

Study of Mental Health/Substance Abuse Facilities and Their Role in North Carolina's System of Care

Final Report

**Joint Legislative Oversight Committee on
Mental Health, Developmental Disabilities,
And Substance Abuse Services**

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1.0 EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

In this year's session, the North Carolina General Assembly took on the issue of reforming the state's system of mental health, developmental disabilities, and substance abuse services. One of its important steps was establishing, through House Bill 1519, the Joint Oversight Committee for Mental Health, Developmental Disabilities, and Substance Abuse Services. The Oversight Committee is charged with the development of a plan that provides for a systematic, phased-in implementation of changes to the state's MH/DD/SA system. Full implementation is required no later than July 1, 2005. The Oversight Committee, which consists of 16 members of the General Assembly, developed and passed the Mental Health Reform Bill in addition to contracting for several studies. The research project conducted by MGT of America, Inc., in association with the Moss Group, Inc., and OBrien/Atkins is one of those studies.

Reform of North Carolina's mental health system is a complex, multiyear process that will involve countless political compromises and strategic redirections to move successfully toward completion. The Mental Health Reform Bill is a revolutionary piece of legislation that will jump-start the reform process and put the state squarely on the road of meaningful reform.

The Oversight Committee's goals and objectives for this project were to:

- determine the appropriate and inappropriate children's mental health and substance abuse program elements, including appropriate facility design and use;
- develop alternative financing mechanisms that require minimal capital outlay;
- create a prototype cost model for targeted facilities;
- provide the Oversight Committee with overall recommendations for the North Carolina Children's Mental Health system;

- provide specific recommendations on the future of the Whitaker School, the Eastern Area Treatment Program, and the Wright School;
- provide recommendations on the overall Substance Abuse Services system;
- provide specific recommendations on the Alcohol and Drug Abuse Treatment Centers (ADATCs);
- provide recommendations regarding special needs populations and the North Carolina Special Care Center (NCSCC);
- update facility recommendations from previous studies of the state hospitals; and
- provide the Oversight Committee with overall system recommendations, including incorporating and updating information from past studies.

In conducting our analysis and developing our recommendations for the Oversight Committee, we were clearly instructed to not make “politically correct” recommendations, but to offer our most honest assessment and thoughts for Oversight Committee consideration. We have done this, fully realizing that we are offering recommendations in a highly charged political environment and that taking any position in such an environment is risky at best.

Despite this challenge, we have faith in the merit of our recommendations, believe in our responsibility to provide them to the Oversight Committee for consideration, hope to stimulate informed debate, and support the development and implementation of meaningful reforms. Although some of our recommendations may be seen as fairly bold, we believe that they are consistent with past studies and necessary to successfully achieve true reform of the system.¹

¹ Our analysis of past studies (e.g., Auditor/PCG report, MGT’s 1999 report, the DMHDDSAS Redesign Study, Lewin Report, DMHDDSAS Unified System of Services Report) strongly suggests that most of our recommendations are consistent with both external and internal studies done in the past by various entities and consistent with true systemic reform.

1.1 Background of the Report

The North Carolina General Assembly has been actively involved in efforts to improve, enhance, and oversee state and local mental health, developmental disabilities, and substance abuse (MH/DD/SA) services for the past 10 years. Reform of the public system of mental health, developmental disabilities, and substance abuse services was targeted through various pieces of legislation enacted by the General Assembly and, in 1996, a comprehensive study of the Department of Human Resources (now the Department of Health and Human Services) was initiated through legislation.

Administration of North Carolina's four psychiatric hospitals, along with the provision of in-patient psychiatric services, is the responsibility of the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMHDDSAS) within the Department of Health and Human Services (DHHS). This same division also provides:

- a range of services to people with severe and profound mental retardation at five regional mental retardation centers;
- residential and outpatient treatment at three alcohol and drug abuse treatment centers;
- a special care center for the elderly with serious medical and mental problems;
- services for children with serious emotional and behavioral disorders at three regional educational institutions; and
- oversight for a network of mental health programs in communities across the state.

DMHDDSAS and the Division of Medical Assistance (DMA) manage federal and state funding to the 39 area/county programs. DMA is responsible for managing all Medicaid funding, and DMHDDSAS manages the rest of the state funding: approximately 25 percent and 52 percent, respectively. County contributions, self-pay, and third-party payment make up the remaining funding for the state. As a result of the

recently enacted Mental Health Reform Bill, the area/county programs will be called Local Management Entities (LMEs) in the future.

1.2 Organization of Our Report

We have organized our final report in a manner consistent with the presentation given to the Committee on August 6, 2001, to facilitate consistency, ease of understanding, and user-friendliness. The organization of this final report is as follows:

Chapter 1.0	Executive Summary
Chapter 2.0	Overall System-Level Recommendations
Chapter 3.0	State Hospital Facilities
Chapter 4.0	Substance Abuse System Recommendations
Chapter 5.0	Children's Mental Health Services
Chapter 6.0	North Carolina Special Care Center
Chapter 7.0	Creative Financing Options
Chapter 8.0	Facilities
Appendices	

1.3 Summary of Our Recommendations

Recommendation 1

Substantially reduce the number of local management entities.

Recommendation 1.1

Reduce number of LMEs to between 4 and 12 by 2007.

Recommendation 2

Use competition, market forces, alignment of financial incentives, and other finance-related strategies to achieve system goals.

Recommendation 2.1

Increase the role of basic competitive/market forces and basic business principles.

Recommendation 2.2

Create a systemic solution to incentivize appropriate use of state facilities by LMEs.

Recommendation 2.3

Make all state institutions receipt-supported and substantially increase their ability to function in a more competitive environment.

Recommendation 2.4

Create a more unified system of services.

Recommendation 2.5

Reduce the overall cost of administering the current regional system.

Recommendation 2.6

Use the current reform process to gradually prepare the overall system for a possible later transition to a more privatized, flexible, and market-based system that incorporates meaningful competition.

Recommendation 2.7

Consider the gradual introduction of risk-based reimbursement systems in future reform-related development.

Recommendation 3

Contract for a centralized, integrated, and statewide Utilization Management system that includes, to various degrees and with different strategies, all publicly funded mental health and substance abuse services in North Carolina.

Recommendation 3.1

Fund the purchase of comprehensive, statewide, and centralized Utilization Management Services.

Recommendation 3.2

If a more limited statewide UM model is chosen, DHHS should consider systematic broadening of UM to include non-Medicaid clients.

Recommendation 3.3

Selectively devolve UM responsibilities to LMEs/area/county programs at a later stage of system development.

Recommendation 3.4

Integrate all current contracts with external UM companies into one contract.

Recommendation 3.5

Add “Care Management” functions to Utilization Management functions to efficiently improve cost-effectiveness and consumer outcomes.

Recommendation 3.6

End any remaining preferential UM treatment for area/county programs.

Recommendation 4

Establish a five-year formal evaluation process of reform effort.

Recommendation 4.1

Support a contract with a respected external evaluation company.

Recommendation 4.2

Mandate coordination of this evaluation effort with other reform-related performance monitoring and measuring processes.

Recommendation 4.3

Ensure thoughtful coordination, collaboration, and presentation of all required reports if a decision is made not to pursue a contract with an external evaluation company.

Recommendation 5

Implement previous recommendations to close all state hospitals, build new hospitals, move children out of state hospitals, relocate elderly, and treat substance abuse clients in ADATCs.

Recommendation 5.1

The Division should develop an implementation plan for downsizing state hospitals while new facilities are being built.

Recommendation 5.2

The Division should produce an annual report on progress of downsizing the hospitals and building new facilities to the Oversight Committee.

Recommendation 6

Adapt ADATCs to accept all primary substance abuse state hospital admissions.

Recommendation 6.1

Renovate the ADATCs, add staffing, and revise management practices as needed to make each ADATC able to accept and safely manage current primary substance abuse admissions to state hospitals.

Recommendation 6.2

Provide a consistent set of detoxification and short-term residential services.

Recommendation 6.3

Expand ADATCs to full bed capacity and fully utilize all available beds.

Recommendation 6.4

Provide additional funding for staffing to allow ADATCs to expand to full capacity and to provide adequate staffing to support the ASAM-NC Level III.9 level of care.

- **Recommendation 6.4.1**
Increase staffing at Butner ADATC—Umstead Hospital
- **Recommendation 6.4.2**
Increase staffing at Walter B. Jones ADATC—Greenville
- **Recommendation 6.4.3**
Expand funding needed to fully staff Black Mountain—Julian F. Keith
- **Recommendation 6.4.4**
Expand funding needed to support overall ADATC staffing needs

Recommendation 6.5

Provide transportation services at each of the three ADATCs.

Recommendation 7

Transfer all primary substance abuse admissions from state hospitals to enhanced ADATCs.

Recommendation 7.1

DMHDDSAS should convene a steering committee to develop, implement, and oversee a work plan to most efficiently facilitate the diversion of primary substance abuse admissions from state hospitals to the revamped ADATCs.

Recommendation 7.2

Ensure that the Mental Health Trust established in this year's budget is used to provide substantial funding for diverting inappropriate state hospital admissions of individuals with primary substance abuse problems.

Recommendation 7.3

Transfer any savings or staff positions related to the diversion of primary substance abuse admissions from state hospitals to adapted ADATCs to the Substance Abuse Services Section to support the additional costs of expanding ADATC capabilities.

Recommendation 8

Develop complete continuums of locally and regionally accessible substance abuse services.

Recommendation 8.1

Provide adequate funding to systematically build a complete and accessible continuum of locally and regionally available substance abuse services in three phases over the next five years.

Recommendation 8.2

Establish and implement minimum "geographic-based" access standards for each level of service.

Recommendation 9

Expand the capacity of needed adolescent substance abuse services across North Carolina.

Recommendation 9.1

Expand the MAJORS program, now offered in 12 of the 39 Area Programs, to every current area/county program and every judicial district.

Recommendation 9.2

Double the capacity of clinically intensive residential program beds (ASAM Level III.5 or III.7) for adolescents with serious substance abuse problems.

Recommendation 9.3

Develop, fund, implement, and monitor the progress of a comprehensive statewide plan that will ensure consistent and effective screening, assessment, and referral to appropriate treatment for identified youth.

Recommendation 9.4

Systematically strengthen early intervention services (ASAM Level 0.5) for youth and adolescents in mainstream settings such as schools, primary care, and juvenile justice settings.

Recommendation 9.5

Develop a specialized, statewide 8- to 10-bed residential program for pregnant adolescent girls who have serious substance abuse problems and who require this level of care.

Recommendation 9.6

Integrate and mainstream substance abuse prevention and treatment services into school-based health clinics and primary care settings through strong contractual agreements with area/county programs and the evolving LMEs.

Recommendation 9.7

Develop systems to provide hospital-based outreach and treatment to homeless, pregnant adolescent and adult women with serious substance abuse problems who are having their babies delivered in local hospitals.

Recommendation 10

Expand statewide outcomes measurement to all publicly funded substance abuse services.

Recommendation 10.1

Mandate the ongoing collection of a standard set of substance abuse outcomes for all services supported by North Carolina public substance abuse dollars.

Recommendation 10.2

Implement a multiyear plan to link relevant departmental databases.

Recommendation 11

Develop and explore longer-term, stable substance abuse financing options.

Recommendation 11.1

Pass substance abuse parity legislation.

➤ **Recommendation 11.1.1**

Mandate an evaluation of substance abuse parity in the North Carolina State Employee Plan.

Recommendation 11.2

Implement a multiprong substance abuse services funding strategy.

- **Recommendation 11.2.1**
Utilize an alcohol sales tax to provide ongoing and stable funding for substance abuse services.
- **Recommendation 11.2.2**
Utilize Medicaid options to expand services for those with substance abuse problems.
- **Recommendation 11.2.3**
Mandate an evaluation of potential legislative changes in insurance regulations to increase coverage options for those with substance abuse disorders.
- **Recommendation 11.2.4**
Promote support of substance abuse services by the North Carolina business sector.
- **Recommendation 11.2.5**
Direct savings generated from diversion of substance abuse-related admissions from state hospitals to development of ADATC and community resources.
- **Recommendation 11.2.6**
Seek innovative sources of funding and strategies to address the complex needs of indigent individuals with severe addictive disorders.

Recommendation 12

Implement previous SAS overall substance abuse system recommendations.²

Recommendation 12.1

Prohibit restrictions on preexisting conditions.

Recommendation 12.2

Ensure unlimited access to detoxification.

Recommendation 12.3

Expand postdetoxification residential treatment.

² These general system recommendations were developed by the SAS section and included in the DMHDDSAS Redesign Plan in 1999. They were, and are, in no way inclusive, but include many recommendations that are essential for effective system functioning. SAS reexamined these recommendations at MGT's request and found that all are still applicable in 2001. We concur.

Recommendation 12.4

Expand low-intensity residential services.

Recommendation 12.5

Ensure priority admissions for pregnant women and intravenous drug users.

Recommendation 12.6

Increase criminal justice trained staffing.

Recommendation 12.7

Improve accountability for substance abuse prevention and treatment block grant funds.

Recommendation 12.8

Increase use of certified substance abuse staff.

Recommendation 12.9

Ensure substance abuse treatment competence in utilization management systems.

Recommendation 12.10

Ensure priority status for criminal justice-involved individuals.

Recommendation 12.11

Expand DWI services.

Recommendation 12.12

Ensure compliance with Synar amendment requirements.

Recommendation 13

Develop a complete and comprehensive array of regional children's mental health services in LMEs and regions across the state.

Recommendation 13.1

Provide adequate funding to systematically build a System of Care with a comprehensive array of fully accessible child and youth mental health services in three phases over the next five years.

➤ **Recommendation 13.1.1**

Utilize projected costs for SOC as a blueprint for future development and as a guide for the costs of that development.

Recommendation 13.2

Charge the State Collaborative for Children and Families with further examining regional Category 1 and 2 development needs and offering recommendations for Oversight Committee consideration.

➤ **Recommendation 13.2.1**

Systematically survey key stakeholders including Area Programs, the North Carolina Child and Family Services Association, private providers, families, and advocates.

➤ **Recommendation 13.2.2**

Determine, cost-out, and implement a plan to fill the gaps in availability of Category 1 and 2 services.

Recommendation 14

Expand and broaden the child mental health outcome measurement system.

Recommendation 14.1

Charge the State Collaborative with developing a comprehensive outcome measurement plan for children receiving services.

➤ **Recommendation 14.1.1**

Adapt the AOI to better meet the needs of children receiving CFS services who are not eligible for at-risk funding.

➤ **Recommendation 14.1.2**

Coordinate the development of core interagency outcomes with the development of a more blended, flexible local funding pool.

Recommendation 14.2

Legislatively mandate development of interagency MIS interface capacity and the state's ability to require, obtain, and report data from local agencies.

Recommendation 14.3

Legislatively mandate an annual "interagency child outcomes report card."

Recommendation 15

Standardize the regional lines of key child-serving agencies.

Recommendation 15.1

Examine and offer recommendations for the most appropriate regional boundaries based on “natural continuums” and other key factors (e.g., population density, geographic factors, and economic/business factors).

Recommendation 16

Establish a single functional “Community Collaborative” structure in each county.

Recommendation 16.1

Support the creation of a single integrated “Community Collaborative” in each county.

➤ **Recommendation 16.1.1**

Mandate that the State Collaborative for Children and Families (SCCF) examine all current state policies, rules, and statutes related to requirements for cross-agency collaboration or community coalitions.

➤ **Recommendation 16.1.2**

Mandate the development of a governance structure that integrates collaboration efforts.

➤ **Recommendation 16.1.3**

Mandate that all state and local government initiatives that direct staff to collaborate with or build coalitions with other agencies involved with the targeted children and their families collaborate with the appropriate community collaborative.

Recommendation 16.2

Charge the State Collaborative for Children and Families with developing implementation plans for these recommendations for Oversight Committee review and consideration.

Recommendation 17

Decategorize a small percentage of funding (e.g., 1% to 3%) of key child-related state agencies.

Recommendation 17.1

Charge the State Collaborative for Children and Families with studying the potential decategorization of a small percentage of funding (e.g., 1% to 3%) of key child-related state agencies.

Recommendation 17.2

Legislatively mandate that agencies demonstrate collaboration in budget development before budgets can be passed.

Recommendation 18

Regionalize and begin to privatize Whitaker and Wright Programs.

Recommendation 18.1

Charge the State Collaborative for Children and Families with studying the following recommendations related to the Whitaker and Wright schools and offering its recommendations for implementation for Oversight Committee consideration.

Recommendation 18.2

Reengineer the system for ensuring provision of residential school services to highest risk latency age children (ages 8 to 12) by developing a four-site regional system for children.

- **Recommendation 18.2.1**
Develop a four-site, regionally-based system of services that functions as part of a continuum of integrated nonresidential and residential services for children.
- **Recommendation 18.2.2**
Renovate Wright and EATP and maintain them as regional state facilities for children for this phase of system development.
- **Recommendation 18.2.3**
Develop two additional programs for children that will provide services consistent with the “Reeducation Model” currently provided at the Wright School to complete the four-site system.
- **Recommendation 18.2.4**
Maintain all four programs as state-operated programs for children until FY 2005 to preserve safety net capacity during early reform.
- **Recommendation 18.2.5**
Ensure that all four sites and their service programs are part of an integrated system and offer the same general treatment approach and level of care that is most appropriate to meet the needs of children of that region.
- **Recommendation 18.2.6**
Ensure that renovations of the two existing sites and development of any additional sites result in Medicaid-reimbursable services for children.

Recommendation 18.3

Reengineer the system for ensuring provision of residential school services to highest risk adolescents (ages 13 to 17) by developing a four-site regional system.

- **Recommendation 18.3.1**
Develop a four site, regionally-based, integrated system of services that functions as part of a continuum of integrated nonresidential and residential services for adolescents.
- **Recommendation 18.3.2**
Plan to eliminate use of the Whitaker facility by July 1, 2003.
- **Recommendation 18.3.3**
Terminate the Greensboro renovation plans, given the proposed continuation of Wright School facilities and anticipated development of residential service capacity for those typically treated at Whitaker.
- **Recommendation 18.3.4**
Purchase services from four programs for adolescents that provide services consistent with the "Reeducation Model" currently provided at the Whitaker School to complete the four-site system.
- **Recommendation 18.3.5**
Maintain all four programs as state-operated programs until FY 2005 to preserve safety net capacity during the challenges of early reform.
- **Recommendation 18.3.6**
Establish a diversion process and impact study to provide information and experience that will allow DHHS to develop and distribute RFPs for adolescent services by FY 2005 (or sooner if data indicate).
- **Recommendation 18.3.7**
Whitaker School programming should be maintained, either in its current site or a new site, until the new programs for adolescents are ready for operations.
- **Recommendation 18.3.8**
Ensure that all four sites and their service programs for adolescents are part of an integrated system.
- **Recommendation 18.3.9**
Ensure that all renovations of current sites and development of new sites result in Medicaid-reimbursable services for adolescents.

Recommendation 18.4

Maintain the cross-agency regional child/adolescent referral and placement structures now in place and incorporate, as appropriate, these processes into all relevant utilization management processes that develop in the future.

Recommendation 19

Establish and effectively implement a systematic, sufficiently funded and safe transition of children and adolescents out of state psychiatric hospitals and into appropriate community-based programs in a manner consistent with *Olmstead* requirements and System of Care principles.

Recommendation 19.1

Establish local and regional service alternatives to state hospitalization for children and adolescents.

Recommendation 19.2

Provide bridge money through *Olmstead* and Mental Health Trust Funds to facilitate effective and safe transitions from the state hospitals.

Recommendation 19.3

Establish the Re-Education Model as the programming model for the child/adolescent units in the hospitals until they are closed.

Recommendation 19.4

Establish local crisis, in-home, and stabilization services.

Recommendation 19.5

Close state hospital child/adolescent units gradually and systematically.

Recommendation 19.6

Transfer youth out of the child/adolescent units if, and only if, appropriate alternative services are available.

Recommendation 20

The DMHDDSAS should develop and implement a structured transition plan for moving the elderly out of state hospitals and close the nursing units at the state hospitals.

Recommendation 20.1

Charge the DMHDDSAS with developing a phased-in plan for moving the elderly out of state hospitals and reporting to the Oversight Committee.

Recommendation 20.2

Renovate the second and seventh floor of NCSCC to increase the bed capacity by adding 68 beds.

Recommendation 20.3

Require DMHDDSAS to report annually on its progress of moving the elderly out of state hospitals.

Recommendation 21

Use certificates of participation for building state facilities for mental health and substance abuse services.

Recommendation 22

North Carolina could issue bonds to fund construction of needed substance abuse and mental health facilities.

Recommendation 23

Invest state investment pools, such as retirement system funds, in mental health and substance abuse buildings as real estate investments, at market rates.

Recommendation 24

Realign alcohol taxes to fund substance abuse treatment facilities.

Recommendation 25

Sell undeveloped Dix property with proceeds used for capital investment or as endowment for operations.

Recommendation 26

North Carolina should build four new psychiatric hospitals and then close the existing state hospitals.

**EXHIBIT 1
BED SIZE ESTIMATED COSTS
FOR NEW STATE HOSPITALS**

	Beds	Cost
Broughton	423	\$96,306,329
Cherry	360	\$82,068,990
Dorothea Dix	247	\$63,726,274
John Umstead ¹	256	\$50,966,908

¹ Assumes retention of Barrett Building with some minimal renovation and phased demolition/replacement of the older buildings.

Recommendation 27

The state should renovate the three ADATCs to improve their security and functionality.

**EXHIBIT 2
BED SIZE, CHANGE IN BEDS, AND ESTIMATED COSTS FOR ADATC
RENOVATIONS**

	Beds	Change	Cost
Julian F. Keith ADATC, Black Mountain	80	0	\$688,788
Walter B. Jones ADATC, Greenville	79	24	\$366,326
Butner ADATC, Butner	80	20	\$770,224

Recommendation 28

The state should renovate two floors at the North Carolina Special Care Center at the estimated cost of \$332,894 to increase its capacity by 68 beds.

Recommendation 29

Renovate Wright School and the Eastern Area Treatment Program (EATP) facilities to become Medicaid-certified.

The projected cost of renovating Wright School to become Medicaid-certified is \$600,000. The number of beds at Wright School will not change.

The number of beds at EATP will increase from 8 to 12. The cost for renovation at EATP is only \$70,000.

North Carolina should ***not*** build or renovate:

- **Dorothea Dix Replacement** as designed by the Freelon Group Architects. The 2001 costs for this design are \$86.2 million. The design calls for too many beds (302), and keeps the youth unit and geriatric beds. MGT believes that there should be no more than 247 beds. The number could be reduced even further if the medical/surgical services were outsourced.
- **Central North Carolina School for the Deaf**, Greensboro. We have recommended design of a regionalized system for both children and adolescents in the state. The state will save \$7.5 million by not renovating the Greensboro campus. The campus is too large for the small schools envisioned in the plan.

- **Whitaker School, Butner.** We do not recommend any renovations to Whitaker, except for already planned maintenance. This program will be privatized as part of a regional adolescent treatment system by July 2003.
- **Children's Schools.** We have recommended design of a regionalized system for both children and adolescents in the state. We propose the development of a regionally-based privatized children's mental health program, with only Wright and EATP being state-owned and operated schools.

2.0 OVERALL SYSTEM-LEVEL RECOMMENDATIONS

2.0 OVERALL SYSTEM-LEVEL RECOMMENDATIONS

Reform of North Carolina's mental health system is a complex, multiyear process that will involve countless political compromises and strategic redirections to move successfully toward completion. The Mental Health Reform Bill is a revolutionary piece of legislation that will jump-start the reform process and put the state squarely on the road of meaningful reform. Although MGT believes substantial weakening of some language and provisos in the bill was unfortunate, we recognize needs for compromise to move reform forward.

Because true systemic reform will likely be a five- to ten-year process, all should understand that over the years much experience will be gained, many political winds will shift, new leadership will continually emerge, and reams of clarifying legislation and policy reports will be created. The passing of this base legislation will allow all those involved in the reform process to understand and learn to adapt to the general intent of the General Assembly. Thus much time remains for the Oversight Committee, DHHS, and all involved to refine their thinking, build consensus, and contribute to the process in a way that facilitates a positive and meaningful outcome. They can now begin the creative process of developing necessary information and consensus, building many of the much-needed operational systems, and implementing numerous system-improving initiatives.

It is important to note that we have observed over the past few years an increasing sense of distrust, low morale, and, at times, hostility among the many groups and factions attempting to influence the course of reform. This conflict is a natural by-product of a system that is not performing well, has unclear accountability for successes and failures, and is in a time of meaningful system reform.

It is in the best interest of all concerned for the General Assembly to continue to act decisively and boldly in its desired directions over the next year or two to clearly establish the future path of the system. The General Assembly's actions could allow all participants to begin to mend fences and find a way to make the new system work. Any uncertainty and/or ambiguity regarding the commitment to fundamental reform are counterproductive and will only strengthen the divisions that have grown over these past few years.

Although the system has experienced several setbacks in recent years, many of these past disappointments were wedded not to incompetent staff, but to severe systemic challenges. Indeed, all should understand that professionals from across the country view with great respect North Carolina's professionals and accomplishments for their national leadership in children's and addiction services. Additionally, none should underestimate the value of lessons learned and knowledge gained (despite their known shortcomings) by North Carolina staff and stakeholders based on their involvement in cutting-edge initiatives over the past years.

Despite the clamor over turf and the heartfelt passion that fuels this field, all should pause for a moment to appreciate the fact that there is actually a very high level of consensus in North Carolina regarding the general direction of reform. These areas include, but are in no way limited to:

- targeting priority populations;
- providing comprehensive/coordinated services;
- ensuring a broad pool of competent nonprofit and state providers;
- establishing a sensible and manageable governance system;
- ensuring accountability and continuous quality improvement;
- supporting state-of-the-art MIS systems;
- aligning financial incentives to achieve desired goals; and
- including consumers in all aspects of reform.

To build on the consensus now found in the system, MGT provides the following recommendations for the overall system.

2.1 Recommendation 1

Substantially reduce the number of local management entities.

2.1.1 Goal

Create an efficient, manageable, and accountable behavioral health care structure in North Carolina.

2.1.2 Findings

The political struggle over governance and the future roles of area/county programs in many ways dominates the reform process. If true systemic reform is chosen, the functions, responsibilities, and accountability will expand dramatically for Local Management Entities (LMEs), causing change in political dynamics. The managerial, administrative, and client-serving functions of LMEs in the context of reform mirror those of a modern health care system. Such systems are complex and challenging to manage. Although the exact nature of the reformed system or the final number of local/regional entities cannot be known at this time, the reformed governance system and the LMEs working within it must be able to function fully and competently within such a modern health care environment. It is in this context of expected future functioning that governance-related decisions should be made.

If North Carolina were now building its public sector behavioral health system from scratch, we doubt that the state would choose to create 39 or even 20 state-operated and state-funded regional facilities/programs. This type of system is rooted in past models and earlier times, but is now so deeply imbedded in the state's health care culture, all concerned have problems envisioning the political will to change it.

Consequently, we do not recommend at this time the elimination of this model, but instead choose to work within the political realities of the time and structure of the Mental Health Reform Bill.

However, it is crucial for the state to adapt this system to be more consistent with modern health care systems. One of the most fundamental realities of modern health care administration is that health plans must have a sufficiently large population base to support the cost of administrative overhead. A common measure of system efficiency is the percentage of administrative costs that must be diverted from clinical care to manage that system. Low administrative costs are necessary to leave the greatest amount of dollars available for delivering services to consumers. A North Carolina governance structure that ends up with high numbers of smaller management entities would find it very difficult to fare well in such an analysis.

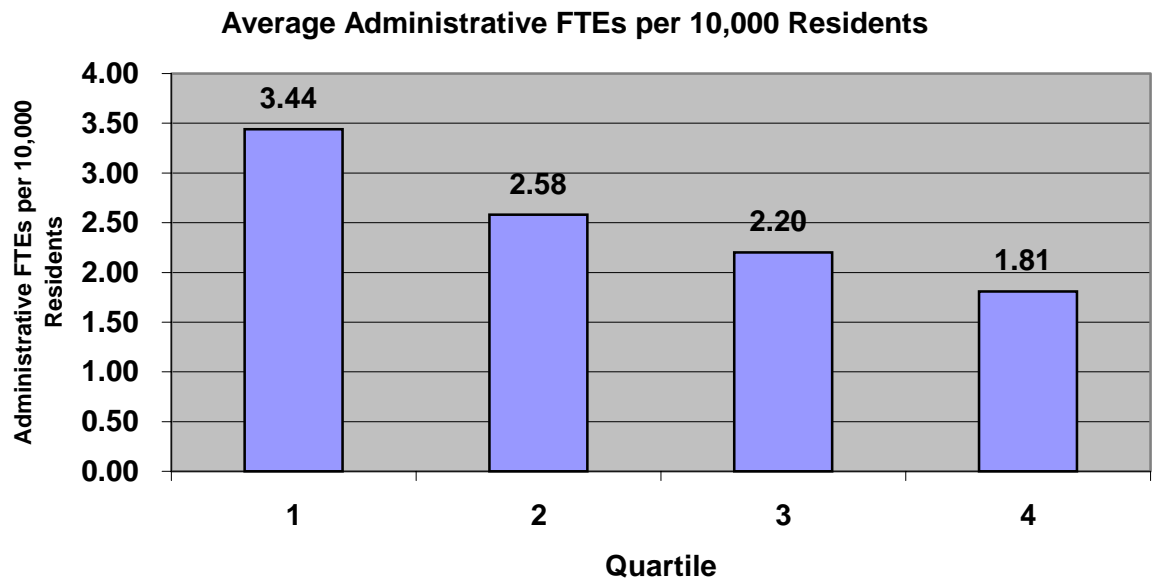
One component of the Division's earlier redesign effort was to examine how the population served by an area/county program related to the number of administrative persons needed run the system to serve that population. This analysis (see Appendix A—Administrative Cost Study: Executive Summary) showed conclusively that area/county programs serving smaller populations have a higher ratio of administrative personnel to population than programs serving larger populations.

As seen in Exhibits 2-1 and 2-2, North Carolina's current area/county program system generally uses almost twice as many administrative personnel (per 10,000 residents) to run the smaller programs than to run the larger ones. Additionally, as the number of area/county programs increases, so does the number of costly MIS systems, training programs, physical infrastructures, and so forth that must be supported.

**EXHIBIT 2-1
AVERAGE ADMINISTRATIVE FTES
PER 10,000 RESIDENTS
(BY QUARTILE)**

Quartile	Area/County Program Population	Average Number of Administrative FTEs (per 10,000 Residents)
1	55,000–110,000	3.44
2	111,000–149,999	2.58
3	150,000–234,000	2.20
4	235,000–634,000	1.81

EXHIBIT 2-2



The findings of these analyses suggest that administrative efficiency should be a key variable in assessing a particular system's economic viability.

The rationale underlying how many local/regional entities we have recommended is based on our analysis of several key factors. These factors were developed in the context of the Division's 1999 redesign effort. Given that they were one of the most thoughtful components of the redesign process in terms of governance options, the section describing each of these components is included in Appendix B—Key Dimensions to Consider in System Design. We suggest that anyone who has an interest in the issue of governance review this appendix.

Beyond the number of regional entities, a key implementation question is how to actually operationalize a substantial reduction in the number of local/regional entities. It is beyond the scope of our study to analyze and provide recommendations or financial projections on the different ways reorganization could be done. However, it is important that the General Assembly and the Division carefully consider the cost and effort involved with various approaches to reduction. For instance, substantial experience with the cost and effort involved with merging two existing area/county programs into a single program can be accessed. Such experience should be studied carefully.

2.1.3 Specific Recommendations

Recommendation 1.1

Reduce number of LMEs to between 4 and 12 by 2007.

It is crucial that the North Carolina reform process be successful in reducing the number of LMEs/area/county programs to a manageable number of management entities. The failure to do so will:

- institutionalize very poor economies of scale;
- support redundant and expensive administrative overhead (e.g., regional senior management staff, MIS systems);
- inhibit future development of any risk-based financial reimbursement models, such as capitation or case rates; and
- inhibit the ability of the state to monitor and manage the system.

It could be effectively argued that the most appropriate and efficient regional management structure for North Carolina would, in fact, be the current four regions; however, we believe that a more reasonable and politically achievable goal by 2007 is in the 8 to 12 range. We realize that it is difficult to imagine how such a structure might look, so we have included previously developed sample regional configurations that attempted to provide a model of 8, 11, and 12 natural regions based on business centers, geography, and current area/county program regional lines. These models are included in Exhibits 2-3, 2-4, and 2-5 for illustrative purposes only.

In sum, given the many operational and political obstacles to achieving a substantial reduction in the number of programs, we urge the General Assembly and DHHS to stay the course and ensure that a meaningful reduction actually occurs.

2.1.4 Suggested Time Frame¹

Consistent with Mental Health Reform Bill

2.2 Recommendation 2

Use competition, market forces, alignment of financial incentives, and other finance-related strategies to achieve system goals.

2.2.1 Goal

Use the current reform process to systematically prepare the state for the possibility of fundamental changes in the financial structures and strategies that underlie the current system.

2.2.1 Findings

It is widely understood that the state overutilizes state facilities because sufficient community resources are not in place across the state. This has been known for many years, if not decades, but the problem has in many ways appeared intractable. Many will

¹ Suggested time frames for recommendations are intended to provide the Committee with our best estimate of ideal chronology and estimated difficulty of implementation. However, we believe that those charged with implementing the recommendations will be in a better position to provide the Committee with a detailed work plan that includes more reliable time frames for completion.

EXHIBIT 2-3

OPTIONS FOR REGIONAL BOARD CONFIGURATION: Option A

Numeric number in map body is Area Program name listed below.

I. Far West (\$50,000)

1. Smoky Mountain
2. Triad
3. Blue Ridge
4. New River

II. West (\$55,00)

5. Foothills
6. Rutherford-Polk
7. Cleveland
8. Gaston-Lincoln
9. Catawba

III. Gateway (108 million)

10. Mecklenburg
11. Piedmont
20. Davidson

IV. NC Central (1.12 million)

12. Crossroads
13. Centerpoint
14. Rockingham
15. Guilford
16. Alamance-Carroll

V. East Central (1.11 million)

17. Orange-Person-Chatham
18. Durham
19. Vance-Granville-Franklin-Warren
26. Johnston
27. Wake

VII. North East (\$70,000)

28. Edgecombe-Nash
29. Riverstone
30. Roanoke-Chowan
31. Albemarle
32. Tideland
33. Pitt

VI. South Central (\$49,000)

21. Randolph
22. Sandhills
23. Southeastern Regional
24. Cumberland
25. Lee-Harnett
34. Wilson-Greene

VII. South East (\$88,000)

35. Wayne
36. Lenoir
37. Neuse
38. Onslow
39. Duplin-Sampson
40. Southeastern Area



Option A:

- 8 regional boards
- most centralized
- does not split up Area Programs
- centered on health care markets and/or regional hubs where possible

EXHIBIT 2-4

OPTIONS FOR REGIONAL BOARD CONFIGURATION: Option B

Numeric number in map body is Area Program name listed below:

I. Far West (\$59,000)

1. Smoky Mountain
2. Trend
3. Blue Ridge
4. New River

II. West (\$55,00)

5. Foothills
6. Rutherford-Polk
7. Cleveland
8. Gaston-Lincoln
9. Catawba

III. Mecklenburg (\$75,000)

10. Mecklenburg

IV. West central (\$44,000)

12. Crossroads
13. Centerpoint
20. Davidson

V. NC Central (\$96,000)

14. Rockingham
15. Guilford
16. Alamance-Caswell
21. Randolph

VI. South Piedmont (\$86,000)

11. Piedmont
22. Sandhills

VII. Mid State (\$28,000)

17. Orange-Person-Chatham
18. Durham
19. Vance-Granville-Franklin-Warren

VIII. Wake (\$50,000)

27. Wake

IX. South Central (\$67,000)

23. Southeastern Regional
24. Cumberland
25. Lee-Hamett
26. Johnston

X. North East (\$08,000)

28. Edgecombe-Nash
29. Riverstone
30. Roanoke-Chowan
31. Albemarle
32. Tideland
33. Pin
34. Wilson-Greene

XI. South East (\$70,000)

35. Wayne
36. Lenoir
37. Neuse
38. Onslow
39. Duplin-Sampson
40. Southeastern Area



Option B:

- 11 regional boards
- does not split up Area Programs
- counties over 500,000 retain single county status

EXHIBIT 2-5

OPTIONS FOR REGIONAL BOARD CONFIGURATION: Option C

Numeric number in map body is Area Program name listed below.

I. Far West (\$50,000)

1. Smoky Mountain
2. Trend
3. Blue Ridge
4. New River

II. West (\$55,000)

5. Foothills
6. Rutherford-Polk
7. Cleveland
8. Gaston-Lincoln
9. Catawba

III. Mecklenburg (\$75,000)

10. Mecklenburg

IV. West central (\$45,000)

12. Crossroads
13. Centerpoint
20. Davidson

V. NC Central (\$95,000)

14. Rockingham
15. Guilford
16. Alamance-Caswell
21. Randolph

VI. South Piedmont (\$86,000)

11. Piedmont
22. Sandhills

VII. Mid State (\$28,000)

17. Orange-Person-Chatham
18. Durham
19. Vance-Granville-Franklin-Warren

VIII. Capital (\$50,000)

26. Johnston
27. Wake

IX. South Central (\$67,000)

23. Southeastern Regional
24. Cumberland
25. Lee-Harnett

X. North East (\$69,000)

28. Edgecombe-Nash
29. Riverstone
30. Roanoke-Chowan
31. Albemarle
32. Tideland

XI. East (\$41,000)

33. Pitt
34. Wilcox-Greene
35. Wayne
36. Lenoir
39. Duplin-Sampson

XII. South East (\$70,000)

37. Nouse
38. Onslow
40. Southeastern Area



Option C:

- 12 regional boards
- population split fairly evenly; larger programs in the central part of the state; smaller in the east
- does not split up Area Programs
- centered on health care markets

claim that it is a matter of underfunding, and there is surely some truth in this perspective. However, it is also true that the overall system is built on a structure that has been proven to be very difficult to manage, very difficult to monitor, and very difficult to change. The result has been an underfunded system that does not meet the needs of its residents effectively and has little proven capacity to adapt itself to a rapidly changing health care environment.

Much of the inertia, frustration, and unclear accountability that many experience in the state results from a “business model” that is very weak. The state and the area/county programs have in recent years been quick to blame the other for the experienced shortcomings, but the truth is that both are caught in an unviable system where neither entity is able to be as good as they could be in a more healthy environment. While the Mental Health Reform Bill will be very helpful in improving this situation, the bill does not address some of the more challenging financial structures of the state and is thus limited to the extent that it can solve some of these problems.

There are many reasons that lay behind these problems, but one of the most fundamental—indeed one of the most crucial—is the fact that there is very little use of competition, market forces, financial incentives, or other related strategies to achieve system goals. Most of the private health care sector and many states have taken significant steps in moving to a more proactive, dynamic purchasing model of care where they purchase and manage, rather than provide, health care services.

There is much national evidence to suggest that North Carolina could benefit greatly from moving in this direction, but such movement is difficult because it represents a dramatic departure from the status quo and would affect the turf of many working within the system.

The reform process will spread over many years, and many opportunities will present themselves to give the state a chance to increase the use of competition, market forces, financial incentives, and other similar strategies to help achieve system goals. We recommend that these opportunities be welcomed and acted upon. Following are several recommendations that should be considered throughout this reform and in future system development efforts.

2.2.1 Specific Recommendations

Recommendation 2.1

Increase the role of basic competitive/market forces and basic business principles.

To ensure meaningful reforms, we believe that the North Carolina General Assembly must substantially increase the role of basic competitive/market forces and business principles to play their rightful and essential role in reform. Doing so will help to ensure development of a cost-effective regional structure responsible to the state that will offer desired efficiency, accountability, cost-effectiveness, and quality.

Although the current reform process does enhance the role of competition and market forces at the provider of service level (a substantial step forward), it does not do this in a meaningful way at the LME management level. Once the Mental Health Reform Bill is fully implemented, the LMEs will still be state-operated, state-funded, and state-supported. As such, they will not incorporate any of the benefits of competition or the use of market forces to achieve goals. A fundamental question facing long-term planners is whether or not the state is best served by maintaining such a large regional structure.

At this stage of system development, we recommend that the state introduce meaningful competition and utilize market forces in whatever creative and innovative ways it can within the current structures. The state should innovate at every opportunity in the coming years, and move as efficiently and effectively as it can towards developing a less regulatory and more market-based system.

Recommendation 2.2

Create a systemic solution to incentivize appropriate use of state facilities by LMEs.

The current organizational and financial division of state facilities and community services at the state and community level within North Carolina breeds fragmentation of services, diminished quality of care, and unclear accountability for treatment successes and failures.

We found, as have others, that the current financial incentive structure between the area/county programs and the state hospitals is clearly wrongly aligned and encourages overutilization of state services and contributes to unclear accountability. Currently, area authorities do not incur any costs when a patient is sent to one of the state facilities; it is, in essence, “free.” However, a patient in crisis can be treated in the community instead of being placed into a state institution. But, in community placement, the area authority will need to oversee that care and provide, purchase, or arrange for services in the community and bear responsibility for the costs. This financial system provides neither incentive to minimize the use of state facilities nor any incentive to invest in developing those services locally. Providing a linkage between the patient and the revenue stream would ensure more effective and efficient decisions regarding treatment.

This system has created very uneven use of the state facilities and spawned actions to address this issue. Steps are now being considered for area/county programs to develop and implement plans to remove specified individuals from the state hospital who do not require that level of care and place them in a more appropriate community-based program. Several “bed day plans” exist in which bed days would in essence be allocated to an area program in an attempt to address the highly uneven use of state facilities by different programs. Such plans have merit because they directly address a well-known problem in a logical way, but many believe such a plan cannot be implemented successfully without more money.

It is beyond the scope of this report to address this issue in any detail or to take a position on its feasibility or likely cost. Suffice to say that it is a worthy goal to be applauded and movement on this issue should be actively pursued. However, it clearly illustrates some of the fundamental limitations of the current system structure. There are numerous children and adults who are, in part, being treated at the state hospitals because area/county programs have not been systematically and sufficiently incentivized—financially or contractually—to ensure development of appropriate community services. Development of community resources and dependence on use of state facilities have instead been the result of the philosophy, competence, and available resources of local leadership.

Bed day plans will likely be implemented in some fashion and succeed in some ways and fail in others. But they will fail to address the underlying issue that bed day plans are a somewhat artificial, short-term, and bureaucratic approach to effectively managing and balancing use of state hospitals. A longer term and more systemic approach would be to develop a process to place the management, financing, and responsibility for client care solely into the LME. Such a process would give them full financial and clinical responsibility and full accountability for the client. Any steps that can be taken in the context of the reform movement that would move the system closer to this model should be pursued.

Recommendation 2.3

Make all state institutions receipt-supported and substantially increase their ability to function in a more competitive environment.

Develop a system to make all state facilities receipt-supported; in other words, the facilities receive their funds by payments they receive from those who use their services.

In addition to the benefits listed above, receipt-supported facilities would strongly incentivize facilities to be as responsive to overall system needs as possible to encourage active use of their services and maintain a strong financial position. Efficiency, accountability, and customer service orientation would all likely increase.

The state already has some experience with this methodology in that Carolina Alternatives authorized hospital services for Medicaid-eligible children and provided Medicaid reimbursements to the hospitals on a per diem utilization basis.

To function effectively in this new environment, it is essential that the General Assembly do everything within its power to increase facilities' ability to be flexible and be able to adapt quickly and efficiently in response to a rapidly evolving system.

Recommendation 2.4

Create a more unified system of services.

Unifying the system of state and community services is one of the most useful recommendations that the state could pursue. It is a complicated topic that requires a more full examination than is appropriate for this report. MGT recommends that the thoughtfully developed DMHDDASAS "Unified System of Services" report (May 1994) that was prepared for the General Assembly be used as a starting point for development of this overall recommendation. Those in charge of implementing this recommendation should convene a meeting of as many members of this original development group as possible to review, discuss, and update their report in light of the current reform environment.

Recommendation 2.5

Reduce the overall cost of administering the current regional system.

One of the most basic financial strategies that can be addressed in the current reform process is to lessen the cost of administering the regional area program system. As discussed in Recommendation 1, LMEs with larger populations have about half of the administrative overhead cost in terms of staffing as do smaller ones. The overall impact of having 39 area programs and having many with relatively small population bases to support their administrative overhead combines to put a fairly high-cost administrative structure on a significantly underfunded system.

In proceeding with reform, the administrative burden of various models must be incorporated. To facilitate this process, it is important to have a basic idea of what the current costs are so that proposed models can have a common base of comparison.

Following is a summary of the total administrative costs and FTEs of the 39 area programs² based on 1999 cost-finding reports. We note that the reported administrative

² "The Administrative Costs and Personnel Patterns of North Carolina's 39 Area Programs: An Analysis of 1999 Cost Finding Reports," 2000 (See Appendix A—Administrative Cost Study: Executive Summary for a more detailed analysis).

costs and personnel expenses of the 39 area programs presented in this report are estimated conservatively, due to additional administrative costs and personnel that could not be included because of the difficulty of accessing reliable data.

■ **Total Administrative Expenses: \$100 million**

Total administrative expenses for the 39 area programs are estimated to be at least \$98.6 million. Administrative expenses represent about two thirds of this total, with general support expenses accounting for the remainder.

■ **Total Administrative Staff Full-Time Equivalents (FTEs)= 1,586 FTEs**

Total Administrative FTEs in the 39 area programs are estimated to be 1,586 FTEs, with slightly more administrative personnel than general support personnel.

