Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4182, MSC 7808, Bethesda, MD 20892, (301) 435–1148.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel.

Date: June 29, 1999.

Time: 1:00 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: Washington Monarch Hotel, 2401 M Street, NW, Washington, DC 20037.

Contact Person: Mushtaq A. Khan, DVM, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4124, MSC 7818, Bethesda, MD 20892, (301) 435–1778, khanm@drg.nih.gov.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel.

Date: June 29, 1999.

Time: 1:00 pm to 3:00 pm.

Agenda: To review and evaluate grant applications.

Place: NIH, Rockledge 2, Bethesda, MD 20892 (Telephone Conference Call).

Contact Person: Ron Manning, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4158, MSC 7806, Bethesda, MD 20892, (301) 435–1723.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel

Date: June 29, 1999.

Time: 1:00 pm to 3:00 pm.

Agenda: To provide concept review of proposed grant applications.

Place: NIH Rockledge 2, Bethesda, MD 20892 (Telephone Conference Call).

Contact Person: Anita Corman Weinblatt, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3110, MSC 7778, Bethesda, MD 20892, (301) 435–1124.

This notice is being published less than 15 days prior to meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Cardiovascular Sciences Initial Review Group. Hematology Subcommittee 2.

Date: June 30–July 1, 1999.

Time: 8:30 am to 5:00 pm.

Agenda: To review and evaluate grant applications.

Place: Holiday Inn Bethesda, 8120 Wisconsin Avenue, Bethesda, MD 20814.

Contact Person: Jerrold Fried, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4126, MSC 7802, Bethesda, MD 20892, (301) 435–1777.

This notice is being published less than 15 days prior to meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel.

Date: June 30, 1999.

Time: 10:00 am to 11:00 am.

Agenda: To review and evaluate grant applications.

Place: NIH Rockledge 2, Bethesda, MD 20892 (Telephone Conference Call).

Contact Person: Betty Hayden, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4206, MSC 7812, Bethesda, MD 20892, (301) 435–1223, haydenb@csr.nih.gov.

This notice is being published less than 15 days prior to meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel, AARR–1(02).

Date: June 30, 1999.

Time: 11:15 am to 5:00 pm.

Agenda: To review and evaluate contract proposals.

Place: Wyndham Bristol Hotel, 2430 Pennsylvania Ave, NW, Washington, DC 20037.

Contact Person: Ranga V. Srinivas, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5108, MSC 7852, Bethesda, MD 20892, (301) 435–1167, srinivar@csr.nih.gov.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel.

Date: June 30, 1999.

Time: 3:00 pm to 4:00 pm.

Agenda: To review and evaluate grant applications.

Place: NIH, Rockledge 2, Bethesda, MD 20892 (Telephone Conference Call).

Contact Person: Sherry L. Dupere, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5136, MSC 7840, Bethesda, MD 20892, (301) 435–1021.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel, ZRG1–HEM–1 (01M).

Date: June 30, 1999.

Time: 4:00 pm to 6:00 pm.

Agenda: To review and evaluate grant applications.

Place: NIH, Rockledge 2, Bethesda, MD 20892 (Telephone Conference Call).

Contact Person: Robert T. Su, PhD, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4134, MSC 7840, Bethesda, MD 20892, (301) 435–1195.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine, 93.306; 93.333, Clinical Research, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: June 17, 1999.

LaVerne Y. Stringfield,

Committee Management Officer, NIH.

[FR Doc. 99–16060 Filed 6–23–99; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Estimation Methodology for Adults With Serious Mental Illness (SMI)

AGENCY: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, HHS.

ACTION: Final notice.

SUMMARY: This notice establishes a final methodology for identifying and estimating the number of adults with serious mental illness (SMI) within each State. This notice is being served as part of the requirement of Public Law 102–321, the ADAMHA Reorganization Act of 1992.

EFFECTIVE DATE: October 1, 1999.

FOR FURTHER INFORMATION CONTACT: Ronald W. Manderscheid, Ph.D., Chief, Survey and Analysis Branch, Center for Mental Health Services, Parklawn Building, Rm 15C–04, 5600 Fishers Lane, Rockville, MD 20857, (301) 443–3343 (voice), (301) 443–7926 (fax), rmanders@samhsa.gov (e-mail).

