

*B. Determination of Degree of Shortage.*

Each designated population group will be assigned to a degree-of-shortage group as follows:

- Group 1—No dentists or  $R \geq 8,000$ .
- Group 2— $8,000 > R \geq 6,000$ .
- Group 3— $6,000 > R \geq 5,000$ .
- Group 4— $5,000 > R \geq 4,000$ .

Population groups which have received "automatic" designation will be assigned to degree-of-shortage group 4 unless information on the ratio of the number of persons in the group to the number of FTE dentists serving them is provided.

*C. Determination of size of dental shortage.*

Size of dental shortage will be computed as follows:

Dental shortage = number of persons in population group/4,000 – number of FTE dental practitioners

*Part III—Facilities**A. Federal and State Correctional Institutions.**1. Criteria.*

Medium to maximum security Federal and State correctional institutions and youth detention facilities will be designated as having a shortage of dental professional(s) if both the following criteria are met:

- (a) The institution has at least 250 inmates.
- (b) The ratio of the number of internees per year to the number of FTE dentists serving the institution is at least 1,500:1. (Here the number of internees is the number of inmates present at the beginning of the year plus the number of new inmates entering the institution during the year, including those who left before the end of the year; the number of FTE dentists is computed as in part I, section B, paragraph 3 above.)

*2. Determination of Degree-of-Shortage.*

Designated correctional institutions will be assigned to degree-of-shortage groups as follows, based on number of inmates and/or the ratio (R) of internees to dentists:

- Group 1—Institutions with 500 or more inmates and no dentists.
- Group 2—Other institutions with no dentists and institutions with  $R > 3,000$ .
- Group 3—Institutions with  $3,000 > R > 1,500$ .

*B. Public or Non-Profit Private Dental Facilities.**1. Criteria.*

Public or nonprofit private facilities providing general dental care services will be designated as having a shortage of dental professional(s) if both of the following criteria are met:

- (a) The facility is providing general dental care services to an area or population group designated as having a dental professional(s) shortage; and

- (b) The facility has insufficient capacity to meet the dental care needs of that area or population group.

*2. Methodology.*

In determining whether public or nonprofit private facilities meet the criteria established by paragraph B.1. of this part, the following methodology will be used:

*(a) Provision of Services to a Designated Area or Population Group.*

A facility will be considered to be providing services to an area or population group if either:

- (i) A majority of the facility's dental care services are being provided to residents of designated dental professional(s) shortage areas or to population groups designated as having a shortage of dental professional(s); or

- (ii) The population within a designated dental shortage area or population group has reasonable access to dental services provided at the facility. Reasonable access will be assumed if the population lies within 40 minutes travel time of the facility and non-physical barriers (relating to demographic and socioeconomic characteristics of the population) do not prevent the population from receiving care at the facility.

Migrant health centers (as defined in section 319(a)(1) of the Act) which are located in areas with designated migrant population groups and Indian Health Service facilities are assumed to be meeting this requirement.

*(b) Insufficient Capacity To Meet Dental Care Needs.*

A facility will be considered to have insufficient capacity to meet the dental care needs of a designated area or population group if either of the following conditions exists at the facility.

- (i) There are more than 5,000 outpatient visits per year per FTE dentist on the staff of the facility. (Here the number of FTE dentists is computed as in part I, section B, paragraph 3 above.)

- (ii) Waiting time for appointments is more than 6 weeks for routine dental services.

*3. Determination of Degree of Shortage.*

Each designated dental facility will be assigned to the same degree-of-shortage group as the designated area or population group which it serves.

