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WHO'S PAYING FOR PUBLIC SUBSTANCE ABUSE PROGRAMS? TRENDS AND INTER-STATE VARIABILITY IN THE REVENUES OF STATE DRUG AND ALCOHOL ABUSE AGENCIES, FROM 1985 TO 1989

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This article documents shifts in the inflation-adjusted revenue sources of state drug and alcohol abuse agencies from 1985 to 1989. All revenues sources show substantial increases in contributions during this period, with the federal block grant providing the largest absolute increase to state revenues (+55%). States continue to be the largest payor for public substance abuse services, accounting for 47% of the total, with the federal government increasing its proportionate share 8%. Interstate variability in per capita expenditures on public substance abuse services is considerable, primarily due to variations in revenues provided by state governments. Future research is needed to determine the sources and effects of differences in states' relative commitment to substance abuse services.

Introduction

Comprehensive national data on the availability of substance abuse programs and the costs associated with treatment are not currently organized into a single database, complicating analyses of the overall treatment system (Schlesinger,

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Dorwart and Clark 1991). This lack of organized data reflects on the broader question of how to organize the system of care, including who should be treated where, and what types of treatment are most appropriate for subgroups among the substance-abusing population. The lack of an organized substance abuse treatment "system" has furthermore made problematic attempts to determine the need for services and appropriate standards for accessibility. Nevertheless, reports of long waits for treatment, despite increases in spending, have given increased salience to the need for better organization within the treatment system, and have brought recognition that insufficient capacity hampers efforts at treatment (Office of National Drug Control Policy 1989).

The current treatment system has been described as segregated into "two separate systems of care: one primarily for the privately insured, and the other for the those whose treatment is purchased by governments" (Schlesinger, Dorwart and Clark 1991:21). Such segregation raises concerns about the quality of treatment in the public sector, the accessibility of treatment for persons who lack insurance and the ability of the public system to respond to demands for expanded capacity (Schlesinger, Dorwart and Clark 1991). These issues have become especially important as federal and state governments come under pressure to increase spending on public substance abuse programs. However, the relative contribution of government funding sources for substance abuse, and the variability produced by the current system of funding has not been the subject of much investigation (U.S. Government Accounting Office 1990).

In an effort to understand recent trends in the publicly funded treatment system, this brief report presents financial data from state agencies responsible for the treatment of substance abuse, and examines the differential distribution of public resources for substance abuse treatment. For example, what has been the impact of increasing federal attention on the overall funding of public substance abuse programs (adjusting for inflation)? How do states vary in per capita revenues for substance abuse services? What revenue sources are primarily responsible for interstate variability? This article will answer these questions by describing the shift in revenue patterns of state alcohol and drug abuse agencies from fiscal years 1985 to 1989.

The Data

Since 1982, the National Association of State Alcohol and Drug Abuse Directors (NASADAD), supported by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Drug Abuse (NIDA), and the states, has collected and disseminated uniform data on drug and alcohol abuse treatment and prevention resources (Butynski and Canova 1988b). These data are published annually and are the basis for the analyses in this article (Butynski, Record and Yates 1986; Butynski et al. 1987; Butynski and Canova 1988, 1990; Butynski, Canova and Jensen 1989). Unfortunately, published reports do not provide

inflation-adjusted figures, nor population-adjusted figures by state, complicating interpretations of variations over time and place.

There are some additional limitations to the data, as they include only those funds that are directly administered by state alcohol and drug abuse agencies. Information on programs that did not receive that funding or on funding sources independent of state alcohol and drug abuse agency control are not included. Consequently, the spending estimates reported here are conservative, and underestimate the total resources spent in the United States on alcohol and drug abuse programs (Butynski and Canova 1988b). (Data for Wyoming was missing for years 1988 and 1989; therefore, Wyoming's expenditure and revenue data were imputed based on data reported for 1987.)

Revenues Sources for Public Substance Abuse Treatment

Nationally, state alcohol and drug abuse program revenues grew markedly during the five years under study, from $1.32 billion in 1985 to $2.4 billion in 1989. When adjusted for inflation (to 1985 dollars) 1989 revenues have risen $472 million to $1.8 billion, a 36% increase over 1985. Revenue increases occurred in every year during that period, with an adjusted average annual increase of 9%. The largest increase came between 1985 and 1986, when revenues grew 13%.

From what sources did this increase come? As shown in Table 1, federal revenues accounted for the bulk of the *increase* in state substance abuse program funding. "Other" federal sources, exclusive of the block grant, showed the greatest *relative* increase, with an adjusted growth of 404%. "Other" federal revenues comprise funds from Medicaid and Medicare reimbursements, and from special programs sponsored by the Department of Justice and the Department of Education. In inflation adjusted dollars, "other" federal spending grew from $25 million in 1985 to $127 million 1989.

