

Revised Status Report on Medicaid Waiver/HIV To Expand Patient Eligibility

Section 10.27 of S.L. 2010-31



**State of North Carolina
Department of Health and Human Services**

**Division of Medical Assistance
Division of Public Health**



February 2011

A. Legislative Mandate

Section 10.27 of S.L. 2010-31 requires the Department of Health and Human Services (DHHS) Divisions of Medical Assistance (DMA) and Public Health (DPH), to jointly study and report on the financial and programmatic feasibility of reducing the waiting list for the AIDS Drug Assistance Program (ADAP) by expanding eligibility for Medicaid to HIV-positive individuals with incomes at or below one hundred thirty-three percent (133%) of the federal poverty level. If deemed appropriate, then the Division of Medical Assistance shall apply to the Centers for Medicare and Medicaid Services (CMS) for a waiver to implement this expansion in Medicaid eligibility. The report shall recommend whether the following waiver should be pursued and the reasons therefore:

(1) An 1115 waiver to allow Medicaid to expand eligibility to HIV-positive individuals with incomes at or below one hundred thirty-three percent (133%) of the federal poverty level in order to reduce North Carolina's waiting list for the AIDS Drug Assistance Program (ADAP).

B. Executive Summary

DMA/DPH Waiver Study for HIV Positive People with income at and below 133% FPL

The following report is the result of a joint study by the Department of Health and Human Services' (DHHS) Divisions of Medical Assistance (DMA) and Public Health (DPH), to report on the financial and programmatic feasibility of reducing the waiting list for the AIDS Drug Assistance Program (ADAP) by expanding eligibility for Medicaid to HIV-positive individuals who are not yet disabled, with incomes at or below one hundred thirty-three percent (133%) of the federal poverty level. The joint study committee consisted of representatives from DPH Communicable Disease Branch, DMA Clinical Policy and Budget sections and a provider specializing in infectious disease.

Pursuit of a Medicaid waiver, while medically desirable and critical from a public health perspective, would present North Carolina with significant challenges to overcome with the funding currently available from the state. As is outlined in this report, the study committee has identified a number of salient points to support this conclusion.

To arrive at these conclusions the Committee made three critical assumptions: 1) The waiver would have been pursued for a limited package of benefits in an attempt to be cost-neutral and would have included all medications, Emergency Room visits, in-patient hospitalizations, and necessary ambulance transportation; 2) Currently the state portion of the ADAP budget is approximately \$28 million, which would have been provided in its entirety toward the Medicaid package of benefits in a waiver; 3) The federal Ryan White funds of \$25 million would continue to be available in order to serve people 134-300% FPL, thus clearing North Carolina's ADAP waiting list.

The following points represent major challenges for North Carolina in pursuing a Medicaid waiver:

- The terms of a waiver application would obligate North Carolina to serve many more people than are presently enrolled in ADAP, resulting in increased cost to the state.
- The Committee determined that the additional state funds necessary to implement a waiver in SFY12 would be \$30,721,216, with incremental increases in following years.

- Development of a new waiver would require a minimum of 9 months' preparation and demonstration of cost-neutrality to CMS.
- For the purposes of this report and in the timeframe given, the Committee was unable to ascertain whether a potential waiver application could demonstrate overall cost neutrality. The application would have to identify at least \$53 million in savings as a direct result of implementation of the waiver intervention in order to be favorably considered by CMS.
- The federal Ryan White CARE Act currently provides just over \$25M for North Carolina ADAP. The committee made the assumption that these funds would continue to be available. However, it is not guaranteed that under health care reform these funds would continue to be available in order to eliminate the ADAP waiting list (which would consist of people between 134% - 300% FPL), and to provide medications for other HIV/AIDS clients who do not qualify for Medicaid for other reasons.
- If the \$28 million in state funds were used for the waiver, it would be necessary to identify other state funds in order to provide the required match for Ryan White federal funds.
- Given the pending implementation of health care reform in 2014, the Committee does not believe there is sufficient time to demonstrate, develop and implement a waiver, which would serve as a 'bridge' from the present to 2014 for those people at/below 133% FPL who will become eligible for Medicaid under the Patient Protection and Affordable Care Act of 2010.