[45 FR 76000, Nov. 17, 1980, as amended at 54 FR 8738, Mar. 2, 1989; 57 FR 2480, Jan. 22, 1992]

APPENDIX C TO PART 5—CRITERIA FOR DESIGNATION OF AREAS HAVING SHORTAGES OF MENTAL HEALTH PROFESSIONALS

*Part I—Geographic Areas*

- A. Criteria.* A geographic area will be designated as having a shortage of mental health professionals if the following four criteria are met:

1. The area is a rational area for the delivery of mental health services.

2. One of the following conditions prevails within the area:

(a) The area has—

(i) A population-to-core-mental-health-professional ratio greater than or equal to 6,000:1 and a population-to-psychiatrist ratio greater than or equal to 20,000:1, or

(ii) A population-to-core-professional ratio greater than or equal to 9,000:1, or

(iii) A population-to-psychiatrist ratio greater than or equal to 30,000:1;

(b) The area has unusually high needs for mental health services, and has—

(i) A population-to-core-mental-health-professional ratio greater than or equal to 4,500:1 and

A population-to-psychiatrist ratio greater than or equal to 15,000:1, or

(ii) A population-to-core-professional ratio greater than or equal to 6,000:1, or

(iii) A population-to-psychiatrist ratio greater than or equal to 20,000:1;

3. Mental health professionals in contiguous areas are overutilized, excessively distant or inaccessible to residents of the area under consideration.

#### B. Methodology.

In determining whether an area meets the criteria established by paragraph A of this part, the following methodology will be used:

1. *Rational Areas for the Delivery of Mental Health Services.*

(a) The following areas will be considered rational areas for the delivery of mental health services:

(i) An established mental health catchment area, as designated in the State Mental Health Plan under the general criteria set forth in section 238 of the Community Mental Health Centers Act.

(ii) A portion of an established mental health catchment area whose population, because of topography, market and/or transportation patterns or other factors, has limited access to mental health resources in the rest of the catchment area, as measured generally by a travel time of greater than 40 minutes to these resources.

(iii) A county or metropolitan area which contains more than one mental health catchment area, where data are unavailable by individual catchment area.

(b) The following distances will be used as guidelines in determining distances corresponding to 40 minutes travel time:

(i) Under normal conditions with primary roads available: 25 miles.

(ii) In mountainous terrain or in areas with only secondary roads available: 20 miles.

(iii) In flat terrain or in areas connected by interstate highways: 30 miles.

Within inner portions of metropolitan areas, information on the public transportation system will be used to determine the

distance corresponding to 40 minutes travel time.

#### 2. Population Count.

The population count used will be the total permanent resident civilian population of the area, excluding inmates of institutions.

3. *Counting of mental health professionals.* (a) All non-Federal core mental health professionals (as defined below) providing mental health patient care (direct or other, including consultation and supervision) in ambulatory or other short-term care settings to residents of the area will be counted. Data on each type of core professional should be presented separately, in terms of the number of full-time-equivalent (FTE) practitioners of each type represented.

(b) Definitions:

(i) *Core mental health professionals or core professionals* includes those psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists who meet the definitions below.

(ii) *Psychiatrist* means a doctor of medicine (M.D.) or doctor of osteopathy (D.O.) who

(A) Is certified as a psychiatrist or child psychiatrist by the American Medical Specialties Board of Psychiatry and Neurology or by the American Osteopathic Board of Neurology and Psychiatry, or, if not certified, is "broad-eligible" (i.e., has successfully completed an accredited program of graduate medical or osteopathic education in psychiatry or child psychiatry); and

(B) Practices patient care psychiatry or child psychiatry, and is licensed to do so, if required by the State of practice.

(iii) *Clinical psychologist* means an individual (normally with a doctorate in psychology) who is practicing as a clinical or counseling psychologist and is licensed or certified to do so by the State of practice; or, if licensure or certification is not required in the State of practice, an individual with a doctorate in psychology and two years of supervised clinical or counseling experience. (School psychologists are not included.)

(iv) *Clinical social worker* means an individual who—

(A) Is certified as a clinical social worker by the American Board of Examiners in Clinical Social Work, or is listed on the National Association of Social Workers' Clinical Register, or has a master's degree in social work and two years of supervised clinical experience; and

(B) Is licensed to practice as a social worker, if required by the State of practice.

(v) *Psychiatric nurse specialist* means a registered nurse (R.N.) who—

(A) Is certified by the American Nurses Association as a psychiatric and mental health clinical nurse specialist, or has a master's degree in nursing with a specialization in psychiatric/mental health and two years of supervised clinical experience; and

(B) Is licensed to practice as a psychiatric or mental health nurse specialist, if required by the State of practice.

