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A comprehensive mental health care system for Native Americans in New Mexico. A report of the Native American Mental Health Planning Project.

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A COMPREHENSIVE MENTAL HEALTH CARE SYSTEM FOR NATIVE AMERICANS IN NEW MEXICO

APPENDICES

November, 1993

University of New Mexico
Department of Psychiatry
Center on Alcoholism, Substance Abuse,
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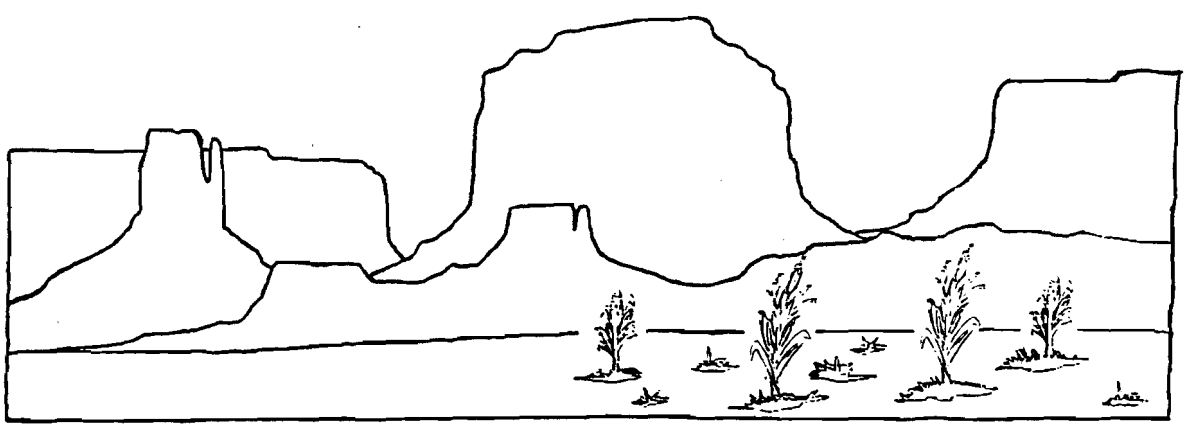

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APPENDIX C

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APPENDIX E

University of New Mexico/CASAA
NATIVE AMERICAN MENTAL HEALTH PLANNING PROJECT

TOPICS FOR INTERVIEWS

1. Local definition of mental health.
2. Is mental health defined in Tribal Code?
3. Mental health concerns.
   a. Common and severe
4. Perceived causes of mental health problems.
5. Age groups affected.
6. How are these problems handled?
   a. Extent to which people use traditional healing.
   b. Extent to which people use other methods - tell us what, who, why, why not...(e.g., IHS, BIA,...).
   c. To what extent are services available.
   d. Extent to which people know of existing services.
   e. What are the images, reputations of these services.
7. What's missing - mental health gaps.
8. Perceptions regarding:
   a. inpatient services
   b. outpatient services
   c. residential treatment facility
   d. day care
   e. half-way houses
   f. rehabilitation services

9. Perceptions of treatment modalities favored by and/or effective with your people (or Native Americans in New Mexico).

a. individual psychotherapy

b. psychiatric (with or without medication)

c. group therapy

d. family therapy

e. AA programs

f. detox programs

g. support groups

h. traditional

i. any other

10. Perceptions of mental health providers:

a. mental health techs

b. substance abuse counselors

c. social workers

d. psychologists

e. psychiatrists

f. medicine people

g. psychotherapists

h. medical doctors

i. nurses

j. others

11. Transportation issues (how far is "too far" for daily/weekly trips for treatment?

12. Locations for services.

a. Pre-existing places/buildings you know of and/or prefer.

b. Ideas for other locations.

13. Comments on facility and services.

a. ownership

b. management and operations

c. patient payment issues

-IHS
-BIA
-other federal
-state
-city/county
-tribe/tribal consortium
-private insurance
-others

14. Preferences for helping people who are a danger to themselves and/or others.

a. safe places in local community

b. transporting them to safe locations further away

c. family care and support.

d. traditional help

e. civil commitment issues (e.g., existence of and knowledge of c.c. procedures, who should decide, etc.)

15. Confidentiality issues.

16. Culturally appropriate concerns we need to know.

17. Issues concerning client population.

a. Indians (in state vs. out of state)

b. with or without non-Indians

18. Ideas for physical plant requirements/needs.

19. Existence of tribal plans.

20. Facility design considerations.

a. types of recreational activities preferred for various age groups

b. furnishings, amount of space, number of beds per patient room

c. seclusion rooms?

d. laundry facilities

(continued)

20. Facility design considerations.

e. food service and eating areas

f. outside areas

g. toilet and bathing facilities/preferences

i. hostels (sizes, types/sizes of rooms,...)

j. common areas

21. Hospitalization issues.

a. hospitalization just for the severely mentally ill?

b. trend of national mental health care

b:\iq0112fo

APPENDIX F

PROVIDER SURVEY
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Date_____ **Survey Respondent Name**_____

Job Title_____

1. **Service Name** _____ **Phone:** (____) ____-____

2. **Address** _____

Provider and/or Service Specialty

3. **How long has your agency been in operation?**_____**years** _____**months**

4. **What is the primary funding revenue source(s)? (Please circle all that apply.)**

   (0) Indian Health Service
   (1) Division of Mental Health
   (2) Behavioral Health Services Division
   (3) Developmentally Disabled Division
   (4) Patient Fees

5. **Do you have an outreach component that educates the community about your facility?**
   (0) Yes (1) No

6. **Which services does your agency provide? (Please circle all that apply.)**

   (0) Outpatient (See question 7.)
   (1) Rehabilitation (See question 8.)
   (2) Supported Housing (See question 9.)
   (3) Residential (See questions 10-12.)
   (4) Inpatient (See questions 13-15.)
   (5) Specialized Services (See questions 16-18)
   (6) Case Management (See question 19.)
   (7) Support Services (See question 20.)
   (9) Other_____

7. **If you answered outpatient services, please circle all that apply.**

A. Outpatient 24-hour hotline/crisis line
B. Face-to-face crisis response
C. Psychiatric care
D Medication monitoring
E. General outpatient mental health services
F. Other_____

8. **If you answered rehabilitation services, please circle all that apply.**

A. Vocational
B. Educational
C. Employment/supported employment
D. Socialization/recreation, including day care
E. Activities in daily living skills
F. Other_____

9. **If you answered supported housing services, please circle all that apply.**

A. Supported Independent living
B. Respite care
C. Foster care
D. Other_____

10. **If you answered residential services, please circle all that apply.**

A. residential care (0-30 days)
B. Long-term care (30+ days)

11. **How many beds does your facility have for:**

A. Children ____
B. Adolescents ____
C. Adults ____
D. Elderly ____
E. Dual-diagnosed ____
F. Other ____

12. **Does your facility have continuing treatment services for persons who have been discharged from a residential facility?**

(0) Yes (1) No

13. **If you answered inpatient services, please answer the following.**

A. Acute inpatient psychiatric care (0-30 days) (0) Yes (1) No
B. Long-term inpatient psychiatric care (30+ days) (0) Yes (1) No

14. **How many beds does your facility have for:**

A.	Children	___
B.	Adolescents	___
C.	Adults	___
D.	Elderly	___
E.	Dual-diagnosed	___
F.	Other	___

15. **Does your facility have continuing treatment services for persons who have been discharged from an inpatient psychiatric facility?**

(0) Yes (1) No

16. **If you answered specialized services, please circle all that apply.**

A. Services to those with mental illness and developmental disabilities (See question 16.)
B. Services to those with mental illness and substance abuse (See question 17.)
C. Outreach to homeless individuals who are psychiatrically disabled
D. Outreach to individuals in jail who are psychiatrically disabled
E. Services to those with mental illness and other disorders_____
F. Other_____

17. **Please circle all developmentally disabled services that you offer:**

A. Counseling
B. Supported Housing
C. Case Management
D. Supported employment
E. Vocational rehabilitation
F. Residential
G. Other_____

18. **Please circle all the substance abuse services that you offer.**

(0) Alcohol
(1) Other substances
(2) Detox
(3) Family therapy
(4) Rehabilitation
(5) Employment services
(6) Other_____

19. **If you answered case management, please circle all that apply.**

A. Individual assessment
B. Service/treatment planning
C. Linkage with needed services
D. Monitoring of service delivery
E. Client identification/outreach
F. Assistance with utilizing resources and obtaining services
G. Crisis management
H. Client/system advocacy
I. Other_____

20. **If you answered support services, please circle all that apply.**

A. Protection & advocacy services
B. Self-help and/or support groups
C. Information hotline
D. General health care, incl. eye and teeth
E. Vocational Rehabilitation
F. Volunteer programs (e.g., peer counseling, widow-to widow)
G. Public transportation
H. Other transportation
I. Other_____

21. **What are your office hours? (If hours vary daily, please write hours that you are open on the appropriate lines below.)**_____

(0) M	(1) T	(2) W	(3) TH	(4) F	(5) S	(6) SU	(7) Lunch?
___	___	___	___	___	___	___	___

Treatment Staffing

22. **Are the staff who provide counseling services required to have a B.A. or equivalent?** (0) Yes (1) No

23. **Please provide the following information about your staff:**

A. Number of direct care staff. _____
B. Number of Native American direct care staff. _____
B. Number of support staff. _____
C. Number of Native American support staff. _____
C. Number of direct care staff with experience working with Native Americans. _____

24. How many of your direct care staff have special training or expertise in working with:

A. Children ___
B. Adolescents ___
C. Adults ___
D. Elderly ___

25. Does anyone in your office speak (Please circle all that apply):

(0) Apache
(1) Pueblo Dialect:_____
(2) Navajo
(3) Other Native American language(s)_____
_____

Insurance Information

26. Do you accept clients with no insurance? (0) Yes (1) No

27. Do you accept private insurance? (0) Yes (1) No

28. Do you use a sliding scale? (0) Yes (1) No

29. Do you accept Medicare? (0) Yes (1) No

30. Do you accept Medicaid? (0) Yes (1) No

31. Do you accept military medical/veterans? (0) Yes (1) No

32. **Do you have contracts with:**

A. Indian Health Service? (0) Yes (1) No
B. For which tribes:

(0) Apache
(1) Pueblo
(2) Navajo
(3) Southern Ute
(4) Other_____

C. Bureau of Indian Affairs? (0) Yes (1) No
D. For which tribes:

(0) Apache
(1) Pueblo
(2) Navajo
(3) Southern Ute
(4) Other_____

Patient Waiting List Information

33. **How large is your average monthly waiting list?**

A. Less than 4 patients
B. 5 to 25 patients
C. 26 to 50 patients
D. 51 to 75 patients
E. 76 to 100 patients

34. **On the average how many days do people stay on your waiting list?** _____

35. **For 1993 will the amount of time a patient remains on the waiting list:**
(0) increase or (1) decrease?

Please describe your answer._____

Referral Information

36. **Most Native American referrals come from (Please circle all that apply.):**

A. Word of mouth
B. Employment counselor
C. Self
D. Indian Health Service
E. Bureau of Indian Affairs
F. Advertisements
G. Other:_____

37. Does your organization provide: (Please circle all that apply.)

A. Intensive care
B. Home-board services

38. If your organization does not provide inpatient or residential services, what facility do you refer patient's to for these services?

Name of Organization Contact Name Phone Number

_____

_____

39. Approximately how many Native Americans have you referred in the past year to:

A. Residential programs_____
B. Inpatient programs_____

40. In your opinion, are your Native American clients satisfied with these facilities? (0) Yes (1) No

Why or why not? _____

41. Do you believe the facilities are culturally sensitive? (0) Yes (1) No

Why or why not? _____

42. If there were a new facility specifically for Native American in the state, approximately how many of your Native American clients would you refer to it in a year?

	Children	Adolescents	Adults	Elderly
A. Inpatient facility	_____	_____	_____	_____
B. Residential facility	_____	_____	_____	_____

Client Information

43. Period for which the following data applies: Begin date: __/__/__ End date: __/__/__

44. What proportion of the total client population do Native Americans represent?

(0) 0-10%
(1) 11-20%
(2) 21-30%
(3) 31-40%
(4) 41-50%
(5) 51-60%
(6) 61-70%
(7) 71-80%
(8) 81-90%
(9) 91-100%

45. **Please provide information about the Native American clients you served:**
(If no Native American clients were served or if this data is unavailable, please check here and skip to question 47.) ☐

Number of Native Americans served:

A. Children _____
B. Adolescents _____
C. Adults _____
D. Elderly _____

46. **What clinical diagnoses are the most common among the Native American client populations of:**

A. Children _____
B. Adults _____
C. Elderly _____
D. Dual-diagnosed _____
E. Other _____

Disorder Characteristics

47. **Number of Native Americans with:**

	Children	Adolescents	Adults	Elderly
A. Only mental health (MH)	____	____	____	____
B. Only Substance abuse(SA)	____	____	____	____
C. MH problems and developmentally disabled (DD)	____	____	____	____
D. MH, SA and DD related	____	____	____	____

48. **How many of the above had a domestic violence problem?** _____

49. **What barriers exist that prevent Native Americans from seeking service(s) at your facility?**

(0) Ability to pay
(1) Transportation
(2) Office hours
(3) Distance to and from mental health facilities
(4) Unaware of treatment services
(5) Others_____

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Indirect Needs Assessment Model (Based upon J.A. & D.L. Tweed, 1992)

Computer routines based upon the model's equation parameters were used to extract the necessary social-indicator data and for calculating each subareas's prevalence rate for each need category or target group. Table 2 provides the D.U. linear-regression model parameters for estimating five target group prevalence rates. Care was taken to assign an unduplicated code at the chosen level for each subarea. The 1990 census data provided the social-indicator variables required to implement the equations used in this model.

The SAS prediction equation for subarea need prevalence rate, in terms of Health Demographic Profile System's social-indicator variable tables, is:

Need Category Prevalence = Bo+(B1*MNS00029)+(B2*MNS00086), (1)

The code MNS00029 is the percentage of total persons below the poverty level, MNS00086 is the percentage of divorced males, and the B parameters represent appropriated variable weights for each distinct need category. Values of the B parameters for the five illustrative target groups are provided in Table 4. A separate equation containing the appropriate "B" parameters is used to calculate subarea prevalence rates for each need or target group being estimated.

After the estimated subarea prevalence rates were determined, they were used to compute the estimated numbers of tribal subarea cases by multiplying each tribal subarea rate by the area's adult population. Again in SAS and HDPS terms: Need Category N=Need Category Prevalence

*(MND00007 - MND00105),

(2)

(2)

The code MND00007 is the total subarea population and MND00105 is the number of children and adolescents under 18.

The five need categories are not inclusive of one another but are "nested" users. They must not add the need category figures together to obtain "total" need figures. The final computational step involved summing the numbers of tribal subarea "cases" into totals for the larger services planning areas they comprise.

Table 3 provides categories including:

1) the tribal subareas,

2) the two social indicators:

   a. the percentage of Native Americans below the poverty level, and,

   b. percentage of divorced males by tribal subarea.

3) the total population

These categories are the numbers used to compute the equation parameters.

Table 4 and 5 provides the region's computed need rates and the compiled need case esimates by percentages and numbers respectively. The first needs category (Total or Any Need) is the appropriate figure for all cases needing ADM services.

