Introduction:

Healthcare in the United States over the last twenty years has seen a shift from traditional treatment methods to a model based on prevention. Doctors are emphasizing the importance of good nutrition, regular exercise, and a healthy lifestyle more everyday. This message is especially important for people living with the Human Immunodeficiency Virus (HIV) or Acquired Immunodeficiency Syndrome (AIDS). For the 68% of HIV positive patients who have public health insurance or no insurance at all, comprehensive treatment programs are not a practical option.[1] People living with HIV are fighting a constant battle to stay healthy. Medications are available to decrease the risk of contracting AIDS, but they are only part of the treatment. A healthy lifestyle, hygienic housing and work conditions, and a strong support system are all part of coping with this disease, and for the indigent population. The vehicle I will use to focus these topics is one that I have personal knowledge about from my experiences at the Fan Free Clinic; the quality of HIV/AIDS treatment received by the indigent population.

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HIV/AIDS is an epidemic that continues to ravage the lives of over 1.2 million persons in the United States, with an estimated 56,000 persons being infected yearly.[2] HIV/AIDS can be a debilitating disease, and a closer look at HIV/AIDS statistics prove disturbing because minorities, particularly African-Americans, are disproportionately infected. A recent segment on National Public Radio reported that studies have shown

1. Bozzette SA et al. “The Care of HIV-Infected Adults in the United States.” NEJM, Vol. 339, No. 26, December 1998.
2. Glynn M, et al. Estimated HIV prevalence in the United States at the end of 2003. National HIV Prevention Conference; June 12–15, 2005; Atlanta. Abstract T1-B1101.

that the HIV rate in Washington D.C. is the highest in the nation. In fact, at 3% of the population, the incidence rate is higher than West Africa.[3]

Over the last ten years, advances in HIV treatment and better prevention programs have greatly slowed the rate of deaths for infected people; however, these advances have not been made widely available. This paper looks at the nature of the disease and different treatment options available before delineating differences in the treatment and heath care for indigent and insured patients living with HIV/AIDS. Finally, it recommends programs for reforming the current system.

Background Science of HIV/AIDS

The Human Immunodeficiency Virus (HIV) is the virus that causes AIDS (Acquired Immunodeficiency Syndrome). HIV, an especially deadly virus, is a retrovirus, Washington and Lee University which means once the virus has infected the cells of the human body it takes over the cell's replication mechanism. The virus, using the body's own tools, destroys CD4+ T cells. These CD4+ T cells are important to the normal function of the body's immune system, and without them, the body is severely weakened. The disease is transmitted through contact with infected mucous membranes, as well as infected body fluids (blood, semen, or vaginal secretions).[4] Different ways to contract HIV include unprotected sexual acts with HIV positive people, blood transfusions from infected people, and sharing infected needles (either for drug use or tattoos). Even when the disease progresses

3. Tell Me More. 12 Mar. 2009. National Public Radio. 18 Mar. 2009 <http://www.npr.org/templates/story/story.php?storyId=102039372>

4. "What is HIV?" The Science of AIDS. Oct. 2006. Center for Disease Control. 18 Mar. 2009 <http://www.cdc.gov/hiv/resources/qa/definitions.htm>.

to the AIDS stage, the virus itself does not kill. Other conditions such as tuberculosis, pneumonia, or cancer ravage the body unchecked because the immune system is weakened. These opportunistic infections are the technical causes of death, but they would not been able to devastate the body if the immune system had not been compromised.

Testing for the Virus

As public health officials dealt with the AIDS epidemic in the 1980's, they implemented several easy and effective measures. Screening blood donors for HIV has eliminated transfusion-associated HIV infection, and routine HIV screening for pregnant women has decreased the incidence of pediatric AIDS. However, progress in decreasing the rate of sexually transmitted HIV has been limited. There are various ways to get tested for HIV/AIDS and approximately 16-22 million persons get tested in the U.S. every year. [5]

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The US Food & Drug Administration has approved four rapid tests with varying degrees of sensitivity and specificity, but with certain invariant characteristics. All the tests have visual indicators, need no instrumentation to read, and take only 20 minutes to deliver results. These rapid tests are the method of choice employed by free clinics, community-based health centers, and hospitals because they are convenient and do not need administration by healthcare professionals. The development of rapid tests has also greatly increased the percentage of the population tested. Two of the rapid tests are oral, while the other two need only a miniscule amount of blood serum (finger-prick samples).

