



I. Mental Disability Managed Care Capitation Analysis

County Profiles Capitation Analyses Strategies for Implementation

Purposes

This report is designed to provide organizations with DATA on the Medicaid population's use of health and especially behavioral health care services. Two types of Medicaid fee-for-service data sets are provided to assist organizations in determining:

- A. The number of subscribers who use psychiatric services.
- B. Severity of mental illness among special needs groups
- C. Patterns of use of psychiatric services
- D. Covered services
- E. Costs of psychiatric services
- F. Per member per month premiums for different subscriber classes and services

The report can also provide an analysis of findings and recommendations for consideration in the development of Special Needs Plans (SNPs), or plan/provider contracts. It is available for each county in New York State and includes comparisons to statewide "norms" and customized groups of counties which may be investigating regional SNPs.

The report is based upon historical fee for service Medicaid reimbursement data. It does not include data on programs such as COPS, intensive case management or comprehensive psychiatric emergency programs funded under other mechanisms.

County Profiles

The County Medicaid Mental Disabilities Profile is an analysis of the variation of program usage rates across demographic groups within the county. The rates are 1992-93 averages and are put in context by comparison with rates in larger geographic areas. The programs, rates, groups and areas are:

<u>Profile Variables</u>		
I. Program	II. Usage	
Grand Total	Eligibles	Per Capita (%)
Psychiatrist	Recipients	Per Eligible (%)
Psychologist	Claims	Per Eligible
MH OPD	Claims	Per Recipient
MH INPT	Visits	Per Eligible
OMH OPD	Visits	Per Recipient
OMH INPT	Days	Per Eligible
MMTP OPD	Days	Per Recipient
OASAS INPT	Dollars	Per Eligible
SA OPD	Dollars	Per Recipient
OMR OPD		
OMR INPT		
ICF-DD		
III. Actuarial Class	IV. Geographic Area	
Ages 0-20	Statewide	
Ages 21-64	Eberts	
Ages 65+	NYS Regions	
All Ages	County	
ADC only		
HR only		
MA only		
SSI only		

For selected programs, rates, groups and areas, five descriptive statistics are presented:

Number (the figure listed in **bold** above) for the county;

Rate (the Usage Rate) for the county;

Rank (the rank of the county's *Rate* among the same *Rate* for all the counties in the area);

Mean (the mean of the values of *Rate* for all the counties in the area); and

Standard Deviation (the standard deviation of the values of *Rate* for all the counties in the area).

Finally, the values of *Rate* and *Rank* are presented in bar charts to make it easier to compare rates across programs and to highlight the rates that are unusually high or low relative to other counties of New York State. See [Exhibit 1](#) for sample profile.

Exhibit 1 Sample Profile

Pitkin County

Rates (All Ages)

	Number	Rate	Rate	Rank	Rank among 68 regions (67 counties, NYC) 1=lowest rate
Eligibles Per Capita (%)	20906	12.65		19	
Grand Total Claims Per Recipient	658781	38.49		43	
Grand Total Claims Per Eligible	658781	31.51		43	
Grand Total Recipients Per Eligible (%)	17115	81.87		32	
Psychiatrist Recipients Per Eligible (%)	119	0.57		25	
Psychiatrist MMTP Recipients Per Eligible (%)	0	0.00		1	
Psychologist Recipients Per Eligible (%)	68	0.32		45	
MH OPD Visits Per Recipient	30176	18.42		27	
MH OPD Visits Per Eligible	30176	1.44		31	
MH OPD Recipients Per Eligible (%)	1639	7.84		34	
MH INPT Days Per Eligible	16583	0.79		55	
MH INPT Days Per Recipient	16583	26.92		37	
MH INPT Recipients Per Eligible (%)	616	2.95		53	
OMH OPD Recipients Per Eligible (%)	187	0.89		45	
OMH INPT Recipients Per Eligible (%)	22	0.11		35	
MMTP OPD Visits Per Recipient	2916	35.78		36	
MMTP OPD Visits Per Eligible	2916	0.14		52	
MMTP OPD Recipients Per Eligible (%)	82	0.39		52	
OASAS INPT Days Per Recipient	54	21.40		18	
OASAS INPT Days Per Eligible	54	0.00		18	
OASAS INPT Recipients Per Eligible (%)	3	0.01		19	
SA OPD Visits Per Recipient	100	12.50		31	
SA OPD Visits Per Eligible	100	0.00		26	
SA OPD Recipients Per Eligible (%)	8	0.04		26	
OMR OPD Recipients Per Eligible (%)	22	0.10		42	
OMR INPT Recipients Per Eligible (%)	10	0.05		35	
KF-DD Recipients Per Eligible (%)	87	0.42		30	