(vi) *Marriage and family therapist* means an individual (normally with a master's or doctoral degree in marital and family therapy and at least two years of supervised clinical experience) who is practicing as a marital and family therapist and is licensed or certified to do so by the State of practice; or, if licensure or certification is not required by the State of practice, is eligible for clinical membership in the American Association for Marriage and Family Therapy.

(c) Practitioners who provide patient care to the population of an area only on a part-time basis (whether because they maintain another office elsewhere, spend some of their time providing services in a facility, are semi-retired, or operate a reduced practice for other reasons), will be counted on a partial basis through the use of full-time-equivalency calculations based on a 40-hour week. Every 4 hours (or ½ day) spent providing patient care services in ambulatory or inpatient settings will be counted as 0.1 FTE, and each practitioner providing patient care for 40 or more hours per week as 1.0 FTE. Hours spent on research, teaching, vocational or educational counseling, and social services unrelated to mental health will be excluded; if a practitioner is located wholly or partially outside the service area, only those services actually provided within the area are to be counted.

(d) In some cases, practitioners located within an area may not be accessible to the general population of the area under consideration. Practitioners working in restricted facilities will be included on an FTE basis based on time spent outside the facility. Examples of restricted facilities include correctional institutions, youth detention facilities, residential treatment centers for emotionally disturbed or mentally retarded children, school systems, and inpatient units of State or county mental hospitals.

(e) In cases where there are mental health facilities or institutions providing both inpatient and outpatient services, only those FTEs providing mental health services in outpatient units or other short-term care units will be counted.

(f) Adjustments for the following factors will also be made in computing the number of FTE providers:

(i) Practitioners in residency programs will be counted as 0.5 FTE.

(ii) Graduates of foreign schools who are not citizens or lawful permanent residents of the United States will be excluded from counts.

(iii) Those graduates of foreign schools who are citizens or lawful permanent residents of the United States, and practice in certain settings, but do not have unrestricted licenses to practice, will be counted on a full-

time-equivalency basis up to a maximum of 0.5 FTE.

(g) Practitioners suspended for a period of 18 months or more under provisions of the Medicare-Medicaid Anti-Fraud and Abuse Act will not be counted.

4. *Determination of unusually high needs for mental health services.* An area will be considered to have unusually high needs for mental health services if one of the following criteria is met:

(a) 20 percent of the population (or of all households) in the area have incomes below the poverty level.

(b) The youth ratio, defined as the ratio of the number of children under 18 to the number of adults of ages 18 to 64, exceeds 0.6.

(c) The elderly ratio, defined as the ratio of the number of persons aged 65 and over to the number of adults of ages 18 to 64, exceeds 0.25.

(d) A high prevalence of alcoholism in the population, as indicated by prevalence data showing the area's alcoholism rates to be in the worst quartile of the nation, region, or State.

(e) A high degree of substance abuse in the area, as indicated by prevalence data showing the area's substance abuse to be in the worst quartile of the nation, region, or State.

5. *Contiguous area considerations.* Mental health professionals in areas contiguous to an area being considered for designation will be considered excessively distant, overutilized or inaccessible to the population of the area under consideration if one of the following conditions prevails in each contiguous area:

(a) Core mental health professionals in the contiguous area are more than 40 minutes travel time from the closest population center of the area being considered for designation (measured in accordance with paragraph B.1(b) of this part).

(b) The population-to-core-mental-health-professional ratio in the contiguous area is in excess of 3,000:1 and the population-to-psychiatrist ratio there is in excess of 10,000:1, indicating that core mental health professionals in the contiguous areas are overutilized and cannot be expected to help alleviate the shortage situation in the area for which designation is being considered. (If data on core mental health professionals other than psychiatrists are not available for the contiguous area, a population-to-psychiatrist ratio there in excess of 20,000:1 may be used to demonstrate overutilization.)

(c) Mental health professionals in contiguous areas are inaccessible to the population of the requested area due to geographic, cultural, language or other barriers or because of residency restrictions of programs or facilities providing such professionals.