5. "CBER - Donor Screening Assays for Infectious Agents and HIV Diagnostic Assays." U S Food and Drug Administration Home Page. 29 Mar. 2009 <http://www.fda.gov/cber/products/testkits.htm>.

However, these tests show “preliminary positives” and must be confirmed with a blood test. Similarly, a negative test result does not indicate no infection. The nature of the virus is such that it can be present in the body without symptoms. Healthcare providers using rapid tests must emphasize the importance of retesting after a month. Facilities serving especially high-risk populations have a hard time convincing people to take one test, let alone coming back for more tests a few weeks later. Unfortunately, the alternate method of testing (RNA tests) is both more expensive and painful.

According to the AIDS Healthcare Foundation, approximately 300,000 persons are unaware of their HIV infection, which is a significant public health risk.[6] Awareness and monitoring of the virus are imperative to minimize the number of new infections because studies have shown that people aware of their HIV positive status tend to “decrease behaviors that help transmit infection to sex or needle-sharing partners.”[7] According to medical health counselors, even “considering whether to be tested often constitutes a crisis in a person’s life.”[8]

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There is no difference in the quality of tests administered, just availability. What does impact the quality of healthcare is the pre and post-test counseling. HIV counseling must be “client-centered,” and must be mindful and respectful of the choices, background, and lifestyle of the person getting tested. This pre- and post-test counseling is absolutely necessary. Psychologists emphasize the need for an open and honest

6. Fears, Darryl. "Awareness Campaign On HIV/AIDS Begins - washingtonpost.com." Washingtonpost.com. 8 Apr. 2009. Washington Post. 12 Apr. 2009 <http://www.washingtonpost.com/wp-dyn/content/article/2009/04/07/AR2009040703717.html?hpid=sec-health>.

7. Ibid

[8] Citation 15

relationship between the patient and healthcare provider, as well as a setting that promotes discussion instead of lecture. If there are no free clinics or community-based health centers easily accessible, people are less likely to seek out a testing center. This access is particularly relevant for rural environments, where lack of transportation can also play a role. However, these settings generally have low risk for contracting HIV/AIDS.

Tracking & Monitoring

Healthcare providers use two methods to keep track of the virus after diagnosis. The first is the viral load test, which measures the amount of HIV virus in the blood. The results look at the copies of HIV in one milliliter of blood, and the lower the number, the better. The best result would be "undetectable," indicating a lack of viral activity.[9] The second way to track the virus is to measure the CD4 + cell count. The CD4+ cell count in the body also indicates progression of the virus. A CD4+ cell count of 200 and below is the official delineation between HIV and AIDS. These two tests allow patients to monitor their disease. The expression "full-blown AIDS" is redundant; the patient is either HIV positive or has AIDS; there is no in-between.

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These tracking tests are also valuable in other ways. Medical researchers use it to calculate the latency of the disease, while healthcare providers employ the viral load test for diagnosis, prognosis, and prevention therapy. The viral load not only predicts how long someone will remain symptomless; it also looks at the transmission risk (the risk of

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[9] Ibid.

passing HIV to someone else). Finally, the viral load test is important in prevention therapy since it is a measure of the efficacy of medication.

Treatment for HIV/AIDS

Patients who have health insurance will choose a provider as the first step in starting treatment. Depending on the viral caseload, the CD4+ cell count, and other health factors (smoking, heart disease, weight, sexual activity), the patient may want to start antiretroviral treatment.[10] Again, the treatment not only has to be comprehensive, it should fit the lifestyle of the patient. While there is no cure for HIV, a positive test for the virus is not a death sentence. Before the invention of powerful antiretroviral drugs in the late 1980s, more than half of HIV positive patients succumbed to the syndrome, but that number has significantly decreased.

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The majority of the treatment for HIV/AIDS involves preventing other infections. The best treatment is comprehensive, accounting for more than just the medication needed to curtail the growth of the virus. A healthy lifestyle is the key to warding off opportunistic infections, as well as lowering so-called "transmission risk factors." Smoking cessation, lack of drug use, and no unprotected sexual contact with possible infected persons are steps that need to be taken after a positive HIV diagnosis. Unfortunately, given the environment and lifestyle of most people who contract the virus, these actions are difficult to implement.