Table 1
State Drug and Alcohol Abuse Agency Revenue Sources, 1985 and 1989, in Inflation Adjusted Dollars

	1985	% of Total	1989	% of Total	Increase	% of Total Increase	% of Change 1985-1989
State D&A Agency	645,217,703	49	761,643,023	42	116,425,320	25	18
Other State	42,561,493	3	77,125,008	4	34,563,515	7	81
Block Grant	230,450,197	17	356,320,298	20	125,870,101	27	55
Other Federal	25,157,896	2	126,758,219	7	101,600.323	21	404
Local	89,349,383	7	147,078,806	8	57,729,423	12	65
Other Sources	294,614,967	22	333,287,835	18	38,672,868	8	13
Total	1,327,351,639	100	1,802,213,189	100	474,861,550	100	36

While "other" federal revenue sources had the largest *rate* of increase, the Alcohol, Drug Abuse and Mental Health Services (ADAMHS) Block Grant provided the largest absolute increase to state substance abuse program funding, growing $126 million. This increase represented a 55% growth in the block grant from 1985 to 1989. The total increase of these combined federal sources (block grant and "other" federal) to state alcohol and drug abuse program revenues amounted to $228 million. Given that total adjusted revenues grew $475 million from 1985 to 1989, federal increases accounted for roughly half (48%) of the overall increase.

The remaining sources of increase came primarily from state governments, and to a lesser extent, county and local governments. The largest single payor for alcohol and drug abuse programs, states increased their *total* revenue contribution for such programs by 22%, from $687 million in 1985 to $839 million in 1989, after adjusting for inflation. State alcohol and drug abuse agencies contributed an adjusted increase of $116 million to their 1985 level of $645 million, with "other" state sources adding $35 million to their 1985 level of $43 million. Together, these state sources accounted for 32% of the overall increase in revenues to state alcohol and drug abuse agencies between 1985 and 1989.

While federal and state governments provided most of the revenue increase for substance abuse programs in the five years under study, county and local governments also made substantial increases in their contributions. Revenues from county and local sources grew 65%, from $89 million in 1985 to $147 million in 1989 (adjusted for inflation). This increase of $58 million accounted for 12% of the overall increase in revenues to state substance abuse programs.

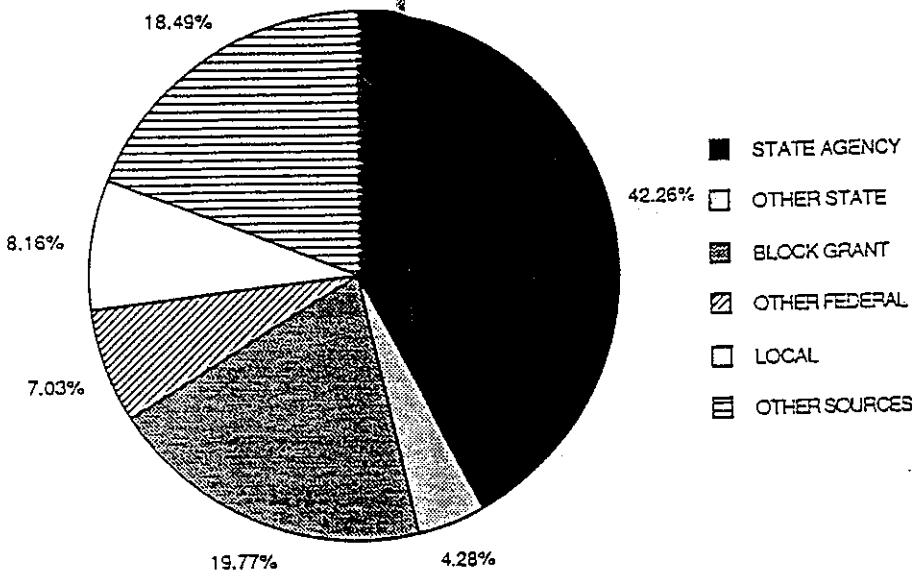
Finally, the remainder of the revenue increase (8%) came from "other" sources. "Other" sources include funding from client fees, court fines and reimbursements from private health insurance. "Other" sources increased by $38 million over 1985 levels to $333 million in 1989, or an increase of 13%.