C. *Determination of degree of shortage.* Designated areas will be assigned to degree-of-

shortage groups according to the following table, depending on the ratio ( $R_C$ ) of population to number of FTE core-mental-health-service providers ( $FTE_C$ ); the ratio ( $R_P$ ) of population to number of FTE psychiatrists ( $FTE_P$ ); and the presence or absence of high needs:

#### High Needs Not Indicated

- Group 1— $FTE_C=0$  and  $FTE_P=0$   
 Group 2— $R_C$  gte \* 6,000:1 and  $FTE_P=0$   
 Group 3— $R_C$  gte 6,000:1 and  $R_P$  gte 20,000  
 Group 4(a)—For psychiatrist placements only: All other areas with  $FTE_P=0$  or  $R_P$  gte 30,000  
 Group 4(b)—For other mental health practitioner placements: All other areas with  $R_C$  gte 9,000:1.

\*Note: "gte" means "greater than or equal to".

#### High Needs Indicated

- Group 1— $FTE_C=0$  and  $FTE_P=0$   
 Group 2— $R_C$  gte 4,500:1 and  $FTE_P=0$   
 Group 3— $R_C$  gte 4,500:1 and  $R_P$  gte 15,000  
 Group 4(a)—For psychiatrist placements only: All other areas with  $FTE_P=0$  or  $R_P$  gte 20,000  
 Group 4(b)—For other mental health practitioner placements: All other areas with  $R_C$  gte 6,000:1.

D. *Determination of Size of Shortage.* Size of Shortage (in number of FTE professionals needed) will be computed using the following formulas:

- (1) For areas without unusually high need:

Core professional shortage=area population/  
6,000 – number of FTE core professionals  
 Psychiatrist shortage=area population/  
20,000 – number of FTE psychiatrists

- (2) For areas with unusually high need:

Core professional shortage=area population/  
4,500 – number of FTE core professionals  
 Psychiatrist shortage=area population/  
15,000 – number of FTE psychiatrists

#### Part II—Population Groups

A. *Criteria.* Population groups within particular rational mental health service areas will be designated as having a mental health professional shortage if the following criteria are met:

1. Access barriers prevent the population group from using those core mental health professionals which are present in the area; and

2. One of the following conditions prevails:

(a) The ratio of the number of persons in the population group to the number of FTE core mental health professionals serving the population group is greater than or equal to 4,500:1 and the ratio of the number of persons in the population group to the number of FTE psychiatrists serving the population group is greater than or equal to 15,000:1; or,

(b) The ratio of the number of persons in the population group to the number of FTE core mental health professionals serving the population group is greater than or equal to 6,000:1; or,

(c) The ratio of the number of persons in the population group to the number of FTE psychiatrists serving the population group is greater than or equal to 20,000:1.

B. *Determination of degree of shortage.* Designated population groups will be assigned to the same degree-of-shortage groups defined in part I.C of this appendix for areas with unusually high needs for mental health services, using the computed ratio ( $R_C$ ) of the number of persons in the population group to the number of FTE core mental health service providers ( $FTE_C$ ) serving the population group, and the ratio ( $R_P$ ) of the number of persons in the population group to the number of FTE psychiatrists ( $FTE_P$ ) serving the population group.

C. *Determination of size of shortage.* Size of shortage will be computed as follows:

Core professional shortage=number of persons in population group/4,500 – number of FTE core professionals

Psychiatrist shortage=number of persons in population group/15,000 – number of FTE psychiatrists

#### Part III—Facilities

##### A. Federal and State Correctional Institutions

###### 1. Criteria.

Medium to maximum security Federal and State correctional institutions for adults or youth, and youth detention facilities, will be designated as having a shortage of psychiatric professional(s) if both of the following criteria are met:

(a) The institution has more than 250 inmates, and

(b) The ratio of the number of internees per year to the number of FTE psychiatrists serving the institution is at least 2,000:1. (Here the number of internees is the number of inmates or residents present at the beginning of the year, plus the number of new inmates or residents entering the institution during the year, including those who left before the end of the year; the number of FTE psychiatrists is computed as in part I, section B, paragraph 3 above.)

###### 2. *Determination of Degree of Shortage.*

Correctional facilities and youth detention facilities will be assigned to degree-of-shortage groups, based on the number of inmates and/or the ratio (R) of internees to FTE psychiatrists, as follows:

Group 1—Facilities with 500 or more inmates or residents and no psychiatrist.

