their female, HIV-positive clients.⁸⁹ Data analysis from the HIV Cost and Services Utilization Study demonstrates that women are 70% more likely than men to delay care because of competing caregiver responsibilities.⁹⁰ Ryan White-funded childcare services help minimize the barriers HIV-positive women face in accessing needed care and services.⁹¹

Transportation

People living with HIV often lack vehicles, or money to pay for insurance or to access public transportation⁹² in order to get their medical appointments. Interviews of PLWHA conducted by Center for Research on Women in Memphis established that less than 50% of PLWHA use private vehicles to access medical care, citing high gas prices and parking prices as barriers.⁹³ Many parts of the country, such as the South, lack extensive public transportation systems, preventing PLWHA without cars from accessing treatment.⁹⁴ Lack of transportation, or the money to pay for transportation, is a very literal obstacle to accessing needed support services. This barrier is compounded by the limited number of clinical providers and HIV specialists⁹⁵ in many parts of the country.

As a result of this situation, access to care is thwarted. In one study of 2,864 adults receiving care for HIV in the U.S., 26% of WLWHA and 12% of men reported postponing care due to lack of transportation.⁹⁶ Further, a 2005 study in North Carolina found that both rural and urban HIV/AIDS case workers reported lack of accessible transportation to be a significant barrier to medication adherence for clients: 58% of rural case managers and 30% of urban case managers rated lack of transportation a "major problem."⁹⁷ Similarly, researchers studying appointment attendance in Brooklyn, New York found that lack of transportation and childcare were reasons for missed appointments.⁹⁸

Transportation services allow low-income women living with HIV to access needed medical care and services. In a study of 999 HIV-positive patients in Boston, access to and use of transportation support through Ryan White funding was significantly correlated with retention in primary care.⁹⁹ Interventions

that increase access to transportation have also been shown to be effective in helping WLWHA keep medical appointments. A 2007 study of a sample of women who missed many appointments provided them with 6 months of transportation and found significantly reduced missed appointment rates as a result.¹⁰⁰ These services, therefore, are essential to keeping people in care.

Legal Services

Provision of legal services has been shown to have distinctly positive effects, including improved individual health, on the lives of people with HIV/AIDS. A 2002 study reviewed the need for, availability of, and impact of legal services for PLWHA and determined that “[Legal] services improve access to health care, housing, and support services through education, empowerment, and enforcement of legal rights.”¹⁰¹ It found that these services were especially effective in guaranteeing access to and the maintenance of health care services¹⁰² primarily by addressing issues that would otherwise compete with these priorities.¹⁰³ A 2007 survey by LegalHealth in New York City assessed the impact of legal services on individuals with cancer. Of the respondents, 83% said legal assistance helped reduce their stress, 51% reported that it had a positive effect on their financial situation, 33% stated that it positively affected their family or loved ones, and 23% and 22% respectively claimed it helped them maintain their treatment regimens and keep medical appointments.¹⁰⁴

The need for access to legal services is arguably even more urgent for people living with HIV, given the strong association between poverty and HIV status, the historical stigma associated with the disease,¹⁰⁵ the heightened risk of discrimination in employment, housing, and other contexts, and the negative health outcomes associated with stress and anxiety for PLWHA.¹⁰⁶ Studies show that individuals perceiving higher levels of cumulative negative life burden and stress-inducing circumstances have viral loads twice as high as those with lower levels of negative life burden, controlling for adherence to HAART.¹⁰⁷ Furthermore, higher levels of stress are associated with faster disease progression.¹⁰⁸ The resolution of these cases is essential, therefore, in diminishing stressors and ensuring stability.

Legal services routinely help people living with HIV/AIDS to access public benefits, including public health insurance, for which they are eligible, or to dispute improper terminations or cuts in assistance.¹⁰⁹ Similarly, many HIV-positive women depend on Supplemental Security Income (SSI), Social Security Disability Income (SSDI). Legal services attorneys fight on behalf of eligible clients to obtain these benefits, and to oppose wrongful recoupments, so that the struggle for financial survival need not constantly interfere with medical care and treatment, and the optimization of health.¹¹⁰ Without legal representation to ensure access to public assistance, disability insurance, and health insurance, treatment retention decreases and PLWHA are exposed to significantly more severe disease outcomes¹¹¹

In this and other areas, such as permanency planning, legal services allow PLWHA to allocate time and mental resources to their health maintenance, rather than their legal battles and concerns. The quality of life and health gains HIV-positive individuals experience through provision of legal services, coupled with the potential cost-efficiency of these initiatives, demonstrates the value of Ryan White-funded legal service programs.

