

LOCAL IMPACT OF PROPOSED  
REDUCTIONS IN THE STATE OF TEXAS  
AIDS DRUG ASSISTANCE PROGRAM

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# LOCAL IMPACT OF PROPOSED REDUCTIONS IN THE STATE OF TEXAS AIDS DRUG ASSISTANCE PROGRAM (ADAP)

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## **Prepared by**

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## I. Introduction

The Texas Department of Health has proposed a change in eligibility for the State of Texas AIDS Drug Assistance Program (ADAP). The proposed change would reduce eligibility from 200 percent of Federal Poverty Level (FPL) to 140 percent of FPL. The effect of the change would be to reduce the number of people who have a source of payment for their HIV medications.

Although the Texas Department of Health has estimated the statewide costs of providing medications to ADAP clients with incomes between 140 and 200 percent of FPL, electronic records of eligibility are not available to estimate those costs at the county level. As a result, staff in five large, urban counties (Bexar, Dallas, Harris, Tarrant, and Travis) were asked to provide estimates of the fiscal impact to their county. ADAP clients residing in these five counties account for about three-quarters of ADAP clients statewide as well as three-quarters of ADAP expenditures. The estimates provided by the counties are based on the cost of replacing the drug regimen prescribed for current ADAP clients. However, if these patients lose access to their current drug regimen, there will be a cost to treating the symptoms of HIV/AIDS. Both of these costs are addressed in this report.

Information was collected from the following sources to determine the local impact of the proposed changes to the ADAP program:

- The Texas Department of Health ADAP program.
- HIV/AIDS clinics and programs funded or administered by hospital districts or county and city governments in five counties (Bexar, Dallas, Harris, Tarrant, and Travis).
- Research on the cost of direct medical care for HIV/AIDS patients.

## Summary

This report provides details of 1) the cost of replacing ADAP medications at the local level, and 2) the cost of providing direct medical care in the absence of HIV medications. Based on information from the sources listed above, the cost of replacing ADAP medications for ADAP clients in the five counties contacted could range from \$9 million to \$21.7 million. The cost of providing direct medical care to ADAP patients in these five counties who no longer have access to the ADAP medications could reach \$27 million.

## II. The Cost of Replacing ADAP Medications

Based on estimates provided by each of the five counties contacted, the table below shows the estimated impact of replacing the ADAP drug regimen for clients in each county who would fall between 140 and 200 percent of FPL.

### Impact of ADAP Changes By County

	Statewide	Bexar County	Dallas County	Harris County	Tarrant County	Travis County
	FY 2002	annual estimate	FY 2002	annual estimate	annual estimate	annual estimate
<b>Statewide Data (from TDH ADAP program)</b>						
A. # of ADAP clients	11,347	973	2,145	3,559	843	893
B. Total expenditures on ADAP clients	\$ 56,000,000	\$ 5,058,118	\$ 9,779,745	\$ 18,792,402	\$ 4,424,139	\$ 4,384,282
C. Actual average annual expenditures per client (B/A)	\$ 4,935	\$ 5,198	\$ 4,559	\$ 5,280	\$ 5,248	\$ 4,910
D. Average annual expenditures based on monthly cost of \$793 (\$793 x 12)	\$ 9,516					
E. % of CURRENT clients statewide expected to lose eligibility under new rules	21%	21%	21%	21%	21%	21%
F. # of ADAP clients expected to lose eligibility	2,426	208	459	761	180	191
<b>Hospital District/Public Clinic Data (from hospital districts and counties)</b>						
G. # of ADAP clients seen in public clinics		600	1,612	1,351	460	700
H. # of public clinic ADAP clients expected to lose eligibility		120	870	209	150	80
I. % of public clinic clients expected to lose eligibility		20%	54%	15%	33%	11%
J. Estimate of the cost of drugs for ADAP clients likely to lose eligibility		\$ 1,080,000	\$ 1,891,042	\$ 711,645	\$ 1,080,000	\$ 1,100,000
K. Average annual cost of ADAP medications that will be lost *		\$ 9,000	\$ 2,174	\$ 3,405	\$ 7,200	\$ 13,750
<b>Remaining County ADAP Clients</b>						
L. # of ADAP clients seen by other non-public health care providers		373	533	2,208	383	193
M. # of these clients expected to lose eligibility (assuming public clinic % of impact)		75	288	342	125	22
N. Cost impact using county average drug costs		\$ 671,400	\$ 625,264	\$ 1,163,073	\$ 899,217	\$ 303,286
O. Total # of ADAP clients impacted in the county		195	1,158	551	275	102
P. Difference between state impact and county estimated impact (F-O)		13	(699)	210	(95)	89

