Executive Summary

The Assessment of Community Mental Health Resources was undertaken to inventory community-based mental health services in Colorado for adults with serious mental illness and children with serious emotional disturbances. The inventory was based upon the Colorado Mental Health Institute (CMHI) Alternatives Survey, which was developed specifically for this project to assess alternatives to Colorado's state psychiatric hospitals. The survey defined 15 categories of intensive mental health services that may be used to provide community-based treatment for mental health consumers as an alternative to an Institute admission (e.g., community hospitals, intensive family services, respite). The survey also inquired about community resources for 11 categories of special-need consumers who have traditionally been served in the Institutes because of the complexity of their health and behavior problems (e.g., co-occurring medical problems, history of violence, developmental disabilities, etc.).

The inventory was based upon data from seventeen community mental health centers (CMHCs) in Colorado that completed the Alternatives Survey in early 2001. Both CMHC-operated programs (e.g., crisis services) and non-CMHC-operated programs were included in the survey (e.g., hospitals). The centers also rated how successfully each program reduced Institute utilization. Finally, the centers estimated the number of special-need consumers who might need hospitalization in a given year and the capacity of community resources to provide a hospital-level of care.

Key findings include:

1. The inventory contains 370 different intensive mental health facilities or programs in Colorado communities.

2. Community resources are unevenly distributed across the state. This is true in terms of the total number of services across different regions of the state, services on a per capita basis, and priorities for services most in need of development. For example, even taking into consideration population differences across regions of the state, inpatient and residential treatment center (RTC) capacity is disproportionately higher in the Central Front Range and Southern Front Range. High intensity treatment teams, intensive family services, intensive case management, and day treatment for children are also concentrated heavily in the Central Front Range.

3. Uninsured consumers appear to have far less access to services in Colorado. Most services in the inventory accept payment from a variety of different sources, including Medicaid, Medicare, private insurance, other public payers (e.g., CDHS), and directly from consumers. However, consumers without insurance are known to have access to only 55% of overall service capacity in the statewide system of care. When reviewing the services catalogued in the inventory, therefore, specific attention should be directed to differential levels of access for those without insurance.

4. In the opinion of the mental health center respondents, the type of service that could potentially reduce Institute use the most if expanded was an alternative treatment unit (ATU).

For adults, ATU capacity is low outside of the Southern Front Range. For children, ATU capacity is minimal in all parts of the state.

5. Residential options were seen as a pivotal alternative to Institute utilization. The inventory showed that there are 228 intensively staffed residential beds in the entire state. Intensively staffed residential was one of the community service types that was seen to have the most impact on preventing, reducing, and shortening Institute stays. Intensively staffed residential services were also identified as the type of service that could have the most impact on reducing Institute utilization if it were to be expanded. CMHCs reported that the supply of both intensively staffed and the more typical, lower-intensity residential and housing options for consumers living in the community are insufficient. This scarcity may contribute to longer lengths of stay in the Institutes than are otherwise necessary.

6. The capacity of communities to offer a hospital or hospital alternative for 11 subcategories of consumers with special needs who have often been served in the Institutes is uniformly low. Such community resources are non-existent in many areas of the state, and, where they do exist, they can accommodate only between 25 and 50% of the estimated number of consumers in a given year who would need a hospital or hospital alternative. Moreover, only some community programs for special-need consumers were perceived as effective in the services that they provide in terms of reducing Institute utilization. The perceived effectiveness of the programs varied depending on the age and characteristics of the consumer groups.

7. Consumers involved in the criminal justice system were one of the eleven subcategories of special-need consumers. Community alternatives for children under 11 and adult consumers in this subcategory were perceived as some of the most effective programs in the community for helping consumers avoid an Institute stay when they need a hospital level of care.

Introduction

Mental Health Services in the Office of Adult Health and Rehabilitation, State of Colorado Department of Human Services (CDHS), contracted with TriWest Group to conduct an assessment of intensive, community mental health services in Colorado. The assessment was to be based on an inventory of intensive, community-based mental health services. There are 15 types of community services included in the inventory, ranging from psychiatric hospitals to temporary respite resources. Together, the services encompass a community-based, continuum-of-care for adults with serious mental illnesses and children with serious emotional disturbances.

The assessment was funded by the State Legislature as a follow-up to the Open Cases Study conducted by Colorado Mental Health Services in 1998. That study showed that some mental health consumers who were receiving inpatient care at one of the CMHIs on March 25, 1997, resembled other consumers who were receiving services in the community at one of the CMHCs on the same day, as illustrated by their profile of the Colorado Client Assessment Record (CCAR). One of the conclusions of the Open Cases Study was that some portion of the consumers who were being served in the Institutes in 1997 could have been served in the community if appropriate, intensive services were available and accessible in the localities where the consumers resided. An inventory was thus required to determine the extent and location of appropriate services in communities across Colorado. The Colorado Mental Health Institute (CMHI) Alternatives Survey was developed to generate such an inventory. The survey was created, administered, and analyzed during a 4-month period at the end of 2000 and beginning of 2001.

The inventory was also intended to function as a supporting document for the *CMHI Operational Plan Study* and *Operational Plan for the Mental Health Institutes*, a large study completed by TriWest Group for the Colorado Department of Human Services, Office of Direct Services in March 2001. The goal of the Operational Plan was to define the future role of the Colorado Mental Health Institutes in the state's public mental health system. The inventory of community services supported that effort by documenting the facilities and services that make up the community-based system of care for individuals with serious mental disorders in different regions of the state.

The current report offers additional detail to help refine the recommendations of that study supporting a need for additional community-based mental health resources as alternatives to current use of the Institutes. It also offers insight into the overall array of intensive community-based mental health resources available to Colorado residents.

Methodology

Description of the Instrument

The CMHI Community Alternatives Survey (Alternatives Survey) is an instrument developed to generate an inventory of intensive mental health facilities and services that are available to consumers who are enrolled in community mental health centers (CMHCs) in each service area

in Colorado. To be included in the inventory, a facility or service must be accessible to the typical CMHC consumer, regardless of whether the facility or service is operated by a CMHC or other entity. The Alternatives Survey also helps to highlight gaps in the continuum of care, particularly for subgroups of consumers who sometimes receive care at one of the CMHIs. These subgroups include consumers who: have co-occurring medical problems, developmental disabilities, or substance abuse; have traumatic brain injury or brain disorders; have a history of violence or sexual misconduct; do not speak English; are involved with the criminal justice system; or have problem behaviors such as fire-setting or running away.

The Alternatives Survey consists of three forms (see Appendices A, B, and C). The first form (Appendix A), "Definitions of Survey Categories and General Survey Directions," describes fifteen types of mental health facilities or services that exist in communities across Colorado (e.g., community psychiatric hospitals, intensive family services, respite, etc.). The heart of the survey is Part I (Appendix B) in which respondents are asked to quantify the availability, accessibility, utilization, cost, and utility of facilities and services that are used by consumers in their region. Part II (Appendix C) asks for additional quantitative information about housing, the number of consumers in various subcategories who may need a hospital in a given year, the percent of those consumers in need who could be served in a community alternative to the CMHI if it was available, and judgments about the ability of the community alternatives to prevent an Institute stay, divert a consumer in crisis from an Institute stay, or shorten an Institute stay by acting as a transitional service. Part II also asks respondents to describe future gaps in services that they anticipate and to identify the types of facilities and services that would most reduce utilization of the CMHIs if they were developed.

Development of the Survey

The CMHI Alternatives Survey was developed between November 27th and December 29th, 2000. Development began with a focused review of the successful 2000 Medicaid Mental Health Capitation and Managed Care Program bid proposals in order to understand the extent and depth of community resources for consumers with "a high level of need." A high level of need was conceptualized as a need greater than could be met with traditional outpatient interventions such as individual psychotherapy, group therapy, or medication management. It was also conceptualized as a grouping of symptoms and behaviors that have traditionally led to an Institute admission.

After the proposal review, key informants from a rural CMHC, an urban Mental Health Assessment and Service Agency (MHASA), and a consumer advocacy organization were interviewed separately about various high-intensity treatment options available outside of the CMHIs. A focus group was also conducted with family members of adult consumers with serious and persistent mental illness. The input from all of these sources was used to create an initial draft of the survey.