The United States Federal Drug Administration, in conjunction with the Department of Health and Human Services, assembled a panel to establish the guidelines

[10] CDC. HIV/AIDS Surveillance Report, 2006. Vol. 18. Atlanta: US Department of Health and Human Services, CDC; 2008.

for anti-retroviral agents for adults and adolescents. Current guidelines suggest measuring baseline, or pre-treatment, viral load. A drug is "working" if it lowers the amount of virus in the body by at least 90% within 2 months. The viral load should continue to drop to less than 50 copies of HIV within 6 months. In order to measure the efficacy of the medication, the viral load should be measured within 2 to 8 weeks after treatment is started or changed, and every 3 to 4 months after that.[11]

There are over 20 available drugs, in 5 different groups. The first drug was approved to treat HIV/AIDS in 1987, and it belongs to a group of drugs known as Nucleoside/Nucleotide Reverse Transcriptase Inhibitors (NRTIs). NRTIs and the next generation of drugs, NNRTIs, are the most available type of medication. The newest group of drugs, approved in 2007, is the most expensive.[12] These drugs are all available in pill form, and all of them are part of a daily regimen.

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Unfortunately, HIV is a virus that can develop resistance fairly quickly, and not just to one drug, but to the whole group. The virus can mutate in the body, and in doing so, develop a resistance to the drug, rendering the medication ineffective. For example, a patient only taking Epivir from the NRTI group can develop a resistance to all the drugs in that group, even if he or she has not previously taken them. This ability to develop cross-resistance severely impacts patients who cannot afford the latest generation of medications. Patients will often take drugs from both the NRTI and NNRTI group. Known as combination therapy, this counteracts the resistance developed by the virus. The first-line therapy is monitored using the tests already described. If the drug regime is

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[11] "Viral Load Tests." AIDS.ORG: Educating - Raising HIV Awareness - Building Community 22 Mar 2009 <http://www.aids.org/factSheets/125-Viral-Load-Tests.html>.
[12] "Introduction to HIV and AIDS drug treatment." AIDS & HIV information from the AIDS charity AVERT 23 Mar 2009 <http://www.avert.org/treatment.htm>.

ineffective or affords severe side effects, a drug from another group is added for the second-line therapy. For insured or underinsured patients, second-line therapy is often not a viable option. Insurance companies often cover only certain groups of drugs or only generic medications. If a patient develops resistance to the available medication, it is a struggle to get the newer drugs.

Another important factor for successful treatment is adherence. Adherence suggests careful observation and following of the prescribed drug treatment. High adherence rates correlate to greater drug effectiveness, and anything less than 95% adherence has shown to correspond in an increase in the viral caseload. Adherence can be a real issue for persons without a regular healthcare provider. While free clinics and community-based health centers often have regular healthcare providers, they cannot provide the attention required to monitor a patient. These centers do not have the infrastructure, resources, or personnel to offer individual treatment programs.

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Another important aspect of treatment is counseling. People diagnosed with HIV often demonstrate signs of clinical depression, and anxiety. Stress and depression can affect the neuroendrocrine system, and can affect the immune system. Unfortunately, for people who do not have health insurance, a positive HIV diagnosis adds a layer of stress to their plate of troubles. Unlike conditions like cancer or any genetic disease, there is a stigma associated with being HIV positive. Since blood donations started being screened in 1985 for HIV, the most common way to contract the disease today is through unprotected sexual contact, and to a lesser degree, intravenous drug usage. One population at high risk for contracting HIV is the male homosexual population. Since many do not agree with their lifestyle or choices, gay men or drug users with HIV/AIDS

are doubly victimized.

Options for the Indigent Population:

Medicaid and Medicare

Several federal programs aim at providing treatment for infected people whose health insurance does not cover their treatment, or who do not have health insurance. Medicaid is the largest insurance provider in the United States and it is the also the largest source of coverage for people with HIV in the United States.[13] Factors used to determine Medicaid eligibility include pregnancy, disability, and age. Income and resources (like bank accounts, real property, or other items that can be sold for cash) are also considered.

Federal and state governments together spent $7.5 billion on programs to treat HIV/AIDS in FY 2008, and will likely spend an additional half billion in FY 2009.[14]

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Even with the rising costs of care and a higher incidence of new cases this amount is only about 2% of total Medicaid spending. About 40% of HIV positive people receive Medicaid, but they represent only .01% of the Medicaid population. A large share of newly diagnosed patients are already on Medicaid, which accounts for the fact that people with HIV are three to four times more likely to be covered by Medicaid than the U.S. population overall.[15] Figure 1 illustrates the various options within the Medicaid program accessible to HIV patients.