Recommendation 2.6

Use the current reform process to gradually prepare the overall system for a possible later transition to a more privatized, flexible, and market-based system that incorporates meaningful competition.

The current reform process represents a major turning point for the state. If stated goals and objectives of the Mental Health Reform Bill are achieved successfully, it will create a vastly improved system. If the recommendations of this report are also to be implemented, it will create an even stronger system that provides full access to a comprehensive set of children's mental health and substance abuse prevention and treatment services to all North Carolinians who need them. All involved in the reform process could be very, very proud of their accomplishments and both system-level and individual outcomes should dramatically improve.

However, a fundamental weakness in the overall system structure might limit future possibilities for additional growth and development. The current area program system is, broadly speaking, a regulation-based system composed of regional, state-operated, and state-funded programs that depend on public sector personnel. This fundamental reality will not change in this planned series of reforms regardless of how many fewer programs exist or how much various management, clinical, and accountability systems are improved.

We recognize, based on our knowledge of the state's history and political culture in this area, that the degree of change necessary to transform this basic model would be far more than is achievable or wise at this stage of system development and in this reform process. Just as the state was not, in retrospect, fully prepared to meet the management and monitoring challenges of Carolina Alternatives,³ the state is not prepared—politically, operationally, or financially—to consider such a move at this point.

³ Recognized nationally as a state-of-the-art model of care despite the problems that emerged, the state was not developmentally prepared for all the challenges presented.

In the foreseeable future the state may wish to build on the hoped-for successes of this reform initiative and move beyond the state/county LME-based system. North Carolina's future should be based more on a market-based model that maintains regional entities but introduces competition for regional management rights and true accountability, meaning management rights are open to competitive bid every three to five years. Such a move, designed and implemented well at the appropriate stage of development, would allow the state to gain the many benefits of the privatizations while maintaining all the positive aspects of the current LME model.

We recognize that this particular evolution may not occur, and the current area program (and now reforming LME) model may be the base North Carolina strategy for decades to come. However, we believe the state should guide the reform in such a way as to facilitate the natural progression to this model so that at some future time it might be chosen. Such a preparation strategy would be very consistent with current strategies imbedded within the Mental Health Reform and could be blended relatively easily into the reform process. Some basic strategies that the state should consider that would support this strategy include the following:

- Keep the number of LMEs to a smaller number as described in Recommendation 1 with minimum regional populations at 500,000 or above that can be amended by the Secretary for special circumstances, such as low population density of the eastern region.
- Provide the area/county programs and evolving LMEs with ongoing opportunities to gain experience that would be relevant and helpful in a more market-based model—such as meaningful and critically evaluated proposal development and partnership development.
- Strengthen the focus on regional management competence through the application of strict and effective accountability processes and minimize the use of LME-provided services.
- If movement is made toward a competition-based regional model, consider having counties, LMEs, and LME consortiums having preferred status/first right of refusal for first three-year contracts and allow the system to gradually move from one model to another.
- Use competition to create an environment where regional entities are in ongoing competition with each other to produce state-specified outcomes.
- Creatively pilot programs to establish an experience base with new ways of managing and providing services that will provide a strong experience base both for the LMEs and the state.

Recommendation 2.7

Consider the gradual introduction of risk-based reimbursement systems in future reform-related development.

The financial mechanisms and structures of a health care system exert a huge influence on how that system operates and can play a dramatic role in shaping system development and quality improvement. There is substantial room for improving the efficiency and power of these mechanisms and structures in North Carolina if and when it decides to do so.

For example, risk-based reimbursement (e.g., capitation rates for defined populations, case rate for specified individuals or groups of individuals) is becoming a norm in private sector health care and is used with great success in some public sector behavioral health systems (e.g., Massachusetts). Such risk-based systems require sufficient base populations to spread the risk, and the state would be wise to ensure that each LME has a sufficient population base to assume a risk-based contract if that were to develop in the future.

2.2.4 Suggested Time Frame

DHHS Report to Oversight Committee that
addresses the challenges and opportunities
of moving in recommended directions

March 2003

Implementation

To be determined

2.3 Recommendation 3

Contract for a centralized, integrated, and statewide Utilization Management system that includes, to various degrees and with different strategies, all publicly funded mental health and substance abuse services in North Carolina.

2.3.1 Goal

The goal of this recommendation is to ensure that the provision of DMA⁴ and DMHDDSAS-funded behavioral health services is done in the most appropriate and cost-effective manner possible to increase access, promote efficiency, support reform-related efforts, and improve client outcomes.

⁴ The Division of Medical Assistance (DMA), part of DHHS, administers Medicaid for the state.

2.3.2 Findings

For the purposes of this report, Utilization Management (UM) refers to an organized and systematic effort to monitor and/or manage service utilization. It is a broad umbrella term that includes any activities that are intended, directly or indirectly, to affect utilization of a specified service. There are a wide variety of UM approaches (e.g., utilization review, program profiles and report cards, copayments, deductibles, retrospective review of charts) and intensity (e.g., intensive utilization review of high-end, expensive health care services vs. annual provider profiling accompanied by recommendations for changes in specified measures).

Many methods and techniques fall under the umbrella of utilization management.

The most common include:

- Utilization Review-based UM—utilization review staff determine the appropriateness of admission (or continued stay or past stay) into particular levels of care, such as preadmission UR;
- profile-based UM—development, distribution, and provision of feedback and expectations based on provider profiles;
- site-based UM—siting a clinician at a high-volume, high-cost setting to provide on-site, individualized UM for example; and
- financially-based UM—using financial incentives such as risk or copayments/deductibles and so forth to influence behavior.

Utilization management is conducted in two different environments within North Carolina—within the area/county programs and contracted to private contractors. Current UM practices in the state are highly inconsistent, significantly fragmented, and largely incomplete. This is true, to different degrees, in both the area/county programs' UM systems and the UM systems contracted to private vendors. Many area/county programs currently do a good job of utilization management, but their overall quality of UM does not begin to approach the level of sophistication common within the industry. Recent COA audits of area/county program quality identified utilization management as

one of the weakest areas. Additionally, it is widely perceived that some area/county programs have used their dual role of being both a provider and a local UM entity to their competitive advantage to promote their own survival as a clinical entity. Such UM practices, to the degree that they have occurred, have discouraged private provider participation in the marketplace and played a role in the loss of community capacity in recent years. During the past few years, area/county programs have in many ways been under attack and their survival has been threatened. The uncertainty of their future status still remains within the context of the mental health reform bill. Under these pressures, one can imagine how some area/county programs felt a need to strengthen their position in the local marketplace. Although understandable that a business entity uses whatever advantages can be found in a competitive situation, we see the joint UM authority/provider model as contributing to the demise of many long-standing community-based programs.

Within Medicaid/DMA, contracted utilization management responsibilities are distributed among three different contractors: Value Options and First Health review appropriateness of children's mental health services; EDS monitors adult outpatient services provided by independent practitioners. Most observers agree that this is not the ideal model, and that it was more a historical accident than a planned strategy. Potential problems of having multiple UM entities include:

- having different organizations reviewing and authorizing services for different aspects of the same behavioral health benefit;
- increasing difficulties in efficiently obtaining complete information about a client's status; and
- combining self-evident redundancy with an unneeded level of complexity.

In total, North Carolina has 39 local UM entities, 3 contracted UM entities, and a total of as many as 42 different UM philosophies.

UM systems in general incentivize provider client management practices in many different ways. Incentives work best when applied to all providers consistently across the state, when no providers enjoy an unearned privileged status, and when they are properly aligned to achieve desired goals. In North Carolina, none of these standards are met. First, the type, intensity, and competence of local UM practices by area/county programs depends largely on the part of the state in which a provider operates. Second, the area/county clinical programs enjoy a highly favored status with DMA's UM program that gives them a huge competitive advantage over other community providers. And third, the area/county programs' ability to transfer difficult clients out of their community and into state facilities that functionally provide "free" care is a severely misaligned incentive. The Medicaid UM systems operate more in line with industry standards, but the aforementioned redundancy and overlap of services diminish efficiency and effectiveness.

State-of-the-art utilization management of mental health and substance abuse services has evolved out of 10 and more years of collective experience in both the private and public sectors. Mature UM is creative, innovative, smart (i.e., devoting a finite amount of UM resources efficiently and effectively), cost-effective, and utilized extensively across the country. The broad range of UM strategies and practices can be flexibly applied to any service, any system, any population, any environment, and with any degree of intensity in North Carolina.

2.3.3 Specific Recommendations

Recommendation 3.1

Fund the purchase of comprehensive, statewide, centralized Utilization Management Services.

The General Assembly/DHHS should fund the purchase of state-of-the-art, centralized, statewide UM services, defined by contract, to manage utilization for both Medicaid

clients and non-Medicaid clients. This UM would be applied, with appropriate degrees of focus and intensity, to all publicly funded services, including those provided in area/county programs, contracted community agencies, and state-operated facilities.

This UM system should, ideally, involve a competitively won contract with a single company that is deemed capable of meeting the challenges of this comprehensive model and able to be an effective partner with the state in helping to reform the system. Given the comprehensive nature of the model, the inclusion of multiple funding streams, and the management of both community and state-operated services, it is likely that the chosen UM models will be implemented in stages over several years. A phased-in approach will allow time to develop the most effective and efficient strategies for managing such a wide range of services.

We recognize that making this bold, but necessary, recommendation is sure to meet resistance unless those impacted by the change:

- are fully committed to reform;
- understand the absolute need for a comprehensive model;
- understand how UM services can be flexibly and innovatively applied in cost and time efficient ways; and
- believe the cost of purchasing this service will be more than offset several times over due to increased efficiency.

We believe this comprehensive approach will be of substantial benefit to the reform effort, will result in the potential savings of millions of dollars, and be excellent vehicle for efficiently and effectively building needed consistency across the diverse and fragmented North Carolina landscape.

DHHS should monitor the implementation of medical necessity in a UM system using key indicators such as:

- number of appeals at each level;
- percentage of overturn at each level;
- under/overutilization statistics;
- number of adverse incidents;
- number of complaints about denial of care;
- satisfaction rate of consumers; and
- audit of care management documentation.

DHHS would determine the philosophy, policies, and operational objectives that should guide the development of such a utilization management system and incorporate these into contract management activities. These UM services should be closely coordinated with LME/area/county program care coordination efforts and be efficiently applied to selected services, flexible in terms of types of UM used, and thoughtfully developed and managed in a way to best support and facilitate targeted reform-related activities. Well-conceptualized and well-implemented, a single, accountable, external, and objective UM entity is best positioned to establish statewide consistency. The UM entity could also help the state to successfully:

- target services to priority populations identified in the State Plan;
- establish statewide consistency in terms of managing both Medicaid and non-Medicaid clients within the framework of available funding;
- establish mechanisms to monitor and improve continuous management of clients across community and state facility settings; and
- identify and report service gaps in the different parts of the state as they are experienced in day-to-day UM activities.

Recommendation 3.2

If a more limited statewide UM model is chosen, DHHS should consider systematic broadening of UM to include non-Medicaid clients.

North Carolinians whose services are funded “bounce” on and off the Medicaid rolls, making effective monitoring and managing of care very difficult. DHHS should consider broadening the provision of UM services to selected subpopulations of individuals who are known to come on and off the Medicaid rolls. Similarly, DHHS should consider the merits of identifying a finite but constantly updated number of clients for which more intensive utilization management (and possibility care management) services are provided.

Recommendation 3.3

Selectively devolve UM responsibilities to LMEs/area/county programs at a later stage of system development.

Utilization management responsibilities could begin to be devolved to LMEs:

- if financial incentives were properly aligned;
- if the number of LMEs were relatively small to achieve reasonable economies of scale; and
- if it were consistent with the evolution of system reform over the next several years.

This potential devolution of UM authority must be preceded by the granting of full clinical and financial accountability (both in the community and in state facilities) for the treatment of clients to the LMEs. If the transfer of client accountability does not or cannot occur, UM functions should remain centralized at the state level.

The earliest the implementation of recommendations could occur would probably be in Phase III (FY 2007) of our plan (see Chapters 4.0 and 5.0). It would likely be later than FY 2007 to provide time for a small number of LMEs to be created and build (or purchase) the infrastructure needed to perform such functions. Additionally, the state should promote developing LME/area/county program-based internal UM systems and practices, just as any provider of services should do as a matter of ethics. If the state

decides to implement our recommendation, the amount of authority delegated to LMEs should be gradually increased to prepare LMEs for assuming full financial risk for those they serve. This devolution would not have to be done all at once, but could be applied selectively and sequentially to those LMEs perceived to be best positioned to assume this responsibility.

In considering this model, the General Assembly and DHHS should recognize the additional administrative costs associated with maintaining a high number of UM and MIS systems when compared to a small number or a single system. According to the recent Lewin Group report, many area/county programs use the same external UM vendor, with each area/county program paying multiple times for the same system upgrade.

Recommendation 3.4

Integrate all current contracts with external UM companies into one contract.

Due to a variety of circumstances, North Carolina now has several Medicaid utilization management contracts operating within the state. Regardless of whether or not the recommendation for a systemwide UM program is implemented, these current UM contracts should be blended into one contract with one vendor in the most efficacious manner possible. If the systemwide UM program is implemented, then these UM contracts should be incorporated into the larger UM initiative in the most efficient way possible. The current initiative by DMA is a step in the right direction, but more limited in scope than we would recommend.

The contract with a UM entity should clarify the preferred techniques, the priority of services, the priority of clients, and what is being purchased.

Recommendation 3.5

Add “Care Management”⁵ functions to Utilization Management functions to efficiently improve cost-effectiveness and consumer outcomes.

In purchasing centralized UM services, DHHS should consider also purchasing (or later expanding the contract to include) targeted care management (CM) functions to selected populations and situations. UM and CM are closely related and some UM practices lend themselves to relatively easy incorporation of additional care management functions.

Such care management can be merged with UM services fairly easily. For instance, in a fully managed system, utilization management and care management function side by side, usually with the same clinician and processes supporting it. As an example, a clinician may be performing phone-based, preadmission utilization review for a hospital level of care (UM), but at the same time informing the provider of key clinical information and treatment and aftercare recommendations (CM) based on analyzing the client's treatment history and treatment notes found in the computer record. Alternatively,

⁵ As MGT uses the term “care management” it refers to accountable case management in which a specified provider (e.g., a community program, an HMO, an individual practitioner) assumes day-to-day responsibility for managing, advocating, informing and/or supporting the care and services that the client needs, and assumes high responsibility for the successes or failures of that client.

provider profiling might lead to a request from the purchaser/manager to lessen the average length of stays by 15 percent to be closer to the national norm for that level of care. That UM could be merged with the provider, assuming both a secondary UM role (deciding which clients to admit and how long to keep them in care), along with full clinical responsibility for managing a specific client or population group (CM).

Care management performed without being merged with UM is a common phenomenon when various UM methods and strategies are centrally administered in a state. In this case, providers of comprehensive community services or county agencies are responsible (directly by contract or indirectly by ongoing practice) for a particular client's or group of clients' care. In the case of North Carolina, utilization review of certain high-level services centrally administered by a DMA vendor is complemented by the ongoing care management functions performed by the area/county program.

Care management is distinguished from case management by the degree of accountability and "clinical ownership." For instance, an outpatient clinician may provide some ad hoc case management services to coordinate a client's care across several vendors over time, to advocate for certain services, to provide information, and so forth. But the degree of "clinical ownership" is fleeting, shared with many others involved in meeting the client's needs, and not inherently leading to a high degree of clinical responsibility for outcomes. Conversely, a traditional ACT team assumes a high degree of clinical ownership for a particular client, is seen as assuming responsibility for client's successes and failures, and the commitment and responsibility is long-term rather than short-term. This example would clearly fall more into care management.

In sum, creatively and flexibly combining UM and CM functions is a very efficient and clinically sound model. Such an addition of capacity should be considered in the context of the evolution of the state UM functions, the evolution of capacities of the LMEs, and identified system needs in the context of other reform-related developments.

Recommendation 3.6

End any remaining preferential UM treatment for area/county programs.

Preferential Medicaid UM policies toward area/county programs impede the viability and further development of a much-needed pool of private nonprofit and for-profit behavioral health providers. DMA should end any remaining preferential practices and make the playing field as even as possible.

2.3.4 Suggested Time Frame

DHHS Report to Oversight Committee

March 2002

Tentative Implementation, begun

September 2002

2.4 Recommendation 4

Establish a five-year formal evaluation process of reform effort.

2.4.1 Goal

Provide the General Assembly and all interested stakeholders with a solid foundation of baseline and then annual information against which future developments can be measured.

2.4.2 Findings

The Mental Health Reform Bill and the State Plan both call for a range of annual reports, legislative updates, and so forth. Accountability is indeed a key theme that runs through the two initiatives. However, a significant danger is that the variety of reports and updates will:

- not be well coordinated or presented;
- will not include key measures or interpretations that would be most useful for legislative review;
- not be purely objective with no vested interest in the results reported; or
- fail in general to provide a user-friendly, informative, and integrated overview to compare progress in a systematic manner over the course of several years of reform.

The state now has an excellent opportunity to initiate such an evaluation project at the beginning of a systematic reform process and create a formal, comprehensive, and objective process of assessing the real progress of system reform.

2.4.3 Specific Recommendations

Recommendation 4.1

Support a contract with a respected external evaluation company.

The General Assembly should support purchasing services from a respected external evaluation company to produce baseline and then annual information that can be used

to systematically monitor the progress of reform over a multiyear period. The establishment of good baseline information in a reform process is never wasted money and can play a key role in understanding the progress of reform over time. Ideally, such a contract with a company should be for many years (e.g., three to five). The actual contract with the evaluation firm should be well-conceptualized, well-developed, and well-managed to ensure maximum value to the state.

Recommendation 4.2

Mandate coordination of this evaluation effort with other reform-related performance monitoring and measuring processes.

The reform process has and should build evaluation and annual reports into most of the initiatives pursued. It only makes sense that the information developed in these evaluations and reports be coordinated with the external evaluation report and organized into an integrated and comprehensive set of information.

Recommendation 4.3

Ensure thoughtful coordination, collaboration, and presentation of all required reports if a decision is made not to pursue a contract with an external evaluation company.

If a decision is made to not pursue outside evaluation, we recommend that the required reports in the reform bill be thoughtfully coordinated into more comprehensive reports, possibly on an annual basis, to increase efficiency and make the ongoing assessment process more user-friendly and helpful for all concerned.

2.4.4 Suggested Time Frame

DMHDDSAS Report to Oversight Committee

March 2002

Tentative Implementation

July 2002

3.0 STATE HOSPITAL FACILITIES

3.0 STATE HOSPITAL FACILITIES

For this study, MGT of America, Inc., was charged with determining what changes, if any, had occurred in the state psychiatric hospitals after a series of studies that impacted the hospitals. We were then to review previous recommendations for facility building or renovation to recommend the next steps for North Carolina. We were not to recreate the previous work, but to examine if any factors might lead us to alter the previous conclusions.

3.1 Previous Studies

North Carolina has contracted for numerous studies that included reviewing the state's psychiatric hospitals. Some of the major studies included:

- 1992 GPAC Report
- 1996 KPMG Study of Department of Human Resources
- 1998 MGT Study of State Hospitals
- 1999 Division Redesign Plan
- 2000 Auditors Study (Public Consulting Group)
- 2001 Lewin Group Medicaid Benefit Study

Two of those studies were most directly related to the state hospitals: MGT and Public Consulting Group (PCG). MGT carefully studied North Carolina's four psychiatric hospitals in a previous engagement. That study resulted in MGT's 1998 *Efficiency Study of the State Psychiatric Hospitals*. Following that extensive study, PCG assessed our work for the State Auditor, as well as reviewed the community mental health system.

On the whole, MGT and PCG agreed that new hospitals were needed, but we differed on some details. PCG's report calls for 1,621 hospital beds systemwide, whereas MGT's recommended 1,287. The PCG report states:

PCG does not regard the 1,621 bed estimate as a "floor." Further reductions might be justified if county programs aggressively develop local alternatives to hospitalization, and if the state follows through in

moving resources from the state hospitals to the counties where the clients are being served.

Unfortunately, PCG's report did not break down bed type within each hospital, making more detailed comparisons difficult. A possible difference in number of beds might be due to MGT's recommendation to remove the long-term geriatric patients from the psychiatric hospitals. As an example of how the recommended number of beds can vary over time, PCG recommended that Dix (or its replacement) have 430 beds; MGT recommended 247; and the replacement hospital as currently designed by the Freelon Group Architects calls for 302 (including 24 geriatric beds).

In addition, MGT and PCG's cost for the hospitals differed, with MGT's being lower. One difference is that MGT used a smaller number of square feet per bed, while PCG also used a higher cost per bed. Differing assumptions on which patients should be treated in a state hospital and inflating construction costs could account for PCG's higher overall cost estimates. In Chapter 8.0 Facilities, MGT will update some of the cost estimates for the state hospitals to 2001 costs.

3.2 Changes at the Hospitals

MGT recommended many changes to the operations of the state hospitals in our 1998 report. Among our recommendations:

- Decrease the number of substance abuse clients treated in the state hospitals by expanding the types of clients accepted by ADATCs and other community-based programs.
- Move geriatric patients to community-based facilities and close the geriatric long-term and nursing facility units at the hospitals.
- Close the Youth Units and develop community resources to treat these young mental health clients.

- More closely align the usage of bed-days to an area authority's population.
- Create a single stream of funding for mental health services.

These programmatic recommendations were designed to lower the dependence of area/county authorities on high-cost inpatient treatment at the state hospitals. MGT's recommendations were also designed to treat more mental health clients closer to their homes. The *Olmstead* decision, on which the U.S. Supreme Court ruled after our study, supports our approach of providing the least restrictive mental health care at the local level.

When we reviewed the statistics of the hospitals, we did not find great changes in their client mix over the past few years. Exhibit 3-1 shows the percentage of patients who had substance abuse as their primary diagnosis during the period covered by our 1998 study, and during the most recent year. As shown, the average for substance abuse admissions over the time period studied by MGT was 22.3 percent, with a spike in 1996–1997. The proportion of substance abuse admissions for Fiscal Year 1999–2000 was 19.3 percent, a very minor decrease.

**EXHIBIT 3-1
PRIMARY DIAGNOSIS OF PATIENTS ADMITTED
TO STATE HOSPITALS BY FISCAL YEAR**

	1992- 1993	1993- 1994	1994- 1995	1995- 1996	1996- 1997	AVG.	1999- 2000
Substance Abuse	19.5%	21.5%	20.3%	22.1%	28.1%	22.3%	19.3%

We had limited data available to us on the age of the patient population during the time frame of our 1998 study due to inadequate data systems at the hospitals at that time. We therefore used a “snapshot” day during January 1998 to examine the number of patients by age groups. During January 1998, 7.5 percent of the patients were in youth units, whereas in FY 1999–2000, 7.3 percent of the patients were children—an insignificant decrease. For the geriatric patients, 5.4 percent of the patient population in

1998 were the elderly. In FY 1999–2000, the proportion of elderly had risen to 7.6 percent, an increase of over 40 percent.

The annual admissions have also risen strongly in the past 10 years. As shown in Exhibit 3-2, the annual admissions have risen from 10,646 patients in FY 1990–1991 to 14,712 patients in FY 1999–2000. However, the hospitals have managed to lower their average daily population from 2,470 to 1,861 patients, indicating shorter average length of stay. One problem that may have contributed to increased admissions is the closure of many private providers of mental health services. As noted in the 2001 Lewin Group report, differing Medicaid payment practices have created a disincentive for private mental health providers in the state. The closed psychiatric and substance abuse beds in North Carolina are shown in Exhibit 3-3.

The usage rates of various area/county programs still do not reflect area/county populations. Some area/county programs continue to use the state hospitals at higher rates than their population should indicate.

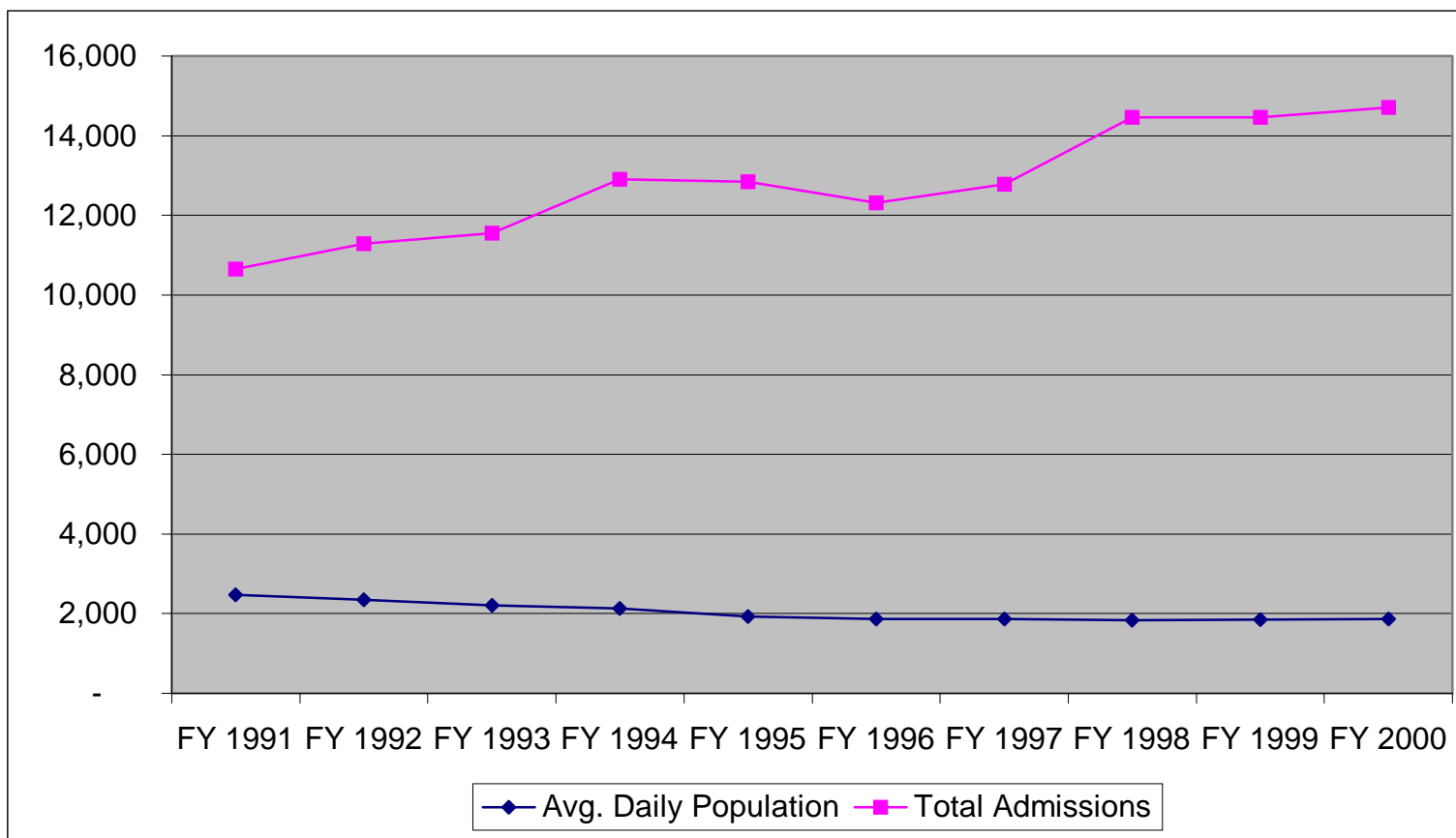
The funding mechanism for the hospitals and the area/county programs has not changed since our 1998 study.

3.3 Findings and Recommendations

3.3.1 Finding: The use of state hospitals has undergone minimal changes since the previous studies.

- Admissions have increased in the past three years to very high levels.
 - Many providers have left the system, often due to inequitable funding policies. One inequitable funding policy is a Medicaid policy that is biased toward area/county programs, where they have more flexibility for the treatment of patients. Area/county programs also have a financial incentive to send their clients to the state hospitals where they receive free care versus a private provider that the area/county programs must pay.
- Conversely, the average daily population has declined in the state hospitals.

EXHIBIT 3-2
ADMISSIONS AND AVERAGE DAILY POPULATION OVER PAST 10 YEARS FOR ALL STATE HOSPITALS



Source: *Annual Statistical Report, North Carolina Psychiatric Hospitals*, March 1, 2001.

**EXHIBIT 3-3
COMMUNITY PSYCHIATRIC AND SUBSTANCE ABUSE BED CLOSURES¹**

Facility²	County	Date Closed	Child/ Adoles. Psych Beds	Adult Psych Beds	Total Psych Beds	Child/ Adoles. SA Beds	Adult SA Beds	Total SA Beds	Total Psych and SA Beds
Charter Asheville	Buncombe	1999	42	65	107		20	20	127
Park Ridge	Henderson	1999	12		12				12
Transylvania Com. Hosp	Transylvania	2000					40	40	40
Amethyst/BHC	Mecklenburg	2000	30	14	44	40	60	100	144
Charter Pines	Mecklenburg	1999	20	40	60	1	1	2	62
Rowan Regional Med Cntr	Rowan	2000					15	15	15
Piedmont Area SS Detox	Cabarrus	1999					8	8	8
NC Baptist	Forsyth	1999	5		5				5
CenterPoint	Forsyth	2000		16	16				16
Charter Winston-Salem	Forsyth	2000	24	51	75				75
Charter Greensboro	Guilford	2000	32	68	100				100
Oakleigh	Durham	2001					27	27	27
Cumberland	Cumberland	2000	16	16	32				32
Pitt County Memorial	Pitt	1999	10		10				10
Brunswick	Brunswick	2001		12	12				12
TOTALS			191	282	473	41	189	230	703

Source: SAS Section, DMHDDSAS.

¹ Bed counts based on number of licensed beds closed.

² Hospitals may have operated somewhat different configuration of beds.

- Shorter average lengths of stay offset the increased admissions. Programs to deinstitutionalize patients required by class action suits helped reduce the length of stay when extremely long-term patients were moved to more appropriate settings. The hospitals have also worked to get newly admitted patients discharged faster.
- Area/county programs' utilization of state hospitals still varies widely.
 - Utilization by area/county programs ranges from appropriate utilization coordinated with adequate continuum of mental health services to inappropriate use to compensate for insufficient community services.
- Primary substance abuse diagnosis clients still make up almost 20 percent of total persons served.
- The elderly have increased from 5.4 percent to 7.6 percent of the patient population.
- Children still make up over 7 percent of total persons served.

3.3.2 Recommendation 5

Implement previous recommendations to close all state hospitals, build new hospitals, move children out of state hospitals, relocate elderly, and treat substance abuse clients in ADATCs.

3.3.2.1 Goal

Act upon a much-studied issue of the future of state hospitals.

3.3.2.2 Specific Recommendations

Recommendation 5.1

The Division should develop an implementation plan for downsizing state hospitals while new facilities are being built.

- The plan should reflect MGT's recommendations for the state providing fewer direct services.
- The plan should also reflect more services being provided on a local and regional basis.

Recommendation 5.2

The Division should produce an annual report on progress of downsizing the hospitals and building new facilities to the Oversight Committee.

3.3.3 Suggested Time Frame

DMHDDSAS Report to Oversight Committee

March 2002

Tentative Implementation

July 2005

4.0 SUBSTANCE ABUSE SYSTEM RECOMMENDATIONS

4.0 SUBSTANCE ABUSE SYSTEM RECOMMENDATIONS

Although substance abuse and dependence problems vary greatly, they are as pervasive throughout North Carolina as they are throughout the rest of the country. These problems can be associated with use, misuse, or addiction. Some individuals experience single or isolated episodes of illness; others experience periodic recurrences in their lifetimes; others have severe and persistent addictive disorders. Individuals may seek care at any time in the disease process. For some persons with addictive disorders, especially those with chronic, severe, and persistent disorders, ongoing management and periodic acute treatment interventions are needed to respond appropriately to situations of relapse.

The General Assembly has provided a substantial increase in funding for substance abuse services over the past 10 years that has resulted in a much needed expansion of services and increased access to services. However, substantial gaps still exist in the North Carolina substance abuse system where vital services are often unavailable, where there are insufficient systems to deal with consumers' acute treatment needs, and where reasonable and timely access to even a minimal core of services is inconsistent across the state.

As noted in several recent studies over the past several years, the state's substance abuse system is, in general, far less developed—virtually absent in some parts of the state—than the state's adult mental health system, children's mental health system, or developmental disability system. The tremendous and costly impact of the resulting untreated substance abuse is felt throughout North Carolina communities.

Despite these gaps in the substance abuse systems and the inconsistency of services to consumers across the state, reasons exist for optimism. More consistent and timely access to appropriate substance abuse services can be developed within the

context of North Carolina's reform process. One reason is that widespread consensus has developed regarding:

- the tremendous impact of substance abuse on communities and families;
- the areas of needed system development; and
- the need for a comprehensive continuum of easily accessible and consistent services across the counties and natural regions of the state.

In addition, there is consistent agreement about priority populations that need to be served as the system is expanded in the context of reform. North Carolina should take pride in the fact that the legislative priorities developed by the state are highly consistent with the well-researched Federal Block Grant Requirements, with focus on women and children on public assistance, those with infectious diseases (e.g., HIV/AIDS, tuberculosis, hepatitis), and children and adolescents with mental health and/or substance abuse problems.

Despite this crucial federal and state consensus on priority populations to be served and increases in overall funding, current combined funding from both of these sources is still not sufficient to reach even these target populations, let alone other critical subpopulations.

DMHDDSAS's Substance Abuse Services (SAS) section has strong and experienced leadership. They have a history of developing nationally recognized services (e.g., women's programming, interface with criminal justice system) that can implement and manage needed development effectively if funding is provided to fill the gaps and address obstacles to effective management of those with serious substance abuse problems. (See Exhibit 4-1.) A further description of exemplary women's substance abuse services provided in North Carolina is presented in Appendix C.

**EXHIBIT 4-1
NORTH CAROLINA'S SUBSTANCE ABUSE SERVICES
EXAMPLES OF NATIONAL RECOGNITION**

The Substance Abuse Services (SAS) section and its state-based providers have consistently won a wide variety of competitive grants from the federal government, and many of the state's initiatives are viewed as setting the national standard.

■ **Management of Offenders with Alcohol and Drug Problems**

North Carolina has one of the most comprehensive systems for the management of offenders with alcohol and drug problems in the country. Recognized by the Robert Wood Johnson Foundation, the North Carolina Department of Health and Human Services (DHHS) and the Department of Corrections (DOC) have worked closely together to ensure that high-risk offenders are enrolled in substance abuse treatment services to promote rehabilitation while at the same time protecting public safety. The Treatment Accountability for Safe Communities (TASC) program is now available in all judicial districts and works with probation officers, the DART program, and other community correction personnel to coordinate supervision and resources.

■ **Clinical Treatment Guidelines**

The National Institute on Alcoholism and Alcohol Abuse (NIAAA) and the National Institute on Drug Abuse (NIDA) both selected North Carolina's public alcohol and drug treatment system for implementation of their nationwide Research to Practice initiative based on the state's highly regarded series of clinical guidelines for substance abuse treatment.

■ **Women's Services**

North Carolina has been acknowledged as a national leader in the development of services for women and their children by the National Center for Addiction and Substance Abuse (CASA) at Columbia University, the national Legal Action Center, the National Council of State Legislators, and Substance Abuse and Mental Health Services Administration (SAMHSA). Additionally, several national publications have recognized the section for innovative systems in successfully identifying and referring treatment for Temporary Assistance for Needy Families (TANF) recipients who have addictive disorders.

■ **Adolescent Services**

The section has received a number of competitive grants from the Robert Wood Johnson Foundation and the U.S. Office of Juvenile Justice and Delinquency Prevention (OJJDP) and is participating in a multiyear National Leadership Initiative to keep children 9 to 15 alcohol-free. Working with a variety of federal, state, and nonprofit agencies, the section is coordinating efforts to reduce underage drinking in communities across the state. Evidence-based prevention strategies are being implemented to delay early use of alcohol, which decreases children's risk of developing serious alcohol problems by 50 percent.

■ **Outcomes Measurement**

The federal Center for Substance Abuse Treatment (CSAT), a division of the SAMHSA, recognized the section's long commitment to successful client outcomes for clients through the improvement of treatment practice and the effectiveness of programs supported with public funds by providing them with one of the first national contracts for the development of an outcome measurement system.

Source: Substance Abuse Services Section, Division of Mental Health, Developmental Disabilities, and Substance Abuse Services.

4.1 Recommendation 6

Adapt ADATCs to accept all primary substance abuse state hospital admissions.

4.1.1 Goal

End inappropriate admissions of substance abuse clients to state hospitals quickly, efficiently, and in a system-building manner.

4.1.2 Findings

Each of the state's three Alcohol and Drug Abuse Treatment Centers (ADATC) has its own regional development history, is an essential anchor in a substance abuse system that has a severe lack of necessary services, and offers necessary and high-quality services. Two of the three offer detoxification services; all offer short-term clinically intensive residential services (ASAM Level III.7);¹ and each offers some specialty services (e.g., services for the deaf and hard of hearing, services for those addicted to heroin, and services for pregnant/perinatal women). Appendix D provides MGT's assessment of the ADATCs from our on-site visits and interviews.

Services for deaf and hearing-impaired substance abusers must be maintained on a regional basis with qualified substance abuse professionals who are fluent in sign language and culturally sensitive to the special needs of the population. These services include individual and group treatment and case management in areas of high prevalence and continue to provide consultation to other providers within their region. Currently, the inpatient unit at the Walter B. Jones ADATC provides these services in addition to providing a setting for statewide referrals for individuals in need of a medically managed level of care.

¹ The American Society of Addiction Medicine (ASAM) has developed and refined over the past decade what is called the ASAM Patient Placement Criteria. This document has served as a national standard for definitions of different levels of care within the field in addition to providing baseline criteria for when a client should be admitted to, maintained in, and discharged from that level of care.

Area/county program utilization of the ADATCs varies substantially. Many area/county programs have developed a reasonable continuum of services with adequate capacity, but many have not. When there is a gap (or many gaps) in the continuum of appropriate community-based services (e.g., outpatient services, day treatment programs, detoxification programs, rehabilitation programs, or halfway houses) or when timely access to available services is very limited, area/county programs often overuse or misuse the ADATCs to compensate for their lack of services. This is just one example of how having what is in essence “free” treatment at a state facility discourages development of necessary community services.

Despite the huge statewide need for the detoxification (ASAM Level III.7-D) and short-term clinically intensive treatment beds (ASAM Level III.7) ADATCs offer, they often do not function at full capacity. The reasons for this underutilization are many. They are due in part to:

- lack of consistent 24 hour/7 day-a-week access;
- lack of capacity to handle difficult to manage/combatative patients effectively;
- lack of sufficient funds to increase staff as needed or to staff an additional ward; and
- lack of any financial incentive to maintain full occupancy.

From an overall system perspective, the ADATCs have not been developed or supported in a way that makes them optimally useful to the state. Although North Carolina has both state hospital facilities designed primarily to treat those with severe mental illness and state substance abuse facilities (i.e., ADATCs) to treat those with severe addictive disorders, the ADATCs are generally not designed or staffed to accept admissions where the individual is very difficult to manage or combative. These admissions instead go the state hospitals, stay on the admission units for often a week

or more, cause chronic overcrowding of the admission wards and increased staff costs, and in the end do not receive the specialized substance abuse services they require.

Over 3,000 patients a year whose primary problem is substance abuse are still inappropriately admitted to the state hospitals, despite the fact that this problem was identified in the first MGT report and indeed understood long before. In our first analysis, MGT examined the extent to which psychiatric hospitals treated patients whose primary diagnosis was substance abuse and examined diagnosis data from the then most recent five fiscal years. As shown in Exhibit 4-2, the percentage of patients in all hospitals whose primary diagnosis was substance abuse increased each fiscal year, reaching a high of 28 percent during FY 1996–1997. The figures have remained fairly constant since that time.

As a result, the state continues to spend significant funds inappropriately by admitting and maintaining substance abuse patients in the state hospitals. (Exhibit 4-3) MGT's first report calculated that the state expended (and continues to expend) an average of about \$15 million a year treating patients with a primary substance abuse diagnosis in state psychiatric hospitals. It is clear to any objective observer that inappropriate substance abuse admissions to state hospitals must be stopped and that more appropriate alternatives be developed. A recent article in the *Raleigh News & Observer* recounted the problems created for Dix Hospital by the inappropriate admission of substance abuse patients from Wake County. The full article, found in Appendix E, supports our finding.

4.1.3 Specific Recommendations

Recommendation 6.1:

Renovate the ADATCs, add staffing, and revise management practices as needed to make each ADATC able to accept and safely manage current primary substance abuse admissions to state hospitals.

EXHIBIT 4-2
PRIMARY DIAGNOSES OF PATIENTS ADMITTED TO
STATE PSYCHIATRIC HOSPITALS¹
1992-93 THROUGH 1996-97

Diagnosis	Fiscal Year									
	1996-97 ²		1995-96		1994-95		1993-94		1992-93	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Substance Abuse	3,592	28.1%	2,725	22.1%	2,610	20.3%	2,778	21.5%	2,252	19.5%
Mental Retardation	51	0.4%	72	0.6%	120	0.9%	126	1.0%	137	1.2%
Mental Illness	9,138	71.5%	9,524	77.3%	10,106	78.7%	9,995	77.5%	9,159	79.3%
TOTAL	12,781	100%	12,321	100%	12,836	100%	12,899	100%	11,548	100%

Source: Annual Statistical Report North Carolina Psychiatric Hospitals, Table 4.

¹ MGT 1998 Analysis

² Butner ADATC became part of Umstead Hospital, effective January 1, 1997. The trend continues to show a large proportion of patients with a primary diagnosis of substance abuse even discounting the addition of those Butner ADATC patients.

EXHIBIT 4-3
COST OF TREATING PATIENTS WITH A PRIMARY DIAGNOSIS OF SUBSTANCE
ABUSE IN STATE PSYCHIATRIC HOSPITALS (1992-1997)¹

Fiscal Yr	Dix	Broughton	Umstead	Cherry	TOTAL
1996-97	\$ 4,311,360	\$ 4,287,856	\$12,720,955	\$ 956,215	\$22,276,386
1995-96	\$ 1,367,520	\$ 2,333,705	\$ 9,266,312	\$ 982,352	\$13,949,889
1994-95	\$ 1,813,840	\$ 2,687,704	\$ 4,546,368	\$ 1,098,072	\$10,145,984
1993-94	\$ 2,037,568	\$ 3,194,620	\$ 5,987,520	\$ 1,125,076	\$12,344,784
1992-93	\$ 1,971,550	\$ 2,295,306	\$ 4,078,948	\$ 4,577,363	\$12,923,167
TOTAL	\$11,501,838	\$ 14,799,191	\$36,600,103	\$ 8,739,078	\$71,640,210

Source: Annual Statistical Report North Carolina Psychiatric Hospitals, Table 4, Table 8, and charge rates for each hospital.

¹ MGT 1998 Analysis.

The ADATCs are, with needed changes, the most appropriate setting to accept and manage individuals who require detoxification and who are difficult to manage or combative. Assuming that the financial resources are not available to build new ADATCs, the current ADATCs can be renovated, staffed, and administered in a way that would accommodate the needs of the vast proportion of inappropriate primary substance abuse admissions now occurring at state hospitals.

Each of the three ADATCs in this model would provide the ASAM-NC Level III.9 Level of Care.² In essence, they will provide residential medically monitored detoxification services, treatment and triage services (ASAM Level III.7), and all other services described in ASAM's PPC-2R. However, they will additionally provide a fully secure setting and necessary staffing that will allow the safe management of intoxicated, difficult-to-manage, and/or combative individuals (i.e., those currently admitted to the state hospitals).

This recommendation represents a cost-effective, clinically appropriate service system building strategy that would save money in the state hospitals, provide better service to consumers, and produce better outcomes.

Recommendation 6.2

Provide a consistent set of detoxification and short-term residential services.

Although each of the ADATCs would, at minimum, provide the services described and offer the same levels of care, each ADATC would be free to offer other additional services. Specifically, each of the ADATCs, in addition to any other services they provide, would offer the following services:

- 24/7/365 admission of intoxicated, difficult-to-manage and/or combative individuals (ASAM-NC III.9);
- medically monitored residential detoxification (ASAM Level III.7-D);
- short-term, clinically intensive postdetoxification rehabilitation services; and
- case management and triage services.

This combination of services is a powerful one that allows much flexibility as the day-to-day case mix changes.

Recommendation 6.3

Expand ADATCs to full bed capacity and fully utilize all available beds.

The diversion of approximately 3,000 individuals a year from state hospitals to the ADATCs requires that the ADATCs increase the number of beds they offer and expand to full capacity.

² The American Society of Addiction Medicine (ASAM) PPC-2R describes multiple levels of residential services. In its continuum of services, there currently exist certain "markers" for the most commonly found levels of care. For example, Level III.1 is a halfway house, Level III.7-D is a medically monitored, clinically intensive detoxification service, and Level IV is a hospital level of care for medically complicated detoxification and intensive treatment services for complex clients with co-occurring disorders. This typology allows for and strongly encourages the development and evolution of additional sublevels of care as the field progresses. Within North Carolina, the capacity to provide medically monitored detoxification (Level III.7-D) plus the capacity to safely manage 24/7/365 admission of intoxicated, difficult-to-manage, and/or combative individuals constitutes the ASAM-NC Level III.9 level of care.

At Walter B. Jones, existing bed capacity is currently unused due to inadequate staffing. (See Exhibit 4-4.) If the ADATC has additional staff, the unused dormitory could provide an additional 24 beds. The total beds at Julian F. Keith would not change, but the proportion of detox beds would increase. The number of beds at Butner would increase if the state undertakes the renovation recommended in Chapter 8.0.