Conclusion and Recommendations

Support services, including housing, case management, mental health care, food, childcare, transportation, and legal services make it possible for PLWHA to better attend to their own health while making difficult choices about how to allocate precious, limited resources: time, money, and energy. Additionally, support services help low-income PLWHA to comply with complex medical regimens, despite the rigors of living in poverty. For low-income and marginalized people living with HIV/AIDS, there can be no effective medical care without Ryan White funded support services.

It is abundantly clear that support services improve health outcomes, which in turn saves money now and in the future. Preservation and expansion of these Ryan White- funded services is sound policy for the health of individuals, families, and the public.

In case of questions or for more information, please feel free to contact Alison Yager, Supervising Attorney for HIV Policy, ayager@hivlawproject.org, 212.577.3001 x 611.

Endnotes

¹ The White House Office of National AIDS Policy, “National HIV/AIDS Strategy for the United States,” (July 2010): vii, <http://www.whitehouse.gov/sites/default/files/uploads/NHAS.pdf>.

² Kaiser Family Foundation, “Women and HIV/AIDS.”

³ Ibid.

⁴ Ronald Andersen et al., “Access of Vulnerable Groups to Antiretroviral Therapy among Persons in Care for HIV Disease in the United States,” *HSR: Health Services Research* 35.2 (2000): 389-416.

⁵ V. Mor et al., “Variation in Health Service Use among HIV-infected Patients,” *Medical Care* 30 (1992): 17-29.

⁶ Typhanye V. Penniman et al. “The Associations of Gender, Sexual Identity and Competing Needs with Healthcare Utilization among People with HIV/AIDS,” *Journal of the National Medical Association* 99 (2007): 423.

⁷ Kaiser Family Foundation, “Women and HIV/AIDS.”

⁸ T. Diaz et al., “Socioeconomic Differences among People with AIDS: Results from a Multistate Surveillance Project,” *American Journal of Preventive Medicine* 10 (1994): 17-22.