The following points were identified as significant benefits to pursuing a Medicaid waiver:

- If a waiver were to be granted and the ADAP state funds were provided for the benefits package of HIV positive people at/below 133% FPL, the remaining federal funding (approximately \$25 million) would presumably be available to provide medications for those people remaining on the waiting list with incomes from 134-300% FPL, and for those people who do not qualify for Medicaid services who are below this income level.
- Partnering of the Divisions of Public Health and Medical Assistance through the creation of a 1115 waiver would allow the state to draw down more Federal dollars and thereby serve more individuals, providing critical life-saving medication to people living with HIV/AIDS.
- It has been clearly demonstrated that being in medical care and accessing antiretroviral therapy (thus reducing viral load and risk of transmission) and ongoing behavioral interventions are important approaches for those who know they are living with HIV.
- Research and the experience of the waiver program in Massachusetts have effectively demonstrated that expanding Medicaid eligibility would be a cost-effective approach to treating people with HIV/AIDS. Initiation of treatment as early as possible is not only cost-effective in actual dollars, but also saves future costs by reducing transmission of the disease.

C. Scope of Report

As specified in Section 10.27 of S.L. 2010-31, this report addresses the following:

- The financial and programmatic feasibility of reducing the waiting list for ADAP by expanding Medicaid eligibility to HIV/AIDS individuals with incomes at or below 133% of Federal Poverty Level.

- An assessment of the cost-effectiveness of using State dollars to expand Medicaid eligibility to this population as compared to using State dollars for ADAP.
- A consideration of any planning and coordination benefits the State may derive from expanding Medicaid eligibility to HIV/AIDS individuals, in preparation for the expansion of Medicaid eligibility in calendar year 2014 to all individuals with incomes at or below one hundred thirty-three percent (133%) of the federal poverty level.

D. Background

Defining the Population Nationally

According to Kates' and Levi's studyⁱ, the CDC estimates that there are 1.2 million people with HIV/AIDS in the United States, about 500,000 of whom are not in care and 250,000 that are unaware of their HIV status. CDC data also indicates that approximately four in ten individuals develop AIDS less than twelve months after an HIV diagnosis. This paper cites a 2003 study that found that of those persons who are eligible for antiretroviral therapy, up to 30%, are not receiving medical care.

CDC statistics since the publication of this study provide an even more sobering view of this epidemic.

According to the CDC website on HIV, at the end of 2006, an estimated 1,106,400 persons in the United States were living with HIV infection, with 21% undiagnosed.

In 2008ⁱⁱ, the CDC estimated that approximately 56,300 people were newly infected with HIV in 2006 (the most recent year that data are available). Over half (53%) of these new infections occurred in gay and bisexual men. Black/African American men and women were disproportionately affected, with an incidence rate that was 7 times as high as the incidence rate among whites.

Also, in 2008, one-third (32%) of individuals with an HIV diagnosis received a diagnosis of AIDS within 12 months of their initial HIV diagnosis.

Defining the Population in North Carolina

An estimated 35,000 people were living with HIV/AIDS in North Carolina as of December 31, 2009. North Carolina averages 1,700 new HIV disease diagnoses each year. Of the 35,000 estimated living clients, estimated back calculation methodology is used to determine that approximately 7,000 of those people are unaware that they are living with HIV/AIDS. They have not been tested and are not in care. In 2009, there were 1,269 male and 436 female cases of HIV disease diagnosed in North Carolina. The three year average (2007-2009) rate of diagnosed HIV disease in NC was 19.3 per 100,000 population.

The top five counties with the highest rates were Mecklenburg (41.5 per 100,000), Edgecombe (39.9 per 100,000), Washington (33.6 per 100,000), Durham (32.7 per 100,000) and Northampton (32.5 per 100,000).

