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Measuring Outpatient Mental Health Care In The United States

by Mark Olfson and Harold Alan Pincus

Abstract: A standard definition of outpatient mental health care does not now exist. Data from the 1987 National Medical Expenditure Survey are used to examine how varying the definition influences utilization estimates. A broad definition of mental health care, which requires purchase of a psychotropic medication or a psychotherapy visit or a visit for a mental health condition, captures nearly seven times as many persons as a definition that requires a visit to a mental health specialist for a mental health condition and either purchase of a psychotropic medication or psychotherapy. Because estimates of mental health service use are highly sensitive to how treatment is defined, caution should be exercised in evaluating mental health utilization data.

Mental health planners and policymakers routinely rely on utilization data to help guide their decision making. Yet little consensus exists on what services constitute mental health treatment. Because estimates of mental health service use vary with how mental health care is defined, this question has important implications for the planning, development, and assessment of mental health services. How mental health care is defined also bears on the volume, cost, and organization of mental health services and therefore relates directly to efforts to reform health care delivery.

Narrow definitions of mental health care, such as those that require a mental disorder diagnosis in the medical record or on an insurance claim form, risk underestimating the volume of mental health-related care provided.\(^1\) This is particularly a concern in general medical settings, in which primary care physicians often prescribe psychotropic medications without noting the existence of a mental health problem.\(^2\) At the same time, overly broad definitions of mental health care risk including services that are only indirectly related to a mental health problem.

This DataWatch presents national utilization and expenditure estimates for four indicators of outpatient mental health service use: psychotropic medication prescriptions, psychotherapy, visits to mental health specialists,
and visits for mental health conditions. These indicators are used to define three levels of mental health service use: specialty mental health care, explicit mental health care, and broadly defined mental health care. National estimates illustrate how the cost, volume, and composition of outpatient mental health services vary across these three levels of care.

**Data source.** The data presented here come from the household section of the 1987 National Medical Expenditure Survey (NMES). Estimates of outpatient medical care expenditures were based on a summation of the total expenses associated with each medical visit made during the survey year and are reported in 1987 dollars. The survey oversampled segments of the population at risk of seeking services for long-term illness and those believed to have restricted access to health care; it relies on a system of weights to correct for the oversampling. The figures presented in this DataWatch have been corrected to provide unbiased national estimates. Estimates of service use are conservative in that visits to hospital outpatient clinics and emergency departments are not included.

In evaluating the NMES data it is important to bear in mind that the findings are based on household informants who may not be fully aware of all of the services used by household members. Moreover, the informant’s perceptions of the reasons for the service use may differ from the patient’s and provider’s perceptions. The sensitive nature of mental health treatment may accentuate this limitation in the data collection.

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**Indicators Of Outpatient Mental Health Service Use**

**Psychotropic drugs.** An estimated fifteen million persons (6.2 percent of the population) purchased or otherwise obtained psychotropic medication in 1987. The total cost of these purchases was $1.6 billion, or approximately 7.1 percent of total outpatient prescription drug expenditures. Nearly all expenditures for psychotropic medications were paid by out-of-pocket payments (56.6 percent), private insurance (27.6 percent), or Medicaid (10.3 percent).

Anxiolytics/sedative hypnotics accounted for 24.5 million (56.7 percent) of the estimated 43.1 million psychotropic medication purchases. The vast majority of these were benzodiazepines (23.6 million). Antidepressants (29.4 percent), antipsychotics (13.7 percent), stimulants (2.6 percent), and lithium (2.0 percent) each accounted for a smaller proportion of psychotropic medication purchases. 

As a group, purchasers of psychotropic medication tended to be older, less educated, and less likely to be employed than either the general population or persons who had one of the other indicators of mental health care use (Exhibit 1). Approximately half of those who purchased a psychotropic
drug reported that their general health was fair or poor, while roughly one-third reported that their health status kept them from their job, housework, or schoolwork (Exhibit 2).