Scope of Application

All individuals whose services are funded through the Federal Community Mental Health Services Block Grant must fall within the definition announced on May 20, 1993, in the **Federal Register**, Volume 58, No. 96, p. 29422. Inclusion or exclusion from the estimates is not intended to confer or deny eligibility for any other service or benefit at the Federal, State, or local level. Additionally, the estimates are not intended to restrict the flexibility or responsibility of State or local governments to tailor publicly-funded systems to meet local needs and priorities. Any ancillary use of these estimates for purposes other than those

identified in the legislation is outside the purview and control of CMHS.

Background

Pub. L. 102–321, the ADAMHA Reorganization Act of 1992, amended the Public Health Service Act and created the Substance Abuse and Mental Health Services Administration (SAMHSA). The Center for Mental Health Services (CMHS) was established within SAMHSA to coordinate Federal efforts in the prevention, treatment, and the promotion of mental health. Title II of Pub. L. 102–321 establishes a Block Grant for Community Mental Health Services administered by CMHS, which permits the allocation of funds to States for the provision of community mental health services to children with a serious emotional disturbance (SED) and adults with a serious mental illness (SMI). Pub. L. 102–321 stipulates that States will estimate the incidence (number of new cases in a year) and prevalence (total number of cases in a year) in their applications for Block Grant funds. As part of the process of implementing this new Block Grant, definitions of the terms ''children with a serious emotional disturbance and ''adults with a serious mental illness'' were announced on May 20, 1993, in the **Federal Register**, Volume 58, No. 96, p. 29422. Subsequent to this notice, a group of technical experts was convened by CMHS to develop an estimation methodology to ''operationalize the key concepts'' in the definition of adults with SMI. A similar group has prepared an estimation methodology for children and adolescents with SED. The final SED estimation methodology was published on July 17, 1998, in the **Federal Register**, Volume 63, No. 137, p. 38661.

Summary of Comments

This final notice reflects a thorough review and analysis of comments received in response to an earlier draft notice published in the **Federal Register**, on March 28, 1997, Volume 62, No. 60, p. 14928.

CMHS received only nine comments expressing opinions about the proposed methodology. Several questions were raised. These questions are summarized in four broad areas: Operational definition of SMI, complexity of the methodology, differences among States, and other related comments.

Operational Definition of SMI

Some comments suggested that the SMI definition was too broad.

The final definition of SMI was published on May 20, 1993, in the **Federal Register**, Volume 58, No 96, p. 29422. This definition cannot be changed by the methodology outlined below.

SMI was defined as the conjunction of a DSM mental disorder and serious role impairment. The Diagnostic Interview Schedule (DIS) estimates were not enhanced. A respondent had to have a DIS/Composite International Diagnostic Interview (CIDI) diagnosis *and* an impairment to qualify for the operational definition of SMI. This means that the estimated annual prevalence of SMI is always equal to or less than the DIS/CIDI estimates of disorder prevalence. The charge to the technical committee was to make what it considered to be the best decisions based on available data about impairment to operationalize the definition of SMI. The report of the committee describes in great detail how and why the technical experts chose specific indicators.

It is important to note that Pub. L. 102–321 explicitly states that SMI includes impairments in functioning. As a result, the technical experts were required to include one component of the operational definition that assesses functioning in social networks. Strict criteria were used, such as reports of extreme deficits in social functioning to qualify for this type of impairment. A respondent must either have one of the following two profiles: (i) Complete social isolation, defined as having absolutely no social contact of any type—telephone, mail, or in-person—with any family member or friend and having no one in his or her personal life with whom he/she has a confiding personal relationship; or (ii) extreme dysfunction in personal relationships, defined as high conflict and no positive interactions and no possibility of intimacy or confiding with any family member or friend. These persons comprise about 10% of those classified as having SMI. The remaining 90% either have a severe disorder like schizophrenia or bipolar disorder, or a disorder and work impairment, or a disorder and report being suicidal.

The rationale for the 57% prevalence estimate of SMI among prison inmates is well documented in the committee's report. A review of epidemiological studies in inmate populations found that the average estimated prevalence of any DIS disorder is 57%. The technical experts concluded that all inmates with one of these disorders, by definition, were functioning inadequately in social roles by virtue of the fact that they were incarcerated.

This definition was adopted for very practical reasons. It is important to remember that the inmate population represents less than one percent of the adult population, and the prevalence estimate of 57% is based on published work.

Some comments urged that the definition of SMI did not constitute the service population for public mental health services.