Among adults/adolescents diagnosed with HIV disease in 2009, African Americans represented 66 percent of all cases with a rate of 69.7 per 100,000, with the highest rate among African American

males (106.3 per 100,000). In 2008, HIV disease was the 7th leading cause of death for 25-44 year olds in North Carolina. Additionally HIV disease was the 3rd leading cause of death among African American females ages 25 to 44 and the 5th leading cause of death among African American males ages 25 to 44. Currently in North Carolina, 1 in 268 people are HIV positive.

Defining HIV/AIDS

HIV is a virus that breaks down the immune system over time. It is transmitted through intimate sexual activity, needle sharing and under certain conditions from mothers to their unborn children. Since HIV is a progressive disease, people may remain relatively healthy for a few years prior to the deterioration of their immune systems even though HIV is at work from the beginning of infection; when this deterioration becomes severe it is called AIDS. Once a person has deteriorated to an AIDS diagnosis he or she will experience a wide variety of opportunistic infections (known as OIs), illnesses and complications, including complicated and expensive diagnoses such as fungal infections in the brain. This deterioration also creates significantly higher costs in care and treatment; it is therefore desirable to provide medication and treatment to prevent such immune system failure.

A person with very low income does not automatically become Medicaid eligible when his or her HIV infection has progressed in severity to become AIDS. He or she must also meet the income and resource criteria of one of the eligibility groups defined by Medicaid, such as aged, blind, disabled, etc.

There is no cure for HIV/AIDS. There are two important measures of immune system functioning that are used to determine a person's health: CD4 counts and HIV viral loads. In addition, we refer to 'community viral load' as a way to address the desirability of suppressing the HIV viral load of each person in a community, which in turn results in those people experiencing better health and being less likely to transmit HIV to others, a critical factor in protecting public health.

There are now a wide variety of medications available to treat HIV/AIDS. As a group they are often referred to as HAART – highly active antiretroviral therapy – or ARV therapy. When a person's CD4 count goes down and his/her viral load goes up, physicians will determine if a person should start medication, which must be taken without missing dosages in order to be effective. If a person on medication stops taking it their viral load will rise quickly. This can result in increased risks to both the individual and to their community. People living with HIV/AIDS are at greater risk for a number of co-infections such as hepatitis, tuberculosis, and other sexually transmitted diseases because their immune systems are compromised.

Much of the funding for the medical care and related supportive services for people living with HIV/AIDS comes to states through the Ryan White CARE Act on the federal level. These funds assist in paying for physicians, medication, case management, mental health and substance abuse counseling, transportation, dental care and other critical services. It is through the Ryan White CARE Act's Part B program that Congress provides the federal funding for ADAP. North Carolina receives just over \$25M through Ryan White, and a nearly equivalent amount from state appropriations.

Defining the AIDS Drug Assistance Program (ADAP)

According to the National ADAP Monitoring Project Annual Report of 2010, client enrollment and client utilization of ADAP were at its highest levels in the 2009 fiscal year across the country. The

report also acknowledges that “waiting lists are the most visible representation of fiscal crisis for ADAP services” (pg 19). Additionally, the report also notes that 9 states (including North Carolina) reported a total of 929 people on waiting lists as of April 22, 2010 and that the “number of clients on waiting lists has been slowly growing since September 2007, when no clients were reported on waiting lists.”

The North Carolina AIDS Drug Assistance Program (ADAP provides antiretroviral medication to low-income HIV/AIDS residents who have no insurance to combat HIV and HIV related opportunistic infections. Both State and Federal Funds support the program. North Carolina is in the top 10 of states with the most enrollees and persons living with HIV/AIDS being served. In order to be eligible for the program one must have a gross family income at or below three hundred percent (300%) of the Federal Poverty Level (FPL). However, as of July 2010, the program is only able to admit new enrollees who are at one hundred twenty-five (125%) or below the Federal Poverty Level. Individuals between 126% and 300% of the Federal Poverty Level are presently on a waiting list that began at the end of January 2010. As of December 31, 2010 there were 6,113 enrolled in the ADAP program and 96 individuals on the waiting list. Prior to the appropriation of additional funding from the North Carolina General Assembly in July of 2010, North Carolina’s ADAP had a waiting list of 800 people. When this additional funding was provided, all people at/below 125% Federal poverty level were enrolled into NC ADAP; emergency federal ADAP funds later relieved the remainder of the waiting list. The people living with HIV/AIDS who are now on the waiting list in North Carolina are those between 126%-300% federal poverty level who have applied since July of 2010.