**Psychotherapy.** According to NMES, approximately 3.1 percent (7.3 million) of the noninstitutionalized population had a total of 79.5 million visits for the primary purpose of receiving psychotherapy in 1987, at a cost of $4.2 billion, or 8 percent of all outpatient medical expenditures. Psychotherapy expenditures were unevenly distributed among the major payers: self-payment (45.4 percent), private insurance (26.1 percent), Medicaid (16.5 percent), Medicare (2.7 percent), and other payers (9.3 percent). Psychotherapy accounted for almost 19 percent of total Medicaid outpatient medical expenditures and 10 percent of total out-of-pocket outpatient expenditures, but only 6 percent of total private insurance payments and 2 percent of total Medicare expenditures for outpatient medical services.

Expenditures for psychotherapy visits also were unevenly distributed among psychotherapy patients. Approximately 34 percent of psycho-
therapy users had one or two psychotherapy visits and accounted for only 4 percent of psychotherapy expenditures. At the other extreme, 16 percent of psychotherapy users had more than twenty psychotherapy visits and accounted for nearly 63 percent of psychotherapy expenditures.

The mean per capita total outpatient medical expenditure for persons who used psychotherapy ($1,009) was approximately five times greater than that for persons who did not use psychotherapy ($194). Psychotherapy users accounted for 14.1 percent of total national outpatient medical expenditures. After subtracting the mean expenditure for psychotherapy ($572) the mean per capita total outpatient medical cost for psychotherapy users remained more than twice as high as that for nonusers ($437 compared with $194).

Visits to mental health specialists. Approximately 2.2 percent of the population (5.2 million persons) had 54.8 million outpatient visits to mental health specialists in 1987. Most of these visits were to psychologists (27.9 million) and psychiatrists (23.3 million) rather than to mental health counselors (3.6 million). Expenditures for mental health specialist visits totaled $3.1 billion, or 5.9 percent of all outpatient medical expenditures. Nearly half of these costs were paid for out of pocket. Private insurance (27 percent) and, to a lesser extent, Medicaid (9.6 percent), workers’ compensation (8.2 percent), and Medicare (3.6 percent) also accounted for significant portions of spending for visits to mental health specialists.

The overwhelming majority (86.4 percent) of persons who visited a mental health specialist received psychotherapy. For this reason, the demographic characteristics of visitors to mental health specialists closely resem-
bled those of psychotherapy users.

**Visits for mental health conditions.** In 1987 an estimated 3.4 percent of the population (8.0 million) had a total of approximately 71.9 million visits for the primary purpose of treating a mental health condition. The cost of these visits was $3.4 billion or approximately 6.4 percent of total outpatient medical spending. Self-payment (43.7 percent), private insurance (23.4 percent), Medicaid (18 percent), Medicare (4.6 percent), and other federal programs (5.8 percent) were the largest payers for these visits. The mean annual outpatient medical cost for persons who had visits for a mental health condition was approximately twice as high as that for the general population but considerably lower than that for persons who had a psychotherapy visit.

The most commonly reported reasons for visits for mental health conditions were depression (24.8 percent), minor mental health conditions (V codes) (17.7 percent), anxiety disorders (14.2 percent), and adjustment disorders (12.5 percent). Visits for childhood mental disorders or mental retardation were less common (8.5 percent), as were visits for schizophrenia (6.5 percent), alcohol or substance abuse (6.1 percent), bipolar disorder (5.0 percent), or other mental disorders (4.8 percent).

Recently published analyses of NMES, which include a broader range of visit codes (for example, Alzheimer’s disease and “other counseling, not elsewhere classified”) and ambulatory settings (for example, emergency rooms and hospital outpatient departments), indicate that 5.2 percent of the population made an outpatient mental health visit during the survey year.

### Defining Use Of Outpatient Mental Health Care

There is some overlap among use of the services we are examining here. Of those who used psychotropic medication (6.2 percent), 0.7 percent also saw a mental health specialist and received psychotherapy; 0.2 percent received psychotherapy in combination with their use of psychotropic drugs; and 0.1 percent saw a mental health specialist in addition to their use of psychotropic drugs. The remaining 5.2 percent used medication only. Of those who received psychotherapy (3.1 percent), 1.0 percent only received psychotherapy, and 1.2 percent also saw a mental health specialist. Of those who saw a mental health specialist (2.2 percent), 0.2 percent only visited that specialist.

