

Spending For Specialized Mental Health Treatment In The VA: 1995–2001

The Department of Veterans Affairs has managed to do the impossible: serve more patients while cutting costs.

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ABSTRACT: The mid-1990s saw dramatic changes in mental health care in the Department of Veterans Affairs (VA), the largest provider of such care in the United States. Spending for specialized inpatient mental health care fell 21 percent from 1995 to 2001, while spending for specialized outpatient care rose 63 percent. The shift from inpatient to outpatient care was accompanied by rapid increases in outpatient medication costs. Overall, the VA reduced the average cost (per VA user) of specialized mental health care by 22 percent while it increased the number of users of these services by 35 percent.

THE DEPARTMENT OF VETERANS AFFAIRS (VA) provides health care to more than four million veterans annually. As the nation's largest provider of behavioral health services, the VA helps to define standards of care for U.S. mental health treatment.

Several initiatives have transformed the agency since the mid-1990s.¹ The Veterans Eligibility Reform Act of 1996 liberalized eligibility rules and eliminated restrictions on outpatient care for low-income veterans. In 1997 the VA adopted a five-year plan to increase the number of veterans served by 20 percent and to decrease average per patient expenditure by 30 percent.² The agency adopted the Veterans Equitable Research Allocation (VERA) system, a budget allocation method that gave regional networks strong incentives to serve more patients and to reduce per patient costs. The broader U.S. mental health care system was also changing. Among people with employment-based private insurance, overall spending for mental health and substance abuse treatment grew more slowly than general health care spending during 1992–1999.³

VA substance abuse treatment services and costs fell sharply from 1993 to 1999.⁴ This paper considers whether there were similar changes in VA mental health pro-

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grams. We examine changes in the costs, patients, and services of specialized VA mental health programs from 1995 through 2001. We address three questions: How did spending for specialized mental health care in VA change? How did the average cost of providing different types of services change over time? And did changes in patient enrollment and per capita costs meet the goals set by the VA when it implemented its policy reforms?

Data Sources And Study Methods

We used administrative files to characterize specialized VA psychiatric programs during fiscal years 1995–2001 (1 October 1994–30 September 2001). We did not include data on specialized substance use treatment, reported previously.⁵

■ **Costs.** Spending data were obtained from the VA Cost Distribution Report (CDR), which estimates the cost of patient care departments by combining the VA general ledger with staff activity allocations. We distributed indirect costs among departments in proportion to their direct costs. We then calculated the average cost of mental health per veteran served. Figures are reported in 2001 dollars based on adjustments using the Consumer Price Index (CPI) for all urban consumers.

■ **Inpatient and residential care.** We used the VA Patient Treatment File to identify inpatient and residential stays. We used the bed section, similar to a hospital ward, to identify specialty mental health care.⁶ We differentiated inpatient programs from specialized domiciliary and rehabilitation programs, which are less intensively staffed.

■ **Outpatient care.** We used the VA National Patient Care Database (NPCD) to identify outpatient care. A three-digit clinic code was used to identify the type of provided service, including different specialty mental health clinics.⁷ We counted clinic codes as the measure of outpatient care. Although the count of codes is not an ideal measure of the quantity of care, it is the only way to construct a data series that begins in 1995.

■ **Outpatient pharmacy costs.** We used the Pharmacy Benefits Management (PBM) VA outpatient prescription database for 1999–2001 to find spending for all drugs and for the most common classes of mental health drugs (antipsychotics, antidepressants, and anxiolytic-sedative-hypnotics). We excluded anticonvulsants because of their frequent use for nonmental illnesses. We included anxiolytic-sedative-hypnotics because of their predominant use in psychiatric settings. Our estimate includes drugs prescribed outside specialty mental health programs, thereby overstating the cost of care in specialized programs.