The first draft was piloted at a large, urban CMHC on December 15, 2000. A senior adult services director and a senior child services coordinator reviewed different portions of the survey for clarity and comprehensiveness. Feedback from the pilot and separate reviews by Mental Health Services personnel were incorporated into a final version of the survey.

Administration of the Survey

The executive directors of each of the 17 community mental health centers in Colorado were asked to complete the Alternatives Survey.[1] They received a mailed copy of the survey on approximately January 2, 2001, and were asked to return the survey no later than January 17, 2001. Most of the CMHCs returned the survey on time, but all surveys were not received until three weeks after the requested return date.

Within the CMHCs, a variety of staff members contributed to the completion of the survey, including clinical, quality assurance and financial administrators. In addition, family members and consumers contributed to subjective ratings of the community services at Colorado West Regional Mental Health Center. TriWest Group supported the efforts of the CMHCs to complete the survey with technical assistance via telephone calls and electronic mail. Answers to frequently asked questions were compiled in a document called "Guidelines for Completing Alternatives Survey," which was sent electronically to CMHCs in the first few days after they had begun working on the survey (see Appendix E).

When each survey was returned by a CMHC, it was reviewed for completeness. Centers were asked to revisit sections of the survey that needed additional information. Also, obvious data errors were brought to the centers' attention for correction.

Limitations of the Survey

Although the survey results are strengthened by the large number of staff and advocates who worked on completing the survey across the state, the depth and breadth of the information received was variable across CMHCs. Responses varied with the size of the center, as well as the design of the center's internal management information system. Thus, the precision of the data is variable from region to region. Nevertheless, the findings offer a current, comprehensive estimate of community-based mental health capacity in Colorado compiled by the single group of key informants who are most knowledgeable about the overall mental health system in each part of the state.

The reliability of the inventory produced by the survey could be enhanced if it went through a two-step validation process that was beyond the scope of the current study. This would involve first compiling a list of the services and corresponding information that each CMHC reported and sending it to each CMHC for review. This would permit the CMHCs to identify any errors in the data and to recognize any omissions in their original list of services that were submitted.

Second, data concerning services that the CMHCs have identified in the survey, but do not operate themselves could be validated through direct contact with these non-CMHC organizations. For example, the survey asks for information regarding hospitals, emergency rooms, residential treatment centers (RTCs), and nursing homes. Only in limited instances are any of these services run by a community mental health center. TriWest Group did validate capacity data concerning hospitals and RTCs as part of this report. It would further increase the

[1] Access Behavioral Care (ABC) supplemented data from Denver by completing selected portions of the survey.

reliability to confirm the other CMHC-reported data for services run by other entities with each organization independently.

Inventory of Community Services

The primary findings for this study are centered on a statewide inventory of community services. The inventory was created using data from Part I of the CMHI Alternatives Survey. The fifteen categories of services that appeared on the survey are presented below in Table 1. Nursing homes were included as a category on the survey because of their utility in serving a limited number of mental health consumers, namely, those consumers who have as significant co-occurring physical health issues.

Table 1. Definitions of Service Categories

Facility or Service Categories	Definition of Facility or Service
1. Inpatient Care at a Psychiatric Hospital or a General Hospital with a Psychiatric Unit	A public or private, licensed hospital that provides 24-hour inpatient care to persons with a mental illness in a hospital setting. The unit may be locked or unlocked. The facility is 27-10 Designated. The facility may or may not also provide *less than 24-hour hospital observation*, which is defined as observation by mental health professionals in a hospital setting for less than 24 hours for emergency assessment and planning. The individual is not admitted to the hospital nor is mental health treatment provided beyond standard crisis intervention procedures.
2. Emergency Room with on-site psychiatric services	An emergency department of a medical facility that has mental health professionals on staff or on-call to respond to psychiatric emergencies, 24-hours a day.
3. Urgent Psychiatric Care	Psychiatric care outside of a hospital emergency room by a qualified medical doctor within the same day as the request for care is made.
4. Community Hospital Alternative/Acute Treatment Unit	A community-based, overnight facility outside of a hospital setting that offers 24-hour supervision and 24-hour medical staffing for consumers who need short-term supervised care and/or medical stabilization. Specially-trained staff is able to administer PRN medications. The facility may or may not be 27-10 designated.

Facility or Service Categories	Definition of Facility or Service
5. Acute Partial Care or Day Treatment	A mental health program in a hospital or other facility that provides 4-12 hours of daily care in a structured therapeutic environment, several times a week. Overnight care is not provided.
6. Residential Treatment Centers (RTC) for Children or Youth	A 24-hour, residential service for children and youth primarily under the age of 18, at least 50% of whom are admitted with a diagnosable mental illness. The primary purpose of the RTC is to provide individually planned programs of mental health treatment services in conjunction with residential care for its residents. The clinical program is directed by a psychiatrist, psychologist, social worker or psychiatric nurse.
7. Mobile Crisis Team	A crisis team staffed by mental health professionals that is able to respond to a consumer in crisis at the consumer's location within one hour in urban areas and within two hours in rural areas.
8. Enhanced Crisis Intervention Team	An intensive intervention that is triggered by an escalation of problem behaviors that puts the consumer at imminent risk of a more restrictive level of care. Emergency personnel are available to respond at a consumer's home, a mental health facility, a hospital emergency room, or other location where a consumer in crisis might present. Depending on the situation of the individual, the team may provide 2-10 hours of service, often over several days. In some cases, the contact may extend to several weeks.
9. High Intensity Community Treatment Teams	A community-based, team approach to care for adult consumers with high levels of need, such as Assertive Community Treatment (ACT or PACT) teams. The multi-disciplinary team is staffed by clinicians and a psychiatrist, and the ratio of staff to consumers is no more than 1:15. The majority of services must be provided outside of a mental health office. The team must either provide 24-hour coverage or 24-hour coverage is actively coordinated by the team with another mobile response unit.

Facility or Service Categories	Definition of Facility or Service
10. Intensive, Community-Based, Family-Oriented, Clinical Services	An intensive, home-based approach to working with families in which a child is at risk of an out of home placement. The clinical approach may involve the family's community network, including schools, clergy, and social service agencies. The treatment team has the capacity to provide 6 or more hours of service per week when the family requires it. Examples of this category would be Multisystemic Therapy Teams or highly intensive family preservation services.
11. Intensive Case Management	An approach to intensive case management for any age group where case managers have a limited number of cases, but with less intensity or comprehensiveness than the previous two categories.
12. Nursing Homes with Mental Health Capacity	A licensed nursing home facility that is able to accommodate mental health consumers.
13. Intensively Staffed Residential Services	A residential, facility with 24-hour AWAKE staff (different from facilities already specified) in conjunction with a minimum of 10 hours/week IN-HOUSE mental health services. NURSING care is available. Group homes, alternative care facilities, and board-and care homes may fall under this category if adequately staffed. Other residential facilities with less than 24-hour AWAKE staffing are addressed in Part II of the Survey.
14. Daytime Respite Care	Non-clinical, respite care for caregivers of mental health consumers provided by a clinician or paraprofessional for at least four (4) hours in the family's home.
15. Overnight Respite Care	Non-clinical respite care for caregivers of mental health consumers provided by a clinician or paraprofessional overnight, either at the family's home or another location.

Inventory results have been grouped into four geographic regions for additional analysis. The regions include the following CMHC service areas:

- Central Front Range – The service areas of Adams, Arapahoe/Douglas, Aurora, Boulder, Denver and Jefferson.
- Northern Front Range – The service areas of Centennial, Larimer and North Range.
- Southern Front Range – The service areas of Pike's Peak, San Luis Valley, Southeastern Colorado, Spanish Peaks, and West Central.
- Western Slope – The service areas of Colorado West, Midwestern and Southwest Colorado.