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VI. IMPLEMENTING INDIRECT NEEDS-ASSESSMENT MODELS FOR PLANNING STATE MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES

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ABSTRACT

This article addresses several services-planning issues necessary for successful implementation of an indirect needs-assessment model to estimate geographic differences in the prevalence of needs for alcohol, drug abuse, and mental health (ADM) services. These include: (1) definition and selection of appropriate ADM services need categories as "target groups", (2) selection of a model that can validly estimate the prevalence of those need categories, and (3) understanding the data requirements, calculation procedures, and limitations on the generalizability of selected models. A strategy for making the best possible use of indirect needs-assessment models, additional research findings to buttress the validity of selected models, and procedures for model implementation in a state are also presented. A key to effective use of such procedures is clear identification of the target groups to be estimated, ranging from the broadest and most prevalent to highly specialized, low-prevalence need groups. Because predictive models are weaker with narrowly defined, low-prevalence need categories than with larger ones, and because of the importance of presenting a full picture of the ADM needs of a state, it is recommended that states employ a series of "nested" target groups that represent the full range of population needs. While the originally proposed models studied here would be useful with higher-prevalence need categories, only two newly developed models that involve the poverty *social indicator could successfully predict to low-prevalence surveyed "chronic mental illness" in this study. Enough is now known about indirect needs-assessment models to warrant implementation by states of one of the better-performing models. The results presented strongly support the validity and potential utility of specific models for estimating varieties of need for ADM services at both state and subarea levels.*

This article focuses on the policy and planning implications of the research results presented in the previous five articles, as well as some additional findings presented below. The first part of the article outlines major issues that policymakers and planners must address when estimating need for ADM services in their states. The second part presents additional research results that support the validity of social-indicator models in estimating service needs across geographic subareas. The third part suggests a strategy for implementing an indirect needs-assessment model (or models) for use in planning alcohol, drug abuse, and mental health (ADM) services in different subareas of a state or large planning region. The final part provides infor-

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TABLE 1
NEED CATEGORY PERCENTAGES FOR GENERAL POPULATION, OUTPATIENTS, AND INPATIENTS

	General Population (N = 4,745)[a]	Outpatient Subsample (N = 123)[a]	Inpatient Sample (N = 40)
Basic caseness criteria			
Any *DIS* diagnosis (1 month) (including substance abuse)	16.3%	52.4%	80.0%
Everyday dysfunction	11.1	37.7	57.5
Demoralization	11.0	43.5	80.0
Composite criteria (multicomponent target groups)			
Total or any need	26.5	68.5	92.5
Any two caseness criteria	9.3	43.0	77.5
Diagnosis plus dysfunction or demoralization	6.7	38.6	70.0
All three caseness criteria	2.7	22.2	47.5
Specialized psychiatric target groups			
Psychiatric diagnosis only (Excluding substance abuse/depression)	13.8	50.6	77.5
Psychiatric diagnosis plus dysfunction	3.9	26.3	47.5
Severe diagnosis only (schizophrenia, mania, major depression, cognitive impairment)	2.2	20.1	57.5
Severe diagnosis plus dysfunction or demoralization	1.6	17.9	52.5
Severe diagnosis plus dysfunction	1.2	13.6	37.5
Chronic mental illness (severe diagnosis of 1+ years duration plus dysfunction)	1.1	13.1	37.5
Other specialized target groups:			
Alcohol, drug abuse or dependence diagnoses only	4.5[b]	9.1[b]	---[c]
Alcohol, "severe" drug abuse or dependence diagnoses only	3.8	7.8	---[c]

[a]State-weighted *n*s.
[b]Includes drug abuse/dependence diagnoses unmodified by *DIS* severity criteria.
[c]Not shown; these three programs do not normally admit substance abusers.

Partly because of pressures exerted by advocacy and consumer groups, as well as the demands of the federal government with respect to "block grant" funding,[2] many states' public ADM services have been targeted exclusively for these subpopulations, and/or those termed the "chronically mentally ill." Other types of ADM cases have come to be viewed as of lower priority for public services, even though they far outnumber the former (for example, demoralized persons with no current *DIS*/DSM-III disorder and little or no everyday dysfunction). Persons with diagnosable disorders not considered to be disabling (such as simple phobias, obsessive-compulsive disorders, or dysthymia) may also fall outside a state's priorities for public-system services. Few, if any, states are interested in persons at the higher-prevalence end of the severity continuum (for example, "high-risk" but currently nonsymptomatic persons). However, delivery of timely preventive or early interventions to such persons might possibly lead to considerable savings on direct services for these same people who could become much more impaired in later years.

A number of possible target groups for ADM service planners to consider are defined below in terms of specific combinations of the three basic need criteria described in Articles II and III of this series. As is true for single-caseness groups, the selection of one or more multiple-caseness need groups as high-priority service targets will have implications for the needs-assessment model(s) chosen to estimate ADM service needs in a state and its subareas.

Multiple-Caseness Groups of High Potential Interest

It was shown in Tables 6 and 7 of Article II that Colorado's ADM outpatient service users, inpatients, and nonusers of services can be characterized by various combinations of *CSHS* caseness. Similar data on caseness combinations are presented in Table 1. Note, however, that the first column here represents the entire *CSHS* household sample (nonusers plus outpatients) rather than solely nonusers of services. This column is of greatest relevance to ADM services planning, since both current and future outpatients (and future inpatients also) are included. As before, the second and third columns represent known service users presented for comparison purposes—the *CSHS* outpatient subsample and the Denver inpatient sample, respectively. Data are shown for both single-category and important composite need categories as well as for special subcategories of ADM need (to be described below) of potentially high interest to state policymakers and planners. Comments

[2]Public Law 99-660 now requires each state to file with the National Institute of Mental Health (NIMH) a formal "state plan" for serving the severely and chronically mentally ill if the state is to receive its full block-grant funding.

appropriate to each need group are offered to highlight the major ADM problems and services-planning issues characterizing them.

Total (Any) Need for ADM Services. A state may want to estimate the number of persons in the *Total (or Any) Need* category for many reasons, such as (1) a desire to overlook no one who may need ADM services, (2) to provide early interventions intended to reduce more serious problems later, or (3) to plan coverage for non-severely ill persons by general medical practitioners and "primary care" clinicians. The percentage of the Colorado general population sample falling into this group was 26.5% (Row 2 of the table). It also included the highest possible percentages of the state's current ADM outpatients (68.5%) and psychiatric inpatients (92.5%), as shown in the second and third figures of the row. Small subareas, of course, can have substantially higher or lower rates than the state average; the top subarea rate observed in the *CSHS* subarea sample was 46.5% of all residents, while the lowest was 6.0%. Planners would probably view meeting this level of need through only *specialty* ADM services to be fiscally and politically difficult, if not impossible. However, funding obstacles should not obscure the empirical validity of the figures. Furthermore, when ADM planning efforts are extended to include *general-medical* sector services (particularly general- and family-practitioners and clinics) where most people already obtain services for ADM problems, this everyone-in-need figure is both appropriate and essential for an accurate picture of the need for ADM services.

All Three ADM Need-Component Cases. At the other prevalence extreme, policymakers might target only those persons manifesting *all three components of need*—diagnosable disorder, everyday dysfunction, and demoralization. As the last row of this panel of Table 1 indicates, this would include just 2.7% of the Colorado population. However, focusing exclusively on this group can create problems. For example, this category includes only about one-fifth (22.2%) of current ADM outpatients in the *CSHS* sample (Table 1, second column); by these strict criteria, about 4 out of 5 (78%) of these patients would be called "not in need"—a dubious proposition at best. Indeed, also "not in need" by this strict criterion would be more than half (52.5%) of the hospitalized Denver psychiatric patient sample (Table 1, third column). While using such low "in-need" figures may seem more fiscally palatable to state officials, this would essentially constitute "closing one's eyes" to the real prevalence of ADM problems in the state and to the probable *demand* for services. Presumably, clinicians, ADM program directors, and informed legislators would protest such "defining away" a state's ADM problems, and call for more realistic needs estimation and priority-setting.

Two-Component Cases: Great Need for and High Probability of Service Use. Just over 9% of the *CSHS* sample met criteria for caseness on at least two of the three need measures used in this study. These cases can be broken down into two subgroups, depending upon whether a *DIS*/DSM-III diagnosable disorder is one of the two components of need for ADM services manifested by the *CSHS* respondents.

Any Diagnosis Plus Dysfunction/Demoralization. This subgroup included 6.7% of the general population sample. About two-thirds of them (4.6% of the *CSHS* sample) had a diagnosable disorder and were also dysfunctional in various domains of daily living—work/school/home management, interpersonal relationships, and so forth. The others (2.2% of the *CSHS* sample) were both diagnosable and demoralized, thus experiencing considerable subjective distress in addition to their formal *DIS*/DSM-III symptomatology. Demoralization has been found both in this research and in other studies[3] to be strongly related to seeking and utilizing ADM services, especially when linked with diagnosable disorder. Hence, it is very likely that a large proportion of this group will seek ADM services.

Two-Component Need Cases With no Diagnosis. This subgroup reported both mental health-related dysfunction in daily living and demoralization, but did not meet full criteria for any of the 12 *DIS*/DSM-III diagnoses (despite having reported an average of 4.5 diagnosis-related psychiatric/substance abuse symptoms). In the *CSHS*, this group was just as likely to seek and utilize ADM specialty services as their diagnosable counterparts. This could be expected given both internal and social pressures for service use resulting from dysfunction and demoralization along with whatever psychiatric symptoms are reported.

A Logical Choice for a High-Priority Target Group. An appropriate and workable middle course between targeting the two extremes of 26.5% of a state's population (*Total or Any Need*) and 2.7% (*All Three Need Components*) would be designating this group of persons having any two or more components of need as a high-priority group. This was proposed as a primary target group selection in Article II. It is unquestionably a very high-need category—it included 43% of *CSHS* outpatients, and about 78% of the Denver psychiatric inpatients studied. It is also one of the highest ADM services-utilization groups found in this study.

As was found for the individual components of this composite need category (see Article II, Figs. 2A–2C), sharp subarea differences in prevalence are the rule. The

[3]Service utilization data for various groupings of *CSHS* respondents and analysis of factors contributing to utilization is planned for a subsequent publication. See Tischler et al. (1988) for the impact of "non-specific distress" (demoralization) on service utilization.

least "needy" of the 48 subareas surveyed showed a prevalence rate of just 1.5%, while the highest prevalence rate found was 21.9% (nearly 15 times greater than the lowest-prevalence subarea).

Some Additional Definitions of High-Priority Target Groups

Because of their ADM policy relevance, several additional definitions of "specialized" priority target groups of persons needing ADM services are shown in the third and fourth panels of Table 1. These may be useful for comparing statewide prevalence rates among different need categories, for making choices about a state's priority target group(s), and ultimately for subsequent selection of an indirect needs-assessment model to estimate prevalence rates across state subareas. These definitions also allow separation of certain target populations often assigned to different state agencies for delivery of services (notably alcohol and drug abuse cases).[4]

"Psychiatric" Disorders Only. In the top row of the third panel are the figures for all *DIS*/DSM-III psychiatric disorders assessed in the survey, *excluding* persons whose only diagnoses involved alcohol and drug abuse and/or dependence; these comprise 13.8% of the general population. This figure is not greatly different from the figure for *all* diagnoses, including substance abuse (16.3%). Similar findings characterize the five-site Epidemiologic Catchment Area (ECA) data (Regier et al., 1988).

A little over one-quarter of this group (3.9% vs. 13.8%) is also *dysfunctional* in everyday living, as shown in the next row of the table. As noted in Articles II and III, dysfunction in one or more domains of everyday living is increasingly perceived as an important criterion for considering someone to need ADM services. Hence, persons with disabilities in both the psychiatric and functioning domains should constitute a high-priority service group. Such dysfunctional persons resemble those whom Grosser (1981) termed "those most in need: persons who experience moderate to severe levels of psychiatric disruption."[5]

"Severe" Psychiatric Disorders. The next row shows figures for persons with current "severe" psychiatric disorders including schizophrenia, major depressive episode, mania, and moderate-to-severe cognitive impairment (totaling 2.2% of the general population). No differentiation is made here between "acute" and "chronic" cases; long duration is not imposed as a criterion, and all have manifested their disorder in the past month. This "severe" category is a much narrower target group than *all* disorders, and should carry a very high service priority because of the severity of psychopathology involved and the importance of services to halting further deterioration and improving prospects for recovery.

Severe Diagnosis Plus Dysfunction and/or Demoralization. The general-population figure for this subgroup (1.6%) indicates that the majority of the severe-diagnosis target group described above are also cases according to everyday dysfunction criteria, demoralization criteria, or both. These additional difficulties sharply increase the likelihood that they will come into contact with ADM services (voluntarily or otherwise), thus increasing their importance as a target group. Most of these persons meet criteria for dysfunction within the past month (1.2% vs. 1.6%), even when the problem has been of short duration.

Chronic Mental Illness. Finally, the rate for a "severely and chronically" mentally ill target group is 1.1% of the Colorado population. This group is characterized by having both a current severe psychiatric disorder of *extended duration* (one year or longer) and dysfunction in everyday living. Expectably, as a result of the extreme impairment manifested for a longer-than-usual time period, this group's prevalence rate is the lowest among the psychiatric-disorders groups listed in the table. Because of the extensive and persistent impairment typical of this group, it represents a very high-priority target population in most state mental health systems.[6]

It is important to recognize, however, that this group represents only a small portion of Colorado's needs for ADM services. As shown in the second column, only 13.1% of current ADM outpatients fall into this category. Perhaps even more instructive is that only a little more than one-third (37.5%) of persons currently *hospitalized* in three of Denver's public and private psychiatric hospitals qualify as "chronically mentally ill" by these criteria. Surely the other inpatients cannot be dismissed as "not needing services"; rather, they represent the more acute, less dysfunctional psychiatric categories. The next paragraph addresses this issue and suggests a strategy for aligning state service priorities with *CSHS* findings regarding needs for ADM services.

[4]Although "chronic brain syndrome"/cognitive impairment cases are sometimes assigned to specialized state agencies other than mental health for provision of services, *CSHS* prevalence rates for *DIS* Severe Cognitive Impairment (0.2%) was so low relative to those for other disorders that this category was not considered separately. Instead, it was simply included in all "psychiatric" need categories, from *Total or Any Need* through *Chronic Mental Illness*.

[5]Grosser's is one first-generation model that attempts to specify the target group considered to be "in need of services." This is a more restricted and smaller target group than that of persons having *any* type of mental health problem, but less restricted and larger than one involving only severely and/or chronically impaired individuals.

[6]This rate reflects only those chronically mentally ill persons residing in *households*; persons in "group quarters," including such institutions as mental hospitals, nursing homes, and boarding homes, are not included. For an estimate of a state's total chronically mentally ill population, a "point-prevalence" rate estimate (involving a period of up to 1 month, as used in the *CSHS*) for residents in such institutions should be added to the *CSHS* household-survey rate.

Addressing Targeting Efforts via a Hierarchy of Needs and Priorities

ADM service systems must cope with the heritage of two federal administrations that have placed little or no value on "social programs" for the less fortunate in this country. Simultaneously, state legislatures have experienced growing demands for expenditures on an eroding infrastructure of roads, utilities, and physical plant in a context of economic inflation that steadily degrades the dollars budgeted. Even with mental health budgets set at the prior year's level, states have had to cut back on their goals and establish new priorities for the provision of public mental health services. Only the lowest-prevalence, most severely impaired groups (such as the "seriously and persistently" mentally ill) are currently given priority for services. This priority may also partly reflect the hope that increases in already huge state hospital expenditures can be slowed by restricting community-based services to serving primarily, if not solely, persons most likely to use the hospitals.

Even if these considerations are valid, however, a decision to neglect "lower-priority" need groups can lead to difficulties in planning and delivering services. For example, if planners disregard demoralized persons in setting priorities, some demand for and usage of ADM services by these nontargeted persons will still occur. This appears inevitable, given that demoralization is much more closely linked to the propensity to seek ADM services than are diagnosable disorders themselves (Link & Dohrenwend, 1980; Tischler, Leaf, & Holzer, 1988). Conversely, targeting only those persons with diagnosable disorders offers no assurance that these are the very people who will seek and utilize the services. In fact, in this study, diagnosable persons who were not also dysfunctional or demoralized were *infrequent* users of both specialty and general medical caregiver-provided ADM services. There is no easy solution to these target-selection and priority-setting issues. Planners must, however, be aware of them and understand that their choice of a priority target population does not automatically result in delivering services to those for whom they were intended.