The formulary (i.e. list of covered HIV medications) for NC ADAP was reduced in March of 2010; only antiretroviral medications and a few related medications are provided through ADAP now.

Relevant Review of the Literature

Research has effectively demonstrated that providing access to healthcare coverage for individuals living with HIV/AIDS assists with achieving several desirable economic, clinical and social outcomes. By providing access to antiretroviral drugs for HIV positive individuals early in diagnosis, benefits include reducing opportunistic infections and hospitalizations, reducing the transmission of HIV and progression of the disease to Acquired Immune Deficiency Syndrome (AIDS) which in turn reduces future costs to Medicaid. Several studies and articles are briefly summarized below and assist with understanding recent initiatives to study HIV/AIDS treatment outcomes.

The objective of a study by Johnston and colleaguesⁱⁱⁱ was to perform an economic evaluation of the incremental net benefit associated with an intervention to expand treatment with HAART in British Columbia, Canada.

The results of the study are as follows: Over 30 years, the HAART expansion scenario was associated with a net benefit of US \$900 million. The study concluded that “...increasing the HAART treatment rate from 50 to 75% of clinically eligible individuals in British Columbia appears to be a cost-effective strategy based on this model.” The study further concluded that “...these cost-effective results are consistent with public health objectives and that all individuals who are eligible for an established lifesaving treatment should receive it.”

The benefits of initiating treatment at an earlier point in the HIV/AIDS diagnosis are further illustrated in the following studies:

Schackmans' study^{iv} states that "initiating antiretroviral therapy earlier (at CD4 counts of 500 as opposed to 200) resulted in 51 fewer deaths per 1,000 patients and 72 fewer opportunistic infections per 1,000 patients after five years. The study also looked at the financial costs of early antiretroviral therapy paid by federal and state payers. Over the first five years, the total costs were \$11,500 higher for early therapy. However, this increase was cost-effective because much of the higher drug costs of initiating treatment earlier were offset by savings from averted HIV-related morbidity."

In Roberts study^v researchers analyzed the cost of care for a sample of 280 patients treated at a large urban health care facility in the United States over the course of one year. Data indicated an annual average cost of care of approximately \$20,000 per patient. Cost of care varied significantly by CD4 count, with those having CD4 counts between 1 and 50 incurring an average annual cost of care of \$30,000 and those with CD4 counts above 500 incurring an annual cost of care of approximately \$13,000. The greatest variability in cost was the result of inpatient hospitalization rather than outpatient visits or medications. (This study demonstrates clear and strong evidence that earlier access to medication is cost-effective over the course of a lifetime of HIV infection.)

A study by Chen^{vi} and colleagues in 2006 makes a compelling argument for the cost-effectiveness of linking individuals to care at an earlier stage. Researchers analyzed cost of medical care for patients receiving primary care at the University of Alabama at Birmingham's HIV clinic over the course of one year (2000-01). Specifically, the study looked at the correlation between CD4 counts and health care expenditures, and found that total annual expenditures for patients with CD4 counts below 50 were 2.6 times greater than total annual expenditures for patients with CD4 counts greater than or equal to 350. [A high CD4 count is most desirable for optimal clinical outcome.]The low CD4 group had hospitalization expenditures that were nearly six times greater than the higher CD4 group as well as non-antiretroviral medication expenditures that were nearly eight-fold greater.

A clear benefit to pursuing a waiver package in North Carolina would have been based on forging a strong partnership between DMA and DPH, in order to serve our most vulnerable citizens living with HIV/AIDS in the state. The following study highlights the potential cost effectiveness of this relationship and the benefits of improved delivery in integrated medical services.