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[13] "Medicaid and HIV/AIDS." The Henry J. Kaiser Family Foundation - Health Policy, Media Resources, Public Health Education & South Africa - Kaiser Family Foundation. 23 Mar. 2009 http://www.kff.org/hivaids/upload/7172_04.pdf.

[14] Ibid.

[15] "Medicaid and HIV/AIDS." The Henry J. Kaiser Family Foundation - Health Policy, Media Resources, Public Health Education & South Africa - Kaiser Family Foundation. 23 Mar. 2009 http://www.kff.org/hivaids/upload/7172_04.pdf.

Figure 1 below outlines the different criteria to qualify for the various Medicaid benefits categories. Most of the HIV patients who do receive Medicaid fall in the Supplemental Security Income (SSI) benefits group, which means they are low income and disabled (they have a physical or mental impairment that prevents one from working for a year or more).[16] Many HIV-positive people have trouble meeting these eligibility requirements because being infected with HIV/AIDS is not considered a disability. Low-wage earners have to turn to a different source for financial help. Also, there are groups of people who fall through the gaps. Low-wage-earning childless adults who are not pregnant or disabled are ineligible for Medicaid.

First, federal law allows HIV screening to be covered by states either under fee-for-service, or through Medicaid managed care. Since this is an optional service, availability of testing varies from state to state. Secondly, Medicaid must reimburse for services provided by federally qualified health centers (FQHCs). Regardless of the category in which the patient qualifies, there are services the federal government guarantees to HIV patients receiving Medicaid. These mandatory services include inpatient and outpatient hospital services, physician and laboratory services, and long-term care.[17] All states cover prescription medication, which healthcare providers view as the most important aspect of treatment. However, states also have the scope to limit the number of prescriptions, hospital inpatient days, and physician visits allowed per month or year.

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[16] Ibid.
[17] Check KFF

Category	Criteria	Mandatory / Optional
SSI Beneficiaries	Disabled (having a physical or mental impairment that prevents one from working for a year or more or that is expected to result in death) AND low-income, few assets (standard is 74% of FPL). Note: 209(b) states can use more restrictive criteria.	Mandatory
Parents, children, pregnant women	Low-income; income and asset criteria vary by category and state	Mandatory; states have option to offer higher income thresholds
Medically Needy	Allows those who meet categorical eligibility, such as disability, to spend down on medical expenses to meet state's income criteria	Optional; 35 states use option for the disabled
Disabled Workers	Disabled; Low-income	Optional
Poverty-level Expansion	Allows for income above SSI levels up to the poverty level	Optional; 19 states use option
State-Supplemental Payment (SSP)	Allows for coverage of those receiving SSP	Optional; 23 states use option for disabled

Figure 1. Categories for Medicaid Eligibility [18]

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States also have the option of providing further benefits, which makes them eligible to get matching funds from the federal government. Community-based, long-term care services exemplified by personal care and rehabilitation services are an option states can provide. The Medicaid program can also offer home and community-based services (HCBS) waivers, which finance community-based, long-term care services to "help individuals with disabilities remain independent" to all groups of people receiving Medicaid. [19] These HCBS waivers are valuable to patients whose disease has progressed to AIDS. In 2005, only 15 states had an HCBS designed specifically for or, or including people with, HIV, which together served less than 15,000 individuals for a cost of $58.2 million. This translates into $4,081 per capita, less than for any other group served by

[18] Ibid
[19] Ibid.

HCBS waivers.[10] Since these HCBS waivers are expensive, states usually do not choose to offer them to all groups of people receiving Medicaid.

Medicare is the federal insurance program for individuals 65 years and older, and it is also a source of health coverage for approximately 100,000 HIV/AIDS patients. However, most patients receiving Medicare payments "are under age 65 and qualify because they are disabled and receiving Social Security Disability Insurance (SSDI) payments (93% of beneficiaries), which entitles them to Medicare after a two-year waiting period."[20] Only 7% become eligible as senior citizens, which is an indication of the severity of the disease. However, the number of patients receiving Medicare has grown over time, reflecting both "growth in the size of the HIV positive population in the U.S," as well as an increased lifespan due to ARV treatment.[21] Figure 2 below outlines the three options for Medicare eligibility.

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Eligibility Category	Eligibility Criteria
Individuals age 65 and older	Sufficient number of work credits to qualify for Social Security payments
Individuals under age 65 with permanent disability	Sufficient number of work credits to qualify for SSDI payments due to disability; eligible for Medicare after receiving SSDI payments for 24 months
Individuals with End-Stage Renal Disease (ESRD) or Lou Gehrig's disease of any age	Sufficient number of work credits to qualify for SSDI; eligible for Medicare as soon as they start receiving SSDI payments (no waiting period)

Figure 2. Eligibility Categories for Medicare[22]

Medicare Benefits are broken into four groups.