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- ⁹ Committee on Public Financing and Delivery of HIV Care, Board on Health Promotion and Disease Prevention, Institute of Medicine of the National Academies, "Public Financing and Delivery of HIV/AIDS Care: Securing the Legacy of Ryan White," (May 2004), http://www.nap.edu/openbook.php?record_id=10995&page=R1.
- ¹⁰ Mark A. Schuster et al., "HIV-Infected Parents and their Children in the United States," *American Journal of Public Health* 90 (2000): 1076, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446301/pdf/10897185.pdf>.
- ¹¹ *Ibid.*
- ¹² Supriya Mehta et al., "Potential Factors Affecting Adherence with HIV Therapy," *AIDS* 11(1997): 1666, http://journals.lww.com/aidsonline/fulltext/1997/14000/potential_factors_affecting_adherence_with_hiv.2.aspx.
- ¹³ The White House Office of National AIDS Policy, "National HIV/AIDS Strategy," 28.
- ¹⁴ Kristin L. Hackl et al., "Women Living with HIV/AIDS: The Dual Challenge of Being a Patient and Caregiver," *Health & Social Work* 22.1 (1997): 54.
- ¹⁵ Shannon L. Hader et al., "HIV Infection in Women in the United States: Status at the Millennium," *Journal of the American Medical Association* 285.9 (2001): 1190, <http://jama.ama-assn.org/content/285/9/1186.full.pdf>.
- ¹⁶ The White House Office of National AIDS Policy, "National HIV/AIDS Strategy," 29.
- ¹⁷ National Institutes of Health News, "Treating HIV-infected People with Antiretrovirals Protects Partners from Infection," (May 12, 2011), <http://www.niaid.nih.gov/news/newsreleases/2011/Pages/HPTN052.aspx>.
- ¹⁸ W.B. Park et al., "One-year Adherence to Clinic Visits after Highly Antiretroviral Therapy: A Predictor of Clinical Progress in HIV Patients," *Journal of Internal Medicine* 261 (2007): 268-275.
- ¹⁹ *Ibid.*, 271.
- ²⁰ Park, "One-year Adherence to Clinic Visits," 268-75.
- ²¹ Lisa R. Metsch, et al., Antiretroviral Treatment Access Study (ARTAS) Study Group, "HIV Transmission Risk Behaviors among HIV-infected Persons Who Are Successfully Linked to Care," *Clinical Infectious Diseases* 47 (2008): 577-84, http://www.hivma.org/uploadedFiles/HIVMA/News_and_Publications/Clinical_Issues_in_HIV_Medicine/2009_Compendium/PDFs/166.pdf.
- ²² Virginia Shubert and Nancy Bernstine, "Moving from Fact to Policy: Housing is HIV Prevention and Health Care." *AIDS and Behavior* 11: Supplement 2 (2007): S173, http://www.aidschicago.org/pdf/2008/housing_plan_MovingfromFact.pdf.
- ²³ National Coalition for the Homeless, "HIV/AIDS and Homelessness," (July 2009), <http://www.nationalhomeless.org/factsheets/HIV.pdf>.
- ²⁴ Shubert, "Moving from Fact to Policy," S175.
- ²⁵ Richard J. Wolitski et al., "HIV, Homelessness, and Public Health: Critical Issues and a Call for Increased Action," *AIDS and Behavior* 11: Supplement 2 (2007): S168.
- ²⁶ J.H. Samet et al., "Compliance with Zidovudine Therapy in Patients Infected with Human Immunodeficiency Virus, Type 1: A Cross-Sectional Study in a Municipal Hospital Clinic," *American Journal of Medicine* 92 (1992): 495-501.
- ²⁷ Suzanne Wenzel et al., "Sexual Risk among Impoverished Women: Understanding the Role of Housing Status," *AIDS and Behavior* 11: Supplement 2 (2007): S10.
- ²⁸ Karen A. McDonnell et al., "Abuse, HIV Status, and Health-Related Quality of Life among a Sample of HIV Positive and HIV Negative Low Income Women," *Quality of Life Research* 14.4 (2005): 945-57.
- ²⁹ Wenzel, "Sexual Risk among Impoverished Women," S10.
- ³⁰ Angela Aidala et al., "Housing Status and HIV Risk Behaviors: Implications for Prevention and Policy," *AIDS and Behavior* 9.3 (2005): 259-60.
- ³¹ *Ibid.*, 258.
- ³² Leaver, "The Effects of Housing Status on Health-Related Outcomes," S96.
- ³³ Shubert, "Moving from Fact to Policy," S172.
- ³⁴ Shubert, "Moving from Fact to Policy," S177.
- ³⁵ Kushel, "Housing Instability and Food Insecurity," 75.
- ³⁶ National AIDS Housing Coalition, "Examining the Evidence: The Impact of Housing on HIV Prevention and Care. Summary of Key Findings from the Third National Housing and HIV/AIDS Research Summit," (2008), <http://nationalaidshousing.org/PDF/Summary-Key%20Summit%20Findings.pdf>.
- ³⁷ The National AIDS Housing Coalition, "2012 HOPWA Current HIV/AIDS Housing Need," (July 2011), <http://www.nationalaidshousing.org/PDF/2012%20HOPWA%20Need%20Paper.pdf>.

