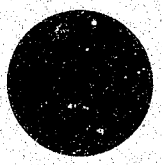

A RAND NOTE

State Policies and the Financing of AIDS Care

A. Pascal, M. Cvitanic, C. Bennett,
M. Gorman, C. Serrato

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RAND

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RAND

RAND/UCLA/HARVARD
Center for Health Care
Financing Policy Research

PREFACE

This study was performed under the auspices of the RAND/UCLA Center for Health Care Financing Policy Studies, operating under a contract with the Health Care Financing Administration (HCFA), U.S. Department of Health and Human Services. It is intended to inform policymakers at federal, state, and local levels and other interested persons about problems in financing treatment of patients with HIV-related illness. A companion piece on financing of care, based on face-to-face interviews with AIDS patients, is forthcoming.

The authors wish to thank the many persons who contributed their expertise and ideas. Penelope Pine and Elvira Fussell of HCFA offered support and advice throughout the course of the study. Deborah Rosansky, formerly of HCFA was also helpful. C. R. Neu, the Director of the Health Care Financing Policy Center, and RAND colleagues Peter Jacobson and Phoebe Lindsey made useful suggestions. An insightful and constructive review of the manuscript was provided by Lloyd Dixon of RAND'S Economics and Statistics Department.

SUMMARY

RAND conducted a telephone survey of officials in all 50 states and the District of Columbia between the Fall of 1987 and the Fall of 1988. Knowledgeable personnel in the state Medicaid program, the AIDS (acquired immune deficiency syndrome) coordinating office, and the agency charged with regulation of private health insurers were queried about the nature of the HIV (human immunodeficency virus) epidemic in that state and about a series of policies that affect access to public and private insurance coverage and reimbursement for HIV-related health care.

The interview material was organized to answer questions about the state of the epidemic and about four policy domains as they affect HIV/AIDS patients--eligibility for Medicaid, services reimbursed under Medicaid, guarantees of access to private health coverage, and regulations of benefits offered under private policies. For the policy domains, we calculated a score for each state meant to scale its situation in relation to the other states.

Data on the extent of the epidemic--particularly on nonsymptomatic HIV infection and ARC (AIDS-related complex)--are scanty at the state level. Drug abuser AIDS patients are concentrated in the northeastern states. State expenditures under Medicaid track the magnitude of the caseload in that state.

The Medicaid eligibility dimension in each state was measured in terms of the ratio of Medicaid beneficiaries to the poverty population, income standards for eligibility, and the situation of HIV positives with respect to the state's Medically Needy program. The broadest scope for eligibility was found to exist in California, Hawaii, Michigan, New York, Rhode Island, Maine, Massachusetts, and Wisconsin.

Scores for provision of Medicaid services were based on whether AZT (azidothymidine) therapy was reimbursed, whether hospice services were covered, whether an AIDS-specific home care waiver had been applied for, whether there was increased reimbursement available for nursing home

services, and whether there was coverage for an unlimited number of inpatient days. The most generous set of provisions were found to exist in Ohio, followed by New Jersey, New Mexico, New York, North Carolina, North Dakota, and South Dakota.

States received scores on the private insurance access dimension as a function of their policies with respect to the allowability of HIV tests and sexual preference questions as a screen for coverage and whether they had organized risk pools for otherwise uninsurable HIV/AIDS patients. California, Washington, D.C., Maine, Michigan, Minnesota, New Jersey, New York, North Dakota, and Wisconsin were the high scorers.

Private insurance benefits for each state were scored on the basis of whether insurance continuation guarantees were available for members of small group plans, whether HIV/AIDS could be used as an excluded prior condition to deny reimbursement, and whether insurers were allowed to cap reimbursements for specific diseases. The states registering the highest scores were California, Georgia, Kansas, North Carolina, and Pennsylvania.

The following state background factors, in descending order, were found to be associated with high scores for Medicaid eligibility and services: caseload, location outside the South, population, and per capita income. For private insurance access and benefits, there was a high association with state per capita income but lower associations with the other variables.

California and New York, the highest caseload states, had higher scores on all dimensions than did a group of medium caseload states (Florida, Georgia, Illinois, Maine, New Jersey, Pennsylvania, and Texas), and a group of low caseload states (all the other states). The medium and low caseload states were more sharply distinguished by their private insurance scores than they were by their Medicaid scores.

The findings discussed here led to a series of pilot studies of HIV/AIDS care financing from the viewpoint of the patients themselves.

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TABLES

I. THE SIGNIFICANCE OF STATE-LEVEL POLICIES

Treating illness related to human immunodeficiency virus (HIV) may cost the United States $50 billion during the 1990s (Scitovsky and Rice, 1987; Sisk, 1987; Pascal, 1987). Deciding on how to distribute that cost burden over federal, state, and local government, employers, third-party payers, and patients poses major problems for our society. Policies that now govern the apportionment of acquired immune deficiency syndrome (AIDS) expenditures were adopted before the onset of the HIV epidemic or in its very early phases. Critical new policy decisions impend. Unless significant initiatives are taken to organize adequate data, and quickly, we will be flying in the dark as we make the needed policy choices on AIDS treatment finance.[1]

The distribution of the costs of treating people with AIDS (PWAs) will be much different from that of other catastrophic illnesses. This difference is in part due to the nature of the disease--short survival times and mix of required services--and the characteristics of the affected population--their demographic and socioeconomic attributes. State and federal policies on Medicaid and private health insurance coverage influence the combination and amount of inpatient, outpatient, skilled nursing, and in-home services used, and ultimately, who bears financial responsibility for the costs of these services.

The importance of understanding state policies on Medicaid and private insurance for PWAs becomes clear when we examine the distribution of AIDS expenditures across payers. Pascal (1987) presents estimates of payer shares by that year. He found that about 40 percent of the cost would fall on the Medicaid program under the most likely scenario. Subsequent studies, including Andrulis, et al. (1987), Buchanan (1988), California AIDS Leadership Committee (1988), and Sisk

[1]The National Center for Health Services Research and Health Care Technology of the U.S. Public Health Service has commissioned research to develop a methodology for estimating the costs of HIV-related care. The plan is to collect data sufficient to make such estimates in a subsequent round of research.