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[20] KFF. Fact Sheet: Medicare at a Glance; November 2008.
[21] Ibid.
[22] Ibid.

- Part A covers hospital insurance and pays for "inpatient hospital services, skilled nursing facilities, home health services, and hospice care."[23]
- Part B covers physician visits, certain preventive services, and home health visits.
- Part C supplements private plans (primarily HMOs) and "contract with Medicare to provide Part A, Part B, and, in most cases, the Part D drug benefit, to enrollees."[24]
- Part D, implemented in 2006, covers voluntary outpatient prescription drug benefits, and it is delivered through private plans that contract with Medicare. Part D also contains additional premiums and cost-sharing assistance for beneficiaries with low-incomes and modest assets.

Although this program seems fairly comprehensive, there are large gaps to be filled.
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Both Medicare and Medicaid, for example, do not cover counseling and psychological services. Group therapy sessions, nutrition programming, and other such preventive services are also not covered, and often are not even offered.

<u>The Ryan White Program:</u>

The Ryan White Program is the single largest federal program designed specifically for people with HIV in the United States, estimated to reach more than half a million people with HIV each year. [11] Enacted as an emergency care program in 1990, the program has been reauthorized three times and is now the third largest source of federal funding for HIV care in the U.S. (See Figure 3) The program is broken down into parts, and states, cities, public and private providers, community- based organizations (CBOs),

[23] KFF. Fact Sheet: Medicare at a Glance; November 2008.
[24] Ibid.

and other institutions all apply for funding by part.

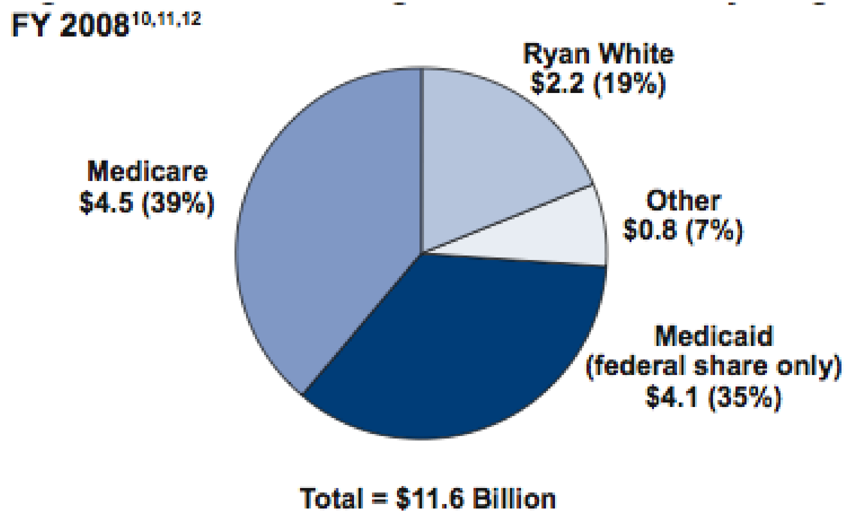

Figure 3. Federal Funding for HIV care for the fiscal year 2008 [8, 11]

Ryan White program grantees have broad discretionary powers; they are able to set their own service priorities and eligibility requirements. Ryan White grantees are usually federal or state programs implemented specifically to treat people with HIV/AIDS. New York State for example, has a range of programs available. Some of these programs include AIDS Drug Assistance Program (ADAP) and the HIV Home Care Program.[25] These programs exemplify the spirit of the inclusive treatment demanded by this disease. Accordingly, the latest reauthorization of the Ryan White program came with a new set of stipulations, including spending at least 75% of funds on “core medical services” which include early intervention services, medical nutrition therapy, hospice services, home and community based health services, substance abuse outpatient care, as well as several other prevention and holistic services. In addition, all state AIDS drug assistance programs must have a “minimum formulary for medications,” meaning a list of

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[25] "HIV Uninsured Care Programs - Summary." New York State Department of Health. Feb. 2009. 17 Apr. 2009 <http://www.health.state.ny.us/diseases/aids/resources/adap/index.htm>.

prescription medications that a drug plan will pay for.[26] All the services listed above were optional before. These new stipulations are actually a boon, and reflect the government's awareness of the multifaceted nature of treatment and prevention as well as the development of the RW program from emergency care to a long-term model. The re-categorization of substance abuse outpatient care and nutrition therapy as "core medical services" is a step in the positive direction in recognizing the holistic nature of treatment. Also, the reauthorization increased the number of eligible candidates to include people with HIV, not just patients with AIDS. Federal funding policies support the comprehensive program needed to combat HIV/AIDS, which is an encouraging sign.