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- ³⁸ Boston Public Health Commission, HIV/AIDS Services Division and Massachusetts Department of Health, Office of HIV/AIDS, "Standards of Care for HIV/AIDS Services," (2009): 39, <http://www.bphc.org/programs/infectiousdisease/hivaidsstestingservicesdiseaseinformation/hivaidservicesdivision/clientsservicesryanwhiteparta/Forms%20%20Documents/Final%20Standards%20of%20Care%20January%202009.pdf>.
- ³⁹ M.B. Kushel et al., "Case Management is Associated with Improved Antiretroviral Adherence and CD4+ Cell Counts in Homeless and Marginally Housed Individuals with HIV Infection," *Clinical Infectious Diseases* 43 (2006): 234, <http://cid.oxfordjournals.org/content/43/2/234.full.pdf>.
- ⁴⁰ Ibid.
- ⁴¹ Lytt I. Gardner et al., "Efficacy of a Brief Case Management Intervention to Link Recently Diagnosed HIV-Infected Persons to Care," *AIDS* 19:4 (2005): 429.
- ⁴² William E. Cunningham et al., "Case Management and Health-Related Quality of Life Outcomes in a National Sample of Persons with HIV/AIDS," *Journal of the National Medical Association* 100.7 (2008): 846.
- ⁴³ Katz, "Effect of Case Management," 563.
- ⁴⁴ Jason A. Craw et al., "Brief Strengths-Based Case Management Promotes Entry into HIV Medical Care," *Journal of Acquired Immunodeficiency Syndrome* 47:5 (2008): 597.
- ⁴⁵ J.J. Ashman et al., "Associations between HIV-positive Individuals' Receipt of Ancillary Services and Medical Care Receipt and Retention," *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV* 14 (2002): S114.
- ⁴⁶ Sally Dodds et al., "Integrating Mental Health Services into Primary HIV Care for Women: The Whole Life Project," *Public Health Reports* 119 (2004): 50. This study was conducted by the Whole Life Project in Miami.
- ⁴⁷ Kushel, "Case Management is Associated with Improved Antiretroviral Adherence and CD4+ Cell Counts," 240.
- ⁴⁸ Ibid., 241.
- ⁴⁹ Stephanie Bouis et al., "An Integrated, Multidimensional Treatment Model for Individuals Living with HIV, Mental Illness, and Substance Abuse," *Health and Social Work* 32.4 (2007): 268, <http://www.dhs.wisconsin.gov/aids-hiv/PDFdocuments/CMResManual0309/Section%203-%20Mental%20Health/Mental%20Health,%20Substance%20Abuse%20and%20HIV%20Treatment%20Model%20article.pdf>.
- ⁵⁰ Dalmida, "Spirituality, Mental Health, Physical Health," 187.
- ⁵¹ Heidi E. Hutton et al., "Depression and HIV Risk Behaviors among Patients in a Sexually Transmitted Disease Clinic," *American Journal of Psychiatry* 161 (2004): 912-14, <http://ajp.psychiatryonline.org/data/Journals/AJP/3760/912.pdf>.
- ⁵² Ibid.
- ⁵³ Dodds, "Integrating Mental Health Services into Primary HIV Care for Women," 49.
- ⁵⁴ Gail E. Wyatt et al., "The Efficacy of an Integrated Risk Reduction Intervention for HIV-Positive Women with Child Sexual Abuse Histories," *AIDS and Behavior* 8.4 (2004): 454.
- ⁵⁵ Dodds, "Integrating Mental Health Services into Primary HIV Care for Women," 49.
- ⁵⁶ Wyatt, "The Efficacy of an Integrated Risk Reduction Intervention," 459-60.
- ⁵⁷ Ibid., 459.
- ⁵⁸ Bouis, "An Integrated, Multidimensional Treatment Model," 268.
- ⁵⁹ Ibid., 277.
- ⁶⁰ Horstmann, "Retaining HIV-Infected Patients in Care," 755.
- ⁶¹ Bouis, "An Integrated, Multidimensional Treatment Model," 269.
- ⁶² Jeannette R. Ickovics et al., "Mortality, CD4 Cell Count Decline, and Depressive Symptoms Among HIV-Seropositive Women: Longitudinal Analysis From the HIV Epidemiology Research Study," *Journal of the American Medical Association* 285.11 (2001): 1473, <http://jama.ama-assn.org/content/285/11/1466.full.pdf>.
- ⁶³ Seth C. Kalichman et al., "Health and Treatment Implications of Food Insufficiency Among People Living with HIV/AIDS, Atlanta, Georgia," *Journal of Urban Health* 87.4 (2010), http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2900577/pdf/11524_2010_Article_9446.pdf.
- ⁶⁴ Julie Young, "HIV and Medical Nutrition Therapy," *Journal of the American Dietetic Association* 97: Supplement 2 (1997): S161.
- ⁶⁵ Alexandra Mangili et al., "Nutrition and HIV Infection: Review of Weight Loss and Wasting in the Era of Highly Active Antiretroviral Therapy from the Nutrition for Health Living Cohort," *Clinical Infectious Diseases* 42 (2006): 836.