This final notice includes a statement about the scope of application of the estimates. That statement defines what is and is not intended by the definition and the methodology.

Complexity of the Methodology

Some comments noted that the use of the Baltimore sample as a basis for estimating national SMI rates among elderly persons may have introduced errors into the estimates for persons 55 years and older.

The technical experts were mandated to arrive at the best estimate based on currently available data. The Baltimore ECA data were the best currently available for persons 55 years and older. Nationally representative data would have been used if such existed. It will be important in the future to improve the data available to produce estimates for all age groups.

Some comments were made about distortions in State estimates and lack of theory.

The technical experts used all available data on State-level variables that could be obtained readily from the Federal government on an annual basis and explored the effects of these variables in predicting SMI. Such variables were deliberately selected to increase the ease of application of the estimation methodology by the States in the future. The experts believed and continue to believe that they could do no less than exhaustively consider the full range of potentially important predictors of SMI, irrespective of available theory. The analytical iterations are explained in the committee's report. These explanations provide all the detail a specialist in applied statistics or demography would need to evaluate the procedures adopted. These procedures are consistent with currently accepted methods for making small area estimates. Government agencies currently use similar methodologies to make estimates of other State-level social policy variables.

Some comments suggested that confidence intervals were not provided for State prevalence estimates.

Confidence intervals have been provided in this final notice, since estimates are based upon samples rather than a complete enumeration.

Some comments suggested that the estimation methodology paper was difficult to understand and that complex statistical procedures were inadequately explained, with insufficient rationale.

In writing the paper, the authors were sensitive to the importance of being clear about major decisions. The authors have had a great deal of experience writing reports of empirical studies for critical scientific and peer review. By the standards of this scientific review process, the level of documentation presented in the estimation methodology report is quite high.

Some comments indicated that no adjustment was made in the methodology to address the phenomenon of different levels of reporting of psychiatric symptoms by ethnic groups.

The technical experts included information to discriminate nonhispanic whites from all other racial groups in the model. No fine-grained distinctions were made about race/ethnicity because of the small numbers of people in specific race/ethnicity subsamples in the surveys that were analyzed. As part of the analysis, the technical experts obtained all the information that was readily available from the Census Bureau on Census Tract-level, County-level, and State-level demographic variables. All these variables were included in efforts to predict and estimate the prevalence of SMI.

Some comments suggested that the factor analysis was inadequate and that important issues not described (e.g., the number of variables in the analysis or how missing data were handled) could have affected the results.

The factor analysis was carried out on a Census data file containing County-level data from the 1990 Census. The sample size was the number of Counties in the U.S., while the number of variables was over 100 Census characteristics. Some of the characteristics were quite highly correlated across Counties, like median household income and mean household income, or the number of men in a County and the number of women in a County. Factor analysis was used as a way of reducing redundancy prior to performing further analyses. The factor analytic procedures employed represent the state-of-the-art for similar data reduction procedures.

Some comments were made about the use of varimax rather than oblique rotation, the decision to examine only the first ten factors in the solution, and the use of factor-weighted scores.

The group of technical experts explored both oblique and rigid rotations and also looked at the unique factors after the first ten. ''Unique factors'' refer to factors in which there is only a single variable with a high loading. Variance was noted to be trivial after the first ten factors. No factors after the first ten had more than one variable with high loading. Factor-weighted and factor-based scales are very highly correlated, therefore the choice of one over the other did not affect the results of the analyses.

Some comments noted that Census data are stronly influenced by population size and suggested that this effect could be removed to find a more meaningful structure.

A similar procedure was actually used. All count variables were transformed (e.g., number of vacant houses, number of people on welfare) into population proportions. This procedure removes the effects of population size.

Some comments suggested that users of the public mental health system have low levels of income. However, the key significant income predictor was an interaction term for high income and urbanicity associated with reduced prevalence of SMI.

The technical experts were surprised to find the absence of high income people was a stronger predictor of SMI than the presence of low income people. This was investigated in considerable detail, trying a number of different specifications in search of a low income effect. These included a specification involving the assessment of neighborhoods with a bimodal distribution of high income and low income people, as well as a specification that examined the effect of degree of variation in income in the community (e.g., differentiation between a community with an average income of $30,000 due to all families having this income versus another with an average of $30,000 due to 10% of families making $210,000 and another 90% making $10,000. After a careful review, the technical experts concluded that the data did not support a low income effect or any effect of income variance for SMI. It is important to note that there is a strong low income effect for estimates of persons with severe and persistent mental illness (SPMI), even though such an effect could not be found for SMI.