However, the Ryan White program has its limitations. Even though the program has grown tremendously over the last 18 years, it still falls short in many ways. Funded entirely by appropriations from Congress, not all states or cities get adequate resources they need to serve their population. Since the Ryan White program was founded as an emergency care last effort program, the infrastructure was not in place to support the current holistic nature of treatment. The current economic crisis will likely decrease funding for prevention and lifestyle maintenance-type care.

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HOPWA & Other Programs:

The treatment for HIV/AIDS is comprehensive, and demands a range of other services. The federal government founded the Housing Opportunities for People With AIDS program (HOPWA) in 1992 and has provided over $2.3 billion to fund housing

[26] Ryan White program

opportunities for people with HIV or AIDS.[27] HOPWA aims to provide "housing and independence to persons living with HIV/AIDS who are experiencing temporary financial crisis as a result of their illness."[28] This program is separate from the medical services covered under described in the previous section. Under the Department of Housing and Urban Development, HOPWA awards grants to local communities, states, and nonprofit organizations. There are three programs that fall under HOPWA; the HOPWA Formula Program uses a "statutory method to allocate HOPWA funds to eligible States and cities on behalf of their metropolitan areas," the HOPWA Competitive Program selects model projects or programs through national competition and the HOPWA National Technical Assistance Funding are awarded to strengthen the "management, operation, and capacity of HOPWA grantees."[29] Each grantee must abide by these standards, but they have flexibility in determining service offered.

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Eligible participants of the HOPWA program must be low-income (earning below 80% of area median income) and HIV positive. Clients receiving tenant-based rental assistance, project-based rental assistance, or living in a unit leased by a sponsor or a facility supported by HOPWA operating funds must pay rent (which is determined to be the greater of 30% of adjusted income or 10% of gross income).[30] At the Fan Free Clinic, services provided include comprehensive housing counseling, assistance with finding

[27] "Housing Opportunities for Persons with AIDS (HOPWA) Program- CPD - HUD." Homes and Communities - U.S. Department of Housing and Urban Development (HUD). 17 Apr. 2009 <http://www.hud.gov/offices/cpd/aidshousing/programs/>.
[28] "HOPWA." Fan Free Clinic. 17 Apr. 2009 <http://www.fanfreeclinic.org/ClientServices/SocialServices/HOPWA/tabid/69/Default.aspx>.

[29] "Housing Opportunities for Persons with AIDS (HOPWA) Program- CPD - HUD." Homes and Communities - U.S. Department of Housing and Urban Development (HUD). 17 Apr. 2009 <http://www.hud.gov/offices/cpd/aidshousing/programs/>.
[30] Ibid

safe affordable housing, and resolution of landlord/tenant concerns.[31] The housing is usually short-term rental, with some participants in long-term rentals. HOPWA participants must participate in goal planning, and be going through rehabilitation for any substance abuse issues. As the program is being re-evaluated, there is an emphasis on "reporting of client outcomes" that will assist in measuring "grantee accomplishment."[32] These, and other measures of performance evaluation must be implemented to order to properly track progress, as well as impact on the population being served.

The HOPWA program is an example of "wrap-around services" and constitutes an important part of treatment. The features that are pivotal to the program's success include an understanding of the nature of the HIV/AIDS virus. There is a real need for psychological and emotional support, especially for patients who are unable to afford top-quality healthcare. The model exemplified by the Fan Free Clinic does just that. Not only do HOPWA counselors help patients find housing, and pay for part of their rent, the clinic also offers nutrition classes, yoga sessions, and group workshops. By offering a support group in addition to post-test counseling and help attaining affordable medication, the clinic is able to offer its patients a full range of services. The most efficient treatment combines the medication with emotional encouragement.

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Prevention Programs

To best combat this virus, another dimension of treatment is prevention. Over the last 30 years, the federal government has spent over $10.1 billion on prevention programs, and public policy experts estimate that these programs averted between

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[31] Fan Free Clinic Brochure
[32] Ibid

204,000 and 1,585,000 new cases of infection.[33] Since the cost per HIV infection is estimated to range from $6400 to $49,700, federal spending on prevention avoided major treatment costs. As federal spending flattened between 2001-2005, so did the decline in transmission rates.