\* Bexar County provided a range of \$7,200 to \$10,800, which has been averaged to \$9,000 for these calculations.

Not all ADAP clients receive services at county hospital districts or public clinic systems. The table above includes the number of ADAP clients residing in each county according to the Texas Department of Health (TDH), as well as the number of hospital district or county clients who are enrolled in the ADAP program. ADAP clients residing in the county who are not patients within the hospital district or county clinics are likely seeing other private or safety net providers elsewhere in the community. The calculations in this table assume that the impact for non-hospital district/county clients can be extrapolated to the other clients in the county.

## Varying Estimates Of Impact

The table below shows that the aggregate estimate of the five counties to replace the ADAP medications for ADAP clients who may lose eligibility under the TDH proposed rule change ranges from \$9 million to \$21.7 million. A more refined estimate is not possible because of the lack of current, electronic income information for ADAP clients. However, if the high-end scenarios, which use costs based on the assumption that clients will be in full compliance with their drug regimen and will remain in the program for a full year, are eliminated, more likely estimates result, ranging from \$9 million to \$11 million dollars for all five counties combined.

### Range of Estimated Cost Impact By County

	Bexar County	Dallas County	Harris County	Tarrant County	Travis County	Total 5 Counties
<b>Using local % of clients impacted:</b>						
1. Cost impact using LOCAL average cost per client	\$ 1,751,400	\$ 2,516,306	\$ 1,874,718	\$ 1,979,217	\$ 1,403,286	\$ 9,524,927
2. Cost impact using state actual average drug costs	\$ 1,013,703	\$ 5,279,695	\$ 2,909,417	\$ 1,443,224	\$ 500,780	\$ 11,146,819
3. Cost impact using state average drug costs (\$9,516, assumes full compliance for full year)	\$ 1,855,620	\$ 11,019,528	\$ 5,243,316	\$ 2,616,900	\$ 970,632	\$ 21,705,996
<b>Using state estimate of 21% of clients impacted:</b>						
1. Cost impact using LOCAL average cost per client	\$ 1,872,255	\$ 996,825	\$ 2,590,925	\$ 1,297,687	\$ 2,625,209	\$ 9,382,901
2. Cost impact using state actual average drug costs	\$ 1,081,431	\$ 2,090,919	\$ 4,017,834	\$ 945,885	\$ 937,364	\$ 9,073,434
3. Cost impact using state average drug costs (\$9,516, assumes full compliance for full year)	\$ 1,979,598	\$ 4,364,068	\$ 7,240,894	\$ 1,715,109	\$ 1,816,836	\$ 17,116,504

As this table shows, the impact varies significantly depending on the assumptions that are made. Although the highest cost across all five counties is shown to be \$21.7 million, that cost could go as high as \$25.4 million if the maximum estimate for each county is totaled (not shown on the table). Likewise, the minimum estimate for each county totals a cost of \$5 million (not shown on the table). While these additional calculations expand the potential range of the cost impact across all five counties, eliminating the very low and very high end estimates still results in a more likely range of \$9 million to \$11 million for all five counties combined. There are two primary variables that impact these calculations:

- 1. The percent of clients that will be affected.** TDH estimates that 21 percent of clients statewide will lose eligibility, but does not provide estimates by county. The local public providers of care to ADAP clients estimated that between 11 percent (in Travis County) and 54 percent (in Dallas County) would lose eligibility, for an average across the five counties of 30 percent. The methodologies used by each county to develop an estimate of the number of clients who could lose eligibility were not reviewed for this report. The cost impact for each county was estimated using the following:
  - The TDH estimate of 21 percent
  - The percent provided by each county
- 2. The cost of medication for HIV clients.** While statewide actual usage of the ADAP program shows an average annual cost of \$4,935, TDH also states that the average annual cost of medications for an ADAP client is \$9,516 based a monthly cost of \$793 per client. The higher number assumes that the client remains in the program for the entire year and is fully compliant. Average annual costs by local public providers of care to ADAP clients varied from

a low of \$2,174 in Dallas County to a high of \$13,750 in Travis County. The reasons for the variation in the average costs among counties were not fully explored, but include different methodologies for determining average cost as well as variances in the prices paid for the medications. The cost impact for each county was estimated using the following:

- The TDH average of \$9,516
- The TDH actual average of about \$5,000
- The average provided by each county

Two factors that further complicate the cost analysis are:

1. Income information is only collected when an individual enrolls in ADAP, so the estimates of the number of ADAP clients affected are based in most cases on income data that may not be current.
2. The state formula for determining eligibility in the ADAP program is gross income less the actual annual cost of the client's prescribed drug regimen. Most of the counties provided estimates of impact based on gross income with no adjustments, although there may be no actual difference in results as a result of using a different formula.

## **Detail of County Estimates**

**Bexar County.** The Bexar County Hospital District (University Health System or UHS) uses an average cost of medication that is similar to the average used by Tarrant County and the Harris County Assistance Fund (see Harris County below). UHS estimates that about 300 ADAP clients use UHS pharmacies and the other 300 use other local participating pharmacies.

**Dallas County.** The Dallas County Hospital District's (Parkland Health and Hospital System) average cost of HIV medications (\$2,174) is the lowest of all of the counties shown on the tables above. To calculate this cost, Parkland determined the actual cost of the drugs provided during FY 2002 to the 870 patients who may lose ADAP eligibility and divided that cost by those 870 patients. Parkland data shows that the average cost of HIV medications for all 1,612 ADAP patients in FY 2002 is much higher at just over \$8,000 per patient. One explanation provided for the discrepancy between the two groups of patients is that the patients who are not subject to losing eligibility may be sicker and require more medications than the patients who may lose eligibility.

**Harris County.** The Harris County Hospital District also has a low average cost per patient and explains that the lower costs may be attributable to differing prescribing patterns, the units of medication dispensed, and the rate of return visits by the patients. Average costs may also be skewed because not all ADAP clients are actively taking the medications that have been prescribed.

The Harris County Hospital District is not the only major provider of services to HIV patients in Harris County. Another large provider of HIV services is the Montrose Clinic, which reported that of their 1,100 ADAP clients, at least 400 (about one-third) could potentially lose eligibility. The clinic director estimates that the average cost of HIV medications for their patients ranges from \$8,000 to \$9,000 per patient. These estimates of impact and cost are much higher than the Harris County Hospital District.

The Assistance Fund in Harris County, which provides financial assistance with medications, estimates that a total of about 540 people (about 15 percent) in Harris County will be affected by the change in

ADAP eligibility. This estimate is similar to the 15 percent estimate by the hospital district. The Assistance Fund, however, uses an average annual cost of HIV medication of between \$6,000 and \$9,000 (much higher than the estimate of \$3,405 by the hospital district), which could result in a total impact in Harris County of between \$3.2 and \$4.9 million.

We have not reconciled the different estimates among these various providers in Harris County.

**Tarrant County.** Many of the Tarrant County Hospital District’s (JPS Health Network) ADAP clients use other local pharmacies, but the JPS pharmacy estimates that the cost of HIV medications dispensed from hospital district pharmacies for ADAP clients who are likely to lose eligibility is \$421,200 annually. Applying the average annual cost of \$7,200 per patient to the estimated 150 ADAP patients seen at the hospital district who may lose eligibility (regardless of which pharmacy they use) could result in an annual cost of \$1 million.