**Specialty mental health care.** Approximately 1.3 percent of the population (3.2 million persons) visited a mental health specialist for a mental health condition and received either psychotropic medication or psychotherapy during the survey year, our criteria for specialty mental health care.
This group accounted for nearly 8.1 percent of total outpatient medical expenditures. These costs were nearly evenly distributed between mental health specialists (52.6 percent) and other health care professionals (47.4 percent).

Explicit mental health care. In the survey year approximately 2.7 percent of the population reported having a visit for a mental health condition and either purchasing a psychotropic medication or receiving psychotherapy, our criteria for explicit mental health care. By including services provided by the general medical sector, the criteria for this level of mental health care capture approximately twice as many users as are identified by the more narrow definition of specialized mental health care (6.4 million compared with 3.2 million).

The sociodemographic characteristics of those who received explicit mental health care resemble those of the group who received specialty mental health care services. Moreover, these two groups reported similar levels of impairment on selected measures of general and mental health status (Exhibit 3).

The mean per capita ambulatory medical expenditure for persons who used explicit mental health care ($890) was much lower than that for those who used the narrower category of specialty mental health care services

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total population</th>
<th>Users of specialty mental health care</th>
<th>Users of explicit mental health care</th>
<th>Users of broadly defined mental health care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous most or all of the time</td>
<td>6.4%</td>
<td>24.3%</td>
<td>24.8%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Depressed most or all of the time</td>
<td>4.1%</td>
<td>16.3%</td>
<td>15.9%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Inpatient mental health care during year</td>
<td>0.2%</td>
<td>3.8%</td>
<td>3.6%</td>
<td>1.8%</td>
</tr>
<tr>
<td>General health fair or poor</td>
<td>17.1%</td>
<td>31.5%</td>
<td>31.0%</td>
<td>39.9%</td>
</tr>
<tr>
<td>Health keeps from job, housework, or school</td>
<td>10.2%</td>
<td>28.3%</td>
<td>24.4%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Trouble walking one block</td>
<td>7.9%</td>
<td>10.4%</td>
<td>11.6%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Health limits school, house, or other work</td>
<td>16.7%</td>
<td>35.0%</td>
<td>34.0%</td>
<td>41.2%</td>
</tr>
<tr>
<td>Mean annual outpatient medical costs</td>
<td>$218</td>
<td>$1,220</td>
<td>$890</td>
<td>$683</td>
</tr>
</tbody>
</table>

Note: Results for health and mental status measures are based on weighted sampling of respondents who were at least eighteen years of age.
Users of explicit mental health services spent approximately one-third of their outpatient medical costs on mental health services.

**Broadly defined mental health care.** According to NMES, 9.0 percent (21.6 million) of the noninstitutionalized population purchased or obtained a psychotropic medication, had a visit for a mental health condition, or received psychotherapy. This group was nearly seven times larger than the group meeting the narrower definition of specialty care.

This level of use is in the range reported by the National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) survey of the adult population who use outpatient mental health services in the general medical or specialty mental health sectors during the course of a year (10.7 percent). In the ECA survey, mental health service use was broadly defined to include visits during which problems with emotions, nerves, alcohol, or drugs were discussed that might have been connected to or in addition to the main reason for the visit. The National Comorbidity Survey recently found that 11.1 percent of the nonelderly adult population uses in- or outpatient mental health services during the course of a year.

In NMES, users of broadly defined mental health care had a total mean per capita outpatient expenditure of $683, or more than three times that of the general population ($218). This group accounted for $15.2 billion or 28.9 percent of total outpatient medical expenditures. Only about 20.3 percent of the medical expenditures for this group were for mental health specialists.