**EXHIBIT 4-4
CURRENT AND POTENTIAL BEDS AT ADATCS**

Facility	Current Operating Capacity	Potential Beds
Walter B. Jones	55	79
Julian F. Keith	80	80
Butner	60	80

Each of the ADATCs should be able to fully utilize all detoxification and rehabilitation beds by providing both detoxification services short-term, clinically intensive postdetoxification rehabilitation services on-site. Based on a set of assumptions regarding average length of stays and the percentage of individuals who step down to on-site rehabilitation services (see Chapter 8.0 for analysis), we estimate that each ADATC should have about 40 percent of its beds set up for detoxification, and about 60 percent for rehabilitation to operate most efficiently.³ The particular plans to renovate each of the ADATCs to provide this level of care and the estimated costs of these renovations are discussed in detail in Chapter 8.0 of the report.

Recommendation 6.4

Provide additional funding for staffing to allow ADATCs to expand to full capacity and to provide adequate staffing to support the ASAM-NC Level III.9 level of care.

Each of the ADATCs will have to increase its staffing to allow it to expand to full capacity and to have sufficient staff to support an ASAM-NC Level III.9 level of care. The following recommendations estimate the funding needed to fully staff the units.

➤ **Recommendation 6.4.1**

Increase staffing at Butner ADATC—Umstead Hospital.

The estimated cost of fully expanding capacity and staffing at Butner at an ASAM-NC Level III.9 level of care is \$1,178,000. Projected staffing needs are found below in Exhibit 4-5.

³ This categorization of the beds is primarily for planning purposes, because the “detox” beds will be flexible in that they will include individuals who are well enough to be receiving treatment services or who are already in the rehabilitation program.

**EXHIBIT 4-5
ESTIMATED FUNDING NEEDED TO FULLY STAFF BUTNER ADATC
AT UMSTEAD HOSPITAL**

Positions Needed	Estimated Annual Salary	FTE Needed	Estimated Total Cost
Nurses	\$60,000	12.8*	\$768,000
Social Workers	\$55,000	2	\$110,000
Counselors	\$30,000	2	\$60,000
Technicians	\$30,000	8	\$240,000
TOTAL			\$1,178,000

Source: Created by MGT, 2001.

*It is projected that there will be a need for three nurses on the first shift, three on the second, and two on the third. To staff at that level every day, 1.6 FTE are required for each position.

- **Recommendation 6.4.2
Increase Staffing at Walter B. Jones ADATC—Greenville.**
The estimated cost of fully expanding capacity and staffing at Walter B. Jones ADATC at an ASAM-NC Level III.9 level of care is \$1,575,000. Projected staffing is found below in Exhibit 4-6.

**EXHIBIT 4-6
ESTIMATED FUNDING NEEDED TO FULLY STAFF
WALTER B. JONES ADATC IN GREENVILLE**

Position Needed	Estimated Salary	FTE Needed	Total Cost
Nurses	\$60,000	16*	\$960,000
Social Workers	\$55,000	3	\$165,000
Counselors	\$30,000	3	\$90,000
Technicians	\$30,000	12	\$360,000
TOTAL:			\$1,575,000

Source: Created by MGT, 2001.

*It is projected that there will be a need for four nurses on the first shift, four on the second, and two on the third. To staff at that level every day, 1.6 FTE are required for each position.

- **Recommendation 6.4.3
Expand Funding Needed To Fully Staff Black Mountain—Julian F. Keith.**
The estimated cost of fully expanding capacity and staffing at Black Mountain—Julian F. Keith at an ASAM-NC Level III.9 level of care is \$2,356,000. Projected staffing is found below in Exhibit 4-7.

**EXHIBIT 4-7
ESTIMATED FUNDING NEEDED TO FULLY STAFF BLACK
MOUNTAIN-JULIAN F. KEITH**

Position Needed	Estimated Salary	FTE Needed	Total Cost
Nurses	\$60,000	25.6*	\$1,536,000
Social Workers	\$55,000	4	\$220,000
Counselors	\$30,000	4	\$120,000
Technicians	\$30,000	16	\$480,000
TOTAL:			\$2,356,000

Source: Created by MGT, 2001.

*It is projected that there will be a need for six nurses on the first shift, six on the second, and four on the third. To staff at that level every day, 1.6 FTE are required for each position.

➤ **Recommendation 6.4.4
Expand Funding Needed To Support Overall ADATC Staffing Needs.**

The estimated cost of fully expanding capacity and staffing at all three ADATCs at an ASAM-NC Level III.9 level of care is \$5,109,000. Projected staffing is found below in Exhibit 4-8.

**EXHIBIT 4-8
ESTIMATED FUNDING NEEDED TO FULLY STAFF ALL THREE
ADATCS**

Position Needed	Estimated Salary	FTE Needed*	Total Cost
Nurses	\$60,000	54.4	\$3,264,000
Social Workers	\$55,000	9	\$495,000
Counselors	\$30,000	9	\$270,000
Technicians	\$30,000	36	\$1,080,000
TOTAL:			\$5,109,000

Source: Created by MGT, 2001.

*The total FTEs are a summary of the previous three exhibits.

Recommendation 6.5

Provide transportation services at each of the three ADATCs.

It is well-known within the substance abuse treatment field that maintaining clients with addictive disorders in ongoing treatment for at least six months is highly correlated with positive outcomes. It is also well-known that lack of transportation is a very common barrier to efficiently accessing continuing care and is a common factor in client dropout.

Obtaining transportation to the next level of care (e.g., from a state hospital to an ADATC to a halfway house) is often quite difficult (sometimes awaiting the availability of a sheriff to provide transportation) and results in an individual staying at higher levels of care much longer than necessary.

In the case of the ADATCs, these overextended stays cost the ADATCs more money, fill beds that could be better used by another individual, and sometimes have a negative effect on a client motivation or outcome. Given the current high volume of discharges from ADATCs per year (and the added volume that will result from state hospital diversions), the benefits of transferring a client to the next level of care when first deemed appropriate and the relatively low cost of an efficiently run transportation service suggests that it would be cost-effective and clinically useful to have transportation services available.

4.1.4 Suggested Time Frame

Substance Abuse Section Cost Effectiveness Analysis
and Implementation Plan to Oversight Committee

March 2002

Implementation

September 2002

4.2 Recommendation 7

Transfer all primary substance abuse admissions from state hospitals to enhanced ADATCs.

4.2.1 Goal

End inappropriate admissions of substance abuse clients to state hospitals quickly, efficiently, and in a system-building manner.

4.2.2 Findings

As discussed in the previous recommendation (Recommendation 6), rates of substance abuse admissions to state hospitals have remained relatively constant over the past several years and since the 1998 MGT study. Generally, client-management needs of substance abusers admitted to the state hospitals pass relatively quickly. Once the initial challenge of these admissions is managed, very few, if any, substance abuse specific services are provided in the state hospital admission units. For all practical

purposes, patients are “housed” and the state hospital admissions units function much like a very expensive, but not clinically useful, holding tank.

Patients often languish in the admissions units for 7 to 10 (or more) days, represent about 20 percent of all admissions, and produce a high demand for overtime and high-priced temporary nurses. The overall cost of these admissions probably exceeds \$15 million a year. Successfully diverting these admissions to the ADATCs would have a significant effect on the operations and finances of the state hospitals. For instance, the hospitals have been operating at or near capacity on adult admissions units at most of the hospitals all year and over capacity at Broughton. Thus, reducing admissions/census by 10 to 15 percent by eliminating inappropriate primary substance abuse admissions would likely mean operating at or possibly slightly under capacity. This in turn would likely lead to a significant reduction in the current need for overtime and use of more highly priced temporary nurses. However, it is not likely that the 10 to 15 percent reduction would be large enough to close units to any degree.

Other hidden costs, both clinically and financially, result from these inappropriate admissions. Perhaps the most important is the fact that a valuable and sometimes rare clinical opportunity to successfully engage an individual in treatment is lost due to the inappropriate admission and lack of trained substance abuse personnel working with that client from the time they come in the door. It is well-known within the substance abuse treatment field that admissions to detoxification, arrests, loss of jobs or home, or other highly negative consequences of substance abuse can very often provide a valuable but fleeting opportunity to engage the client, break through denial, and begin to guide the individual into a recovery process. But the fleeting nature of this treatment window is very real, and often may not come back for months or years. During that time, addictive behaviors can lead to severe problems in health, serious criminal activity,

dysfunctional families, and sometimes death. Although it is difficult to understand all the clinical ramifications and to estimate the overall financial cost (e.g., consequent crime, emergency room visits) of this lost opportunity, a crucial intervention opportunity is unquestionably squandered with substantial negative consequences for the state and the communities to which these untreated individuals return.

4.2.3 Specific Recommendations

Recommendation 7.1

DMHDDSAS should convene a steering committee to develop, implement, and oversee a work plan to most efficiently facilitate the diversion of primary substance abuse admissions from state hospitals to the revamped ADATCs.

This recommendation to divert primary substance abuse admissions from state hospitals to the revamped ADATCs will efficiently and effectively address a well-known flaw in the utilization of state hospital resources. To succeed, this plan (or any variation of this plan) must meet the following criteria:

- Alternative secure detoxification settings have to be created that can provide safe management of difficult-to-manage and/or combative patients.
- Efficient administration and client management mechanisms must be in place to ensure good access to these settings (e.g., 24/7/365 admissions, no waiting lists, geographic access, efficient admissions procedures).
- Efficient system capacity is necessary to perform rapid step-down to less secure and more clinically appropriate settings (e.g., continued detoxification, postdetoxification rehabilitation, available and accessible step-down services; and transportation to those services, if needed).

Recommendation 7.2

Ensure that the Mental Health Trust established in this year's budget is used to provide substantial funding for diverting inappropriate state hospital admissions of individuals with primary substance abuse problems.

The Mental Health Trust should be a primary funding agent for implementing the reforms demanded by *Olmstead* and addressing the thus far intractable problem of inappropriate primary substance abuse admissions to the state hospitals. Such an investment will reduce state hospital expenses significantly, improve the quality and appropriateness of services provided, and likely create far more positive outcomes for those affected. The appropriate diversion of these individuals, typically over 3,000 a year, could be done

quickly and efficiently and represent a meaningful system improvement early in the reform process. It greatly benefits both the mental health system and the substance abuse system and is a win/win move for all concerned.

Recommendation 7.3

Transfer any savings or staff positions related to the diversion of primary substance abuse admissions from state hospitals to adapted ADATCs to the Substance Abuse Services Section to support the additional costs of expanding ADATC capabilities.

The costs of expanding ADATC capabilities will be measured in the millions of dollars and will probably come out of the SAS section budget. The savings resulting from these diversions will be deducted from the state hospital budgets. Fairness would suggest that any savings resulting from the diversions should support the cost of developing the services that will take those diversions.

4.2.4 Suggested Time Frame

Substance Abuse Services Section Report to Oversight Committee January 2002

Implementation July 2002

4.3 Recommendation 8

Develop complete continuums of locally and regionally accessible substance abuse services.

4.3.1 Goal

Ensure consistent access to a comprehensive continuum of substance abuse services to North Carolinians in all counties in order to dramatically reduce the impact of substance abuse problems on health care costs, crime, and the overall quality of community life.⁴

4.3.2 Findings

Even though the North Carolina SAS Section is one of the most respected and forward-looking in the country, the system has substantial weaknesses in terms of

⁴ Research cited by the National Association of State Legislatures strongly suggests that the current level of untreated substance abuse in North Carolina is costing the state tens of millions of dollars annually in terms of increased criminal justice costs, increased health care costs, lost productivity, and so forth.

access, accountability, and quality across the state due to insufficient funding, a highly decentralized system, and longstanding systemic problems. Many area/county programs fall short in terms of ensuring availability of and access to the needed continuum of services, and access to services varies greatly depending on what county you live in or what area/county program serves you. Overall, the most essential and basic substance abuse services (e.g., specialized outpatient substance abuse services, detoxification and treatment programs, day/evening treatment programs, halfway houses, and other residential and hospital based services) that form the foundation of a complete substance abuse service system are unavailable in many regions across the state. North Carolinians seeking or requiring substance abuse services will often find that the services they need are not available or they must wait several weeks for a first appointment.

We also noted that North Carolina has suffered a substantial loss of psychiatric and substance abuse beds in the past few years due to a wide range of factors (See Exhibit 4-9: Community Psychiatric and Substance Abuse Bed Closures). However, most beds were lost due to the changing and more challenging health care market. Their loss has significantly weakened North Carolina's ability to provide necessary substance abuse (and mental health) services to its population. Current political and economic pressures have led many area/county programs to restrict or terminate contracts with outside agencies they view as competitors and to provide the services themselves (often to detriment of the consumer). The actions of the area/county programs have been a major factor in the downfall of several well-respected substance abuse programs in the state.

The American Society of Addiction Medicine (ASAM) has made a major contribution to the substance abuse field over the past decade by developing and publishing the ASAM Patient Placement Criteria. This document, now in its third edition, has served to standardize definitions across the country regarding the different levels of

**EXHIBIT 4-9
COMMUNITY PSYCHIATRIC AND SUBSTANCE ABUSE BED CLOSURES¹**

Facility ²	County	Date Closed	Child/ Adoles. Psych Beds	Adult Psych Beds	Total Psych Beds	Child/ Adoles. SA Beds	Adult SA Beds	Total SA Beds	Total Psych and SA Beds
Charter Asheville	Buncombe	1999	42	65	107		20	20	127
Park Ridge	Henderson	1999	12		12				12
Transylvania Com. Hosp	Transylvania	2000					40	40	40
Amethyst/BHC	Mecklenburg	2000	30	14	44	40	60	100	144
Charter Pines	Mecklenburg	1999	20	40	60	1	1	2	62
Rowan Regional Med Cntr	Rowan	2000					15	15	15
Piedmont Area SS Detox	Cabarrus	1999					8	8	8
NC Baptist	Forsyth	1999	5		5				5
CenterPoint	Forsyth	2000		16	16				16
Charter Winston-Salem	Forsyth	2000	24	51	75				75
Charter Greensboro	Guilford	2000	32	68	100				100
Oakleigh	Durham	2001					27	27	27
Cumberland	Cumberland	2000	16	16	32				32
Pitt County Memorial	Pitt	1999	10		10				10
Brunswick	Brunswick	2001		12	12				12
Totals			191	282	473	41	189	230	703

Source: SAS Section, DMHDDSAS.

¹ Bed counts based on number of licensed beds closed.

² Hospitals may have operated somewhat different configuration of beds.

care within a full continuum of substance abuse services. It also provides baseline criteria for when a client should be admitted to, maintained in, and discharged from those levels of care. If one is involved in any aspect of substance abuse system development, the understanding of the “ASAM continuum” of substance abuse services is helpful. It describes four general levels of care (Levels I, II, III, and IV) and specific or specialized services within those levels of care (e.g., Level III.7). A variety of ancillary services can be offered at many or all of those levels of care (e.g., detoxification can be provided at all levels). Exhibit 4-10 briefly describes the ASAM continuum.

**EXHIBIT 4-10
THE ASAM SUBSTANCE ABUSE CONTINUUM**

Level 0.5 Prevention, early intervention, and outreach services

Level I: Outpatient counseling

Level II Structured outpatient counseling (e.g., day/evening treatment)

Level III: Residential substance abuse treatment

Level III.05 Transitional housing¹

Level III.1 Halfway houses

Level III.3 Long-term rehabilitation programs

Level III.5 Therapeutic communities

Level III.7 Combined detoxification/short-term rehabilitation programs

Level III.9 Secure detoxification²

Level IV: Hospital-based detoxification

Hospital-based detoxification and treatment, medically necessary for about 10 percent of detoxifications,³ should be available in the 8 to 12 largest communities in North Carolina. Actual distribution of such programs may be dictated largely by the location of hospitals that are willing and able to provide this service.

Source: “The ASAM Patient Placement Criteria for the Treatment of Substance-Related Disorders” (ASAM PPC-2R), 2nd ed., Revised, April 2001.

¹ The ASAM typology allows and encourages the addition of additional services that are developed in substance abuse systems and to use the decimal system to place it within the continuum. North Carolina has added transitional housing (Level III.05) to describe supportive housing with some degree of staffing or case management offered.

² Consistent with ASAM typology, North Carolina has designated “secure detoxification” (capacity to admit difficult to manage and or combative intoxicated individuals in need of detoxification) as Level III.9.

³ This 10 percent figure is based on the very consistent percentage of individuals directed to Level IV hospital-based detoxification programs in the Massachusetts managed care system over a period of several years.

4.3.3 Specific Recommendations

Recommendation 8.1

Provide adequate funding to systematically build a complete and accessible continuum of locally and regionally available substance abuse services in three phases over the next five years.

In this study, we were charged, among other things, with “studying the substance abuse system.” While we have offered many recommendations in this chapter that we believe would improve the system, systematically building a comprehensive continuum of substance abuse services in every local management entity (LME) and in each region in North Carolina is our most basic and fundamental recommendation.

Good outcomes for individuals with substance abuse problems result from their being treated within a seemingly seamless and comprehensive continuum of services for six months or more. During this time, they will likely receive services in more than one level of care or modality of treatment. For instance, a person may require detoxification (Level III.7-D), followed by a two-week residential rehabilitation program (Level III.7), that leads to living in a halfway house (Level III.1), and receiving services at an outpatient clinic (Level I). Each service is crucial for recovery—the inability to access any one of these services for this individual may well lead to treatment failure. A more detailed explanation of the continuum of substance abuse residential services is found in Appendix G.

It is well known within the substance abuse treatment field what services are needed to produce good outcomes. It is also well documented that poor outcomes lead to tremendous social impacts (e.g., divorce, domestic abuse, poor parenting, homelessness, and workplace problems) and financial impacts (e.g., increased health care, social service, and criminal justice costs) on communities across North Carolina.

Any objective observer can see that North Carolina does not currently provide its citizens with a complete and comprehensive system of substance abuse services. This inadequacy has been noted in study after study and is an unassailable fact. The impact of this public policy on the state is huge and pervasive. If the General Assembly decides to seriously address this problem, it will take a large investment of resources over several years. While we realize funding this plan is difficult in challenging financial times, we also can say with confidence that the state can expect to receive an overall return of \$7 for every \$1 it invests (based on the authoritative CAL-DATA study).

We are recommending expansion of services across all 5 ASAM Levels of Care in 12 different types of programs. These services include expansion of prevention and early intervention services (Level 0.5), outpatient services (Level I), day treatment services (Level II), various residential services (Level III), and hospital-based services (Level IV).

North Carolina is a large and geographically diverse state organized into 100 counties, currently utilizing 39 area/county programs to provide behavioral health services. Complete substance abuse systems of care, similar to other specialty services, require a full continuum of services that are sited according to how much they are used and whether they are outpatient or residential in nature. For instance, some services (e.g.,

outpatient counseling) need to be available locally in every medium-sized or large town, throughout a city, and certainly in every county. Other services may be more appropriately county-based with one per county, others can be more sparsely based by region depending on demand for service, and some (e.g., highly specialized but crucial services) require only one to three sites statewide to be sufficient.

To truly address this need for expanded substance abuse services is difficult, but not impossible. To succeed, the state has to first have an idea of what actual costs are required to expand services so that it can plan accordingly. Based on our analysis, we have developed a detailed blueprint for future development. Our blueprint provides information about what services need to be developed, the number of programs needed per LME or region, the estimated cost of these programs, and a five-year/three-phase implementation plan. In summary, compared to available funding in FY 2002, the overall projected cost of building a complete substance abuse system in North Carolina over a five-year period will roughly require:

- an additional \$71 million in funding in FY 2003;
- an additional \$74 million in funding per year in FYs 2004 and 2005;
and
- about \$127 million each in FY 2006 and FY 2007.

Exhibits 4-11, 4-12, and 4-13 describe the programs that would be purchased by fiscal year, and Exhibit 4-14 summarizes the five-year plan.

Recommendation 8.2

Establish and implement minimum “geographic-based” access standards for each level of service.

Determining the ease of access to services is a complex issue because access is comprised of numerous variables (e.g., distance to programs, hours open, timeliness of first appointment, cultural/ethnic competence). One of the fundamental measures of access is simply how close the service is to where one lives and the ease of getting there (e.g., on a public transportation line). As services are expanded and local and regional gaps in the service continuum are filled during the reform process, a certain degree of “geographic access” will be sought. Following are our recommended access guidelines (Exhibit 4-15) that provide a broad picture of appropriate, reasonable, and (we believe) achievable access to different levels of care (in terms of geographic proximity and distribution) within North Carolina.

4.3.4 Suggested Time Frame:

Substance Abuse Services Section Implementation Report to
Oversight Committee

March 2002

Implementation

ASAP: by Phase

**EXHIBIT 4-11
RECOMMENDED DEVELOPMENT AND COST OF ADDITIONAL
COMMUNITY-BASED SUBSTANCE ABUSE SERVICES
PHASE 1 (FY 2003)***

Level of Care		Type of Program	Description	Who Served	Number of New Programs Needed ¹ Over 2002	Annual Operating Cost/ Program	Est. # New Program	FY 2003 Total Additional Annual Operating Cost (Above FY 2002)
Level 0.5 Prevention	N/A	Prevention, Early Intervention	Wide variety of evidence-based efforts to prevent future problems or decrease harm	Children/ Adolescents	2 per LME	\$150,000	20	\$3,000,000
Level I Outpatient	N/A	General Outpatient Counseling	General adult outpatient counseling (individual, group, family)	Adults	2 per LME	\$500,000	20	\$10,000,000
				Adolescents	2 per LME	\$200,000	20	\$4,000,000
Level II Structured Outpatient	II.1	Day/Evening Treatment	Structured day & evening programs, usually 3-5 hours long; best w/ coerced population	Adults	2 per LME ²	\$500,000	20	\$10,000,000
			Alternative schools funded by multiple agencies	Adolescents	2 per LME	\$150,000	20	\$3,000,000
Level III Residential	III.05	Transitional Independent Housing	Apartments or host homes supported with case management or staffed apartments.	Men	4 per LME	\$75,000	40	\$3,000,000
				Women	3 per LME ³	\$75,000	30	\$2,250,000
		Transitional Congregate Housing	Low clinical intensity treatment & housing (e.g., Healing Place)	Adults	1 per Region ⁴	\$1,000,000 ⁵	4	\$4,000,000
	III.1	Halfway Houses	Low clinical intensity living, 8 or so residents; attend work, school or day treatment; groups at night	Men	1+ per Region ⁶	\$250,000 ⁷	5	\$1,250,000
				Women	1 per Region	\$250,000 ⁸	4	\$1,000,000
				Adolescents	2 per Region	\$250,000 ⁹	8	\$2,000,000
	III.3	Long-term Supported Housing	Low clinical intensity, long-term supported housing (12-18 months)	Men	1 per Region	\$200,000 ¹⁰	4	\$800,000
				Women	1 per Region	\$200,000	4	\$800,000
	III.5	Therapeutic Communities	Moderate to high intensity, highly structured, long-term treatment	Adults	1 per Region ¹¹	\$912,500 ¹²	4	\$3,650,000
		Residential Recovery Homes	Moderate to high intensity, highly structured, long-term treatment	Women & Children	2 per Region	\$450,000 ¹³	8	\$3,600,000

* Footnotes follow this set of Exhibits.

EXHIBIT 4-11 (Continued)
RECOMMENDED DEVELOPMENT AND COST OF ADDITIONAL
COMMUNITY-BASED SUBSTANCE ABUSE SERVICES
PHASE 1 (FY 2003)

Level of Care		Type of Program	Description	Who Served	Number of New Programs Needed ¹	Annual Operating Cost	Est. # New	FY 2003 Total Additional Annual Operating Cost (Over FY 2002)
Level III Residential (Cont'd)	III.7	Detoxification/ Rehabilitation	Medically monitored detoxification; short-term clinically intensive treatment	Adults	2-SC; 1- E, W & NC Regions	\$2,000,000 ¹⁴	5	\$10,000,000
	III.9	Secure Detoxification	Medically monitored detoxification with capability to admit difficult-to-manage and/or combative individuals	Adults	ADATCs in the NC E, W& SC Regions	\$1,703,000	3	\$5,109,000
Level IV Hospital	IV	Hospital Detoxification	Medically managed detoxification for potential medical complications	Adults	All LMEs contract for services: Max. 1 hr access	\$360,000 ¹⁵	10	\$3,600,000
Additional Funds Required (Over FY 2002) To Build A Comprehensive Continuum of Services (2001 dollars)								\$71,059,000

**EXHIBIT 4-12
RECOMMENDED DEVELOPMENT AND COST OF ADDITIONAL
COMMUNITY-BASED SUBSTANCE ABUSE SERVICES
PHASE 2 (FY 2004 & FY 2005)**

Level of Care		Type of Program	Who Served	Number of Programs Needed Over FY 2002 ¹	Annual Operating Cost/Program	Est. # New Program	FY 2004 Total Additional Annual Operating Costs (Over FY 2002)	FY 2005 Total Annual Operating Costs (Over FY 2002)
Level 0.5 Prevention	N/A	Prevention, Early Intervention	Children/ Adolescents	2 per LME	\$150,000	20	\$3,000,000	\$3,000,000
Level I Outpatient	N/A	General Outpatient Counseling	Adults	2 per LME	\$500,000	20	\$10,000,000	\$10,000,000
			Adolescents	2 per LME	\$200,000	20	\$4,000,000	\$4,000,000
Level II Structured Outpatient	II.1	Day /Evening Treatment	Adults	2 per LME ²	\$500,000	20	\$10,000,000	\$10,000,000
			Adolescents	2 per LME	\$150,000	20	\$3,000,000	\$3,000,000
Level III Residential	III.05	Transitional Independent Housing	Men	4 per LME	\$75,000	40	\$3,000,000	\$3,000,000
			Women	3 per LME ³	\$75,000	30	\$2,250,000	\$2,250,000
		Transitional Congregate Housing	Adults	1 per Region ⁴	\$1,000,000 ⁵	4	\$4,000,000	\$4,000,000
	III.1	Halfway Houses	Men	1+ per Region ⁶	\$250,000 ⁷	5	\$1,250,000	\$1,250,000
			Women	1 per Region	\$250,000 ⁸	4	\$1,000,000	\$1,000,000
			Adolescents	2 per Region	\$250,000 ⁹	8	\$2,000,000	\$2,000,000
	III.3	Long-term Supported Housing	Men	1 per Region	\$200,000 ¹⁰	4	\$800,000	\$800,000
			Women	1 per Region	\$200,000	4	\$800,000	\$800,000
	III.5	Therapeutic Communities	Adults	1 per Region ¹¹	\$912,500 ¹²	4	\$3,650,000	\$3,650,000
		Residential Recovery Homes	Women & Children	2 per Region	\$450,000 ¹³	8	\$3,600,000	\$3,600,000
	III.7	Detoxification/ Rehabilitation	Adults	2-SC; 1- E, W & NC Regions	\$2,000,000 ¹⁴	5	\$10,000,000	\$10,000,000
	III.9	Secure Detoxification	Adults	Development of 4 th III.9 Program	\$3,000,000	1	\$8,109,000 ¹⁶	\$8,109,000
Level IV Hospital	IV	Hospital Detoxification	Adults	All LMEs contract for services: 1 hr access	\$360,000 ¹⁵	10	\$3,600,000	\$3,600,000
Additional Funds Required (Over FY 2002) to Build a Comprehensive Continuum of Services (2001 dollars)							\$74,059,000	\$74,059,000

**EXHIBIT 4-13
RECOMMENDED DEVELOPMENT AND COST OF ADDITIONAL
COMMUNITY-BASED SUBSTANCE ABUSE SERVICES
PHASE 3 (FY 2006 & FY 2007)**

Level of Care		Type of Program	Who Served	Number of New Programs Needed Over FY 2005	Annual Operating Cost/Program	Est. # New Programs	Est. # Total New Programs	FY 2006 Total Additional Annual Operating Costs (Over FY 2002)	FY 2007 Total Additional Annual Operating Costs (Over FY 2002)
Level 0.5 Prevention	N/A	Prevention, Early Intervention	Children/ Adolescents	2 per LME	\$150,000	20	40	\$6,000,000	\$6,000,000
Level I Outpatient	N/A	General Outpatient Counseling	Adults	1 per LME	\$500,000	10	30	\$15,000,000	\$15,000,000
			Adolescents	1 per LME	\$200,000	10	30	\$6,000,000	\$6,000,000
Level II Structured Outpatient	II.1	Day /Evening Treatment	Adults	1 per LME ²	\$500,000	10	30	\$15,000,000	\$15,000,000
			Adolescents	1 per LME	\$150,000	10	30	\$4,500,000	\$4,500,000
Level III Residential	III.05	Transitional Independent Housing	Men	4 per LME	\$75,000	40	80	\$6,000,000	\$6,000,000
			Women	4 per LME ¹⁷	\$75,000	40	70	\$5,250,000	\$5,250,000
		Transitional Congregate Housing	Adults	1 per Region ⁴	\$1,000,000 ⁵	4	8	\$8,000,000	\$8,000,000
	III.1	Halfway Houses	Men	1 per Region ⁶	\$250,000 ⁷	4	9	\$2,250,000	\$2,250,000
			Women	1 per Region	\$250,000 ⁸	4	8	\$2,000,000	\$2,000,000
			Adolescents	1 per Region	\$250,000 ⁹	4	12	\$3,000,000	\$3,000,000
	III.3	Long-term Supported Housing	Men	1 per Region	\$200,000 ¹⁰	4	8	\$1,600,000	\$1,600,000
			Women	1 per Region	\$200,000	4	8	\$1,600,000	\$1,600,000
	III.5	Therapeutic Communities Residential Recovery Homes	Adults	1 per Region ¹¹	\$912,500 ¹²	4	8	\$7,300,000	\$7,300,000
			Women & Children	1 per Region	\$450,000 ¹³	4	12	\$5,400,000	\$5,400,000
III.7	Detoxification/ Rehabilitation	Adults	2-W, 1- E, 1 NC Regions	\$2,000,000 ¹⁴	4	9 ¹⁸	\$18,000,000	\$18,000,000	
III.9	Secure Detoxification	Adults	Purchased III.9 Services to ensure 1 hour access	\$2,500,000 ¹⁹	3	7	\$15,609,000	\$15,609,000	
Level IV Hospital	IV	Hospital Detoxification	Adults	All LMEs contract for services: 1 hr access	\$360,000 ¹⁵	3	13	\$4,680,000	\$4,680,000
Additional Funds Required (Over Baseline Year FY 2002) to Build a Comprehensive Continuum of Services (2001 dollars)								\$127,189,000	\$127,189,000

EXHIBIT 4-14
SUMMARY OF RECOMMENDED ADDITIONAL OPERATING BUDGET TO BUILD A
COMPREHENSIVE CONTINUUM OF NORTH CAROLINA SUBSTANCE ABUSE SERVICES

Level of Care	Sub-Level	Level of Care	Who Served	Phase 1- Additional Funding to FY 2002 Baseline		Phase 2- Additional Funding to FY 2002 Baseline		Phase 3-Additional Funding to FY 2002 Baseline		Total Additional Funds Required FYs 2003-2007
				FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	
Level 0.5 Prevention	N/A	Prevention	Children/ Adolescents		\$3,000,000	\$3,000,000	\$3,000,000	\$6,000,000	\$6,000,000	\$21,000,000
Level I Outpatient	N/A	Outpatient Counseling	Adults		\$10,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$60,000,000
			Adolescents		\$4,000,000	\$4,000,000	\$4,000,000	\$6,000,000	\$6,000,000	\$24,000,000
Level II Structured Outpatient	II.1	Day/Evening Treatment	Adults		\$10,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$60,000,000
			Adolescents		\$3,000,000	\$3,000,000	\$3,000,000	\$4,500,000	\$4,500,000	\$18,000,000
Level III Residential	III.05	Transitional Independent Housing	Men		\$3,000,000	\$3,000,000	\$3,000,000	\$6,000,000	\$6,000,000	\$21,000,000
			Women		\$2,250,000	\$2,250,000	\$2,250,000	\$5,250,000	\$5,250,000	\$17,250,000
		Transitional Congregate Housing	Adults		\$4,000,000	\$4,000,000	\$4,000,000	\$8,000,000	\$8,000,000	\$28,000,000
	III.1	Halfway Houses	Men		\$1,250,000	\$1,250,000	\$1,250,000	\$2,250,000	\$2,250,000	\$8,250,000
			Women		\$1,000,000	\$1,000,000	\$1,000,000	\$2,000,000	\$2,000,000	\$7,000,000
			Adolescents		\$2,000,000	\$2,000,000	\$2,000,000	\$3,000,000	\$3,000,000	\$12,000,000
	III.3	Long-Term Supported Housing	Men		\$800,000	\$800,000	\$800,000	\$1,600,000	\$1,600,000	\$5,600,000
			Women		\$800,000	\$800,000	\$800,000	\$1,600,000	\$1,600,000	\$5,600,000
	III.5	Therapeutic Communities	Adults		\$3,650,000	\$3,650,000	\$3,650,000	\$7,300,000	\$7,300,000	\$25,550,000
		Residential Recovery Homes	Women & Children		\$3,600,000	\$3,600,000	\$3,600,000	\$5,400,000	\$5,400,000	\$21,600,000
	III.7	Detoxification/ Rehabilitation	Adults		\$10,000,000	\$10,000,000	\$10,000,000	\$18,000,000	\$18,000,000	\$66,000,000
	III.9	Secure Detoxification	Adults		\$5,109,000	\$8,109,000	\$8,109,000	\$15,609,000	\$15,609,000	\$52,545,000
Level IV Hospital	IV	Hospital Detoxification	Adults		\$3,600,000	\$3,600,000	\$3,600,000	\$4,680,000	\$4,680,000	\$20,160,000
TOTAL RECOMMENDED ADDITIONAL ANNUAL FUNDING FOR NC SUBSTANCE ABUSE SERVICES (Baseline FY 2002)					\$71,059,000	\$74,059,000	\$74,059,000	\$127,189,000	\$127,189,000	\$473,555,000

NOTES: FY 2002 is the Baseline Budget Year. See Exhibits 4-11,4-12, and 4-13 for more detail. Fiscal Years 2003, 2004, 2005, 2006, and 2007 proposed funding is in addition to this baseline budget and are 2001 dollars that should be adjusted to inflation as needed. The bulk of these services will need to be funded by the SAS section, but some is in or could be funded by DMA/Medicaid and consequently draw federal matching funds. DMA and the SAS section should collaborate to devise a plan to maximize federal funding now that the Balanced Budget Act allows DMA much more freedom in its purchase of services useful to those with substance abuse problems.

Notes for Exhibits 4-11, 4-12, 4-13, and 4-14

¹ Assumptions upon which additional capacity needs are calculated:

- One Local Management Entity (LME) managing services per 800,000 to 1 million North Carolinians;
- Ten LMEs operating across North Carolina within four larger regions (East, North Central, South Central, and West);
- Adjust capacity needs up or down by prorating as appropriate.

² The courts refer approximately 54% of admissions into the North Carolina substance abuse system, and most of these will be required to obtain day treatment (Level II) services. In general, such day treatment services should be located in larger cities or metropolitan areas close to transportation lines. Capacity development may need to be adjusted for rural areas.

³ Historically, women sought treatment at a lower rate than men. North Carolina is a national leader in establishing women's programming, but the number of men treated still outpaces that of women. As a result, projected funding for some levels of care will be less for women in the earlier stages of reform, but equalizes with the rate of men by Phase 3 based on the hope that reform-related processes will successfully address this iniquity.

⁴ Within each region, locate facility in a county with a population over 175,000.

⁵ Each with 100 beds

⁶ Regions are defined as the currently existing South Central (SC), East (E), West (W), and North Central (NC) regions. Because of the current deficit of III.7 detoxification and rehabilitation services in the South Central region, two halfway houses are recommended for the South Central Region, and one in each of the other regions in Phase 1.

⁷ Each with 10 beds

⁸ Each with 10 beds

⁹ Each with 8 beds

¹⁰ Each with 10 beds

¹¹ Within each region, locate facility in a county with a population over 175,000.

¹² Each with 100 beds

¹³ Each with 8 families

¹⁴ Each with 20 beds; this is based on an expected ratio of 40% detox beds and 60% rehabilitation beds, and consequently 8 detox beds and 12 rehabilitation beds per 20-bed unit.

¹⁵ Cost per 240 detoxifications. See Appendix F to see how Level IV detoxifications were developed.

¹⁶ Additional cost (\$3 million) to prior year (\$5.1 million) due to anticipated development of one additional program, probably in Wake County, capable of providing a III.9 level of care.

¹⁷ A reform goal is to achieve parity of access to women's service by FY 2006.

¹⁸ The uneven distribution of III.7s is due to currently known deficits and anticipated needs.

¹⁹ In order to provide adequate access to III.9 services, it will be necessary to develop such capacity in areas where such facilities are over an hour away. Phase 3 costs are added to previous phase costs. It is estimated that it will take three programs or program equivalents to meet this need. The estimated cost is based on inadequate information, so should be studied further at the appropriate time.

**EXHIBIT 4-15
GEOGRAPHIC ACCESS STANDARDS**

Level 0.5 Prevention, early intervention, and outreach services

Prevention, early intervention, and outreach services should be available in every county and every school in the state.

Level I: Outpatient counseling

Sufficient capacity of outpatient counseling (individual, group, and family) should be available in every town with a population of 20,000 or more, or within 30 minutes of travel time (except in the most remote sections of the state, where this standard should be raised to one hour).

Level II Structured outpatient counseling (e.g., day or evening treatment)

Structured outpatient counseling (e.g. day or evening treatment: Level II) services should be available in the 8 to 12 largest cities in North Carolina.

Level III: Residential substance abuse treatment

There are several different types of residential substance abuse treatments requiring development in North Carolina. In general, most residential treatment programs should be sited in or close to the cities where Level III.7 detoxification/rehabilitation programs are located because these III.7 facilities are the primary referral source of clients to many of the Level III residential programs. Recommended guidelines for different residential levels of care are described in more detail below.

Level III.05 /III.07 Transitional housing

Transitional housing options should be minimally available in the 8 to 12 largest communities.

Level III.1 Halfway houses

Halfway houses should all be sited in the general vicinity of Level III.7 detoxification/rehabilitation programs.

Level III.3 Long-term rehabilitation programs

Long-term rehabilitation programs should be sited near all detoxification/rehabilitation programs and in each of the 8 to 12 largest North Carolina communities.

Level III.5 Therapeutic communities

Therapeutic communities differ for men and women and also in other ways; in general, a handful of these programs should be regionally distributed across the state.

Level III.7 Combined detoxification/short-term rehabilitation programs

Combined detoxification and rehabilitation programs should be available in each of the 8 to 12 largest communities in North Carolina.

Level III.9 Secure detoxification

Secure detoxification capacity, capable of handling difficult-to-manage and combative individuals, should be minimally available in each of the three ADATCs.

Level IV: Hospital-based detoxification

Hospital-based detoxification and treatment, medically necessary for about 10 percent of detoxifications, should be available in the 8 to 12 largest communities in North Carolina. Actual distribution of such programs may be dictated largely by the location of hospitals that are willing and able to provide this service.

Source: Created by MGT, 2001.

4.4 Recommendation 9

Expand the capacity of needed adolescent substance abuse services across North Carolina.

4.4.1 Goal

Ensure that every adolescent living in North Carolina has access to the most needed substance abuse services in order to effectively and efficiently minimize the long-term consequences and impact on individuals, their families, and the communities where they live.

4.4.2 Findings

The adolescent substance abusing population is arguably the most underidentified and underserved in the state. Our discussions with state officials and other stakeholders suggest that area/county programs and other community agencies often do not consistently identify the beginnings of or current adolescent substance abuse in those they serve. This breakdown in the system has many long-term ramifications. No single screening tool, process, or system is used across the state to identify potential adolescent substance abuse, and thus many who could be served effectively never receive services. We observed one notable exception to this general trend in the comprehensive screening system used in the juvenile justice system.

We believe that area/county programs, community-based providers of adolescent services, and substance abuse treatment agencies in general are not doing as good a job as possible to provide effective outreach services or to successfully engage and then retain the young clients once they are referred.

A fundamental challenge for North Carolina is thus to expand the development of systems that ensure consistent and effective identification, screening, and assessment and referral procedures for youth. These screening systems should be used by all

sectors that work with youth (e.g., mental health, juvenile justice, schools, health providers, and social services). Although DMHDDSAS has increased community awareness of treatment needs for adolescent substance abuse, appropriate identification and referral to evaluation and treatment still falter far too often in the day-to-day management of adolescents by community agencies. This problem has many roots, but experience has shown that child- and youth-serving public agencies tend to learn over time if the needed substance abuse services are truly available and accessible. If so, they then act accordingly.

In examining the service continuum that is available for youth, we found a dramatic shortage of adolescent substance abuse services across the state and see a great need for capacity building. At the upper end of the continuum, adolescent regional residential programs serving adolescents with substance abuse problems provide a critical service component in the statewide system of substance abuse services for youth. These programs typically provide:

- regional level of access to comprehensive residential services;
- 24-hour care (usually with about three to four-month length of stays);
- an intensive substance abuse treatment program; and
- on-site public education.

While these regional adolescent substance abuse treatment centers provide a valuable service, the very long waiting lists for entry into these services is well known and thus discourages many from seeking help there.

A missing component of the continuum is a residential program to provide intensive specialized treatment and support for adolescent girls who are pregnant and have serious substance abuse problems. Such a program meets a low incidence, but crucially important need. Any substance abuse system designed to meet the needs of adolescent girls requires such a program. Our examination of the juvenile justice system

found that the MAJORS⁵ program provides a variety of substance abuse services for adjudicated adolescents (i.e., those convicted of a crime and sentenced) who are believed to have substance abuse problems. These court-mandated treatment programs offer intensive outpatient services (generally four to five hours a week) and most have active home-based treatment and family involvement. Although widely hailed, the program is now operating in less than one-third of the area/county programs (12 of the 39) and is thus not an available option for most adolescents and courts across the state.

Providing effective early intervention services (i.e., ASAM Level 0.5) to youth beginning to use alcohol or other drugs and/or beginning to get in trouble with them is one of the most essential—and most challenging—system interventions that North Carolina could make in its reform effort. This subpopulation does not usually seek out specialized services in mental health or substance abuse treatment clinics on their own. Unfortunately, the state does not yet consistently have local early intervention systems in place to reach these youth. Research shows that the illicit use of drugs and alcohol for many of these youth will increase over time, causing a range of consequences for the child, the family, and the communities in which they live. While some efforts have been made to mainstream the provision of these early intervention services in North Carolina, systematic expansion of such programs is needed in schools, the juvenile justice system, and primary health care settings.

In general, a substantial increase in overall capacity is needed and early intervention services must be provided to youth as early as possible. Successfully achieving just these two goals would make a substantial contribution to reducing or eliminating this early use and dramatically lessening the long-term consequences to the individual and the state. The following recommendations, ranked by priority, would

⁵ The acronym MAJORS stands for “Managing Access for Juvenile Offender Resources and Services.”

significantly improve the prevention and treatment of adolescent substance abuse in North Carolina.

4.4.3 Specific Recommendations (Ranked in Terms of Priority)

Recommendation 9.1

Expand the MAJORS program, now offered in 12 of the 39 Area Programs, to every current area/county program and every judicial district.

Recommendation 9.2

Double the capacity of clinically intensive residential program beds (ASAM Level III.5 or III.7) for adolescents with serious substance abuse problems.

Doubling the capacity will increase from the current 59 beds to about 120 beds.

Recommendation 9.3

Develop, fund, implement, and monitor the progress of a comprehensive statewide plan that will ensure consistent and effective screening, assessment, and referral to appropriate treatment for identified youth.

Screening systems should be developed in all sectors that work with youth, such as mental health, juvenile justice, schools, health providers, and social services.

Recommendation 9.4

Systematically strengthen early intervention services (ASAM Level 0.5) for youth and adolescents in mainstream settings such as schools, primary care, and juvenile justice settings

Early intervention will ensure that problems and potential problems with substance use are identified and addressed as early as possible.

Recommendation 9.5

Develop a specialized, statewide 8- to 10-bed residential program for pregnant adolescent girls who have serious substance abuse problems and who require this level of care.

Recommendation 9.6

Integrate and mainstream substance abuse prevention and treatment services into school-based health clinics and primary care settings through strong contractual agreements with area/county programs and the evolving LMEs.

Recommendation 9.7

Develop systems to provide hospital-based outreach and treatment to homeless, pregnant adolescent and adult women with serious substance abuse problems who are having their babies delivered in local hospitals.

Engage them and their fetal alcohol syndrome (FAS) vulnerable children in local treatment systems.

4.4.4 Suggested Time Frame:

DMHDDSAS Implementation Report to the Oversight Committee March 2002

Implementation Complete June 2005

4.5 Recommendation 10

Expand statewide outcomes measurement to all publicly funded substance abuse services.

4.5.1 Goal

Ensure that all individuals receiving publicly funded substance abuse treatment services are included in a single, statewide outcome measurement system.

4.5.2 Findings

North Carolina's current substance abuse outcome measurement system, the North Carolina Treatment Outcomes and Program Performance System (NC-TOPPS),⁶ is widely recognized as one of best program-based systems in the country. The SAS section coordinates this initiative with the assistance of two partners—the National Development and Research Institutes-North Carolina (NDRI-NC) and North Carolina State University's Center for Urban Affairs and Community Services.

⁶ The current project grew out of a federal Center for Substance Abuse Treatment (CSAT) grant where North Carolina was selected as one of the initial TOPPS-I sites. This CSAT pilot was built upon substance abuse treatment research findings and practitioner input. Current data collection instruments and feedback reports were developed through a participatory and consensus process with the pilot sites' substance abuse directors, clinicians, and participating researchers. Key personnel from the pilot sites continue to meet quarterly to discuss relevant assessment, outcome, and performance issues related to the NC-TOPPS.