Dollars (All Ages)

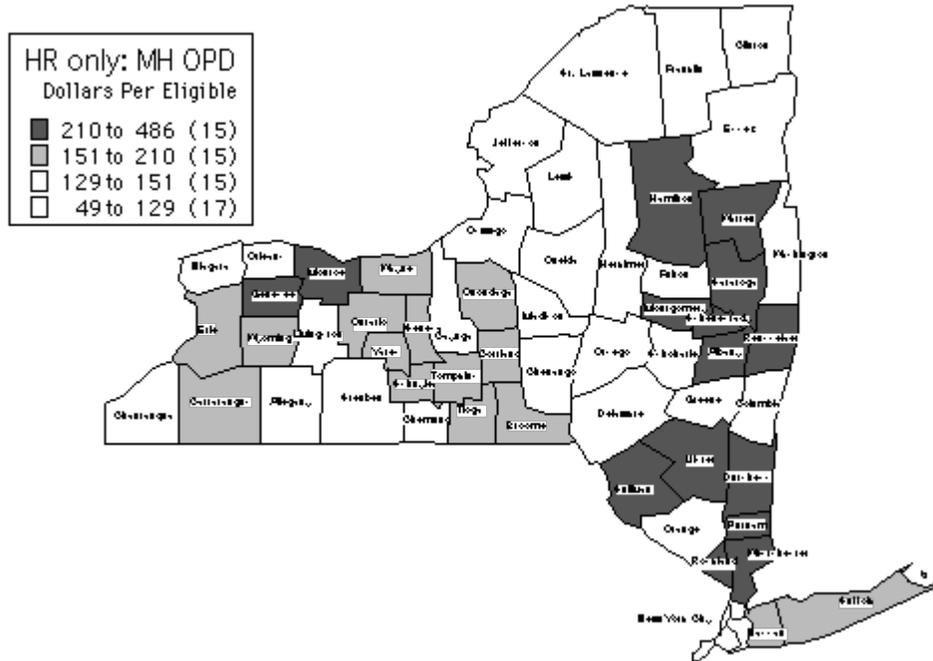
Grand Total Dollars Per Recipient	\$ 83,083,425	\$ 4,854		50	
Grand Total Dollars Per Eligible	\$ 83,083,425	\$ 3,974		50	
MH OPD Dollars Per Recipient	\$ 2,537,511	\$ 1,549		46	
MH OPD Dollars Per Eligible	\$ 2,537,511	\$ 121		45	
MMTP OPD Dollars Per Recipient	\$ 262,548	\$ 3,221		50	
MMTP OPD Dollars Per Eligible	\$ 262,548	\$ 13		53	
OASAS INPT Dollars Per Recipient	\$ 13,458	\$ 5,383		20	
OASAS INPT Dollars Per Eligible	\$ 13,458	\$ 1		17	
SA OPD Dollars Per Recipient	\$ 8,032	\$ 1,004		48	
SA OPD Dollars Per Eligible	\$ 8,032	\$ 0		31	
OMR OPD Dollars Per Recipient	\$ 54,615	\$ 2,540		28	
OMR OPD Dollars Per Eligible	\$ 54,615	\$ 3		42	

Profiles may be augmented in several ways

A customized analytical group of counties - for assessing comparative positions in "regional" Special Needs Plans relative to utilization targets, fees, and potential capitation levels. These are especially relevant for counties with low utilization and or costs. "Regional" plans may attempt to standardize reductions in use or costs in a blanket manner - all counties must reduce use of clinic treatment by 10% because the regional rate is 10% above the target level. Such actions penalize counties with low use and cost because they may already be closer to the regional target than other counties in their region and a 2% reduction may be more legitimate.

Geocoded information - maps - which show the distribution of the key utilization and cost indicators and make "hot spots" in a region or the state easy to identify. See [Exhibit 2](#).