It is noteworthy that the analysis of income effects was confined to neighborhoods (Census Tracts) due to the fact that the Census Bureau would not release individual-level family income data cross-classified by other Census variables at either the Tract, County, or State levels. The Census Bureau decision was based on the concern to maintain confidentiality of Census records.

Some comments requested future consideration of SMI incidence.

Currently, no nationally representative data are available on incidence of SMI. The group of technical experts has made recommendations to CMHS regarding the need for future data collection to obtain incidence data.

State Differences

Some comments suggested that SMI prevalence was higher in the West and the Southwest, compared with other regions of the US.

The magnitude of the SMI estimates, averaging approximately 5–6% of the adult population in a year, is very plausible. It is generally agreed that 2–3% of the adult population suffer from severe and persistent disorders such as schizophrenia, other nonaffective psychoses, and bipolar disorder. Based upon the estimation methodology, an additional 2–3% of the adult population suffer from serious anxiety, nonbipolar mood disorders, and other disorders, for a total of 5–6%. It would be highly suspicious if the estimates were any less.

In the draft notice of the estimation methodology, point estimates were provided for State SMI prevalence figures. In this final notice, a 95% confidence interval is used to calculate the SMI prevalence rate as a range. State prevalence of SMI is estimated to be between the lower and upper percent limits for each State. Based on these analysis, one cannot conclude that rates differ among States. Hence, the same prevalence rate and percentage standard error are applied to all States to produce the numerical estimates provided in table 1. See the footnote to table 1 for further information on this estimation procedure.

Some comments noted that the inclusion of Alzheimer's disease contributes appreciably to the counts and that, since the definition cannot be changed at this point, the report should clearly note that this is the case.

This is a good suggestion.

Some comments suggested that only 10 States are at or below the national average, and that the majority of these States are quite small, therefore a mathematical explanation of this phenomenon would be appropriate.

This comment does not reflect the nature of the estimation methodology. As stated in the draft **Federal Register** notice of March 23, 1997, Volume 62, No 60, page 14931, the national total estimated number of persons with SMI is derived from direct, weighted counts

from the surveys used. However, the State totals were computed from synthetic modeling at the County level, and county estimates were summed to arrive at State totals. These two approaches are not the same. Therefore, they are subject to different types of sampling and non-sampling errors. As a result, the sum of State totals will not necessarily equal the U.S. total, and State estimates cannot be compared directly with the national average.

Some comments suggested that use of national probability estimates did not permit consideration of regional and state differences, which could affect the relationship between key analytical variables.

Because of the difficulty of obtaining data, the technical experts made the assumption that the effects of all the predictor variables were the same across all States. More precise estimates could have been made if representative samples from each State were available.

Other Related Comments

Some comments noted that the exclusion of homeless and institutionalized persons, those living in group quarters, and those without telephones excludes the segments of the population with the highest risk of SMI.

The Epidemiologic Cachement Area (ECA) and the National Commobidity Survey (NCS) studies were both household surveys, so there is no exclusion of non-telephone households. Although national data were used to estimate the overall U.S. prevalence of the omitted population groups, due to lack of data, no attempt was made to estimate how many homeless people or persons in the other excluded segments reside in each State.

Some comments suggested the need to have prevalence estimates for Puerto Rico.

The prevalence estimates for Puerto Rico are included in this notice.

Some comments suggested validity studies that could form the basis for modifications and refinements to the estimation methodology.

Validation studies could help refine the estimation methodology. However, the mandate to the technical experts was to develop the best estimates with currently available data rather than only propose new data collections. As noted earlier, the technical experts have recommended that CMHS carry out a nationally representative survey once each decade in the Census year explicitly designed to assess the prevalence of SMI and SPMI, with oversampling to allow estimation by State. Execution of validation studies as part of this survey would permit the evaluation of and increased precision in State-level estimates.

Some comments urged SAMHSA to increase Block Grant Funds for States to offer services to the number of persons who have SMI.

The first step in such a process is the one currently being undertaken, i.e., using the estimation methodology to produce estimates showing that the number of adults with SMI exceeds the number who can be served with currently available funds.