Because this is a program-based outcome system, the NC-TOPPS assessment tool is used on a regular basis by program counselors and the clients they treat. Both the clinician and the client complete the evaluation on a regular basis. The use of the tool, a sophisticated collection of well-respected nationally based measures, is thus occurring in real time, in the context of the therapeutic relationship and in a way that the information gained is well-positioned to be acted upon and positively influence the quality of care.

The NC-TOPPS tool is also very adaptable to different situations and populations within North Carolina. In fact, the North Carolina criminal justice system has used many of the NC-TOPPS items and adapted others in developing a tool for the population they serve. The NC-TOPPS system is currently being used in the following areas:

- the original five program pilot sites (Blue Ridge, Durham, Piedmont, Sandhills, and Southeastern Area) for all substance abuse clients;
- one contract agency (Coastal Horizons);
- each of the 39 area/county programs (to varying degrees);
- several specialty programs such as Perinatal/Maternal program, Methadone programs, MAJORS (Managing Access for Juvenile Offender Resources and Services), and Work First/Substance Abuse Initiatives.

Despite usage in the above-mentioned programs, NC-TOPPS is now reaching only about 5,000 to 8,000 clients a year out of an annual pool of about 70,000 individuals. The pool of substance abuse clients, who are treated in the state for substance abuse problems with public dollars, is growing steadily. In other words, about 3 to 4 percent of those treated for substance abuse with public monies are involved in the state's outcome measurement and quality improvement system. In sum, we believe that NC-TOPPS provides the state with a high-quality, standardized, and effective system for substance abuse related outcome and performance measurement.

Appendix H contains the full NC-TOPPS outcomes measurement report and provides an example of the type of information that can be developed.

While NC-TOPPS provides an excellent foundation for program-based outcome measurement, the state may also be interested in obtaining other types of outcome information to guide the development of public policy. Currently, services for an individual or family are often provided in two or more sectors of government, but there is no capacity to efficiently examine and utilize data and information gathered in other systems that would be highly relevant and useful. For example, in developing state policy, one might want to understand the impact of substance abuse treatment on:

- recidivism rates of North Carolina criminal justice offenders within two years of release;
- the percentage of mentally ill offenders who are receiving mental health services three months after being released from incarceration; or
- the impact of DSS intervention on the outcomes of treatment of mothers with substance abuse problems and their affected children five years down the road.

Whatever the particular interest, easy-to-access interdepartmental outcome-related data can provide a wealth of useful information that can be used to inform public policy development. Sharing of outcome data is currently being done in a few states. For instance, the Washington state MIS systems allow relatively easy interdepartmental exchange of data that are used to track outcomes of individuals across services systems and inform the state's legislative decision-making. Building this capacity in North Carolina would be especially useful in tracking outcomes of those who received substance abuse treatment, because the outcomes of this treatment are experienced in many aspects of government services such as the criminal justice system, health care, child welfare, and social services. Such development is neither easy nor inexpensive,

but represents the future of how integrated information systems will be used to enhance the quality and efficiency of client monitoring and outcomes improvement.

4.5.3 Specific Recommendations

Recommendation 10.1

Mandate the ongoing collection of a standard set of substance abuse outcomes for all services supported by North Carolina public substance abuse dollars.

The General Assembly should mandate the ongoing collection of a standard set of outcomes for all North Carolinians who receive publicly funded substance abuse services. The NC-TOPPS outcome system is an excellent system, and should be the foundation of future system improvement. To be effective, the overall outcome system should minimally include all substance abuse services funded by DMHDDSAS and the Division of Medical Assistance (DMA Administrative Medicaid Program). We believe that continuation and expansion of the NC-TOPPS program could benefit the state in four substantial ways. It would:

- institutionalize an effective and standardized system for monitoring the demographic profile of those using services (Exhibit 4-16 presents the NC-TOPPS demographic profile);
- provide a standardized means for measuring and reporting substance abuse treatment outcomes and provider performance (examples of NC-TOPPS outcomes measures are shown in Exhibit 4-17);
- institutionalize a uniform outcomes measurement system as a component of both state and local information systems; and
- provide substance abuse service programs with a valuable outcome measurement tool that can be used effectively to enhance program performance and continually improve client outcomes.

Recommendation 10.2

Implement a multiyear plan to link relevant departmental databases.

The General Assembly should support the implementation of a multiyear strategy to systematically develop linkages across related administrative data sets and build capacity for interdepartmental outcomes measurement. This would allow efficient sharing of data about clients who utilize different government-funded programs and systems and generate a wealth of useful information for ongoing system development and management.

If the Legislature is interested in facilitating or promoting the development of this type of capacity, it would need to provide some additional funding over a few years to support

EXHIBIT 4-16 NC-TOPPS DOMOGRAPHIC PROFILE

Total

6585 admissions are reported for the fiscal year 2000-2001.

Gender - Question 10:

53.8% Male 43.3% Female 2.9% Missing

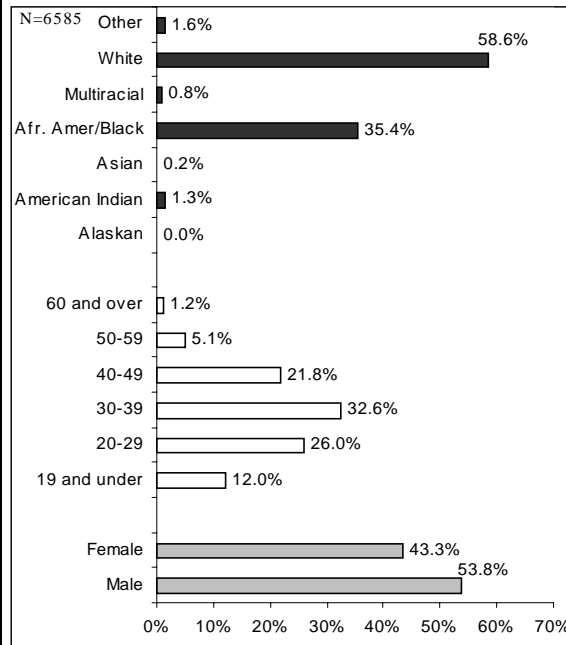
Race - Question 15:

0% Alaskan 1.6% Other
1.3% American Indian 0.8% Multiracial
0.2% Asian 58.6% White/Caucasian
35.4% Afr. Amer./Blac 2.1% Missing

Age - Question 4:

12.0% age 19 and und 21.8% ages 40-49
26.0% ages 20-29 5.1% ages 50-59
32.6% ages 30-39 1.2% age 60 and over
1.4% Missing

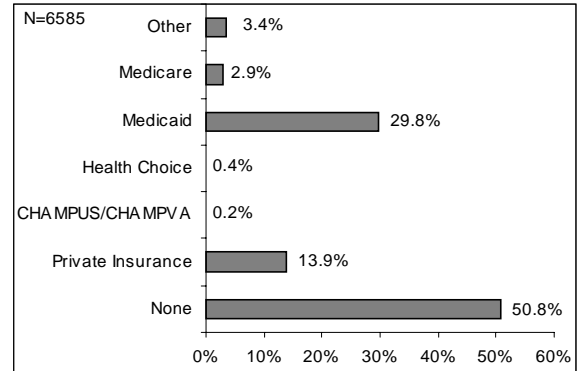
Graph 1-1: Demographics



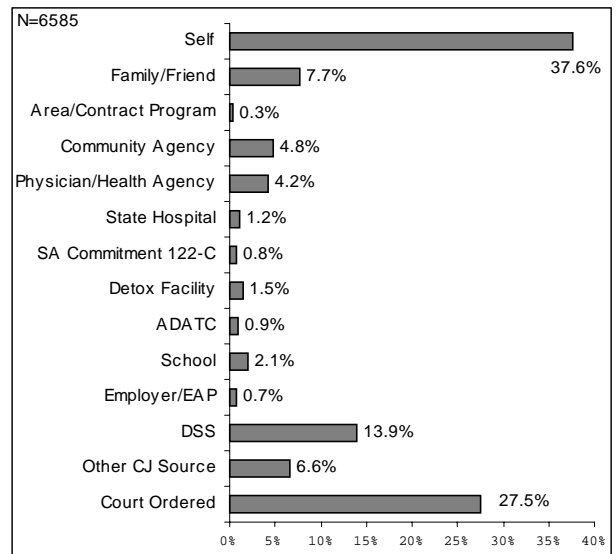
Other Characteristics- Questions 22,17,& 25:

45.2% (2978 of 6585) reported never having been married.
78.5% (5169 of 6585) have less than a High School^A education.
48.0% (3160 of 6585) have children under the age of 18.

Graph 1-2^B - Health Insurance- Question 16:



Graph 1-3^B - Referral Sources - Question 13:



Note: Data on this page is gathered only from initial assessments with the today's date of July 1st through June 30th. Question numbers refer to the 7/1/00 revised initial assessment. Missing values are included in the percentages. Percentages may not equal 100 due to rounding.

*No data is reported for variables with fewer than 10 clients.

^ALess than High School education does not include clients that have a diploma or GED.

^B Graphs 1-2 & 1-3 refer to a 'mark all that apply' question therefore the percentages do not add to 100%.

Source: DMHDDSAS, SAS section.

EXHIBIT 4-17 NC-TOPPS OUTCOME MEASURES

Behavior Trends Comparing First Assessment and Second Assessment:

Tobacco Use: 63.2% clients at first assessment and 64.9% at the second assessment smoked or used tobacco.

Sexual Activity: 29.6% at first assessment and 8.1% at second assessment participated in sexual activity without using a condom.

Physical Abuse: 6.2% at first assessment and 2.8% at second assessment have been physically hurt by a spouse/partner/adult.

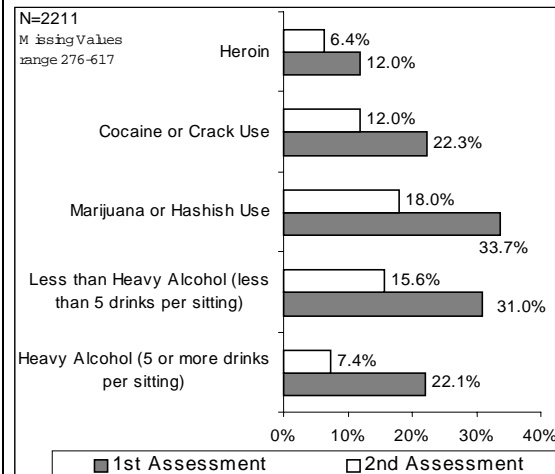
Suicide: 11.7% at first assessment and 5.8% at second assessment have had thoughts of suicide.

Support Groups: 28.1% at first assessment and 43.8% at second assessment have participated in recovery-related support/self-help groups.

Family support: 60.2% at first assessment and 56.7% at second assessment have had a lot of support from family/friends.

Employment: 32.3% at first assessment and 34.5% at second assessment were working full time.

Graph 3-1^D - Last 3 Month Drug Use First and Second Assessment:



Explanation: 22.1% (488 of 2211) at first assessment and 7.4% (164 of 2211) at second assessment used heavy alcohol.

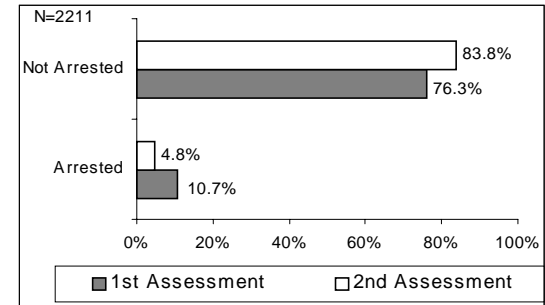
Note: The data represents the behavior trend at the first and second assessment regardless if it was an initial or update assessment. The data includes initial and update assessments with the today's date of July 1st through June 30th. Missing values are included in the percentages. Percentages may not equal 100 due to rounding.

*No data is reported for variables with fewer than 10 clients.

^BGraph 3-3 refers to a 'mark all that apply' question therefore the percentages do not add to 100%.

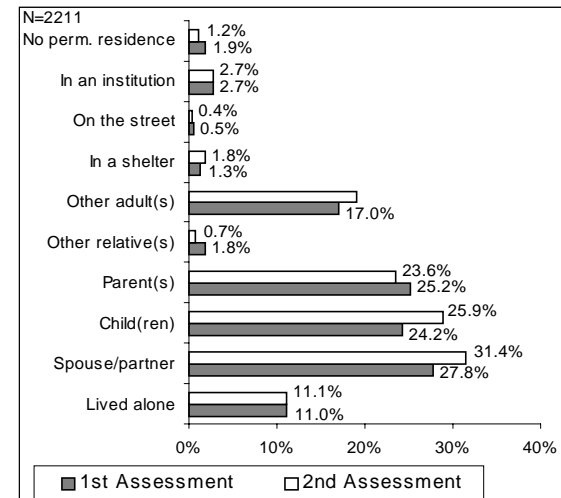
^DClients may use more than one drug, therefore the percentages will not add to 100%.

Graph 3-2 - Arrest trends including any DWI or Probation/Parole violation comparing First and Second Assessment:



Explanation: 76.3% (1686 of 2211) at first assessment and 83.8% (1853 of 2211) at second assessment were not arrested for any offense including DWI or probation/parole violations.

Graph 3-3^B - Living Status Comparing First and Second Assessment:



Explanation: 11.0% (244 of 2211) at first assessment and 11.1% (245 of 2211) at second assessment lived alone.

Source: DMHDDSAS, SAS section.

the staff required to build the necessary linkages across the administrative data sets. As a first step, DHHS should be asked to provide to the Oversight Committee an informed analysis of the challenges, opportunities, and estimated costs of achieving this goal. In sum, MGT believes that it is a worthy developmental goal, and that systematic development spread over time would yield substantial benefits to the state.

4.5.4 Suggested Time Frame

Substance Abuse Services Section Report to Oversight Committee March 2002

Implementation July 2003

4.6 Recommendation 11

Develop and explore longer-term, stable substance abuse financing options.

4.6.1 Goal

Provide a stable and multifaceted pool of funds to support the continuing development of substance abuse services across the state.

4.6.2 Findings

The North Carolina substance abuse service system, similar to other human services in the state, is a highly decentralized system where the amount of and access to substance abuse services vary greatly across the state. Even with increases in funding over past years, it is still an underfunded system, with substantial service development needs required over the next several years. Additional federal, state, and/or county funding will be needed to help support the necessary expansion of services, but it would also be wise to look for additional avenues of funding to support this development and to help provide for a consistent flow of substance abuse-related funding from different sources.

Given the pervasive impact of substance abuse problems on individuals, families, communities, counties, and the state, enhancing the base funding of substance abuse

services in new and innovative ways could benefit all. Following are some recommendations for providing additional support to substance abuse service system development.

4.6.3 Specific Recommendations

Recommendation 11.1

Pass substance abuse parity legislation.

Providing parity for substance abuse services in North Carolina is arguably the most important legislation that the General Assembly could pass to enhance the long-term prospects of developing a complete and accessible substance abuse service system. Parity is of course a largely political issue that will be achieved (or not) through the General Assembly's normal political processes. It is also an issue that is likely to be influenced by legislators' critical review of insurance industry claims that often describe (contrary to current research) substance abuse parity as "just too expensive." If there is the political will to pass such parity legislation this legislative session, congratulations are due to North Carolina political leaders for expanding access to such a key and cost-effective health care service.

➤ Recommendation 11.1.1

Mandate an evaluation of substance abuse parity in the North Carolina State Employee Plan.

If there is not the political will to pass such parity at this time, then we highly recommend that the General Assembly, at minimum, inform the process with data and mandate an evaluation of the North Carolina State Employee Plan, which now has accumulated a sizable amount of data on the cost of including substance abuse parity.

Recommendation 11.2

Implement a multiprong substance abuse services funding strategy.

To build the necessary regional continuums of substance abuse services, North Carolina should consider developing a multiprong funding strategy to supplement its standard funding strategies. Below are some strategies we believe the state should consider to generate stable funding sources for providing accessible substance abuse services to all of its citizens.

➤ **Recommendation 11.2.1**

Utilize an alcohol sales tax to provide ongoing and stable funding for substance abuse services.

As of the writing of this report, the General Assembly is considering devoting some of the proceeds of an increased state alcohol tax to the DMHDDSAS and to the substance abuse service system. We support this effort and believe it is an appropriate use of these new potential revenues. Consideration should be given to these revenues being stable funding sources over time. Additionally, consideration should be given to the idea that specific percentages of funding be directed to the substance abuse services system development given that the tax is based on sales of the most abused drug in North Carolina.

➤ **Recommendation 11.2.2**

Utilize Medicaid options to expand services for those with substance abuse problems.

The Balanced Budget Act (1997) gave the states greater flexibility in many ways, including increased flexibility in designing and implementing managed care-related strategies and in providing services to consumers. The state should examine whether this increased flexibility can be used to expand the number of substance abuse-related services that are supported through Medicaid and/or to utilize selected managed care-related strategies to improve the quality of services provided.

➤ **Recommendation 11.2.3**

Mandate an evaluation of potential legislative changes in insurance regulations to increase coverage options for those with substance abuse disorders.

Insurance regulations, policies, and practices can create barriers to accessing needed substance abuse services. Common barriers include unrealistic annual or lifetime limits on coverage, lack of coverage for certain needed services, and so forth. We recommend that the General Assembly mandate an evaluation of potential legislative changes in insurance regulations that would increase coverage options for those with substance abuse disorders.

➤ **Recommendation 11.2.4**

Promote support of substance abuse services by the North Carolina business sector.

North Carolina businesses—large and small—experience the impact of substance abuse in terms of lost productivity, increased health care costs, increased sick time, and so forth. It is in the best interest of the business community to help address this problem with their employees and in the communities where they conduct business. The state and interested others should explore all opportunities for fully engaging the business community in being an active partner in the prevention and treatment of substance abuse in North Carolina.

➤ **Recommendation 11.2.5**

Direct savings generated from diversion of substance abuse-related admissions from state hospitals to development of ADATC and community resources.

The diversion of over 3,000 admissions per year of those with primary substance abuse problems from state hospitals will potentially produce significant savings in the state hospitals in terms of reduction of staff and the possible closing of wards.⁷ If this were to occur, the General Assembly or DHHS should redirect some of those cost savings and/or staff positions—directly or indirectly—to support expansion of ADATC capabilities.

Additionally, we believe it would be appropriate for any *Olmstead*-related transition funds that may be made available at a future time to initially be directed to assisting the transfer of substance abuse admissions from state hospitals to ADATC or community resources, because the funds would help support the creation of an immediate and cost-effective solution to what has been an intractable system problem.

➤ **Recommendation 11.2.6**

Seek innovative sources of funding and strategies to address the complex needs of indigent individuals with severe addictive disorders.

One of the greatest challenges of the public substance abuse service system is effectively providing and managing services for indigent individuals. These individuals have a large impact on community life (e.g., homelessness), and they are some of the hardest to treat successfully with existing services and systems. To better meet the need of indigent individuals with serious and persistent substance abuse problems, considerations should be given to a variety of innovative financial and clinical management strategies to achieve better outcomes with this population. These possibilities include:

- setting aside indigent funds at the state and local levels. Funds are currently lumped together and the only “attention-getting” fund for providers is Medicaid due to its stability (indigent funds could theoretically have the same visibility);
- incorporating the indigent populations as targeted population and holding the local programs accountable for service outcomes;

⁷ It is not likely that wards will be closed due to the diversion of substance abuse admissions, despite the fact that they represent about 20 percent of admissions. Current admission wards are quite overcrowded, leading to much use of overtime and use of expensive nursing agencies to supply nurses. Our interviews and analyses suggest that it is difficult to predict with accuracy the ultimate ramifications of the successful diversion of substance abuse admissions. However, analysis of the numbers suggest that such a move would likely reduce client levels in Admission wards to normal capacity (or even below) and thus save money in terms of reduced use of overtime and of expensive nursing services, but not to the closing of wards.

- developing collaborative projects with industry, schools, juvenile justice, criminal justice, and public health, and then leveraging the monies already spent in the public and private systems to achieve better outcomes; and
- seeking national foundation money to conduct pilot projects that can demonstrate the cost-effectiveness of different strategies for serving this population effectively.

4.7 Recommendation 12

Implement previous SAS overall substance abuse system recommendations.⁸

4.7.1 Goal

Incorporate past substance abuse services development plans into the current reform effort.

4.7.2 Findings

The following 12 overall system recommendations are a combination of policies to be adopted, services to be developed, training to be provided, and standards to be maintained. Some are of these recommendations are incorporated to some degree into our current recommendations; others are not. Each should be reviewed and implemented as necessary.

4.7.3 Specific Recommendations

Recommendation 12.1

Prohibit restrictions on preexisting conditions.

Any entity responsible for the provision of care in the new system should be required to provide equal access to alcohol and drug treatment regardless of preexisting conditions or prior treatment for alcohol and drug abuse disorders.

⁸ These general system recommendations were developed by the SAS section and included in the DMHDDSAS Redesign Plan in 1999. They were, and are, in no way inclusive, but include many recommendations that are essential for effective system functioning. SAS reexamined these recommendations at MGT's request and found that all are still applicable in 2001. We concur.

Recommendation 12.2

Ensure unlimited access to detoxification.

There should be unlimited access to detoxification for any client meeting medical necessity criteria.

Recommendation 12.3

Expand postdetoxification residential treatment.

Postdetoxification residential treatment should be available to all individuals being discharged from detoxification services and who are appropriate candidates for that level of care.

Recommendation 12.4

Expand low-intensity residential services.

Community development of lower-level residential alternatives should be promoted in the new business plan.

Recommendation 12.5

Ensure priority admissions for pregnant women and intravenous drug users.

Contracted providers will demonstrate an understanding of and compliance with the need for priority admission for pregnant women and intravenous drug users.

Recommendation 12.6

Increase criminal justice trained staffing.

The provider network must include sufficient number and types of services that employ professionals who understand and are experienced in dealing with juveniles in a criminal justice setting.

Recommendation 12.7

Improve accountability for Substance Abuse Prevention and Treatment Block Grant funds.

Contracted services will establish procedures to ensure that Substance Abuse Prevention and Treatment Block Grant funds are not used to provide services that also are billed to Medicare, Medicaid, or another insurance program.⁹

⁹ The statute contains third-party recovery provisions that prohibit payment if payment has been made or can reasonably be expected to be made under Medicare or Medicaid programs or another insurance program (42 U.S.C. 300x31 (a)).

Recommendation 12.8

Increase use of certified substance abuse staff.

Networks will be encouraged to use providers who are credentialed by the North Carolina Substance Abuse Professional Certification Board and physicians who are certified by the American Society of Addiction Medicine. Other degreed professionals who may be exempt from this requirement must provide evidence of academic or other training/education in treating addiction disorders.

Recommendation 12.9

Ensure substance abuse treatment competence in utilization management systems.

Any utilization management personnel staffs who evaluate access to care and/or authorize lengths of stay have training and background in alcohol and other drug treatment. Both utilization management entities and providers must provide evidence of such training and education.

Recommendation 12.10

Ensure priority status for criminal justice-involved individuals.

Priority status will be given to those sentenced to intermediate punishments, those sentenced to community punishments that are at risk for revocation, and those transitioning from institutional settings to the community.

Recommendation 12.11

Expand DWI services.

The newly designed system should maintain and build upon the current DWI law. DWI services are composed of five graduated levels, with referrals based upon assessor recommendations, and include a minimum number of hours and days for each level.

Recommendation 12.12

Ensure compliance with Synar amendment requirements.¹⁰

To ensure that the state complies with the various requirements of the Synar amendments, providers are required to engage in activities designed to reduce youth

¹⁰ Section 1926 of the Public Health Service Act, commonly referred to as the Synar Amendment administered through the Substance Abuse Prevention and Treatment (SAPT) Block Grant program, requires states to conduct specific activities to reduce youth access to tobacco products. The Secretary of the U.S. Department of Health and Human Services is required by statute to withhold SAPT Block Grant funds from states that fail to comply with Synar requirements. In addition, providers would be required to submit an annual report with detailed information on all activities and outcome measures for reducing youth access to tobacco. This report is to be submitted to the Substance Abuse Services Section no later than July 15th of each year so that information can be compiled and submitted with the state's SAPT Block Grant Application as required by law.

access to tobacco products. These activities include collaborative efforts with agencies and organizations to increase awareness of the extent of the problem. They also involve conducting merchant education programs for owners, managers, and employees in retail outlets that sell tobacco products, and encouraging local law enforcement departments to engage actively in enforcement of the state's Youth Access To Tobacco Products Law (G.S. 14-313).

5.0 CHILDREN'S MENTAL HEALTH SERVICES

5.0 CHILDREN'S MENTAL HEALTH SERVICES

The Children and Family Services (CFS) section of DMHDDSAS developed plans for a System of Care (SOC) designed to coordinate all children's services at the local level, a state-of-the-art approach. The SOC approach recommended for statewide implementation in North Carolina will establish the structure and resources necessary to begin integrating currently segmented services and supports (silos) into a comprehensive network of resources. Similarly, new service development must be shifted from program silos to a network of coordinated resources. These coordinated resources are necessary to implement comprehensive, integrated service plans for each youth/family with responsible and effective management of local, regional, and statewide capacity.

One essential component being used to implement the SOC is the State Collaborative for Children and Families (SCCF). The SCCF is composed of representatives from state departments and divisions and the community that serve youth and families. Its membership includes Division of Social Services, Substance Abuse Services Section, Developmental Disabilities Section, CFS Section Administrative Offices of the Courts, Department of Public Instruction, Department of Juvenile Justice and Delinquency Prevention, and advocacy groups. The SCCF meets every Friday to develop policy to guide state and local collaboratives. It also works toward combining financial resources that serve youth and families across multiple systems.

As the SOC is in early stages of implementation, children in North Carolina with complex mental and behavioral health needs, as well as their families, do not have access to a sufficient array of local, regional, and state-level residential and nonresidential services and supports that cuts across current child-serving agency

boundaries. A serious need exists for additional children's mental health services to fill gaps in order to establish an array of resources that goes well beyond traditional outpatient, inpatient, and residential treatment centers to improve access and approach seamless care. As a result of the gaps in service, these children

- go unserved;
- access costly residential treatment when sent away from their homes and communities ;
- become involved in the judicial system and are sentenced to Youth Development Centers; and
- become "wards of the state" when their families give up custody of them to the Division of Social Services to obtain care.

The full array of services needed for children with complex mental and behavioral health needs can be described in categories. The CFS unit in North Carolina has designed a four-category system to describe these services. The four categories in North Carolina are presented in the following narrative.

Category 1: Core services available to all children, youth, and their families in all areas of the state.

Category 1 services are necessary for children and youth with behavioral and mental health needs (from mild to severe) and their families either in their home county or nearby counties. Category 1 services serve as the core services available to all children, youth, and their families in all areas of the state. Core services facilitate access to services and effectively avoid the need for higher intensity, more expensive services, such as out-of-home care and institutionalization. They are intended to act as the first-level public safety net and provide a necessary and basic level of mental health services to children and youth with mental and behavioral health needs. Also included in this level are prevention/outreach services that enable mental health providers to work within their

local communities and partner with other human service agencies, schools, and primary care providers in an effective manner to maximize existing resources.

Category 2: Primary services delivered to children with more significant mental health needs and their families.

Category 2 services are the primary services delivered to children—and their families—with more significant mental health needs. Based on current utilization figures, most children and families receiving assistance through the children and family mental health system should be able to have their needs met through Category 2 service components. These children with emotional and behavioral disturbances, while not yet as persistent as the most seriously involved children, nevertheless require increasingly complex treatment and a greater degree of care coordination to prevent further functional impairment and escalation into risk for out-of-home placement. If a full array of services and supports are available in Categories 1 and 2, most children will not become at risk for out-of-home placements and require Category 3 or 4 services.

Category 3: Targeted to meet the special needs of children and families who have mental health concerns that cannot be addressed through primary services described in Category 2.

Category 3 services are targeted to meet the special needs of children and families who have mental health concerns that cannot be addressed through primary services described in Category 2. The goal for services at this level is to develop a systematic response to the critical needs underlying the challenging behaviors and conditions exhibited by children with more severe and persistent mental health issues. Category 3 services provide the specialized response capacity for North Carolina's SOC for children who have persistent and challenging emotional and behavioral needs. These services also provide a reliable capacity to engage family members and include them in the development and implementation of a comprehensive, multiagency/community integrated service plan.

The goal for Category 3 services is to use intensive care coordination across child-serving agencies to develop and implement a unified, multidomain plan of assistance that addresses the child and family's full range of needs. One integrated Child and Family Team that includes the family's formal (agency) and informal (family/community) sources of support carry out this process through one integrated service plan, coordinated by one case manager. In addition to providing consistent support over time, the Child and Family Team uses its accumulated understanding and insights into the needs of the child and family to fashion innovative options for services and supports. These services and supports help children receive clinically appropriate care in their communities and prevent unnecessary out-of-home placements. This capacity for ongoing learning and creative resource development is the hallmark of Category 3 services.

Category 4: Services addressing the full range of needs of families with children who have severe and enduring emotional and behavioral disorders who are unlikely to respond to the resources available through Category 1, 2, and/or 3 services.

Category 4 services address the full range of needs of families with children who have severe and enduring emotional and behavioral disorders who are unlikely to respond to the resources available through Category 1, 2, and/or 3 services. The central organizing principle of Category 4 services is a belief that as the needs of children and families become more serious and multidimensional, the support offered them should become more innovative in order to achieve lasting positive outcomes. Category 4 services ensure that North Carolina can provide an effective response to the most serious mental health needs of children and their families. Through Category 4 services the Child and Family Team determines what to do when existing service and support options have not worked and/or do not appear sufficient to address the range of critical needs of the child and family.

5.1 Recommendation 13

Develop a complete and comprehensive array of regional of children's mental health services in LMEs and regions across the state.

5.1.1 Goal

Develop sufficient regional and subregional availability of needed child mental health services and programs.

5.1.2 Findings

As MGT examined the North Carolina child mental health system, we found that the system is far too reliant on hospital-level care and provides many services in hospitals that could be provided in community settings. The impact of this over-reliance on hospitals is that:

- children are pulled out of their communities and away from their families and supports;
- their care is vulnerable to fragmentation over time due to the difficulties in effectively coordinating hospital and community services; and
- the cost of the hospital levels of care drains funds from the needed development of more community-based services that would contribute to better service outcomes.

Further examination of this system suggests an inconsistent access to an array of crucial community-based services, termed Category 1 and 2 services in North Carolina. These services (e.g., outpatient counseling, care coordination, crisis stabilization, family preservation, and respite) are critical components of a children mental health continuum. Categories 1 and 2 are often the glue that helps hold children with complex mental health needs together, preventing decompensation or rapid fall into more destructive behaviors. These services are provided by a wide range of caregivers, making it challenging to determine who is providing what services to what child at any given time.

When examining the residential services now functioning in North Carolina, we found a generally sufficient number of overall system beds. However, upon closer scrutiny, we determined the residential services are not aligned to the system's need. Indeed, upon further questioning and research, we found that services were not developed in any systematic manner to meet actual system needs nor are the services well distributed across natural regions of the state.

In sum, the inconsistent access to critical Category 1 and 2¹ services, combined with the inadequate distribution of residential programs that often cannot manage the most difficult children, results in an incomplete continuum of services that leads to:

- inappropriate and clearly divertible admissions of children to residential or hospital services;
- unnecessary decompensation and deterioration in the level of functioning of children with mental health concerns;
- poorer short-term and long-term outcomes with higher overall annual treatment costs per child; and
- potentially costly and legally dangerous conflicts with *Olmstead*.

Clearly, current funding is insufficient to complete the array of services and resources needed. Details of the four categories of mental health services needed for children in North Carolina is found in Appendix I, which shows the specific type of services needed within each category. To develop projected costs for North Carolina providing the full array of children's mental health services in the state, we developed Exhibit 5-1, with number of programs needed by LME, region, or state. The exhibit also shows the estimated cost per program. This exhibit illustrates the underlying program costs for projecting overall costs for the state to supplement the current services. Exhibit 5-2 (SOC Array of Services—Costs FY 2003–2007) then takes the underlying number of

¹ All children/families have access to Category 1 Services. Children/families in Category 3 have access to Category 2 and 3 Services. Children/families in Category 4 have access to Categories 1 through 4 Services.

programs needed and projected costs to determine the additional costs to the state to implement the full array of services. The exhibit provides specific information regarding the additional types, amount of services needed, and costs of implementation. These services include local services and supports essential to avoid unnecessary out-of-home institutionalization and inappropriate state custody, as well as regional and state-level resources necessary to augment local services for low-incidence, highly complex treatment needs. Each community should be empowered to serve its families without first thinking of where else youths should go to get the help they need. Exhibit 5-2 reflects a phase-in of additional and expanded services needed to reach this goal according to categories of service intensity, each related to the target populations discussed in the beginning of the chapter.

A total of \$73,446,980 in additional funds from FY 2003 to FY 2007 will be needed to fund Category 1 services for all of North Carolina's youth/families. We project an additional need for \$11,580,870 (in 2001 dollars) each year beyond FY 2007 to sustain these core services across the state. Crisis Services, a critical need within the state, account for most of this funding. With core services in place, youth may be prevented from being placed in Categories 2, 3, and 4 and, especially, out-of-home placements because nothing else exists.

**EXHIBIT 5-1
PROGRAM COSTS FOR CHILDREN MENTAL HEALTH PROJECTED SPENDING**

Category	Additional Services Needed	Specific LME Needs	Cost Per Unit	Estimated Start-up costs/LME/Yr
1	1.1 Family Advocacy and Support	2 FTEs/LME	\$40,000	\$80,000
	1.2 Education/Consultation/Prevention Services	2FTEs/LME	\$40,000	\$80,000
	1.3 Care Coordination - \$47.70/hour - reimbursable ¹	5 FTEs/LME	\$40,000	\$200,000
	1.4 Outpatient Screening ²	0	\$0	\$0
	1.5 Crisis Services - Crisis System for Youth:			
	Phone - unknown if this is sufficient capacity per LME	0		\$0
	Walk-In - unknown if this is sufficient capacity per LME	0		\$0
	Mobile -	12 FTEs/LME	\$40,000	\$480,000
	Residential - Crisis Unit for 8 Youth	1	\$1,000,000	\$1,000,000
	Respite	10 Families/LME	\$239/day	\$872,350
2	Hospitalization - Community Hospitals will be the source for this service - unknown capacity per LME.	0	\$0	\$0
	2.1 Early Childhood Services	1 FTE/LME	\$40,000	\$40,000
	2.2 Community Based Services - \$25.72/hour - reimbursable	20 FTE/LME	\$25,000	\$500,000
	2.3 Evaluation (Psychiatric/ Psychological/Other) - enhance present capacity	5/LME	\$45,000	\$225,000
	2.4 Psychotherapy: Individual, Group, Family - unknown if this is sufficient capacity per LME	0	\$0	\$0
	2.5 Medication Management - unknown if this is sufficient capacity per LME.	0	\$0	\$0
	2.6 Therapeutic Respite - \$9.95/hour - reimbursable	10/LME	\$238.80/day	\$871,620
	2.7 Treatment Support Services - \$59.72/hour - reimbursable	5/LME	\$35,000	\$175,000
3	2.8 Wraparound/Flexible Funds	Capacity	\$8,400/year	\$8,400
	3.1 Intensive Case Management-\$90.00/hour - reimbursable -1:15 ratio staff to youth/family	123.3/LME	\$40,000	\$4,932,000
	3.2 Day Treatment - \$20.92/hour reimbursable 8 youth/program	4/LME	\$243,446	\$973,784
	3.3 Family Based Residential Care (Level II, Family & Program)			
	(a) LEVEL II - Family Setting - \$113.40/day - reimbursable	10/LME	\$413,910	\$4,139,100
	(b) LEVEL II Family Setting-Program-\$151.79/day - reimbursable	10/LME	\$554,033	\$5,540,330
	3.4 In-Home Therapy/ Family Preservation - enhance services for 100 families	10/LME	\$71,070	\$710,700
	3.5 Therapeutic Mentoring	3 FTE/LME	\$35,000	\$105,000
	3.6 Summer /Before/After School Programs - \$14.31/hour - reimbursable	10/LME	\$35,000	\$350,000
	3.7 Independent Living Skills Training - \$7.68/hour - reimbursable	4 FTE/LME	\$35,000	\$140,000
	3.8 Vocational Placement/ Training/ Support - \$17.50/hour - reimbursable	4 FTE/LME	\$35,000	\$140,000
4	3.9 Group Based Residential (Level III) - Private (unknown capacity) - \$257.36/day reimbursable	0	\$0	\$0
	3.10 Supervised Independent Living	4/LME	\$35,000	\$140,000
	3.11 Wilderness Camp Treatment - Private - Individual Rates - Capacity Unknown	0	\$0	\$0
	4.1 Assertive Community Treatment Teams - \$827.55/month/youth reimbursable	3 Teams/LME	\$500,000	\$1,500,000
	4.2 Level IV - Group Setting - \$270.80/day - Private - reimbursable - capacity	0	\$0	\$0
	4.3 Psychiatric Residential Treatment Facility (PRTF) Private Rates - reimbursable	0	\$0	\$0
	4.4 State Run Residential Treatment Centers ³	1/Region	\$5,000,000	\$5,000,000
4	4.5 Inpatient Hospitals - all operated by private providers	0	\$0	\$0
	TOTAL ⁴			\$28,203,284

¹ "Reimbursable" means that youth with Medicaid and Community Treatment Services Program funding have these rates for reimbursement after the capacity is built. 25% of youth who seek services have these rates for reimbursement after the capacity is built. Also, 25% of youth who seek services are from families who have no reimbursement ability for services. Thus, 25% of the total amount needed in all categories listed above will be needed each year for these youth/families.

² A 0 or \$0 signifies that capacity does exist, but it is as yet unknown if there is sufficient capacity per LME.

³ Continuation amount would be shared by the LMEs in that region. State Run Residential Treatment Centers would be funded initially at one per region (4) in the state. With a comprehensive community array of services in place, this might remain a sufficient amount.. However, it should be noted that without the recommended Services 1.1 - 4.3 in place locally, capacity might need to adjusted to one RTC per LME (raising, with a 10 LME model, LME costs for RTCs to \$10-\$15 million per year per LME.)

⁴ It also does not reflect what might be contributed by other agencies if the System of Care approach is adopted at the state level and funding moves from system isolation to cooperating to coordinating and eventually integrating services/funding from different service systems.

**EXHIBIT 5-2
SYSTEM OF CARE ARRAY OF SERVICES FOR YOUTH**

Category / Services		Phase 1		Phase 2		Phase 3		Total
Category	(Definitions are found in Appendix I and program costs are found in Exhibit 5-1)	Baseline	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Total Recommended 5-Yr Increase
		FY02	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	
1	1.1 Family Advocacy and Support	1	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000
	1.2 Education/Consultation/Prevention Services		\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000
	1.3 Care Coordination		\$2,000,000	\$500,000	\$500,000	\$500,000	\$500,000	\$4,000,000
	1.4 Outpatient Screening		\$0	\$0	\$0	\$0	\$0	\$0
	1.5 Crisis Services--Crisis System for Youth	2	\$23,523,500	\$9,480,870	\$9,480,870	\$9,480,870	\$9,480,870	\$61,446,980
	Subtotal Category 1		\$27,123,500	\$11,580,870	\$11,580,870	\$11,580,870	\$11,580,870	\$73,446,980
2	2.1 Early Childhood Services	3	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000
	2.2 Community Based Services		\$5,000,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$10,000,000
	2.3 Evaluation (Psychiatric/Psychological/Other)		\$4,500,000	\$1,125,000	\$1,125,000	\$1,125,000	\$1,125,000	\$9,000,000
	2.4 Psychotherapy: Individual, Group, Family		\$0	\$0	\$0	\$0	\$0	\$0
	2.5 Medication Management		\$0	\$0	\$0	\$0	\$0	\$0
	2.6 Therapeutic Respite		\$8,716,200	\$2,179,050	\$2,179,050	\$2,179,050	\$2,179,050	\$17,432,400
	2.7 Treatment Support Services		\$1,750,000	\$437,500	\$437,500	\$437,500	\$437,500	\$3,500,000
	2.8 Wraparound/Flexible Funds		\$84,000	\$84,000	\$84,000	\$84,000	\$84,000	\$420,000
	Subtotal Category 2		\$20,450,200	\$5,475,550	\$5,475,550	\$5,475,550	\$5,475,550	\$42,352,400
3	3.1 Intensive Case Management		\$49,320,000	\$12,330,000	\$12,330,000	\$12,330,000	\$12,330,000	\$98,640,000
	3.2 Day Treatment		\$9,737,840	\$2,434,460	\$2,434,460	\$2,434,460	\$2,434,460	\$19,475,680
	3.3 Family Based Residential Care (Level II, Family & Program)							
	(a) Level II--Family Setting		\$41,139,100	\$10,284,775	\$10,284,775	\$10,284,775	\$10,284,775	\$82,278,200
	(b) Level II Family Setting--Program		\$55,403,300	\$13,850,825	\$13,850,825	\$13,850,825	\$13,850,825	\$110,806,600
	3.4 In-Home Therapy/Family Preservation		\$7,107,000	\$1,776,750	\$1,776,750	\$1,776,750	\$1,776,750	\$14,214,000
	3.5 Therapeutic Mentoring		\$1,050,000	\$1,050,000	\$1,050,000	\$1,050,000	\$1,050,000	\$5,250,000
	3.6 Summer/Before/After School Programs		\$3,500,000	\$875,000	\$875,000	\$875,000	\$875,000	\$7,000,000
	3.7 Independent Living Skills Training		\$1,400,000	\$350,000	\$350,000	\$350,000	\$350,000	\$2,800,000
	3.8 Vocational Placement/Training/Support		\$1,400,000	\$350,000	\$350,000	\$350,000	\$350,000	\$2,800,000
	3.9 Group-Based Residential (Level III)		\$0	\$0	\$0	\$0	\$0	\$0
	3.10 Supervised Independent Living		\$1,400,000	\$350,000	\$350,000	\$350,000	\$350,000	\$2,800,000
	3.11 Wilderness Camp Treatment		\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Category 3		\$171,457,240	\$43,651,810	\$43,651,810	\$43,651,810	\$43,651,810	\$346,064,480

EXHIBIT 5-2 (Continued)
SYSTEM OF CARE ARRAY OF SERVICES FOR YOUTH

Category / Services		Phase 1		Phase 2		Phase 3		Total
Category	(Definitions are found in Appendix F and program costs are found in Exhibit 5-1)	Baseline	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Additional Funding to FY 2002 Baseline Funding	Total Recommended 5-Yr Increase
4	4.1 Assertive Community Treatment Teams		\$15,000,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$30,000,000
	4.2 Level IV--Group Setting		\$0	\$0	\$0	\$0	\$0	\$0
	4.3 Psychiatric Residential Treatment Facility (PRTF)		\$0	\$0	\$0	\$0	\$0	\$0
	4.4 State Run Residential Treatment Centers (4) ³		\$20,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$28,000,000
	4.5 Inpatient Hospitals		\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Category 4		\$35,000,000	\$5,750,000	\$5,750,000	\$5,750,000	\$5,750,000	\$58,000,000
TOTAL ADDITIONAL RECOMMENDED FUNDS			\$254,030,940	\$66,458,230	\$66,458,230	\$66,458,230	\$66,458,230	\$519,863,860

¹ To sustain these services for all North Carolina youth/families, continuation funding equal to the amount in FY 2007 is needed annually to sustain services beyond FY 2007.

² 25% of NC youth/families in NC are uninsured (no Medicaid, CTSP [ARC], or private insurance). To sustain services for this population beyond FY 2007, the amount in FY 2007 is needed annually to sustain services beyond FY 2007. Note: Programs with \$0.00 amounts are unknown to figure the amount for the 25% uninsured population.

³ State Run Residential Treatment Centers are funded at one/region (4) in the state and with the assumption of a full community array of services in place. However, without a functional array of services at the local level,

⁴ The estimated \$519,863,860 in additional funds over five years is about \$265 million less than the \$784,252,000 need estimated by Duke University (See Appendix J). Although this exhibit underestimates the actual

We estimate an additional \$42,352,400 will be needed between FY 2003 and FY 2007 to build capacity for Category 2 services. As can be seen in Exhibit 5-1 many of these services have Medicaid and/or At-Risk Children (ARC) funding rates. The costs for the eight Category 2 services are fairly evenly divided. However, 25 percent of youth/families who seek help in North Carolina have no health insurance, so an additional \$5,475,550 (in 2001 dollars) will be needed each year beyond FY 2007 to sustain these services for these youth/families without insurance and for services that have no reimbursement rates.

MGT projects an additional \$346,064,480 will be needed between FY 2003 and FY 2007 to build capacity for Category 3 services. As can be seen in Exhibit 5-1, most of these services have Medicaid and/or At-Risk Children (ARC) funding rates. However, 25 percent of youth/families who seek help in North Carolina have no health insurance, so an additional \$43,651,810 (in 2001 dollars) will be needed each year beyond FY 2007 to sustain these services for these youth/families without insurance and for services that have no reimbursement rates.

The expense in the first few years is higher in order to develop the needed capacity that does not exist at present in local communities. As intensity of service moves from Category 1 to Category 4, the expenses increase, but the ability to reimburse through outside funding sources increases, making it less expensive to the state. The goal is to make sure that no youth has to go to a higher category of service because nothing else exists. This plan is a long-term commitment to fund an adequate, appropriate System of Care Array of Services.