It was decided to use larger regions than the 17 traditional CMHC areas for several reasons. Comparisons of community capacity among 17 different areas would not be comprehensible or useful for system planners. Comparisons among 4 regions that follow Colorado's natural population contours better illustrate the variability in resources. Furthermore, each region of the inventory is intended to delimit an interactive, regional network of care. There is no presumption that each of the 15 types of intensive services should exist is each of the 17 CMHC areas; only that services should be accessible to consumers within a reasonable distance.

Each service in the inventory is listed only once under the geographic region where it is located, regardless of the number of CMHCs who may contract with the facility. For example, The Children's Hospital is listed under inpatient services in the Central Front Range, even though mental health centers as distant as the Western Slope may use the services there.

The same organization may appear more than once in the inventory if it provides more than one of the 15 types of services in the inventory. For example, the Cleo Wallace facility in Westminster appears twice in the Central Front Range portion of the inventory, once under inpatient facilities and once under RTCs.

The complete inventory, organized by location and type of service, appears in Appendix F. A summary of the number of services in each state quadrant is presented below in Table 2.

Centers were asked to report information about facilities and programs to which consumers from their areas had regular access. Thus, the inventory contains only services that are known by and used by the community mental health centers. It does not include other human services in the state that could potentially benefit mental health consumers. For example, the RTC category is a listing of centers used by the CMHCs, not an account of all licensed RTCs in Colorado.

A sixteenth service category was developed after the nursing home submissions were reviewed. The amount of information received about nursing homes was highly variable from CMHC to CMHC, and from nursing home facility to facility. CMHCs were quite familiar with some facilities where they actively referred consumers and sent staff regularly to provide services. For other facilities, they knew little more than its name, location, and the fact that there was at least one person in residence with a mental health diagnosis.

Therefore, the category of Nursing Homes was divided into two groups. The primary category was entitled "Nursing Homes with Mental Health Capacity." This is a facility known to the local mental health center and considered to be a community option that may effectively prevent,

divert, or shorten Institute utilization, as demonstrated by a mean rating of 3 on the prevention, diversion, and shortening ratings (See section below on Role of Community Resources as Alternatives to the Institutes). The second category, "Other Nursing Homes," includes those nursing homes that received a mean rating of less than 3 or received no rating at all from the local CMHC.

The list of 15 service categories does not encompass all of the components of a comprehensive system of care. On Part II of the Survey, respondents had an opportunity to list other facilities and programs that are helpful in maintaining consumers in their home communities, but that were not included as a designated inventory category. For children and adolescents, the most frequently mentioned additional services were wrap-around funding and school-based mental health programs, including day treatment programs located in schools.[2] For adults, the CMHCs frequently listed clubhouses, especially those with a vocational component; wrap-around funds that could be used for such needs as transportation to community services; and intermediate-intensity options such as alternative care facilities and crisis stabilization units.

Table 2 summarizes the number of service providers in each category for the four regions, as well as statewide. Service providers are differentiated by age group served. Categories include:

- Children – A service provider that serves only children (generally ages 0 – 11).
- Adolescents – A service provider that serves only adolescents (generally ages 12 – 17).
- Children and Adolescents – A service provider that serves a mix of children and adolescents.
- Adults – A service provider that serves only adults ages 18 to 59.
- Older Adults – A service provider that serves only adults age 60 or older.
- Adults and Older Adults – A service provider that serves a mix of adults and older adults.
- All Ages – A service provider that does not target services to a particular age group.
- Not Reported – A service provider for whom age information was not available.

[2] Day treatment was one of the 15 categories on Part I of the survey, but the location of the program was not specified as part of the definition.

Table 2. **Number of Services, by Age Group Served and State Quadrant PAGE 1**

Table 2. **Number of Services, by Age Group Served and State Quadrant PAGE 2**

Table 2. **Number of Services, by Age Group Served and State Quadrant PAGE 3**

Capacity of Community Alternatives

As part of the survey, CMHCs gathered information about the number of beds or slots that facilities and programs encompassed. These capacity figures were submitted for services that the centers operate and other services that are used by consumers from the area. The figures regarding non-CMHC services have not been independently validated by the operator of the service, except in the cases of inpatient and RTC facilities noted above.

CMHCs did not report slot or bed capacities for 13 day treatment programs (31% of those reported), four RTCs (13% of those reported), two intensive family services (8% of those reported), and two intensive case management services (9% of those reported). Consequently, the absolute and per capita numbers for these four categories presented in Tables 3 and 4 below represent conservative estimates.

Capacity is defined as the number of services, beds, or slots that are physically located in the quadrant. Since the inventory is largely intended to produce a geographic analysis, services in a different part of the state to which local consumers may have access were *not* counted. The services were counted only in the region where they were located. The geographic restriction also reflects a concern expressed by stakeholders that the inventory assess the public mental health system's ability to serve individuals close to home.

The per capita capacity figures were calculated by summing the reported number of facilities, slots or beds for all entries in a service category in a quadrant, and then dividing the sum by the population of that quadrant. If slot information was reported by age group, then age-appropriate population estimates were used as the denominator. For example, the sum of adult slots was divided by the number of adults living in the quadrant. The population numbers used were 1999 county population figures for children and adults supplied by the Colorado Division of Local Governments, Demography Section.[3]

For the sake of completeness, both the absolute and per capita number of beds, slots, and facilities have been reported in this document (Tables 3 and 4, respectively). However, absolute numbers can be misleading, given the large differences in population among the four state quadrants. Comparisons among the quadrants about the availability of a given service should only be made with per capita numbers.

[3] For more information, contact Rebecca Picaso, Colorado Office of Local Government Services, 303-866-4147.

Table 3: Capacity in Units of the Public Mental Health System, by Age and Quadrant

Type of Service	Central Front Range	Southern Front Range	Northern Front Range	Western Slope	Total	Units
Hospital Facilities						
Inpatient	**323**	**98**	**46**	**45**	**512**	**Beds**
Child - Dedicated	24	0	0	0	24	
Adolescent - Dedicated	59	8	8	0	75	
Mixed Child and Adolescent	7	23	0	0	30	
Total Child & Adolescent	90	31	8	0	129	
Total Adult	233	67	38	45	383	
Emergency Room	**9**	**4**	**4**	**1**	**18**	**Facilities**
Child and Adolescent	1	0	0	0	1	
Adult	0	2	0	0	2	
All ages	8	2	4	1	15	
Day Treatment	**617**	**35**	**285**	**40**	**977**	**Slots**
Child and Adolescent	375	0	40	29	444	
Adult	242	35	245	11	533	
Community Mental Health						
ATU	**72**	**62**	**16**	**26**	**176**	**Beds**
Child and Adolescent	4	0	0	8	12	
Adult	68	62	16	18	164	
Intensively Staffed Residential	**107**	**87**	**34**	**0**	**228**	**Beds**
High Intensity Comm. Tx. – Adult	**825**	**95**	**95**	**10**	**1025**	**Slots**
Intensive Family Treatment	**738**	**45**	**44**	**33**	**860**	**Slots**
Intensive Case Management	**1883**	**139**	**0**	**210**	**2232**	**Slots**
Mobile Crisis	**4**	**3**	**3**	**2**	**12**	**Providers**
Child and Adolescent	1	1	0	0	2	
All ages	3	2	3	2	10	
Enhanced Crisis Intervention	**5**	**3**	**0**	**2**	**10**	**Providers**
All ages	0	3	0	2	5	
Child and Adolescent	2	0	0	0	2	
Adult and Older Adult	3	0	0	0	3	
Daytime Respite	**3**	**1**	**0**	**0**	**4**	**Providers**
Overnight Respite	**2**	**2**	**0**	**0**	**4**	
Other Systems						
Residential Treatment Center	**775**	**292**	**20**	**32**	**1119**	**Beds**
Nursing Homes with Mental Health Services	**20**	**26**	**1**	**13**	**60**	**Facilities**
Other Housing*	**1133**	**170**	**551**	**299**	**2153**	**Slots**

Capacity is based on the number of services physically located in the quadrant; consumers may have access to some services in another area. Not all facilities reported the number of slots (see text). *With additional data cleaning the "Other Housing" estimates have been revised downwards from the numbers that appear in the CMHI Recommendations Report (TriWest Group, March 15, 2001).