(1987), show that the share ranges between 20 and 60 percent of patients dying from AIDS and from 10 to 30 percent of all AIDS-related medical expenditures. Substantial cost shares--compared to other major impairments--that fall upon public hospitals (perhaps 15 percent) and on patients and their families (perhaps 20 percent) are discussed in Pascal (forthcoming).

AIDS will probably absorb about 5 percent of the Medicaid budget during the 1990s (Pascal, 1987). The Hospital Council of New York has estimated that by 1992 state Medicaid payouts there will have doubled because of AIDS.[2] That may be somewhat exaggerated but a 50 percent increase in New York seems likely. California's Medi-Cal increase will probably be in the neighborhood of 25 percent (California AIDS Leadership Committee, 1988). It is not at all unlikely, given these facts and the rapid spread of the epidemic, that many high caseload states will see AIDS-related increases of 10 to 15 percent in Medicaid expenditures.

The best current guestimates--and they are no more than that--suggest that public hospitals, funded by state and local government, are picking up about 15 percent of the treatment costs because many of their patients have no insurance coverage and because state Medicaid systems reimburse only a fraction of true costs.[3] Patients and their families seem to be paying about 20 percent of the costs out-of-pocket.[4]

THE POLICY ENVIRONMENT

Knowledge of the distribution of AIDS-related expenses is important input to the policy debate on treatment finance. A number of major policy proposals are on the table. Examples include:

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[2]Personal communication from John W. Rosson, Vice President.

[3]Andrulis, et al. (1987)

[4]The source for these conjectures is ongoing RAND work for HCFA on the cost and financing of HIV-related care as revealed in interviews of PWAs.

Services Covered and Reimbursed

1. Encouraging more home- and community-based waiver programs under Medicaid to discourage "over-hospitalization" and bring down costs.
2. Cutting Medicaid coverage for certain services (e.g., intensive care).
3. Expanding Medicaid reimbursement for certain services (e.g., nursing facilities and hospices).

Defining Eligibility

4. Either expanding the definition of presumptive disability to include all symptomatic HIV-infected persons or limiting the definition to only those PWAs with most severe opportunistic infections. (AZT, for instance, is assumed to significantly reduce/postpone disabling symptoms.) Fewer will then qualify for SSI and Medicaid.
5. Further broadening the Centers for Disease Control's official AIDS definition so as to include more people with serious AIDS-related complex (ARC) conditions. This would result in more people eligible for SSI and Medicaid.

Restructuring Federal Financing

6. Increasing the Federal Medicaid share for AIDS-related claims.
7. Allowing state Medicaid systems to pay private insurance premiums for PWAs who cannot continue to pay themselves.
8. Permitting "uninsurables" to join state Medicaid programs for which they would be billed through means-tested, and therefore subsidized, premiums.
9. Reducing the Medicare waiting period for chronically ill persons below the current 24 months.

10. Developing a federal "disaster relief" program to assist public hospitals (and local social service agencies) that are disproportionately affected in caring for PWAs.

Improving Private Insurance Regulation

11. Tightening regulation of health benefits under employer self-insurance (ERISA) plans. (It is claimed that U.S. Department of Labor regulation of these plans is less stringent than the regulation of private plans by state departments of insurance.) This would lessen discrimination against and limitations on PWAs and keep more of them in the private payer system.
12. Extending COBRA[5] protection to people who lose their jobs with small employers and extending continuation guarantees beyond 18 months to match extension in life expectancy. These changes would also keep more patients in private plans and off Medicaid or out of public hospitals.
13. Encouraging states to more stringently regulate private third-party health plans, especially multiple employer trusts, whose recovery and takeover provisions can result in a situation where workers in small firms have essentially *no* coverage for serious, chronic illness, including AIDS.
14. Promoting (i.e., subsidizing) state-managed health insurance risk pools to provide coverage for PWAs.

To make intelligent policy in the HIV care finance arena requires good intelligence about the current situation. We need to know how policy changes will shift the burden of caring for those infected with HIV among state, federal, and private payers. That is why this project was launched.

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[5]The Consolidated Omnibus Budget Reconciliation Act of 1986 extends health insurance continuation coverage at premiums no higher than 102 percent of the previous employer-plus-employee contributions to workers who lose their jobs at employment sites with 20 or more workers.

ORGANIZATION OF THIS NOTE

The next section of this Note provides some detail on how the survey was conducted. The subsequent sections present, and attempt to explain, the findings of the survey. First is a section on state-by-state statistics regarding HIV infection, AIDS caseload, and care expenditures. The following section treats Medicaid, divided into subsections on eligibility and services. A succeeding section covers private health insurance as it relates to HIV infection and AIDS; it is divided into subsections on access and benefits. Following that is a section detailing statistical tests of the relationship between Medicaid and private insurance and state background variables as explanatory factors.

II. THE RAND SURVEY OF STATES' MEDICAID AND HEALTH INSURANCE REGULATIONS

Between October 1987 and September 1988 each state's[1] Medicaid policy office, insurance regulation office, and health department was contacted by telephone. At least one representative from each agency participated in an interview lasting about ten minutes; often it proved necessary to interview several people to complete the questionnaire. Follow-up calls were made to get updates on policy changes. In some cases, it was impossible to find a person who could answer our questions and so the reader will find "NA" (answer not available) at some points in the tables below. When we could, we compared our results to previously published data and inconsistencies were resolved through further follow-up calls.

Table 1 presents data on the extent of the HIV epidemic for all states. It includes data on the magnitude of HIV infection (when state health officers were willing to estimate it), on whether a case of ARC must be reported to state authorities, on the number of AIDS cases registered,[2] and on the distribution of cases by transmission group (again, when our respondents were willing to make an estimate). Finally, it contains some information on the cumulative state spending for AIDS care up through the end of 1987.

Examination of these results suggests that data with respect to HIV infection and ARC are only scantily available. Where the distribution by means of transmission is known, 75 percent and more tend to fall into the homosexual/bisexual male group. Interestingly, it is in the eastern states (e.g., New York, New Jersey, Delaware, Vermont, West Virginia) that drug abusers and others form a sizable share of AIDS patients.

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[1]In what follows "states" will be assumed to include the District of Columbia.

[2]We have substituted data released by the Centers for Disease Control, U.S. Public Health Service, for the data we tried to collect from the individual states. The former source proved substantially more complete and reliable.