**Travis County.** The City of Austin and Travis County estimate that the average annual cost of medication per ADAP client is \$13,750. The estimate assumes that all patients are on the typical drug regimen and that patients will be 100 percent compliant with their medications, which may be different than the assumptions made by the other counties, resulting in much higher cost impact estimates than the other counties.

### County Indigent Health Care Programs and ADAP

Patients who lose eligibility in the ADAP program may be eligible for the indigent health care program in four of the five counties. Because the state uses a formula for determining eligibility for ADAP that subtracts a client’s annual cost of medication from their annual gross income, only those clients with an annual gross income (without the adjustment) that falls within the IHCP guidelines would be eligible for the county programs.

In Travis County, the income limit for eligibility is 100 percent of FPL, so ADAP clients between 140 and 200 percent of FPL would not be eligible. But even if individuals qualify for the IHCP in their county, their prescriptions may not be available through or be funded by the county or hospital district pharmacies.

### County Indigent Health Care Programs (IHCP) and ADAP

	Bexar	Dallas	Harris	Tarrant	Travis
Are patients who lose ADAP benefits eligible for IHCP?	Maybe	Maybe	Maybe	Maybe	Unlikely. Might receive limited benefits if disabled.
Are ADAP drugs available in IHCP formulary?	No	Yes	Yes	Some	No

### III. The Cost of Medical Care in the Absence of ADAP Medications

The Ryan White Comprehensive AIDS Resources Emergency (CARE) Act is Federal legislation that addresses the unmet health care needs of persons living with HIV disease by funding primary health care and support services. The ADAP program is funded through this legislation. We are not aware of any provisions of the CARE Act that provide funding for in-patient services. The cost of medical care for clients who lose access to medications will be borne by the public hospitals in each of the five counties.

The annual cost of direct medical care is estimated to be about \$12,000, which is generally higher than the estimated annual cost of providing HIV medications. For this reason, the cost of treating patients who lose access to their HIV medications is expected to be higher, potentially significantly higher, than the cost of providing HIV medications.

**Methodology.** The most comprehensive source of data on the cost of treating HIV patients comes from the federally funded HIV Cost and Services Utilization Study (HCSUS), which surveyed a representative sample of HIV patients in 1996 with follow-ups through 1998. This study has not been updated since then.

Based on data from the HCSUS, the average annual cost of treating an HIV patient in 1996 was about \$20,000 dollars. About 40 percent of that cost was for pharmaceuticals, including medications that were new at the time, although as much as 41 percent of patients eligible for these drugs were not receiving them, suggesting that the cost of pharmaceuticals would likely increase as more patients began taking the then new drug regimen.

Excluding the pharmaceuticals from the HCSUS cost estimate leaves about \$12,000 in annual direct medical expenses including hospitalization, outpatient care, and emergency services. Although direct medical care costs vary by the severity of symptoms and the stage of disease, the average cost is used here. Applying the cost of direct medical care in 1996 to the number of patients estimated to lose ADAP eligibility in each of the five counties, the cost of treating HIV patients is compared in the table below to the cost of the drug regimen they are currently taking.

Research indicates that the use of drug treatment for HIV patients is associated with a lower rate of hospital admission, so the reverse might be expected in the absence of drug treatment.

## Direct Medical Costs for Treatment of HIV/AIDS by County

County/Hospital District	# of ADAP clients in the county estimated to lose eligibility (based on local estimates)	Estimated average annual cost of DIRECT MEDICAL CARE without ADAP*
<b>Bexar</b>	195	\$ 2,340,000
<b>Dallas</b>	1,158	\$ 13,896,000
<b>Harris</b>	551	\$ 6,612,000
<b>Tarrant</b>	275	\$ 3,300,000
<b>Travis</b>	102	\$ 1,224,000
<b>Total for 5 counties</b>	2,281	\$ 27,372,000

\*These costs would not be paid directly by the City of Austin or Travis County because the Indigent Health Care Program in Travis County only provides services to individuals at or below 100 percent of FPL.