SMI Estimation Methodology

Data Sources

Data from two major national studies, the NCS and the ECA, were used to estimate the prevalence of adults with SMI. The NCS, a nationally representative sample household survey conducted in 1990–91 assessed the prevalence of DSM–III–R disorders in persons aged 15–54 years old. This sample included over 1,000 census tracts in 174 counties in 34 States. The ECA, a general population survey of five local areas in the U.S., was conducted in 1980–85 to determine the prevalence of DSM III disorders in persons age 18 and older. The ECA data utilized for the present analysis were limited to the Baltimore site because that was the only site that had disability data needed to operationalize the criteria for SMI. Although the Baltimore sample is not nationally representative, it is used in this analysis because the ECA provides a rough replication and check on the NCS data. Also, the NCS does not have data on persons age 55 and older, so the ECA data are used to estimate the prevalence of serious mental illness among persons 55 years and older.

The group of technical experts determined that it is not possible to develop estimates of incidence using currently available data. However, it is important to note that incidence is always a subset of prevalence. In the future, information on both incidence and prevalence data will need to be collected.

Serious Mental Illness (SMI)

As previously defined by CMHS, adults with a serious mental illness are persons 18 years and older who, at any time during a given year, had a diagnosable mental, behavioral, or emotional disorder that met the criteria of DSM–III–R *and* ''* * * that has resulted in functional impairment which substantially interferes with or limits one or more major life activities.* * *.'' The definition states that ''* * * adults who would have met functional impairment criteria during the referenced year without the benefit of treatment or other support services are considered to have serious mental illnesses. * * *'' DSM–III–R ''V'' codes, substance use disorders, and developmental disorders are excluded from this definition.

The following criteria were used to operationalize the definition of serious mental illness in the NCS and ECA data:

(1) Persons who met criteria for disorders defined as severe and persistent mental illnesses (SPMI) by the National Institute of Mental Health (NIMH) National Advisory Mental Health Council (National Advisory Mental Health Council, 1993).

To this group were added:

(2) Persons who had another 12-month DSM–III–R mental disorder (with the exclusions noted above), and

—Either planned or attempted suicide at some time during the past 12 months, or

—Lacked any legitimate productive role, or

—Had a serious role impairment in their main productive roles, for example, consistently missing at least one full day of work per month as a direct result of their mental health, or

-Had serious interpersonal impairment as a result of being totally socially isolated, lacking intimacy in social relationships, showing inability to confide in others, and lacking social support.

Estimation Procedures

Two logistic regression models were developed to calculate prevalence estimates for adults with SMI.

(a) A Census Tract Model for years in which the decennial U.S. census is conducted.

(b) A County-Level Model to be used in intercensal years.

In non-censal years, the county-level model will be used to estimate SMI prevalence, after adjusting for its known relationship with the census tract model.

Formula

Census-Tract Model

Using 1990 census data, a logistic regression model was developed to calculate predicted rates of SMI for each cell of an age by sex by race table for each of the 61,253 Census Tracts in the country. Next, the rates were multiplied by cell frequencies and subtotaled to derive tract-level estimates. Finally, the tract-level estimates were aggregated to arrive at county-level and state-level prevalence estimates of adults with SMI. This regression methodology is often used in small area estimation (Ericksen,

1974; Purcell & Kish, 1979). The actual Census Tract Model equation is specified immediately below:

PARAMETER ESTIMATES FOR CENSUS TRACT MODEL

Predictor	Odds ratio	95% Confidence interval
Intercept	*0.02	(0.01–0.04)
Individual-Level Variables		
Age:		
18–24	*1.94	(1.18–3.17)
25–34	1.32	(0.86–2.03)
35–44	1.46	(0.96–2.21)
45–54	1.00	
Sex:		
Female	*2.23	(1.57–3.19)
Male	1.00	
Race:		
Nonhispanic white	1.00	
Black/Hispanic/other	*0.49	(0.28–0.87)
Marital Status:		
Married/Cohabiting	1.00	
Never Married	*3.90	(1.15–3.08)
Separated/Divorced/Widowed	*1.88	(2.41–6.31)
Census Tract Level Variables		
F2 (High socio-economic status)	1.16	(0.90–1.49)
F4 (Immigrants)	0.99	(0.85–1.14)
County-Level Variables		
County Urbanicity:		
Metropolitan	1.12	(0.85–1.49)
Other	1.00	
Interactions Among Variables		
FemaleXSeparated/Divorced/Widowed	*0.47	(0.24–0.91)
FemaleXNever Married	*0.47	(0.28–0.78)
Non WhiteXSeparated/Divorced/Widowed	*2.62	(1.29–5.33)
Non WhiteXNever Married	1.81	(0.95–3.44)
FemaleXF2	*0.70	(0.51–0.96)
UrbanicityXF2	*0.75	(0.52–0.95)
F2XF4	*0.78	(0.64–0.94)

*Significant at the .05 level, two tailed test; F2=Census Tract factor score for high socioeconomic status (SES); F4=Census Tract factor score for immigrants.