In terms of the relative burden of paying for substance abuse programs, in 1989, state governments' appropriations to state alcohol and drug abuse agencies were the single largest payor, accounting for 42.3% of the overall revenues (see Figure 1). The block grant was the second largest payor, contributing 19.8% of the revenues, and "other" sources (client fees, fines and private insurance) accounted for 18.5%. The remaining 19% was paid by local and county governments (8%), "other" federal (7%) and "other" state (4%). This "payor mix" represents a notable shift from 1985, with the federal government increasing its total proportionate share of the burden 7.4%, and state government declining in its total proportionate share by 5.7%.

Interstate Variability

How do the states differ in resources for substance abuse programs? In raw dollars, New York State had the most revenues in 1989, with a $541 million budget. At the other end, North Dakota had the lowest budget at $3.3 million. Of course,

Figure 1
Percent Distribution of Revenue Sources



examined on a per capita basis, this tremendous range is significantly reduced, though nonetheless compelling. Nationally, the average state per capita funding for substance abuse programs was $9.31 in 1989. The state with the lowest per capita revenues was Texas with $1.80, and the state with the highest per capita revenues was Alaska with $56.49 (see Table 2).

This range in state per capita funding from $1.80 to $56.49 is of interest as it reveals the rather significant variability among the states in funding resources, after controlling for population size. But does this variability derive from variations in federal, state or local support? To understand this variability, the components of total state substance abuse program revenues are evaluated for their relative contributions to this variability. Table 3 shows measures of central tendency for the five sources of state substance abuse agency revenues: total state (agency and "other"), block grant, "other" federal, local and "other" source. As indicated by the mean values, "state" sources account for half of the per capita revenues, and given the high standard deviation (5.06), the states are the most important source of variability in state per capita spending. Indeed, per capita revenues from state sources vary from $.27 in Texas to $31.30 in Alaska.

However, if one controls for the relative share contributed by the various sources (as has been shown in the column dividing the standard deviations by the means), one can see that "other" federal has the most relative variability, and that the block grant has the least. This is not surprising given that the block grant is dispensed by a national formula based on state demographics. "Other" federal is based primarily on Medicare and Medicaid reimbursements and special program initiatives of the Departments of Justice and Education. Local, "other" and state

Table 2
State Drug and Alcohol Agency Revenue Sources in 1989, Not Adjusted for Inflation, in Dollars Per Capita

State	Rank	Total Revenues	State Agencies	Block Grant	Federal Agencies	Local Agencies	Other Sources	% Change 1985-1989
Alaska	1	56.49	31.30	5.06	9.99	6.34	3.80	42
Alabama	49	2.21	0.63	1.57	0.01	0.00	0.00	49
Arkansas	45	3.58	1.29	1.64	0.41	0.24	0.00	55
Arizona	21	7.82	3.22	1.96	0.00	0.00	2.64	20
California	10	11.56	2.86	3.19	1.24	1.32	2.95	47
Connecticut	4	21.09	12.30	2.28	0.96	0.00	5.56	145
Delaware	27	7.06	4.64	2.20	0.20	0.00	0.01	15
Florida	29	6.98	3.43	1.74	0.06	1.74	0.00	80
Georgia	28	6.99	4.51	1.51	0.24	0.14	0.60	71
Hawaii	39	4.70	2.42	1.19	0.10	.0.03	0.97	27
Iowa	26	7.06	3.54	1.40	0.14	0.76	1.22	67
Idaho	46	3.56	1.74	1.54	0.28	0.00	0.00	26
Illinois	30	6.60	4.78	1.58	0.25	0.00	0.00	26
Indiana	35	5.50	2.67	1.10	0.84	0.32	0.57	71
Kansas	32	5.95	2.29	1.37	0.15	0.74	1.41	71
Kentucky	42	4.07	2.16	1.32	0.20	0.389	0.00	90
Louisiana	48	2.65	1.05	1.48	0.00	0.00	0.11	-8
Massachusetts	12	10.10	7.66	2.28	0.16	0.00	0.00	63
Maryland	8	12.38	7.40	1.51	0.16	1.00	2.31	90
Maine	20	8.32	6.33	1.99	0.00	0.00	0.00	11
Michigan	17	9.05	3.13	2.36	0.34	1.08	2.15	25
Minnesota	9	11.83	6.50	2.41	0.57	2.35	0.00	886
Missouri	44	3.94	2.06	1.65	0.23	0.00	0.00	73
Mississippi	47	3.37	1.13	1.32	0.93	0.00	0.00	28
Montana	5	17.39	3.31	1.82	1.47	1.54	9.26	77
North Carolina	33	5.81	4.24	0.67	0.90	0.00	0.00	443
North Dakota	38	5.02	1.12	3.59	0.31	0.00	0.00	91
Nebraska	34	5.65	2.90	1.80	0.05	0.36	0.54	46
New Hampshire	43	4.02	2.33	1.52	0.02	0.00	0.15	69
New Jersey	22	7.72	4.03	1.56	0.94	0.36	0.83	160
New Mexico	13	10.04	8.22	1.20	0.61	0.00	0.00	5
Nevada	24	7.51	2.13	2.43	0.28	0.05	2.62	5
New York	2	30.17	14.13	2.98	0.65	2.10	10.31	73
Ohio	40	4.26	1.57	0.94	0.16	0.16	1.43	48
Oklahoma	36	5.49	3.78	1.45	0.27	0.00	0.00	203
Oregon	3	28.68	14.75	2.15	9.97	1.82	0.00	604
Pennsylvania	25	7.44	3.36	1.61	0.08	0.73	1.65	34
Rhode Island	7	14.19	11.59	1.88	0.73	0.00	0.00	87
South Carolina	16	9.31	3.97	1.18	0.65	1.26	2.25	142
South Dakota	31	6.09	1.24	1.80	0.33	0.95	1.77	6
Tennessee	37	5.46	2.06	1.16	0.33	1.29	0.62	155
Texas	50	1.80	0.27	1.31	0.23	0.00	0.00	42
Utah	15	9.44	3.76	2.07	0.13	1.67	1.80	20
Virginia	23	7.68	3.27	1.38	0.00	1.99	1.04	N/A
Vermont	19	8.32	5.69	2.31	0.33	0.00	0.00	17
Washington	11	10.27	8.32	1.68	0.27	0.00	0.00	54
Wisconsin	6	17.01	5.96	2.05	5.63	1.34	2.04	54
West Virginia	41	4.12	1.67	1.87	0.00	0.08	0.50	7
Wyoming	18	8.67	6.87	1.17	0.00	0.63	0.00	9