Gilman's study on the comprehension of costs in HIV primary care^{vii} examines,

"...a hybrid cost model to identify the determinants of cost variation among programs that offer early intervention services to people living with HIV and AIDS in the US. The model combines the effects of input price and output volume measures from traditional economic cost functions with institutional factors based on program and patient characteristics on the cost of providing primary medical care and support services to people living with HIV and AIDS. The impact of economic factors conforms to conventional theory and reveals the potential for cost savings through greater economies of scale and substitutability of low cost for high cost labor inputs. Similarly, **programs that use staff more efficiently and share an affiliation with other organizations exhibit lower costs than more labor intensive and non-affiliated providers.**"

"...however, patient characteristics are equally important determinants of program spending. Minority patients use services less frequently and generate fewer costs, while patients facing fewer barriers to care, such as those with Medicaid coverage, access

services more frequently and incur higher costs. Uninsured patients also generate higher costs, but the higher costs associated with this subgroup more likely stem from a lack of continuity in care and, thus, poorer health status and greater healthcare needs when treatment is sought. Injection drug users require less expensive services, but access services more frequently than other risk groups, while patients with an AIDS diagnosis and those who are co-infected with hepatitis C require more program resources. **By separately estimating the economic and institutional determinants of program costs, the study highlights the relative importance of factors that are amendable to internal cost control efforts versus those that reflect the resource needs of local communities.”**

The above research demonstrates that such a waiver can be cost-effective; the state of Massachusetts has already demonstrated that this can be achieved.

Viewing Massachusetts’ use of an 1115 waiver to serve more HIV+ individuals could prove beneficial in gauging the possibilities of implementing such a waiver in our state. The Massachusetts 1115 waiver was implemented in April of 2001 and with its 9-year existence the state has demonstrated that the 1115 waiver is both cost-effective and cost-saving to the state in the long run. Eligibility requirements for the waiver from 2001-2009 included:

- Clinical HIV diagnosis
- Income at or below 200 % FPL
- Under the age of 65
- Not institutionalized

Also, there are no asset limits/no enrollment cap regarding eligibility. The benefits that comprise the benefits package for individuals covered under the Massachusetts 1115 waiver include:

- Primary care
- Diagnostic care
- Hospital care
- Prescription drug coverage
- Mental health and substance abuse treatment.

The success and benefits of the 1115 waiver in Massachusetts has enabled the state to make positive changes to ADAP that accommodates a greater number of HIV+/AIDS individuals as well as provide additional benefits for those served in 2010. Massachusetts' ADAP in 2010 serves individuals at or below 500% of the Federal Poverty Level. Also the program since the implementation of the waiver in 2001 has an “open formulary,” and allows for flexibility to provide gap coverage in a multi-payer environment, which for Massachusetts served as good preparation for its healthcare reform in 2006.

The proposed benefits package sought for North Carolinians included,

- Prescription medications
- Emergency Room Visits
- Inpatient Hospitalizations
- Ambulance service

This benefit package reflects the proposed partnership between DMA and DPH and only included a limited package of services; those not funded by the Ryan White CARE Act.

In evaluating the proposed waiver, consideration was given not only to the current costs of treatment but also to the societal costs and future costs to North Carolina Medicaid. The following table represents the estimated average annual cost (in total dollars) to North Carolina Medicaid of all services provided to a recipient who is HIV positive only versus the cost for a recipient with AIDS. Additionally, it provides the average annual cost for the provision of prescription medications (all types) to a recipient who is HIV-positive only versus a recipient with AIDS.

Although there is significant cost in caring for both recipients with HIV (non AIDS) and those with AIDS, it is apparent that when an individual who has HIV becomes sicker and progresses to a diagnosis of AIDS, the cost of care rises significantly. In the case of this sample of Medicaid recipients below, the cost of care rose by 117% only some of which is attributable to increased medication costs.