We estimate an additional \$58 million will be needed between FY 2003 and FY 2007 to build capacity for Category 4 services. As can be seen in Exhibit 5-1, all of these services have Medicaid and/or At-Risk Children (ARC) funding rates. The bulk of this

funding would be directed to the state-run residential treatment centers. However, 25 percent of youth/families who seek help in North Carolina have no health insurance, so an additional \$5,750,000 (in 2001 dollars) will be needed each year beyond FY 2007 to sustain these services for these youth/families without insurance and for services that have no reimbursement rates.

The total costs projected to fully implement the full array of services in North Carolina is \$519.9 million over five years. Our projections of needed funding is \$265 million less than projected in a study by Duke University in 1999. (See Appendix J.)

5.1.3 Specific Recommendations

Recommendation 13.1

Provide adequate funding to systematically build a System of Care with a comprehensive array of fully accessible child and youth mental health services in three phases over the next five years.

- **Recommendation 13.1.1**
Utilize Exhibit 5-2 as a blueprint for future development and as a guide for the costs of that development.

Recommendation 13.2

Charge the State Collaborative for Children and Families with further examining regional Category 1 and 2 development needs and offering recommendations for Oversight Committee consideration.

- **Recommendation 13.2.1**
Systematically survey key stakeholders including Area Programs, the North Carolina Child and Family Services Association, private providers, families, and advocates.

The surveys should determine with more certainty currently available services and current gaps in regional and subregional Category 1 and 2 services.

- **Recommendation 13.2.2**
Determine, cost-out, and implement a plan to fill the gaps in availability of Category 1 and 2 services.

The plan should be based on the gaps identified in the stakeholder survey in order to strengthen regional and subregional continuums of services in each area/county program/LME.

5.1.4 Suggested Time Frame

State Collaborative for Families and Children (SCCF)
Implementation Report to Oversight Committee March 2002

Implementation Complete July 2007

5.2 Recommendation 14

Expand and broaden the child mental health outcome measurement system.

5.2.1 Goal

Develop a comprehensive outcomes measurement system by expanding the current system to all populations.

5.2.2 Findings

The North Carolina children's mental health system has an effective outcomes measurement system in place using the Assessment Outcome Instrument (AOI) with outcomes collected for all children eligible for at-risk funds. However, the system is incomplete because outcomes are not collected for those children receiving services who are not eligible for at-risk funds. This incomplete system provides an unbalanced portrayal of those served by the child mental health system, and fails to be used to benefit the children who are receiving services but not considered at-risk.

The AOI is specifically designed for the at-risk children (and thus those with substantial mental health problems) by obtaining a wide range of information relevant for this subpopulation. If this system were to be expanded to those children who are not

eligible for at-risk funds, then the AOI should be amended to better suit the outcome measurement needs of this subpopulation.

While the current outcome system is adequately meeting the needs of those at-risk children, and could be adapted and expanded to include children not eligible for at-risk funds, it is limited in many ways to the types of outcomes obtainable in mental health settings. As helpful as this is, the current Child and Family Service outcome measurement system does not have efficient capacity to measure important outcomes across agencies and thus incorporate a holistic understanding of outcomes across different aspects of a child's life.

Similar to the substance abuse system, key outcome-related information is found in the databases of several state agencies, but efficient access to this information is extremely limited. Currently, all key child and family-related agencies collect a tremendous amount of data that produce meaningful information, but their MIS systems lack consistent data elements (i.e., categorizing languages spoken in identical ways) and lack the capacity to efficiently interface with each other.

Currently, services for a child or family are often provided by several sectors of government, but limited capacity exists to efficiently examine and utilize data and information gathered in other systems. Easy-to-access interdepartmental outcome-related data would provide a wealth of useful information that can be used to inform public policy development. Building such capacity over time would greatly enhance the General Assembly and DHHS's understanding of the long-term impact of child mental health services on a client's life. Such development is neither easy nor inexpensive, but represents the future of how integrated information systems will be used to enhance understanding of successful and unsuccessful treatment modalities.

5.2.3 Specific Recommendations

Recommendation 14.1

Charge the State Collaborative with developing a comprehensive outcome measurement plan for children receiving services.

The State Collaborative should offer recommendations for Oversight Committee consideration.

Adaptation and expansion of the current AOI to all children served by the CFS will provide the state with a comprehensive understanding of outcomes achieved by both subpopulations. An outcome measurement plan should enhance the capacity of the General Assembly over time to better understand the impact of its spending and inform its future deliberations.

- **Recommendation 14.1.1**
Adapt the AOI to better meet the needs of children receiving CFS services who are not eligible for at-risk funding.
- **Recommendation 14.1.2**
Coordinate the development of core interagency outcomes with the development of a more blended, flexible local funding pool.

Recommendation 14.2

Legislatively mandate development of interagency MIS interface capacity and the state's ability to require, obtain and report data from local agencies.

This mandate would develop over time the ability to gather, organize and report information at the state level and provide comprehensive information from various state agencies about relevant services provided, activities, and outcomes of targeted children.

Recommendation 14.3

Legislatively mandate an annual "interagency child outcomes report card."

5.2.4 Suggested Time Frame

State Collaborative for Families and Children (SCCF)
Implementation Report to Oversight Committee

March 2002

Implementation

July 2003

5.3 Recommendation 15

Standardize the regional lines of key child-serving agencies.

5.3.1 Goal

Ensure that child-related state agency regional lines do not create unnecessary barriers to providing quality child services.

5.3.2 Findings

When managing a child's care, community-based children's and family services continually face the challenge of how to effectively coordinate a child's care across several agencies. Each agency has a unique set of funding streams, requirements, and challenges. Coordination of services has been very difficult historically, resulting in some fragmentation of care. In general, a state should do everything within its power to lessen the barriers to coordinated care for children.

Within North Carolina, key state agencies contributing to children's overall health status have inconsistent and overlapping regional boundaries. While having different regions is not uncommon across the country, inconsistent regional boundaries sometimes create unnecessary inefficiencies or barriers to quality treatment. In most cases, the inconsistent boundaries are not that problematic and North Carolina caregivers have learned to work around them as necessary. However, in some cases, it can be problematic. For instance, the boundaries of the court districts are sometimes very relevant when managing a child's care and create unnecessary (and sometimes time-consuming) work for the involved caregivers.

The state's reform movement offers greater opportunity to address many longstanding issues. According to our discussions with those involved, many of the state agencies are not strongly committed to the current regional boundaries and are open to

developing increased consistency. Given the challenge of statewide implementation of the SOC model, every opportunity for facilitated coordination should be pursued.

5.3.3 Specific Recommendations

Recommendation 15.1

Examine and offer recommendations for the most appropriate regional boundaries based on “natural continuums” and other key factors (e.g., population density, geographic factors, and economic/business factors)

When developing more consistent regional boundaries, an inherent opportunity is presented to examine the current appropriateness of boundaries. Many years and much development have occurred since most were established. Every state has some natural service regions that incorporate a wide variety of variables. For instance, population density and distribution, natural business districts, current regional lines, well-known county to county working relationships, and current or needed placement of key services are all relevant factors. The State Collaborative for Families and Children should be encouraged to use the opportunity to rethink the appropriateness of current boundaries and include in its recommendations its analysis of the most appropriate boundaries for the model or models it proposes.

5.3.4 Suggested Time Frame

State Collaborative for Families and Children (SCCF)
Report to Oversight Committee

March 2002

Implementation Completion

September 2004

5.4 Recommendation 16

Establish a single functional “Community Collaborative” structure in each county.

5.4.1 Goal

Establish the most effective and efficient local system for coordinating the management of the state’s services for children and adolescents with complex mental health needs who are served by multiple state agencies.

5.4.2 Findings

A common issue facing communities across North Carolina is how to effectively coordinate the provision of services to children with complex mental health needs who typically are served—or should be served—by multiple agencies. Such coordination in day-to-day business is difficult, highly challenging, and often unsuccessful. To address this issue, most community agencies and regional offices develop a working group of key agency representatives to help manage the overall care of an identified child and family.

Although working groups are a very good approach in theory, in practice, inefficiency runs rampant. Because many children are receiving services in several of the same agencies, multiple working groups are operating with basically the same agency staff attending multiple agency meetings to discuss the same child and family. For example, a staff person representing an agency may attend one meeting in the morning about an identified child/family with about a half dozen staff from key relevant agencies. Then in the same week, convene a meeting to discuss other services for the same child/family with many of the same representatives attending.

Such duplication of effort results from a variety of organizational and legislative mandates about collaborating with other agencies. In concept, such mandates are good policy, but their lack of coordination is problematic at best. The current structures and local child management systems do not make efficient use of various agencies' staff time and resources to perform necessary functions and achieve goals and objectives. This process is not only a highly inefficient use of valuable staff resources, but creates additional burden for the very children and families targeted for help, along with potential disillusionment for involved staff, which may contribute to higher staff turnover.

To facilitate the implementation of local, integrated, and efficiently managed collaboration models throughout North Carolina to manage resources for children with complex mental health needs; we offer the following recommendations.

5.4.3 Specific Recommendations

Recommendation 16.1

Support the creation of a single integrated “Community Collaborative” in each county.²

- **Recommendation 16.1.1**
Mandate that the State Collaborative for Children and Families (SCCF) examine all current state policies, rules, and statutes related to requirements for cross-agency collaboration or community coalitions.

Recommend to the General Assembly and/or respective agencies any state policies, rules, and statutes that should be modified or eliminated to reduce duplication. The aim of the changes should assist in developing a more integrated and coordinated local collaboration structure to facilitate the management of services/resources for children with complex mental health needs.

- **Recommendation 16.1.2**
Mandate the development of a governance structure that integrates collaboration efforts.

The collaboration should include developing a system of care, juvenile crime prevention councils, and other initiatives to maximize coordination, efficiency, and improved overall outcomes.

- **Recommendation 16.1.3**
Mandate that all state and local government initiatives that direct staff to collaborate with or build coalitions with other agencies involved with the targeted children and their families collaborate with the appropriate community collaborative.

Recommendation 16.2

Charge the State Collaborative for Children and Families with developing implementation plans for these recommendations for Oversight Committee review and consideration.

² In some cases, it may make sense to implement the policy across two or more smaller or rural counties. State Collaborative for Children and Families (SCCF) should consider this issue in its recommendations for implementation.

5.4.4 Suggested Time Frame

SCCF Report to Oversight Committee

March 2002

Implementation Complete

July 2004

5.5 Recommendation 17

Decategorize a small percentage of funding (e.g., 1 to 3%) of key child-related state agencies.

5.5.1 Goal

Increase the flexibility of child-related funds at the local level to allow the provision of more individualized, innovative, and clinically appropriate services.

5.5.2 Findings

One of the most significant barriers to innovative and successful community-based treatment for children with challenging behavioral health needs (and their families) is inflexible funds provided by different federal or state agencies. Rigid funding requirements are a long-standing problem in service systems across the country. This funding structure is a fundamental cause of the fragmentation of services that so often contributes to poor outcomes.

The system of care (SOC) model being implemented in North Carolina is built on the premise of highly coordinated, innovative, and individualized care management at the community level. The successful implementation of the state's SOC approach is greatly impeded by the lack of flexible funds at the local level. Rigid categorical financing inhibits the flexibility essential for clinical creativity, innovation, and optimal outcomes. Indeed, categorical funding in key agencies often institutionalizes fragmented and incomplete care, creating strong barriers to access, choice, quality care, and individualized, outcome-oriented service plans.

In addition, rigid categorical funding and the inability to creatively use a shared pool of flexible funds at the local level encourages cost-shifting and promotes lack of overall accountability. While an agency needs to ensure its money supports its mission, overly strict spending guidelines can backfire by not allowing sufficient flexibility and diminishing hoped-for outcomes.

The General Assembly appears to understand the importance of this issue. Its recent legislative actions supporting the decategorization of some child-related funding is consistent with the wisdom of the Comprehensive Treatment Program Special Provision.

5.5.3 Specific Recommendations

Recommendation 17.1

Charge the State Collaborative for Children and Families with studying the potential decategorization of a small percentage of funding (e.g., 1 to 3%) of key child-related state agencies.

The SCCF should also offer recommendations for implementation for Oversight Committee consideration.

The State Collaborative offers an excellent forum to explore relevant challenges and opportunities. It should examine what possibilities exist for decategorizing a small percentage of funding (e.g., 1 to 3%) of key child-related state agencies to support more flexible provision of services at the local level. Even very small percentages of several different funding streams can provide local caregivers with significant flexibility that they now lack. This flexibility would allow creative and innovative purchase of services or supports that could have a very positive effect on outcomes. Innovation could ultimately produce longer-term savings to the agencies and the state as a whole.

Recommendation 17.2

Legislatively mandate that agencies demonstrate collaboration in budget development before budgets can be passed.

The budget development process offers a significant opportunity for coordinated planning and development among agencies that often serve the same children and families. It is a demanding and time consuming process in which each agency is attempting to create a budget that will be seen as reasonable and enhance its ability to achieve desired goals and objectives. While agencies have the opportunity to actively collaborate with other agencies and seek opportunities for more coordinated budget planning, coordination often does not occur as much as would be desired.

By tying expectations of substantial and demonstrable collaboration to the budget process, the General Assembly can efficiently and effectively encourage greater coordination among state agencies. The standards of collaboration that must be met can evolve over time as experience is gained.

5.5.4 Suggested Time Frame

State Collaborative for Families and Children (SCCF) Study
and Implementation Report to Oversight Committee

March 2002

Implementation

July 2003

5.6 Recommendation 18

Regionalize and begin to privatize Whitaker and Wright Programs.

5.6.1 Goal

Develop a regionally based and integrated system of residential schools for the highest risk children in the state.

5.6.2 Findings

The Wright and Whitaker schools offer important safety net services for North Carolina youth. The Wright School, a state facility that serves children ages 6 to 12, serves children who have been most difficult to treat in the community and/or have failed several treatment attempts in other settings. Wright is seen by most as the residential placement of last resort for most of these children. In general, other treatment services have failed to meet the needs of these children or they have been rejected for treatment at private facilities due to the intensity of clinical management required to effectively manage their care.

Similarly, the Whitaker School, serving adolescents ages 13 to 17, is a state facility designed to serve adolescents who have been through multiple out-of-home placements and treatment settings before referral to Whitaker. Whitaker also is seen as the placement of last resort for most of these adolescents. Like the children at Wright,

other treatment services have failed to meet the needs of these adolescents or they have been rejected for treatment at private facilities due to the intensity of clinical management required to effectively manage their care.

In general, both programs are well respected, but questions have arisen regarding the need to keep them open, whether their services could be provided in a state hospital setting, the wisdom of locating services in just one setting, the condition and future viability of the buildings and property, and so forth.

In the current system, each school provides a level of care and type of programming that is unparalleled in the state and thus earns their status as the placements of last resort. As state facilities, however, they are vulnerable to a reforming system facing budget challenges. It is a legitimate question to ask if they should indeed be closed as the state moves from a more state facility-based system to a more community treatment-based system.

If they were to be closed, we believe that it is likely that the children and adolescents served would generally not be successfully transferred and managed into other service settings, given the mostly unmanaged nature of the current system. The impact of this potential outcome would lead to significant dangers for the youth and, in some cases, to the community. Furthermore, the potential cost-savings from closing these facilities at this time could very likely be more than offset by additional costs incurred by other systems (e.g., DJJDP, out-of-state placements).

Currently, the “front door” of their services is managed by well-established teams of individuals who review and prioritize admissions. This utilization management system for the front door to the services is well regarded and perceived as useful. However, no external utilization management process is used to determine how long they stay at the facility and when they are discharged. It is probable that a more comprehensive

utilization management system could make better and more efficient use of these beds. It should also be noted that each of these programs is sited in a single location, close to one another. The impact of this central location on consistency of access and family involvement is obvious.

The viability of the facilities is presented in detail in Chapter 8.0, but suffice to say here that the Whitaker facility is beyond repair and renovation and should be closed, while the Wright facility still remains viable.

The question as to whether the services offered should be state facility-based services or purchased services revolves around three more fundamental questions. In general, the three questions are:

- Should the state be providing, rather than purchasing, services currently provided in the schools?
- Are the services offered at Wright and Whitaker reasonably purchasable (i.e., could the state write a Request for Proposals (RFP) and execute a service contract describing exactly what was desired)?
- If purchasable, can they be purchased now with a high degree of confidence in a positive outcome?

In regards to the first question, as stated elsewhere in this report, North Carolina is in general over-reliant on state facilities and should move actively in the direction minimizing state facility services and maximizing purchased services. It is in this role as a purchaser that the state can join others who have or are moving from “regulating” entities to “strong purchasing” entities. However, given the uncertainties of the early reform, this process should be spread over three or four years to allow sufficient time for development and preparation. In regards to the second question, the services are probably purchasable if the related RFPs were clear in their expectations and the state

were willing to pay market value for the services.³ In regards to the third question, an approach that simultaneously maintained state school functioning while at the same time allowing for the systematic purchase of similar services over time should inspire a certain degree of confidence that the reform process will be sound and successful.

5.6.3 Specific Recommendations

Recommendation 18.1

Charge the State Collaborative for Children and Families with studying the following recommendations related to the Whitaker and Wright schools and offering its recommendations for implementation for Oversight Committee consideration.

Recommendation 18.2

Reengineer the system for ensuring provision of residential school services to highest risk latency age children (ages 8 to 12) by developing a four-site regional system for children.

- **Recommendation 18.2.1**
Develop a four site⁴, regionally-based system of services that functions as part of a continuum of integrated nonresidential and residential services for children.
- **Recommendation 18.2.2**
Renovate Wright and EATP and maintain them as regional state facilities for children for this phase of system development.⁵
- **Recommendation 18.2.3**
Develop two additional programs for children that will provide services consistent with the “Reeducation Model” currently provided at the Wright School to complete the four-site system.⁶

³ The state would of course maintain the right to not accept proposals if proposed costs were too high. Alternatively, the state could offer a fixed priced RFP, and then judge proposals on their clinical merits.

⁴ This four-site regional program system for children should have each program's capacity sized or resized appropriately to create the most clinically appropriate and cost-effective environment for children in that region. An appropriate number of beds may be in the 8 to 12 bed range, but many important factors should be considered. Capacity decisions should be made a later time when more information is available. New capacity capabilities for each of the components of the regional system should be developed in the context of the implementation plan to be submitted to the Oversight Committee by the State Collaborative for Children and Families (SCCF).

⁵ It is essential to develop and implement a plan to maintain current services during the renovations.

⁶ Care should be taken to promote continuity of care by ensuring a full Maintenance of Effort so that no Wright or EATP beds or other resources serving youth in those facilities are lost during the renovations or purchase of additional services.

- **Recommendation 18.2.4**
Maintain all four programs as state-operated programs for children until FY 2005 to preserve safety net capacity during early reform.

The state should establish a process to privatize all or most of these services after FY 2005.^{7 8}

- **Recommendation 18.2.5**
Ensure that all four sites and their service programs are part of an integrated system and offer the same general treatment approach and level of care that is most appropriate to meet the needs of children of that region.

- **Recommendation 18.2.6**
Ensure that renovations of the two existing sites and development of any additional sites result in Medicaid-reimbursable services for children.

Recommendation 18.3

Reengineer the system for ensuring provision of residential school services to highest risk adolescents (ages 13 to 17) by developing a four-site regional system.

- **Recommendation 18.3.1**
Develop a four site⁹, regionally-based, integrated system of services that functions as part of a continuum of integrated nonresidential and residential services for adolescents.
- **Recommendation 18.3.2**
Plan to eliminate use of the Whitaker facility by July 1, 2003.
- **Recommendation 18.3.3**

⁷ The state of course retains the right to reject all proposals and run the programs itself if proposals are judged to be unacceptable. A diversion process and impact study should be initiated when the new programs are established and current programs renovated to ensure that potential vendors appropriately admit and serve youth prior to FY 2005. This diversion process will help the state in its efforts to contract out these Residential Treatment Centers to vendors that have demonstrated their commitment to a “no reject—no eject” policy for youth with severe disorders.

⁸ It is absolutely essential that when the state moves to purchase services now being provided at state facilities that the process is open, professionally managed, objectively evaluated, and protected from political interference.

⁹ This four-site regional program system for adolescents should have each program’s capacity sized or resized appropriately to create the most clinically appropriate and cost effective environment for adolescents in that region. Each State Residential Treatment Center should have capacity to serve youth who need Psychiatric Residential Treatment Facility-level (PRTF) services, crisis or emergency care-level services, and transitional-level services. This way, youth who need services at a higher or lower intensity can be served at the State Residential Treatment Center and not discharged and moved elsewhere in the state. New capacity capabilities for each of the components of the regional system should be developed in the context of the implementation plan to be submitted to the Committee by the State Collaborative for Children and Families (SCCF).

Terminate the Greensboro renovation plans, given the proposed continuation of Wright School facilities and anticipated development of residential service capacity for those typically treated at Whitaker.

➤ **Recommendation 18.3.4**

Purchase services from four programs for adolescents that provide services consistent with the “Reeducation Model” currently provided at the Whitaker School to complete the four-site system.¹⁰

➤ **Recommendation 18.3.5**

Maintain all four programs as state-operated programs until FY 2005 to preserve safety net capacity during the challenges of early reform.

The state should establish a process to privatize all or most of these services for adolescents after FY 2005.^{11, 12}

➤ **Recommendation 18.3.6**

Establish a diversion process and impact study to provide information and experience that will allow DHHS to develop and distribute RFPs for adolescent services by FY 2005 (or sooner if data indicate).

The RFPs should be for contracts with appropriate vendors for four regional programs for adolescents that provide services consistent with those now provided at Whitaker School.

➤ **Recommendation 18.3.7**

Whitaker School programming should be maintained, either in its current site or a new site, until the new programs for adolescents are ready for operations.

Maintenance of Effort should ensure continuity of care for adolescents who are receiving or soon to receive these services.

¹⁰ Care should be taken to promote continuity of care by ensuring a full Maintenance of Effort that no Whitaker beds or other resources serving adolescents in that facility are lost during the renovations or purchase of additional services.

¹¹ The state of course retains the right to reject all proposals and run the programs itself if proposals are judged to be unacceptable. A diversion process and impact study should be initiated when the new programs are established and current programs renovated to ensure that potential vendors appropriately admit and serve youth prior to FY 2005. This diversion process will help the state in its efforts to contract out these Residential Treatment Centers to vendors that have demonstrated their commitment to a “no reject—no eject” policy for youth with severe disorders.

¹² It is absolutely essential that when the state moves to purchase services now being provided at state facilities that the process is open, professionally managed, objectively evaluated, and protected from political interference.

- **Recommendation 18.3.8**
Ensure that all four sites and their service programs for adolescents are part of an integrated system.

The adolescent programs should all offer the same general treatment approach and level of care most appropriate to meet the needs of adolescents of that region.

- **Recommendation 18.3.9**
Ensure that all renovations of current sites and development of new sites result in Medicaid-reimbursable services for adolescents.

Recommendation 18.4

Maintain the cross-agency regional child/adolescent referral and placement structures now in place and incorporate, as appropriate, these processes into all relevant utilization management processes that develop in the future.

5.6.4 Suggested Time Frame

State Collaborative for Children and Families (SCCF)
Implementation Report to Oversight Committee

March 2002

Implementation Complete

July 2005

5.7 Recommendation 19

Establish and effectively implement a systematic, sufficiently funded and safe transition of children and adolescents out of state psychiatric hospitals and into appropriate community-based programs in a manner consistent with *Olmstead* requirements and System of Care principles.

5.7.1 Goal

Comply with *Olmstead* by providing care in least restrictive community environments and moving children out of state hospitals when community-based services are fully in place.

5.7.2 Findings

Olmstead requires that children and others receive their mental health services in the community if at all possible. North Carolina needs to implement a plan specific to the

needs of youth in, or at risk of going into, state hospitals in order to comply with *Olmstead*. Failure to do so could potentially lead to lawsuits that the state should avoid at all costs. Currently, many children and adolescents living in North Carolina are now treated in the state psychiatric hospital child/adolescent units that could be effectively treated in the communities. This tendency to treat youth in state facilities is largely due to unavailable appropriate community-based services that could serve these populations.

Historically, stakeholders validly feared the downsizing of state hospitals and/or elimination of the child/adolescent units. Families and advocates in the past fought such actions based on a legitimate fear of youth not being able to receive the services they needed in the community along with other unintended consequences. Indeed, many of these fears were realized when state financial resources from child and adolescent units of the state hospitals were significantly reduced in FY 2001 in anticipation of increased Medicaid reimbursement in order to address the state's budget deficit. As a consequence, dollars available to follow youth from the hospitals to community care are now more limited and less able to fund the necessary community alternatives.

Regional high-intensity residential treatment facilities, such as those that currently exist through Wright and Whitaker Schools and Eastern Adolescent Treatment Center (see Recommendation 18), are an absolutely essential component in this service system to ensure a safety net for these youth.

While moving youth from state hospital treatment to community-based treatment has been a hotly contested issue, it is in reality just one natural component of a larger reform effort that must shift the service system from a out of home/institutionalization model to community-based treatment model. Such a model focuses on keeping youth "at home, in school, and out of trouble" through the implementation of a statewide System of Care. The SOC should effectively network and manage necessary services

and supports. It is essential that families in North Carolina with children in the system know that their state and local governments support keeping children in the families' homes if at all possible. Stakeholders must believe the governments will make every effort to stop inappropriate out-of-home placements.

The System of Care model now being implemented in North Carolina is far and away the best model to effectively comply with *Olmstead* requirements. Indeed, the proposed development of services over the next five fiscal years (see Recommendation 13) is designed to build a community system that can effectively and appropriately manage the needs of these youth and their families. From a clinical perspective, such downsizing or elimination of the child/adolescent state hospital units is without question the right thing to do, if it is done systematically and correctly.

5.7.3 Specific Recommendations

Recommendation 19.1

Establish local and regional service alternatives to state hospitalization for children and adolescents.

In the context of overall system reform and with full involvement of the State Collaborative for Children and Families, systematically and carefully implement a plan to establish local and regional service alternatives to state hospitalization.

Recommendation 19.2

Provide bridge money through *Olmstead* and Mental Health Trust Funds to facilitate effective and safe transitions from the state hospitals.

Utilize *Olmstead* and Mental Health Trust Funds to serve as bridge funding and redirect remaining hospital unit resources/positions into start-up and maintenance of new services for these youth, as described in Exhibit 5-2.

Recommendation 19.3

Establish the Re-Education Model as the programming model for the child/adolescent units in the hospitals until they are closed.

To facilitate this transition, establish the Re-Education Model (utilized successfully at Whitaker and Wright Schools) as programming model for the child/adolescent units in

each state hospital. Provide necessary resources to train state hospital staff in this approach to strengthen linkages between state hospitals and communities. The training should assist state hospital staff to develop expertise in community-oriented skills consistent with the emerging statewide System of Care.

Recommendation 19.4

Establish local crisis, in-home, and stabilization services.

Establish local, comprehensive crisis services systems, and in-home response and stabilization capacity across the state. The capacity for immediate response can be used to help avoid unnecessary residential placements. Otherwise, it is likely that over-reliance on future residential facilities will simply replace current over-reliance on state hospitals.

Recommendation 19.5

Close state hospital child/adolescent units gradually and systematically.

A gradual and systematic approach to child and adolescent unit downsizing should be done sequentially to allow consideration of local readiness, the unique needs for each child, the hospital unit, and the region. Such actions should occur if, and only if, an appropriate array of local and regional services is available.

Recommendation 19.6

Transfer youth out of the child/adolescent units if, and only if, appropriate alternative services are available.

Proceed with the transfer of youth out of the child/adolescent units if, and only if, appropriate alternative services are available in North Carolina's regions and communities. Closing the state hospital units without sufficient funding, development, and readiness of local resources to deliver appropriate care for youth who would normally require the intensive treatments of a state hospital should be unthinkable. In sum, this process should be the right way or not at all—the lives of the state's most vulnerable children rest with the outcome.

5.7.4 Suggested Time Frame

CFS Implementation Report due to the Oversight Committee

March 2002

Implementation completion dates

Annually, by hospital, from FY 2003-2007

**6.0 NORTH CAROLINA SPECIAL
CARE CENTER**

6.0 NORTH CAROLINA SPECIAL CARE CENTER

The North Carolina Special Care Center (NCSCC) is a 208-bed skilled/intermediate nursing facility located in Wilson, N.C. The NCSCC, a JCAHO accredited nursing home, serves as the central repository for the state's four psychiatric hospitals. Older psychiatric patients are usually transferred there when their physical health needs become their primary diagnoses in their care and treatment. The facility originally opened as a Tuberculosis Sanatorium in 1969. NCSCC also houses a 40-bed Alzheimer Unit that was recently established.

6.1 Current Operations

Most of the clients at NCSCC have been transferred there from other state facilities. In FY 1999–2000, 61 percent of its admissions were from other state facilities. The mental health clients are usually transferred there from the state mental hospitals when they no longer respond to psychotherapy. Although some residents are admitted from the community, patients from the state psychiatric hospitals have priority for admission. Nursing services, physical therapy, occupational therapy, lab services, radiology, and activity therapy are provided. Three general practice physicians work full time at NCSCC, and a psychiatrist provides services one day a week.

The Alzheimer Unit is for clients who display aggressive behaviors and have been refused placement in other nursing homes. NCSCC attempts to stabilize the Alzheimer patients where possible for return to the community. Some patients are discharged back into community nursing homes once their disease has progressed and they are in a more docile stage.

The nursing home and Alzheimer Unit serve as a safety net for the state. In order to be admitted, the patient must be turned down by community nursing homes and

demonstrate aggressive or violent behavior. The local area program must have looked for placement in the community and failed. The clients must be medically indigent. In fact, 70 percent of NCSCC's expenditures are covered by Medicaid reimbursement.

Many of the state's medically indigent, elderly mental health clients are being cared for in costly state hospitals. For the geriatric patients in the state hospitals, 5.4 percent of the patient population in 1998 during MGT's study were the elderly. In FY 1999–2000, the proportion of elderly in the state hospitals had risen to 7.6 percent, an increase of over 40 percent from 1998. Some of those geriatric patients undoubtedly belonged in the state hospitals for crisis stabilization, but our observations revealed that many did not belong in a mental hospital. When patients can no longer actively participate in their treatment, they should not be in a mental hospital, nor will Medicaid pay for them to be there.

6.2 Recommendation 20

The DMHDDSAS should develop and implement a structured transition plan for moving the elderly out of state hospitals and close the nursing units at the state hospitals. A total of 68 of these patients can be moved to NCSCC after renovation of the second and seventh floor of the Scott Wing.

6.2.1 Goal

Care for the elderly in more appropriate settings than the state hospitals.

6.2.2 Findings

The costs for caring for a client at the NCSCC is lower than at the other state hospitals, as shown in Exhibit 6-1. The Medicaid rates for both the Intermediate Care Facility (ICF) and Skilled Nursing Facility (SNF) are much lower at NCSCC. The state saves from \$28 to \$193 dollars a day using NCSCC for ICF clients, or a decrease of 15 percent to 103 percent per day. The savings for each ICF client transferred to NCSCC would total between \$10,220 and \$70,445 annually. For SNF clients transferred to

NCSCC, the state would save between \$136 and \$159 a day, or a decrease of between 61 percent and 72 percent. The annual saving for the state for transferring an SNF patient to NCSCC would be from \$49,640 to \$58,035.

**EXHIBIT 6-1
COMPARATIVE MEDICAID RATES AND SAVINGS FOR
NORTH CAROLINA STATE HOSPITALS**

	ICF	\$ DIFF FROM NCSCC	% DIFF FROM NCSCC	ANNUAL SAVINGS	SNF	\$ DIFF FROM NCSCC	% DIFF FROM NCSCC	ANNUAL SAVINGS
Broughton	\$ 381	\$ 193	103%	\$ 70,445	\$381	\$ 159	72%	\$ 58,035
Cherry	\$ 290	\$ 102	54%	\$ 37,230	\$358	\$ 136	61%	\$ 49,640
Dix	N/A				N/A			
Umstead	\$ 216	\$ 28	15%	\$ 10,220	N/A			
NCSCC	\$ 188				\$222			

As described in Chapter 8.0 Facilities, NCSCC has had much of its buildings renovated recently. However, the Tower's seventh floor is vacant. With some renovations, an additional 42 beds could be opened on the seventh floor. The second floor of the Tower could also be renovated at a reasonable cost to provide 26 more beds. In addition, two floors in the main building are vacant, but would require extensive renovation to reopen. Our costs for renovations of the second and seventh floors of the Scott Wing at NCSCC are found in Chapter 8.0.

NCSCC provides cost-effective care for elderly, as summarized below:

- NCSCC provides low Medicaid rates for both ICF and SNF beds.
 - NCSCC provides care for the elderly at lower rates than the state psychiatric hospitals.
 - If 78 patients transferred from Broughton's ICF to NCSCC's ICF, the state would save \$4.79 million annually. Other transfers would save lower amounts, but would still save the state money without compromising services.

- Most admissions to NCSCC are from other state facilities.
 - NCSCC's admissions from state facilities account for 61 percent of annual total.
- Many elderly are still being served in state hospitals, past the point when active psychiatric care can be provided.
 - The state psychiatric hospitals have 7.6 percent of their total persons served over 65 years of age in FY 2000, an increase from the 1998 MGT Study when the proportion was 5.4 percent.
 - Geriatric patients who no longer respond to psychiatric treatment do not belong in state mental health hospitals. Medicaid policies preclude the payment for psychiatric care of these patients in mental hospitals.
 - We observed many geriatric patients in all of the psychiatric hospitals in 1998. Many of them were beyond psychiatric treatment since they were being tube fed or secured in geri-chairs. These geriatric patients were incapable of harming themselves or others, so should not present a challenge for community nursing homes to provide care.
- Many of the patients currently in the state hospitals would be more appropriately cared for in a nursing facility.
 - Many of these persons can no longer benefit from psychiatric treatment, so they would be more appropriately cared for in a nursing facility.
 - Some of the patients may still have strong family connections in their area of the state where they are currently located. These patients, where appropriate, should be targeted for placement in a local nursing facility.
 - For patients without strong family ties in their local area, the most appropriate, cost effective nursing facility should be chosen.
- Little has changed in the state hospitals concerning the elderly since MGT's 1998 report.
 - The issue of the elderly in the state hospitals has not dramatically changed or improved since the 1998 MGT Report, despite a plan to move the elderly into more appropriate settings. A plan was designed by the DMHDDSAS, but its full implementation did not occur.

Remodeling NCSCC, as recommended in Chapter 8.0, will provide 68 beds on the second and seventh floor of the Tower (Scott Wing). This recommendation is consistent

with MGT's 1998 study, with the added specificity of a location for 68 of the patients. The transfer of the geriatric patients will save the state considerable amounts of money annually. The other geriatric patients (approximately 72) will need community placement.

Other areas of NCSCC could be renovated for additional nursing home beds. We would recommend, however, that the state first look to private providers for nursing home beds.

The transition plan should take into account those patients in the state hospitals with strong family ties in their local community. The transition plan for these patients should concentrate on finding appropriate community placement in their area. The transition plan should also address how to avoid placing geriatric patients in the state hospitals in the first place.

6.2.3 Specific Recommendations

Recommendation 20.1

Charge the DMHDDSAS with developing a phased-in plan for moving the elderly out of state hospitals and reporting to the Oversight Committee.

Recommendation 20.2

Renovate the second and seventh floor of NCSCC to increase the bed capacity by adding 68 beds.

Recommendation 20.3

Require DMHDDSAS to report annually on its progress of moving the elderly out of state hospitals.

6.2.4 Suggested Time Frame

DMHDDSAS Report to Oversight Committee

March 2002

Implementation Complete

July 2005

7.0 CREATIVE FINANCING OPTIONS

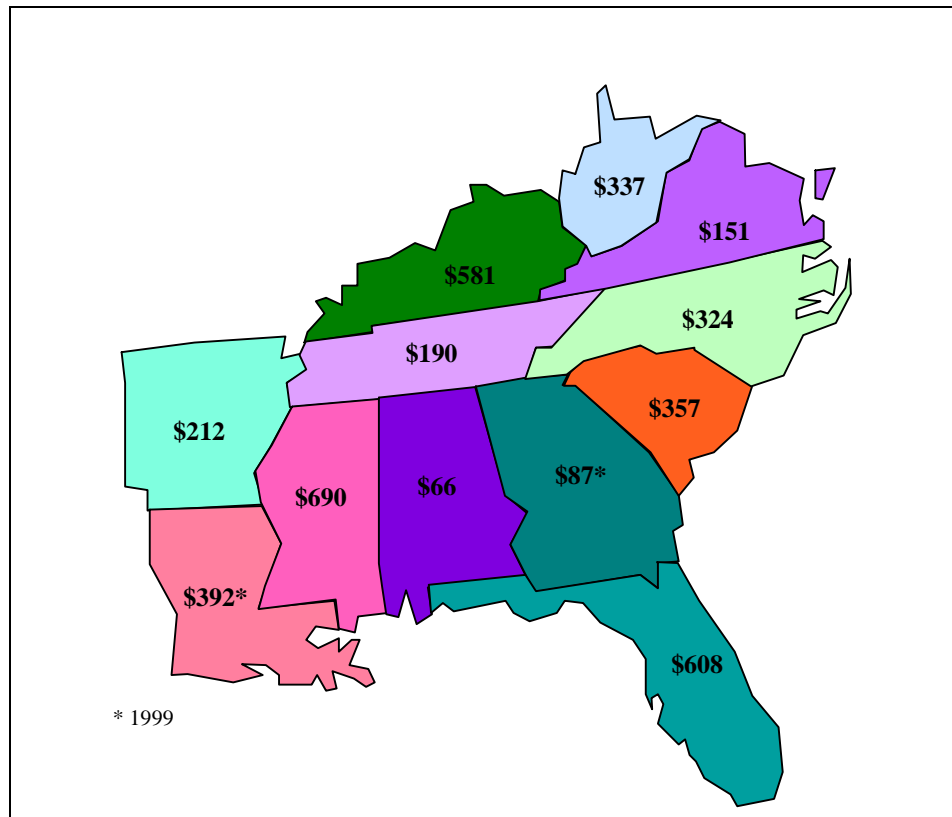
7.0 CREATIVE FINANCING OPTIONS

When the Joint Oversight Committee on Mental Health/Developmental Disabilities/Substance Abuse Services planned for this study, one of its primary concerns was financing of facilities. The State of North Carolina's budget had been severely impacted for several years by the costs it incurred by damages from Hurricane Floyd. Many capital projects had to be cancelled so the funds could go to disaster relief. In addition, the state suffered from an economic slowdown in the past year, creating revenue shortfalls. With pent-up demand for facilities and fewer sources of revenue, the Oversight Committee was interested in alternative financing mechanisms that require minimal capital outlay. MGT researched financing mechanisms used by other states for ideas that would provide the state with the ability to fund facility construction.

7.1 Bonds Used for Facility Financing

State and local governments often use bonds to finance capital outlay. Using bonds allows the governments to pay for a long-term investment with long-term funds. Research revealed that southeastern states had different approaches to the use of bonded indebtedness. Exhibit 7-1 shows the bonded debt per capita for southeastern states for 2000. Bonded debt per capita was found in each state's Comprehensive Annual Financial Report (CAFR). (Two states, Louisiana and Georgia, did not include bonded debt per capita for 2000 in their CAFRs, requiring us to use 1999 numbers.) All governments produce an annual CAFR in a standard reporting format, allowing for consistent comparisons across similar governments. The bonded debt per capita ranged from \$66 per capita in Alabama to \$690 per capita in Mississippi. The average bonded

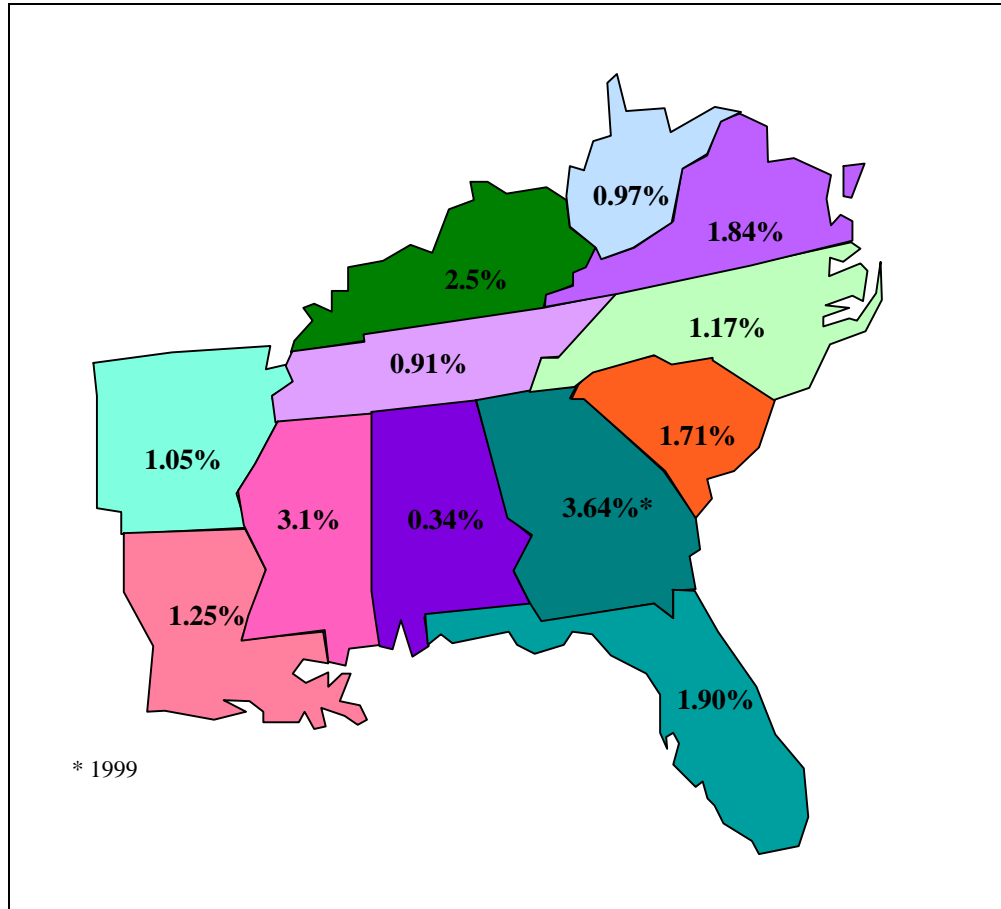
**EXHIBIT 7-1
BONDED DEBT PER CAPITA FOR SOUTHEASTERN STATES**



Source: Comprehensive Annual Financial Reports for each state, 2000.

debt per capita for the region was \$333 per capita, making North Carolina's bonded debt per capita of \$324 below average. To further compare the bonding capacity of North Carolina, we compared the ratio of annual debt service to total expenditures. (See Exhibit 7-2.) These data were also reported in each state's annual CAFR. (Again, Georgia did not report these data for the year 2000.) Alabama again had the lowest ratio (0.34%), while Georgia had the highest ratio (3.64%). North Carolina again has a ratio (1.17%) that is lower than the region's ratio of annual debt service to total expenditures (1.7%).

EXHIBIT 7-2
RATIO OF ANNUAL DEBT SERVICE TO TOTAL EXPENDITURES FOR
SOUTHEASTERN STATES



Source: Comprehensive Annual Financial Reports for each state, 2000.

7.2 Certificates of Participation

Another creative financing mechanism, certificates of participation, is already in use in North Carolina. The authority to use certificates of participation for prison construction was authorized by the General Assembly in 2000, with a clarification bill passed in 2001. The process allowed the state to build four new prisons without up-front capital investment.

The certificates of participation process provided for the prison projects to be built by private contractors using private financing. The state does not have to provide funds

for construction, but must guarantee operating funds over time of lease (20 years). The 20-year lease-purchase agreement has ownership of the prisons passing to the state at the end of the agreement. The statute created a special non-profit corporation to sell certificates of participation in the prisons as a real estate investment. The non-profit corporation would then sell assignment of rights to receive lease payments to investors. The assignment of rights is the certificate of participation. The certificate of participation makes investing in a prison similar to investing in a commercial real estate development based investment income being received from long-term leases.

7.3 State Investing in its Own Buildings

States usually have significant investments held for future uses. One prime example of these funds is retirement funds. According to the statutes in many states, the retirement systems can invest in a variety of investment vehicles, often including real estate investments. The Retirement System of Alabama (RSA) has taken that real estate investment option one step further. RSA has invested in the construction of state buildings for over 20 years. The state has guaranteed the cash flow to RSA from RSA's investment in state buildings, making the real estate investment low risk. RSA has safeguarded the retirement investments of state employees by investing in real estate with little risk of market downturns. The state benefits by not having to bond for its buildings or sign long term leases for state buildings with the profits going to private real estate investors. This practice has become a win/win situation for the state of Alabama. As shown in the previous section, Alabama has a very low bonding obligation.

7.4 Alcohol Taxes

Local ABC boards and/or the county commissioners in North Carolina have flexibility in expending local share of alcohol taxes. By statute, the local ABC Boards pay the bottle charge to the county commissions (1¢ for a bottle with 50 milliliters or less and 5¢ for each bottle of more than 50 milliliters sold). The ABC Boards also spend (or give to the county commission to spend) at least seven percent of the gross receipts (receipts minus operating expenses). These two sources of funds are to be spent on the treatment of alcoholism or substance abuse, or for research or education on alcohol or substance abuse. After making some other required distributions, the remaining gross receipts are given to the general fund of the county or city. Although some counties or cities may spend more than the seven percent on substance abuse services, many do not. Often the local governments will use their alcohol profits on local projects, such as a library. Directing a larger percent of current alcohol taxes could provide a source of local funding of substance abuse services and facilities.