Exhibit 2. Hot spots within New York State



Capitation Analyses

A second component of this report pertains specifically to Mentally Ill Medicaid eligible individuals. Utilization data for 1993 coupled with trended 1983-1993 data is used to estimate key quantitative components of managed care forecasting (per member per month program use rates, per member per month premiums, subscriber Medicaid actuarial class and subscriber special needs class - low incidental users, high incidental users, and non-incidental users SPMI/SED). This database includes the elements listed below:

Capitation Variables				
I. Program	II. Usage	III. Actuarial Class		
All programs	Number of Members	Ages 0-20		
Selected programs	Number of Users	Ages 21-64		
Durable Medical Equipment	Total Units	Ages 65+		
Inpatient Care	Units per member per month	All Ages		
General Hospital	Units per user per month	ADC only		
State OMH	Units per member per year	HE only		
State OMRDD	Units per user per year	MA only		
Laboratory	Total Dollars	SSI only		
Licensed clinics	Fee for service "premium" per member per month			
Emergency Room	Fee for service "premium" per user per month			
Mental Disabilities	Fee for service "premium" per member per year			
Methadone	Fee for service "premium" per user per year			
Primary Care				
All other				
State OMH				
State OMRDD				
Long Term Care				
Institutional	General Population	Rural		
Non-institutional	All Users of Psychiatric Clinic Services	Urban		
Nursing Services	Low incidental Users			
Pharmacy	High incidental Users			
Private Practitioners	Non-incidental Users			
Psychiatrists				
Methadone				
Primary Care				
All other				
Rehabilitation Services				

Exhibit 3 depicts a sample output.

Exhibit 3 Per member per month “Premiums” by Level of Need

Variable - Per member per month premium

	Psych Pop Total	Psych Pop Low Incl.	Psych Pop High Incl.	<i>Psych Pop Non-Incl. / SPMI</i>
ALL SERVICES	\$ 364.95	\$ 241.73	\$ 411.76	\$ 796.99
Selected Services				
Inpatient	\$ 180.65	\$ 116.49	\$ 234.65	\$ 239.15
Psychiatric Clinics	\$ 105.02	\$ 75.85	\$ 225.12	\$ 355.07
Medication	\$ 28.55	\$ 26.01	\$ 65.23	\$ 82.56
Hospital Emergency Rooms	\$ 10.89	\$ 24.00	\$ 9.30	\$ 9.68
Primary Care Clinics	\$ 10.63	\$ 10.25	\$ 11.89	\$ 9.06
All Other Clinics	\$ 6.92	\$ 8.01	\$ 5.58	\$ 5.46
Primary Care Physicians	\$ 4.86	\$ 5.55	\$ 4.11	\$ 3.65
All Other Physicians	\$ 3.68	\$ 3.39	\$ 4.84	\$ 2.02
Case Management	\$ 1.64	\$ 0.54	\$ 2.31	\$ 4.85
Laboratory	\$ 1.60	\$ 1.54	\$ 1.22	\$ 2.80
Rehabilitation Services	\$ 1.35	\$ -	\$ 4.23	\$ -
Psychiatrists	\$ 0.37	\$ 0.21	\$ 3.75	\$ 0.18
Total Selected Services	\$ 356.15	\$ 271.84	\$ 572.23	\$ 714.49

Type of Subscriber		SPMI
Number of Subscribers		163
Service Type		Psychiatric clinic
Per member per month premium	\$	355.07
Months Covered		1,793
Annual premium required for previous level of coverage	\$	636,644

Capitation analyses may be augmented in several ways

Extrapolation of capitation rates by severity of mental illness based upon age, Medicaid classification, and rural/urban variations.

Psychiatric profiling which relates utilization of services and costs to standard ICD-9 codes such as 295 - Schizophrenic Disorders, 296 - Affective Psychoses, 297 - Paranoid States, 298 - Depressive Psychoses, 300 - Neurotic Disorders, 301 - Personality Disorders, etc.

These analyses can assist organizations in mastering skills and developing programs which can harness managed care forces - forces which may reduce access to needed services and divert special needs populations to other less appropriate programs.

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II. Managed Care and Psychiatric Special Needs

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This technical note was prepared by HMS Associates to advise interested parties of developments in managed care analyses, and stimulate a dialogue and continued exploration of key managed care concepts.