We estimated drug costs prior to 1999 by multiplying the total outpatient pharmacy spending in the CDR by the percentage spent for psychiatric medications that was reported by the PBM in 1999. Alternative assumptions, including backward extrapolation of PBM data, produced similar results.⁸

Study Results

■ **Total costs for specialized mental health treatment.** Spending for VA mental health treatment increased 12.6 percent from 1995 to 2001, while total VA health services spending increased 15.5 percent (Exhibit 1). Spending for specialized mental health care as a percentage of VA health spending fluctuated between 12.1 percent and 12.7 percent over the same period.

There was a marked shift from inpatient to outpatient settings. Specialized inpatient mental health spending fell 21 percent over the period, while spending for outpatient and residential care (excluding outpatient pharmacy) rose nearly 73 percent. Although spending for residential care greatly increased, it remained the smallest spending category. The shift from inpatient to outpatient care coincided with a rapid increase in medication spending. Outpatient medication costs for mental health rose 183 percent over the seven-year period (Exhibit 1).

■ **Patients treated and volume of services.** The number of patients who received specialized mental health care rose 35 percent between 1995 and 2001 (Exhibit 2). As a percentage of all VA health care users, it declined from 18.3 percent in 1995 to 17.0 percent in 2001. The number of patients receiving any inpatient mental health treatment declined 21 percent from 1995 to 2001, while the number receiving outpatient (nonpharmacy) mental health care services increased 37 percent. The absolute number of patients enrolled in residential treatment programs remained small, increasing from 1995 to 1999 but then declining through 2001.

EXHIBIT 1
Spending For Specialized Mental Health Services In The Department Of Veterans Affairs (VA), Millions Of 2001 Dollars, Selected Years 1995-2001

	1995	1997	1999	2001
All VA health care spending	\$15,715	\$15,606	\$16,106	\$18,151
Specialized mental health care spending				
Inpatient	\$ 1,406	\$ 1,302	\$ 1,155	\$ 1,116
Residential	15	24	51	63
Outpatient services	389	472	569	635
Outpatient pharmacy ^a	132 ^b	167 ^b	269	373
Total spending	1,942	1,965	2,044	3,187
As percent of all VA health spending	12.4%	12.6%	12.7%	12.1%
Percent of specialized mental health care spending				
Inpatient	72.4%	66.3%	57.2%	51.0%
Residential	0.7	1.2	2.5	2.9
Outpatient services	20.0	24.0	28.3	29.0
Outpatient pharmacy	6.8	8.5	13.2	17.1

SOURCE: Data extracted from VA Cost Distribution Report (CDR) and the Pharmacy Benefits Management (PBM) VA outpatient prescription database.

^a Not limited to specialized mental health facilities.

^b Estimated values.

EXHIBIT 2
Specialized Mental Health Care Services Provided By The Department Of Veterans Affairs (VA), Selected Years 1995–2001

	1995	1997	1999	2001
Count of patients				
Inpatient	76,798	71,675	64,188	60,990
Residential	1,353	2,842	5,757	4,453
Outpatient	501,208	545,441	620,079	686,498
Any specialized mental health care	513,107	556,667	626,676	691,966
As percent of all VA patients	18.3%	18.7%	18.4%	17.0%
Volume of services				
Inpatient stays	138,786	129,221	116,828	111,238
Days of inpatient care	3,520,314	2,418,729	1,799,059	1,501,265
Residential stays	1,877	3,586	7,212	5,727
Days of residential care	86,747	166,859	292,021	265,543
Outpatient clinic codes	5,832,047	6,196,643	6,970,011	7,069,605

SOURCE: Data extracted from the Veterans Affairs (VA) National Patient Care Database (NPCD).

We measured utilization by a count of stays and days of inpatient and residential care, and by the number of clinic codes for outpatient care. The total days of specialized inpatient mental health care fell 57 percent between 1995 and 2001 (Exhibit 2). In contrast, the number of outpatient clinic codes rose 21 percent. The total days of residential care rose 237 percent from 1995 to 1999, followed by a 9 percent decline through 2001.