Table 1

STATISTICS ON HIV-RELATED ILLNESS

State	Tot. No. HIV+ 87/88	ARC Report Reqd?	AIDS Cases		Distribution Among Risk Group %			State Expend. for AIDS Thru 1987 ($000)[a]
			Total Dec. 87	Per Mil. Pop	Gay/Bisex	IVDA	Other	
AL	NA	Yes	215	19	79	11	18	1,893
AK	1863	No	36	62	75	4	21	498
AZ	NA	Yes	315	19	79	8	13	0
AR	NA	Yes	87	76	77	11	12	440
CA	NA	No	10954	315	80	13	7	58,033
CO	15000	Yes	521	119	91	4	5	414
CT	NA	No	571	127	NA	NA	NA	4,800
DE	NA	No	75	82	65	30	5	36
DC	NA	No	957	977	96	2	2	3,660
FL	NA	No	3623	225	NA	NA	NA	12,539
GA	36000	No	1078	125	88	NA	12	414
HI	6000	No	182	121	NA	NA	NA	631
ID	200	Yes	16	8	86	14	0	0
IL	NA	Yes	1317	73	NA	NA	NA	3,428
IN	846	No	146	26	NA	NA	NA	0
IA	NA	No	63	14	NA	NA	NA	8
KS	NA	No	103	28	70	12	18	213
KY	1000	No	109	21	81	9	10	60
LA	26000	No	670	96	88	3	9	0
ME	NA	No	59	35	NA	NA	NA	319
MD	NA	No	882	124	NA	NA	NA	2,002
MA	60000	No	1038	118	86	8	6	7,591
MI	NA	No	463	31	NA	NA	NA	2,500
MN	15000	No	287	43	90	7	3	1,350
MS	NA	No	89	17	87	8	5	0
MO	NA	No	392	43	83	8	7	255
MT	NA	Yes	13	8	NA	NA	NA	70
NE	142	No	44	15	76	8	16	0
NV	NA	No	153	102	85	11	4	0
NH	NA	No	55	29	87	6	7	59
NJ	NA	Yes	3143	266	NA	NA	NA	7,907
NM	6750	No	90	42	92	3	5	500
NY	NA	No	13171	585	58	38	4	39,920
NC	23800	No	364	34	82	10	8	330
ND	NA	No	46	6	NA	NA	NA	0
OH	40000	Yes	579	27	91	7	2	250
OK	NA	No	189	32	93	2	5	280
OR	14000	No	279	482	91	4	6	1,980

PA	NA	No	1220	63	92	3	5	350
RI	NA	No	120	69	NA	NA	NA	389
SC	NA	No	186	37	NA	NA	NA	0
SD	700	No	5	5	75	25	0	0
TN	15000	No	173	21	87	8	7	0
TX	NA	No	3465	150	93	2	5	1,535
UT	2000	No	90	40	90	5	5	85
VT	1000	No	24	21	67	23	10	0
VA	NA	No	562	72	NA	NA	NA	543
WA	15000	Yes	675	99	95	2	3	398
WV	NA	Yes	41	11	65	9	16	0
WI	NA	No	174	21	80	7	13	543
WY	33	No	8	14	75	8	17	0

SOURCES: RAND Survey, Centers for Disease Control (1988), General Accounting Office (1987), Rowe and Ryan (1988).

[a] Does not include federal share of Medicaid.

Cumulative expenditures, as one would expect, are highly correlated with the AIDS caseload. (The simple correlation coefficient is 0.92.) The most striking anomolies in these data are, perhaps, the high spending in Maine (where we would have "expected" about $3.5 million instead of $7.6 million) and the low spending in Texas (where we would have "expected" about $10.7 million instead of $1.5 million.)[3]

[3]For the list of states, spending runs about $5,000/AIDS case, when the two variables are regressed by ordinary least squares:

$$\text{Spending} = 5.114281 \times \text{Cases} - 275.6441$$
$$(.3037477) \qquad (569.3127)$$
$$R^2 = .85.$$

III. MEDICAID POLICIES

States Medicaid programs vary with respect to eligibility and coverage. Our conversations with Medicaid offices in each of the states produced results of interest on both eligibility standards and provision of services.

ELIGIBILITY STANDARDS

Generally, individuals qualify for Medicaid in one of three ways. They may be recipients of Aid to Families with Dependent Children (AFDC), they may be judged "medically needy," or they may be disabled and receive Supplemental Security Income (SSI) from the federal government. Currently, all those with an AIDS diagnosis meeting the requirements established by the Centers for Disease Control (CDC), U.S. Public Health Service, are "presumptively disabled" and thus eligible for SSI. States typically impose income and asset maxima that govern qualification under the second and third methods.

We first include data on a general indicator of Medicaid eligibility: the ratio of the Medicaid population to the poverty population in the state. The higher that measure, the easier eligibility for Medicaid would appear to be.

The higher a state's SSI income eligibility standard, the sooner a patient becomes eligible for Medicaid. The SSI income eligibility criterion for a single person in most states falls within the range of $4,000 to $5,000 per year, but several states have cutoffs outside this range. Generally, one must be unemployed to receive Medicaid coverage through the SSI. To significantly increase Medicaid's share of AIDS costs, the income and asset requirements would have to be raised to a level consistent with income from a full-time job at the minimum wage--about $7,000/year. Only two states--Arkansas and California--have standards this high and none of our respondents indicated that their state was planning to raise its standard to such a level.

Many states have a "medically needy" program that employs a more generous (i.e., compared to SSI) income eligibility standard based on the difference between income and medical expenditures. Thus in some states, individuals with income or assets too high for Medicaid eligibility under SSI, but with substantial medical expenses, will qualify under the medically needy program. Also, individuals with HIV-related health problems but who do not (yet) have AIDS can become eligible through medically needy programs.[1]

Thirty-four states have such indigent care programs, providing some medical services to people who do not qualify for Medicaid. These programs are an important source of care for HIV-seropositive individuals who have depleted their own financial resources yet cannot qualify for Medicaid. The services available under indigent care programs vary across states and from county to county within some states. Generally, people dependent upon this assistance program are limited to receiving inpatient care in county hospitals only, and often have limited coverage for skilled nursing facility care, outpatient prescription drugs, and mental health services.