-
- ⁶⁶ Derek Macallan, "Wasting in HIV Infection and AIDS," *The Journal of Nutrition* 129 (1999): 238S–242S; Abby H. Shevitz et al., "Elevated Resting Energy Expenditure Among HIV-Seropositive Persons Receiving Highly Active Antiretroviral Therapy," *AIDS* 13 (1999): 1355.
- ⁶⁷ Shevitz, "Elevated Resting Energy Expenditure," 1355.
- ⁶⁸ Louise C. Ivers et al., "HIV/AIDS, Undernutrition, and Food Insecurity," *Clinical Infectious Diseases* 49 (2009): 1097.
- ⁶⁹ Woods, "Dietary Considerations in HIV and AIDS," 96.
- ⁷⁰ World Health Organization, "Nutrient Requirements for People Living with HIV/AIDS: Report of a Technical Consultation," (2003): 4, http://www.who.int/nutrition/publications/Content_nutrient_requirements.pdf.
- ⁷¹ *Ibid.*
- ⁷² *Ibid.*, 3.
- ⁷³ Alexandra Mangili et al., "Nutrition and HIV Infection: Review of Weight Loss and Wasting in the Era of Highly Active Antiretroviral Therapy from the Nutrition for Health Living Cohort," *Clinical Infectious Diseases* 42 (2006): 838.
- ⁷⁴ William Cunningham et al., "The Impact of Competing Subsistence Needs and Barriers on Access to Medical Care for Persons with Human Immunodeficiency Virus Receiving Care in the United States," *Medical Care* 37.12 (1999): 1271.
- ⁷⁵ *Ibid.*, 1275.
- ⁷⁶ Ivers, "HIV/AIDS, Undernutrition, and Food Insecurity," 1098; Denise Agin et al., "Effects of Whey Protein and Resistance Exercise on Body Cell Mass, Muscle Strength, and Quality of Life in Women with HIV," *AIDS* 15 (2001): 2436.
- ⁷⁷ Agin, "Effects of Whey Protein and Resistance," 2436.
- ⁷⁸ Cunningham, "The Impact of Competing Subsistence Needs," 1280.
- ⁷⁹ Ivers, "HIV/AIDS, Undernutrition, and Food Insecurity," 1098; Agin, "Effects of Whey Protein and Resistance," 2431-40.
- ⁸⁰ Ivers, "HIV/AIDS, Undernutrition, and Food Insecurity," 1097; Denise Agin et al., "Effects of Whey Protein and Resistance," 2431-2440.
- ⁸¹ Food Security for Seniors and Persons with Disabilities Project, "A Look at Household Food Security for Seniors and Persons with Disabilities in Seattle's Low-income Housing," February 2008, 17, <http://www.solid-ground.org/AboutUs/Publications/Documents/FoodSecurityForSeniors-PersonsW-Disabilities.pdf>.
- ⁸² Baligh R. Yehia et al., "Inpatient Health Services Utilization among HIV-Infected Adult Patients in Care 2002-2007," *Journal of Acquired Immune Deficiency Syndrome* 53.3 (2010):397-404, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2831106/pdf/nihms153873.pdf>.
- ⁸³ Kelly A. Gebo, et al., "Contemporary Costs of HIV Healthcare in the HAART Era," *AIDS* 24.17 (2010): 2708.
- ⁸⁴ Michael D. Stein et al., "Delays in Seeking HIV Care Due to Competing Caregiver Responsibilities," *American Journal of Public Health* 90.7 (2000): 1139, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446306/pdf/10897195.pdf>.
- ⁸⁵ Kristin L. Hackl et al., "Women Living with HIV/AIDS: The Dual Challenge of Being a Patient and Caregiver," *Health & Social Work* 22.1 (1997): 54.
- ⁸⁶ Shannon L. Hader et al., "HIV Infection in Women in the United States: Status at the Millennium," *Journal of the American Medical Association* 285.9 (2001): 1190.
- ⁸⁷ William Millán, Director, HRA/MICSA/HASA Administration Office of Policies, Procedures, Training & Community Affairs, e-mail message to Alison Yager, Supervising Attorney, HIV Law Project, March 23, 2011.
- ⁸⁸ Carrie E. Foote-Ardah and Jeremy C. Roseberry, "Voices of Indiana Women Living with HIV/AIDS and Their Care Coordination Providers: An Exploratory Study to Identify Service Barriers," Indiana University-Purdue University Department of Sociology (November 2004): 10.
- ⁸⁹ *Ibid.*, 12.
- ⁹⁰ Stein, "Delays in Seeking HIV Care," 1138.
- ⁹¹ *Ibid.*, 60.
- ⁹² The Center for Research on Women, The University of Memphis, "Mind the Gap: Ryan White Part A HIV/AIDS Transportation Needs Assessment Special Study," (2010): 5, http://www.memphis.edu/crow/pdfs/Transportation_Full_Final_Report_8.11.10.pdf.
- ⁹³ *Ibid.*
- ⁹⁴ *Ibid.*, 4.
- ⁹⁵ Committee on HIV Screening and Access to Care, Institute of Medicine, "HIV Screening and Access to Care: Health Care System Capacity for Increased HIV Testing and Provision of Care," (2011): 20, http://www.nap.edu/catalog.php?record_id=13074#toc.