Table I

	HIV+ Only	AIDS	% Increase
Average Annual Medicaid Cost - ALL Services	\$28,348	\$61,488	117%
Average Annual Medicaid Cost - Prescribed Medications only	\$15,053	\$23,026	53%

The data above is based on SFY10 paid claims (Source: DMA DRIVE) for a random sample of NC Medicaid recipients identified as i) HIV+ only or ii) diagnosed with AIDS.

Between 15-20% of each sample contains recipients with both Medicaid and Medicare coverage.

These figures clearly demonstrate the economic consequences of failure to provide treatment at the earliest possible stage of the disease. In addition, research supports the fact that providing early treatment and comprehensive medical care for persons living with HIV/AIDS is not only sound economic policy in that it is cost-effective but that it also delays the progression and transmission of the disease.

Data supports that a person living with AIDS is more likely to become a Medicaid recipient than a person with a diagnosis of HIV only. Furthermore, persons living with AIDS will access Medicaid at a higher cost than a person with a diagnosis of HIV only. The following studies demonstrate this conclusion:

Farnhams'^{viii} study analyzed data from several large-scale national surveys to determine the medical costs averted by HIV prevention efforts in the United States from 1991-2006. The authors compared the difference between the number of infections that have occurred with the number of infections that might have occurred in the absence of HIV prevention programs and then analyzed the amount of lifetime treatment costs averted. The study concluded that for the relevant time period, a total of \$129.9 billion in HIV costs was averted nationally.

Das' study^{ix} examined the relationship between HIV viral load and the rate of HIV infections in San Francisco. Researchers found that decreases in total community viral load as a result of increased

access to antiretroviral therapy were significantly associated with decreases in new HIV diagnoses and noted a one-third decline in estimated HIV incidence between 2006 and 2008.

Given that North Carolina estimates there are **35,000** individuals who are infected with HIV, the conclusions of the 2005 study by Gary Marks, PhD. emphasizes the importance of linkage to medical care and antiretroviral therapy as a means to reducing transmission risk. The research by Marks and colleagues^x also demonstrates that reducing transmission results in reduced cost of care.

As stated previously, a significant conclusion of this study is the following: "Linkage to medical care and antiretroviral therapy, which may reduce viral load and transmission risk and ongoing behavioral interventions are important approaches for those who know they are living with HIV."

It is clear that the best measures available for controlling the HIV/AIDS epidemic is to provide medical care and medication to those living with the virus. Medication reduces community viral load, in turn reducing the spread of infection.

E. Cost to State

The following table represents estimations of how much it will cost the state to serve individuals with HIV/AIDS at or below 133% FPL on a Medicaid 1115 waiver versus through the North Carolina ADAP program. **The committee determined that the additional state funds necessary to implement a waiver in SFY12 would be \$30,721,216, with incremental increases in following years.**

Table II

Projections of Cost of an 1115 Medicaid Waiver for HIV/AIDS Recipients versus Continued Coverage through ADAP for General Assembly Report (Section 10.27 of S.L. 2010-31)

	SFY 12	SFY 13	SFY 14 ¹
Projected Number of NC HIV/AIDS cases²	29,990	31,135	32,328
Projected New Medicaid Recipients due to HIV/AIDS 1115 Waiver option³	5,398	5,604	5,819
Average annual Medicaid cost per HIV/AIDS recipient⁴	\$31,534	\$32,965	\$34,461
Estimated Total Expenditures for HIV/AIDS waiver recipients	\$170,219,339	\$184,735,965	\$200,529,832
Adjustment for waiver end date of 12/31/13	\$170,219,339	\$184,735,965	\$100,264,916
STATE SHARE of New Waiver Expenditures	\$59,338,462	\$64,398,957	\$34,952,350
Federal Share	\$110,880,877	\$120,337,008	\$65,312,566
State Appropriation from DPH (for ADAP)⁵	\$28,617,246	\$28,617,246	\$28,617,246
Additional state funds needed to implement waiver	\$30,721,216	\$35,781,711	\$6,335,104

Assumptions/Limitations:

1. This report is based on the key assumption that the waiver would be in place until January 1, 2014, when health care reform is scheduled to go into effect; such a waiver would act as a 'bridge' from the present to 2014 for those people at/below 133% FPL who will become eligible for Medicaid under that reform.