The authors believe that service planners should clearly and unequivocally acknowledge the existence of the full range of ADM disorders and problems in their plan documents—even if political and financial realities ultimately force the plans to target state services much more narrowly. This can be accomplished by defining target populations within a hierarchical or "nested" set of need categories. At the top of the hierarchy would be the broadest need grouping, including anyone who could potentially benefit from an ADM intervention. The *Total or Any Need* category is a reasonable choice here, although some states might find alternative definitions preferable. At the bottom of the hierarchy, on the other hand, would be those subpopulations that the state designates as its highest priority targets for public ADM services, such as the *Severely and Chronically Mentally Ill*.

Adopting a hierarchical approach to need prevalence accomplishes several things. First, it *places specific-group targeting efforts in perspective*, sensitizing both planners and elected officials to the larger and smaller constituencies for public ADM services. It also focuses at least some attention on those portions of ADM services need that may not be directly addressed in a state's service plans. Second, an effective plan would allow for the *different likelihood of services utilization by persons from the various hierarchy levels*, and incorporate provisions for meeting the demands for services that are likely to be experienced. This approach helps address those persons in the *non*targeted populations who may "appear at the doors" of ADM service facilities with emergent, persistent, or compelling problems, without regard for their official targeted status. Third, prevalence rate information for "nested" hierarchical groups can help policymakers recognize the spectrum of needs that exist and then *develop different services strategies and techniques* (including use of non-ADM resources) to cope with as much of it as well as possible within current financial constraints. It can be anticipated that persons who fall into the lower-prevalence, higher-severity groups will need different services than less impaired persons from higher-prevalence categories.

PREDICTION OF TARGET GROUP PREVALENCE RATES BY INDIRECT MODELS

Once a state has made a selection of target groups for which it would like quantitative estimates, the next step is to choose an indirect needs-assessment model that can validly estimate the prevalence of those groups across its subareas. As noted in Article V, only two of the six original models tested could be recommended on the basis of both their analytical characteristics and empirical performance in predicting *CSHS*-based rates for single need-component categories (diagnosable disorders, everyday dysfunction, or demoralization). Additional data on performance in predicting to multiple-component need categories for these two models, and also for the two-variable linear regression and logistic regression models developed in the course of this research, are reviewed next.

Performance Data for Models vis-a-vis Selected Target Groups

Data on accuracy of prediction of several hierarchical need categories for the Slem linear regression model, the Synthetic Estimation model, and the two new Denver University models are shown in Table 2. The models have been optimized for each target group by adjusting only their quantitative parameters (while retaining the

TABLE 2
PERFORMANCE COMPARISON OF FOUR OPTIMIZED MODELS FOR COMPOSITE NEED VARIABLES

Model and Measure of Model Fit	Need Category or Target Group: Total or Any Need	Any Two Need Components	Diagnosis +Dysfunction or Demoralization	Severe Diagnosis	Severe Chronic Dx Plus Dysfunction
Mean CSHS prevalence rates, 48 areas	27.7%	9.7%	7.0%	2.5%	1.2%
Average absolute deviations (from surveyed prevalence rates) and deviations as a percentage of observed CSHS rates (in parentheses)					
Slem regression	4.6%	2.9%	2.5%	1.4%	0.9%
	(16.5)	(29.5)	(36.0)	(56.3)	(71.7)
Synthetic estimation	5.5	3.4	2.8	1.4	0.9
	(19.9)	(34.9)	(40.1)	(57.7)	(75.7)
D.U. linear regression	4.8	2.7	2.4	1.4	0.8
	(17.3)	(28.3)	(33.8)	(57.2)	(70.6)
D.U. logistic regression	4.9	2.8	2.4	1.3	0.8
	(17.7)	(28.6)	(33.9)	(53.4)	(66.9)
Product-moment correlation with need measure					
Slem regression	.68	.64	.59	.39	*ns*
Synthetic estimation	.67	.61	.58	.53	*ns*
D.U. linear regression	.70	.67	.63	.51	.31
D.U. logistic regression	.68	.67	.64	.60	.40

Note: *ns* = not significant.

original mathematical format and social-indicator predictors) to best predict each of the groups. In this fashion, each proposed model has evolved into a *series* of models, all with the same format and predictors but with different equation parameters and constants. As a result, prospective users may view a model's optimal performance against each need category of interest, and may later select for implementation a particular version (or versions) of the model for based on target group-specific performance. Since these are optimized rather than original models, bias has already been minimized; hence, the test for model bias used in Article V has been omitted.[7]

In addition, since the average absolute errors are necessarily smaller for the lower-prevalence need groups than the higher-prevalence ones, all such errors have also been expressed as a percentage of the mean prevalence rate for the relevant group. This makes it possible to compare prediction-error performance of a series of similar models across all of the nested target groups.

Reconfirmation of Validity of Tested Models on Multiple-Component Need Categories. The average absolute error figures (upper panel) and correlations in (lower panel) of Table 2 indicate that both the Slem and the Synthetic-Estimation models performed quite well in predicting to the first three need categories or target groups (*Total or Any Need*, *Any Two Need Components*, and *Diagnosis Plus Dysfunction or Demoralization*). Their absolute prediction errors were substantially less than half the average prevalence rates involved, and their correlations with surveyed prevalence rates were sizeable (ranging from .58 to .68) and statistically significant. For the *Severe* group, however, the correlation for the Slem model fell off considerably (from $r = .59$ to $r = .39$) while the Synthetic-Estimation model did only slightly less well than for the previous group ($r = .53$ vs. $r = .58$). Subarea rate-prediction errors were also quite a bit larger relative to the much lower prevalence rates being estimated. Importantly, for the very low-prevalence *Chronically Mentally Ill* target group, neither of these two model estimates were correlated significantly with the surveyed subarea rates, leaving them unusable for this important task. Nonetheless, both appear capable of predicting not only to the three single-component need caseness indices presented in Article V, but also to the higher prevalence multiple-component need categories that would be important to many states. Hence, it is again apparent that in the absence of direct-survey data on needs for ADM services, state policymakers would do well to implement a social-indicator needs-assessment model that can predict the number of cases needing ADM services in key target groups.

[7]It is important that states implement models calibrated to have essentially no bias relative to the true prevalence rate of the target group(s) whose rates are being modeled. Using biased models (where the average subarea rate prediction does not approximate the average true subarea prevalence rate) will cause the introduction of additional prediction error, and possibly render the subarea estimates completely useless for differentiating subareas in terms of service needs. In addition, using biased models will produce incorrect overall state prevalence estimates.

Performance of Experimental Models With Multiple-Component Categories. The figures in Table 2 for the experimental linear and logistic regression models show that they also performed very well with respect to the five hierarchical need categories. Indeed, they usually outperformed the others. The average absolute prediction errors were equal to or smaller than either of the original models for all target groups except for *Total or Any Need*, where the Slem model did slightly better. In terms of correlations, the new models equaled or exceeded the performance of the original models for all five need groups except in one instance where the Synthetic Estimation model predictions correlated more highly (.53) with *Severe Diagnoses* than the D.U. linear model (.51). A distinctly better performance with respect to the lowest-prevalence target group (*Chronic Mental Illness*) was also apparent; in contrast to nonsignificant values for the original models, the correlations with this target group reached statistically significant levels—.31 and .40 for the linear and logistic-regression versions, respectively. Even for this very low-prevalence need category, these significant correlations again indicate the superiority of an indirect needs-assessment model over the "default" flat-rate assumption.

Relative Desirability of Predictive Models

For the highest prevalence need category (*Total or Any Need*), the choice of a model for use in predicting subarea prevalence could be made on other grounds than empirical performance, such as ease of model calculations or preference for one versus another set of model predictors. For the next two groups, however, the empirical performance of the two D.U. models gives them an edge over the Slem and Synthetic-Estimation procedures. As noted previously, both the *Any Two Caseness Indicators* and *Diagnosis Plus Dysfunction or Demoralization* categories are high-need, high-likelihood of service use target groups that are almost as well predicted by the D.U. models as the lower-priority "Any Need" group. Accordingly, these predictive models are strongly recommended for first consideration by planners in their selection of predictor models.

Planners should review the strengths and weaknesses of alternative models outlined in Article IV before choosing a model for implementation in their state, with particular attention to (1) the content of the model in terms of component social indicators, (2) the complexity of calculating estimates for geographic subareas, and (3) the presumed generalizability of the Colorado equations and parameters to their own state. These considerations are covered in the final section of this article.

Inverse Relationship between Prediction Accuracy and Prevalence Rate

Note that the relative magnitude of need rate prediction errors tends to vary inversely with the prevalence rate being estimated by the various models; that is, error as a percentage of the mean prevalence rate tends to increase as the prevalence rates become smaller for the more specialized target groups. For the lowest-prevalence group (*Chronic Mental Illness*), almost two-thirds of the average prediction will consist of error regardless of the model chosen. Various factors may be involved in this relationship, including the possibility that the lower prevalence rates (at the proportional extremes) are statistically less stable. Whatever the underlying causes, this limitation on prediction capability represents another important reason why state planners should *not* focus solely on the very low-prevalence and more specialized need categories, but instead choose at least one of the larger, higher-prevalence need categories as a key planning and priority target group. Such a choice would allow for greater prediction accuracy across subareas, and thus provide correspondingly greater confidence in allocating ADM service resources differentially to the various subareas. This strategy also fits with the earlier recommendation that an *array* of targeted need groups be selected from all such possibilities, and that the full array be modeled and the resulting need estimates be presented to interested groups for consideration and subsequent allocation of service resources.

SUGGESTED PROCEDURES FOR MODEL IMPLEMENTATION

To implement for any state or region the needs-assessment technology described above and in previous articles of this series, a sequence of specific steps to be followed is outlined below. To illustrate these steps, a hypothetical example for the state of Colorado is described, as if the authors were in fact performing the planning function for that state's ADM services system.

A. Selecting an Array of Need Categories (Target Groups) for Estimation

From the classifications of need variables shown in Table 1 above, planners would select a minimum of two or three categories that (1) match up well with the state's priority target groups for ADM services, and (2) illustrate the full range of types and numbers of persons needing services. In our Colorado example, all five need categories listed in Table 2 will be selected for modeling to illustrate a hierarchy of categories of need for services, from the most broad *Total or Any Need* category to the most specific and high-priority group, *Severe and Chronic Mental Illness*. Note that the prevalence rates for each of these target groups are not additive; instead, each successively smaller target group represents one specific part of the larger group within which it is "nested."

B. Selection of a Model for Calculating Estimates

Next, referring to the empirical average-error and correlation figures in the upper and lower panels of Table 2, as well as the analytic strengths and weaknesses of the various models outlined in Article IV, a predictor model must be selected to generate subarea estimates for these five need categories. In this illustration the choice of model has been made on the basis of three factors: (1) the conceptual and computational attractiveness of a simple two-variable model, particularly one incorporating the politically important *poverty* variable; (2) the fact that the predictions of the D.U. Linear- and Logistic-regression models correlated at above-chance levels with observed *CSHS* prevalence rates for all target groups (including the *Severely and Chronically Mentally Ill*), thereby offering prediction accuracy superior to that obtainable with flat-rate models for all groups; and (3) the greater familiarity of most readers with linear as opposed to logistic regression.

It is suggested that the same model be used to estimate rates for all of the need categories chosen as target groups, because a single model will be simpler and easier to present and justify to legislatures, consumer advocacy groups, budget officials, and ADM services caregivers.

C. Developing the Set of Subareas and Predictor Variables

Since the 3,000- to 4,000-person *census tract* or *census county division* (for nontracted subareas) was used as the unit of analysis for surveying subarea needs and for validating the model prediction equations in this research, this same geographic level was chosen for computing need estimates for all of Colorado's subareas (there are 751 of these in the state). It is suggested that users in other states also start with comparably sized geographic units. Care must be taken that every state subarea is assigned an unduplicated designation or code at the chosen level. While the *Health Demographic Profile System* can provide the 1980 census data for the social-indicator variables required to implement the equations used in these models at this level of geography,[8] the U.S. Census tapes themselves must be accessed if the more recent 1990 predictor data is desired or if a state does not have access to the 1980 *HDPS* tapes.

D. Inserting Equation Parameters, Obtaining Social-Indicator Values, and Calculating Need Estimates

Unless a state has only a few subareas of this size, computer routines are recommended for extracting the necessary social-indicator data and calculating each subareas's prevalence rate for each need category or target group. Since the *HDPS* files are provided by NIMH in the "SAS" computer language format, this software is the computational system of choice for making these calculations.[9]

TABLE 3
D.U. LINEAR-REGRESSION MODEL PARAMETERS FOR ESTIMATING FIVE TARGET GROUP PREVALENCE RATES

Need Category or Target Group	B_0	B_1	B_2
Total or any need	12.2992	0.2309	1.6557
Any two need components	1.3623	0.1578	0.8454
Diagnosis plus dysfunction or demoralization	0.9025	0.1227	0.6015
Severe dx only (schizophrenia, mania, major depression, cognitive impairment)	0.7455	0.0929	0.0739
Chronic mental illness (severe dx of 1-year duration plus dysfunction)	0.7676	0.0169	−0.0069

For the D.U. linear-regression model, the SAS prediction equation for subarea need prevalence rate, in terms of *HDPS* social-indicator variable tables, is:

$$\text{Need Category Prevalence} = B_0 + (B_1 * \text{MNS00029}) + (B_2 * \text{MNS00086}), \quad (1)$$

where MNS00029 is the percentage of total persons below the poverty level, MNS00086 is the percentage of divorced males, and the *B* parameters represent appropriate variable weights for each distinct need category. Values of the *B* parameters for the five illustrative target groups are provided in Table 3. A separate equation containing the appropriate "*B*" parameters is used to calculate subarea prevalence rates for each need or target group being estimated.

After the estimated subarea prevalence rates have been determined, they are used to compute the estimated *numbers* of subarea cases by multiplying each subarea rate by the area's adult population. Again in SAS and *HDPS* terms:

$$\text{Need Category } N = \text{Need Category Prevalence} * (\text{MND00007} - \text{MND00105}), \quad (2)$$

where MND00007 is the total subarea population and MND00105 is the number of children and adolescents under 18.

Since the five need categories are not exclusive of one

[8]The manual by Stiles, Jackson, Goldsmith, and Longest (1984), which outlines the 1980 *HDPS* SAS data file structure for different geographic levels and the specific social-indicators used here, is particularly helpful.

[9]Consultation regarding specific details for accomplishing these steps is available from the authors and others they can recommend.

TABLE 4
COMPUTED NEED ESTIMATES FOR 20 COLORADO PLANNING REGIONS FOR ADM SERVICES

Catchment or Planning Region	1980 Adult Population	Total or Any Need	Any Two Need Components	Diagnosis Plus Dysfunction	Severe Diagnosis	Severe Dx Plus Dysfunction (CMI)
Jefferson County	262,041	63,561	20,074	14,239	4,398	2,358
Colorado Springs area	213,373	52,728	17,325	12,418	4,624	2,372
Denver I – NW	111,581	43,343	17,653	12,749	4,244	1,686
Adams County	144,066	37,153	12,313	8,776	2,825	1,428
Boulder area	134,223	34,961	11,827	8,476	3,017	1,497
NW Colorado	127,403	33,805	11,450	8,180	2,699	1,331
Aurora	118,436	31,375	10,461	7,433	2,182	1,090
Denver III – SE	110,769	31,303	10,816	7,694	2,193	1,040
Arapahoe County	122,147	27,714	8,377	5,939	1,959	1,104
Pueblo area	101,446	26,267	9,017	6,503	2,601	1,282
Denver II – NE	81,773	25,203	9,216	6,599	2,049	913
North Central Colorado	104,091	24,768	8,003	5,748	2,293	1,197
Fort Collins area	83,054	19,853	6,530	4,715	2,037	1,048
Denver IV – SW	65,673	17,144	5,798	4,153	1,461	725
NE Colorado	59,505	13,103	4,071	2,937	1,337	722
Western Colorado	42,796	10,516	3,497	2,520	1,033	525
West Central Colorado	34,448	8,841	2,966	2,126	765	383
SE Colorado	34,990	8,527	2,893	2,103	988	497
SW Colorado	34,197	8,549	2,882	2,079	859	431
San Luis Valley	24,683	6,292	2,235	1,636	818	399
Totals	2,010,695	525,006	177,404	127,024	44,384	22,028

Note: Arranged in descending order of Total or Any Need cases.

another but are "nested," users must not add the need category figures together to obtain "total" need figures. Rather, the first need category (*Total or Any Need*) is the appropriate figure for all cases needing ADM services.