Table 2 contains data indicating ease of eligibility to the various state Medicaid systems. The last column on the table contains the results of a simple scoring scheme devised to assess the differences in Medicaid eligibility. The state received 1 point if its ratio of Medicaid beneficiaries to its poverty population exceeded 1, an additional point if the eligibility income cutoff exceeded $5,000, and a third point if people with AIDS are automatically eligible for its medically needy program. The range is thus 0 to 3.

Table 2 suggests that the states with the broadest eligibility criteria are California, Hawaii, Michigan, New York, Rhode Island, Maine, Massachusetts, and Wisconsin followed by Connecticut, Minnesota, Pennsylvania, Utah, Vermont, and Washington.

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[1]Most states allow a maximum of $2,000 assets in addition to a home and one car.

Table 2

INDICATORS OF ACCESS TO STATE MEDICAID SYSTEMS

State	Ratio of Med. Beneficiaries to Pov. Pop.	Income Cutoff for Eligibility[a] ($)	HIV+s Eligible for Medically Needy Program?	Medicaid Access Score
AL	0.46	1,416	No	0
AK	0.42	8,880	No	1
AZ	0.55	2,304	No	0
AR	0.50	2,304	Yes	1
CA	1.28	7,404	Yes	3
CO	0.58	5,052	No	1
CT	0.91	6,060	Yes	2
DE	0.65	3,720	No	0
DC	0.51	4,200	Yes	1
FL	0.34	3,024	Yes	1
GA	0.45	3,072	Yes	1
HI	1.20	5,616	Yes	3
ID	0.35	3,648	No	0
IL	0.83	4,092	Yes	1
IN	0.44	3,072	No	0
IA	0.59	4,572	Yes	1
KS	0.65	4,524	Yes	1
KY	0.65	2,364	Yes	1
LA	0.51	2,280	Yes	1
ME	1.11	6,432	Yes	3
MD	0.73	4,140	Yes	1
MA	1.57	5,712	Yes	3
MI	0.95	5,388	Yes	2
MN	0.81	6,384	Yes	2
MS	0.47	4,416	No	0
MO	0.58	3,348	No	0
MT	0.44	3,984	Yes	1
NE	0.42	4,200	Yes	1
NV	0.32	3,420	No	0
NH	0.58	4,668	Yes	1
NJ	0.96	4,848	Yes	1
NM	0.38	3,096	No	0
NY	1.03	5,964	Yes	3
NC	0.46	2,952	Yes	1
ND	0.36	4,452	Yes	1
OH	0.75	3,624	No	0
OK	0.65	3,720	Yes	1
OR	0.82	4,764	Yes	1

PA	1.15	4,380	Yes	2
RI	1.31	5,292	Yes	3
SC	0.50	4,560	Yes	1
SD	0.31	4,392	No	0
TN	0.44	1,860	Yes	1
TX	0.33	2,208	Yes	1
UT	0.45	8,316	Yes	2
VT	0.83	6,372	Yes	2
VA	0.51	3,492	Yes	1
WA	0.69	5,904	Yes	2
WV	0.72	2,988	Yes	1
WI	1.06	6,528	Yes	3
WY	0.31	4,320	No	0

SOURCES: RAND Survey, General Accounting Office (1987), Urdman and Wolf (1988).

[a] This is the income cutoff for an AFDC family of three; it does *not* apply specifically to people with AIDS.

SERVICES PROVIDED

We next attempted to discover how states differed in terms of coverage of and reimbursement for services used by PWAs. Table 3 shows the results.

PWAs, like some other chronically ill Medicaid beneficiaries, face problems of obtaining care, since many providers do not accept Medicaid and many states place limitations on the maximum amounts of certain services covered by Medicaid. (These problems may be compounded by the general reluctance on the part of providers to serve individuals with HIV infection.) Moreover, PWAs need a unique blend of inpatient, skilled nursing,and home care services. Our survey results focused on some basic means by which states could expand access to care for PWAs.

According to a recent survey, approximately half of the AIDS/HIV patients on alternative care status would benefit from skilled nursing home care (New York Department of Health, 1988). Ideally, by increasing Medicaid nursing home reimbursement rates for PWAs, states can provide an incentive for these facilities to accept PWAs who, generally, require more nursing care than the average patient.[2] This aspect of service is covered in column [4].

[2]States granting increased reimbursement still report access problems as a result of long waiting lists, shortage of single-bed rooms and the lack of facilities for infectious disease control within the nursing homes. Florida, on the other hand, has recently opened chronic care facilities that could serve PWAs.

Table 3

SERVICES PROVIDED TO PWAS UNDER MEDICAID

State	[1] Reimburs. for AZT	[2] Hospice Services Covered	[3] Home Care Waiver Appl. For	[4] Incr. Reimb. for Nurs. Home Servs.	[5] Unlimited Inpatient Days Covd.	[6] Medicaid Service Score
AL	No	No	No	No	No	0
AK	Yes	No	No	No	Yes	2
AZ	Yes	No	No	Yes	Yes	3
AR	No	No	No	No	Yes	1
CA	Yes	UR	Yes	No	Yes	3
CO	No	NA	No	No	Yes	1
CT	Yes	Yes	No	No	Yes	3
DE	Yes	Yes	No	No	Yes	3
DC	Yes	No	No	NA	Yes	2
FL	Yes	Yes	No	Yes	No	3
GA	Yes	No	No	No	Yes	2
HI	Yes	No	Yes	No	Yes	3
ID	Yes	No	No	No	No	1
IL	Yes	UR	No	No	Yes	2
IN	Yes	No	No	No	Yes	2
IA	Yes	No	No	NA	Yes	2
KS	Yes	Yes	No	No	Yes	3
KY	Yes	Yes	No	Yes	No	3
LA	Yes	No	No	No	Yes	2
ME	Yes	No	No	NA	Yes	2
MD	Yes	No	No	Yes	Yes	3
MA	Yes	UR	No	No	Yes	2
MI	Yes	Yes	No	No	Yes	3
MN	Yes	Yes	NA	NA	NA	2
MS	Yes	No	No	No	No	1
MO	Yes	No	No	No	Yes	2
MT	Yes	No	No	NA	Yes	2
NE	Yes	No	No	No	Yes	2
NV	Yes	No	No	No	Yes	2
NH	Yes	UR	No	No	Yes	2
NJ	Yes	UR	Yes	Yes	Yes	4
NM	Yes	Yes	Yes	No	Yes	4
NY	Yes	Yes	No	Yes	Yes	4
NC	Yes	Yes	Yes	No	Yes	4
ND	Yes	Yes	Yes	No	Yes	4
OH	Yes	Yes	Yes	Yes	Yes	5
OK	Yes	No	No	No	Yes	2
OR	Yes	No	No	Yes	No	2
PA	Yes	No	No	No	Yes	2
RI	Yes	No	No	No	Yes	2