North Carolina state alcohol taxes based on volume have not kept up with inflation over the last 30 years. According to a study of alcohol policies in the United States, North Carolina's cents per drink in taxes has declined from over 16¢ per drink in 1968.¹ Using costs adjusted for inflation and 2000 dollars, the per drink taxes in North Carolina in 1998 were less than 5¢ per drink. Beer and wine taxes in North Carolina are based on volume, while liquor taxes are based on the distiller's price. Basing a tax on cost rather than volume allows a state to keep up with inflationary trends.

¹ Alcohol Epidemiology Program, Alcohol Policies in the United States: Highlights from the 50 States. Minneapolis: University of Minnesota, 2000.

7.5 Real Estate Holdings

The state has vast holdings of expensive real estate in downtown Raleigh. The property where Dix Hospital and Department of Health and Human Services (DHHS) are located has great market value. The Dix property has undeveloped tracts of land in the prime downtown real estate market. The undeveloped parcels at Dix include the following acreage:

- ± 30 acres
- ± 28 acres
- ± 20 acres
- ± 10 acres
- ± 9 acres
- ± 6 acres

Sale of these parcels could generate significant funds for the state's substance abuse and mental health systems. Downtown location of mental health or substance abuse facilities is not required, nor are offices for DHHS. Less expensive real estate outside downtown is an option for building state or local facilities, as is currently done for other state offices.

7.6 Findings and Recommendations

7.6.1 Finding: North Carolina has several options for financing construction with minimal capital outlay.

- **Bonds**—From our analysis we find that North Carolina had large bonding capacity. Our research showed:
 - North Carolina is below the regional average in two measures of a state's ability to support bonded debt; and
 - North Carolina has bonding capacity that could be used to fund new construction or renovation for substance abuse and mental health facilities.
- **Certificates of Participation**—The General Assembly last year approved using certificates of participation for prison construction. The certificate of participation process has the following aspects:

- The projects are built by private contractors using private financing
- The state does not have to provide funds for construction, but must guarantee operating funds over the time of lease
- The statute created a special non-profit corporation to sell certificates of participation
- Investors purchase certificates of participation as a real estate investment
- The certificates of participation assigns rights to the investor to receive lease payments made by the State under a lease-purchase agreement
- **State investment pools**—The state has investment pools that could be used to build state facilities for mental health and substance abuse services.
 - state retirement funds could be used to build state facilities as a low risk real estate investment
 - the state employees would have the advantage of a good rate of return on a low risk investment
 - the state would pay the retirement system investment income rather than the income going to private investors as in certificates of participation.
 - using existing state investment pools is a win/win situation
- **Alcohol tax changes**—statutes now require only a small amount of alcohol tax revenue to be spent on alcohol and substance abuse treatment or education. Current state tax laws:
 - require only a little more than seven percent of gross receipts to be used on alcohol and substance abuse treatment or education
 - have not guarded against inflation that has reduced the adjusted per drink tax from 16¢ per drink in 1968 to less than 5¢ per drink in 1998
- **Dix property**—is located on prime downtown real estate property. The current Dix property:
 - contains many vacant parcels that could be sold to finance the mental health and substance abuse systems needed in the state

- used for Dix Hospital and DHHS offices is not the best use of the land
- downtown location of mental health or substance abuse facilities is not required, nor are offices for DHHS
- Less expensive real estate outside downtown is an option for building state or local facilities

7.6.2 Recommendation 21

Use certificates of participation for building state facilities for mental health and substance abuse services.

7.6.3 Recommendation 22

North Carolina could issue bonds to fund construction of needed substance abuse and mental health facilities.

North Carolina has bonding capacity available that it could use.

7.6.4 Recommendation 23

Invest state investment pools, such as retirement system funds, in mental health and substance abuse buildings as real estate investments, at market rates.

The North Carolina retirement system could choose to invest in building mental health and substance abuse facilities as real estate investments with low risk,

The investment return would be returned to the retirement system instead of private investors, such as in certificates of participation.

7.6.5 Recommendation 24

Realign alcohol taxes to fund substance abuse treatment facilities.

State statutes could designate more of current alcohol taxes to go to alcohol and substance abuse treatment.

The state could increase the per volume tax on alcohol, or change the alcohol taxes to be based on price, therefore keeping up with inflation.

7.6.6 Recommendation 25

Sell undeveloped Dix property with proceeds used for capital investment or as endowment for operations.

The property is not being used at the greatest value to the state.

North Carolina State University has expressed some interest in the property. If the university is willing to bid on the property in the same fashion as any other commercial developer, they should receive the rights to buy property it has the highest bid.

8.0 FACILITIES

8.0 FACILITIES

In the course of this study, we reviewed the physical plants of the three Alcohol and Drug Abuse Treatment Centers (ADATCs), the two children's mental health schools, and the NCSCC for condition and suitability for their purposes. Due to a proposed plan to move the Whitaker and Wright schools to the closed school for the deaf in Greensboro, we added a tour of that campus to determine the viability of that move. MGT also reviewed the changes to the campuses of the four psychiatric hospitals that were carefully examined by our team in 1998. DHHS and physical plant staff also provided documents to us on the repairs, rehabilitation, capital projects, and demolitions of each campus. From our reviews of the physical plant and supporting documents, we developed prototype models for various facilities with diagrams and projected costs. Although not contemplated in our original scope of work, a cochair of the Joint Oversight Committee requested that we also recommend what the state should build. The MGT team included those facility recommendations at the end of this chapter. This information will assist the committee in providing guidance to the leadership of the General Assembly for future direction.

8.1 Assessment of Selected Facilities

8.1.1 ADATC Facilities

Facility: Julian F. Keith ADATC
Location: Black Mountain, North Carolina

Buildings are in generally good condition, and grounds are attractive. However, certain recent changes in the program and in configuration of dayrooms create problems.

The Detox/Crisis Unit, converted from a former Step-down Unit, requires several alterations to meet the requirements of a locked unit:

- replacement of patient room windows;
- replacement of lay-in ceilings in patient rooms with hard ceilings;
- replacement of plumbing fixtures in patient toilets; and
- provision of a secure outdoor area accessible from the unit.

Exam/assessment space shares a room with the unit secretary. Unit administrative space—nurse station and charting—is inadequate for any type of unit.

Building C (Dormitories 1 and 2) houses 30 female clients. In plan, it is an L-shaped unit with the dayroom at the junction of the arms. The entrance is directly into the dayroom.

Building D (Dormitories 3, 4, and 5) houses 40 male clients. In plan, it is a T-shaped unit with the dayroom at the junction of the arms. The entrance is directly into the dayroom.

Due to recent life-safety-related improvements, dayrooms in Buildings C and D have been separated from patient sleeping areas, and in Building C from the nurse station/charting area, impairing visual control of the units. In Building C, the entrance to the unit cannot be seen from the nurses' administrative center/charting area.

Facility: **Walter B. Jones ADATC**
Location: **Greenville, North Carolina**

Buildings are in generally good condition. Grounds are attractive and terrain is generally flat, as is common in the coastal plain area. Vehicular access is controlled by means of a gate on the entrance drive. There are no other barriers to access to or egress from the campus.

The lack of perimeter security was cited as a major concern by the staff of the ADATC, who stated that there have been instances of contraband being smuggled to clients and of physical threats to clients from intruders.

With the exception of the Cafeteria (Building 3) and the Activities Building (7), all permanent structures have the same basic plan—parallel corridors with offices or bedrooms along the exterior and support spaces (e.g., toilets, showers, nurse stations, dayrooms, mechanical rooms) between the corridors. Although structurally efficient, this arrangement creates dormitories with poor visual control of all areas. Compounding this deficiency, the dayrooms at each end of the dormitory buildings (2, 4, 5, and 6), which were originally open to the corridors, have been enclosed for life safety reasons.

Building 2 houses the Perinatal Unit (five beds and bassinets) and Admissions. There is no secure holding room for patients admitted from jail, nor is there a full-time security force.

Building 5 houses 24 male beds. Toilets and showers are located in the central zone and cannot be accessed by patients without entering the general corridor. One toilet/shower room opens onto each corridor and serves six rooms with 12 beds. There is no staff toilet.

Building 6 houses 26 female beds, four of which are used for male patients when needed. Toilets and showers are similar to those in Building 5. When the male beds are occupied, one toilet/shower becomes male, the other female. This creates a ratio of one shower per 11 beds and one water closet per 7 beds, both well below current guidelines. As in Building 5, there is no staff toilet. The nurse station is awkwardly shaped and undersized.

Building 4 is currently unoccupied, and has a capacity of 22 beds. It has the same features found in Buildings 5 and 6.

In addition to the internal arrangement of the dormitories, which makes supervision difficult, the location of the units in separate buildings prohibits cross coverage by staff.

Facility: Butner ADATC
Location: Butner, North Carolina

Since the MGT team did not review the ADATC program and facilities in our previous study, we visited Butner ADATC. We found the same problems with the ADATC facility as we did with the rest of John Umstead Hospital. The ADATC Program occupies Ward Buildings 44, 45, 46, and 47 of John Umstead Hospital. Buildings are typically two stories, with each floor divided into two wards by the connecting corridor that links all buildings at Umstead. As previously pointed out in MGT of America's 1998 *Efficiency Study of the State Psychiatric Hospitals*, this bisection of all floors seriously restricts the layout of various functional areas and inhibits efficient staffing of the units.

The ADATC benefits from the fact that its buildings are at the south end of the north-south arm of this connecting corridor, which reduces—but does not eliminate—non-ADATC traffic through the facility.

Ward Building 44: First Floor: Female dining and weekend visitation take place in the dayroom on Ward 443 (west end). Family program is conducted in the adjacent group room. Except for a vending area off the connecting corridor, the remainder of the floor is unused. Ward 441 (east end) could become an acute female detox ward if staff were available.

Second Floor: Ward 442 (east end) is a 15-bed female rehab ward. Ward 444 (west end) is primarily program space, including group rooms, recreation/classroom and exercise room. Three rooms are used as overflow bedrooms.

Ward Building 45: First Floor: Ward 451 (east end) is largely unused. Male dining takes place in the east end dayroom. Vending and laundry are located along the connecting corridor. Ward 453 is a 15-bed acute male detox unit. Second Floor: Wards 452 and 454 are both male rehab wards, with a total of 30 beds.

Ward Building 46: First Floor: Ward 461 (east end) houses admitting, assessment, and medical records. Ward 463 houses rehabilitation therapy, including classrooms, exercise rooms and R/T staff offices. Second Floor: Ward 462 (east end) houses medical staff offices. Ward 464 is male program space, including group rooms and activity areas.

Ward Building 47: First Floor: Ward 471 (east end) is the ADATC administrative suite. Ward 473 houses nursing administration and offices for dieticians and housekeeping. Second Floor: Ward 472 (east end) houses counselors' offices, and Ward 474 houses the recreation therapy department, including activity spaces and staff offices.

8.1.2 Children's Facilities

Facility: Whitaker School
Location: Butner, North Carolina

In MGT's *Efficiency Study of the State Psychiatric Hospitals*, we pointed out the numerous problems with the children's wards at Umstead. We still find that the buildings for children's mental health (Wards 41, 42, and 43) are as ill-suited to their function as the other old buildings at Umstead are to theirs, and for the same reasons: rigid plan geometry creating less-than-optimally sized and configured spaces; and dispersal of the program among several buildings, creating additional demands on staff.

In addition, the physical condition of the buildings includes problems with roofing, plumbing, asbestos in the ceilings, lack of a sprinkler system, and high energy costs. These physical problems lead to very limited ability for the state to correct deficiencies within a reasonable budget. We did not see that much had changed from our prior assessment.

Facility: Wright School
Location: Durham, North Carolina

The Wright School campus is surrounded by a mixed commercial area to the north and west and a residential neighborhood to the south and east. The school itself, located on the western portion of the campus, has views from the building to provide contact with the neighborhood. Grounds are extensive, and the eastern portion of the property is heavily wooded.

Buildings include the masonry main building, which houses dormitory, classroom, administration and activity space, and two prefabricated buildings, which house offices for family counselors and assessment staff. The main building is in generally good condition.

The main building was originally built as an orphanage (The Wright Refuge) and has been remodeled to provide space for a child psychiatric program. Many bedrooms and toilets are in make-do space and do not meet current standards in terms of square-footage and/or arrangement. There are no wheelchair accessible facilities.

Students at the Wright School are divided into three treatment groups of eight, each on a separate wing of the building. Each unit has a separate dayroom and classroom. The classrooms are generally large and have ample natural light (typically large windows on two sides). Students make use of a recreation room in the basement and of the large campus for outdoor recreation. There is a nature trail in the wooded area of the campus.

Facility: Central North Carolina School for the Deaf
Location: Greensboro, North Carolina

The Central North Carolina School for the Deaf campus is surrounded by office/industrial facilities. The heavily wooded campus effectively separates the school

from these neighbors, and gives the facility a secluded nature. Grounds are extensive and buildings are widely separated.

Classrooms and dormitories are in separate buildings, but are paired with Mehl Hall dormitory and the Dixon Building, separated from Brown Hall dormitory and the Phillips/Payne Building by a wooded gully. These physical divisions were used to separate different aged students.

Buildings are in generally good condition, with the exception of wood fascias, which are in process of being replaced. Wood windows are scheduled to be replaced and are of an inappropriate design for a mental health facility.

The two dormitories are similar in plan with three residential pods arranged around a core containing activity and support spaces. As currently configured, each residential pod has a capacity of 32 beds in eight four-bed rooms. Each pair of bedrooms shares a toilet and shower. Dayrooms are in the center of the pods and have little or no natural light.

Internal configuration of dormitory units is inappropriate for a mental health facility, but proposed plans for moving Wright and Whitaker students there call for complete interior demolition and reconfiguration. As currently envisioned, each residential pod would house 14 beds in private rooms, for a total capacity of 42 beds each in Brown Hall and Mehl Hall. Bathrooms would be entered from the common corridor and each would serve three or four beds. The dayrooms would be enlarged and would be open to daylight on one side.

Less extensive renovation would be required in each of the classroom buildings and in the Hall/Mericka administration building.

8.1.3 Adult Mental Health Facilities

Facility: North Carolina Special Care Center
Location: Wilson, North Carolina

The North Carolina Special Care Center (NCSCC) occupies three interconnected buildings on a 40-acre campus. The original building, completed in 1942, has three floors designated G, 1, and 2. The original building is comprised of the Administrative Building, the Service Wing, and the South Wing (it is also called the Scott Wing and is listed separately on the State Property Office's building summary). The Spruill Wing was added in 1951. The occupied portion of this structure is now known as the North Wing, and "Spruill Wing" is used to designate the vacant portion. The Scott Wing, completed in 1954, has eight floors designated G, 1 through 7, and adjoins the service wing.

Various small outbuildings house such functions as the heating/cooling plants, the maintenance shop, and an incinerator.

The facility underwent a total electrical update two years ago. Reroofing of all areas except the Spruill Wing has recently been completed. A chiller replacement project is set to commence. NCSCC administration sees plumbing replacement as the next priority for repair and renovation.

The 40-bed Alzheimer's Treatment Program is located on the South Wing, with 20-bed nursing units on floors 1 and 2. An enclosed courtyard is accessible from the first floor.

Floors 3 through 6 of the Scott Wing hold 208 ICF and SNF beds. The second floor, south end of the Scott Wing is a former respiratory intensive care unit and is currently vacant. The seventh floor is also vacant and has a capacity for 42 additional beds if renovated.

The first floor, north end of the Scott Wing houses the eight-bed Early Adolescent Treatment Program (EATP), and the ground floor houses its associated classroom and

activity space. An enclosed yard accessible from the EATP provides outdoor activity space.

Food service, central receiving and supply, pharmacy, and an ambulance entrance are located in the Service Wing, which links the Scott Wing with the remainder of the facility.

Facilities: State Psychiatric Hospitals

We reviewed the changes to the campuses of the psychiatric hospitals by examination of the documents submitted on capital projects and repair and renovation. We also surveyed the Dix and Umstead campuses in conjunction with other visits and meetings. Based on the material we received, the work that has occurred at each of the four campuses since the previous study has been largely repair and rehabilitation, with capital projects designed to improve building systems or prolong building life. Although some units have been relocated between existing buildings on the same campus (particularly at Dix and Umstead), this has not necessarily provided these units with improved facilities.

Two items of note on the Dix campus are that the new chiller plant is in operation and that the houses on Kendall Court and Bender and Dorsett Streets have been demolished, making the area of the campus north of the Council Building available for other use.

8.1.4 Overall Assessment

The ADATCs have some structural problems that do not lead to optimal therapeutic use. If the existing ADATCs are to provide a fully secure admissions unit for difficult to manage clients in need of detoxification (Level III.9 services as described in the next sections), improvements in the physical security of the facilities will be needed.

In addition, some improvements are needed in the facilities that would allow each of those institutions to utilize its existing facilities at full capacity. In response, MGT has provided cost estimates for renovating the current structures at the ADATCs. Although we do not think renovating the Butner ADATC is necessarily the best choice, we projected costs to renovate it to increase system capacity before the State could contract for the services in the future. Renovation is less costly than a new building, but the funds spent on Butner renovation will not provide very long-term benefits. Renovation of Butner is just a stopgap measure.

As required in our scope of work, we have also developed prototypes for the state to build new ADATCs, if it chooses that route. The state can also use the ADATC prototypes to assess the appropriateness of physical layout of other facilities, if it chooses to outsource treatment as we recommend.

As we stated in our previous study, we do not support attempting to renovate the buildings at Umstead, including that of Whitaker School. The physical plant issues and high operating costs do not support renovation. The facilities at Wright and EATP will need some renovations to become Medicaid certified, which we believe to be cost effective for the state. We do not support moving Whitaker and Wright to the Greensboro School for the Deaf. Although the renovations to Greensboro's physical plant are feasible, we do not recommend such a large facility in one location. Instead, we would recommend smaller facilities in more areas. MGT promotes a regional approach to children's mental health services. The Greensboro campus could be separated into adolescents and children, with reasonable safety, but we would recommend going one step further by having the schools and age groups truly separate.

The NCSCC should be renovated to care for more of the elderly mentally ill in the state. Two floors at NCSCC can be renovated to provide an additional 68 beds. As

shown in a previous chapter, the NCSSC can treat these patients at much lower costs than the state hospitals.

We did not find any changes to the state hospitals to cause us to change our previous recommendation to close the existing hospitals and build new facilities. The energy savings alone support our previous recommendations. Several different consulting groups over 20 years have recommended building new hospitals. We differ only on number of facilities and number of beds. The actual location of the new hospitals is open for debate. The state may choose to locate the new hospitals close to the current sites to avoid the political fallout of closing facilities that support many state employees. As an alternative to using current locations, the state could examine the needs for service and population centers to better distribute psychiatric beds across the state.

8.2 Prototypes for Facility Development

Prototype designs have been developed for each of the facility types under consideration: children's mental health centers, substance abuse centers, and geriatric mental health centers. These prototypes have been developed to the extent necessary to determine the scope of construction at each of several bed counts, and a probable construction cost for each. The next section of this chapter presents our actual recommendations for building facilities.

Our scope of work required the projection of construction costs. In previous chapters, we have recommended the privatization of many services, which would lead to the state providing fewer direct services. In response, the state would not have to build facilities. We also recognize that the state may decide to continue to be direct service

providers. These prototype models may then serve as initial planning documents for the state.

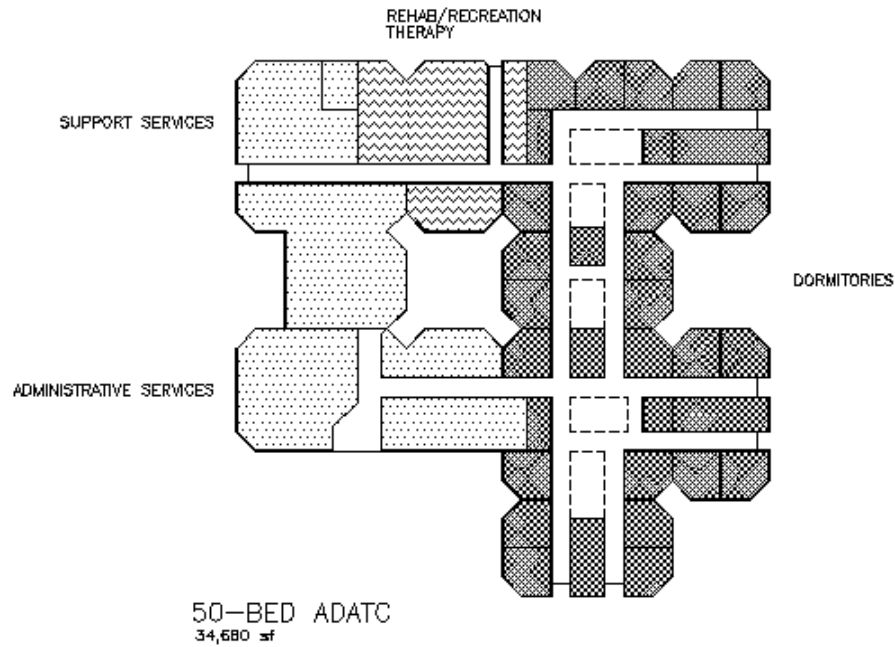
Prototypes consist of two elements: diagrammatic plans for each facility type and size to the level of detail necessary to validate the overall square footages; and probable “bricks and mortar” costs for each scenario. Costs are broken down by major functional component. These components are sized based upon a limited survey of similar facilities, including the preliminary plans for the Dix Hospital replacement.

8.2.1 Substance Abuse Facilities

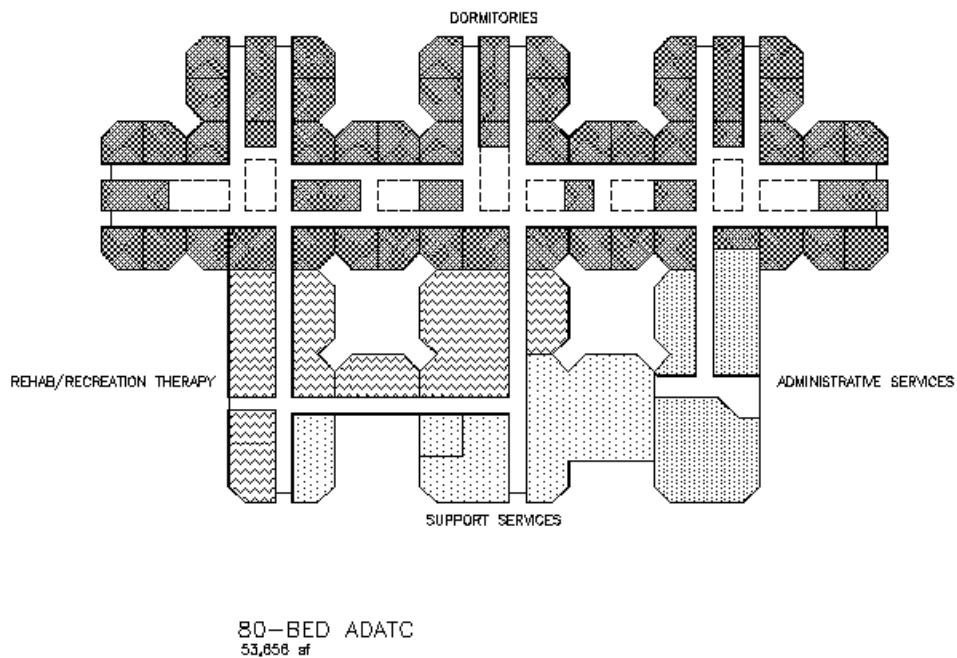
Two different models have been developed for the ADATCs. The models assume new construction: a single-building model, in which all functions are housed under one roof; and a “campus” model, in which the dormitories are in freestanding buildings surrounding (or adjacent to) a central building housing the other functions. The latter is similar to the existing Black Mountain and Greenville ADATCs. In addition, we have developed costs for renovation programs at each of the three existing ADATCs, which would allow each of those institutions to utilize its existing facilities at full capacity.

Prior to development of the prototypes, it was necessary to develop a conceptual program for the facilities. The conceptual program shows the space to be included in a new or renovated facility, in broad outline form. It is based upon the goals of the institution, the services it will provide, its organizational structure and staffing patterns, and all policies and procedures that may affect the facility. The conceptual program directly influences overall space requirements and, therefore, capital requirements. The diagrams for the single building model are found in Exhibits 8-1 through 8-4. The diagrams illustrate the different configurations possible for differing numbers of beds from 50 to 124. Exhibit 8-5 shows the campus model that can be built around a 24-bed and 32-bed configuration.

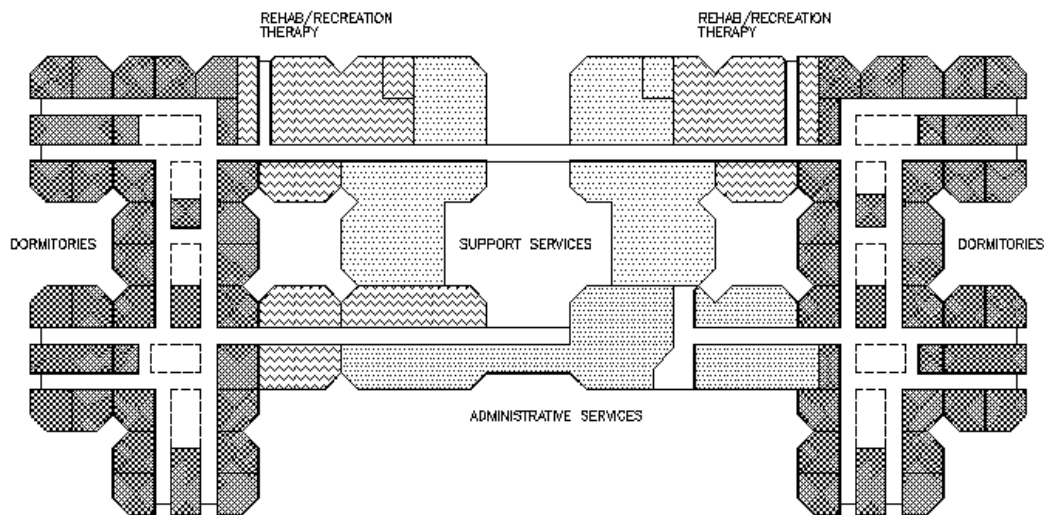
**EXHIBIT 8-1
SINGLE BUILDING MODEL
FOR ADATC WITH 50 BEDS**



**EXHIBIT 8-2
SINGLE BUILDING MODEL
FOR ADATC WITH 80 BEDS**

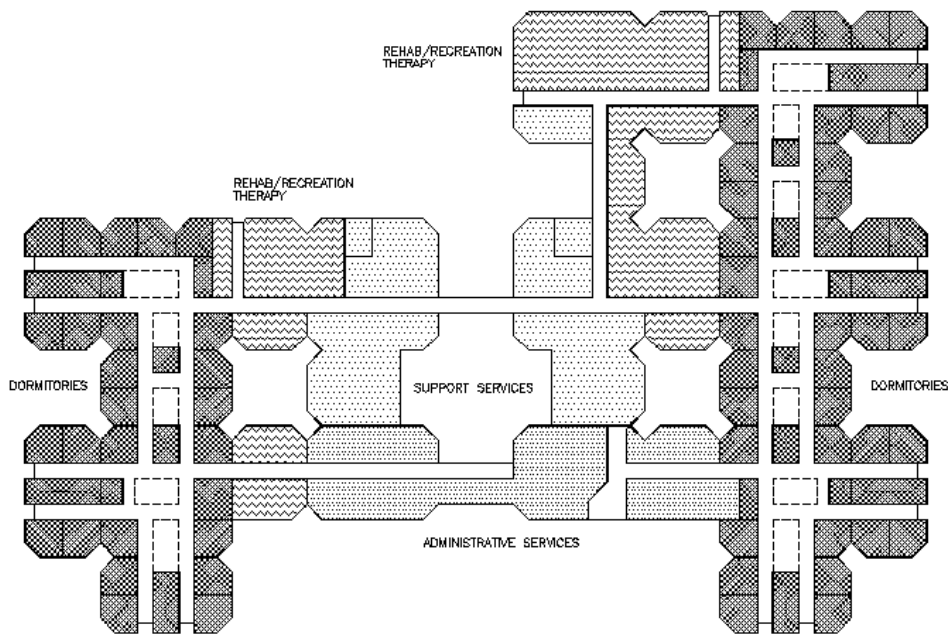


**EXHIBIT 8-3
SINGLE BUILDING MODEL
FOR ADATC WITH 100 BEDS**



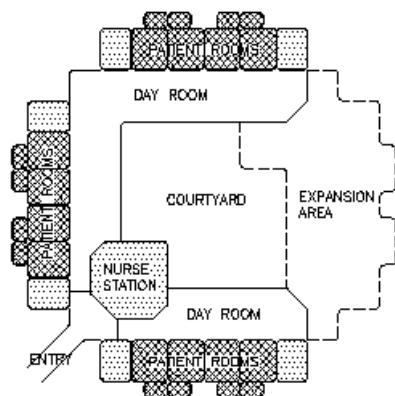
100—BED ADATC
79,460 sf

**EXHIBIT 8-4
SINGLE BUILDING MODEL
FOR ADATC WITH 124 BEDS**

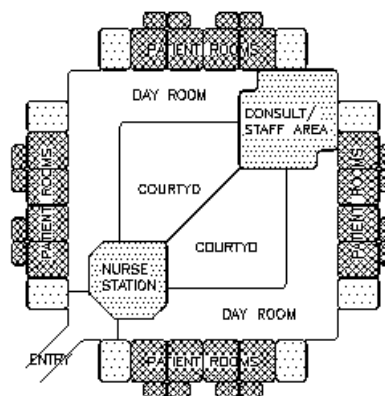


124—BED ADATC
89,020 sf

**EXHIBIT 8-5
CAMPUS MODEL
FOR ADATC WITH VARYING NUMBER OF BEDS**



24-BED DORMITORY



32-BED DORMITORY

The conceptual program is not the same as a functional space program, which shows the specific spaces to be included in a new or renovated facility, and details the most efficient combination and configuration of rooms and other functional areas. The functional space program is developed on a project-by-project basis.

For residential mental health or substance abuse facilities, the key determinant of space required is the volume of service to be provided, in terms of the number of beds and staff positions required supporting that volume. Many methods exist for determining the number of beds, and these vary in sophistication from simple to complex. Using only projected admissions per year and average length of stay (ALOS) in days, one can broadly apply the simple formula below:

$$\frac{\text{Number of Admissions} \times \text{ALOS}}{365 \times \text{Planned Occupancy Percentage}} = \text{Beds}$$

To apply the formula to North Carolina's ADATCs, we used the following assumptions:

- an ALOS of four days for clients requiring Level III.7-D¹ medically monitored detoxification or what we have termed in North Carolina as Level III.9 (secure III.7 settings with capacity to handle difficult-to-manage or combative clients);
- 50 percent of these Level III.9 clients are subsequently admitted after detoxification to Level III.7 that provides high-intensity, short-term step-down treatment;
- an ALOS of 14 days for clients in Level III.7 care (assumed range of LOS is generally seven to 21 days);
- a planned occupancy rate of 70 percent for III.9/III.7-D beds, to increase the likelihood of an available bed during peak admission periods;
- a planned occupancy rate of 85 percent for III.7 beds, to allow reasonably "full" utilization; and
- maximum flexibility of use of beds: All detox beds can be used for either III.7 or III.9 treatment and rehab clients can, if necessary, sleep in detox beds.

Based on these assumptions, we calculated the optimal ratio of III.9/III.7-D beds (Detox beds) to III.7 beds (Rehab beds) for maintaining a relatively full facility. We set the number of annual detox admissions at 1,000, with the following results:

$$\frac{1,000 \times 4}{365 \times 70\%} = 15.66 = 16 \text{ Detox Beds}$$

$$\frac{500 \times 14}{365 \times 85\%} = 22.56 = 23 \text{ Rehab Beds}$$

Thus, to support 1,000 detox admissions, we would require a total of 39 beds, of which 16 (41%), would be designed with III.9/III.7-D capabilities (i.e, fully secure setting with appropriate level of staffing). For conceptual planning purposes, we used a target

¹ Level III.7-D exemplifies the ASAM levels of care typology, as described more completely in Chapter 4.0.

bed configuration of 40 percent Detox and 60 percent Rehab. Based on optimal staffing patterns, beds would be arranged in 20-bed units, where possible.

Bed counts for the various prototype models vary slightly from multiples of 20. In the case of new construction, this is due to efforts to provide efficient building configurations. For the same reason, bed counts vary slightly between the single-building and campus models. For comparison between the two models, Exhibit 8-6 shows the square footage per bed, and Exhibits 8-7 and 8-8 show the cost per bed. In the case of renovation, the sizes and configurations of existing buildings did not always allow distribution of beds in an optimal fashion.

With regard to new construction generally, the single-building model would be less costly to build, and it has certain other advantages:

- The contiguity of nursing units makes it more flexible, in that it allows the creation of swing beds and small subunits.
- It facilitates cross coverage by staff.
- The compact footprint of the single building model would require less land to be acquired if new sites are developed.

The campus model, while more costly, would lend itself to incremental, modular development over time.

EXHIBIT 8-6
SQUARE FOOTAGE ESTIMATES OF NEW ADATC FACILITIES
(Freestanding Facility—Single Building Model)

Function	50 beds (20 Detox, 30 Rehab)		80 beds (32 Detox, 48 Rehab)		100 beds (40 Detox, 60 Rehab)		124 beds (50 Detox, 74 Rehab)	
	DGSF	BGSF	DGSF	BGSF	DGSF	BGSF	DGSF	BGSF
Administrative Services	4,510	4,826	4,510	4,857	7,881	8,480	7,881	8,606
Rehab/Recreation Therapy	3,360	3,595	7,256	7,815	8,629	9,285	13,896	15,174
Support services	5,040	5,393	5,410	5,827	9,750	10,491	10,452	11,414
Inpatient Units	19,200	20,544	32,236	34,718	38,620	41,555	48,575	53,044
Mechanical/Electrical	300	321	400	431	600	646	700	764
Total	32,410	34,679	49,812	53,648	65,480	70,456	81,504	89,002
Total Square Feet (rounded)	34,680		53,650		70,460		89,000	
Square Feet/bed	694		671		705		718	

Source: Created by MGT of America, Inc., 2001.

DGSF = Department Gross Square Feet
 BGSF = Building Gross Square Feet

EXHIBIT 8-7
COST ESTIMATES OF NEW ADATC FACILITIES
(Single Building Model)

		Program		Cost/SF	Cost	
50 beds	Administrative Services	4,826	BGSF	\$ 130.00	\$ 627,341	
	Rehab/Recreation Therapy	3,595	BGSF	\$ 185.00	\$ 665,112	
	Support services	5,393	BGSF	\$ 160.00	\$ 862,848	
	Inpatient Units	20,544	BGSF	\$ 185.00	\$ 3,800,640	
	Mechanical/Electrical	321	BGSF	\$ 90.00	\$ 28,890	
	Subtotal	34,679	GSF	\$ 172.58 AVG	\$ 5,984,831	
	Equipment (6%)				\$ 359,090	
	Design Contingency (5%)				\$ 299,242	
	Subtotal				\$ 6,643,162	
	Construction Contingency (3%)				\$ 199,295	
	Fees (10%)				\$ 598,483	
	Probable Cost				\$ 7,440,940	\$ 148,819 /bed
80 beds	Administrative Services	4,857	BGSF	\$ 130.00	\$ 631,445	
	Rehab/Recreation Therapy	7,815	BGSF	\$ 185.00	\$ 1,445,722	
	Support services	5,827	BGSF	\$ 160.00	\$ 932,251	
	Inpatient Units	34,718	BGSF	\$ 185.00	\$ 6,422,862	
	Mechanical/Electrical	431	BGSF	\$ 90.00	\$ 38,772	
	Subtotal	53,648	GSF	\$ 176.54 AVG	\$ 9,471,052	
	Equipment (6%)				\$ 568,263	
	Design Contingency (5%)				\$ 473,553	
	Subtotal				\$ 10,512,868	
	Construction Contingency (3%)				\$ 315,386	
	Fees (10%)				\$ 947,105	
	Probable Cost				\$ 11,775,359	\$ 118,388 /bed

Source: Created by MGT of America, Inc., 2001.

EXHIBIT 8-7 (Continued)
COST ESTIMATES OF NEW ADATC FACILITIES
(Single Building Model)

		Program		Cost/SF	Cost	
100 beds	Administrative Services	8,480	BGSF	\$ 130.00	\$ 1,102,394	
	Rehab/Recreation Therapy	9,285	BGSF	\$ 185.00	\$ 1,717,689	
	Support services	10,491	BGSF	\$ 160.00	\$ 1,678,560	
	Inpatient Units	41,555	BGSF	\$ 185.00	\$ 7,687,697	
	Mechanical/Electrical	646	BGSF	\$ 90.00	\$ 58,104	
	Subtotal	70,456	GSF	\$ 173.79 AVG	\$ 12,244,444	
	Equipment (6%)				\$ 734,667	
	Design Contingency (5%)				\$ 612,222	
	Subtotal				\$ 13,591,333	
	Construction Contingency (3%)				\$ 407,740	
	Fees (10%)				\$ 1,224,444	
	Probable Cost				\$ 15,223,517	\$ 122,444 /bed
124 beds	Administrative Services	8,606	BGSF	\$ 130.00	\$ 1,118,787	
	Rehab/Recreation Therapy	15,174	BGSF	\$ 185.00	\$ 2,807,270	
	Support services	11,414	BGSF	\$ 160.00	\$ 1,826,173	
	Inpatient Units	53,044	BGSF	\$ 185.00	\$ 9,813,122	
	Mechanical/Electrical	764	BGSF	\$ 90.00	\$ 68,796	
	Subtotal	89,002	GSF	\$ 175.66 AVG	\$ 15,634,148	
	Equipment (6%)				\$ 938,049	
	Design Contingency (5%)				\$ 781,707	
	Subtotal				\$ 17,353,904	
	Construction Contingency (3%)				\$ 520,617	
	Fees (10%)				\$ 1,563,415	
	Probable Cost				\$ 19,437,936	\$ 126,082 /bed

Source: Created by MGT of America, Inc., 2001.

EXHIBIT 8-8
COST ESTIMATES OF NEW ADATC FACILITIES
(Campus Model)

		Program		Cost/SF	Cost	
56 beds	Administrative Services	4,781	BGSF	\$ 130.00	\$ 621,478	
	Rehab/Recreation Therapy	3,562	BGSF	\$ 185.00	\$ 658,896	
	Support services	5,342	BGSF	\$ 160.00	\$ 854,784	
	Inpatient Units	24,410	BGSF	\$ 185.00	\$ 4,515,791	
	Mechanical/Electrical	350	BGSF	\$ 90.00	\$ 31,482	
	Subtotal	38,444	GSF	\$ 173.82 AVG	\$ 6,682,431	
	Equipment (6%)				\$ 400,946	
	Design Contingency (5%)				\$ 334,122	
	Subtotal				\$ 7,417,498	
	Construction Contingency (3%)				\$ 222,525	
	Fees (10%)				\$ 668,243	
	Probable Cost				\$ 8,308,266	\$ 148,362 /bed
80 beds	Administrative Services	4,781	BGSF	\$ 130.00	\$ 621,478	
	Rehab/Recreation Therapy	7,685	BGSF	\$ 185.00	\$ 1,421,725	
	Support services	5,724	BGSF	\$ 160.00	\$ 915,840	
	Inpatient Units	34,683	BGSF	\$ 185.00	\$ 6,416,392	
	Mechanical/Electrical	466	BGSF	\$ 90.00	\$ 41,976	
	Subtotal	53,339	GSF	\$ 176.56 AVG	\$ 9,417,411	
	Equipment (6%)				\$ 565,045	
	Design Contingency (5%)				\$ 470,871	
	Subtotal				\$ 10,453,326	
	Construction Contingency (3%)				\$ 313,600	
	Fees (10%)				\$ 941,741	
	Probable Cost				\$ 11,708,667	\$ 146,358 /bed

Source: Created by MGT of America, Inc., 2001.

Note: All costs are shown in August 2001 dollars.

EXHIBIT 8-8 (Continued)
COST ESTIMATES OF NEW ADATC FACILITIES
(Campus Model)

		<u>Program</u>		<u>Cost/SF</u>	<u>Cost</u>	
88 beds	Administrative Services	5,035	BGSF	\$ 130.00	\$ 654,550	
	Rehab/Recreation Therapy	7,685	BGSF	\$ 185.00	\$ 1,421,725	
	Support services	5,724	BGSF	\$ 160.00	\$ 915,840	
	Inpatient Units	38,546	BGSF	\$ 185.00	\$ 7,130,980	
	Mechanical/Electrical	700	BGSF	\$ 90.00	\$ 62,964	
	Subtotal	57,689	GSF	\$ 176.57	AVG	\$ 10,186,059
	Equipment (6%)					\$ 611,164
	Design Contingency (5%)					\$ 509,303
	Subtotal					\$ 11,306,526
	Construction Contingency (3%)					\$ 339,196
120 beds	Fees (10%)					\$ 1,018,606
	Probable Cost					\$ 12,664,328
						\$ 143,913 /bed
	Administrative Services	8,268	BGSF	\$ 130.00	\$ 1,074,840	
	Rehab/Recreation Therapy	11,448	BGSF	\$ 185.00	\$ 2,117,880	
	Support services	10,176	BGSF	\$ 160.00	\$ 1,628,160	
	Inpatient Units	48,819	BGSF	\$ 185.00	\$ 9,031,582	
	Mechanical/Electrical	816	BGSF	\$ 90.00	\$ 73,458	
	Subtotal	79,528	GSF	\$ 175.11	AVG	\$ 13,925,920
	Equipment (6%)					\$ 835,555
	Design Contingency (5%)					\$ 696,296
	Subtotal					\$ 15,457,771
	Construction Contingency (3%)					\$ 463,733
	Fees (10%)					\$ 1,392,592
	Probable Cost					\$ 17,314,096
						\$ 144,284 /bed

Source: Created by MGT of America, Inc., 2001.

Note: All costs are shown in August 2001 dollars.

With regard to proposed renovations at the ADATCs, we looked at each facility with the object of apportioning beds based on the targeted 40/60 Detox/Rehab split. The program for renovating each is outlined below, and probable construction costs are shown in Exhibit 8-9. The details for the cost estimates are shown in the narrative below.

Julian F. Keith ADATC, Black Mountain

- Current Bed Complement: 10 Detox, 30 Female Rehab, 40 Male Rehab
- Objective: 32 Detox, 48 Rehab (Ratio: 40/60)
- Recommendation: Upgrade existing Detox to provide III.9 capability; upgrade 10 female and 14 male rehab beds to Level III.9/III.7-D capability, leading to a complement of 34 Detox (14 male, 10 female, 10 mixed).

Walter B. Jones ADATC, Greenville

- Current Bed Complement: 26 Female Rehab, 24 Male Rehab, 5 Perinatal
- Objective: 24 Detox, 20 Female Rehab, 30 Male Rehab, 5 Perinatal (Detox/Rehab Ratio: 33/67)
- Recommendation: Upgrade Dormitory 5 to provide III.9 capability; partially renovate and reopen Dormitory 4 with 24 male rehab beds; partially renovate Dormitory 6 to accommodate 20 female and six male rehab beds. Resulting bed complement: 24 Detox, 50 Rehab (20 female, 30 male), and five Perinatal.

Butner ADATC

- Current Bed Complement: 15 Detox (Male), 15 Female Rehab, 30 Male Rehab
- Objective: 30 Detox, 20 Female Rehab, 30 Male Rehab, (Detox/Rehab Ratio: 38/62)
- Recommendation: Renovate Ward 441 to provide 15-bed Female Detox Unit with III.9/III.7-D capability; provide staff as necessary to support addition of five existing “overflow” beds on Ward 444 to female rehab Unit on Ward 442; renovate currently unused portion of Ward 451 to provide office space for staff associated with the new Detox Unit. Resulting bed complement: 30 Detox (15 female, 15 male) and 50 Rehab (20 female, 30 male).

EXHIBIT 8-9
COST ESTIMATES FOR RENOVATION
JULIAN F. KEITH ADATC, BLACK MOUNTAIN

Current Bed Complement: 10 Detox, 30 Female Rehab, 40 Male Rehab

Objective: 32 Detox, 48 Rehab (Detox:Rehab Ratio = 2:3)

Recommendation: Upgrade existing Detox to provide III.9 capability; Upgrade 10 Female and 14 Male Rehab beds to III.9/III.7D capability, leading to a complement of 34 Detox (14 male, 10 female, 10 mixed).

Item:	Approx. Area	Cost/SF	
Renovate 10 bed Detox Unit (Dorm 6)	4,800 SF	\$ 45.00	\$ 216,000
Renovate 10 beds in Dorm 1&2 to create Detox Ur	3,000 SF	\$ 65.00	\$ 195,000
Renovate 14 beds in Dorm 3,4,5 to create Detox L	2,200 SF	\$ 65.00	\$ 143,000
Subtotal			<u>\$ 554,000</u>
Equipment (6%)			\$ 33,240
Design Contingency (5%)			<u>\$ 27,700</u>
Subtotal			\$ 614,940
Construction Contingency (3%)			\$ 18,448
Fees (10%)			<u>\$ 55,400</u>
Probable Cost			\$ 688,788
			\$ 20,258 /bed

Source: Created by MGT of America, Inc., 2001.

Note: All costs are shown in August 2001 dollars.