E. Summing Small-Area Estimates Into Planning-Region Need Estimates

The final computational step involves summing the numbers of subarea "cases" into totals for the larger services planning areas they comprise; these should be the same planning areas for which budget allocations are to be determined, so that differences in estimated need can directly influence the allocation of resources. For some states this number will be under 10, while for some larger states it will exceed 50. In Colorado there are 20 such regions; hence, the estimated numbers in need for each subarea target group are aggregated up to the 20 larger planning regions for use at this level, as illustrated in Table 4.

The value of calculating (and also retaining) the smaller subarea prevalence data is that they remind users that the larger service regions are generally *not* homogenous with regard to need rates for ADM services and numbers of cases. Indeed, this fact underlies the relatively successful prediction of small-area need rates by several social-indicator models in this research. Whenever possible, the needs data for subareas within each service region should also be provided to planners and other interested parties to draw attention to smaller "pockets" of particularly high levels of need.

Once the numbers of cases in each planning region have been obtained, these can be converted into regional prevalence *rates* by dividing the numbers of need cases by the corresponding adult population figures. Since rates are not influenced by the relative sizes of the planning regions, they provide a much better picture of differences in need for ADM services across subareas and of the departure of these rates from a uniform-rate or per-capita assumption regarding needs. Such rates for this Colorado illustration are shown in Table 5.

F. Incorporating the Need Estimates Into Regional Resource Allocations

With ADM need estimates in hand, the final task is to integrate the results into a relevant and workable plan for the provision of ADM services. This plan would specify (1) the long-term and short-term objectives of the ADM system(s), (2) the structural resources (facilities, beds, manpower) necessary to meet these objectives, and (3) the temporal prioritization (or "staging") of efforts to realize the objectives. The various ADM need estimates can provide information of value to each stage of the planning process, including objective-setting and prioritization of efforts. Traditionally, however, need estimates are thought to serve primarily as inputs into the specification of resource requirements. Thus, planners are often looking for formulas to convert need estimates into the necessary inpatient beds, residential and day program slots, outpatient visits, emergency services, and the clinical staff plus operating budgets to support them.

At this point of development in services planning

TABLE 5
COMPUTED NEED RATES FOR 20 COLORADO PLANNING REGIONS FOR ADM SERVICES

Catchment or Planning Region	1980 Adult Population	Total or Any Need	Any Two Need Components	Diagnosis Plus Dysfunction	Severe Diagnosis	Severe Dx Plus Dysfunction (CMI)
Denver I – NW	111,581	38.8	15.8	11.4	3.8	1.5
Denver II – NE	81,773	30.8	11.3	8.1	2.5	1.1
Denver III – SE	110,769	28.3	9.8	6.9	2.0	0.9
Aurora	118,436	26.5	8.8	6.3	1.8	0.9
NW Colorado	127,403	26.5	9.0	6.4	2.1	1.0
Denver IV – SW	65,673	26.1	8.8	6.3	2.2	1.1
Boulder area	134,223	26.0	8.8	6.3	2.2	1.1
Pueblo area	101,446	25.9	8.9	6.4	2.6	1.3
Adams County	144,066	25.8	8.5	6.1	2.0	1.0
West Central Colorado	34,448	25.7	8.6	6.2	2.2	1.1
San Luis Valley	24,683	25.5	9.1	6.6	3.3	1.6
SW Colorado	34,197	25.0	8.4	6.1	2.5	1.3
Colorado Springs area	213,373	24.7	8.1	5.8	2.2	1.1
Western Colorado	42,796	24.6	8.2	5.9	2.4	1.2
SE Colorado	34,990	24.4	8.3	6.0	2.8	1.4
Jefferson County	262,041	24.3	7.7	5.4	1.7	0.9
Fort Collins area	83,054	23.9	7.9	5.7	2.5	1.3
North Central Colorado	104,091	23.8	7.7	5.5	2.2	1.2
Arapahoe County	122,147	22.7	6.9	4.9	1.6	0.9
NE Colorado	59,505	22.0	6.8	4.9	2.2	1.2

Note: Arranged in descending order of Total or Any Need *rates*.

technology, however, no such conversion formulae are available. It seems likely that hospital and residential care would be needed for at least some of the persons falling into each of the five need categories illustrated here, and in greater proportion as the groups increase in "severity" of ADM problems. However, since need prevalence itself *decreases* with increasing severity, the total number needing such care is more difficult to estimate. Further, it is unlikely that simple procedures for converting needs data into optimum service configurations will be available in the near future; the complexities of ADM services delivery are now simply too great. Critical factors other than need estimates themselves would include the administrative structures involved (integrated vs. separate systems for mental health and substance abuse services), hospital/program admission policies, service program eligibility criteria (type of problem, area of residence, age, financial resources, and so forth), and clinician resources available in the different state planning regions (including urban/rural differentials).

In addition, the interacting role of *private* mental health services must be factored into the planning. For example, in a 1980 statewide survey of Colorado's public and private mental health specialty treatment resources, the number of persons receiving private care was approximately equal to the number receiving publicly supported services (Barbeito-Thompson, Grosser, & Coates, 1980). On its face, this might imply that public-system planners could plan to serve only about half the persons estimated to need ADM services. Yet this study finding already reflects the eligibility and admissions policies of Colorado's service systems at that time – and this was *prior* to the severe cutbacks that occurred in human services budgets in the eighties, which may have helped force the adoption of far more restrictive service eligibility policies. While no follow-up study data are available to show the current volume of ADM clients receiving private care, it seems unlikely that restricting admissions to public programs would automatically redirect the service-seekers to the private sector.

Similar considerations are necessary for the appropriate role of the primary health care system. A number of studies (including unpublished papers from this research project) have shown that a majority of individuals seeking help for ADM problems obtain their care from medical-sector physicians, nurses, and social workers. Ensuring that such persons receive the best possible care (or at least "appropriate" interventions) in such systems, or will be referred to specialized ADM service providers as needed, requires that this part of what has been termed the "de facto mental health service system" (Regier, Goldberg, & Taube, 1978) be formally recognized and dealt with in public ADM services plans.

Planners also must be aware of the distinction between ADM need and the expressed *demand* for ADM services. Regardless of the manner in which target groups are defined, a sizeable number of individuals will neither seek nor obtain services because of "stigma" and other factors (see Goldsmith, Jackson, & Hough, 1988 for a guide to the literature on the multiple factors facilitating and inhibiting the decision to seek services).

TABLE 6
PERFORMANCE COMPARISON OF SELECTED OPTIMIZED MODELS FOR A COMBINED ALCOHOL OR DRUG ABUSE/DEPENDENCE TARGET GROUP

Measure of Model Fit	Model			
	Synthetic Estimation	Slem Regression	D.U. Linear Regression	D.U. Logistic Regression
Average absolute deviations (from 4.5% surveyed prevalence rate) and deviations as a percentage of observed CSHS rates (in parentheses)	2.0% (44.5)	1.9% (41.3)	1.9% (41.2)	1.9% (42.4)
Product-moment correlation with need measure	.38	.42	.44	.43

Accordingly, the demand for services stemming from a given need target group will probably be significantly smaller than either direct-survey or indirect need estimates would indicate.

Other factors will be important as well, particularly at the local level—geographically dispersed versus centralized services and entry points, coordination mechanisms between different programs, immediately available bed capacity, and referral patterns by medical-sector, social services, and law enforcement agencies, to mention just a few.

Thus the procedure(s) by which ADM need estimates are ultimately "converted" into resource requirements and budgets in state planning efforts is not simple. It is likely that states will have to continue to draw on their own experience and that of other states in the resource-allocation process. As a consequence, services and resources allocation strategy and tactics will continue to be rather rough-cut, historically influenced, and politically very sensitive. Under the current conditions of universally felt constraints on ADM funding in an era of sustained scarcity, focusing on "optimal" allocation using need estimates is probably a misplaced effort. Instead, a focus on "equity" of service opportunities for persons and regions within a state seems more appropriate—and geographic needs estimates for different priority target groups constitute an important vehicle for addressing the equity issue. While we may not know what specific service configurations are needed in each area for each group, nor what an optimal distribution of resources would look like, we *can* begin to use indirect need estimates to identify currently *inequitable* distributions of resources and set the stage for actions to address this key issue.

Estimating Need for Substance Abuse Services

In states where the same agency is responsible for alcohol, drug, and mental health programs (and where regional planning responsibilities are also combined), the above equations will be appropriate for planning services involving *all* diagnosable disorders including substance abuse and/or dependence. However, in some states the responsibilities for substance abuse and mental health service programs are separated; appropriate planning figures would therefore appropriately exclude one or the other category. For "mental health only" programs, multiplying the obtained subarea estimates for *Total or Any Need*, *Any Two Need Components*, and *Diagnosis Plus Dysfunction/Demoralization* by .862, .901, and .862, respectively, will provide initial approximations to need category percentages exclusive of alcohol and drug abuse disorders (assumed to be proportionally constant to other diagnoses). When substance abuse is expected to vary relative to other diagnoses across subareas, these estimates may not be accurate and planners may wish to contact the authors regarding exact parameters.

For separate substance abuse programs, however, different equations are necessary to obtain better-than-flat-rate estimates across subareas. Shown in Table 6 are the average absolute errors and correlations with surveyed need of several of the better predictive models for estimating need for substance abuse services only, as assessed via *DIS*/DSM-III alcohol and drug abuse and/or dependence *diagnoses* (everyday dysfunction and demoralization are ignored here). Alcohol problems strongly dominate this combination in Colorado, as that prevalence rate is about double that for all other drug abuse problems ("severe" or "not severe").[10] Planners could select any of the better-performing models to estimate subarea prevalence of need for substance abuse services, basing their choice upon a preference for the model's social-indicator content and the calculation procedure involved, with approximately equivalent results in terms of accuracy. Note that these model prediction errors tend to be larger and the correlations with surveyed need lower than for the combined mental health-substance abuse need categories shown in Table 2; it appears that both area and individual characteristics are less predictive of this specific category of ADM problems, at least in Colorado.

[10]To better represent the actual prevalence of drug abuse disorders for ADM services planning purposes, *DIS*/DSM-III prevalence rates *excluding* "severity" criteria are used in these analyses and table figures. Such rates are higher than those for "severe" drug disorders only, and parallel published ECA prevalence rates that also do not restrict drug abuse rates with *DIS* severity criteria.

Also, since these substance abuse figures still include persons with *both* substance abuse and mental health disorders, they cannot be simply subtracted from the all-inclusive ADM categories in Table 2 to obtain mental-health-only figures, as this would eliminate "dually-diagnosable" cases from the mental health need estimates. Planners desiring specific model parameters for estimating either composite or specific need categories other than those shown in this illustration should contact the authors.

ADDITIONAL CONSIDERATIONS AND CAVEATS REGARDING MODEL IMPLEMENTATION

Implementation of an indirect needs-assessment model and incorporating its results into the allocation of public ADM service resources is an important undertaking, particularly if a state has not previously considered such an option. Both services dollars and caregiver jobs could be shifted if a needs-assessment plan is implemented in locations where previous resource allocations have ignored epidemiologic considerations. Accordingly, limitations of the procedures must be understood, especially when soliciting the cooperation of legislators, budget officials, citizen groups, and consumer groups in the new procedure. Some of these are discussed below; others will certainly occur to readers. While space precludes covering all such considerations known to the authors, planners should focus at least some time and effort on reviewing conditions that will facilitate or hamper implementation of a model, the limitations on its performance, and potential problems in its use.

Model content

While all the models studied are comprised of social indicators that have been found to be related to ADM problems in epidemiologic research, the four models discussed in this article are not identical in terms of indicator content. They are roughly similar in that they all contain a *marital-disruption* indicator. Only the two D.U. models contain the *poverty* dimension, however, which was generally the strongest single predictor of need in this research—especially for severe cases. The Slem regression model, which contains no income or other "social class"-linked predictor, relies on *persons living alone* as its second predictor and may not be as appealing to some audiences as an index of socioeconomic disadvantage and financial hardship. The Synthetic Estimation model studied here also contains no income indicator.[11] On the other hand, it is the only model that uses *ethnic minority* status; some states may prefer this direct linkage to ADM service needs of large Black and Hispanic populations (but note that this model does not successfully predict to the *Severe and Chronic Mental Illness* category).

Complexity of Calculations

The Slem and D.U. linear regression models have the advantage of containing only two predictor variables, thus offering the simplest computations. The D.U. Logistic regression model also has only two variables, but is algebraically more complex than the linear regression version since it involves an exponential function. However, the trade-off for this slight increase in mathematical complexity is the elimination of the possibility of obtaining out-of-range need estimates (less than 0% or more than 100% in need) for extremely atypical subareas.[12] In contrast, the Synthetic Estimation model tested here involves 72 variables and parameters (representing cross-tabulations of four 2- to 4-category demographic predictors). It requires disaggregating each of a state's small area populations into these 72 demographic-predictor categories, multiplying the category numbers by the category-specific need rates, and then reaggregating the results. Computer capability is a requirement for calculations of this scope.

Generalizability of Optimized Models

Although the data presented support the use of indirect social indicator models for assessing subregion needs for ADM services, their implementation elsewhere assumes that the results obtained for models and parameters in Colorado can be generalized to other settings. Can this be safely done? Perhaps the best advice would be that a planner should be both pragmatic and skeptical. On the pragmatic side, the authors believe that the models described here are superior to the use of flat-rate models, and may also perform at least as accurately as alternative models not yet tested empirically. However, until attempts are made to validate further the optimized versions of these models, there are some grounds for skepticism and caution.

First, the models presented are optimized with regard to a particular sample of 48 subareas of Colorado. The statistical estimation procedures employed in this study select parameter values based on the patterns of variation and covariation manifested in this particular sample; hence, these parameters applied to any other sample of 48 subareas would be unlikely to generate an equally good fit of predicted with observed need rates. It seems likely, therefore, that the models will not perform as well when applied to another set of subareas, whether in Colorado or in other states. Given this likelihood, the

[11] A synthetic estimation model for Texas counties containing *education*, which has been found to be closely related to socioeconomic status, has been presented recently by Holzer, Swanson, Ganju, Goldsmith, and Jackson (1989).

[12] Except for the *Severely and Chronically Mentally Ill* group, planners should feel free to use the simpler Linear regression version provided they are prepared to deal appropriately with any out-of-range subarea need estimates that may be obtained.

question is whether the performance of the model would still be preferable to alternative needs assessment procedures (such as flat-rate models) which performed substantially less well in this study. Since this research calls flat-rate models sharply into question, the pragmatic alternative would be to use these models in other settings until additional validity research indicates otherwise.