2. Prevalence estimates calculated using HIV (non AIDS) and AIDS living cases as of 07/01/2009 from state morbidity records (eHARS-electronic HIV/AIDS reporting system) as the baseline. Each year's estimate represents the sum of HIV (non AIDS) and AIDS cases which are adjusted for an annual increase (see below) of 5.36% for AIDS cases and 2.67% for HIV(non AIDS) cases. Prevalence estimates are further adjusted for incomplete or underreporting as defined in the NC Epidemiologic Profile for HIV/STD Prevention and Care Planning-December 2010. Annual increases represent the mean (FY 2004-FY2008) increase of morbidity for HIV (non AIDS) and AIDS.
3. Estimate based on 2009 ADAP clients at or below 133% of FPL as baseline. In 2009 these ADAP clients represented 18% of overall HIV/AIDS prevalence which was derived by matching 2009 ADAP clients directly to morbidity records. This 18% proportional relationship is expected to remain constant.
4. DMA and DPH believe that the clients who would come onto this waiver (i.e. coming from ADAP) are "less sick" (specifically in terms of ER and inpatient hospital utilization) than the current Medicaid population. However, DMA expenditure data for a random sample of HIV/AIDS recipients is being utilized for an approximation of projected costs. This annual cost only includes average Medicaid expenditures for a limited package of services NOT funded through Ryan White (i.e. drugs, emergency room visits, inpatient hospital stays, and ambulance transportation) and proposed to be covered under the waiver; includes Medicaid only (83%) and Dually eligible Medicare (17%) recipients. The average annual costs are inflated by a factor of 4.5% each year (blended from SFY12 DMA budget model inflationary factors for the covered services).
5. An assumption is made that 100% of the state fiscal year 11/13 continuation budget would be available as state share for Medicaid expenditures.

There are several facts related to the funding of North Carolina's ADAP that play a role in the above analysis:

- The state provides just over \$28M in appropriations for ADAP, all of which could be moved to DMA to provide for the care of newly eligible HIV/AIDS clients under a waiver.
- The federal Ryan White CARE Act provides just over \$25M for NC ADAP, which would then be available to reduce the ADAP waiting list, which would consist of people between 133% - 300% FPL. In addition, these funds would be available to provide medications for other HIV/AIDS clients who do not qualify for Medicaid for other reasons.
- By moving state appropriations from ADAP to Medicaid, North Carolina would be eligible for a significant increase in federal funds which would otherwise be unavailable to us. The \$28 million in state dollars could potentially draw an additional \$53 million in federal dollars (FMAP of 65%) and these dollars would also be available for persons with HIV/AIDS joining Medicaid under the waiver. However, because any potential waiver application must demonstrate cost neutrality, the application would have to identify at least \$53 million of savings as a direct result of implementation of the waiver interventions in order to be favorably considered by CMS. For the purposes of this report and in the timeframe given, the committee was unable to ascertain whether a potential waiver application could demonstrate cost neutrality.
- 72% of NC ADAP clients have a gross income that is at or below the 133% FPL; therefore there will still be people who were 'grandfathered' into ADAP prior to the recent funding crisis who need to be served with the federal ADAP funding, as well as those above 133% FPL who will need medication.
- Other medical and support services to HIV/AIDS clients that are currently provided through the Ryan White CARE Act federal funds would continue in North Carolina as they currently exist. Those clients who would move onto Medicaid through a waiver would be able to continue to access those services for any covered needs that a Medicaid waiver did not provide.

- The terms of a waiver application would obligate North Carolina to serve many more people than are presently enrolled in ADAP.
- It is also important to note that if the \$28 million in state funds were used for the waiver, it would have been necessary to identify other state funds in order to provide the required match for Ryan White federal funds.

All of these factors are important relevant issues that have been carefully weighed and studied in putting forth the conclusions and calculations contained in this report.