■ **Factors affecting average cost per user.** We determined the factors affecting the average cost of mental health care per veteran served. Declines in the cost of inpatient care reflected a reduction in the number of people hospitalized and in the average length-of-stay (Exhibit 3). The percentage of patients treated in inpatient specialized mental health care programs declined more than six percentage points from 1995 to 2001. Among those treated in an inpatient unit, the average number of stays per patient per year remained stable at 1.8. The average length-of-stay, however, fell from 25.4 days in 1995 to 13.5 days in 2001. Although the average cost per day rose, the reduction in the number of patients treated, combined with the decrease in length-of-stay, greatly reduced the cost of specialized VA inpatient mental health care, from \$501 to \$275 per user.

Costs for residential mental health care showed a different pattern. While the average number of stays per patient remained stable, the number of people receiving residential care rose sharply. Growth in the treated population and average spending per day raised the annual cost of residential care among all VA users from \$5 in 1995 to \$16 in 2001.

More than 97 percent of patients receiving specialized mental health care had at least one outpatient mental health clinic code in their utilization records. The average number of outpatient clinic codes per patient fell from 11.6 in 1995 to 10.3 in 2001. This decline was accompanied by a sharp rise in spending per clinic visit.

EXHIBIT 3
Factors Affecting Mental Health Treatment Spending By The Department Of Veterans Affairs (VA) Per VA User, Selected Years 1995–2001

	1995	1997	1999	2001
Percent of all VA patients	18.3%	18.7%	18.4%	17.0%
Inpatient				
Percent of all mental health patients	15.0%	12.9%	10.2%	8.8%
Stays per patient with any stays	1.8	1.8	1.8	1.8
Length-of-stay (days)	25.4	18.7	15.4	13.5
Average spending per day	\$399.3	\$538.5	\$642.1	\$743.4
Average spending per VA user	\$501.3	\$438.7	\$339.8	\$274.7
Residential				
Percent of all mental health patients	0.3%	0.5%	0.9%	0.7
Stays per patient with any stays	1.4	1.3	1.3	1.3
Length-of-stay (days)	46.2	46.5	40.5	46.4
Average spending per day	\$167.8	\$143.5	\$175.8	\$238.7
Average spending per VA user	\$ 5.2	\$ 8.1	\$ 15.1	\$ 15.6
Outpatient				
Percent of all mental health patients	97.7%	98.0%	98.9%	99.2%
Number of clinic codes per patient	11.6	11.4	11.2	10.3
Average mental health spending per visit	\$ 89.4	\$ 87.2	\$106.6	\$142.6
Average mental health spending per user, including pharmacy ^a	\$186.0 ^b	\$215.0 ^b	\$246.3	\$248.1
Total spending per VA user	\$692.5	\$661.9	\$601.2	\$538.4

SOURCE: Data extracted from the Veterans Affairs (VA) National Patient Care Database (NPCD) and Cost Distribution Report (CDR).

NOTE: Figures are in 2001 dollars.

^a Not limited to specialized mental health facilities.

^b Estimated values for pharmacy costs.

Growth in the treated population and in spending per visit combined to cause an increase in spending per user of \$62 over seven years, or 33 percent.

■ **Total spending per user.** The total economic impact of changes in specialized inpatient, residential, and outpatient treatment is shown at the bottom of Exhibit 3. Spending per user declined an average of 4.1 percent each year. The annual rate of decline was 2.2 percent from 1995 to 1997 and just over 5.0 percent from 1997 to 2001. Increasing average expenditures for residential and outpatient care were overshadowed by a large decrease in spending on inpatient care, leading to a 22 percent drop in the overall average mental health spending per VA user.

Discussion

In 1997 the VA set out on a five-year plan to serve 20 percent more veterans. We found that between 1995 and 2001 the VA increased the number of veterans served by 37 percent. This change was made possible by the adoption of less stringent eligibility requirements by Congress and was encouraged by the introduction of the VERA budget allocation system, which distributed funding based on a count of

“The VA reduced the average quantity of resources used to treat a person using its mental health services.”

users in each region.