Second, readers should recognize that important social indicators may have been omitted from the optimized models as a result of the small sample of subareas. A sample size of 48 limits the ability to build more complex models by limiting detection of all but the largest effects. For example, the D.U. linear and logistic regression models contain only two predictor variables (percentage in poverty and percentage of divorced males). Statistical analysis indicated that additional social indicators provided little or no predictive benefit once these two variables had been entered into the regression equations. However, had a sample of 200 subareas been available for estimation, other social indicators might have survived the statistical culling procedure and been incorporated into these models. To the extent that such "omitted" variables are important sources of variation within states, they could produce another type of prediction error that limits generalizability of these models. Planners must recognize such risks when seeking to generalize the *CSHS* models to their own states.

In this vein, some consideration should be given to the similarity of a potential user state's population to that of Colorado. For example, Colorado's population is heavily non-Hispanic White with only one large ethnic minority group—Hispanics of Mexican-American descent. While ethnic-minority status did not account for significant variation in need when added into the predictive equations, this might not have been true for a Southern state with a much larger and more diverse Black population, or for a highly industrialized Eastern state with large urban Black and Hispanic communities.

In considering the generalizability issue, planners should also realize that use of one of these models does not imply that the overall ADM need rate(s) obtained for a given state will approximate that for Colorado. Of course, the more similar the two states are in terms of sociodemographic indicators used as predictors of need for ADM services, the more similar will be the overall rates of estimated need. But where the states differ sharply on key social indicators, the use of these models should generate similarly sharp differences in estimates of both subarea and overall state needs for ADM services.

No simple "rules of thumb" can be offered by the authors regarding sociodemographic differences that would be large enough to deter selection of any specific social-indicator model on grounds of questionable generalizability. A state's best protection against implementation of a potentially inappropriate model is a careful review of the epidemiologic literature with respect to the predictor variables used in the model(s), followed by consideration of the user state's sociodemographic composition in terms of those variables.

Adjustments Required for Age and Institutional Groups

Two final points should be made regarding the models presented here to ensure that the prevalence rates obtained from them are used properly. First, none of the rates presented in this or the preceding articles include any persons with mental health or substance abuse problems who are under age 18. Hence, all needs for child and adolescent ADM services would constitute *additional* service needs beyond those tabulated here for adults and the elderly.

Second, persons residing in "group quarters"—including key ADM institutions such as long-term care mental hospitals, nursing homes, boarding homes, and halfway houses with more than nine residents—were not represented in the *CSHS* household survey. Often, however, states receive periodic reports from such institutions (at least publicly supported ones) and could add to model-based prevalence estimates the number of persons who (1) resided in these institutions within any 1-month reference period (to match the *CSHS* 1-month reporting period), and (2) would meet similar diagnosis, dysfunction, and demoralization criteria for selected categories of need for ADM services. If the latter data are not available, alternative methods would have to be used to estimate this group-quarters prevalence rate and associated number of cases.

CONCLUSION AND IMPLICATIONS FOR FUTURE SERVICES PLANNING

This article has attempted to cover the conceptual issues and practical procedures involved in applying the research reported in this article series to the estimation of needs for ADM services across a large geographic area such as an entire state. The following general conclusions and implications from these findings and considerations appear to be warranted.

First, there is probably no single index or criterion of need for ADM services that fully captures all of the important aspects of such need. Notwithstanding the advances made in assessing general-population ADM problems with the *Diagnostic Interview Schedule* and the determination of the prevalence of diagnosable disorders in the general population, both *everyday dysfunction* and *demoralization* are important and independent components of need for services, especially in combina-

tion with diagnosis as definers of high-priority target groups.

Second, the extensive variation in need rates found across Colorado's subareas should encourage abandonment of the assumption of equal rates of need in all areas and the associated use of a flat-rate or "per capita" model for allocating service resources in these areas. Policymakers can and should strive to make differential allocations of service resources appropriate to different state subareas if they wish to allocate resources equitably, in proportion to estimated prevalence of need for ADM services.

Third, a number of social-indicator models have been shown to be capable of predicting with a significant degree of accuracy the surveyed rates of important categories of need for ADM services in different subareas of a state. Except for the lowest-prevalence *Chronically Mentally Ill* target group, all four models presented in this article are more accurate predictors of prevalence of all categories of need for ADM services than a flat-rate assumption and model. Further, the experimental models developed in this research are significantly more accurate for the chronic category as well.

Fourth, in order to make proper use of this technology, service planners must consider and prioritize those categories of need for ADM services that are to be designated as "target groups." Such designations constitute key policy decisions that will establish the percentage(s) and number(s) of the general population for whom ADM services are being planned, both for the state as a whole and for its subareas. The same policy decisions should simultaneously influence a planner's choice of the particular social-indicator model to be implemented for estimating these need categories, since the ability of most models to estimate different ADM target groups can vary substantially.

Fifth, successful implementation of one of the models tested in this research can be a complex, though fairly inexpensive, enterprise. It should be undertaken carefully and with a full understanding of the strengths and limitations of the models, including the issues regarding the generalizability of the model parameters for Colorado to the planners' own states. Access to research, statistical, and computer expertise is also important for successful implementation and use of one of the recommended models.

It seems realistic to expect that most, if not all, states could sharply improve the accuracy and equity of their ADM services planning and resources allocation if the indirect needs-assessment technology described in this research were implemented and the results integrated into their services planning processes. ADM needs-assessment data can be highly useful to states in several ways. They should increase policymakers' confidence in the appropriateness and equity of their resource allocation decisions for the state as a whole and for its different planning subregions. These data may also help a state service system "make its case" for a more appropriate budget by providing empirically sound quantification of its highest-priority ADM service needs. Finally, such data would enable a state to present its funding requests in the context of the full spectrum of ADM needs across the state; this may assist legislators to see that only the "tip of the needs iceberg" is usually targeted, and that adequate services funding for this "tip" is both desirable and important to public welfare.

Valid needs assessment technology is available and ready for use. An important remaining task is to achieve a sufficient number of state implementations and additional cross-validation studies to develop extensive experience with the technology. Such experience may provide both the basis and impetus for advancing our ability (now lacking) to estimate the specific kinds and volumes of services needed for adequate coverage of ADM service needs.

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SELECT COMMITTEE COPY

APPENDIX H

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Maria G. Chavez
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Diane LeResche, Ph.D.
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CLINICAL PROGRAMMING SURVEY

1. Name_____
(Optional)

2. Occupation_____
(e.g., Mental Health Technician, Clinical Psychologist)

3. Agency_____

4. Tribe_____

5. Number of years experience you've had, which helps you in answering this survey?

_____

6. Are you answering this by yourself? (Please circle) YES NO

7. If "No", who did you gather ideas from (not their names: just their roles; e.g., community members, professionals, etc.)

_____

_____

8. Community/Region of New Mexico you'll be addressing when answering this survey:

_____

9. Are there two people who you think are very important to contact on these matters?

_____
Name Phone Number

_____
Name Phone Number

SECTION I

We have structured this questionnaire to be done in a certain order. Please complete Section I before going to Section II, and Section II before going on to Section III. When you finish you can go back and change any responses you wish. Thank you for your cooperation and information!!

1. Please describe what you believe to be the most critical unmet mental health and substance abuse needs of New Mexico Native Americans. Please provide (attach) any data you have which supports or documents these unmet needs.

_____

_____

_____

_____

_____

2. Do you believe that a new statewide organization or facility is needed to address the unmet mental health and substance abuse needs of Native Americans in New Mexico?

_____ YES _____ NO

If no, what strategies would you recommend to meet current unmet needs?

_____

_____

_____

_____

_____

3. If you do believe that a new statewide organization or facility is needed to address the unmet mental health and substance abuse needs of Native Americans in New Mexico, please indicate which functions you think the organization/facility should perform and how great the need is for each. Please list these functions/components and rate each one you have listed. (Continue on back page if necessary.)

1 = of most need or importance
2 = of moderate need/importance
3 = of lesser need/importance

_____

_____

_____

_____

MODEL E

TRIBAL REP. COPY

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(Optional)

2. Occupation_____
(e.g., Mental Health Technician, Clinical Psychologist)

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4. Tribe_____

5. Number of years experience you've had, which helps you in answering this survey?

_____

6. Are you answering this by yourself? (Please circle) YES NO

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Name Phone Number

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_____

_____

_____

_____

_____

2. Do you believe that a new statewide organization or facility is needed to address the unmet mental health and substance abuse needs of Native Americans in New Mexico?

_____ YES _____ NO

If no, what strategies would you recommend to meet current unmet needs?

_____

_____

_____

_____

_____

3. If you do believe that a new statewide organization or facility is needed to address the unmet mental health and substance abuse needs of Native Americans in New Mexico, please indicate which functions you think the organization/facility should perform and how great the need is for each. Please list these functions/components and rate each one you have listed. (Continue on back page if necessary.)

1 = of most need or importance
2 = of moderate need/importance
3 = of lesser need/importance

_____

_____

_____

_____

MODEL I

Primary Purpose of Facility - Provide (1) full evaluation for complicated problems, (2) intermediate care for up to six weeks, (3) locked and maximum care facilities for safety, (4) local short term 4-5 day care in satellite facilities that are supported by a strong outpatient program.

Types of Services at a Central Facility - Full evaluation diagnosis, short term and intermediate treatment, fully developed aftercare program that would work closely with satellites and community, full range of services for children, adolescents, adults, elders, and dually diagnosed patients.

Types of Services at Satellites - Medical, neurological psychiatric, substance abuse detox unit for short term emergency evaluation and care (5-7 days). One-to-one nursing provided for safety of selected patients. Close relationship with outpatient and traditional healers would be an integral part of programming. A small hostel for family and patients and transportation to and from central facility.

Size - Central facility: 8 children, 8 adolescents, 24 beds for adults, dual diagnosis patients and elderly. (Total 40 beds)

Satellites - Six to twelve (6-12) beds each, depending on location.

Referral - Long term and medically complicated patients would be referred to existing specialized facilities (e.g., Las Vegas, University of New Mexico Neurological Services.)

Relative Expense for Construction and Operations - Moderate to high

MODEL II · FACILITY-without-WALLS

Primary Purpose of Facility - Focus is not on main facility; rather, it is on community-based services. Main facility is only for centralized patient case-management (tracking), a New Mexico and regional information clearinghouse on providers primarily addressing Native Americans needs, community care-giver training, dissemination of promotion and prevention information. Three to four regional facilities are for evaluations, limited in-patient services, provision and management of home-based treatment. Treatment and rehab services are as de-centralized from regional centers as is possible.

Types of Services Provided at Main Facility - Computerized patient history and current status information (access very limited, confidentiality locked). 24-hour telephone clearinghouse for information on provider locations, availability of beds and services, and appropriateness for Native Americans. Coordination of continuous training for community care-givers (MH Techs, foster-care families, etc.). Hostels for trainees. Classrooms. Promotion and prevention services (material development and distribution, itinerant presenters).

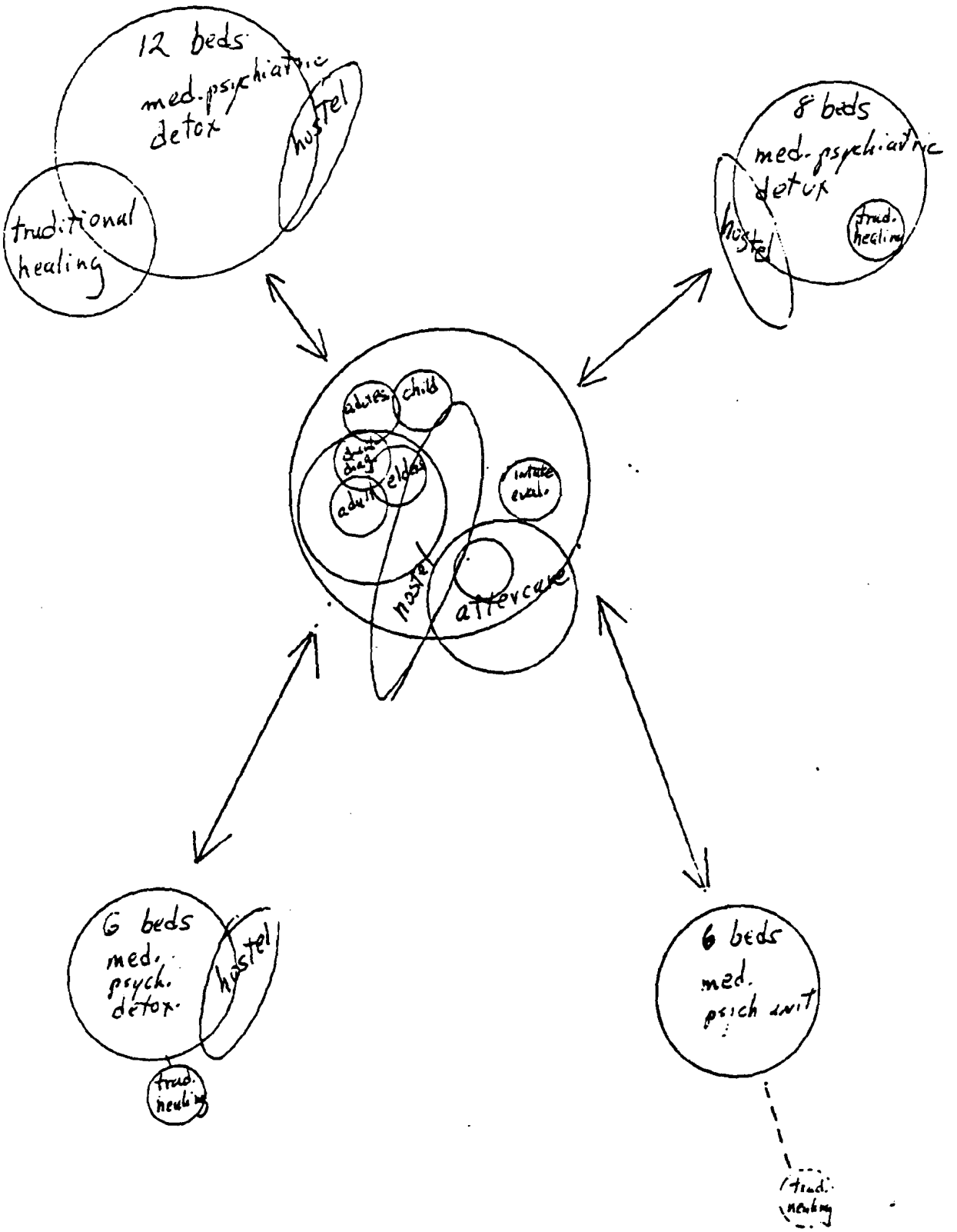
Types of Services Provided in Regional Facilities - Casefinding, screening, patient assessments, detox, treatment planning, limited treatment (medical and traditional) actually in the facilities, and case monitoring. Very few in-patient beds. Referrals to existing resources for long-term care needs. Community teams plan and deliver out-patient and home-health care as close to the patients as is feasible. Transportation. Staff housing.

Length of Stay - No patients at main facility. Short term stays in regional facilities.