F. Programmatic and Technical Impact

Programmatic Impact:

- It is estimated that implementation of this waiver would require additional staff. The following are approximations of the numbers required and possible staffing options; either two (2) FTEs or one (1) FTE and a vendor to conduct the analyses and evaluations required by CMS. Costs associated with these additional positions include salaries/benefits, office space and equipment.
- The addition of a new Medicaid eligibility category would significantly impact the duties of the Medicaid eligibility staff both at the state and county level. This could potentially result in the need for additional staff at one or both levels. Medicaid's contracted agency for Provider Enrollment and fiscal functions would be impacted as well.
- Training would be required for the staff administering the program as well as those in the field. This would also include eligibility staff.
- As demonstrated earlier in table I comparing costs for someone who is HIV -positive versus an individual with AIDS, it is cost-effective to treat individuals who are HIV-positive before their disease progresses to AIDS. While this strategy is not cost-neutral, it has nevertheless been proven to be clinically effective.
- Development of a new waiver would require a minimum of 9 months' preparation and demonstration of cost-neutrality to CMS.
- The proposed waiver would not be creating a new entitlement program in that the target population will be going on Medicaid in 2014. This waiver would end December 31, 2013.
- Given the pending implementation of health care reform in 2014, the committee does not believe that there is sufficient time to demonstrate, develop and implement a waiver, which would serve as a 'bridge' from the present to 2014 for those people at/below 133% FPL who will become eligible for Medicaid under the Patient Protection and Affordable Care Act of 2010.

Technical Impact:

- Implementation of the waiver would require significant changes in the Medicaid Management Information System (MMIS). The system is currently responsible for claim processing functions.

G. Feasibility of Implementing Recommendation

Although the cost-effectiveness of early medical intervention has been demonstrated, implementation of the 1115 waiver (allowing Medicaid to expand eligibility to people living with HIV/AIDS with

income at or below 133% FPL to reduce the ADAP waiting list in North Carolina) would require additional state funding.

If the waiver were feasible, the following benefits would be recognized.

- Improvement in health outcomes for people living with HIV/AIDS.
- Receipt of federal matching dollars. This addition of federal funding would make it possible to serve more North Carolinians living with HIV/AIDS.
- Persons with HIV/AIDS currently receiving care through the Ryan White CARE Act would have the added benefit of coverage for non ADAP formulary medication, hospitalizations, emergency room visits and ambulance transportation.
- Offering comprehensive medical services through the 1115 waiver and the Ryan White CARE Act earlier in the course of the disease would halt progression to AIDS.

H. Recommendation and Conclusion

DMA and DPH recognize that there are significant challenges to overcome for the state of North Carolina to pursue an 1115 Waiver for the purpose of expanding Medicaid eligibility to people living with HIV/AIDS who are at or below 133% FPL. The data described in Table II proves that doing so would incur substantial additional costs to the state. It has been clearly demonstrated through numerous studies and the experience of the Massachusetts ADAP that an 1115 waiver is highly cost-effective, as opposed to waiting to begin treatment at a later stage in the disease. However, based on this analysis conducted jointly by DMA and DPH, it has not been possible to demonstrate that an 1115 waiver for this population would be cost neutral, even with the addition of the federal matching funds that would be available under a waiver. This analysis shows that pursuing a waiver would require both additional funding from the state and further analysis to demonstrate overall cost-neutrality for North Carolina, as required by CMS.

Clinical research supports the promotion of early access to antiretroviral drugs and linkage to primary care. **Expanding access to early antiretroviral therapy and linkage to primary care are demonstrated methods for reducing costs and transmission of the disease. Additional benefits of early and universal treatment include increasing the quality of life and reducing expensive co-infection of other illnesses, ultimately halting disease progression and postponing death.**

However, the Division of Medical Assistance (DMA) and the Division of Public Health (DPH) conclude that pursuing a waiver would require both additional funding from the state and further analysis to demonstrate overall cost-neutrality for North Carolina. DMA and DPH along with other partners should continue to study this issue and to prepare for the likelihood that health care reform in 2014 will significantly change the delivery of services to people living with HIV/AIDS in North Carolina.

J. References

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