Table 4. Capacity per Capita of the Mental Health System, by Age and Quadrant

Type of Service	Central Front Range	Southern Front Range	Northern Front Range	Western Slope	Total	Units
Hospital Facilities						
Inpatient beds per capita	**13.9**	**11.2**	**8.9**	**10.2**	**12.3**	**Beds**
Child-Dedicated Beds per child capita	5.8	0.0	0.0	0.0	3.3	
Adolescent-Dedicated beds per adolescent capita	30.0	10.7	17.6	0.0	21.0	
Mixed Child & Adolescent beds per C&A capita	1.1	10.0	0.0	0.0	2.8	
Total Child & Adolescent per C&A capita	14.7	13.5	6.0	0.0	11.9	
Total Adult Beds per adult capita	13.6	10.4	10.0	13.7	12.5	
Emergency Room per capita	**0.39**	**0.46**	**0.78**	**0.23**	**0.43**	**Facilities**
Child & Adolescent ERs per C&A capita	0.16	0.00	0.00	0.00	0.09	
Adult ERs per adult capita	0.00	0.31	0.00	0.00	0.07	
All ages ERs per capita	0.34	0.23	0.78	0.23	0.36	
Day Treatment per capita	**26.5**	**4.0**	**55.4**	**9.1**	**23.5**	**Slots**
Child & Adolescent per C&A capita	61.1	0.0	30.1	25.7	40.8	
Adult per adult capita	14.1	5.4	64.2	3.4	17.3	
Community Mental Health						
ATU per capita	**3.1**	**7.1**	**3.1**	**5.9**	**4.2**	**Beds**
Child & Adolescent per C&A capita	0.7	0.0	0.0	7.1	1.1	
Adult per adult capita	4.0	9.6	4.2	5.5	5.3	
Intensively Staffed Residential	**6.2**	**13.5**	**8.9**	**0.0**	**7.4**	**Beds**
High Intensity Community Treatment per adult capita	**48.0**	**14.7**	**24.9**	**3.0**	**33.4**	**Slots**
Intensive Family Treatment per C&A capita	**120.3**	**19.6**	**33.1**	**29.2**	**79.0**	**Slots**
Intensive Case Management per adult capita	**109.6**	**21.6**	**0.0**	**64.0**	**72.6**	**Slots**
Mobile Crisis per capita	**0.17**	**0.34**	**0.58**	**0.45**	**0.29**	**Providers**
Child and Adolescent per C&A capita	0.16	0.44	0.00	0.00	0.18	
All ages per capita	0.13	0.23	0.58	0.45	0.24	
Enhanced Crisis Intervention per capita	**0.21**	**0.34**	**0.00**	**0.45**	**0.24**	**Providers**
All ages per capita	0.00	0.34	0.00	0.45	0.12	
Child and Adolescent per C&A capita	0.33	0.00	0.00	0.00	0.18	
Adult and Older Adult per adult capita	0.17	0.00	0.00	0.00	0.10	
Daytime Respite per capita	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**Providers**
Overnight Respite per capita	**0.1**	**0.2**	**0.0**	**0.0**	**0.1**	

Type of Service	Central Front Range	Southern Front Range	Northern Front Range	Western Slope	Total	Units
Other Systems						
Residential Treatment Center per C&A capita	**126.4**	**127.2**	**15.1**	**28.3**	**102.8**	**Beds**
Nursing Homes with Mental Health Services per adult capita	**1.2**	**4.0**	**0.3**	**4.0**	**2.0**	**Facilities**
Other Housing per adult capita*	**65.9**	**26.4**	**144.4**	**91.2**	**70.1**	**Slots**

Capacity is based on the number of services physically located in the quadrant; consumers may have access to some services in another area. Not all facilities reported the number of slots (see text). *With additional data cleaning the "Other Housing" estimates have been revised downwards from the numbers that appear in the CMHI Recommendations Report (TriWest Group, March 15, 2001).

An examination of Table 2 on Number of Services (pp. 11-13) and Table 4 on Capacity Per Capita (pp. 16-17) yields the following conclusions about the amount and distribution of mental health resources in Colorado:

1. The Central Front Range and Western Slope have more adult inpatient resources per capita.

2. The Central and Southern Front Range have more child and adolescent inpatient resources per capita.

3. Urgent Psychiatric Care, daytime respite, and overnight respite are largely unavailable for children and adults in most parts of the state. Only the Central and Southern Front Range have any respite capacity at all.

4. For RTC and day treatment, the Central Front Range has the most resources, but the Southern Front Range also has a large number of RTC beds per capita.

5. ATU resources are more prevalent per capita in the Southern Front Range and on the Western Slope. This may relate to the relative lack of other intensive alternatives (e.g., inpatient, intensive case management) in these areas

6. Per capita, the Southern Front Range has the most intensively staffed residential services (those providing 24-hour, awake staff). The Western Slope has none.

7. The Central Front Range has a much more developed array of intensive community-based treatment options per capita, including high intensity community treatment teams for adults (e.g., assertive community treatment teams), intensive family treatment (e.g., home-based services, Multisystemic Therapy teams), and intensive case management.

8. The Northern Front Range has by far the most day treatment capacity for adults per capita. The Central Front Range has less, perhaps due to the increased numbers of intensive community-based treatment resources there. The Southern Front Range and Western Slope

have few day treatment resources for adults per capita.

9. The Southern Front Range and Western Slope have more nursing home providers per capita with some level of specialized mental health services.

10. The Northern Front Range has fewer housing resources per capita than other areas of the state.

Access to Community Resource by Payer Source

CMHCs were asked to indicate whether consumers with varying insurance status had access to each service that they listed on their inventories. The choices included consumers with Medicaid, Medicare, private insurance, no insurance, or other supplemental funding (e.g., DHS or DYC funding). Data about payers for services were received for 294 of the 370 services (79%). Only these 294 services were included in the analyses regarding payer-driven access to community services. It is also important to remember that payer information has not been independently verified by the programs. It is possible that programs accept other sources of payment than the CMHCs reported.

A caveat must also be added about how the term "access" should be interpreted in this study. The fact that a service accepts a person with Medicare, for example, does not mean that Medicare will reimburse the service provider for any or all types of care that the person receives. Consumers with Medicare may have access to an intensive treatment team, even though Medicare only pays for traditional services such as individual psychotherapy. Also, some services such as mobile crisis teams accept consumers regardless of insurance status because the service does not bill third parties for payment. The crisis team is financed with other sources of funds.

Furthermore, because a service does not have a policy barring certain insurance types from entry does not mean that all consumers have regular or equal access to the service. Some RTCs have designated slots for Medicaid and will only accept privately insured youths once those slots are filled. Medicare or uninsured consumers may face waiting lists that Medicaid individuals do not or they may be diverted to other facilities when possible.

Almost all of the services in the inventory accept payment from a number of different sources, including self-pay consumers without insurance. Most programs serve consumers for an array of payers. For example, just 13 programs (4%) were reportedly reserved for the Medicaid population only.

Consumers who are enrolled in Medicaid (Table 5) were reported as having access to virtually all of the services on the inventory (97%). The few exceptions were a handful of programs for youth that were funded directly by the Colorado Department of Human Services and/or the Colorado Division of Youth Corrections specifically for the non-Medicaid population. The

majority of services were reportedly known to be accessible to privately insured consumers (75%) and consumers with Medicare (64%) (Tables 6 and 7, respectively).[4]

Consumers without insurance, however, were reported to have access to only 55% of services in the state system of care (see Table 8). They have no access to daytime respite anywhere in Colorado. Compared to the number of providers who serve Medicaid consumers, the number of providers for the uninsured is quite small. Uninsured consumers have fewer options for nursing homes with mental health capacity (21%), RTCs (22%), overnight respite (25%), high intensity community treatment (46%), intensive family services (54%), and day treatment (64%), compared with the number of options for consumers with Medicaid. Uninsured consumers have the same or nearly the same access to inpatient facilities, ATUs, and residential services.