EXHIBIT 8-9 (Continued)
COST ESTIMATES FOR RENOVATION
WALTER B. JONES ADATC, GREENVILLE

Current Bed Complement: 26 Female Rehab, 24 Male Rehab, 5 Perinatal

Objective: 24 Detox, 20 Female Rehab, 30 Male Rehab, 5 Perinatal (Detox:Rehab Ratio = 1:2)

Recommendation: Upgrade Dormitory 5 to provide III.9/III.7D capability; partially renovate and reopen Dormitory 4 with 24 Male Rehab beds; Partially renovate Dormitory 6 to accommodate 20 Female and 6 Male Rehab beds. Resulting bed complement: 24 Detox; 50 Rehab (20 Female and 30 Male), and 5 Perinatal.

Item:	Approx. Area	Cost/SF		
Renovate Dorm 4	Major Renovation:	220 SF	\$ 100.00	\$ 22,000
	Minor Renovation:	185 SF	\$ 65.00	\$ 12,025
Renovate Dorm 5	Major Renovation:	250 SF	\$ 100.00	\$ 25,000
	Minor Renovation:	2,947 SF	\$ 45.00	\$ 132,615
	Sitework (Lump sum):			\$ 40,000
Renovate Dorm Major Renovation:	630 SF	\$ 100.00	\$ 63,000	
Subtotal			\$ 294,640	
Equipment (6%)			\$ 17,678	
Design Contingency (5%)			\$ 14,732	
Subtotal			\$ 327,050	
Construction Contingency (3%)			\$ 9,812	
Fees (10%)			\$ 29,464	
Probable Cost			\$ 366,326	\$ 10,774 /bed

Source: Created by MGT of America, Inc., 2001.

Note: All costs are shown in August 2001 dollars.

EXHIBIT 8-9 (Continued)
COST ESTIMATES FOR RENOVATION
BUTNER ADATC, BUTNER

Current Bed Complement: 15 Detox (Male), 15 Female Rehab, 30 Male Rehab

Objective: 30 Detox, 50 Rehab (Detox:Rehab Ratio = 3:5)

Recommendation: Renovate Ward 441 to provide 15 bed Female Detox Unit with III.9/III.7D capability; Provide staff as necessary to add 5 "overflow" beds on Ward 444 to female rehab unit in Ward 442; Renovate currently unused portion of Ward 451 to provide office space associated with new Detox Unit. Resulting bed complement: 30 Detox (15 Female and 15 male) and 50 Rehab (20 Female and 30 Male).

Item:	Approx. Area	Cost/SF	
Renovate Ward 441 Major Renovation:	4,700 SF	\$ 100.00	\$ 470,000
Renovate Ward 451 Minor Renovation:	2,300 SF	\$ 65.00	\$ 149,500
Subtotal			<u>\$ 619,500</u>
Equipment (6%)			\$ 37,170
Design Contingency (5%)			<u>\$ 30,975</u>
Subtotal			<u>\$ 687,645</u>
Construction Contingency (3%)			\$ 20,629
Fees (10%)			<u>\$ 61,950</u>
Probable Cost			<u>\$ 770,224</u> \$ 22,654 /bed

Source: Created by MGT of America, Inc., 2001.

Note: All costs are shown in August 2001 dollars.

8.2.2 Child Mental Health Facilities

The prototype children's and adolescents' mental health facility/school follows similar lines. The school is essentially organized along a central circulation spine, with 8-bed or 12-bed dormitories on one side, and other functional units on the other. In addition to bedrooms, each dormitory would contain separate quiet and noisy activity areas, a "time-out" room, staff offices, and various support spaces. Each bedroom would have a private toilet. The diagram for the 8-bed school is shown in Exhibit 8-10. The 12-bed school diagram is presented in Exhibit 8-11.

Given the right site and the appropriate mix of students, the circulation spine could become a courtyard around which freestanding buildings are arranged, rather than a corridor. Exhibit 8-12 shows the estimated space per bed required, and Exhibit 8-13 indicates the probable construction cost per bed.

8.2.3 Adult Mental Health Facilities

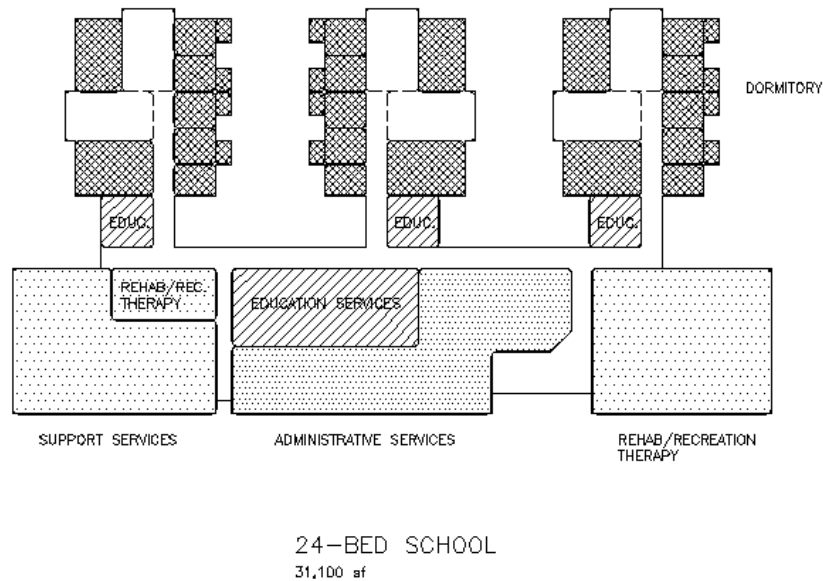
The NCSCC has renovated much of its facilities previously. We recommend renovating the seventh and second floor of the Scott Wing to expand its bed capacity. The approximate number of geriatric patients in the state hospitals is 140. As stated in Chapter 6.0, MGT recommends community placement for other geriatric patients currently in the state hospitals.

The state psychiatric hospitals in North Carolina have been the subject of study for many years. As stated in Chapter 3.0 of this report and elsewhere, the state needs to build new state hospitals. We updated the Freelon Group Architects estimates for building a new Dix, plus we updated MGT's cost estimates for the four hospitals from 1998.

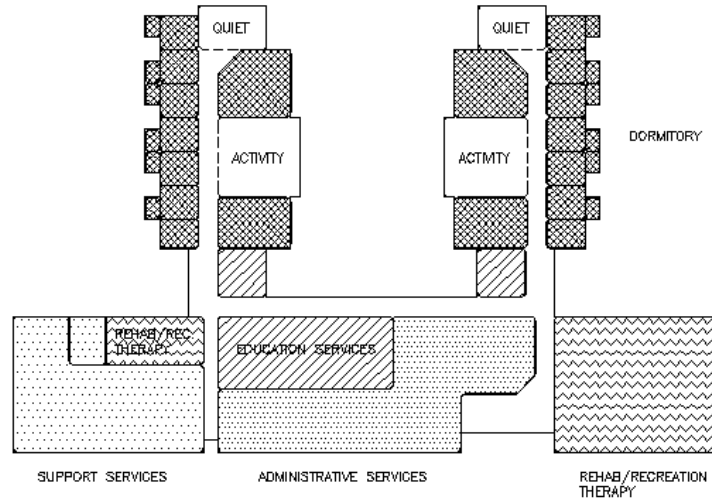
8.2.4 North Carolina Special Care Center

Existing space on the seventh floor of the Scott Wing at the NCSCC could be renovated to accommodate 42 additional ICF beds, while the second floor could be renovated for 26 beds. Exhibit 8-14 presents the estimated costs of renovating the two floors at NCSCC. The NCSCC currently operates 143 ICF beds and 105 SNF beds.

EXHIBIT 8-10 MODEL FOR SCHOOL WITH THREE WINGS OF EIGHT BEDS



**EXHIBIT 8-11
MODEL FOR SCHOOL
WITH TWO WINGS OF 12 BEDS**



24-BED SCHOOL
29720 sf

**EXHIBIT 8-12
SQUARE FOOTAGE ESTIMATES OF NEW SCHOOL FACILITIES**

Function	24 beds (3 Dorms @ 8 beds)		24 beds (2 Dorms @ 12 beds)	
	DGSF	BGSF	DGSF	BGSF
Administrative Services	4,390	5,022	4,390	4,890
Rehab/Recreation Therapy	4,110	4,702	4,110	4,579
Support services	3,280	3,752	3,280	3,654
Education Services	3,360	3,844	3,360	3,743
Dormitories	12,132	13,879	11,224	12,504
Mechanical/Electrical	300	343	300	334
Total	27,572	31,542	26,664	29,704
SF/bed		31,540 1,314		29,705 1,237

Source: Created by MGT of America, Inc., 2001.

**EXHIBIT 8-13
COST ESTIMATE OF NEW SCHOOL FACILITIES**

		Program		Cost/SF	Cost			
24 beds (3 dorms w/ 8 beds,ea.)	Administrative Services	5,022	BGSF	\$ 130.00	\$ 652,881			
	Rehab/Recreation Therapy	4,702	BGSF	\$ 185.00	\$ 869,840			
	Support services	3,752	BGSF	\$ 160.00	\$ 600,371			
	Education Services	3,844	BGSF	\$ 160.00	\$ 615,014			
	Dormitories	13,879	BGSF	\$ 185.00	\$ 2,567,616			
	Mechanical/Electrical	343	BGSF	\$ 90.00	\$ 30,888			
	Subtotal	31,542	GSF	\$ 148.49	AVG	\$ 4,683,730		
	Equipment (6%)					\$ 281,024		
	Design Contingency (5%)					\$ 234,187		
	Subtotal					\$ 5,198,941		
						Construction Contingency (3%)	\$ 155,968	
						Fees (10%)	\$ 468,373	
						Probable Cost	\$ 5,823,282	\$ 242,637 /bed
24 beds (2 dorms w/ 12 beds,ea.)	Administrative Services	4,890	BGSF	\$ 130.00	\$ 635,760			
	Rehab/Recreation Therapy	4,579	BGSF	\$ 185.00	\$ 847,030			
	Support services	3,654	BGSF	\$ 160.00	\$ 584,627			
	Education Services	3,743	BGSF	\$ 160.00	\$ 598,886			
	Dormitories	12,504	BGSF	\$ 185.00	\$ 2,313,154			
	Mechanical/Electrical	334	BGSF	\$ 90.00	\$ 30,078			
	Subtotal	29,704	GSF	\$ 147.25	AVG	\$ 4,373,776		
	Equipment (6%)					\$ 262,427		
	Design Contingency (5%)					\$ 218,689		
	Subtotal					\$ 4,854,891		
						Construction Contingency (3%)	\$ 145,647	
						Fees (10%)	\$ 437,378	
						Probable Cost	\$ 5,437,915	\$ 226,580 /bed

Source: Created by MGT of America, Inc., 2001.

EXHIBIT 8-14
COST ESTIMATES FOR RENOVATION
NORTH CAROLINA SPECIAL CARE CENTER

Renovation of 7th Floor and 2nd Floor South, Scott Wing

				<u>Program</u>	<u>Cost/SF</u>	<u>Cost</u>	
26 Beds	2nd Floor Nursing Unit Ren	4,600	NSF		\$ 22.50	\$ 103,500	¹
<u>42 Beds</u>	7th Floor Nursing Unit Renc	<u>7,300</u>	NSF		<u>\$ 22.50</u>	<u>\$ 164,250</u>	²
68 Bed Total	Subtotal	11,900	NSF		<u>\$ 22.50</u> AVG	<u>\$ 267,750</u>	
	Equipment (6%)					\$ 16,065	³
	Design Contingency (5%)					<u>\$ 13,388</u>	
	Subtotal					<u>\$ 297,203</u>	
	Construction Contingency (3%)					\$ 8,916	
	Fees (10%)					<u>\$ 26,775</u>	
	Probable Cost					<u>\$ 332,894</u>	⁴ \$4,895/bed

Source: Created by MGT of America, Inc., 2001.

¹ Approximate square footage, precise extent to be determined in design.

² Based on May 2000 estimate for 7th Floor renovation.

³ Fixed equipment only. Does not correspond to May 2000 estimate's line item for "equipment," which included office furniture and various resident care equipment.

⁴ All costs are shown in September 2001 dollars.

8.2.5 State Psychiatric Hospitals

In its 2000 report for the State Auditor, PCG recommended that Dix have 430 beds, while MGT recommended 247 in our study in 1998. The replacement hospital as currently designed by Freelon Group Architects provides for 302 beds (including 24 geriatric). The schematic design estimate for the currently proposed Dix Replacement Hospital was \$80,081,066 (project cost) in March 2000. Escalation of construction costs to September 2001 would bring its cost to approximately \$86,160,000 (or a 0.42 percent increase in construction costs per month). However, the Dix replacement hospital as designed by the Freelon Group only slightly downsizes the current Dix. The design calls for a youth unit and geriatric beds, contrary to our recommendations in 1998. MGT stands by our original recommendations to remove these two units. Therefore, we recommend the new Dix design be downsized further.

For an update of MGT's cost estimates for the four state hospitals, MGT used the bed numbers we recommended in 1998 and developed construction square footages for each hospital based on bed count. We deducted from the Umstead total the square footage of the Barret Building, housing 150 beds, which we assumed would continue in use and toe in to the new construction. The square feet and bed counts for all hospitals is shown in Exhibit 8-15. Our revised cost estimates for 2001 are shown in Exhibit 8-16.

As stated in Chapter 3.0, MGT recommends closing all four state psychiatric hospitals and building four new, smaller hospitals.

EXHIBIT 8-15
SQUARE FOOTAGE ESTIMATES OF NEW PSYCHIATRIC HOSPITALS¹

Function	Broughton 423 beds			Cherry 360 beds ²			Dorothea Dix 247 beds			John Umstead 256 beds ⁷		
	Beds	DGSF	BGSF	Beds	DGSF	BGSF	Beds	DGSF	BGSF	Beds	DGSF	BGSF
Administrative Services		34,675	36,750		31,350	33,250		26,125	27,700		26,600	28,200
Diagnostic & Treatment Services		38,325	40,650		29,700	31,500		28,875	30,600		25,200	26,700
Rehab/Recreation Therapy		18,250	19,350		16,500	17,500		13,750	14,600		14,000	14,850
Support Services		23,725	25,150		21,450	22,750		17,875	18,950		18,200	19,300
Inpatient Units												
Patient Care Mode ³	-	-	-	-	-	-	30	15,150	16,050	-	-	-
Patient Care Mode ⁴	129	70,950	75,200	112	61,600	65,300	46	25,300	26,800	97	⁷	-
Patient Care Mode ⁵	272	149,600	158,600	248	136,400	144,600	140	77,000	81,600	159	58,300	61,800
Patient Care Mode ⁶	22	13,200	14,000	-	-	-	31	18,600	19,700	-	-	-
Inpatient Support Services		-	-		-	-		4,220	4,450		-	-
Mechanical/Electrical		36,500	38,700		33,000	35,000		27,500	29,150		28,000	29,700
Circulation/Mall		34,675	36,750		31,350	33,250		26,125	27,700		26,600	28,200
Total	423	419,900	445,150	360	361,350	383,150	247	280,520	297,300	256	196,900	208,750
SF/bed			445,150			383,150			297,300			208,750
			1,052			1,064			1,204			1,126

Source: Created by MGT of America, Inc., 2001.

¹ New Constuction model is based on organizational principles developed during the programming and schematic design phases of the proposed Dorothea Dix Hospital by the Freelon Group Architects, et al.

² MGT Report of 1998 shows Cherry with 361 beds (1998 Report, Exhibit 9-4). That number includes the Wilson House, which is not included in new construction here.

³ Pre-Trial Units plus core support space.

⁴ Adult Admissions and Deaf Units.

⁵ Adult Long Term, Geriatric Admissions and Clinical Research Units.

⁶ Medical/Surgical Units.

⁷ The relatively new 79,425 SF Barret Building would remain in use and houses 150 beds. New construction would accommodate the remaining 106 beds.

EXHIBIT 8-16
COST ESTIMATES FOR NEW PSYCHIATRIC HOSPITALS

		<u>Program</u>	<u>Cost/SF</u>	<u>Cost</u>	
Broughton	Administrative Services	36,750 BGSF	\$ 130.00	\$ 4,777,500	
	Diagnostic & Treatment Services	40,650 BGSF	\$ 270.00	\$ 10,975,500	
	Rehab/Recreation Therapy	19,350 BGSF	\$ 185.00	\$ 3,579,750	
	Support Services	25,150 BGSF	\$ 160.00	\$ 4,024,000	
	Inpatient Units	247,800 BGSF	\$ 185.00	\$ 45,843,000	
	Mechanical/Electrical	38,700 BGSF	\$ 90.00	\$ 3,483,000	
	Circulation/Mall	36,750 BGSF	\$ 130.00	\$ 4,777,500	
	Subtotal	445,150 GSF	\$ 174.01 AVG	\$ 77,460,250	
	Equipment (6%)			\$ 4,647,615	
	Design Contingency (5%)			\$ 3,873,013	
	Subtotal			\$ 85,980,878	
	Construction Contingency (3%)			\$ 2,579,426	
	Fees (10%)			\$ 7,746,025	
	Probable Cost			\$ 96,306,329	\$ 227,675 /bed
Cherry	Administrative Services	33,250 BGSF	\$ 130.00	\$ 4,322,500	
	Diagnostic & Treatment Services	31,500 BGSF	\$ 270.00	\$ 8,505,000	
	Rehab/Recreation Therapy	17,500 BGSF	\$ 185.00	\$ 3,237,500	
	Support Services	22,750 BGSF	\$ 160.00	\$ 3,640,000	
	Inpatient Units	209,900 BGSF	\$ 185.00	\$ 38,831,500	
	Mechanical/Electrical	35,000 BGSF	\$ 90.00	\$ 3,150,000	
	Circulation/Mall	33,250 BGSF	\$ 130.00	\$ 4,322,500	
	Subtotal	383,150 GSF	\$ 172.28 AVG	\$ 66,009,000	
	Equipment (6%)			\$ 3,960,540	
	Design Contingency (5%)			\$ 3,300,450	
	Subtotal			\$ 73,269,990	
	Construction Contingency (3%)			\$ 2,198,100	
	Fees (10%)			\$ 6,600,900	
	Probable Cost			\$ 82,068,990	\$ 227,969 /bed

Source: Created by MGT of America, Inc., 2001.

Note: All costs are shown in September 2001 dollars.

EXHIBIT 8-16 (Continued)
COST ESTIMATES FOR NEW PSYCHIATRIC HOSPITALS

		Program		Cost/SF	Cost	
Dorothea Dix	Administrative Services	27,700	BGSF	\$ 130.00	\$ 3,601,000	
	Diagnostic & Treatment Services	30,600	BGSF	\$ 270.00	\$ 8,262,000	
	Rehab/Recreation Therapy	14,600	BGSF	\$ 185.00	\$ 2,701,000	
	Support Services	18,950	BGSF	\$ 160.00	\$ 3,032,000	
	Inpatient Units	144,450	BGSF	\$ 185.00	\$ 26,723,250	
	Inpatient Support Services	4,450	BGSF	\$ 160.00	\$ 712,000	
	Mechanical/Electrical	29,150	BGSF	\$ 90.00	\$ 2,623,500	
	Cirrculation/Mall	27,700	BGSF	\$ 130.00	\$ 3,601,000	
	Subtotal	297,600	GSF	\$ 172.23 AVG	\$ 51,255,750	
	Equipment (6%)				\$ 3,075,345	
	Design Contingency (5%)				\$ 2,562,788	
	Subtotal				\$ 56,893,883	
	Construction Contingency (3%)				\$ 1,706,816	
John Umstead	Fees (10%)				\$ 5,125,575	
	Probable Cost				\$ 63,726,274	\$ 258,001 /bed
	Administrative Services	33,250	BGSF	\$ 130.00	\$ 4,322,500	
	Diagnostic & Treatment Services	31,500	BGSF	\$ 270.00	\$ 8,505,000	
	Rehab/Recreation Therapy	17,500	BGSF	\$ 185.00	\$ 3,237,500	
	Support Services	22,750	BGSF	\$ 160.00	\$ 3,640,000	
	Inpatient Units (New Construction)	61,800	BGSF	\$ 185.00	\$ 11,433,000	
	Inpatient Units (Refit & New Finis	79,425	BGSF	\$ 30.00	\$ 2,382,750	
	Mechanical/Electrical	35,000	BGSF	\$ 90.00	\$ 3,150,000	
	Cirrculation/Mall	33,250	BGSF	\$ 130.00	\$ 4,322,500	
	Subtotal	314,475	GSF	\$ 130.35 AVG	\$ 40,993,250	
	Equipment (6%)				\$ 2,459,595	
	Design Contingency (5%)				\$ 2,049,663	
	Subtotal				\$ 45,502,508	
	Construction Contingency (3%)				\$ 1,365,075	
	Fees (10%)				\$ 4,099,325	
	Probable Cost				\$ 50,966,908	\$ 199,089 /bed

Source: Created by MGT of America, Inc., 2001.

All costs are shown in September 2001 dollars.

8.3 Recommendations

After careful review of current facilities and our recommendations for system changes, the MGT team developed some recommendations for the facilities that the General Assembly should construct.

8.3.1 Recommendation 26

North Carolina should build four new psychiatric hospitals and then close the existing state hospitals.

If the state chooses to build the hospitals over time, rather than all at once, the order of building the hospitals should be:

- Dorothea Dix
- John Umstead
- Broughton
- Cherry

The total number of beds and size of each hospital will be considerably smaller than current configurations. During MGT's 1998 study, the system operated with 2,236 beds. The total beds in our recommendations are now 1,286. The number of beds and estimated cost for each state hospital are found in Exhibit 8-17.

**EXHIBIT 8-17
BED SIZE ESTIMATED COSTS
FOR NEW STATE HOSPITALS**

	Beds	Cost
Broughton	423	\$96,306,329
Cherry	360	\$82,068,990
Dorothea Dix	247	\$63,726,274
John Umstead ¹	256	\$50,966,908

¹ Assumes retention of Barrett Building with some minimal renovation and phased demolition/replacement of the older buildings.

8.3.2 Recommendation 27

The state should renovate the three ADATCs to improve their security and functionality.

Two ADATCs, Julian F. Keith and Walter B. Jones, are adequate for treating substance abuse clients, but need some renovations to address severe security issues and improve functionality. The renovations to Butner ADATC are to improve its functionality and provide female detox beds for the short term. MGT anticipates that the state will

contract for the substance abuse services in 2003 to replace Butner ADATC beds when Umstead is to be replaced.

The number of beds, change in beds, and estimated renovation costs are shown in Exhibit 8-18.

**EXHIBIT 8-18
BED SIZE, CHANGE IN BEDS, AND ESTIMATED COSTS FOR ADATC
RENOVATIONS**

	Beds	Change	Cost
Julian F. Keith ADATC, Black Mountain	80	0	\$688,788
Walter B. Jones ADATC, Greenville	79	24	\$366,326
Butner ADATC, Butner	80	20	\$770,224

8.3.3 Recommendation 28

The state should renovate two floors at the North Carolina Special Care Center at the estimated cost of \$332,894 to increase its capacity by 68 beds.

The additional 68 beds will allow the NCSCC to accept transfers from the state hospitals. NCSCC can provide quality care for the elderly at lower rates than the state hospitals. As shown in Exhibit 6-1, the annual savings of transferring a patient from a state hospital to NCSCC range from \$10,220 to \$70,445. The payback period for the investment is only six months, even if the patients with the lowest annual savings are transferred.

8.3.4 Recommendation 29

Renovate Wright School and the Eastern Area Treatment Program (EATP) facilities to become Medicaid-certified.

The projected cost of renovating Wright School to become Medicaid-certified is \$600,000. The number of beds at Wright School will not change.

The number of beds at EATP will increase from 8 to 12. The cost for renovation at EATP is only \$70,000.

8.4 Facilities that MGT Does NOT Recommend Building

The original scope of work intended that the MGT team would present options to the General Assembly to use for choosing which facilities to build. Therefore, previously

in this chapter MGT presented diagrams and cost estimates for a variety of scenarios for which the state might opt. After the beginning of the project, a cochair of the Oversight Committee asked MGT to provide recommendations of what we thought was the best approach to the building of facilities, given our recommendations for system changes. We presented those chapter recommendations in the previous section. For clarity, we now summarize what MGT recommends the state should **not** build.

North Carolina should **not** build or renovate:

- **Dorothea Dix Replacement** as designed by the Freelon Group Architects. The 2001 costs for this design are \$86.2 million. The design calls for too many beds (302), and keeps the youth unit and geriatric beds. MGT believes that there should be no more than 247 beds. The number could be reduced even further if the medical/surgical services were outsourced.
- **Central North Carolina School for the Deaf**, Greensboro. We have recommended design of a regionalized system for both children and adolescents in the state. The state will save \$7.5 million by not renovating the Greensboro campus. The campus is too large for the small schools envisioned in the plan.
- **Whitaker School**, Butner. We do not recommend any renovations to Whitaker, except for already planned maintenance. This program will be privatized as part of a regional adolescent treatment system by July 2003.
- **Children's Schools**. We have recommended design of a regionalized system for both children and adolescents in the state. We propose the development of a regionally-based privatized children's mental health program, with only Wright and EATP being state-owned and operated schools.

APPENDICES

APPENDIX A:

***ADMINISTRATIVE COST STUDY:
EXECUTIVE SUMMARY***

APPENDIX A

ADMINISTRATIVE COST STUDY: EXECUTIVE SUMMARY¹

There is a high degree of consensus that significant improvements must be made in the way that North Carolina meets the needs of its residents with mental health (MH), developmental disability (DD), and substance abuse (SA) problems. There also is substantial consensus on the general direction of the reforms, such as increasing the emphasis on accountability, ensuring equal access, and measuring performance. The fact that such consensus exists is good for the state and good for consumers.

However, there is less agreement on the optimal way to organize the overall management structure, or governance, of the publicly funded mental health, developmental disability, and substance abuse system that oversees and manages these services. This lack of consensus results from several factors. First, the issues related to system management and governance are complex. Second, people who work in different components of the overall system have different perspectives on these issues. Finally, there are the inevitable “turf” issues that are associated with any attempt to substantially reform a large system.

In the context of this reform effort, a variety of proposals and models for a revised overall organizational model have been discussed or suggested over the past year. Most recently, the legislatively mandated study by the Auditor’s office suggested an additional system model for consideration. The Blue Ribbon Commission recommended by the study currently is being established to consider these issues and provide leadership for this long-range reform effort.

It is likely that the Commission will work closely with all stakeholders, including the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMHDDSAS, or the Division), the state agency responsible for the MH, DD, and SA systems. The Division has played a very active role in building consensus on the need for reform, engaging stakeholders, and offering initial recommendations for consideration and debate. Consistent with this role, the Division requested this governance-related analysis to support the Commission’s work and provide baseline information upon which interested parties can build.

A. Rationale for Analysis

In considering various governance models, it is important to note that there is no inherent “right” or “wrong” way to organize the governance of the MH/DD/SA system. Many different system models can successfully achieve desired goals. However, objective analysis is required to consider the relative advantages and disadvantages of any particular model. Although many variables are important to such an analysis, one key variable is the projected administrative costs of a proposed model. No one wants a system where administrative costs consume a large share of the resources intended to meet client service needs.

¹ “The Administrative Costs and Personnel Patterns of North Carolina’s 39 Area Programs: An Analysis of 1999 Cost Finding Reports,” 2000

A key step in this system development process, therefore, is to project the likely administrative costs and administrative personnel requirements of various proposed models. Such projections are most useful when the current system's administrative costs and personnel requirements are known. Then, the projected administrative costs and personnel requirements of proposed system models can be compared against this baseline.

To develop this information base, and to provide planners with objective baseline information that they believed would prove to be valuable as the state moves forward in its reform effort, the Division requested this analysis of the administrative costs and administrative personnel of North Carolina's 39 area programs. The Division suspected that there might be some consistent relationship between area program size, as measured by population served, and the number of staff needed to manage that program. Regardless of outcome, the Division hoped that the analysis would promote more informed discussion and debate, lay the methodological groundwork for analysis of proposed models, and increase the likelihood that any reform effort will ultimately be successful.

B. Methodology Overview

This analysis is based on the FY99 Cost Finding Reports completed by the area programs and submitted to the State. In the cost finding reports, overall administrative expenses are categorized into two sub-groups: "admin" expenses and "general support" expenses. The "admin" expenses reported by area programs are established according to explicit State guidelines; therefore, they are reported fairly consistently across area programs. These fairly standard admin expenses and personnel positions represent the types of expenses and positions that most management entities in a new system model would likely require.

General support expenses are additional administrative and personnel expenses reported by the area programs that exist but are not appropriate for inclusion in the admin expenses category. Because there are no state guidelines to direct accounting practices for general support expenses, the reporting patterns of area programs differ widely.

To enhance the validity of this analysis, the reported expenses were adjusted by deducting expenses that were not relevant or appropriate for inclusion in the analysis. These deductions included capital outlays, depreciation, and similar types of expenses that would distort interpretation if included.

C. Key Findings

Following is a summary of the total administrative costs and FTEs of the 39 area programs, based on these most recent cost finding reports. It should be noted that the reported administrative costs and personnel expenses of the 39 area programs presented in this report are estimated conservatively. This is because there are additional administrative costs and personnel (for example, internal management staff) that could not be included due to the difficulty of accessing reliable data.

■ **Total Administrative Expenses**

Total administrative expenses for the 39 area programs are estimated to be at least \$98.6 million. Admin expenses represent about two-thirds of this total, with general support expenses accounting for the remainder.

Administrative Expenses

Admin total adjusted expenses	\$63.2 million
General Support total adjusted expenses	<u>\$35.4 million</u>
Total Administrative Expenses	\$98.6 million

■ **Total Administrative Staff Full-Time Equivalents (FTEs)**

Total Administrative FTEs in the 39 area programs are estimated to be 1,586 FTEs, with slightly more admin personnel than general support personnel.

Full-Time Equivalents (FTEs)

Admin FTEs	833 FTEs
General Support FTEs	<u>753 FTEs</u>
Total FTEs	1,586 FTEs

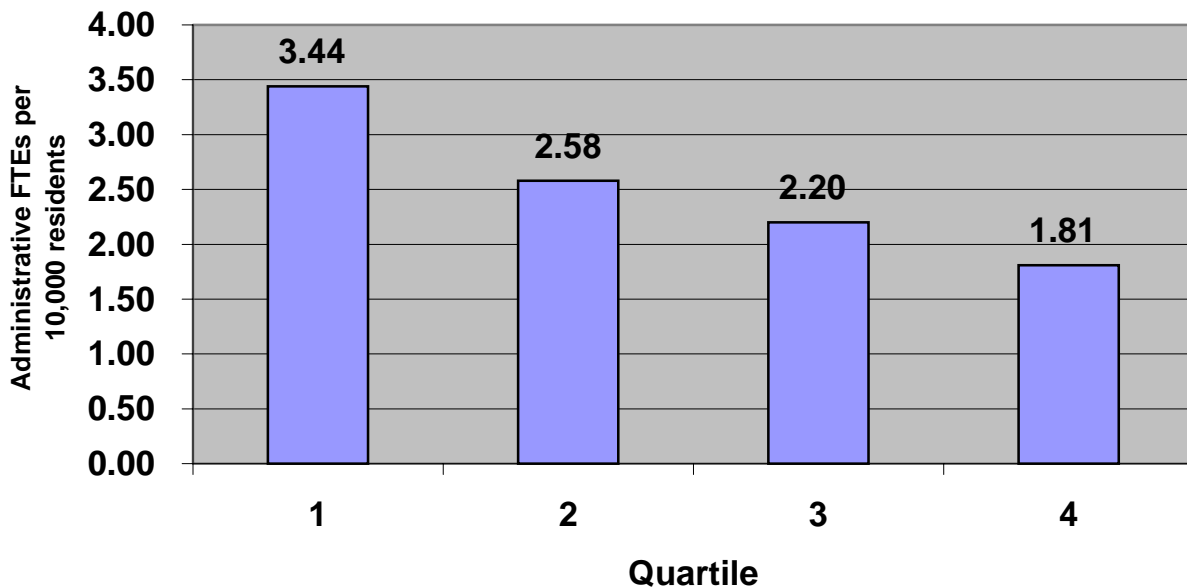
■ **Relationship of Administrative FTEs to Area Population**

The following exhibit illustrates the relationship of area program size, defined as the total population of the area served, to current personnel practices. It shows the average number of administrative (admin and general support) FTEs in the area program per 10,000 residents. For purposes of this analysis, the 39 area programs are categorized into four groups, or quartiles, based on the area program populations. These data are shown on the next page in table and graphic form.

Exhibit E1
Average Administrative FTEs Per 10,000 Residents
by Quartile

Quartile	Area Program Population	Average Number of Administrative FTEs (per 10,000 Residents)
1	55,000-110,000	3.44
2	111,000 – 149,999	2.58
3	150,000 – 234,000	2.20
4	235,000 - 634,000	1.81

Average Administrative FTEs per Quartile



D. Conclusions and Implications

In general, this analysis shows that area programs serving smaller populations generally have a higher ratio of administrative personnel to population than programs serving larger populations. In the current area program system, it takes almost twice as many administrative personnel (per 10,000 residents) to run the smaller programs than to run the larger ones. The greater efficiency of a larger organization over a smaller organization (in terms of required management personnel per population) is not entirely unexpected. However, this is the first time that this reality has been documented in the area programs.

This finding, and its conceptual underpinnings, has significant implications for how North Carolina planners and the soon-to-be-appointed Blue Ribbon Commission move forward in their deliberations. Generally, it can be safely assumed that this observed pattern—larger management entities are more efficient (in terms of required management personnel) than smaller ones—would be true for all proposed management structures.

Two other factors related to the number of management entities also are relevant. This analysis limited its inquiry to the personnel patterns and costs of the area programs. However, it also is true that (1) administrative personnel needs and costs rise as the number of management entities increases and (2) as the number of programs increases, so does number and cost of MIS systems, training programs, physical infrastructures, and so forth that must be supported.

In health care systems, a common measurement of the efficiency of a system is the percentage of administrative costs that must be diverted from clinical care to manage that system. In general, system planners strive to minimize overall administrative costs as much as possible. This leaves the greatest amount of dollars available for delivering services to consumers. A governance structure that ends up with high numbers of smaller management entities would find it difficult to fare well in such an analysis.

This document makes no attempt to determine the optimal North Carolina governance structure. However, the findings of this analysis suggest that administrative efficiency should be a key variable in assessing a particular system's economic viability. It is hoped that this analysis, and the methodology used to produce it, will add value to the ongoing system reform discussions.

APPENDIX B:

KEY DIMENSIONS TO CONSIDER IN SYSTEM DESIGN

APPENDIX B

KEY DIMENSIONS TO CONSIDER IN SYSTEM DESIGN¹

In considering the future direction of the North Carolina system over the next decade, we recommend that the following questions be kept in mind.

1. Will the evolving system be flexible and nimble enough to meet future changes in service needs, funding organization requirements, and funding?
2. Will the system naturally lead to increasing economies of scale and reduction of overall administrative costs?
3. Will the system eventually have the necessary capabilities to effectively manage and minimize risk?
4. Will the system systematically increase the provision of state-of-the-art services?
5. Does the system provide adequate opportunity for priority populations to be better served?
6. Does the system assure the development and success of a safety net at the community level?
7. Does the system include mechanisms to build on existing strengths and eliminate weaknesses?

In the Division's Redesign Plan² (2000), key principles and design dimensions were identified and developed to provide a conceptual framework against which various governance options could be understood. We believe they remain a highly valid analytical tool because they can help the General Assembly and all stakeholders focus attention on some of the most critical decisions regarding system structure and governance in the years ahead. These principles form the conceptual basis of our longer-term recommendations about governance within North Carolina. We fully

¹ This material was originally developed in the context of the Division's 1999 redesign effort.

² These principles are based on and adapted from the DMHDDSAS Redesign Plan 2000.

recognize that many of the system design issues presented are not politically or developmentally appropriate in this phase of reform. However, when considering the longer term evolution of the system, we believe they offer a very useful framework for understanding some of the choices that lay ahead and for longer term planning.

B.1 Exclusivity vs. Competition

Currently, the 39 area/county programs have exclusive rights to obtain the division's state and federal funds to:

- provide DMHDDSAS services; and
- purchase services for the residents of one or more counties.

These exclusive contracts with area/county programs have encouraged relative longevity of contracts and local service coordination, but have also fostered autonomous management practices that may conflict with state priorities.

In general, exclusivity of management operations by an area/county program or other regional entity can be used to promote better control and coordination of community systems. Alternatively, the use of competition in any system can generally create better client choice, lower costs, and higher quality through marketplace conditions rather than through typical governmental process controls. This exclusivity versus competition issue is fundamental to all public systems of care that use nonprofit and for-profit entities in their service system and is highly relevant to North Carolina's system.

If North Carolina wants to create a modern health care system, it is hard to imagine not incorporating the known benefits of competition into the system. Competition is flexible and can be introduced at virtually any level or levels within the purchase of service system. A major challenge is determining which system elements can best be provided in a pure competitive environment, and which are best provided by

an entity that has exclusive rights to provide a particular service. In the current system, for example, the area/county programs operate as exclusive regional management agents, as providers they function in a quasicompetitive environment, and nonprofit and for-profit providers compete to be, in essence, a preferred provider of the area program.

An area program that provides a particular service that is offered by other external providers of the same service clearly has an inherent conflict of interest, and thus a pure competitive environment does not in this case exist. Common sense suggests that even the most ethical of area/county program may find itself unduly influenced by financial, political and/or “business” incentives to utilize its own service over that of other competitors when feasible. We therefore strongly recommend the current movement for current area/county programs to separate the functions of providing services from that of purchasing/managing services to the highest degree possible. Similarly, we fully support current initiatives to create the strongest possible internal “firewalls” possible when circumstances support the provision (rather than purchase) of services and the empowerment of the Secretary to provide careful oversight and management of these situations when needed.

Competition and exclusivity are not mutually exclusive and can exist side by side.

For instance, at some future time, the Division could conceivably:

- competitively bid exclusive contracts for coordinating services, thus allowing the possibility of more effective managers assuming regional management responsibilities over time;
- use longer-term performance-based contracts to promote stability; and
- maintain the recourse to pull or rebid the contract if and when necessary.

In doing so, coordinated system management can be encouraged via exclusivity while improving accountability through competition.

B.2 Local Control/Management vs. More Centralized Control/Management

The decision of whether the control, management, and purchase of provider services of North Carolina's publicly funded behavioral health system should occur at a more local level or more centralized levels is a critical one. A more local level could be counties or management entities organized at the single county or multicounty level. In contrast, a more centralized level could involve management entities organized at the regional or state level.

Some argue that locally controlled management entities are generally better positioned to understand local needs, meet those needs, win local support, and more closely coordinate the provision and purchase of DMHDDSAS services with other local services and agencies. Alternatively, many maintain that larger, more centralized management entities are better positioned to purchase similar services with substantially lower overall administrative overhead costs and provide greater system consistency and uniformity.

In general, different services are best managed by larger entities and some by smaller entities. For instance, because of economies of scale and the difficulties of applying consistent standards across the state, state-of-the-art utilization management (e.g., preauthorization for high cost services requiring close management) should be organized at a statewide level.³ Alternatively, fiscal administration, quality improvement management, personnel management, and other administrative functions are probably most economically and effectively provided at the regional. And other services such as crisis services, are probably best provided by more local entities such as area/county programs or substantial treatment agencies.

³ We support the wisdom behind the recently developed DHHS Request for Proposals (RFPs) for utilization management service.

B.3 Locus of Purchasing

A fundamental question facing planners is the locus of responsibility for purchasing and managing services: Is it best located at the area program level, the counties, regional entities, or the Division? Although those accustomed to more local entities being responsible for purchasing care, states and large regional entities across the country effectively purchase services directly from service providers. Ultimately, we argue that the quality of a service system depends less on the locus of purchase than the soundness of the purchase and management system used and the level of competency of those managing it.

B.4 Flexibility/Dynamism vs. Consistency

System designs can be categorized by the degree to which they encourage flexible and dynamic service delivery. Structured, regulated designs are prescriptive, rule bound, and process-focused. They create greater consistency of processes and services across the state and establish minimum standards, but do so at the expense of creativity and adaptability. Designs that favor flexible and dynamic service delivery tend to be less structured, less regulated, nonprescriptive, and more outcome-focused, but at the expense of consistency and state control.

Unfortunately, North Carolina currently has highly inconsistent processes and services, a relative absence of meaningful minimum standards across the state, and the virtual absence of structural or financial incentives designed to encourage and maximize creative and innovative approaches to managing and providing services.⁴

⁴ As an example, Carolina Alternatives (despite its well-known shortcomings) did indeed begin to create meaningful structural and financial incentives for creative and innovative management and delivery of services. While North Carolina's financial and data systems were not sufficiently developed or adequate to effectively manage this initiative, this in no way diminishes the value of such a model if adequate financial and data systems were to be put in place.

B.5 Contracts with Public Entities vs. Nonprofit or For-Profit Entities

The state system is currently built on a network of 39 public local government authorities (i.e., area/county programs) that both provide and purchase services in defined areas across the state. In their purchase of outside services, the area/county programs subcontract with individual and group practitioners and nonprofit and for-profit service providers.

Public entities have more experience with indigent and seriously impaired people than many for-profit organizations. Public entities are more likely to be closely connected to the public political process, responsive to citizen advocacy and input, and subject to legislative influence and control. However, as public entities, they have no incentive to retain profits, as do most private nonprofits and for-profits, and little external incentive to be efficient.

Nonprofits also have a wealth of experience with indigent and seriously impaired. Nonpublic nonprofit and for-profit entities are usually better funded and have better developed infrastructure. Because they are competitive, they have the experience and motivation to perform well to prescribed expectations.

If the current publicly managed system is maintained, we must ensure adequate state control to avoid past financial problems. If the system is not maintained, we must create tough contracts with the private sector to ensure that public resources aren't diverted from consumers.

If the state is clear about what it expects, either model can be successful. If for-profit entities are used, the contract can specify a limit on profit with additional proceeds either being profit shared and/or reinvested in state-defined services for the next year. This provides incentives to the for-profits to work hard to give back. For-profits are developing public sector expertise.

The money needed for public entities to develop the infrastructure will probably equal or exceed the amount of profits that will be made by the for-profits. We have to ask ourselves one question: Which system would plow reinvestment back in to services faster?

B.6 Entrepreneurial vs. Government-Regulated

The overall financing structure of a health care system determines to a large degree how services will ultimately be provided. Government accounting and other regulatory structures limit flexibility and entrepreneurial activities, but provide the opportunity for more careful regulation and control. However, governmental accounting limits the development or acquisition of capital.

One way to approach this dimension is to assess whether government or privately managed entities can better obtain the desired results given the accounting and financial constraints that each would have.

One reason for drawing attention to this dimension is to note that public entities and private entities are not competing on a level field. Three basic choices might be to:

- choose one or the other as contractor;
- modify regulations to permit public entities more flexibility; and/or
- blend public and private partnerships in such away as to capitalize on the strengths of each.

In particular, new capital is needed for information system development and possibly for development of authorization management system. These would be examples of system elements that might lend themselves particularly well to public-private partnerships.

B.7 Public System as Manager/Purchaser vs. Provider

The state is responsible for providing services on behalf of its residents. A fundamental question facing the state is whether it provides those services directly or purchases them. Currently, the state provides services through the area/county programs and the state institutions, and purchases some community services through the area/county programs.

At one extreme, the state serves as only a purchaser and buys all of its services from a competitive universe of vendors and service providers. At the other extreme, the state directly provides all of its services through various branches such as state institutions and area/county programs. In the middle ground, the state as a purchaser can also provide some services directly, and as a provider can purchase some services directly. The Division intends to clarify its role as a more proactive and discriminating purchaser of services, including administration of management and clinical services.

B.8 Use of Public Entities vs. For-Profits/Nonprofits

As the state's purchaser of DMHDDSAS services, it may purchase (or fund in the case of public entities) services from public entities, nonprofits, and for-profits. Currently, the vast majority of funding and purchasing is directed toward public entities such as institutions and area/county programs. Through area/county programs, nonprofits also receive funding for services. Purchasing services from for-profits expands the universe of potential service providers and provides the state with more purchasing options. However, purchasing from profit-making entities will divert some state resources as profits to these entities rather than as services to consumers. It should be noted that the for-profit entities may demonstrate net benefit to the state by costing less overall than nonprofits.

B.9 Catchment Area Size

Although all agree that some services should be available locally across the state (e.g., assessment, crisis intervention) and local service providers must be responsive to and coordinated with local services, less consensus exists about the ideal number of catchment areas.

One way or another, it is likely that North Carolina's structure will include some division of the state into a specified number of regions or catchment areas to facilitate management and better meet local and regional needs. On one extreme, the state could directly purchase clinical services across the state with the assistance of an administrative services-only organization or a managed care organization. In this situation, management of the program would likely include some form of regional management structure with a handful of management teams based in Raleigh or spread across the state. Alternatively, if the state were to move to a strictly county-based purchase of services, one hundred separate catchment areas would be used. In between these two extremes, a variety of options can be found.

Currently, there are 39 functional catchment areas based on the area/county program structure. Most observers believe that's too many. Some have suggested that natural evolution would lead to somewhere between 25 and 35. Others suggest that the state reduce the number of catchment areas to 15 or 25. Still others have suggested a larger regional structure that would result in 4 to 6 catchment areas.

B.10 Size of Purchasing Unit

Effectively purchasing DMHDDSAS services requires a strong knowledge base about these disorders, the provision of services needed to treat these disorders, and the

best strategies for purchasing, monitoring, managing, and evaluating these services.

Similar to the catchment area discussion, how many purchasing units should there be?