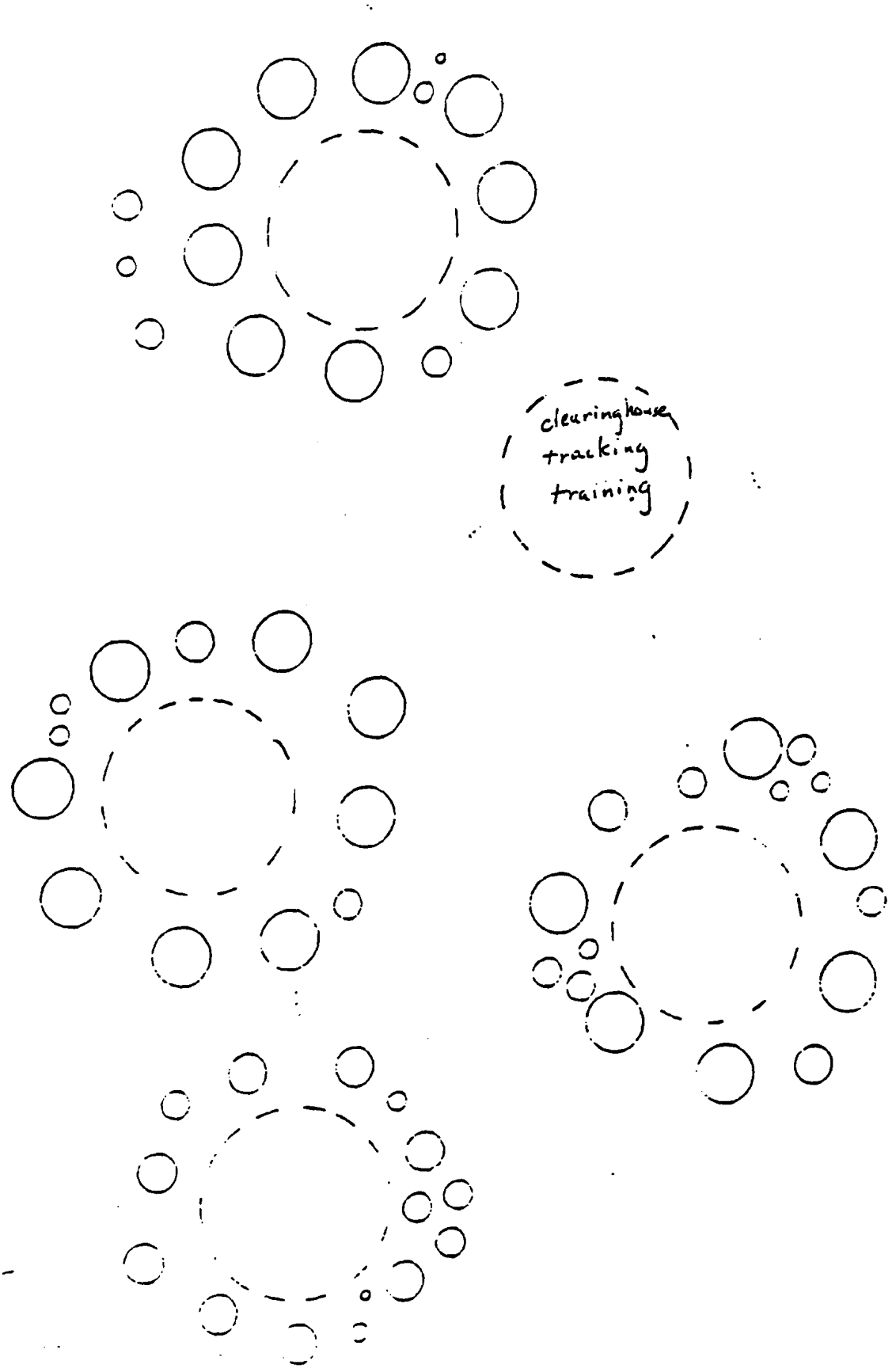
Size - Small main facility. Three or four regional facilities with approximately 10 beds in each.

Relative Expense for Construction and Operations - Low cost for main facility. Moderate for modifying existing structure and/or to construct new regional ones. Operating expenses in regional facilities high if level of service is high.

MODEL I


12 beds
med-psychiatric
detox
hostel
traditional
healing
8 beds
med-psychiatric
detox
hostel
trad.
healing
adults
child
adult
elders
intake
eval.
hostel
aftercare
6 beds
med.
psych.
detox.
hostel
trad.
healing
6 beds
med.
psych unit
trad.
healing

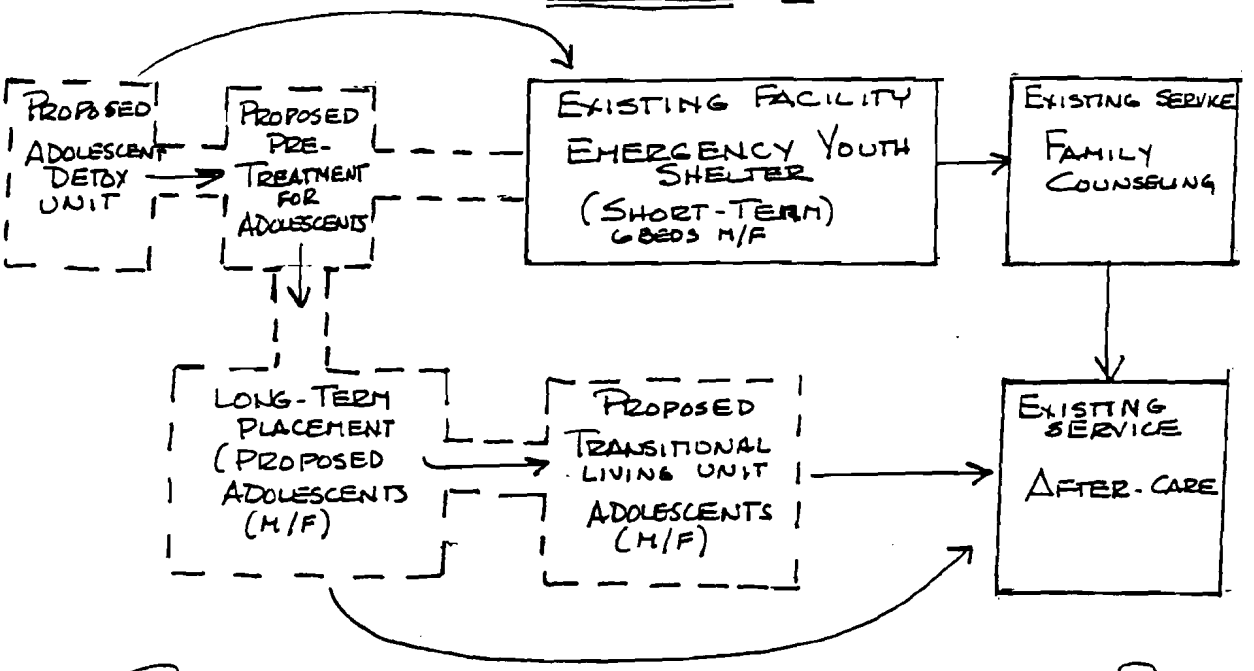
MODEL II - FACILITY-WITHOUT-WALLS



APPENDIX I
SECTION III

Please design a model which you feel best meets the needs of Native Americans. Two models are provided for you to review if you wish.

MODEL 1.

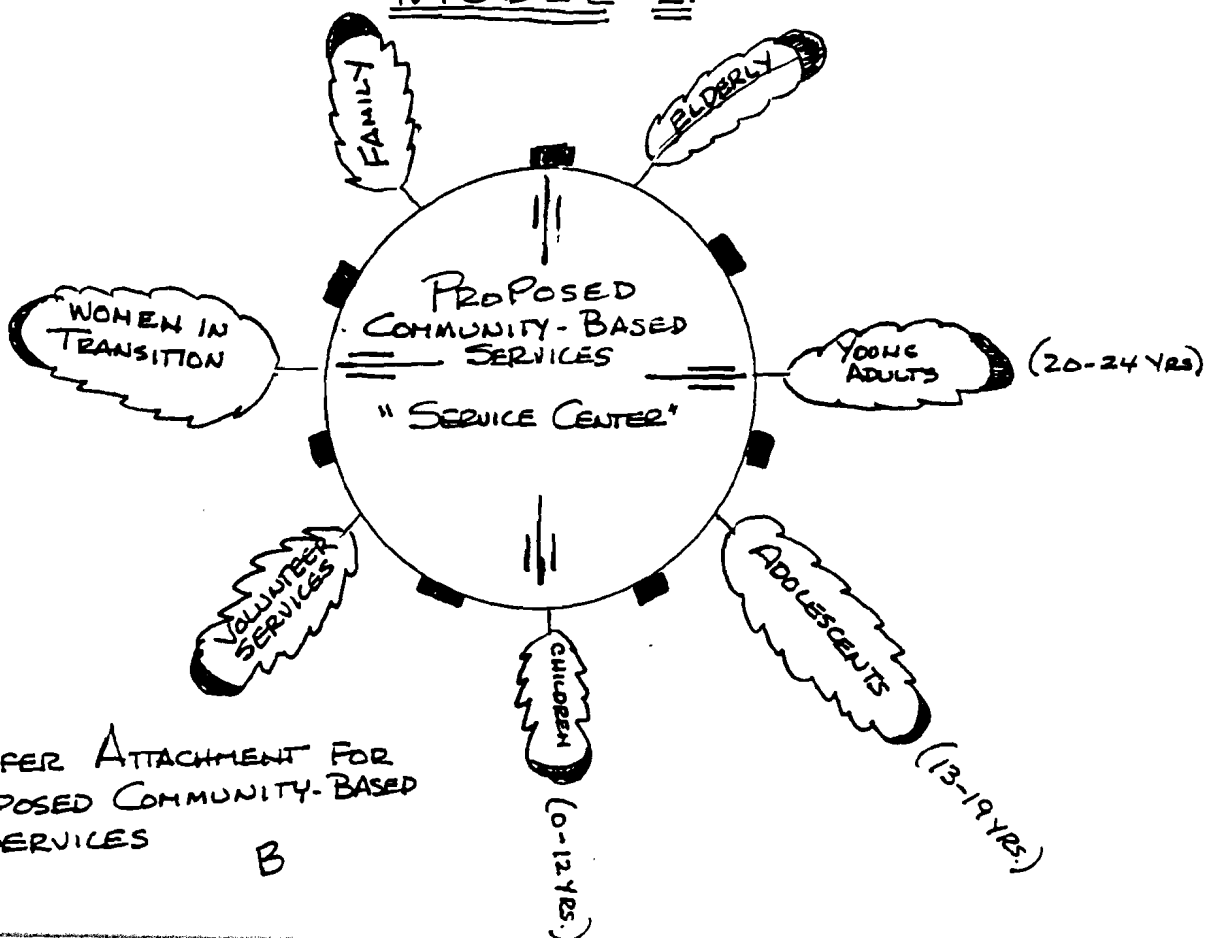


REFER ATTACHMENT FOR EXPLANATION OF EXISTING & PROPOSED SERVICE DELIVERY

A

LAN

MODEL 2.



REFER ATTACHMENT FOR PROPOSED COMMUNITY-BASED SERVICES

B

SECTION II

There are many components that go into a mental health facility. We would like your opinion to what is:

(1) essential - requires priority funding (choose only 5 items)
(2) required - could be reduced if there are funding restrictions
(3) very useful but could be deleted if there are major restrictions in funding
(4) should be deleted
(5) essential but should be provided by other agencies (choose at least 3)

To assist in prioritizing we ask that you only rate 5 items as #1 and at least 3 items as #5. Please leave blank any item you feel is inappropriate for you to answer.

	ESSENTIAL	REQUIRED	VERY USEFUL	DELETE	PROVIDE BY OTHERS	
Inpatient - Childrens Unit	1	2	3	4	(5)	1
Inpatient - Adolescent Unit	1	2	3	4	(5)	2
Inpatient - Adult Unit	1	2	3	4	(5)	3
Inpatient - Elders Unit	1	2	3	4	5	4
Dual Diagnosis Unit	1	2	3	4	5	5
Detox Unit (for adolescents)	(1)	2	3	4	5	6
Hostel for Families	1	2	3	4	5	7
Locked rooms for patient protection	1	2	3	4	5	8
Hostel for aftercare workers & trainees	1	2	3	4	5	9
Intake evaluation unit with a comprehensive Medical, Neurological, Psycho/ Social/Cultural Assessments	1	2	3	4	5	10
Neuropsychlogical Testing	1	2	3	4	5	11
Neurological Evaluations by Neurologist	1	2	3	4	5	12
MRI, CT Scan - X-ray	1	2	3	4	5	13
Complete Laboratory	1	2	3	4	5	14
Family Therapy Program	(1)	2	3	4	5	15
Group Psychotherapy	1	2	3	4	5	16
Individual Psychotherapy	1	2	3	4	5	17
Crisis Unit - Short-Term Stay	(1)	2	3	4	5	18
Traditional Healers available on site for evaluation/treatment	1	2	3	4	5	19
Full Training Capabilities with extensive support for field workers	1	2	3	4	5	20
Aftercare Program - Extensive Field Support	1	2	3	4	5	21
Case Management System under auspices of the facility	1	2	3	4	5	22
Health Promotion and Prevention for service catchment area	1	2	3	4	5	23
Transitional Living Facility(s)	(1)	2	3	4	5	24
Transportation to and from central facility	1	2	3	4	5	25
Health Promotion Program for patients at the facility	1	2	3	4	5	26
Spiritual Evaluation and counseling	1	2	3	4	5	27
Traditional Healing Facilities	1	2	3	4	5	28
Traditional Activities - music, dancing, sand painting	1	2	3	4	5	29
Occupational Therapy - Including Native Arts	1	2	3	4	5	30
Rehabilitation (living, communications & social skills training)	(1)	2	3	4	5	31
Vocational Training	1	2	3	4	5	32
Art Therapy	1	2	3	4	5	33
Other	1	2	3	4	5	34

SECTION I

We have structured this questionnaire to be done in a certain order. Please complete Section I before going to Section II, and Section II before going on to Section III. When you finish you can go back and change any responses you wish. Thank you for your cooperation and information!!

Need to emphasize family in relation to increasing delinquent children.

1. Please describe what you believe to be the most critical unmet mental health and substance abuse needs of New Mexico Native Americans. Please provide (attach) any data you have which supports or documents these unmet needs.

Family Intervention / Family in Crisis / Family Dysfunctioning that may / may not be alcohol-related but families in need of help. Intensive intervention / Services to upgrade family functioning to maintain more healthier environment. Many families remain dysfunctional while family member going through Substance Abuse treatment — resulting in treated family member returning to unhealthy home environment and facing possible relapse.

2. Do you believe that a new statewide organization or facility is needed to address the unmet mental health and substance abuse needs of Native Americans in New Mexico?

_x_ YES ____ NO

If no, what strategies would you recommend to meet current unmet needs?

N/A

3. If you do believe that a new statewide organization or facility is needed to address the unmet mental health and substance abuse needs of Native Americans in New Mexico, please indicate which functions you think the organization/facility should perform and how great the need is for each. Please list these functions/components and rate each one you have listed. (Continue on back page if necessary.)

1 = of most need or importance
2 = of moderate need/importance
3 = of lesser need/importance

Rating

(1) - Emphasis on high relapse potential associated with addictive diseases and the need to provide intensive After-Care and relapse prevention subsequent to Inpatient treatment.

(1) Transitional Living Facility: Adults & Adolescents (two separate components)

(1) Family Intervention

(1) Women's Support Groups — Peer Support Groups

Model 1. Facility — Attachment A

I Existing Facility/Services

Geographical Area Served: The Eight Northern Pueblos: Taos, Picuris, San Juan, Santa Clara, San Ildefonso, Nambe, Pojoaque, and Tesuque.

The Emergency Youth Shelter provides short-term placement services to six youth (male/female) between the ages of 9-18. The Emergency Youth Shelter is staffed 24-hours daily, seven days/week. Services include a 24-hour Hotline service, substance abuse education, individualized treatment planning, individual/group/family counseling, evaluation and placement services, on-site GED course work for youth not enrolled in an educational institution, tutoring, and After-care services.

Length of Placement: 14-30 days. Long-term placements are considered on bed space availability.

Staffing: Director, Case Manager, House Manager, Night Attendent, and (3) Residential Instructors.

ATTACHMENT A

II. PROPOSED FACILITY/SERVICES

A. ADOLESCENT DETOX UNIT (8 beds, M/F)

There are no detoxification facilities available for adolescents within the catchment area. Many adolescents are placed at the Santa Fe County Detention Center for a 72-hour detox period prior to admission at the Santa Clara Emergency Youth Shelter.

The proposed Adolescant Detox unit will provide detox services at a more centralized location and eliminating placing youth in a Detention Center; cost savings for tribes who have to pay approximately $100/day/client.