Despite more restricted access, scores on the Colorado Client Assessment Record (CCAR) have shown that uninsured consumers have only slightly lower levels of severity when compared with their Medicaid counterparts.[5] Given their comparable level of need and substantially less access to community-based alternatives, uninsured consumers are likely to remain more dependent than the Medicaid and privately insured populations on the Colorado Mental Health Institutes for intensive services unless their community-based access expands significantly.

[4] It should be reiterated here that consumers with Medicare may be accepted into these services, but Medicare does not reimburse most types of intensive mental health services.
[5] Ellis, D. and Coen, A. February, 2001. Colorado Mental Health Services. Personal communication.

Table 5 Number of Services Available, Medicaid

Table 6 Number of Services Available, Medicare

Table 7 Number of Services Available, Private

Table 8 Number of Services Available, Uninsured

Community Capacity for Consumers with Special Needs

Additional capacity questions were included on Part II of the survey regarding 11 categories of consumers with special needs who have historically used Institute services, partly because of a lack of appropriate community alternatives. The categories are listed below in Table 10. CMHCs were asked to estimate the unduplicated number of consumers in each category who needed a hospital or hospital alternative during the past year, regardless of whether they actually received such a service.[6]

A statewide summary of the data regarding estimated number of consumers with special needs and related community capacity may be found below in Table 10. For readers interested in more detail, Appendix G contains the data reported by each CMHC.

The categories of consumers were based on characteristics such as co-occurring medical problems, problem behaviors, primary language, and history of violence. The characteristics defining these categories were not mutually exclusive. For instance, a consumer may have a history of violence and a co-occurring medical problem. If a given consumer who needed hospitalization fell into more than a single category, CMHCs were asked to count the consumer in the category that presented the largest barrier to serving the consumer in a community setting.

Arapahoe, Centennial, Colorado West, and Midwestern did not provide estimated counts of the number of consumers who needed a hospital or alternative in the previous year because figures were not available.[7] The 13 CMHCs that did provide estimated counts of consumers used different methodologies to create their estimates. For example, clinical managers in smaller CMHCs were able to create a list of specific consumers because the number of such individuals was quite small and the identities of the consumers were known by the CMHC management. The larger CMHCs had to develop an estimation methodology using whatever consumer and hospital data were present in their management information system.

Despite the variability in methodologies, the estimates are sufficient to understand the approximate number of consumers with special needs in each region who need an intensive level of service. The estimates also offer a baseline for interpreting the community capacity ratings that the CMHCs provided on the survey next to the estimated number of consumers in each category. The capacity ratings indicate what percent of the consumers in the category currently could be served in the community.

[6] Access Behavioral Care provided the number estimates for children and adolescents served in the Denver service area.
[7] However, Arapahoe, Centennial and Midwestern did provide capacity and alternative ratings for the 11 consumer categories.

In addition to estimating the number of consumers with special needs, the CMHCs were also asked to estimate the capacity of the community service system to care for these individuals outside of the Institutes. More specifically, they were asked to rate the adequacy of community resources within a one-hour drive in urban areas or within a two-drive in rural areas. The capacity ratings were based on the scale below.

Table 9. Rating Scale for Community Capacity for Consumers with Special Needs

1. **Current community capacity represents 0% of need (i.e., alternatives do not exist);**
2. **Current community capacity represents less than 25% of need;**
3. **Current community capacity represents between 26 and 50% of need;**
4. **Current community capacity represents between 51 and 75% of need;**
5. **Current community capacity represents 75 to 100% of need;**
6. **There is excess community capacity.**
7. **Not applicable – Consumers with these problems rarely or never request services**

The fourth column on the state summary in Table 10 below indicates how many CMHCs reported having at least some capacity in their community. Detailed capacity data by CMHC can be found in Appendix G. In general, if a CMHC reported no community capacity for a special-needs consumer category, they also reported that there were no or few consumers in their area that met the category description. Colorado West did not provide capacity ratings.

The data reported regarding consumers with special needs are summarized in Table 10 below. The categories were divided into four age brackets: children ages 11 and under, adolescents ages 12 to 17, adults ages 18 to 59, and older adults ages 60 and over. The total number of consumers with special needs who might need a hospitalization in the 13 catchment areas for which data were reported was 4347, over half of whom were adults.

Table 10. Statewide Estimated Population, Community Capacity, and Alternative Ratings for Consumers with Special Needs

Categories of Consumers with Special Needs	Number of Consumers Needing Hospital or Alternative	Average Community Capacity Rating*	Number of CMHCs out of 16 Reporting Community Capacity	Average Alternative Effectiveness Rating on a 1 (not effective) to 4 (very effective) scale
Children ages 11 and younger who:				
a) Have co-occurring medical problems	54	2.90	6	3.17
b) With a traumatic brain injury or organic brain disorder	8	2.75	4	2.25
c) Have a co-occurring developmental disability	50	2.23	9	2.56
d) Have co-occurring substance abuse	23	2.44	5	2.40
e) Are girls and have a recent violent history	71	2.70	8	2.50
f) Are boys and have a recent violent history	100	2.90	8	2.50
g) Have involvement with the criminal justice system	24	3.11	6	3.00
h) Have other problem behaviors (e.g., fire setting, running away)	145	2.62	9	2.63
i) Have a history of sexual offenses or misconduct	29	2.09	6	2.50
j) Speak primarily Spanish	28	2.10	7	2.57
k) Do not speak English nor Spanish	4	1.29	4	2.50
State summary for all child categories	**537**	**2.47**		**2.60**
Adolescents ages 12-17 who:				
a) Have co-occurring medical problems	55	3.20	7	3.14
b) With a traumatic brain injury or organic brain disorder	7	3.00	5	2.40
c) Have a co-occurring developmental disability	51	2.25	9	2.33
d) Have co-occurring substance abuse	134	3.00	10	2.10
e) Are female and have a recent violent history	59	2.80	9	2.33
f) Are male and have a recent violent history	144	3.00	8	2.38

Categories of Consumers with Special Needs	Number of Consumers Needing Hospital or Alternative	Average Community Capacity Rating*	Number of CMHCs out of 16 Reporting Community Capacity	Average Alternative Effectiveness Rating on a 1 (not effective) to 4 (very effective) scale
g) Have involvement with the criminal justice system	234	3.33	11	2.55
h) Have other problem behaviors (e.g., fire setting, running away)	191	3.00	9	2.44
i) Have a history of sexual offenses or misconduct	60	2.08	10	2.10
j) Speak primarily Spanish	18	2.13	6	2.33
k) Do not speak English nor Spanish	5	1.71	5	2.80
State summary for all adolescent categories	**958**	**2.68**		**2.45**
Adults ages 18 to 59 who:				
a) Have co-occurring medical problems	316	3.18	10	2.90
b) With a traumatic brain injury or organic brain disorder	82	2.83	10	2.70
c) Have a co-occurring developmental disability	275	2.38	11	2.59
d) Have co-occurring substance abuse	676	3.73	9	2.56
e) Are female and have a recent violent history	119	2.50	8	2.75
f) Are male and have a recent violent history	172	2.55	9	2.44
g) Have involvement with the criminal justice system	419	3.00	8	3.13
h) Have other problem behaviors (e.g., fire setting, running away)	87	2.67	7	2.57
i) Have a history of sexual offenses or misconduct	77	2.00	6	2.50
j) Speak primarily Spanish	45	2.55	7	2.71
k) Do not speak English nor Spanish	36	1.78	3	3.67
State summary for all adult categories	**2303**	**2.65**		**2.77**
Older adults ages 60 and over who:				
a) Have co-occurring medical problems	146	3.00	8	3.00
b) With a traumatic brain injury or organic brain disorder	50	2.73	9	2.22
c) Have a co-occurring developmental disability	38	2.20	9	2.22