The four aspects of a successful prevention program include targeting, selection, delivery, and efficiency.[34] In order to understand the nature of the epidemic, data must be collected to assess the trends in HIV incidence in different populations. Secondly, the services being offered must be suitable for the situation. Any program must respond appropriately to the group it aims to serve. The third element, delivery, has become a major difficulty for many healthcare providers. Delivery of all services necessary for successful treatment is often impossible to achieve. Finally, most free clinics and community based health centers (discussed in the next section) often have no method of tracking progress, meaning they cannot measure the efficiency of their programs.

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Free Clinics & Federally Qualified Health Care Centers

Free clinics and federally qualified health centers (FQHCs) are two other options available for indigent patients. Free clinics and FQHCs operate similarly, except the former is (mostly) funded privately, and the latter is (mostly) funded federally. Free clinics are usually non-profit organizations that are either community-based or faith-based, founded in response to a dire medical need in a community. They are often under-staffed, and serve the underinsured or the “working poor”- people who have no insurance but earn too much to qualify for federal or state programs. In Virginia, for example, there

[33] Holtgrave, David R. "What Works, and What Remains To Be Done in HIV Prevention in the United States." Annual Review of Public Health 27 (2006): 261-75.
[34] Bertozzi, Stefano. "Making HIV prevention programmes work : The Lancet." TheLancet.com - Home Page. 6 Sept. 2008. 12 Apr. 2009 <http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(08)60889-2/fulltext>.

are 2.1 million uninsured Virginians and approximately 80% are members of working families. Not unsurprisingly, Virginia also has the second highest number of free clinics in the nation, with 50 clinics and 60 sites of service. Free clinics are dependant on the resources available, and can only offer limited medical services. If clinics do qualify for government funding, they usually have to abide by the restrictions attached to the grants (exemplified by the Ryan White program). These clinics also depend heavily on a volunteer base, and daily operations can be quite inefficient. Although there is some effort to standardize the quality of healthcare, a standard national (or even state) level of health care is far from being established.

The counterpart to the free clinic is the community health center. Located in a high need community, these health centers are governed by a "community board composed of a majority (51% or more) of health center patients who represent the population served."[35] In addition to primary healthcare services, many centers offer other services such as education, translation, and transportation, but these services are not free. They are adjusted with ability to pay, and many patients are already on some public health insurance program. In 2008, the 1,200 community health centers treated 7 million uninsured patients, up 3% from 6.8 million in 2007, and given the current economic crisis, the number treated will continue to grow.[36] These community health centers are supposed to supplement the available medical resources, however, they have become the main source of medical help in many areas.

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[35] "Health Center Program: What is a Health Center." Primary Health Care: Health Center Program HRSA. 15 Apr. 2009 <http://bphc.hrsa.gov/about/>.

[36] Bello, Marisol. "Free clinics fill medical void." Usa Today 10 Apr. 2009. 15 Apr. 2009 <http://www.usatoday.com/news/health/2009-04-09-freeclinics_N.htm>.

Reforms & Recommendations

1. The United States, despite headway in slowing down the rate of incidence, still sees about 50,000 new cases every year. Since there is no systematic national measurement of HIV incidence in place, it is hard to track progress.[37] One of the first reforms is to implement a national standard of measurement. One effective way would be measuring not only the new number of HIV cases, but calculating the transmission rate. The transmission rate is defined as "the number of new HIV infections in a year divided by the total number of persons living with HIV/AIDS in that year."[38] This number is different from incidence (the number of new cases in a year) or prevalence (the percent of the population living with HIV/AIDS). The transmission rate allows officials to track not just the prevalence of HIV but also how quickly it spreads. Currently, the U.S. transmission rate is about 4%, which means approximately 96% of infected people did not transmit their disease. This rate is a good measure of people's response to their disease, behavioral changes, and efficiency of outreach/education programs. A low transmission rate indicates more personal responsibility being undertaken.

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2. Far too often, politics has trumped science in determining the backbone of policy-making. More concerted prevention efforts must be undertaken. One change that must occur is lifting of the ban on the use of federal funds for syringe exchange programs. New York City ran a successful needle-exchange program over the last two decades. Over a 12-year period, the needle exchange rate increased from 250,000 to 3 million a

[32.] Holtgrave, David R. "What Works, and What Remains To Be Done in HIV Prevention in the United States." Annual Review of Public Health 27 (2006): 261-75.