Length of Stay: 3-5 days

Staffing: 8 Detox Counselors for 24-hour coverage
1 RN/EMT on call 24-hours basis

B. PROPOSED PRE-TREATMENT UNIT FOR ADOLESCENTS (8 Beds, M/F)

This unit will provide for: (1) screening; (2) full evaluation (psycho-social) of the adolescent's problems, (3) determine placement: short-term or long-term.

Length of Stay: 3-5 days

Staffing: Case Manager (MSW preferred)

C. PROPOSED LONG-TERM PLACEMENT (10 Beds, M/F)

This Unit will provide: (1) intermediate treatment; (2) 24-hour supervised inpatient services, with strong emphasis on substance abuse; (3) same services as short-term but more comprehensive; (4) individualized treatment planning.

Length of Stay: 90-120 days

Staffing: 8-10 counselors (preferably certified) for 24-hour coverage.

ATTACHMENT A

D. PROPOSED ADOLESCENT TRANSITIONAL LIVING UNIT (10 BEDS, M/F)

Phasing-out of clients back to family environment or independent living. Emphasis on substance abuse Relapse Prevention, strengthen utilization of available support groups and services, skills building, vocational/educational/career training and/or placement, employment opportunities, housing, case management. Focus on individual, group and family counseling. 24-hour service.

Length of Stay: 60-90 days, based on individualized treatment plans.

Staffing: 4 Counselors, 1 Case Manager, 1 After-Care Counselor

* Clients released from long-term placements will receive an additional 6 months After-Care services provided through existing services of the Emergency Youth Shelter program or possibly hire an After-Care Counselor under "Proposed Services".

MODEL 2. FACILITY-WITHOUT-WALLS ATTACHMENT B

PROPOSED COMMUNITY-BASED SERVICES

Geographical Area to be Served:

Santa Clara Pueblo

(NOTE: Other Eight Northern Pueblos might design their own individual Community-based Services dependent upon respective community needs assessments and ranking of priorities.)

EXISTING SERVICES

Under the auspices of the Santa Clara Tribal Administration, 18 programs are designed to provide multi-services delivery to the residents of the Santa Clara Pueblo. These programs provide both community and social services oriented services to benefit all age groups represented in the community.

However, the general contention is that something else is needed for better utilization of services and working towards betterment of the entire community and residents.

Therefore, it is essential to develop on the idea of establishing a "Community Services Center". (Refer to drawing of Model 2.)

Functions of Proposed Community Services Center

1. Clearing house for information
2. Provide support services
3. Outpatient Counseling
4. Referral Services
5. Vocational / Educational / Career Counseling
6. Training Opportunities
7. Skills Building
8. Dissemination of Promotion / Prevention Information
9. Materials Development and Distribution
10. Plan, Develop / Implement activities for the entire community (monthly / quarterly or special occasions)
11. Provide Parenting Skills
12. Domestic Violence
13. Fitness Programs

Plus many more activities the Proposed Service Center can possibly carry-out.

JICARILLA APACHE TRIBE

EDUCATION:
- **TRIBAL:** financial aid, Head Start
- **IHS:** independent tribal school district
- **BIA:** independent tribal school district
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** no

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** no
- **IHS:** SS, CPS, CPT
- **BIA:** no
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** criminal investigation
- **STATE:** yes
- **COUNTY:** yes
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** mental health technician
- **IHS:** yes
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

COURTS:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health rep
- **IHS:** clinic, WIC
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** outpatient
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

SANTA ANA PUEBLO

EDUCATION:
- **TRIBAL:** AIPC financial aid, Head Start
- **IHS:** no
- **BIA:** no
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** no

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** no
- **IHS:** no
- **BIA:** SS, CPT
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** yes
- **STATE:** yes
- **COUNTY:** yes
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** Five Sandoval

COURTS:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** yes
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health rep, community health nurse, WIC
- **IHS:** community health nurse
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** Five Sandoval, WIC

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** Five Sandoval outpatient

JEMEZ PUEBLO

EDUCATION:
- **TRIBAL:** Head Start
- **IHS:** no
- **BIA:** no
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** AIPC financial aidd

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** no
- **IHS:** no
- **BIA:** yes
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** yes
- **COUNTY:** no
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

COURTS:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** yes
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health nurse, community health rep
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** WIC, Five Sandoval

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** Five Sandoval

ACOMA PUEBLO

EDUCATION:
- **TRIBAL:** financial aid, Head Start
- **IHS:** no
- **BIA:** no
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** no

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** yes
- **COUNTY:** no
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** no
- **IHS:** mental health technician
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

COURTS:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health rep, WIC
- **IHS:** community health nurse, hospital
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** no
- **IHS:** outpatient
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** New Sunrise outpatient

LAGUNA PUEBLO

EDUCATION:
- **TRIBAL:** financial aid, Head Start
- **IHS:** no
- **BIA:** no
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** no

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** no
- **IHS:** SS, CPS, CPT
- **BIA:** no
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** yes
- **COUNTY:** no
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** mental health technician
- **IHS:** yes
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

COURTS:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health rep, WIC
- **IHS:** community health nurse, hospital
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** outpatient
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** New Sunrise Adolescent inpatient

SAN JUAN PUEBLO

EDUCATION:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** day school
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** Head Start, ENIPC financial aid

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** SS, CPT
- **IHS:** no
- **BIA:** CPS
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** criminal investigation
- **STATE:** yes
- **COUNTY:** yes
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** yes
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

COURTS:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health rep
- **IHS:** community health nurse
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** inpatient

SANTA CLARA PUEBLO

EDUCATION:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** day school
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** Head Start, ENIPC financial aid

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** CPT
- **IHS:** SS
- **BIA:** SS, CPS
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** criminal investigating
- **STATE:** yes
- **COUNTY:** yes
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** no
- **IHS:** mental health technician
- **BIA:** no
- **STATE:** no
- **COUNTY:** yes
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

COURTS:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health rep
- **IHS:** clinic, community health nurse
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** detox, inpatient, rehab
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** yes

ZIA PUEBLO

EDUCATION:
- **TRIBAL:** financial aid
- **IHS:** no
- **BIA:** no
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** Head Start

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** no
- **IHS:** no
- **BIA:** yes
- **STATE:** no
- **COUNTY:** SS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** yes
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** Five Sandoval

COURTS:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** yes
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** community health rep
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** WIC, Five Sandoval

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** Five Sandoval

COMMUNITY PROFILES

SAN FELIPE PUEBLO

EDUCATION:
- **TRIBAL:** financial aid
- **IHS:** no
- **BIA:** no
- **STATE:** public schools
- **COUNTY:** no
- **OTHER:** Head Start

SOCIAL SERVICES (SS) & CHILD PROTECTIVE SERVICES (CPS):
- **TRIBAL:** SS, CPS, CPT
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** SS, CPS
- **OTHER:** no

LAW ENFORCEMENT:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** yes
- **COUNTY:** yes
- **OTHER:** no

MENTAL HEALTH:
- **TRIBAL:** mental health technician, social worker
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

EMPLOYMENT TRAINING:
- **TRIBAL:** no
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

COURTS:
- **TRIBAL:** yes
- **IHS:** no
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

HEALTH:
- **TRIBAL:** dental, community health rep
- **IHS:** community health nurse
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

ALCOHOL & SUBSTANCE ABUSE:
- **TRIBAL:** outpatient
- **IHS:** outpatient
- **BIA:** no
- **STATE:** no
- **COUNTY:** no
- **OTHER:** no

Plan for Residential Mental Health Treatment Facility for Native Americans in NM

QUESTIONS FOR COMMUNITY FOCUS GROUPS

1. Site of Interview:_____

2. Tribe:_____3. No. of Partic._____

Information Regarding Scope of Problem:

4. In your opinion, what are the four main causes of family conflicts, and/or substance abuse?

5. List four other "mental health" problems in your community.

6. To what extent do families feel able to handle these problems?

Information Regarding Identification of Services Available:

7. Identify the mental health services available to your community?

8. Regarding the problem of mental health, in your opinion, What is the role of the Tribal Governor, Chairman? Tribal Courts? Tribal Social Services?

9. Are services easily accessible to community members? If not, Why not? How far is too far for daily/weekly trips for treatment?

Information Regarding Mental Health Needs:

10. Identify the type of health care providers you would prefer if ill or in need of counsel.

11. What type of intervention/prevention strategies are needed in Native American communities?

12. Would you support a mental health facility for Native Americans?

ATTACHMENT B

The Proposed Model indicates some of the emphasis areas that need attention with regard to more service provision and/or areas that may not be currently receiving services (i.e., Women in Transition; more Family Intervention; Volunteer Services)

Under each emphasis area shown in MODEL 2, the types of needed services could be spelled out, but will not be listed at this time for the convenience of those individuals who will be reviewing many responses to this questionnaire. However, may be shared at some later date and time.

Staffing: Initially 1 case Manager, 2 Counselors (B.A/MSW)

Train participants to provide Volunteer Services and to assist in carrying out certain duties (i.e., #1 - receptionist duties; #8, #9, #10). Possibility of training others as Peer Supports.

Basic Job Descriptions

Primary Care Provider (case manager) - A Primary Care Provider for Native Americans is envisioned as a person's guide, advocate, coordinator, and primary therapist. The one who continues with the person from when he or she enters the system of care through follow-up care, overseeing that all needs are addressed (through service networking). This role denotes multiple responsibilities, including at least admission evaluation, case management, formulation and implementation of the treatment and discharge plan, and three months of systematic aftercare. The primary therapist involves other professionals as consultants, coordinates the client's treatment activities, is responsible for getting reports and appropriate use of information. This person maintains close communication with the family, referring facility, and any other community support agencies that should be involved (e.g., schools, courts, housing, etc.). He/she also does supportive counseling and crisis management. Frequent travel to homes is required for aftercare visits.
Primary therapists will have a master's degree in social work, psychology or related discipline, or a bachelor's degree in psychology with five years experience. Individual must be thoroughly familiar with the area they serve. They are able to collaborate with specialists.
These positions will be at all locations : the main, regional, and large communities.

Community Service Guide (mental health tech., natural helpers)- A locally selected person, known to be respected, reliable, friendly, and helpful. This person makes bi-weekly visits to patients in main and/or regional sites; carries messages between patients and families; makes aftercare home visits; consults with their therapists and other agencies; transports people in emergency situations, to tribal court, and assists people in arranging transportation to get medications, connecting to Dial-a-Ride transportation; and provides access to consultation, prevention, education, and special topics such as crisis counseling, substance abuse, working with native healers; from his/her knowledge gained in mental health and tribal systems.
Supervised by clinically trained, community-oriented professionals, they are people to be paid at the entering social worker level and should have B.A. level training.

Administrators - Use a culturally flexible administrative style. They respect and can implement a system which is culturally congruent with the New Mexican Native American populations. They should have degrees in administration, preferably in health and mental health administration. Medical and other professional degrees are not to be routinely used for administrative positions.

Psychiatrists - M.D. and board eligible in psychiatry. Particular experience and expertise in working with Native Americans is desired, especially with the severe mental illnesses most common among Indians (i.e., manic-depression, depression,

dual-diagnosis, etc.). Specialists in child and adolescent psychiatry are also needed. Must be open to a variety of treatment modalities (medications, family therapy, etc.) and working with traditional healers, at patient's request. A community psychiatry orientation is desired.

Psychologists - Clinical psychologists who are skilled in the types of psychotherapy most needed by Native Americans, community psychology, and transcultural psychological assessments, are needed.

Family therapists - May or may not be psychologists or social workers. They should be trained in marriage, couples, and family therapy and may lead self-help groups.

Alcoholism and Drug Abuse Counselors - Have had supervised training, specialized courses in substance abuse and counseling, and are certified. Degreed individuals who are skilled in various screening protocols and in matching clients to proper/appropriate treatments based on their social/cultural/ and ooorientational traits are most desireable.

Traditional Healers - Approved by the local tribal organization (council, society, and/or government). Will attend treatment planning meetings in tribal settings where appropriate. In some Pueblos and other communities the participation of traditional healers will be a private matter between tribal officials and the clients and their families.

All Clinicians - Must be State of New Mexico certified within their respective professions. They must be willing and able to work in multi-disciplinary teams, provide family- and client-centered services, travel to rural areas frequently, and have knowledge of and appreciation for Native American cultures. They should have demonstrated skills in interviewing and assessing Native Americans using a socialpsychological, biological, spiritual, holistic model, and are able to diagnose and formulate treatment plans within this cultural context. They can provide multiple treatment interventions, based on individual client, family, and cultural needs, as well as referral to other services. All clinicians must be able to utilize community resources and work collaboratively with native healers and helpers. It is important that they have a long-term commitment to Indian communities.

Social Workers - Assist with counseling and support services (e.g., financial assistance, job training, etc.) and provide home-based assistance. Both masters and bachelors level personnel can be utilized here.

Each of the above categories of mental health workers could be required to take continuing medical education work in native American issues once every four or five years.

Existing Education Programs within New Mexico

Following are relevant, existing education programs within the state of New Mexico (source is from the New Mexico Commission on Higher Education) where personnel recruitment efforts may be made for this project.

1. Southwestern Indian Polytechnic Institute (SIPI) (Albuquerque) : The only all Indian post-secondary, technical-vocational school in the U.S. that accepts applicants from all federally recognized tribes. It is completely funded and operated by the BIA. It provides counseling services, Special Student Services which addresses the traditional element into treatment. Sweats are offered to the SIPI students every Thursdays and Sundays of the week. It's business school offers training in secretarial and clerical skills, accounting, data processing, and marketing. The food preparation program has institutional cooking and baking. They have no late afternoon, evening or weekend classes. SIPI is re-designing its instructional offerings. A new Center for Tribal Socio-Medical Technologies is being created which will house a Department of Health Sciences and a Department of Social Technologies. They are offering a courses in psychology and in social sciences for the first time this semester (Spring 1993). They will be linking up with the Native American Higher Education Telecommunications Project for long distance learning course offerings. (Contact : Tony Schuerch, Chairman, Dept. of General Studies, 897-5326)

2. Graduate degrees in psychology are offered at New Mexico State University and the University of New Mexico. Other institutions offer undergraduate degrees.

3. A BA and a MSW in medical social work (concentrating in mental health and gerontology) are available at NM Highlands University. NM State University also offers an MSW. Other social work degrees are found at Navajo Community College (AA), NM State University (BSW), Northern CC (AAS), UNM (Valencia) (AA), College of Santa Fe (B.S.W.), and Western NM University (MA).

4. The only School of Medicine and School of Pharmacy are at the University of New Mexico, Albuquerque.

5. Nursing degrees (ADN, AS, AAS, BSN) are offered at Albuquerque Technical Vocational, ENMU (Clovis, Roswell), Luna VTI, New Mexico State University, (Las Cruces, Alamogordo, Carlsbad), Northern CC, San Juan College, Santa Fe CC, and the University of New Mexico (B.S.N. and M.S.W.).

6. Nursing Home Attendant, Home Health Attendant, Nursing Assisting, and Practical Nursing certificates are available at Albuquerque Technical Vocational. Certificates in Practical Nursing are also at ENMU (Clovis,Roswell), Luna VTI, and Northern CC.

7. The only Substance Abuse Counseling program (AAS degree) is at Northern N.M. Community College.

8. Certificates in Child Development are offered at ENMU (Roswell; also has an AS degree), Tucumcari Area Voc., and Luna VTI.

9. Child Care Aide and Assisting certificates are found aat Albuquerque Technical Voc., NMSU (Dona Ana), and San Juan College.

10. Albuquerque Technical Vocational offers certicates in Food Production, Management and Services; Baking; Chef/Cook; and Food Service. San Juan College, Luna VTI, and Santa Fe CC also offer a certificate in Chef/Cook.

11. Medical Office Management certificates are earned at ENMU (Roswell).

12. Teaching Assisting AA degrees come from ENMU (Roswell), NM State University, NMSU (Grants), and UNM (Gallup). An AA in special education teaching assisting is at the University of New Mexico, Albuquerque.