Categories of Consumers with Special Needs	Number of Consumers Needing Hospital or Alternative	Average Community Capacity Rating*	Number of CMHCs out of 16 Reporting Community Capacity	Average Alternative Effectiveness Rating on a 1 (not effective) to 4 (very effective) scale
d) Have co-occurring substance abuse	92	2.80	7	2.29
e) Are female and have a recent violent history	33	2.56	6	2.33
f) Are male and have a recent violent history	40	2.20	6	2.33
g) Have involvement with the criminal justice system	28	2.63	7	2.71
h) Have other problem behaviors (e.g., fire setting, running away)	32	2.40	7	3.00
i) Have a history of sexual offenses or misconduct	32	1.90	8	2.00
j) Speak primarily Spanish	30	2.00	7	2.43
k) Do not speak English nor Spanish	29	1.88	6	2.33
State summary for all older adult categories	**550**	**2.39**		**2.44**
Consumers of all ages who:				
a) Have co-occurring medical problems	571	3.07		3.05
b) With a traumatic brain injury or organic brain disorder	147	2.83		2.39
c) Have a co-occurring developmental disability	413	2.27		2.43
d) Have co-occurring substance abuse	925	2.99		2.34
e) Are female and have a recent violent history	282	2.64		2.48
f) Are male and have a recent violent history	455	2.66		2.41
g) Have involvement with the criminal justice system	705	3.02		2.85
h) Have other problem behaviors (e.g., fire setting, running away)	456	2.67		2.66
i) Have a history of sexual offenses or misconduct	199	2.02		2.28
j) Speak primarily Spanish	121	2.19		2.51
k) Do not speak English nor Spanish	74	1.66		2.83
State summary for all categories	**4348**	**2.55**		**2.57**

*Capacity ratings: 1= 0%, 2 = less than 25%, 3 = 26 - 50%, 4 = 51-75%, 5 = 75 - 100% of need.

When special-need consumers require a hospital-level of care, community resources are available for only a small portion of them. Many CMHCs, often more than half of the 16 that submitted data, indicated that there were no suitable hospital services in the vicinity for many of the consumer categories (see the "Number of CMHCs Reporting Community Capacity" column on Table 10). Centennial, San Luis Valley, and Southeastern reported that they had no community capacity to care for consumers with special needs.

Even when local services did exist, the capacity of the services was reported to be inadequate. The capacity scale defined a rating of 2 as "current community capacity represents less than 25% of need" and a rating of 3 as "current community capacity represents between 26 and 50% of need." The average capacity rating for all subcategories combined was 2.55. Thus, the capacity of the community to treat individuals such as these is substantially less than 50% of the consumers in need, according to staff at community mental health centers. And although the adequacy of community resources is higher than this for some subcategories in some geographic regions, the statewide capacity is uniformly low for all 11 subcategories.

The category with the largest number of consumers in need of an alternative was consumers with co-occurring substance abuse (n = 925). The adequacy of the community capacity to treat these individuals was relatively high (mean = 2.99), but still only sufficient to care on average for less than 50% of consumers with co-occurring mental health and substance abuse needs who required an intensive level of care over the past year.

The most prevalent subcategory of special need for children was the group with "other problem behaviors" such as fire setting and running away (n = 145). Nine CMHCs reported having some capacity to treat children with these problems in the community. They estimated that current resources were adequate to serve on average between 26 and 50% of need.

Among adolescents, the most prevalent special-needs group was that of persons involved with the criminal justice system (n = 234). The community capacity for serving this group is relatively high (mean = 3.33), averaging over 50% of estimated need among the 11 CMHCs that reported resources for legally-involved youth with mental illness. However, a significant gap exists even for this category.

Among older adults, the subcategory with the most consumers in need of an alternative was that of older adults with co-occurring medical problems (n = 146). Community resources can be found within a reasonable distance for 26 to 50% of elders who live in the 8 service areas reporting resource levels (mean = 3.00).

The smallest category of need for all age groups was consumers who speak neither English nor Spanish (n = 74). However it should be noted that this category also received the lowest adequacy of capacity rating (mean = 1.66), meaning that very few services exist in the community to serve such individuals.

The next-to-lowest capacity rating was associated with consumers who have a history of sexual offenses or misconduct (mean = 2.02). Although 199 of these consumers reportedly needed

hospitalization during the past year, community mental health centers report that communities can care for fewer than 25% of these individuals outside of the Institutes.

Ten CMHCs provided data on consumers with traumatic brain injury or organic brain disorder. In the past year, 147 such consumers were expected to need a hospital-level of care, almost all of whom were adults. The capacity of community alternatives is perceived to be approximately the same as for other special needs populations (mean = 2.83, between 26% and 50%).

Effectiveness of Community Resources as Alternatives to the Institutes

Respondents were given the opportunity to make a judgment about how effective each service on the inventory was in reducing Institute usage. They were asked how effective each service was in:

- Preventing CMHI admission by supporting on-going needs;
- Diverting CMHI admission by providing an alternative care setting; and
- Shortening length-of-stay (LOS) in the Institutes by acting as a CMHI step-down or transition.

These "alternative" ratings were made on a scale where 1 signified "not effective," 2 signified "somewhat effective," 3 signified "effective," and 4 signified "very effective." Ratings were averaged if more than one CMHC rated the same service. Mean ratings of 1 to 1.50 were considered "not effective," mean ratings of 1.51 to 2.49 were considered "somewhat effective," mean ratings of 2.50 to 3.49 were considered "effective," and 3.50 to 4.00 "very effective." It should be recognized that respondents' judgments do not necessarily reflect the inherent effectiveness of the overall type of service, but, rather, the current effectiveness of the specific services available in their area at the time of the survey.

Of the 370 services in the inventory, 86% of the prevention entries, 83% of the diversion entries, and 80% of the shortening LOS ratings were completed. Some of the missing data appeared to be a result of some respondents' decision to leave the alternative rating blank (rather than place a 1 in the space) when they considered the service to be an inappropriate Institute alternative. For example, shortening LOS ratings were absent for many community inpatient facilities because it would often be inappropriate to transition a consumer from the Institutes by placing him or her into another inpatient facility. Because of the missing data in instances like these, alternative ratings may tend to overstate slightly the ability of the programs to serve as alternatives to the CMHIs.

Table 11 below contains the Alternative Ratings for the services in the inventory. The first page of the table provides prevention ratings, the second provides diversion ratings and the third provides shortening LOS ratings by region and statewide for each service type.

Table 11. Alternative Ratings, by Type of Service and State Quadrant
See SPSS file 'Alternative Ratings, by Type of Service and State Quadrant'
Page 1

Table 11. Alternative Ratings, by Type of Service and State Quadrant
See SPSS file 'Alternative Ratings, by Type of Service and State Quadrant'
Page 2

Table 11. Alternative Ratings, by Type of Service and State Quadrant
See SPSS file 'Alternative Ratings, by Type of Service and State Quadrant'
Page 3

Prevention Ratings. The prevention ratings were intended to capture the effectiveness of programs in the community that support the on-going, intensive needs of consumers who would otherwise be at risk for an Institute admission. Consistent with the continuum-of-care treatment model, 12 of the 15 service categories on the Alternatives Survey were seen as effective in preventing Institute stays (mean = 2.5 or above). Only emergency rooms, community hospitals, and RTCs were not seen as playing a significant role in preventing use of the Institutes.

The services that were considered most useful for preventing Institute stays (mean = 3.5 and above) were high intensity community treatment teams (e.g., assertive community treatment), intensively staffed residential services, and intensive case management teams.

The most notable regional distinctions were that intensive family treatment in the Southern quadrant and ATUs in the Northern quadrant were given relatively high prevention ratings (mean = 3.7). This may reflect the particular role that these treatment modalities play in a regional system of care that is physically removed from the large population centers of the state.

Diversion Ratings. If a consumer needs hospitalization, he or she may often be admitted to the Institutes or diverted to another appropriate inpatient or intensive setting. CMHCs assessed each service on the inventory in terms of how effectively it could provide an alternative setting for a consumer who might otherwise be appropriate for an Institute admission. Again, almost all of the 15 types of community services were rated as "effective" on average. Only RTCs, emergency rooms, and intensive family services were not viewed as effective diversionary services once a consumer was at imminent risk of hospitalization.

Regionally, intensive family services in the Southern quadrant were considered very effective diversionary resource (mean = 3.7). In the Central region, nursing homes with mental health capacities received a diversion rating of 3.2. For the Western quadrant, high intensity community treatment teams were seen as a very effective diversion strategy (mean = 4.0).