Managed Care and Psychiatric Special Needs Plan

Commentary

Medicaid managed care is having greater and greater influence on rural populations and service providers. The potential for mandated managed care and the eventual inclusion of heavy use non-incident special care populations such as the seriously and persistently mentally ill (SPMI) require that local social service districts, county public health and mental health departments, and service providers have a solid grasp on local patterns of utilization of services, and associated costs. Capitated plans will control service delivery and costs and local governmental units as guardians of both local tax dollars and the public interest must monitor service use to assure that appropriate levels of care are delivered at appropriate costs. Service providers need to be sensitive to variations in use of services by "actuarial classes" of subscribers as a basis for assessing their own cost-effectiveness and place in capitated systems of care.

It is the intent of this technical note to document current Medicaid health and mental health service claims patterns and costs in a rural New York State county as a potential baseline measure for managed care plan and health and mental health service provider performance. Of particular interest is the extent to which utilization patterns of currently utilized Medicaid actuarial classes differ within the general population and within the special needs populations.

Preliminary analyses to date show:

- **Incidental users consume 60% of selected service resources and per member per month costs for this group are considerably lower than the SPMI group.**
- **The SPMI group consumes approximately 40% of selected service resources of the psychiatric population and per member per month costs for this group are the highest of the psychiatric populations studied**

- **Inpatient care for both psychiatric and health purposes per member per month ranged from \$52.59 for the Medicaid non-psychiatric population to \$242.29 for the SPMI group. Psychiatric inpatient care accounted for an estimated 60 - 80% of all inpatient days for the psychiatric population.**
- **Inpatient care for both psychiatric and health purposes accounted for 44% of claims for selected resources for the non-psychiatric population and 29% of claims for selected services (see page 4 - services categories) for the psychiatric population.**
- **Community based outpatient psychiatric service costs averaged \$93.61 per member per month with a range of over 400% between low incidental and SPMI groups. This per member per month charge for many classes of psychiatric patients was higher than inpatient charges and was the highest of the services studied.**
- **Per member per month utilization for primary care services were similar for both the non-psychiatric and psychiatric populations.**
- **Higher use of hospital emergency room services was noted for several psychiatric populations.**

(Data on services and costs supported by New York State Office of Mental Health programs such as COPS, case management, and reinvestment are being examined but are not included in this technical note due to emphasis on "traditional" managed care services funded on a fee for service basis through the Medicaid program.)

Concepts

Several concepts are employed in this technical note to describe the Medicaid population and the Medicaid population using psychiatric services. The Medicaid population is operationally defined as all county residents certified as Medicaid eligible by a rural county Department of Social Services during 1993.

Aid Category

These populations are divided into four groups, based upon degree of public assistance need, and include those classified as:

- Aid to Families with Dependent Children (ADC)
- Home Relief (HR)
- Medicaid Only (MAO)
- Supplemental Security Income (SSI)

Age

Age subgroups are commonly used by State DSS in its treatment of these populations. These age groups include:

- Under 20 years of age
- 21 to 64 years of age
- 65 years of age older

Cognizant that the special needs population is heavily concentrated in the 21 - 64 years of age group, particular attention was placed on identifying patterns of use and cost of individuals in this age group.

Psychiatric Special Needs Population

A service utilization measure was employed to operationally define the Medicaid psychiatric/special needs population. That utilization measure was related to the use of community-operated psychiatric outpatient clinics. Medicaid-eligible individuals who utilized community outpatient psychiatric clinics were defined as potential members of the psychiatric special needs population. Community outpatient psychiatric clinics are clinics certified by the New York State Office of Mental Health and exclude NYSOMH operated psychiatric outpatient programs. The community psychiatric outpatient use definition includes 94% of all "psychiatrically related" outpatient service categories recorded by State DSS and hence was most representative of the psychiatric population in a rural county in this data set. Utilization of OMH outpatient services in this data set was minimal (less than six individuals). Level of need or severity of mental illness was reviewed by the surrogate measure - frequency of utilization of community psychiatric clinic services. The following three levels were utilized:

Low Incidental Users:

Individuals using between 1 and 9 visits over a calendar year

High Incidental Users:

Individuals using between 10 and 30 visits per year

Heavy Users/Non-incidentals Users/SPMI:

People using 31 or more visits per year

Health and Mental Health Services/Benefits

New York State Department of Social Services existing databases were used to examine utilization levels and costs. Accordingly, the analysis reflects the service reporting categories used by NYSDSS. These categories are groupings of provider type and or Common Procedural Terminology (CPT) codes. For the purposes of this review, fourteen service categories and aggregations were examined. Low frequency services or services not included in managed care initiatives such as nursing home care were not considered.