During this same period the number of users of VA mental health services rose 35 percent. The percentage of VA patients who received mental health treatment declined only slightly, from 18.3 percent to 17.0 percent. The actual trend in the count of users could be obscured, however, by the large decline in substance abuse treatment programs over the same period.⁹ Many patients are diagnosed with both substance use and other psychiatric disorders.¹⁰ We suspect that some patients were shifted to mental health settings as substance abuse programs were reduced or eliminated. The count of patients could be inflated by people who would have formerly received specialized substance abuse care.

■ **Decreased spending.** The five-year plan adopted in 1997 also proposed to lower average per patient spending by 30 percent. Between 1995 and 2001 it fell 20 percent, and for mental health care it fell 22 percent. These reductions were achieved when the number of people served increased more quickly than spending.

■ **Changed treatment patterns.** The change in mental health spending was accompanied by a shift in the types of treatment provided. Over that period, the VA expanded outpatient and residential care while reducing inpatient care. This pattern mirrors changes outside the VA, where managed care has had a greater impact on mental health inpatient use than on short-term hospitalizations for medical disorders.¹¹ Much of the savings from reduced inpatient care was offset by increases in outpatient and residential care. The expansion of residential care was associated with a decrease in daily costs.¹²

■ **Inpatient costs.** Despite a 57 percent reduction in the number of inpatient mental health care days, its costs declined only 21 percent. Two factors may explain this. First, certain inpatient costs are fixed; as volume declines, the fixed costs attributed to each inpatient rise. Second, stricter admissions criteria might have increased patients' illness acuity and the cost of care.

■ **Prescription drug spending.** Nationally, prescription drug spending has far outpaced the rates of general and medical inflation; among older adults it averaged more than 18 percent per year over the period 1997–2000.¹³ Spending for VA mental health medications followed the general trend and was consistent with growth in mental health and substance abuse prescription costs of privately insured patients.¹⁴

The sharp increase in pharmacy spending suggests that new treatment protocols and the introduction of new medications have tilted mental health spending in the direction of pharmacotherapy. For example, schizophrenia treatment in the late 1990s was marked by the introduction of several new antipsychotics and the increasing use of combination drug therapy.¹⁵ Similar changes are affecting treatment for bipolar disorder.¹⁶

■ **Study limitations.** This study should be interpreted in light of several limitations. First, the study is limited by the accuracy of pharmacy data. We estimated costs of psychiatric medications based on drug categories. Some categories have both medical and psychiatric uses. We included one category we deemed primarily psychiatric and excluded one we deemed primarily medical. Another limitation is that our estimates of 1995–1998 psychiatric pharmacy costs rely on assumptions that could be inaccurate.

Second, although the CDR reconciles to the VA general ledger, allocations in the CDR are sometimes missing or inaccurate.¹⁷ When current data are missing, the CDR uses the past period's data; data might not completely reflect the shift of resources from the inpatient to the outpatient setting.

Third, information of the quantity of outpatient services relies on the clinic code, a unit of service whose definition has shifted because of improvements in VA outpatient data systems. The quantity of outpatient services in the early years of the study may be overstated and unit costs of outpatient care in those years understated.

Finally, the VA reforms started in 1995, but accurate data before 1995 were not available. Our inability to identify the effect of the VA reforms is exacerbated by concurrent changes in U.S. psychiatric practice. It is not possible to disentangle these effects; indeed, they may actually represent the same phenomena. The reforms were intended to lead the VA into conformity with community practice patterns.

WE FOUND THAT the VA reduced the average quantity of resources used to treat a person using its mental health services. It accomplished this by shifting care from the inpatient to the residential and outpatient settings, and by increasing the use of antidepressant and atypical antipsychotic drugs. These changes might have affected the quality of care. An important goal for future research is to evaluate the effect of new treatment patterns on patient outcomes.

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NOTES

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