Ratings of the Ability to Shorten Length-of-Stay. CMHCs assigned a shortening length-of-stay (LOS) rating to each service that indicated how effective a service was at shortening "length of stay by acting as a CMHI step-down or transition." The results show that many of the same services that are effective in preventing and diverting Institute use are also helpful in expediting a consumer's return to the community. In order of their average rating, the effective types of services were intensively staffed residential services, ATUs, intensive family services, urgent psychiatric care, day treatment, intensive case management, daytime respite, high intensity community treatment teams, nursing homes with mental health capacity, and overnight respite. In the Northern quadrant only, CMHCs believed that RTCs could accelerate a child's departure from the Institutes.

Overall Types of Services seen as Effective Alternatives. Most of the 15 services on the inventory were considered effective alternatives to Institute utilization to some degree. The two types of services that were not rated as effective alternatives statewide were RTCs for youth and

emergency rooms.[8] With 1 as "not effective" and 2 as "somewhat effective," the ability of RTCs to prevent admission was 1.9, to divert admission was 1.6, and to shorten LOS was 1.7.

However, there are distinct, regional differences regarding the perception of RTCs. RTCs located in the Central region (n = 20) received the lowest alternative scores, perhaps as a result of the more complete array of other services available. Although there are only three RTCs in the Northern region, they were considered to be a somewhat effective diversionary resource and an effective resource for shortening Institute stays.

It is worth noting that intensively staffed residential services for adults was the category most consistently seen as effective at reducing Institute usage out of the 15 service types in the inventory. It received some of the highest alternative ratings in the prevention, diversion, and shortening LOS dimensions (mean = 3.8, 3.4, 3.3, respectively). Despite the views of survey participants, it should be kept in mind that this is not a service type that has a strong research base supporting its use (as opposed to assertive community treatment services or other evidence-based approaches).

Effectiveness of Services for Consumers with Special Needs

The previous section of the report concerned the perceived ability of the15 types of services defined in the inventory to prevent, divert, or shorten a hospital stay. This section of the report describes the perceived ability of any and all community resources to meet the needs of 11 special subcategories of consumers. These consumers have characteristics that tend to place unique demands on community services, and thus, they often are placed in the Institutes when a hospital level of care is needed. CMHCs were asked to rate on a scale from 1 to 4 the clinical effectiveness of available community resources in terms of the services' ability to prevent, divert, or shorten Institute utilization for each of the 11 subcategories of special needs consumers across four age brackets. The anchors for the scale are shown in Table 12.

Table 12. Alternative Rating Scale for Community Resources for Consumers with Special Needs

1. Alternatives are not effective
2. Alternatives are somewhat effective
3. Alternatives are effective
4. Alternatives are very effective
5. Alternative do not exist / Not applicable

[8] The subcategory of "Other Nursing Homes" were excluded from consideration as effective alternatives by definition. Nursing homes with no alternative ratings or an average rating below 3 were removed from the primary nursing home category and grouped together in the "Other" category.

For some service areas, there were no community alternatives to Institutes reported for many of the categories of special need consumers. In those cases, the CMHC did not provide an alternative rating. The number of CMHCs who provided an alternative effectiveness rating is the same as the number reporting capacity, as shown in the fourth column of Table 10 (pp. 26-28). Ratings were averaged across CMHCs who had community resources appropriate for each category of consumers. Mean ratings of 1 to 1.50 were considered "not effective," mean ratings of 1.51 to 2.49 were considered "somewhat effective," mean ratings of 2.50 to 3.49 were considered "effective," and 3.50 to 4.00 were considered "very effective."

The effectiveness of the community resources overall as an alternative averaged 2.57, almost exactly between the anchor points of "somewhat effective" and "effective." The community services seen as doing the best job of keeping consumers out of the Institutes were those for consumers with co-occurring medical problems (mean = 3.05). This was true for all four age brackets.

On the other end of the spectrum, the community alternatives that were rated as least effective at preventing Institute usage were those for consumers with a history of sexual misconduct (mean = 2.28). These programs were considered only somewhat effective, particularly for adolescents and older adults.

Mental health centers strongly endorsed the use of Institute alternatives for children under 11 and adult consumers who are involved in the criminal justice system and who need a hospital-level of care (mean = 3.00 for children and 3.13 for adults).

Programs designed for adult consumers who speak neither English nor Spanish were also perceived as very effective (mean = 3.67), but only three CMHCs in the state reported having access to programs for this relatively small subpopulation (n = 74).

The community mental health centers also indicated that community-based resources for older adults with "other behavior problems (e.g., fire setting and running away)" have effectively reduced Institute stays for older adults (mean = 3.00). Programs for consumers with a traumatic brain injury or organic brain disorder received alternative ratings similar to other types of programs for consumers with special needs. For children, adolescents, and older adults, the programs were rated as somewhat effective (mean =2.25, 2.40, 2.22, respectively), while adult programs were rated effective (mean = 2.70).

In summary, community programs for many consumers with special needs may offer an effective way to reduce Institute utilization. However, CMHCs report that current community resources are not always clinically effective when an intensive level of care is needed. The effectiveness of the programs varies depending on the age and characteristics of the consumer groups.

The data also suggest recent efforts to improve services for mental health consumers who are also involved in the criminal justice system may be paying off. Although the number of intensive programs is still lower than the reported need, the capacity of alternatives for the mentally-ill/criminally-involved group is higher than for other subpopulations of consumers.

Furthermore, these alternatives are perceived to be particularly effective in preventing hospitalization at the Institutes.

Community-based alternatives for consumers with a history of sexual misconduct, on the other hand, are not viewed as a successful diversionary resource for the Institutes. Thus, the public mental health system's reliance on the CMHIs for intensive mental health care for consumers with a history of sexual misconduct is likely to continue unless other settings are developed.

Most-Needed Alternative Services in the Community

A wide variety of community-based services are useful in treating consumers with serious mental illness outside of the CMHIs. The relatively high alternative ratings for the 15 service types illustrates this. The survey also takes the issue one step further by attempting to identify which of the service types would have the most impact on reducing use of the Institutes if the availability of the service was expanded. CMHCs were asked to specify two to four service categories from the list of 15 that hypothetically would have the most impact on preventing, diverting, or shortening Institute utilization. Their responses are summarized in Table 13 on the following page.

Insert Table 13 Most Needed Alternative Services page
See SPSS file Most Needed Alternative Services

Statewide, the type of service mentioned most frequently by the 17 CMHCs with the most potential to further reduce dependence on the CMHIs was the category of Acute Treatment Units (ATUs). This was the only category of service that was specified by at least one CMHC in every quadrant of the State. Two CMHCs listed ATUs in the Central, Northern, and Southern quadrants, and one listed it in the Western quadrant.

There were two categories that were listed by four CMHCs: intensive family services (e.g., home-based, MST) and intensively staffed residential services for adults. The need for intensive family services was mentioned by two Central, one Northern, and one Southern CMHCs. In the section on alternative ratings, it was observed that intensive family services were not considered an effective diversionary resource on the basis of the average diversion rating for the category. However, although current intensive family services may not be viewed as helpful in diverting hospitalization once a youth is in crisis, a significant number of CMHCs do see the development of additional intensive family services as having potential in reducing hospitalization given their prominence in this list of most-needed resources and in their relatively high prevention and shortening LOS ratings.

The need for additional adult residential services of various intensities was reported across Colorado. The need was articulated more clearly along the Central Front Range, where three of the four CMHCs who responded to the question specified intensively staffed adult residences as one of the most needed community services to reduce Institute utilization. One Northern CMHC also listed this category. Two Southern CMHCs took the initiative to independently create another housing category – one that is intensive, but drops the criteria that staff be awake at night – and placed that on the list of most needed services.