Service Categories Studied:

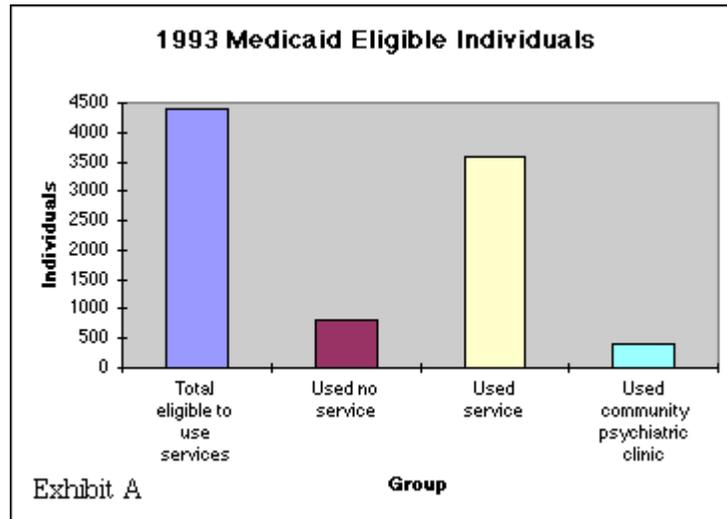
ALL SERVICES

SELECTED SERVICES LISTED BELOW:

Psychiatric Physicians
Psychiatric Clinics
Inpatient
Emergency Room Clinics
Primary Care Physicians
All Other Physicians
Primary Care Clinics
All Other Clinics
Case Management
Comm and Rehab Services
Pharmacy
Lab

Findings - General

In 1993, 4,398 individuals or 11% of a rural county were certified as Medicaid eligible. Of that number approximately 80 percent or 3,582 used health or mental health services which were reimbursed as fee for service by Medicaid. Of those 3,582 individuals who used services, 410 people or approximately 11 percent, used a community psychiatric outpatient clinic service. These figures are displayed in Exhibit A.



Within the 410 member psychiatric population, 254 people (62%) used between 1 and 9 visits of community psychiatric outpatient services - *the low incidental group*, 108 people (26%) used between 10 and 30 visits - *the high incidental group*, and 48 people (12%) used more than 30 visits - *the heavy use or non-incidental group*, in calendar year 1993. Approximately one out of every ten members of the psychiatric population, qualifies for a special needs plan defined by high use. See Exhibit B.

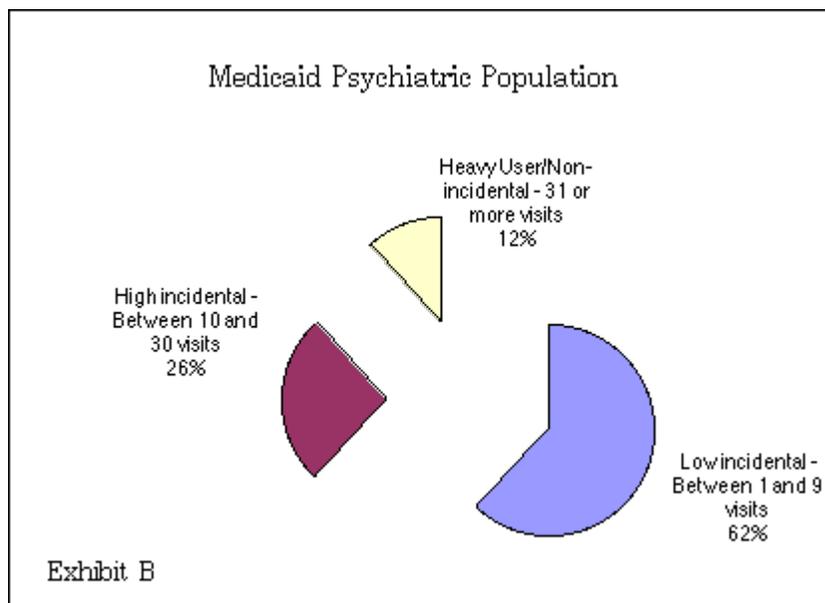


Exhibit C depicts statistics on the Aid classes of the general population and the psychiatric population 21 to 64 years of age. The psychiatric population contains a higher proportion of HR and SSI beneficiaries and a lower proportion of MAO eligibles. Also, the psychiatric population is markedly "overrepresented" in the 21 to 64 years of age category.