13. Special Education degrees are offered at Eastern NM University, NM Highland University, NM State University, Western NM University, and at University of New Mexico, Albuquerque.

14. A Ph.D. in Psychology and Ph.D. in Counseling Psychology are found at UNM, Albuquerque.

15. Almost all institutions of higher education have certificate, AA, BS, or graduate degree programs in computer programming, data processing, systems analysis, microcomputer applications, and other computer related areas. Navajo Community College offers an AA in computer and information science.

16. There are numerous certificate and ASA programs in the secretarial, clerk-typist, general office clerk, word processing, and related fields. Navajo Community College has an AAS in secretarial and a certificate in general office clerk. Albuquerque TVI offers medical records clerk, receptionist, electronic office, and information processing programs.

17. A BBA in Personnel Management is available from Eastern NM Univ.

SECTION II

There are many components that go into a mental health facility. We would like your opinion to what is: (1) essential - requires priority funding (choose only 5 items) (2) required - could be reduced if there are funding restrictions (3) very useful but could be deleted if there are major restrictions in funding (4) should be deleted (5) essential but should be provided by other agencies (choose at least 3) **To assist in prioritizing we ask that you only rate 5 items as #1 and at least 3 items as #5. Please leave blank any item you feel is inappropriate for you to answer.**	ESSENTIAL	REQUIRED	VERY USEFUL	DELETE	PROVIDE BY OTHERS	
Inpatient - Childrens Unit	1	2	3	4	5	1
Inpatient - Adolescent Unit	1	2	3	4	5	2
Inpatient - Adult Unit	1	2	3	4	5	3
Inpatient - Elders Unit	1	2	3	4	5	4
Dual Diagnosis Unit	1	2	3	4	5	5
Detox Unit	1	2	3	4	5	6
Hostel for Families	1	2	3	4	5	7
Locked rooms for patient protection	1	2	3	4	5	8
Hostel for aftercare workers & trainees	1	2	3	4	5	9
Intake evaluation unit with a comprehensive Medical, Neurological, Psycho/ Social/Cultural Assessments	1	2	3	4	5	10
Neuropsychlogical Testing	1	2	3	4	5	11
Neurological Evaluations by Neurologist	1	2	3	4	5	12
MRI, CT Scan - X-ray	1	2	3	4	5	13
Complete Laboratory	1	2	3	4	5	14
Family Therapy Program	1	2	3	4	5	15
Group Psychotherapy	1	2	3	4	5	16
Individual Psychotherapy	1	2	3	4	5	17
Crisis Unit - Short-Term Stay	1	2	3	4	5	18
Traditional Healers available on site for evaluation/treatment	1	2	3	4	5	19
Full Training Capabilities with extensive support for field workers	1	2	3	4	5	20
Aftercare Program - Extensive Field Support	1	2	3	4	5	21
Case Management System under auspices of the facility	1	2	3	4	5	22
Health Promotion and Prevention for service catchment area	1	2	3	4	5	23
Transitional Living Facility(s)	1	2	3	4	5	24
Transportation to and from central facility	1	2	3	4	5	25
Health Promotion Program for patients at the facility	1	2	3	4	5	26
Spiritual Evaluation and counseling	1	2	3	4	5	27
Traditional Healing Facilities	1	2	3	4	5	28
Traditional Activities - music, dancing, sand painting	1	2	3	4	5	29
Occupational Therapy - Including Native Arts	1	2	3	4	5	30
Rehabilitation (living, communications & social skills training)	1	2	3	4	5	31
Vocational Training	1	2	3	4	5	32
Art Therapy	1	2	3	4	5	33
Other - DAY TREATMENT PROGRAMS	1	2	3	4	5	34

OPTIONAL MODELS

MODEL A - Comprehensive Centralized Services

MODEL B - Center for Evaluations and Specialized Care

MODEL C - Facility-without-Walls

MODEL D - Combination

MODEL E - This is a model which **you** create because none of the above work for you.

These features will be addressed in the development of each model:

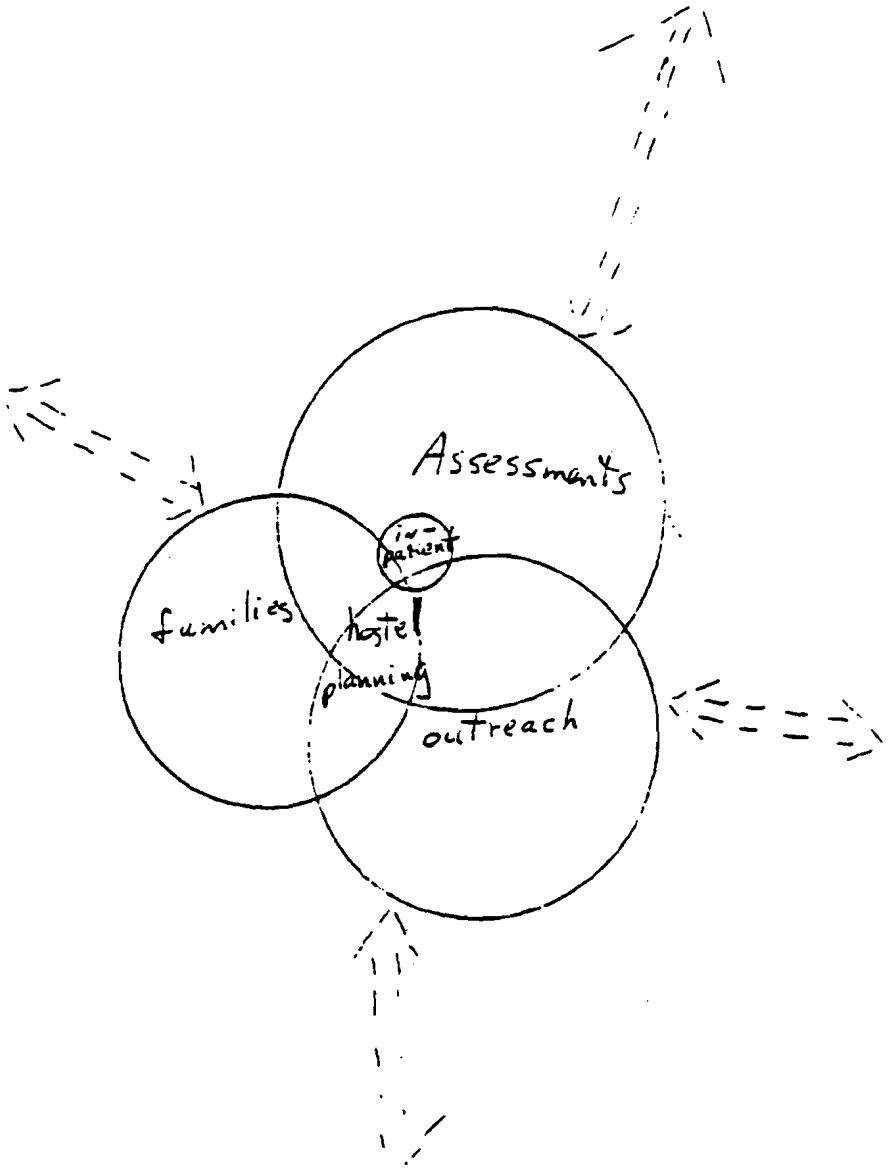
*Services and facilities will be appropriate for Native Americans
*The major behavioral concerns will be addressed (mental health, substance abuse, developmental disabilities
*All age groups will embraced (children, adolescents, adults, elders)
*Comprehensive services that provide the highest quality of care, equipment, and staffing will be recommended
*Continuum of care is the goal
*Geographic and financial accessibility for all is a high priority

******** **importance notice !!** ********

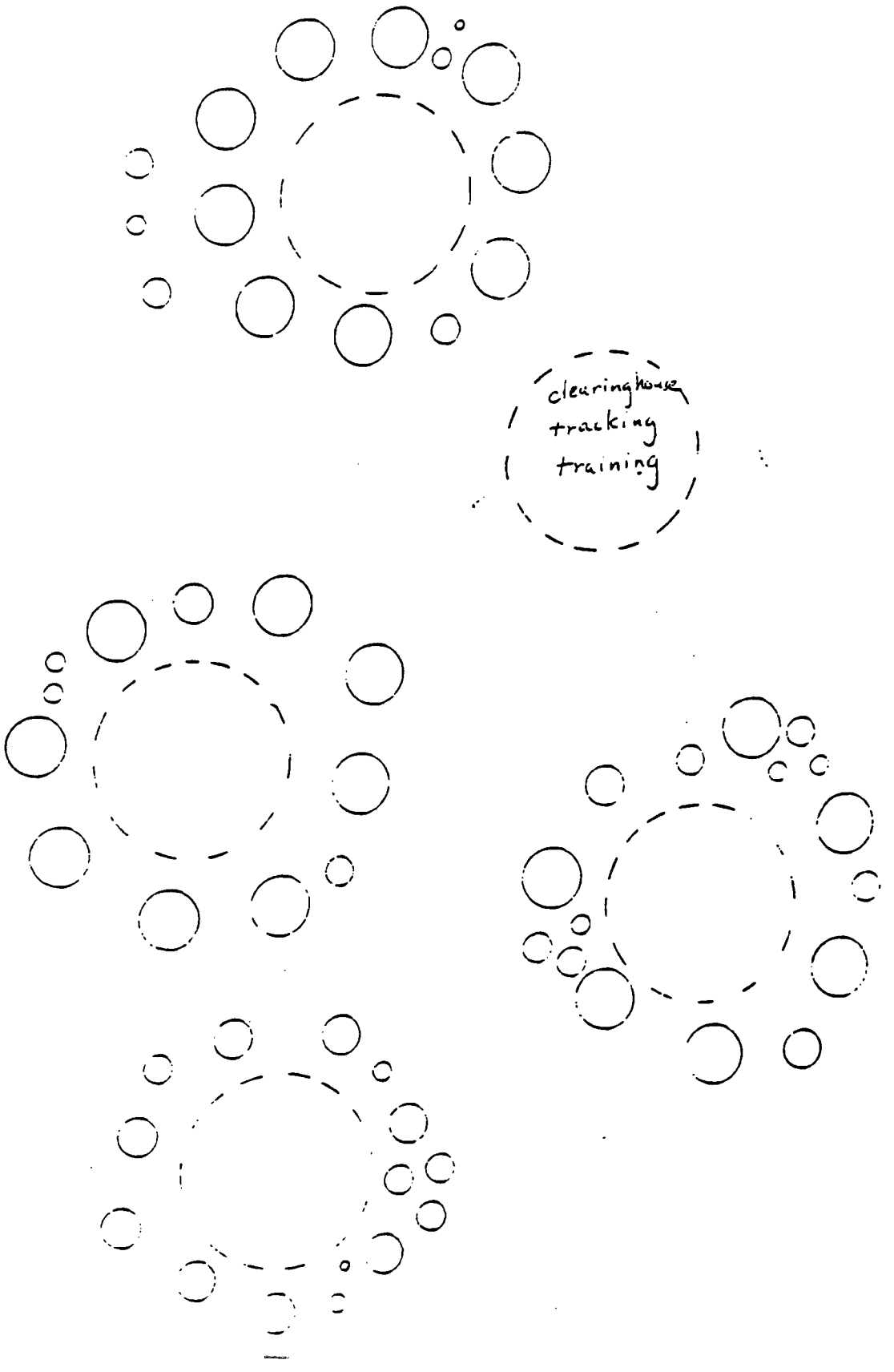
These are only draft models designed to gather Tribal and agency opinions. No decisions have been made on locations, funding, management, eligibility, and similar concerns

Model A - Comprehensive Centralized Services

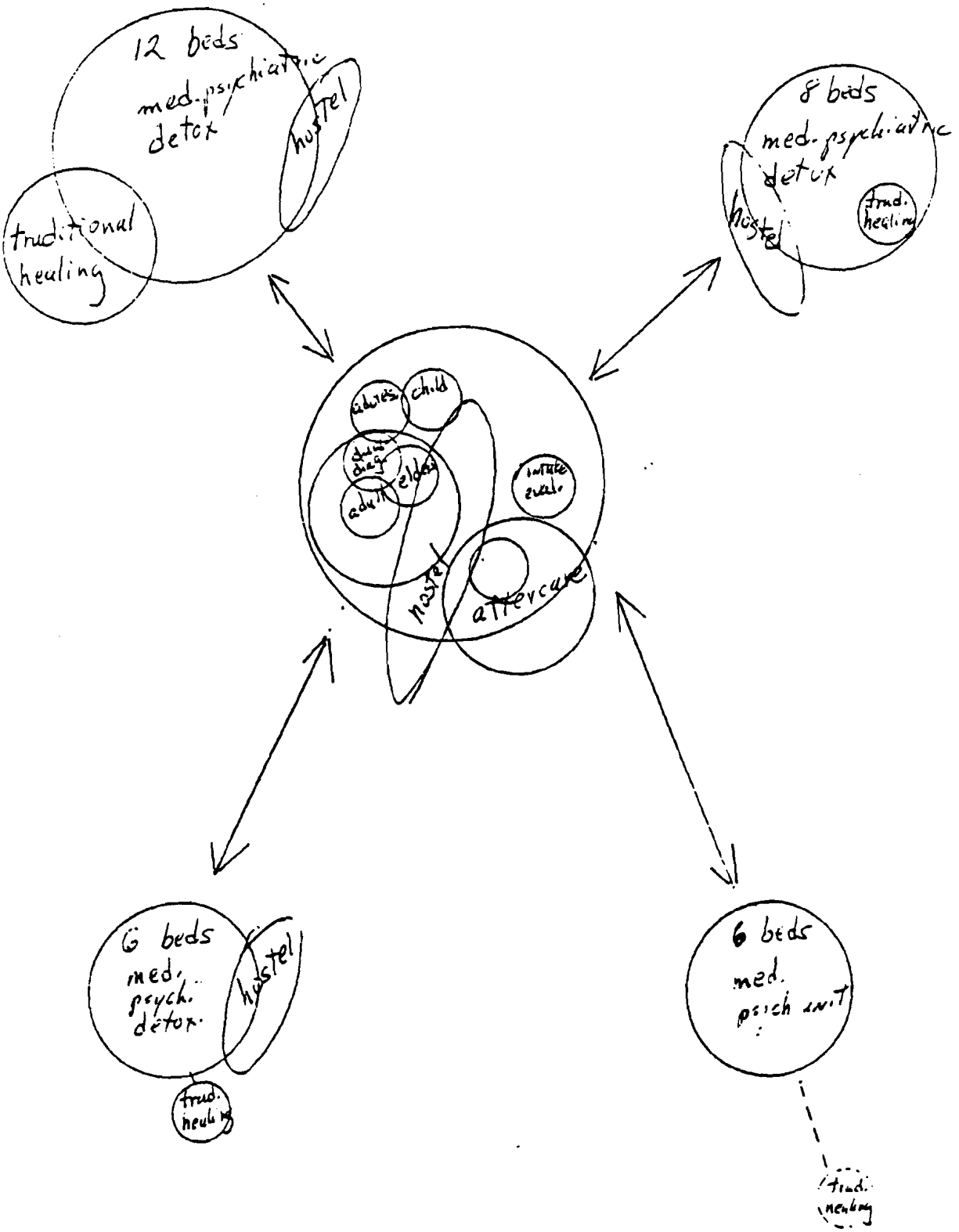
Model B - Center For Evaluations and Specialized Care



Model C - Facility-without-Walls



MODEL D


12 beds
med. psychiatric
detox
hostel
traditional
healing
8 beds
med. psychiatric
detox
trad.
healing
hostel
diabetic
child
elderly
adult
intake
evals.
hostel
aftercare
6 beds
med.
psych. detox.
hostel
trad.
healing
6 beds
med.
psych unit
trad.
healing