Eleven of the 15 service categories were designated by one, two, or three CMHCs as potentially having the most impact on reducing Institute use if developed. The only category not mentioned by any of the CMHCs was emergency rooms with psychiatric services. The diversity of responses illustrates the variability of community needs and the current uneven distribution of community resources in the state. For example, to reduce Institute utilization, Boulder and Jefferson Centers would like to have additional day and overnight respite slots, whereas to accomplish the same goal, San Luis Valley would like more community inpatient beds.

The data together argue for a priority to be given to ATUs, intensive family services, and adult residential at various levels of intensity in any policy and funding changes. Expanded capacity of other types of service is also desirable in specific geographic areas.

A few other types of services all having to do with the child service system were put on the most-needed list spontaneously. These categories were not originally part of the standard 15 categories on the survey, but were added by respondents. Enhanced foster-care placements, therapeutic foster care, school-based services, and “child clinicians” were listed by CMHCs in the Central and Southern quadrants. The last addition, “child clinicians,” underscores the difficulty that rural centers face in providing high-quality community services in any format without sufficient numbers of qualified professionals in the area. These are detailed in Table 14 below.

Table 14.

Other Community Services Most Needed to Reduce Insitute Utilization

State Quadrant	Needed Service
Central	Enhanced foster care placement
	School-based Child and Adolescent Services
Southern	Housing
	Therapeutic Foster Care
	Housing slots in Trinidad and Walsenburg
	Child clinicians

These service types outside of the standard 15 on the survey were spontaneously identified by CMHCs as the services most needed to reduce utilization of the Institutes.

Housing Capacity

One of the objectives of Part II of the survey was to obtain an estimate of the number of housing options currently available for consumers who may on occasion need an Institute admission, but who otherwise are typically served in the community. Such consumers may use intensive case management services, high intensity treatment teams, or day treatment programs. However, these consumers could not be maintained in the community unless they also had access to long-term, independent housing.

CMHCs were asked to provide information about these less-intensive housing options for mental health consumers who live within the confines of their geographic service areas. The type of housing options covered by Part II included Section 8 certificates, HUD 811 and 202 facilities, Single Room Occupancy Modified (SRO MOD) Rehabilitation facilities, home ownership programs, and "other housing" such as group homes and board-and-care facilities. Data was received for at least some of these housing categories from all 17 CMHCs.

However, some CMHCs left parts of the questionnaire blank or indicated that they did not have figures available. Most of the CMHCs do not routinely keep information on housing units that they do not operate. Therefore, the numbers provided likely reflect a low estimate of the housing options available.

Existing housing options are reported by service area in Table 15 and by state quadrant in Table 16 below. Section 8 certificates are the most common housing option reported (n = 1394) and "Other" housing such as group homes and board-and-care homes are the second most prevalent (n = 494). The vast majority of housing options are found in the Central Front Range quadrant of the state. The one exception to this is the category of SRO Modified Rehabilitated facilities. Most of these facilities and slots are found in the Southern Front Range quadrant.

CMHCs were also asked to provide an estimate of how many additional housing slots are needed to meet the needs of local consumers in each housing category. These data are presented in Tables 17 and 18 below. Statewide, 41% more Section 8 certificates are estimated to be needed,

36% more HUD slots, 40% more SRO MOD Rehabilitated Slots, 82% more Home Ownership opportunities, and 27% more "Other" housing options.

Although the type of housing that is most needed varies from area to area, the statewide picture is clear from the perspective of the community mental health centers. CMHCs report an insufficient supply of housing for consumers served by the public mental health system in all service areas. Although the impact of the housing shortage was not addressed directly in the Alternatives Survey, center personnel anecdotally reported that the scarcity of housing units for adults with serious mental illness extends the lengths-of-stay for consumers in the Institutes. Discharge is delayed because of the difficulty of securing a low-intensity housing option or because the higher-intensity, transitional residences are occupied by consumers waiting for openings in the low-intensity placements.

Table 15, 16, 17 and 18 summarize all of the results related to housing just discussed and are presented on the following four pages.

Insert Tables. See SPSS file 'Low Intensity Housing Options'

Table 15. Reported Existing Low Intensity Housing Options, by CMHC

Table 16. Reported Existing Low Intensity Housing Options, by State Quadrant

Table 17. Additional Needed Low Intensity Housing Options, by CMHC

Table 18. Additional Needed Low Intensity Housing Options by State Quadrant

Estimate of Future Gaps in Community Resources

The inventory of services provides a snapshot of mental health services that are and are not available in Colorado communities as of January 2001. To help policy makers and planners obtain a glimpse of what the needs of the community system-of-care might look like in the future, the CMHCs were asked to respond to the question, "What do you project to be the gaps and inadequacies of your community's system of care two years from now?" Some centers believed that their needs two years from now would be the same as their current needs. Others foresaw that rapid population growth in their communities would seriously undermine the infrastructure of the system-of-care within two years time. Still others responded that what is needed was a fundamental improvement in the quality of community alternatives, rather than a significant expansion of capacity. The gaps and inadequacies that were identified in the CMHCs responses are summarized in Table 19 below.

Table 19. Future Gaps and Inadequacies in the Public Mental Health System

Central Front Range Quadrant

- Child prevention services
- Support for school-based mental health
- Capacity of crisis response teams for children
- Child residential capacity, including supported group homes and intensive placements
- Shortage of appropriate families for children and adolescents to live with
- Capacity of respite care for day and overnight respite for children
- Adult high-intensity placements between hospitals and lower intensity residential options, such as board-and-care homes and adult foster care facilities
- Adult residential services, including those with 24-hour awake staff
- Rent subsidies, with additional staff for administration and case management support
- Case management services
- Capacity of inpatient facilities and inpatient alternatives, like ATU beds
- Outpatient capacity
- Overall gaps and inadequacies in all services (inpatient, outpatient, medications) for non-Medicaid consumers, including indigent and Medicare consumers
- Culturally competent treatment modalities and services
- Links with primary physical care

Table 19 (continued). Future Gaps and Inadequacies in the Public Mental Health System

Northern Front Range Quadrant

- Lack of inpatient beds for children and adolescents
- Lack of RTC beds for children and adolescents
- Lack of community adult inpatient beds, partly because of diversion from other counties
- Insufficient number of CMHI beds because of growing population
- Shortage of ATU beds if population increases continue
- Rapid expansion of waiting lists for uninsured and non-Medicaid populations
- A local non-medical detoxification facility
- Inadequate services to adult and adolescent consumers in detention centers
- 24-hour supervised residential care, as an ATU step-down
- An adolescent RTC for rural populations

Southern Front Range Quadrant

- More infrastructure overall to support growing population of the area
- Shortages of child psychiatrists
- Lack of RTC capacity
- Lack of inpatient capacity for children and adults
- Lack of an ATU or other hospital alternatives, especially for rural children and adults
- A locked facility for adolescents that could function as a hospital diversion and step-down
- More intermediate step-downs between inpatient and outpatient
- Transitional treatment unit for stays of one to four weeks
- 23-hour observation beds
- Consumer transportation
- Low-income housing, including housing for single-parent families with an identified child with mental illness
- Residential treatment options for adults in rural areas
- Boarding homes or other low intensity housing geared toward young adults
- Transitional housing resources
- Vocational services and intensive case management in rural areas
- More geriatric services, including a crisis stabilization unit for older adults
- Intensive case management
- A joint developmental disabilities / mental illness program
- Funding for more medications for uninsured and underinsured populations

Table 19 (continued). Future Gaps and Inadequacies in the Public Mental Health System

Western Quadrant

- Inadequate basic funding, while needs and expectations increase
- Lack of care facilities within a reasonable distance
- Transportation difficulties for those needing hospitalization outside of the area
- Lack of support for requests for funding program collaboration in small towns
- Lack of a capacity to provide continuing crisis response as a mode of treatment
- Respite care, crisis beds, other alternatives to hospitals
- Serious lack of supportive living situations

References

TriWest Group. (March 15, 2001). CMHI Operational Plan Study: Recommendations for the Mental Health Institutes in Colorado – Revised. State of Colorado, Department of Human Services, Office of Direct Services.

TriWest Group. (March 15, 2001). CMHI Operational Plan Study: Operational Plan for the Mental Health Institutes. State of Colorado, Department of Human Services, Office of Direct Services.