Group 2—Other facilities with no psychiatrists and facilities with 500 or more inmates or residents and  $R > 3,000$ .

Group 3—All other facilities.

##### B. State and County Mental Hospitals.

1. *Criteria.*

A State or county hospital will be designated as having a shortage of psychiatric professional(s) if both of the following criteria are met:

(a) The mental hospital has an average daily inpatient census of at least 100; and

(b) The number of workload units per FTE psychiatrists available at the hospital exceeds 300, where workload units are calculated using the following formula:

Total workload units = average daily inpatient census + 2 × (number of inpatient admissions per year) + 0.5 × (number of admissions to day care and outpatient services per year).

2. *Determination of Degree of Shortage.*

State or county mental hospitals will be assigned to degree-of-shortage groups, based on the ratio (R) of workload units to number of FTE psychiatrists, as follows:

Group 1—No psychiatrists, or R>1,800.

Group 2—1,800>R>1,200.

Group 3—1,200>R>600.

Group 4—600>R>300.

C. *Community Mental Health Centers and Other Public or Nonprofit Private Facilities.*1. *Criteria.*

A community mental health center (CMHC), authorized by Pub. L. 94-63, or other public or nonprofit private facility providing mental health services to an area or population group, may be designated as having a shortage of psychiatric professional(s) if the facility is providing (or is responsible for providing) mental health services to an area or population group designated as having a mental health professional(s), and the facility has insufficient capacity to meet the psychiatric needs of the area or population group.

2. *Methodology.*

In determining whether CMHCs or other public or nonprofit private facilities meet the criteria established in paragraph C.1 of this Part, the following methodology will be used.

(a) *Provision of Services to a Designated Area or Population Group.*

The facility will be considered to be providing services to a designated area or population group if either:

(i) A majority of the facility's mental health services are being provided to residents of designated mental health professional(s) shortage areas or to population groups designated as having a shortage of mental health professional(s); or

(ii) The population within a designated psychiatric shortage area or population group has reasonable access to mental health services provided at the facility. Such reasonable access will be assumed if the population lies within 40 minutes travel time of the facility and nonphysical barriers (relating to demographic and socioeconomic char-

acteristics of the population) do not prevent the population from receiving care at the facility.

(b) *Responsibility for Provision of Services.*

This condition will be considered to be met if the facility, by Federal or State statute, administrative action, or contractual agreement, has been given responsibility for providing and/or coordinating mental health services for the area or population group, consistent with applicable State plans.

(c) *Insufficient capacity to meet mental health service needs.* A facility will be considered to have insufficient capacity to meet the mental health service needs of the area or population it serves if:

(i) There are more than 1,000 patient visits per year per FTE core mental health professional on staff of the facility, or

(ii) There are more than 3,000 patient visits per year per FTE psychiatrist on staff of the facility, or

(iii) No psychiatrists are on the staff and this facility is the only facility providing (or responsible for providing) mental health services to the designated area or population.

3. *Determination of Degree-of-Shortage.*

Each designated facility will be assigned to the same degree-of-shortage group as the designated area or population group which it serves.

[45 FR 76000, Nov. 17, 1980, as amended at 54 FR 8738, Mar. 2, 1989; 57 FR 2477, Jan. 22, 1992]

## APPENDIX D TO PART 5—CRITERIA FOR DESIGNATION OF AREAS HAVING SHORTAGES OF VISION CARE PROFESSIONAL(S)

Part I—*Geographic Areas*A. *Criteria.*

A geographic area will be designated as having a shortage of vision care professional(s) if the following three criteria are met:

1. The area is a rational area for the delivery of vision care services.

2. The estimated number of optometric visits supplied by vision care professional(s) in the area is less than the estimated requirements of the area's population for these visits, and the computed shortage is at least 1,500 optometric visits.

3. Vision care professional(s) in contiguous areas are excessively distant, overutilized, or inaccessible to the population of the area under consideration.

B. *Methodology.*

In determining whether an area meets the criteria established by paragraph A of this part, the following methodology will be used:

1. *Rational Areas for the Delivery of Vision Care Services.*