The estimate for persons 55 years and older is derived from analysis of ECA data in conjunction with NCS data. The prevalence ratios among ECA respondents ages 55–64 and 65 years and above, were found to be 84 and 31 percent as large, respectively, as the prevalence estimate for NCS respondents 18–54 years old, after controlling for differences in gender and race. NCS State-level estimates were extrapolated using these ratios. These ratios did not differ significantly by sex or race. A factor of .81 was applied to State-level SMI estimates for the age range 18–54 to derive the rate for the age range 55–64, and .31 was used to arrive at the estimate for person 65 and older. A weighted sum (by age distribution of each State) was calculated to determine the final State-level SMI prevalence estimate.

County Model

U.S. Census Bureau tract-level data are available only for years in which the decennial U.S. Census is conducted. To obtain prevalence estimates for adults with SMI during intercensal years, the group of technical experts used biennial individual- and county-level data from the Census Bureau's small area estimation program. Predicted values from the logistic regression equation were used to calculate county-level estimates. In contrast to the Census Tract Model, the initial estimates using this approach were generated at the county level. These county-level estimates are then summed to provide State-level prevalence estimates. The actual county-level model equation is specified immediately below:

PARAMETER ESTIMATES FOR COUNTY-LEVEL MODEL

Predictor	Odds ratio	95% Confidence interval
Intercept	* 0.04	(0.02–0.07)

PARAMETER ESTIMATES FOR COUNTY-LEVEL MODEL—Continued

Predictor	Odds ratio	95% Confidence interval
Individual-Level Variables		
Age:		
18–24	1.69	(1.00–2.85)
25–34	1.10	(0.65–1.88)
35–44	1.24	(0.71–2.15)
45–54	1.00	.....
Sex:		
Female	1.58	(1.17–2.13)
Male	1.00	.....
County-Level Variables		
Urbanicity:		
Metropolitan	1.35	(0.99–1.85)
Other	1.00	.....

*Significant at the 0.05 level, two-tailed test.

Adjustment for persons age 55 years and older is carried out as in the Census Tract Model. An adjustment factor (Census Bureau, Fay, 1987; Fay & Herriot, 1979) based on the ratio of County-Level Model estimates for 1990 and Census Tract Model estimates for 1990 can be used to adjust estimates for subsequent years from the County-Level Model. This procedure assumes that the Census Tract Model is more accurate than the County-Level Model.

County and State Estimates

As stated earlier, Census Tract Model prevalence estimates were summed to derive county estimates, and county estimates were summed to arrive at State estimates. The 12-month prevalence of SMI is estimated nationally to be 5.4 percent (with a standard error of 0.9 percent) or 10.2 million people in the adult household population (95 percent confidence interval ranging from 7.0 million to 13.4 million), of which 2.6 percent or 4.8 million adults have SPMI (figure 1). When the standard error is considered, State estimates do not vary. Hence, State estimates are defined as 5.4 percent of the adult population, with a 95 percent confidence interval of plus or minus 1.96 times 0.9 percent.

The above estimates are based on noninstitutionalized persons residing in the community. Limited information currently exists on SMI estimates for persons institutionalized (i.e., persons in correctional institutions, nursing homes, the homeless, persons in military barracks, hospitals/schools/homes for persons who are mentally ill or mentally retarded). Fischer and Breakey (1991) indicate that, on average, the SMI prevalence rate for these groups (including about 5 million people or 2.7 percent of the U.S. adult population) is about 50 percent. The following assumptions were made in deriving rough estimates of SMI prevalence for persons who are institutionalized: (a) For 1.1 million residents of correctional institutions, 100 percent of whom are adults, prevalence of SMI is estimated to be 57 percent; (b) For 1.8 million residents of nursing homes, 100 percent of whom are adults, prevalence of SMI is estimated to be 46 percent; (c) For 0.5 million persons who are homeless, 80 percent of whom are adults, prevalence of SMI is estimated to be 50 percent; (d) For 0.6 million persons in military barracks, all of whom are adults, the SMI prevalence rate is equivalent to that of the adult household population; (e) For 0.4 million persons in hospitals, homes, and schools for persons who are mentally ill, 80 percent of whom are adults, prevalence of SMI is estimated to be 100 percent. (f) For 0.6 million persons in other institutional settings such as chronic disease hospitals, homes and schools for persons with physical disability, and rooming houses, 50 percent of whom are adults, prevalence of SMI is estimated to be 50 percent.