SC	Yes	No	Yes	NA	Yes	3
SD	Yes	Yes	No	Yes	Yes	4
TN	Yes	Yes	No	No	No	2
TX	Yes	No	No	No	No	1
UT	Yes	No	No	No	Yes	2
VT	Yes	Yes	No	No	No	2
VA	Yes	No	No	No	Yes	2
WA	Yes	No	No	Yes	Yes	3
WV	Yes	No	No	No	No	1
WI	Yes	No	No	Yes	Yes	3
WY	Yes	No	No	Yes	Yes	3

SOURCES: RAND Survey, Buchanan (1988), General Accounting Office (1987).
NOTES: NA=Data not available.

Home- and Community-Based Services Medicaid Waivers--state policies are shown in column [3]--can be used to provide coverage for home care as an alternative to inpatient care. To date, Hawaii, New Jersey, New Mexico, Ohio, and California received approval from HCFA for these waivers and approval is pending on waiver applications from South Carolina.[3] A number of other states reported that they did not apply specifically for waivers covering the AIDS population because they already utilized 2176 waivers for the disabled, which can include PWAs. Additionally, many home services can be covered through waivers for hospice care, for which 13 states provide Medicaid coverage.[4]

States cite additional reasons for declining to apply for the waivers. First, several states prefer the flexibility inherent in serving people through state-only programs not subject to federal regulations. States on their own can also prior-authorize coverage for special services, thereby precluding the need for an AIDS-specific 2176 waiver. Second, to receive waiver approval, the state must prove that the waiver plan is budget-neutral. This requires research expenditure, an undertaking unlikely in a state with a low caseload. Third, the 2176

[3]Why states have or have not applied for Home- and Community Based Waivers for PWAs is discussed in a forthcoming RAND Note for the Health Care Financing Administration.

[4]However fewer than six of these states have received HCFA approval for hospice care and thus, presumably, do not receive a federal matching share for that coverage. Personal communication from Pat Jones, Hospice Association of America.

waiver applies only to PWAs who continuously require a steady level of care (e.g., in an institution). But the typical patient goes through periods of wellness during which he/she will descend to a lower service-need level and thereby lose valuable benefits (e.g., case management and counseling).[5] So, while the 2176 waiver can reduce overall costs of treatment, some states feel they can achieve similar savings through other policies.[6]

We have supplemented our survey results with information on other state-specific Medicaid policies relevant to PWAs. This supplementary information relates to coverage for azidothymidine (AZT), a drug useful in supressing/delaying symptoms common to the HIV-infected[7] in column [1], coverage of hospice services in column [2], and limits on inpatient days for Medicaid eligibles in column [5].

As above, we calculated a Medicaid service score based on the number of "Yes" answers. Given the variables in examined in our survey, the most generous Medicaid programs are in Ohio, followed by New Jersey, New Mexico, New York, North Carolina, North Dakota and South Dakota.

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[5]Personal communication from Debbie Rosansky, Health Care Financing Administration, Office of Research and Demonstrations.

[6]Even a "waiver-covered" PWA may find that not all of his outpatient service needs are reimbursed. In California, for example, the waiver will provide for $1,300 worth of services per month. At a cost of $15/hour for some home health attendants, the round-the-clock care needed by some patients would be reimbursed for fewer than four days per month.

[7]Richard Chambers, HCFA/DIA, AZT coverage as of 1/1/89.

IV. PRIVATE HEALTH INSURANCE POLICIES

Policies with respect to private health insurance regulation span two domains of concern: the securing of coverage and the protection of benefits for those covered. These were difficult data to collect. Particularly in the low-AIDS-incidence states, many of the regulations applicable to health insurance policies have never been applied to an AIDS patients so that our respondents had to speculate on a hypothetical situation.

It must be reiterated here that states regulate only third-party plans operative in their jurisdictions. Eighty percent of American workers are covered by self-insured plans that may be administered or reinsured by an insurance company but that are regulated by the U.S. Department of Labor under ERISA. It has been alleged that Labor Department regulation of ERISA plans is less stringent than is the practice in states with respect to third-party plans (California AIDS Leadership Committee, 1988).

SECURING COVERAGE

When HIV infected individuals are excluded from private health insurance coverage, Medicaid bears a greater share of the AIDS treatment costs. PWAs will spend down to Medicaid eligibility levels at an earlier point in their illness than if they had private health insurance coverage at the time of diagnosis. Also, many of the infected uninsured individuals with early symptoms will be burdened with out-of-pocket expenses, since they will require regular medical attention but probably do not qualify for disability status. Uncompensated expenditures (e.g., in public hospitals) arise as these individuals can no longer pay bills out-of-pocket but lack the necessary AIDS diagnosis to immediately become eligible for Medicaid.

According to a recent survey of commercial health insurers, all of them rated PWAs as uninsurable, 99 percent rated individuals with ARC as uninsurable, and 91 percent said they would not knowingly cover anyone

who is HIV seropositive (Intergovernmental Health Policy Project, 1988). Insurers seek to identify this last group, the asymptomatic infected individuals, by asking applicants to submit to an HIV antibody test. Insurers are primarily interested in testing applicants for individual health insurance policies and those in small groups (fewer than 50 members); large groups have experience-rated policies in which this year's premium reflects last year's payout, which protects the underwriter against risk. Besides, historically, large group, employer-sponsored plans have not attempted to screen covered employees.[1]

Only a few states proscribe use of this test in the underwriting process.[2] Insurers in these places have been known to use T-cell helper counts blood tests to identify immune system abnormalities. The T-cell count is not an accurate means of identifying the HIV-infected, since some infected individuals have normal T-cell counts and occasionally T-cell counts can drop below normal in uninfected individuals. Insurers recognize the drawbacks of using the T-cell count in underwriting and are lobbying heavily for the right to use the antibody test, at least in underwriting individual health insurance policies. Antibody testing has become common practice in the issuance of life insurance policies.