[38] Ibid

years the HIV infection rate among intravenous drug users dropped 80%.[39] Some policy-makers claim that these programs encourage the use of intravenous drugs; however, the research has proved that to be untrue.

3. Medicaid remains a largely untapped resource for facilitating and reimbursing HIV screening in a high-risk population.[40] Most FQHCs do not have routine testing available. Increasing the availability of testing and screening should have a positive impact on the incidence of new cases.

4. Since there is no one program that is outlined for treating HIV/AIDS, and treatment is also unique to the individual, the best insurance program will also be a comprehensive one. President Obama's plans for healthcare reform offer such an insurance program. Under Obama's proposal, there would be a National Health Insurance Exchange which would offer a "range of private insurance options as well as a new public plan based on benefits" that allows individuals and small businesses to buy affordable health coverage.[41] In addition, he proposes lowering the costs for businesses so that employees have access to better benefits. For small businesses, offering a "Small Business Health Tax Credit" to offset the costs of health insurance ensures that all companies will be able to offer health insurance. Additionally requiring large employers that do not offer coverage to contribute "a percentage of payroll toward the costs of their employees health care" is another way to guarantee health insurance. While these measures would seem

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[39] Juri, Carmen. "Newark program trades clean needles with 600 addicts." The Star Ledger 12 Apr. 2009. 15 Apr. 2009 <http://www.nj.com/news/index.ssf/2009/04/nj_needle_exchange_program_in.html>.

[40] "Routine HIV Testing in Health Care Settings." The Forum for Collaborative HIV Research - Home. HIV Medicine Association. 27 Apr. 2009 <http://www.hivforum.org/storage/hivforum/documents/TestingPolicyRoundtable/lubinski-day%202%20session%202.pdf

[41] "Health Care." Organizing for America. Barack Obama Campaign. 18 Apr. 2009 <http://www.barackobama.com/issues/healthcare/#make_health_insurance_work>.

effective, it does not go far enough. The United States is the only developed industrialized nation without universal healthcare and it spends more than other nation on health care with insufficient results. Universal health care, regardless of delivery, would be the best option, and not just for HIV/AIDS treatment, but for the health of the nation.

Future Plans

The Obama Administration, under the auspices of Kevin Fenton, director of the national center for HIV/AIDS at the Center for Disease Control and Prevention, has launched an awareness campaign for the next five years. With a $45 million budget, the campaign hopes to raise awareness and "put the HIV epidemic back on the front burner, on the radar screen."[42] The AIDS Healthcare Foundation, a leading nonprofit organization, has already criticized the campaign for being "inadequate." And indeed, while the campaign is going to launch public service announcements, advertising on trains, buses and other modes of public transportation, send text messages and launch a Web site, there are concerns over how it plans to teach target populations, specifically African-Americans and Latinos. These two groups are seeing alarmingly high rates of incidences, especially the African-Americans who are only 12 percent of the U.S. population, but make up half of new HIV infections and nearly half of Americans living with the disease.[43] Clearly, there is still a lot of work to do.

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The current economic crisis has severely exacerbated the current situation. According to the Center of Budget and Policy Priorities, a private research institution looking at the impact of policies, 34 states have already cut the budgets for social

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[42] Fears, Darryl. "Awareness Campaign On HIV/AIDS Begins - washingtonpost.com." Washingtonpost.com. 8 Apr. 2009. Washington Post. 12 Apr. 2009 <http://www.washingtonpost.com/wp-dyn/content/article/2009/04/07/AR2009040703717.html?hpid=sec-health>.
[43] Ibid.

programs. [44] Several states have decreased or eliminated health benefits for Medicaid recipients, and other services such as therapy and counseling are likely to get the axe as well.

Without established guidelines for treatment, and states having the option to offer certain services, the quality of healthcare is going to deteriorate. Even if universal health care is established, healthcare providers often differ in their treatment. House visits, counseling, and addiction therapy are a few examples of services that are not considered absolutely necessary and might be eliminated from the program. With the implementation of universal healthcare, the lack of a standard treatment for HIV/AIDS becomes less important. Through combined efforts from policy makers, physicians, insurance companies, and health centers, this disease can slowly, but surely, be defeated.

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[44] Eckholm, Erik. "States Slashing Social Programs." The New York Times. 11 Apr. 2009. 13 Apr. 2009 <http://www.nytimes.com/2009/04/12/us/12deficit.html?_r=1&hp>

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