State estimates of each of these populations can be added to the State SMI populations identified below.

Only a portion of adults with SMI seek treatment in any given year. Due to the episodic nature of SMI, some persons may not require mental health service at any particular time.

Provision of Estimates to States

CMHS will provide each State mental health agency with estimates in order to initiate the first cycle of use. Subsequently, CMHS will provide technical assistance to States to implement the methodology using State demographic information.

The intial set of State estimates is provided in table 1 below. Further background information on these estimates can be found in Kessler, et al. (1998).

TABLE 1.—ESTIMATED 12-MONTH NUMBER OF PERSONS WITH SERIOUS MENTAL ILLNESS, AGE 18 AND OLDER

[By State, 1990*]

State	Point estimate	95% confidence interval	
		Lower limit	Upper limit
Alabama	161,017	110,327	211,708
Alaska	20,396	14,730	26,817
Arizona	144,942	104,680	190,572
Arkansas	93,398	63,995	122,801
California	1,188,502	814,344	1,562,660
Colorado	131,389	90,026	172,752

TABLE 1.—ESTIMATED 12-MONTH NUMBER OF PERSONS WITH SERIOUS MENTAL ILLNESS, AGE 18 AND OLDER—Continued

[By State, 1990 *]

State	Point estimate	95% confidence interval	
		Lower limit	Upper limit
Connecticut	137,027	93,889	180,165
Delaware	27,153	18,605	35,701
District Columbia	26,450	18,123	34,776
Florida	543,871	372,652	715,090
Georgia	256,549	175,784	337,315
Hawaii	44,718	30,640	58,795
Idaho	37,711	27,235	49,582
Illinois	458,149	313,917	602,381
Indiana	220,763	151,263	290,262
Iowa	111,125	76,141	146,109
Kansas	98,062	67,190	128,933
Kentucky	147,485	101,054	193,915
Louisiana	161,606	110,730	212,482
Maine	49,622	34,000	65,244
Maryland	195,438	133,911	256,965
Massachusetts	251,821	172,544	331,098
Michigan	369,173	252,952	485,394
Minnesota	173,249	118,708	227,790
Mississippi	98,629	67,579	129,678
Missouri	205,321	140,683	269,959
Montana	31,156	21,348	40,964
Nebraska	62,066	42,527	81,605
Nevada	48,864	33,481	64,247
New Hampshire	44,847	30,728	58,965
New Jersey	320,259	219,437	421,082
New Mexico	57,690	39,528	75,851
New York	741,469	535,505	974,894
North Carolina	271,214	185,832	356,597
North Dakota	25,024	17,146	32,902
Ohio	434,558	297,753	571,363
Oklahoma	124,663	85,417	163,909
Oregon	114,382	78,373	150,392
Pennsylvania	490,689	336,213	645,165
Puerto Rico	195,719	159,550	231,817
Rhode Island	42,000	28,778	55,222
South Carolina	138,591	94,960	182,221
South Dakota	26,867	18,409	35,325
Texas	656,136	449,575	862,698
Tennessee	197,671	135,441	259,901
Utah	59,152	40,530	77,774
Vermont	22,662	15,528	29,797
Virginia	252,861	173,257	332,466
Washington	194,686	133,396	255,977
West Virginia	72,895	49,946	95,843
Wisconsin	194,550	133,303	255,798
Wyoming	17,175	11,768	22,582
Total	10,191,412	7,043,431	13,374,301

Does not include persons who are homeless or are institutionalized.