sources also show significant variability (all with standard deviations greater than the mean), indicating that substantial inequities among the states exist for every category of revenue.

Hence, it is observed that the wide interstate variability among state per capita spending on substance abuse programs is primarily determined by differences in state sources, a variability which is exacerbated by each of the other revenue sources, with the most equalizing influence contributed by the federal block grant.

Conclusion

State alcohol and drug abuse program revenues grew significantly between 1985 and 1989. Most of that increase was due to an enhanced federal commitment

Table 3
Measures of Central Tendency for State Drug and Alcohol Revenue Sources Per Capita in 1989

	Mean	Median	SD	SD/ Mean
Total State	4.87	3.40	5.06	1.04
Block	1.83	1.65	0.73	0.40
Other Federal	0.84	0.27	2.05	2.44
Local	0.68	0.20	1.08	1.59
Other Source	1.25	0.52	2.13	1.70
Total	9.48	7.25	8.93	0.94

to substance abuse programming, though states and local governments also made substantial contributions to an overall revenue increase of 35% during that period. Of the federal contributions, the block grant remains its most significant form of support, though "other" federal sources showed the greatest relative increase over the five-year period studied here. Proportionately, states continue to bear the greatest burden in financing state substance abuse programming, accounting for nearly half of all the dollars which are administered by state substance abuse agencies.

Interstate variability in state agency substance abuse revenues is significant, and an area in need of further study. In large part, this variability is due to variations in state revenue sources, although all revenues with the exception of the block grant show substantial differences across states. The block grant, therefore, is the most "equalizing" factor in state per capita revenue sources. Future studies are necessary, therefore, to investigate the sources of state government variability in funding substance abuse services. While preliminary analyses show that geographic variations in the cost of providing services account for about 20% of that variability, the majority of that variability remains unexplained, and is likely to be affected by political environment, need, state tax policies, and the organization of the substance abuse service system.

Research is also needed to determine the degree to which interstate variability represents inequalities or variations in the quality or accessibility of substance abuse services. For despite providing an "equalizing" influence, the existing block grant allocation formula has been criticized for not reflecting adequately the variation in need among states for substance abuse services (U.S. General Accounting Office 1990). Future research could explore the relationship between growing support for substance abuse programming and a decline in state mental health revenues which has been observed over this same period (Hadley et al. in

press). At least with regard to the ADAMHS Block Grant, an increasing proportion has gone to substance abuse and a decreasing proportion to mental health (National Association of State Mental Health Program Directors 1991). Finally, policy efforts that seek greater equitability of state funding for substance abuse should target state budget allocations, and further enhancements in the federal role of equalizing state variability.

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