The estimated cost of medical care used in this table, \$12,000 per year, exceeds most of the jurisdictions' average annual cost of HIV medications (Travis County is the only exception). Therefore, the annual cost of direct medical care could be expected to exceed the cost of ADAP medications, particularly for Dallas and Harris County, where the average drug cost per patient is relatively low. In Travis County, where the average annual costs of HIV medications is very high, the cost of direct medical care is very similar to the estimated cost of replacing the drugs.

For all of the counties except Travis, the hospital districts would bear the cost of the direct medical expenses because their county Indigent Health Care Programs (IHCP) provide eligibility at least to 200 percent of FPL, and would, therefore, cover the medical expenses of these patients. In Travis County, the City of Austin and Travis County IHCP only provide services to patients who are at or below 100 percent of FPL, so the costs would be borne by the charity care programs of local hospitals, with the exception of some disabled individuals up to 200 percent of FPL who may qualify for limited IHCP benefits.

**Limitations.** Medical costs in 1996 obviously do not provide an accurate comparison to medical costs for treating HIV/AIDS in 2003 for several reasons, including changes in the treatment of HIV, such as the more widespread use of prophylactic medications to prevent co-morbidity and opportunistic infections, as well as increases (including inflation) in health care costs overall. However, more recent national studies using representative samples were not found.

Researchers have found that the health care costs for HIV patients declined from 1996 to 1998 and 1999 due to the more widespread use of highly active antiretroviral drugs (HAART). Based on data from the HCSUS, the cost of pharmaceuticals increased from 1996 to 1998, but the cost of hospitalization declined more than the cost of pharmaceuticals increased. Another study of patients treated at nine HIV primary and specialty care clinics during 1999 indicated that patients on HAART were hospitalized less than patients who were not on the drug regimen. The average annual hospitalization costs found in this study were lower than the HCSUS study, but were based on a time period in which more patients were on HAART.

We have used the higher cost of treatment (hospitalization and emergency care) from HCSUS in 1996 to estimate the cost of direct medical treatment in the absence of HIV medications because it more likely

represents the mix of services that would be provided to clients who do not have access to the medications provided through the ADAP program. These costs, however, do not include the cost of pharmaceuticals for treating co-infections that are often present in HIV patients.

Lastly, how quickly ADAP clients who lose their eligibility would begin to increase their utilization of inpatient and emergency services is unknown. HIV/AIDS disease progression depends on many factors, so although the full costs of medical treatment might not be realized initially, the costs would be expected to increase over time.

### **Other Factors that May Impact Cost**

In addition to the direct medical costs for current ADAP clients who no longer have access to their HIV medications, there are other factors associated with a loss of access that may impact local jurisdictions. Those factors include:

- The increase in new HIV infections that may well occur because the drug regimen keeps an HIV patient's viral load low, thereby reducing the risk of infecting others.
- The possibility that drug resistance will develop in patients who do not adhere to their drug regimen that could compromise future drug treatment.

### **Sources of Costs of Direct Medical Care**

Bozzette, Samuel A., et al. (2001, March 15). "Expenditures for the Care of HIV-Infected Patients in the Era of Highly Active Antiretroviral Therapy." New England Journal of Medicine 34 (11), pp. 817 – 823.

HIV Research Network. (2002, May). "Hospital and outpatient health services utilization among HIV-infected patients in care in 1999." Journal of Acquired Immunodeficiency Syndromes 30 (1), pp. 21—26.

Hellinger and Fleishman, (2000, June). "Estimating the National Cost of Treating People with HIV Disease: Patient, Payor, and Provider Data." Journal of Acquired Immunodeficiency Syndromes 24, pp. 182-188 (Abstract).

Rand Corporation (1999). "A Portrait of the HIV+ Population in America." HIV Cost and Services Utilization Policy Brief. RB-4523.