We also asked state insurance regulators whether insurers in their state were permitted to screen applicants on the basis of sexual preference, a device allegedly used to deny coverage to people "at risk" for HIV infection.

Finally, we attempted to obtain information on the existence of assigned risk pools in each state that may be usable by people with HIV-related illness who cannot secure individual health insurance

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[1]It may be the case, however, that self-insured employers attempt to screen out HIV+s, or those suspected to be at risk for HIV infection, to control health insurance costs.

[2]Even states that do not forbid the use of HIV testing may attempt to control it. Vermont for example places strict limits on the circumstances under which insurers can request the test and the circulation of test results. Florida, New Hampshire, and Rhode Island have passed laws that attempt to balance the interests of insurers and the insured. Washington, D.C., on the other hand, may be forced by the Congress to stop precluding HIV testing for insurance purposes.

coverage. The replies were difficult to interpret because many respondents were uncertain of the legal status of assigned risk plans and of their applicability to HIV+s or PWAs. We gave a state a "Yes" on this item only when the respondent answered unambiguously in the affirmative.

Table 4 shows the results of this portion of our survey.

No state has a perfect score of 3 on private health insurance access. The states scoring 2 on this item are California, Washington, D.C., Maine, Michigan, Minnesota, New Jersey, New York, North Dakota, and Wisconsin.

PROTECTING BENEFITS

Table 4 treats policies designed to provide access to private health insurance; Table 5 shows how the various states attempt to protect the benefits of those who do secure private coverage. We asked respondents about three different policies--"mini-COBRAS," pre-existing condition exclusions, and payout caps.

State "mini-COBRAs" do one of two things. They either extend "COBRA-like" protections (see above) to workers who had been affiliated with small employers, or they extend COBRA continuation protections beyond the 18 months stipulated in the federal law. States with mini-COBRAs will, other things equal, retain more people under private coverage.

Some states have policies that prevent or discourage new policy underwriters from denying reimbursement for pre-existing conditions such as HIV infection or AIDS.[3] Because there is substantial turnover in health insurance underwriting, the absence of bans on pre-existing-condition-exclusions can result in the loss of coverage and the shift of patients to Medicaid or public hospitals.

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[3]After mounting the survey we discovered the complexity of "recovery and takeover" provisions in the health insurance business, especially as these relate to Multiple Employer Trusts, often used by groups of small employers. Suffice it to say that we now feel that reimbursement for pre-existing conditions is problematical in many states that answered "Yes" as shown the second column of Table 5.

Table 4

STATE POLICIES TO PROVIDE PRIVATE HEALTH INSURANCE ACCESS FOR HIV-AFFECTED POPULATIONS

State	Insurers Cannot Question Re HIV Test	Insurers Cannot Deny on Basis of Sex Pref.	Provides Risk Pool Applicable to AIDS/HIV Patients	Access Score
AL	No	No	NA	0
AK	No	No	No	0
AZ	No	Yes	NA	1
AR	No	No	NA	0
CA	Yes	Yes	No	2
CO	No	Yes	No	1
CT	No	No	NA	0
DE	No	Yes	No	1
DC	Yes	Yes	NA	2
FL	No	Yes	NA	1
GA	No	Yes	No	1
HI	No	No	NA	0
ID	No	No	No	0
IL	No	Yes	NA	1
IN	No	No	Yes	1
IA	No	Yes	NA	1
KS	No	Yes	No	1
KY	No	No	No	0
LA	No	No	No	0
ME	Yes	No	NA	1
MD	No	Yes	NA	1
MA	Yes	Yes	NA	2
MI	Yes	Yes	NA	2
MN	No	Yes	Yes	2
MS	No	No	No	0
MO	No	No	NA	0
MT	No	Yes	NA	1
NE	No	No	NA	0
NV	No	Yes	No	1
NH	No	No	No	0
NJ	Yes	Yes	NA	2
NM	No	No	Yes	1
NY	Yes	No	No	2
NC	No	No	NA	1
ND	No	Yes	Yes	2
OH	Yes	No	No	1
OK	No	No	No	0
OR	No	Yes	NA	1
PA	No	Yes	No	1

RI	No	No	NA	0
SC	No	No	Yes	1
SD	No	Yes	NA	1
TN	No	Yes	NA	1
TX	No	No	NA	0
UT	No	No	No	0
VT	No	No	NA	0
VA	No	No	No	0
WA	No	No	NA	0
WV	No	No	NA	0
WI	Yes	Yes	NA	2
WY	No	No	NA	0

SOURCE: RAND Survey.

Almost all state regulators permit insurers to limit or cap certain treatments or services--e.g., dental care, psychiatric care, ophthalmic care. Some states do not permit insurers to limit reimbursement for specific diseases or conditions, however. Queries on this last policy constituted the final item in our survey of state private health insurance benefits regulation. The findings of the survey are shown in Table 5.

The private insurance benefits score turns up some states that have not scored very high on the previous items. For example, California registers a 3, but so do Georgia, Kansas, North Carolina, and Pennsylvania. On the other hand, Michigan, New Jersey, New York, and Wisconsin--states that have tended to score high on past items--register scores of only 1 for private health insurance benefits.