The group who met the broadly defined mental health service criteria tended to be older than the other two groups. Whereas fewer than one in ten of the specialty mental health care users (6.2 percent) and explicit mental health care users (8.6 percent) were over age sixty-five, nearly one-quarter of the users of broadly defined mental health care were over age sixty-five. As the definition of outpatient mental health care becomes broader, persons who have less mental health impairment and more general health impairment are identified as receiving mental health services (Exhibit 3).

**Policy Implications**

Defining outpatient mental health care remains an important but unresolved aspect of the health care reform debate. Health care policymakers and professionals now enjoy considerable latitude in deciding what to classify as a mental health service. Some acknowledge only those services provided by mental health specialists, while others recognize a far broader array of mental health-related services. Not surprisingly, these perspectives give rise to different projections of mental health services costs and thus
bear directly on health care planning.

Rising health care costs have spurred the development of a range of organizational and financial mechanisms designed to reduce these costs. Under many managed care plans, for example, mental health care benefits are “carved out” for provision outside of the plan at additional cost to the patient. In such cases, a broad definition of mental health care might sharply reduce the provision of mental health services. A broad definition of mental health care coupled with a restrictive benefit package leaves many patients facing a choice between expensive out-of-plan care and no mental health treatment at all.

In fee-for-service arrangements, commercial insurers routinely impose benefit caps and copayments on specialized outpatient mental health services. Such policies may tend to increase the provision of “informal” mental health care within the general medical sector because patients and physicians share a financial incentive to avoid specialty care. In addition to such economic disincentives, the stigma of mental illness, a limited supply of mental health specialists in some communities, and a general tendency among some patients and physicians to describe mental health problems as general medical conditions all contribute to the provision of poorly defined mental health-related services during general medical visits.

According to NMES, persons who receive specialty outpatient mental health care are comparatively few in number but have very high outpatient expenditures, averaging approximately five times the per capita outpatient expenditures of the general population. Even after expenses attributable to specialty mental health care are adjusted for, these patients have comparatively high medical expenditures. As utilization management extends into outpatient care, the medical expenditures of these patients will be scrutinized closely.

The NMES data suggest that a large segment of the population receives mental health care that is rather informal in nature. This care typically is provided during outpatient visits that are not recognized by the patient as primarily for the purpose of treating a mental health condition. For example, approximately seven million Americans each year receive psychotropic medication prescriptions without ever having a visit that they perceive as being primarily for a mental health condition. Using data from the National Ambulatory Medical Care Survey (NAMCS), Stephen Jencks found that in about half of primary care visits that included a prescription for psychotropic medication, the physician did not record a mental disorder diagnosis, provide psychotherapy, or state that the patient was visiting for a mental health condition.

Under these conditions, it is very difficult to quantify with much precision or confidence the volume of outpatient mental health care provided.
One important consequence is that large numbers of patients are vulnerable to policies that expand the definition of mental health care and restrict its coverage.

**Concluding comments.** In light of the lack of any universally accepted definition of outpatient mental health care, some caution should be exercised in evaluating the findings of mental health service utilization data. While narrow definitions risk neglecting the substantial amount of mental health care provided by general medical professionals, overly broad definitions risk including large numbers of patients who receive only superficial or indirect attention to their mental health problems. Without careful attention to this issue, health policymakers may overestimate the volume of mental health care provided in the general medical sector or underestimate the care provided by mental health specialists.

Ultimately, whether a service constitutes a form of mental health care should not be based on its cost or the characteristics of its users, but rather on the clinical effectiveness of the service in question. Unfortunately, little information now exists on the effectiveness of routine clinical care. In the absence of these data, criteria used to define outpatient mental health care should be based on careful consideration of the purposes, goals, and functions for which the definition is used.

**NOTES**

3. The total exceeds 100 percent because purchases of preparations that include more than one class of medication are considered under each class.
4. Throughout this DataWatch, total outpatient medical utilization excludes ambulatory visits made to emergency departments and hospital clinics.
9. Jencks, “Recognition of Mental Distress and Diagnosis of Mental Disorder.”