Exhibit C

21 - 64 years of age - Users				
	General Population without Psy		Psychiatric Population	
	People	Percent of People	People	Percent of People
ADC	215	19.7%	67	22.9%
HR	110	10.1%	61	20.9%
MAO	545	49.9%	82	28.1%
SSI	222	20.3%	82	28.1%
Total 21 - 64	1092	100.0%	292	100.0%
Total All Ages	3172	34.4%	410	71.2%

Seventy-one percent of all of the psychiatric population is within this age group in comparison to 34.4% for the general population.

Findings

As expected, stark differences exist in utilization patterns of services commonly covered under health care programs. Of critical importance is the actual magnitude of the differences between utilization levels of a variety of services for these groups. The highly significant variation in actuarial class utilization levels and annual claims strongly suggest that *as we move into the implementation of managed care and special needs plans and contemplating one rate for the entire psychiatric population we should exhaustively consider the utilization patterns of these groups in developing standards of care and service utilization targets for psychiatric special needs plans.*

Cost of Selected Services

The SPMI, the "carved out" population, consume a highly disproportionate amount of resources on a per member basis, yet they do not consume the majority of resources utilized by the mentally ill. For example, in the 21 - 64 years of age category, low incidental users consumed approximately 37% of benefits - \$396,006, high incidental users consumed 24% - \$261,814 and heavy users utilized 39% or \$412,350 in services. The high proportion of overall costs by low incidental users and "lower than expected" level for heavy users are significant findings.

Monthly Premiums

Variation in monthly "premiums" based upon actual cost experiences for the 21 - 64 years of age group ranged from a low of \$96 per member per month to \$991 per member per month, a ten-fold difference.

Use of Particular Services

Health and Mental Health Inpatient Care

Inpatient care accounted for 42% of claims for selected resources for the non- psychiatric 21 - 64 years of age population and 31% of claims for selected resources for the comparably aged psychiatric population. Within the psychiatric population, there were virtually identical levels of inpatient resource intensity (30% - low incidental , 30% - high incidental , and 32% - heavy use).

Primary Care

Psychiatric patients are perceived as having restricted access to medical primary care programs. With the exception of a limited number of specific groups, use of primary care clinics were similar to the general 21 - 64 years of age population.

Exhibit D

Medicaid Eligible 21 - 64 Yrs.	Primary Care Clinic Services					
	Units per Year* assumes twelve month eligibility					
	ALL	ADC	HR	MAO	SSI	
All Users	2.3	2.5	1.3	3.2	0.8	
Health Users Only	2.3	2.3	1.4	3.5	0.6	
All Psychiatric Users	1.9	3.1	1.2	1.6	1.6	
Psychiatric Users: 1 - 9 Visits	1.8	3.6	0.7	1.3	1.6	
Psychiatric Users: 10 - 30 Visits	2.2	2.6	2.4	0.8	2.2	
Psychiatric Users: 31+ Visits	1.7	2.8	0.1	4.6	0.8	

Hospital Emergency Room

The SPMI population with the exception of the ADC Aid class utilize hospital emergency rooms at levels at least twice as high as the non-psychiatric population in this county. This measure like inpatient care is confounded by the use of emergency room care by the psychiatric population for psychiatric emergencies which one would expect to be higher than the general population.

Exhibit E

Medicaid Eligible 21 - 64 Yrs.	Hospital Emergency Room Services				
	Units per Year* assumes twelve month eligibility				
	ALL	ADC	HR	MAO	SSI
All Users	0.6	0.7	0.7	0.6	1.4
Health Users Only	0.6	0.7	0.6	0.5	1.1
All Psychiatric Users	1.0	1.0	1.0	0.8	2.5
Psychiatric Users: 1 - 9 Visits	0.8	1.2	0.8	0.6	0.2
Psychiatric Users: 10 - 30 Visits	1.2	0.8	1.0	0.8	2.5
Psychiatric Users: 31+ Visits	1.4	0.8	1.4	2.0	6.2

Limitations

The small number of cases and rural nature of the county and its service system, require that these findings be interpreted with caution. In addition, "service-resistant SPMI", who do not keep appointments or consistently participate in their care plans and may be more concentrated in urban areas, are difficult to include in analyses predicated upon frequency of use of services such as this. Data from other rural counties and urban areas are currently being studied and will shed significant light on the potential generalization of this rural county's experience.

Your comments on this technical note are appreciated.

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