Table 5

STATE POLICIES PROTECTING THE BENEFITS OF HIV/AIDS PATIENTS

State	Provides Mini-COBRA for Small Groups	Insurers Cannot Use HIV/AIDS to Excl. Pre-existing Conditions	Insurers Cannot Cap Specific Diseases	Benefit Score
AL	No	No	No	0
AK	No	No	Yes	1
AZ	Yes	No	No	1
AR	Yes	Yes	No	2
CA	Yes	Yes	Yes	3
CO	Yes	No	Yes	2
CT	Yes	No	No	1
DE	No	Yes	Yes	2
DC	NA	Yes	NA	1
FL	NA	Yes	Yes	2
GA	Yes	Yes	Yes	3
HI	Yes	No	NA	1
ID	No	Yes	Yes	2
IL	Yes	No	No	1
IN	No	No	Yes	1
IA	Yes	Yes	No	2
KS	Yes	Yes	Yes	3
KY	Yes	No	No	1
LA	No	No	Yes	1
ME	Yes	No	NA	1
MD	Yes	Yes	No	2
MA	Yes	No	Yes	2
MI	NA	Yes	NA	1
MN	Yes	Yes	No	2
MS	NA	NA	NA	0
MO	No	NA	No	0
MT	NA	Yes	Yes	2
NE	Yes	No	NA	1
NV	NA	No	No	0
NH	Yes	No	Yes	2
NJ	No	No	Yes	1
NM	Yes	No	No	1
NY	No	No	Yes	1
NC	Yes	Yes	Yes	3
ND	Yes	No	Yes	2
OH	Yes	No	No	1
OK	Yes	No	No	1
OR	Yes	No	No	1
PA	Yes	Yes	Yes	3
RI	Yes	No	Yes	2

SC	NA	NA	No	0
SD	NA	Yes	NA	1
TN	Yes	Yes	No	2
TX	NA	No	Yes	1
UT	Yes	No	Yes	2
VT	Yes	No	No	1
VA	Yes	No	Yes	2
WA	Yes	No	No	1
WV	Yes	No	Yes	2
WI	NA	No	Yes	1
WY	No	No	No	0

SOURCE: RAND Survey.

V. EXPLAINING THE OUTCOMES

The outcomes, as measured by the scores calculated in Tables 2 through 5, do not of course tell the whole story. In some cases we could not obtain responses from a particular state. In other cases, our informant may have been misinformed or state policy may have changed between the time we launched our survey and the time this publication appears.[1] There were questions that some may consider important in AIDS care coverage and reimbursement that we did not ask because of resource limitations. There are also cases where local government provides a service to PWAs that is not generally available at the state level. Nonetheless, the scores discussed above provide useful summary measures of state-by-state policies as they affect those infected with HIV.

We hypothesized several background factors that we thought ought to be associated with the scores. The various factors are described in Table 6.

We first report the correlation coefficients between the various score variables and the characteristics of the various state attributes together with the intercorrelations among the characteristics variables. In fact, Table 7 is a complete listing of correlation coefficients for the all the variables used in the analysis.

It appears that for the Medicaid scores there is not much basis for distinguishing among the attribute variables in terms of the strength of their associations; they appear of roughly similar size. In the case of the private insurance score variables, the size of the association with income and with southern location is diminished.

In Table 8, however, we report the results of multivariate analyses--by means of Ordinary Least Squares regressions--that attempt to portray the independent statistical relationships between the scores

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[1]The continuing coordination between the states and the federal government for reimbursement for AZT therapy is a good example of emerging policy. So is the growing state use of Medicaid's case management option.

Table 6

DEFINITIONS, DESCRIPTIONS, AND SOURCES FOR VARIABLES

Variable		Mean	Std. Dev.	Min.	Max.	Source
POP	State population (000)	4,616	4,732	402	23,667	Bureau of Census (1988)
INC	State per capita income ($)	10,417	1,533	7,483	14,090	Bureau of Census (1988)
SOUTH	State located in South	.333	.476	0	1	Bureau of Census (1988)
CASES	Number of AIDS cases 12/87	650	1,776	2	10,289	Table 1
EXPPAT	State Medicaid expenditure/ case through 1987 ($000)	3.7	4.9	0	25.2	Table 1
MEDELI	Medicaid eligibility score	1.196	.939	0	3	Table 2
MEDSER	Medicaid services score	2.392	.981	0	5	Table 3
MEDTOT	Combined Medicaid score	3.588	1.388	0	7	MEDELI + MEDSER
PVTACC	Private insurance access score	0.765	0.737	0	2	Table 4
PVTBEN	Private insurance benefits score	1.412	0.829	0	3	Table 5
PVTTOT	Combined private insurance score	2.176	1.228	0	5	PVTACC + PVTBEN
SUMTOT	Combined Medicaid and private insurance scores	5.765	2.233	0	11	MEDTOT + PVTTOT

Table 7

CORRELATIONS AMONG VARIABLES

	MEDELI	MEDSER	MEDTOT	PVTACC	PVTBEN	PVTTOT	SUMTOT	EXPPAT	CASES	POP	INC	SOUTH
MEDELI	1.0000											
MEDSER	0.0451	1.0000										
MEDTOT	0.7080	0.7375	1.0000									
PVTACC	0.2704	0.4618	0.5092	1.0000								
PVTBEN	0.2798	0.0434	0.2198	0.2272	1.0000							
PVTTOT	0.3511	0.3065	0.4541	0.7536	0.8113	1.0000						
SUMTOT	0.6334	0.6272	0.8716	0.7313	0.5830	0.8325	1.0000					
EXPPAT	0.4132	0.2335	0.4444	0.4067	0.1904	0.3726	0.4813	1.0000				
CASES	0.3860	0.2506	0.4381	0.3762	0.1232	0.3090	0.4424	0.9234	1.0000			
POP	0.3039	0.2178	0.3595	0.3726	0.2067	0.3632	0.4233	0.7583	0.7820	1.0000		
INC	0.3532	0.2229	0.3964	0.3682	0.1013	0.2894	0.4057	0.3768	0.3657	0.2799	1.0000	
SOUTH	-0.2835	-0.2426	-0.3631	-0.2279	0.0507	-0.1026	-0.2823	-0.1219	-0.0737	0.0058	-0.2877	1.0000

and various attributes of the states. Multiple regression provides a convenient technique for expressing the underlying associations between two variables, holding constant the association with other related variables. We do not indicate standard errors or t-statistics because the underlying data are more in the nature of a census than a sample. We have, however, standardized the independent variables (i.e., divided the values for each state by the standard deviation for the variable),[2] so that regression coefficients shown in Table 8 indicate the relative magnitude of the various independent factors in terms of their association with the scores.