-
- ⁹⁶ Cunningham, "The Impact of Competing Subsistence Needs," 1275.
- ⁹⁷ S. Reif et al., "Barriers to Accessing HIV/AIDS Care in North Carolina: Rural and Urban Differences." *AIDS Care* 17.5 (2005): 562, <http://www.med.unc.edu/healthonwheels/files/rural-health-disparity-articles/Barriers%20to%20accessing%20HIV%20AIDS%20care%20in%20North%20Carolina-Rural%20and%20Urban%20differences.pdf>.
- ⁹⁸ B. Norris et al., "Evaluation of Compliance Rates in a Clinic Serving Minority and Low Income Communities," abstract SD769, VI International Conference on AIDS, San Francisco (June 1990).
- ⁹⁹ W. Lo et al., "Association of Ancillary services with Primary Care Utilization and Retention for Patients with HIV/AIDS," *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV* 14 (2002): S53.
- ¹⁰⁰ M. Andersen et al., "Retaining Women in HIV Medical Care," *J Assoc Nurses AIDS Care* 18 (2007): 33-41.
- ¹⁰¹ John-Manuel Andriote & R. Bradley Sears, *Ensuring Access to Health Care for People with HIV/AIDS: The Role of Legal Services (A Ryan White CARE Act Policy Study)* (April 2000): 6.
- ¹⁰² *Ibid.*, 12.
- ¹⁰³ *Ibid.*, 11.
- ¹⁰⁴ David I. Schulman et al., "Public Health Legal Services: A New Vision," *Georgetown Journal on Poverty Law and Policy*, 15(2008): 729, <http://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=1219&context=lsfp>.
- ¹⁰⁵ Ronda B. Goldfein and Sarah R. Schalman-Bergen, "From the Streets of Philadelphia: The AIDS Law Project of Pennsylvania's How-To Primer on Mitigating Health Disparities," *Temple Law Review* 82 (2010): 1208-13.
- ¹⁰⁶ Adam W. Carrico et al., "Psychoneuroimmunology and HIV," in *Comprehensive Textbook of AIDS Psychiatry*, ed. Mary Ann Cohen and Jack M. Gorman (New York: Oxford University Press, 2008), 28.
- ¹⁰⁷ *Ibid.*
- ¹⁰⁸ *Ibid.*
- ¹⁰⁹ John-Manuel Andriote and R. Bradley Sears, "The Role of Legal Services in Ensuring Access to Care for People with HIV/AIDS" in *Directions in HIV Service Delivery & Care: Reducing Barriers to Care, A Policy Brief, No. 4*, U.S. Health Resources and Services Administration, HIV/AIDS Bureau, (2010): 16-17, <http://www.heart-intl.net/HEART/052505/DirectionsinHIVServiceDelivery&Care.pdf>.
- ¹¹⁰ *Ibid.*
- ¹¹¹ Supriya Mehta et al., "Potential Factors Affecting Adherence with HIV Therapy," *AIDS* 11(1997): 1666.