* Because there are no differences among States, the estimate for each State is calculated as 5.4 percent of the total State adult population. The size of the 95 percent confidence interval for each State is equal to the percentage estimate plus or minus 1.96x0.9 percent. The percentage estimate and the percentage standard error are identical across States. However, the numeric estimate and numeric standard error vary depending on the State adult population. The percentage standard error (0.9 percent) used to compute the upper and lower 95-percent confidence limits is estimated using jackknife repeated replication (JRR) variance analysis (Kish and Frankel 1974). The JRR calculations assume that the imputation ratios and the population proportions in the different age groups based on the census data are correct. The confidence limits simulate the error introduced into the estimates by imprecision in the prevalence estimates for NCS respondents in the age range 18–54.

Limitations

The ECA and NCS were designed to study lifetime prevalence of mental disorders rather than 12-month prevalence. As a result, the emphasis in diagnostic assessment was on lifetime disorders. In addition, functional impairment was not a primary focus in either the ECA or the NCS.

Current data cannot provide estimates of incidence. Additional information needs to be collected in the future.

It is anticipated that additional work will be done in future years to refine and update the estimation methodology. CMHS will apprise States as this work develops.

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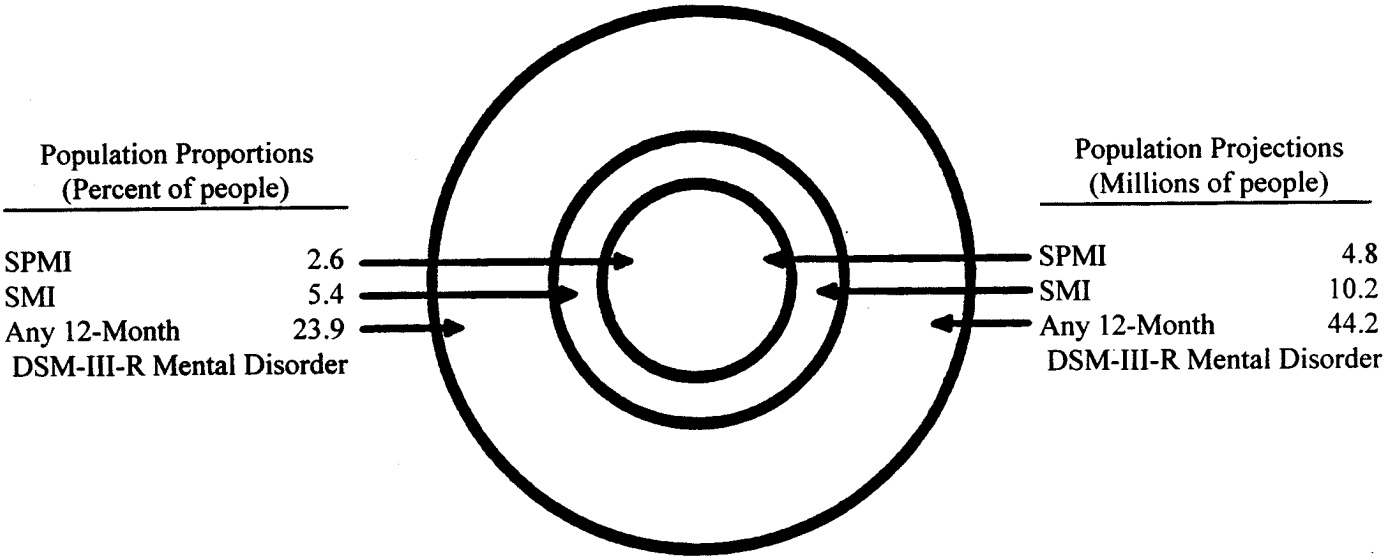
Figure 1. Estimated Total Population (Ages 18+) 12-Month Prevalences and Population Projections of DSM-III-R Severe and Persistent Mental Illness (SPMI), Serious Mental Illness (SMI), and Any Mental Illness Based on Pooled Baltimore ECA/NCS Data



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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Center for Substance Abuse Treatment, and Center for Substance Abuse Prevention; Fiscal Year 1999 Funding Opportunity

AGENCIES: Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment (CSAT), and Center for Substance Abuse Prevention (CSAP).

ACTION: Notice of availability of funds for grants to support the development of community-based practice/research collaboratives.

SUMMARY: The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Treatment (CSAT) and the Center for Substance Abuse Prevention (CSAP), announce the availability of FY 1999 funds for grants for the following activity. This activity is discussed in more detail under section 4 of this notice. This notice is not a complete description of the activity; potential applicants must obtain a copy of the Guidance for Applicants (GFA) before preparing an application.

Note: SAMHSA also published notices of available funding opportunities for FY 1999 in previous issues of the **Federal Register**.