Table 8

FACTORS ASSOCIATED WITH STATE MEDICAID AND PRIVATE HEALTH INSURANCE OUTCOMES: RESULTS OF MULTIVARIATE ANALYSES

Indep. Variables	Dependent Variables							
	MEDELI	MEDSER	MEDTOT	PVTACC	PVTBEN	PVTTOT	SUMTOT	EXPPAT
CASES	0.322	0.188	0.448	0.120	-.094	0.043	0.491	0.810
POP	0.055	0.095	0.133	0.132	0.190	0.402	0.534	0.097
INC	0.030	0.073	0.091	0.104	-.067	0.054	0.145	0.032
SOUTH	-.550	-.504	-.927	-.277	.112	-.225	-1.152	-.088
MEDELI	--	-.140	--	--	--	--	--	--
MEDSER	-.120	--	--	--	--	--	--	--
MEDTOT	--	--	--	--	--	--	--	-.017
PVTACC	--	--	--	--	0.183	--	--	--
PVTBEN	--	--	--	0.135	--	--	--	--

[2]Except for the regional variable (South/non-South), which is binary, i.e., 0,1.

MEDICAID ELIGIBILITY AND SERVICES

Other things equal, states with more "generous" Medicaid regulations with respect to eligibility (MEDELI) ought to be the ones with higher caseloads (a proxy, perhaps, for political pressure), higher per capita incomes (more easily affordable), larger populations (generally more progressive), and locations outside the South (a region known for having a more stringent Medicaid environment (see, for example, Andrullis, 1987). Table 8 reveals that the hypothesized factors are indeed associated with the Medicaid eligibility scores. The heavily impacted, richer states outside the South score higher on Medicaid eligibility. Population size appears to have a limited, though positive, association with the Medicaid scores.

We added MEDSER to the equation on the grounds that states with easy eligibility should have extensive services, i.e., that both would be affected by a liberal Medicaid environment.[3] As can be seen in Table 7, the simple correlation is positive, though small. The measure of independent association, however, between Medicaid eligibility and services is actually negative. A similar set of factors is associated with the outcomes for Medicaid services, MEDSER. The third column shows multivariate regression results for the sum of the two Medicaid scores.

PRIVATE INSURANCE ACCESS AND BENEFITS

The column headed PVTACC presents results of an attempt to find the factors associated with high state scores on access to private health insurance. Our hypothesis here echoed that for Medicaid eligibility--that large caseloads and populations, high income, and location outside the South covaried with high access scores. The signs of variable coefficients are as hypothesized. State population appears to have a

[3]Estimates of coefficients were also made for cases in which the equation did not contain the companion score, i.e., MEDELI and MEDSER and, below, PVTACC and PVTBEN. Invariably, the effect of dropping the other score variable was to slightly lower the estimated coefficients for the remaining exogenous variables but not to change the relative magnitudes.

strong relationship and the two private insurance scores are, as expected, related.

The assocations with PVTBEN--HIV-related benefits for holders of private health insurance policies--were the least expected of all those for various scores or score combinations. Even the signs for the caseload, income, and regional variables are the reverse of what might have been anticipated. Generally, the larger, richer states seem to provide most protection to PWAs in terms of regulation of health insurance underwriters, as shown in the PVTTOT column of Table 6.

EXPLAINING OVERALL STATE PERFORMANCE

We combined both Medicaid and private insurance scores into SUMTOT and regressed it against all of the background variables with the results as shown in penultimate column. Population, caseload, and, especially, region appear to be more loom larger than state per capita income in their relationships with state policies affecting PWAs.

Finally, we sought to discover the factors associated with Medicaid spending per AIDS patient across states.[4] Table 8 contains the results of a multiple regression estimate of the factors associated with state expenditures per patient. Per patient expenditures are more strongly associated with the size of the caseload than with population and region. State per capita income is a distant third in magnitude of association. Curiously, there is only a weak association with the magnitude of the caseload and the state's "generosity" with respect to Medicaid eligibility and services. In fact, the association with MEDTOT is negative. A possible reason for this outcome--although care needs to be taken with a conclusion based on such sketchy evidence--is that the kind of services featured in Table 3, upon which the MEDSER element of the MEDTOT variable is based, actually *lower* expenditures through the use of hospices and home-based services. It is also possible that

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[4]This is a crude estimate of spending per patient. It is the quotient of the state share of Medicaid reimbursements for AIDS patients during 1987 and AIDS cases alive at the end of 1987 and thus does not measure actual spending on Medicaid-qualified PWAs.

states with good Medicaid services scores may have relatively high non-Medicaid AIDS caseloads, which would tend to reduce spending per patient as measured here.

The High, Medium, and Low Caseload States

There is a good deal of policy interest in states categorized by size of caseload. The states fall, rather naturally, into three groups. California and New York between them account for a large fraction of total cases and form our high caseload class. Then there are a number of states we call medium caseload, experiencing between 1,000 and 10,000 cases by the end of 1987. This group contains Florida, Georgia, Illionis, Maine, New Jersey, Pennsylvania, and Texas. The low caseload group contains all the other states. We were interested in how scores differed among these three classes of states. The results are shown on Table 9.

The scores array themselves as expected, with the high caseload states exceeding those with medium caseloads which, in turn, exceed those with low caseloads. But the Medicaid-related scores differ only negligibly between the medium and low caseload groups.

CONCLUSIONS

The survey of state policies on AIDS, Medicaid, and private health insurance reveals many areas in which protection is scanty, incomplete or absent.[5] As expected, the larger, higher income states--particularly those in the East, Midwest, and West--with big caseloads generally stand out as more vigorous in policy development and regulation. These findings helped orient and sharpen our pilot study of AIDS care financing from the viewpoint of patients, queried by means of intensive one-on-one interviews. Those results will be presented in a soon-to-be-published companion report.

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[5]These conclusions, inevitably, are based on telephone surveys of state officials. In some cases those impressions may be inaccurate or out of date.

Table 9

AVERAGE SCORES BY CASELOAD CLASSES

Variable	Low[a]	Medium[b]	High[c]
MEDELI	1.0	1.4	3.0
MEDSER	2.4	2.3	3.5
MEDTOT	3.4	3.7	6.5
PVTACC	0.6	1.1	2.0
PVTBEN	1.3	1.9	2.0
PVTTOT	1.9	3.0	4.0
SUMTOT	5.4	6.7	10.5

SOURCE: Tables 1-7.
[a]All states other than those listed under [b] and [c] below.
[b]Florida, Georgia, Illinois, Maine, New Jersey, Pennsylvania, and Texas.
[c]California and New York.

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