APPENDIX C:

***EXEMPLARY WOMEN'S
SUBSTANCE ABUSE SERVICES
PROVIDED IN NORTH CAROLINA***

APPENDIX C

EXEMPLARY WOMEN'S SUBSTANCE ABUSE SERVICES PROVIDED IN NORTH CAROLINA

North Carolina Perinatal and Maternal Substance Abuse Initiative

North Carolina has become a national leader in providing gender-specific substance abuse services for women and their children. The program:

- offers 20 specialized programs for substance abuse pregnant/parenting women and their children;
- is federally funded to address birth outcomes and family functioning;
- provides comprehensive gender-specific substance abuse services that include, but are not limited to the following:
 - screening
 - assessment
 - case management
 - out-patient services
 - parenting skills
 - residential care
 - referrals for primary and preventive health care
 - referrals for appropriate interventions for the children
- benefits children by facilitating services provided by the local health departments (pediatric care), early intervention programs, and child services coordination services.

Work First Substance Abuse Initiative

North Carolina has become a national leader in creating and implementing an innovative collaborative model to provide effective substance abuse services to welfare families. This initiative:

- is recognized nationally as a best practice model leading to multiple requests for presentations, technical assistance, and information;
- provides early identification of Work First recipients who have substance abuse problems severe enough to impact their ability to become self-sufficient;
- is carried out by the 39 area/county programs statewide;

Exemplary Women's Substance Abuse Services Provided in North Carolina

- out-stations Qualified Substance Abuse Professionals (QSAPs), when possible, in the local Departments of Social Services to provide screening, assessment, referral, and care coordination;
- promotes joint development of a service plan by the QSAP and the Work First case manager; and
- has succeeded in admitting over 4,000 Work First recipients into treatment since its inception.

Division of Social Services (DSS) Collaboration

North Carolina Substance Abuse Services Section has established one of the most progressive relationships with a state Division of Social Services in the country. The SAS Section:

- collaborates with Children's Services in DSS to begin providing substance abuse assessment to substantiated Child Protective Services parents;
- arranges for the QSAPs to provide the same level of services to this population; and
- improves identification of substance abuse, access to treatment, coordination of care, and positive outcomes for families.

North Carolina CASAWORKS for Families Residential Initiative

North Carolina is the first state to implement a substance abuse treatment model statewide that is specifically designed for welfare recipients and their children to achieve self-sufficiency. The CASAWORKS initiative:

- establishes a collaborative project between the Division of MHDDSAS and the Division of Social Services;
- supports eight comprehensive residential substance abuse programs for Work First women and their children;
- ameliorates the impact of welfare reform on substance-abusing families; and
- provides an integrated and concurrent gender-specific substance abuse treatment and job readiness/training/employment program.

Strengthening Families Program (SFP)

North Carolina has begun providing science-based prevention services as an integral part of a family's substance abuse treatment. The Strengthening Families Program:

- supports three demonstration sites in Wake, Buncombe, and Mecklenburg counties;
- provides a family skills training program designed to:
 - reduce risk factors for substance use
 - reduce risk of other problem behaviors in high-risk children of substance abusers including behavioral, emotional, academic, and social problems
- builds on protective factors by improving family relationships and parenting skills, and improving the youth's social and life skills.

APPENDIX D:
SUMMARY OF ON-SITE
REVIEWS OF THE
ADATC PROGRAMS IN NORTH
CAROLINA

APPENDIX D

SUMMARY OF ON-SITE REVIEWS OF THE ADATC PROGRAMS IN NORTH CAROLINA

General Overview and Introduction

There are three state Alcohol and Drug Abuse Treatment Centers in North Carolina: Walter B. Jones—Greenville, Butner—a part of the John Umstead Hospital located in Butner, and Julian F. Keith—Black Mountain. The Health Care Financing Administration (HCFA) certifies all three as Psychiatric Hospitals and thereby meet the rigorous professional standards required of their medical doctors, nurses, counselors, social workers, rehabilitation specialists, and dietitians. The three together provide 170 certified acute rehabilitation beds and 20 crisis/detox beds for a severely addicted and involuntarily committed portion (ASAM III.7) of the population of the state. Though each ADATC has its own unique service delivery model, each provides a core of services essential for the successful rehabilitation of this seriously addicted population. These clinical services include Psychiatric and General Medical services, Psychological Services, Social Work Counseling and Case Management, Group and Individual Counseling by Licensed Addiction Counselors, Nursing, Rehabilitation Therapy, Substance Abuse Education, and Family Education and Support Services. These three programs are essential elements of the state delivery system providing excellent crisis residential treatment services that are cost infeasible at the area level for the client population in question. Specialty programs will be addressed in Question 2.

1. What is your understanding of and previous experience with the delivery of services in the state?

Several factors contribute to the high level of ADATC staff awareness of the nature and health of the delivery system within their respective region:

- In each ADATC some of the professional staff previously worked in area programs.
- All patients must be staffed and referred by an area provider.
- Discharges from each ADATC can be made only after intensive case management, placement planning, and coordination with area staff to the degree possible.

ADATC staff are fully aware of the fragmented and inconsistent nature of the substance abuse delivery system at the area levels across the state. Clearly, one of the significant challenges for the state is the adequate provision of a true continuum of care in each area of the state. One of the greatest frustrations voiced by ADATC staff was the critical absence of so many of the support services vital to the long-term recovery of every individual in this client population.

2. What services are provided at each facility?

For a description of the core clinical services provided by all three ADATCs see the General Overview and Introduction above.

Two specialized and separately funded programs offered at the Walter B. Jones ADATC should be noted. Each serves a statewide population. One is the acute rehabilitation program for the deaf. The second is the five-bed rehab program for mothers with infants and for pregnant females. Both are important elements of the state's delivery system, have dedicated funding sources, and should be protected.

On the other hand, a missing programmatic element of that same hospital is the planned for 10-bed crisis stabilization/detox unit. Hospital administration has converted a rehabilitation wing for such use, giving up much needed rehab beds to do so but has yet been unable to secure funds necessary for the staffing and specialized equipment. This addition is of particular importance in this easternmost part of the state where the 38 counties served are among the most resource poor in the state and services at the area level are fragmented at best. One telling measure of this reality is the estimated 80-bed deficit in detox alone. In addition, there is the continued need to divert substance abuse patients in crisis (the involuntarily committed ASAM III.7 level patient) away from the state psychiatric hospital whenever possible and appropriate.

It should also be pointed out the each ADATC provides rich and abundant intern and research opportunities for multiple disciplines, including nursing, social work, medical doctors, and others.

3. How do ADATC services fit within the continuum of care in North Carolina?

Each time this consultant posed this question to the administrative team at each ADATC the first reply was "What continuum?" I include this in this report because, in order to fully appreciate the role and importance of these three extraordinary programs, it is necessary to point out the fragmented and inconsistent nature of the rest of the system in most areas of the state. As was stated above, area programs are the single points of entry for each of the ADATCs, and there are high levels of communication between staffs of each ADATC and area programs in the case management and staffing processes both prior to patient admittance and at discharge. For the ASAM III.7-level patient needing hospital care and meeting the criteria for receiving state services, the three ADATC hospitals are of critical importance both in terms of quality of services and cost feasibility.

Particularly in view of the declining number of both public and private inpatient treatment programs for the chronic and acute substance abusing population, including the dually diagnosed, the three ADATC programs are essential elements of the state substance abuse system.

4. What associated services are provided locally by area programs or by private providers?

First, it should be underscored that the continuum of services at the area levels vary to a high degree, ranging from fairly good in the more heavily populated areas to almost nonexistent in most parts of the state. It is particularly in the programs most needed by this patient population upon their release from an ADATC that most areas programs do not have the resources to provide intensive case-management, long-term residential programs, and halfway houses—with transportation being the most frequently noted. These programs are similarly important in view of the two to four week waiting period that exists for admittance into the voluntary ADATC programs. It is also important to note that 20 to 30 percent of this patient population are homeless to begin with.

The programs that are offered in most areas are outpatient counseling and minimal case management, both of which are most inadequate with this population. Private providers not under contract with area programs are simply nonplayers in addressing these needs.

However, it should also be noted that some, though relatively few, area programs do, in fact, offer an array of support services necessary for the long-term recovery of this population. These are in the larger metropolitan areas where county governments are more financially invested in substance abuse programs and also are areas more likely to have a more adequate array of services for the homeless, including housing and job training and placement.

5. In the view of the administrative teams at each ADATC, why does the state provide these services at the three Treatment Centers rather than at the area levels?

As stated above, the intensive nature and cost of providing this level of care is simply infeasible at the local level. Further, many private providers throughout the state have gone out of business over the last few years for multiple reasons. The few remaining are simply not interested in serving this population, particularly given the capitation rate the state is willing to offer. Most general hospitals also believe this population is best served in a specialized program and setting.

6. What services most needed by this patient population are inadequate or unavailable at the local level?

The most frequently mentioned service not available in almost every area is intensive case management. Other services cited in order of importance were: long-term residential, specialized, and consistent programs for the dually diagnosed; transportation; family counseling; other housing (such as halfway houses, work farms, and other therapeutic communities); job training and placement; and detox programs adequate for the treatment of this population.

7. What is needed to fill the gaps in service across the state?

This, of course, is the \$64,000 question. In view of the many times this has been the subject of studies and serious discussions at all levels of government during the last few years, recommendations will be as succinct as possible.

First, there is the need to adequately redefine the *continuum of care*, but to do so quite apart from the question of what we can afford. It will then be necessary to calculate the costs of providing such a continuum to all the citizens of the state. Further, such calculations should also include an analysis of the costs associated with not providing such a continuum, including a realistic appraisal of who (what institution) is bearing which costs. This, of course, is more difficult to accomplish, but without these calculations it is very difficult to address fairly and successfully the issues of governance and funding. And in view of the projected shortfalls in state revenues, these issues become even more sharply focused. In one way or another a joint state/local government approach will be required in order to move forward in the humane and cost-effective delivery of these services. This will certainly require a new model of collaboration between state and local government policy makers as well as the aforementioned calculations.

It is perfectly clear that the system as a whole is underfunded to a great degree. In addition, there are clearly significant inefficiencies throughout the system (which will be addressed in the conclusion).

Aside from that, it will continue to be important to address the need for the services that are essential in the recovery of the ADATC population (listed above).

8. Do the ADATC facilities impact service delivery?

Each of the three facilities is more than adequate for the creation of a therapeutic environment. They are comfortable and have ample space. The campuses at Walter B. Jones and Julian F. Keith (Greenville and Black Mountain) are more spread out and isolated and provide a less institutional look and feel than Butner, which is part of the Ulmstead Psychiatric Hospital. On the other hand, Butner has certain programmatic advantages, the most important of which is the rapid transfer of crisis patients admitted to the Psych Unit in error.

9. What ADATC facility needs impact the delivery of services?

At the Butner ADATC service delivery is clearly impacted by inadequate air conditioning. This can best be addressed by the replacement of the Central Plant chiller (\$4,351,000). Other needed improvements are listed in the Department's Capital Budget requests.

At Walter B. Jones ADATC, in addition to the staff needed to man the crisis unit (\$816,123) for which space is already available, there still remain equipment and remodeling needs (a minimum of \$100,000). Another issue affecting staff is security. Nurses, already overburdened due to staff vacancies (five) are having to make security rounds. This service should be performed by personnel hired for this purpose (\$72,000).

The addition of surveillance cameras and monitors should also be strongly considered (\$5,000).

10. Do ADATC administrative teams have any other recommendations for improvements in the organization, management, or operations of the service delivery system?

In addition to filling the gaps in the continuum of care referenced above, the three teams focused a great deal of attention on the need to standardize the patient assessment process. The duplication of effort as a patient moves from provider to provider and from category to category is a huge drain of time and energy throughout the system. There is also the very apparent need for better standardized training at all levels in the assessment and treatment of the dually diagnosed patient. Much of the frustration at the ADATC level centers around this issue. Clinicians especially, including Psychiatrists, are asking for more and better standardized training at all levels of the delivery system. One physician quote helps sum this up. "Three separate psychiatrists will look at the same patient and invariably come up with three completely different diagnoses." That may well be the nature of the beast. But there was among these doctors and clinicians a strong feeling that the situation can be greatly improved.

It is important to point out that staff at each of the facilities feel very positive about their own programs and management. There is a strong and well-articulated sense of pride about these programs and the quality and value of the care they provide. These are not the faces of the tired and burned-out staff one frequently sees at the local level. This is undoubtedly an important element of the therapeutic milieu. It is also important to restate their concern for the frustrations experienced by so many administrators and service providers at the local level. They expressed their belief that their issue is not with the Department or the management of resources at the area level. Their primary frustration is the underfunding of the system as a whole.

11. Concluding observations

The three ADATC acute residential treatment programs fill a void in the state delivery system that has long been recognized by area and state practitioners and policy makers as critical. The success rates of these programs are difficult to measure given the absence of so many critical after-care programs in so many areas of the state and given the lack of available and reliable follow-up data. However, a general impression can be drawn from several data sources: high patient satisfaction ratings, and strikingly low recidivism rates, which themselves are often the result of multiple and difficult to determine factors. Several significant success factors can be noted: first, a highly skilled and dedicated professional workforce; second, programs effectively tailored to the needs and characteristics of each region; third, a voluntary patient population who, though seriously addicted and who had been unsuccessful in previous treatment attempts, was significantly invested in the goal of recovery; and finally, facilities adequate for the creation of a therapeutic environment.

Each ADATC has given up acute residential treatment beds in order to make space available for 10-bed secure crisis stabilization/detox units for the involuntarily committed

patient (ASAM-III.7). This was driven primarily by the need to take pressure off the state hospitals, which were admitting far too many involuntary patients whose primary diagnosis was substance abuse. While it is clear that the two crisis units now in operation (Butner and Walter B. Jones) have filled a need in their respective regions, it is not clear that the original intent has been realized to the extent envisioned. Part of this is due to the rapid reduction in placement alternatives for this population across the state over the last three years. Part is due to the lack of placement alternatives for the ASAM III.9 and above patient, whom the ADATC programs were not designed to accommodate and for whom the state hospitals may be the only alternatives. And, finally, part of this is due to the ongoing need for better and more standardized training in patient assessment at all levels.

With the above-mentioned reduction of acute residential treatment beds, the inevitable increase in waiting periods has occurred (two to three weeks on average but frequently more). Consequently, many who need this service and are willing to be admitted to an ADATC cannot maintain sobriety and disintegrate before their scheduled admission date. Adding back the previously taken away treatment beds is certainly one alternative to address this situation. However, providing resources for additional services at the area level appears to be the better solution for this patient population in order to address their needs both prior to *admission* as well as upon release.

The final area recommended for comprehensive study and future funding consideration is the area of telecommunication technology. Much, if not most, of the current data collection and exchange requirements could be done much more efficiently and effectively via the computer. The same can certainly be said with regard to training. Even in view of the strict requirements regarding patient confidentiality, Internet and intranet solutions are available and should be explored. The barriers making this pursuit difficult are cultural more so than legal, technological, or economic.

APPENDIX E:

***DIX DOCTOR PRESSES FOR WAKE
ALCOHOL TREATMENT CENTER
(ARTICLE)***

APPENDIX E

newsobserver.com

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Dix doctor presses for Wake alcohol treatment center

By BONNIE ROCHMAN, Staff Writer

RALEIGH — The doctor in charge of psychiatric care at Dorothea Dix Hospital is lobbying Wake County to build a locked alcohol treatment center where Wake residents who he says are not mentally ill can go instead of taking up space at the understaffed state mental-health hospital.

About half of Dix's patients come from Wake, and up to half of those have substance-abuse problems, Dix's clinical director, Brian Sheitman, said Wednesday. About 20 percent of Dix admissions are drunk and don't need psychiatric care, Sheitman said. But they are bundled off to Dix, in part because Wake has no appropriate treatment facility. Treatment suffers at Dix, which is under scrutiny from the U.S. Justice Department for a struggle with understaffing, juggles psychiatric care with nonpsychiatric detoxification, Sheitman said.

"We need this desperately," Sheitman said. "In order for Dix to be able to function as a psychiatric hospital, we need some help. We can't do both missions."

The question of who treats alcoholics is only one part of a complex puzzle involving the state, the county, mental-health workers and law-enforcement officials, who are required by law to transport people involuntarily committed to mental hospitals.

For months, Wake and Dix officials have been seeking a solution to Dix's overcrowding, looking into community treatment as an alternative for chronically mentally ill patients. In the past three years, admissions have jumped 800 to about 4,500 people a year, 1,900 of them from Wake.

Many of those with drug or alcohol addictions need to be placed in a locked detoxification facility until they sober up and can be directed to rehabilitation programs, Sheitman said, but Wake County has none to offer. Locked units help ensure that patients won't harm themselves or wander off the unit and harm others.

Sheitman planned to petition county commissioners at their Sept. 17 meeting for a locked treatment center, but the county manager's office suggested he first make his pitch to Wake Human Services.

Michael Weeks, chairman of the county commissioners, said the treatment Dix provides is invaluable. He said commissioners are awaiting a report from the Human Services board about how best to treat alcoholics, and where.

Human Services is already familiar with Sheitman's concerns.

Peter Morris, the agency's medical director, said he knows Dix is struggling. But he said Wake sends to Dix only those alcoholics who have diagnosed mental illnesses or those who are threatening to harm themselves or others. Morris estimated Wake sends about 400 intoxicated people to Dix each year, all of whom also have mental-health diagnoses. Dix pays for their care.

For years, Morris said, Dix didn't object to accepting alcoholics for detoxification. More recently, Dix has made clear that this policy has changed, he said.

In response, Human Services is meeting with hospitals in Wake County to see whether they would be willing to offer locked detoxification. Wake's 25-year-old Alcohol Treatment Center has eight detoxification beds and 24 inpatient beds, all unlocked. Wake also contributes to The Healing Place, a voluntary recovery and rehabilitation program for alcoholics.

APPENDIX E (Continued)

"We've done an amazing amount of investment in this population over the years," Morris said. "What's changed is Dix's decision to not admit these acutely alcoholic patients."

At Sheitman's direction, Dix started this summer refusing admission to people with blood-alcohol levels greater than 0.08 percent in an attempt to divert alcoholics who he said clearly are not mentally ill. Admissions have dropped 15 percent to 20 percent since the new rule, Sheitman said, and most of those admitted now are not drunk.

But Dawn Bryant, attorney for the Raleigh Police Department, said the rule has created new problems for officers, who no longer know where to take intoxicated people who have been involuntarily committed.

Sheitman said police officers will sometimes sit with them for hours in local emergency rooms -- many of which don't want to admit them either -- waiting for alcohol to fade from their bodies.

"As soon as these people sober up, they don't really need to be in a locked psychiatric hospital," Sheitman said.

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[[BACK](#)]

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APPENDIX F:

***LEVEL IV:
PROJECTIONS OF LEVEL IV
HOSPITAL-BASED
DETOXIFICATION SERVICES)***

APPENDIX F

LEVEL IV:

PROJECTIONS OF LEVEL IV HOSPITAL-BASED DETOXIFICATION SERVICES

North Carolina does not now generally provide appropriate and safe detoxification services for individuals who have complicating medical conditions or complications. The detoxification of these individuals must be managed in a hospital setting to ensure safe withdrawal, and ideally should be in hospital-based substance abuse detoxification programs (there are now very few, if any, of these in North Carolina).

Because of the general lack of state experience with this level of care, projections of future utilization of this needed service in the reformed system must be determined using the best information available. Consequently, our overall projections of utilization are based on assumptions about the percentage of detoxifications that require a hospital environment, the expected average length of stay at such a setting, and the expected cost of services. These assumptions are that:

- About 10 percent of those individuals presenting for detoxification will have medical conditions or potential complications that require a hospital level of care (Level IV) to ensure safety of the individual.¹
- The average length of stay of a Level IV detoxification will be 3.0 days.²
- The cost of Level IV care will be about \$500 per day.

Based on these assumptions, our analysis projects that there will be about 2,200 Level IV detoxifications a year in North Carolina once the reform process is fully implemented. This figure is based on the following experience and assumptions.

- **We project about 600 SAS-purchased Level IV services statewide per year.**

SAS now purchases \$300,000 a year of Level IV services, resulting in about 200 annual detoxifications, in the Western Region. This appears to be an appropriate amount based on numbers needing services. SAS purchases these services in no other region at this time due to financial limitations. Extrapolating the Western Region's experience across the state to the other three regions suggests that there will be about 600 additional detoxifications statewide purchased by SAS in this same manner in the reformed system.

¹ Based on Massachusetts' utilization review experience over four years, in which there was full access to Level III.7-D and Level IV detoxification services.

² This is assuming that utilization is managed and that efficient step-down triage capabilities exist.

- **We project about 300 Level IV detoxifications a year resulting from the 3,000 admissions (i.e., 10%) being diverted from the state psychiatric hospitals to the ADATCs.**

We can confidently project the need for about 300 Level IV detoxifications from the 3,000 diverted admissions from the state psychiatric hospitals to the ADATCs based on the experience that about 10 percent of individuals needing detoxification require Level IV hospital-based detoxification.

- **We project about 300 Level IV admissions now commonly occurring at general hospitals.**

Currently, SAS reports that about 1,000 detoxifications are occurring annually outside of normal referral processes at Cumberland General Hospital (e.g., showing up at emergency room, walking in off the street). We were told to assume that there are about six hospitals across the state treating the same population in the same situations. Of these estimated 6,000 detoxifications, we estimate that about 15 percent (300) will require a hospital level of care (Level IV) and that 85 percent could be treated safely in a Level III.7 detoxification program.

This 15 percent figure is based on the known fact that about 10 percent of all detoxifications require a hospital level of care, and an additional 5 percent is based on the probability that some individuals self-refer themselves to the hospital based on known need. Consequently, we project that there will be about 300 Level IV detoxifications annually from the pool of individuals now being detoxified outside of the system in general hospitals.

- **We project about 1,000 Level IV detoxifications a year as a result of systemic reform-related improvements in access to services in the overall system of care.**

Currently, SAS estimates that about 1,000 Level IV detoxifications a year are directly or indirectly associated with or due to Area Program awareness and involvement. This figure roughly includes those who are detoxified in the Western Region hospitals and those who are sent to the State Hospital. Those independently accessing services through general hospitals outside of any Area Program involvement are not included.

These 1,000 Level IV detoxifications are occurring in a system where some Area Programs generally do a good job of ensuring good access to Level III.7 and Level IV services, some to a moderate job, and some do a poor job. Interviews with SAS staff and other stakeholders suggest that about half the Area Programs are doing a satisfactory or moderate job of providing good access to

Level IV: Projections of Level IV Hospital-Based Detoxification Services

a continuum of substance abuse services, about a quarter are doing a good job, and about a quarter are doing a poor job.

For the purposes of this analysis, we assume that those doing a good job are triaging about 75 percent of those that should be referred to Level IV, those doing a moderate job about 50 percent, and those doing a poor job about 25 percent.

Meaningful systemic reforms will increase access to needed services across the board and hold LMEs accountable for providing good access to crucial services (such as Level IV detoxification, which saves lives). We can assume that those with the poorest referral will be forced to dramatically increase services, while those with good or moderate triage rates will have to increase access to a lesser degree.

With half of the Area Programs currently triaging half of the individuals they should, a quarter triaging 75 percent, and a quarter triaging 25 percent, the overall average of the state is that half of all those who need Level IV services are getting them. Assuming the state intends to triage 100 percent of those requiring Level IV services to Level IV services in a reformed system, it will result in the doubling of the current rate to 2,000 a year, a 1,000 detoxification a year increase.

Overall, adding these four above projections together, we project that there will be 2,200 publicly funded Level IV detoxifications a year. The rate of increase should be relatively fast for SAS direct purchases and state hospital diversions, with a slightly slower rate for current general hospital admissions and those resulting from systemic reform.

APPENDIX G:
CONTINUUM OF SUBSTANCE
ABUSE RESIDENTIAL SERVICES

APPENDIX G

CONTINUUM OF SUBSTANCE ABUSE RESIDENTIAL SERVICES

The incidence of homelessness among substance abusers involuntarily committed to state psychiatric hospitals is a concurrent problem that must be addressed in local alternative planning. Regardless of the length of stay, when individuals with few if any internal or external supports are released to their previous environment, the potential for relapse and return to a life-threatening status is often inevitable. These individuals have for years been referred to as revolving door alcoholics and drug addicts. The success of any substance abuse recovery effort has long been tied to the presence of a safe drug-free living environment. Likewise, the success of any efforts to adequately address the needs of the involuntarily committed substance abusing population is even more contingent on the provision of housing supports. Some recommended models are:

- **Substance Abuse Halfway Houses (Level III.1).** This traditional level of housing care is viewed as essential for individuals who have made significant progress in their recovery and who are employable. The estimated per-day bed cost for this service is \$37 a day per individual for a total cost of \$1,110 per month.
- **Substance Abuse Host Homes (Level III.3).** Families from the community at large are contracted to provide a private room, meals, and transportation to recovery meetings and treatment sessions for identified clients. Homeless clients who are engaged in treatment are provided with the supports they have lost and are gradually reintegrated into society in a natural home environment. The estimated per-day bed cost for this service is \$27 a day per individual for a total cost of \$800 per month.
- **Substance Abuse Extended Care Facilities (Level III.5).** An innovative community model brings together a mixed homeless population: those in recovery along with those still drinking and using drugs. Through their interaction in the residential community, those in recovery act as role models and mentors for those who are still abusing drugs and alcohol but are becoming open to recovery. The program includes a combination of sobering up in a nonmedical detoxification center, instilling hope, providing tools and skills for continued recovery, and continually providing support until a self-sustained clean and sober lifestyle is achieved. This is accomplished with a unique mutual help community. The per-day bed cost for this service is approximately \$25 a day per individual for a total cost of about \$750 per month.
- **Substance Abuse Therapeutic Communities (Level III.5).** These long-term programs have reemerged over the past few years and offer a unique treatment approach to substance abusers that may have failed in a traditional treatment approach. Residents stay in the program for two years or more and work in community-operated

business enterprises. The proceeds of the businesses are reinvested in the operation and support of the facility and program. The patient profiles include many individuals with co-occurring substance abuse problems and nonmajor mental illness and those with criminal justice involvement. The approximate per-day bed cost for this service is \$45 a day per individual for a total cost of \$1,350 per month.

- **Medically Monitored Detoxification and Rehabilitation (Level III.7).** Medically monitored detoxification and rehabilitation in local communities must be available for substance abusers with or without medical problems that require brief stabilization and detoxification. Once detoxification has occurred, assessment should focus on need for continued treatment either in state psychiatric hospitals, an ADATC, or in the community.¹
- **Acute Psychiatric Hospitalization (Level IV).** A hospital-based substance abuse detoxification program or acute psychiatric hospitalization must be available for those patients identified as being medically fragile/complicated (e.g., diabetes) or dually diagnosed with both mental and addictive disorders. Once detoxification has occurred, assessment should focus on the need for continued hospitalization and then placement in appropriate step-down programs.

¹ It is essential that the continuum of care for the initial phase of an individual's detoxification is available at three distinct care provision levels (e.g., medically managed, medically monitored, and clinically managed). The continuum will include acute care facilities that will admit and initiate treatment for medically fragile patients, those with preexisting medical conditions that may complicate detoxification, those threatening harm to themselves or others, and those who have a history of assault or property damage during previous withdrawal from substances. All of these facilities may have 23-hour observation services as well as longer term treatment (e.g., 5 to 14 days).

APPENDIX H:
SUMMARY OF OUTCOMES IN THE
NORTH CAROLINA TREATMENT
OUTCOMES & PROGRAM
PERFORMANCE SYSTEM

APPENDIX H



Summary of Outcomes in the North Carolina Treatment Outcomes & Program Performance System NC-TOPPS July 2000 - June 2001 State-Initial Assessment

Total

6585 admissions are reported for the fiscal year 2000-2001.

Gender - Question 10:

53.8% Male 43.3% Female 2.9% Missing

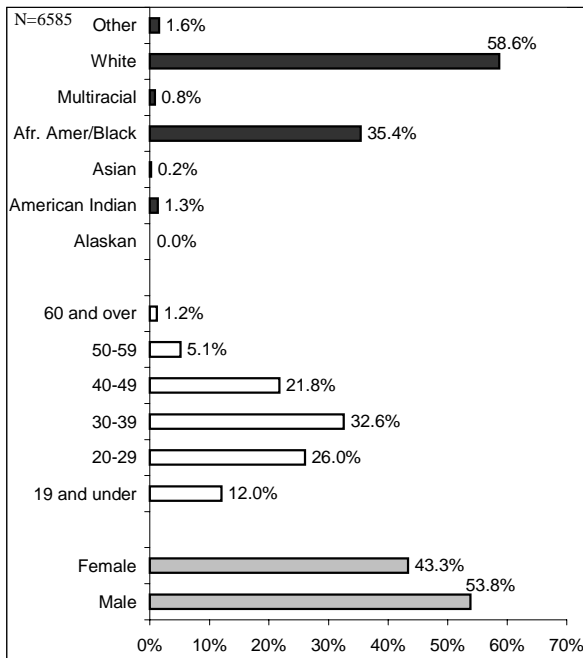
Race - Question 15:

0% Alaskan 1.6% Other
1.3% American Indian 0.8% Multiracial
0.2% Asian 58.6% White/Caucasian
35.4% Afr. Amer./Black 2.1% Missing

Age - Question 4:

12.0% age 19 and under 21.8% ages 40-49
26.0% ages 20-29 5.1% ages 50-59
32.6% ages 30-39 1.2% age 60 and over
1.4% Missing

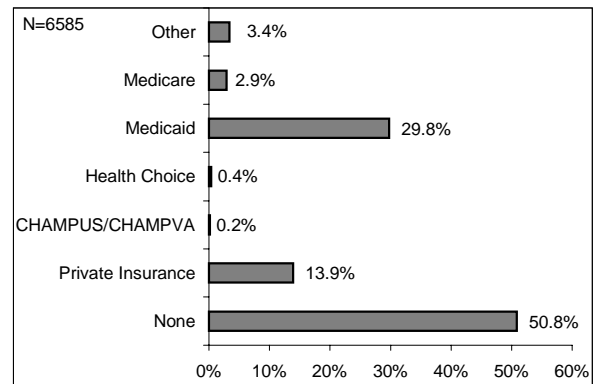
Graph 1-1: Demographics



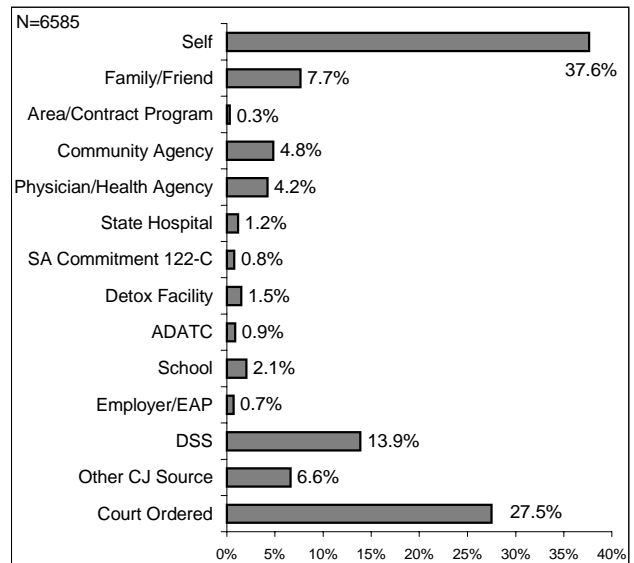
Other Characteristics- Questions 22,17,& 25:

45.2% (2978 of 6585) reported never having been married.
78.5% (5169 of 6585) have less than a High School^A education.
48.0% (3160 of 6585) have children under the age of 18.

Graph 1-2^B - Health Insurance- Question 16:



Graph 1-3^B - Referral Sources - Question 13:



Note: Data on this page is gathered only from initial assessments with the today's date of July 1st through June 30th. Question numbers refer to the 7/1/00 revised initial assessment. Missing values are included in the percentages. Percentages may not equal 100 due to rounding.

*No data is reported for variables with fewer than 10 clients.

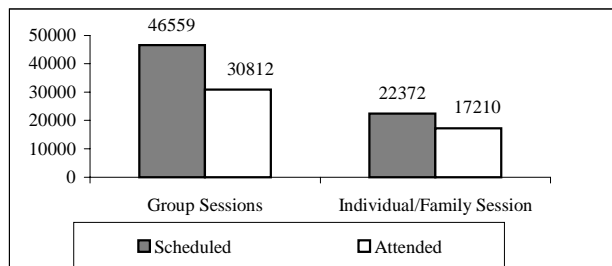
^ALess than High School education does not include clients that have a diploma or GED.

^BGraphs 1-2 & 1-3 refer to a 'mark all that apply' question therefore the percentages do not add to 100%.



**Summary of Outcomes in the
North Carolina Treatment Outcomes & Program Performance System
NC-TOPPS
July 2000 - June 2001
State-Update Assessment**

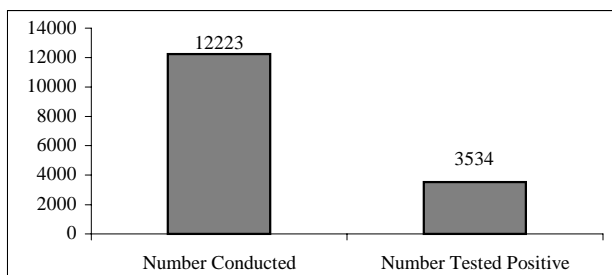
Graph 2-1^C - Total treatment participation since the last assessment - Question 16:



46,559 group sessions were scheduled and 30,812 (66.2%) were attended.

22,372 Individual/Family Sessions were scheduled and 17,210 (77.0%) were attended.

Graph 2-2^C - Total number of drug tests and total number of positive tests since last assessment - Question 17:



Out of 12,223 tests conducted, 3,534 (28.9%) tested positive.

Support and Motivation^C - Questions 40, 20, 35, 46 & 33:

5.3% (184 of 3,475) clients used a needle to inject a drug.

65.6% (2,280 of 3,475) clients' families have been in face-to-face contact with program staff concerning treatment planning and/or services.

12.7% (441 of 3,475) clients have a sponsor.

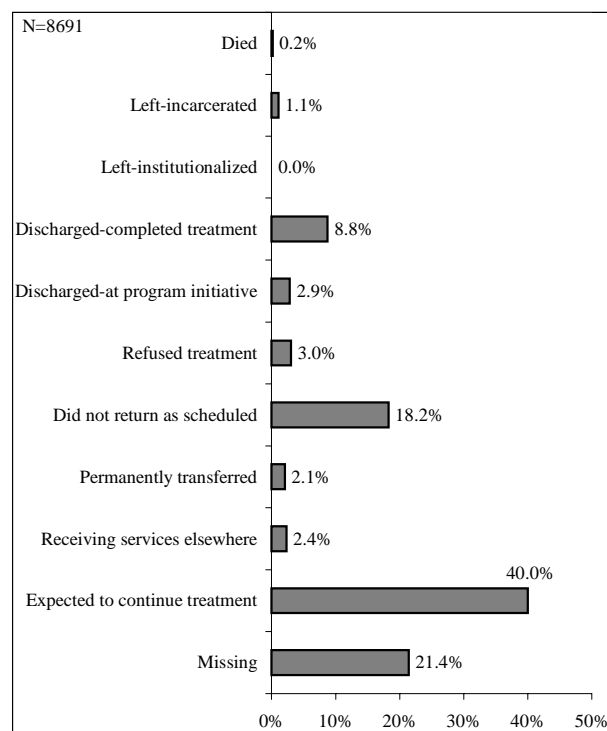
31.5% (1,096 of 3,475) clients use faith, prayer, religious or other spiritual involvement a lot to help them in their daily living.

Note: Data on this page is gathered only from update assessments with the today's date of July 1st through June 30th. Question numbers refer to the 7/1/00 revised update assessment. Missing values are included in the percentages. Percentages may not equal 100 due to rounding.

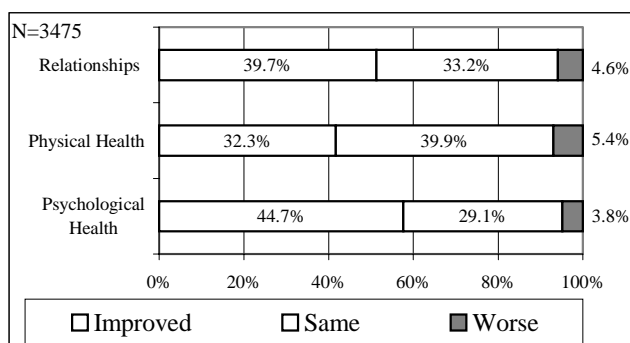
*No data is reported for variables with fewer than 10 clients.

^C Data includes only currently active clients.

Graph 2-3 - Current Treatment Status - Question 11:



Graph 2-4^C - Situation Improvement - Question 49:



39.7% (1,397 of 3,475) clients have improved their relationships.

32.3% (1,122 of 3,475) clients have improved their physical health.

44.7% (1,554 of 3,475) clients have improved their psychological health.



Summary of Outcomes in the North Carolina Treatment Outcomes & Program Performance System NC-TOPPS

July 2000 - June 2001

State-Progress Tracking Client Record Numbers

Behavior Trends Comparing First Assessment and Second Assessment:

Tobacco Use: 63.2% clients at first assessment and 64.9% at the second assessment smoked or used tobacco.

Sexual Activity: 29.6% at first assessment and 8.1% at second assessment participated in sexual activity without using a condom.

Physical Abuse: 6.2% at first assessment and 2.8% at second assessment have been physically hurt by a spouse/partner/adult.

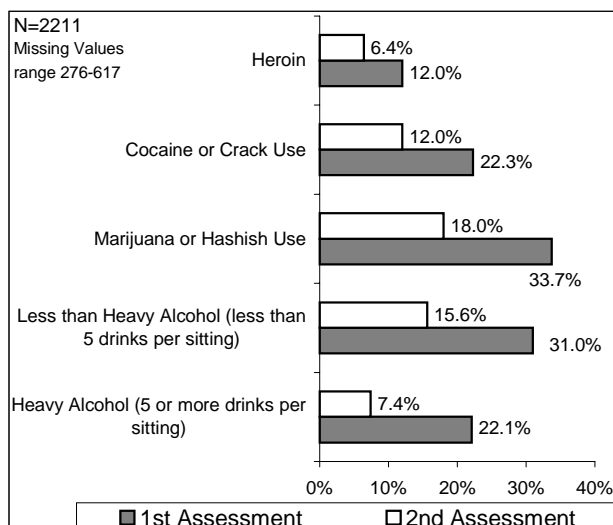
Suicide: 11.7% at first assessment and 5.8% at second assessment have had thoughts of suicide.

Support Groups: 28.1% at first assessment and 43.8% at second assessment have participated in recovery-related support/self-help groups.

Family support: 60.2% at first assessment and 56.7% at second assessment have had a lot of support from family/friends.

Employment: 32.3% at first assessment and 34.5% at second assessment were working full time.

Graph 3-1^D - Last 3 Month Drug Use First and Second Assessment:



Explanation: 22.1% (488 of 2211) at first assessment and 7.4% (164 of 2211) at second assessment used heavy alcohol.

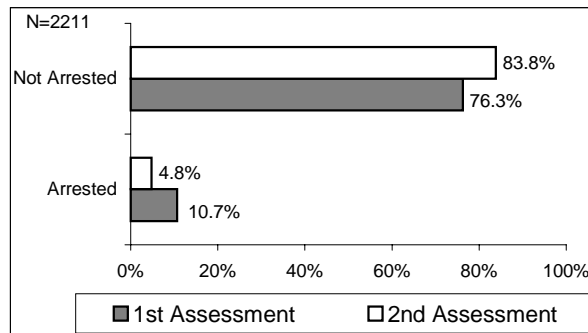
Note: The data represents the behavior trend at the first and second assessment regardless if it was an initial or update assessment. The data includes initial and update assessments with the today's date of July 1st through June 30th. Missing values are included in the percentages. Percentages may not equal 100 due to rounding.

*No data is reported for variables with fewer than 10 clients.

^BGraph 3-3 refers to a 'mark all that apply' question therefore the percentages do not add to 100%.

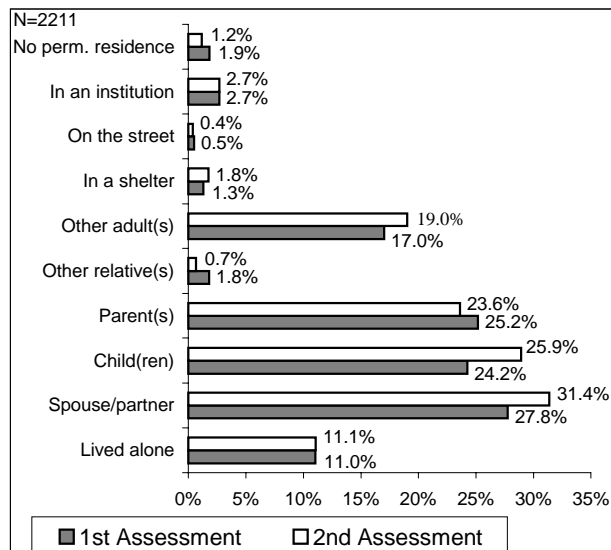
^CClients may use more than one drug, therefore the percentages will not add to 100%.

Graph 3-2 - Arrest trends including any DWI or Probation/Parole violation comparing First and Second Assessment:



Explanation: 76.3% (1686 of 2211) at first assessment and 83.8% (1853 of 2211) at second assessment were not arrested for any offense including DWI or probation/parole violations.

Graph 3-3^B - Living Status Comparing First and Second Assessment:

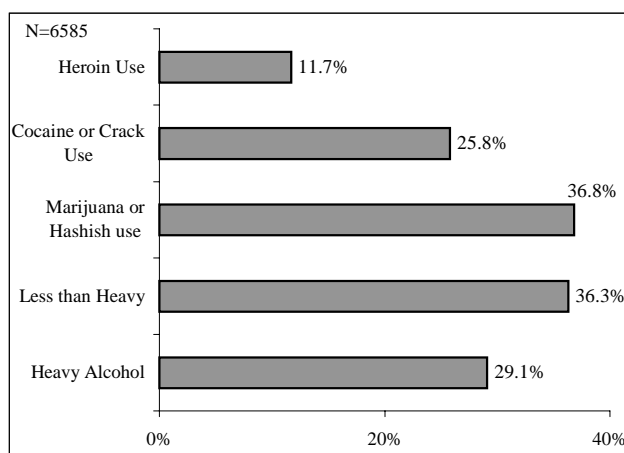


Explanation: 11.0% (244 of 2211) at first assessment and 11.1% (245 of 2211) at second assessment lived alone.



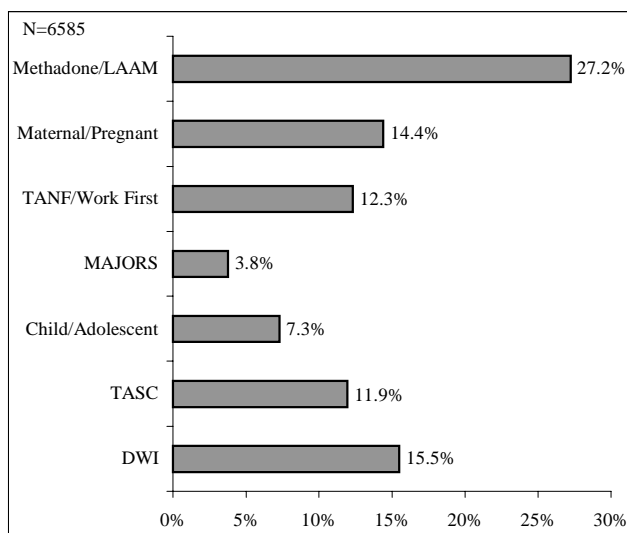
**Summary of Outcomes in the
North Carolina Treatment Outcomes & Program Performance System
NC-TOPPS
July 2000 - June 2001
State Level Comparison**

Graph 4-1^D - Past 3 Month Drug Use at Initial Assessment:



Explanation: 29.1% (1916 of 6585) of total State clients used heavy alcohol at initial assessment.

Graph 4-2^B - Eligibility & Special Populations at Initial:



Explanation: 15.5% (1020 of 6585) of total State clients are DWI eligible.

Note: The data includes initial and update assessments with the today's date of July 1st through June 30th. Missing values are included in the percentages. Percentages may not equal 100 due to rounding.

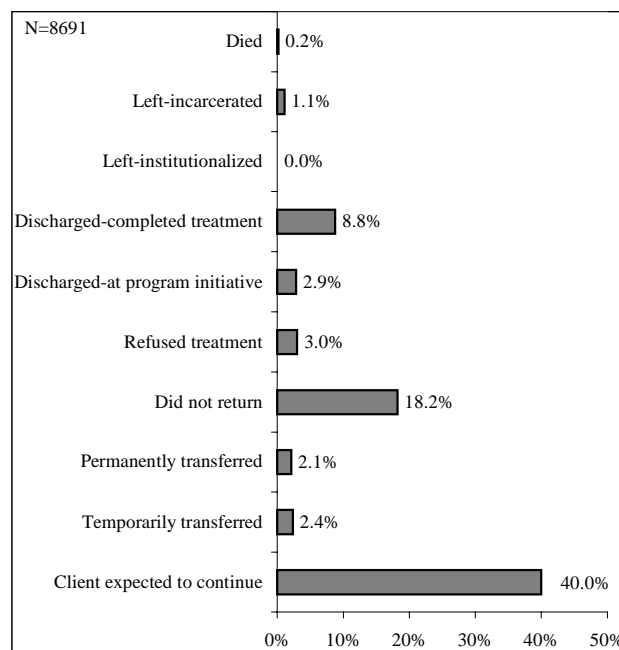
*No data is reported for variables with fewer than 10 clients.

^BGraph 4-2 refers to a 'mark all that apply' question therefore the percentages will not add to 100%.

^CData includes only currently active clients.

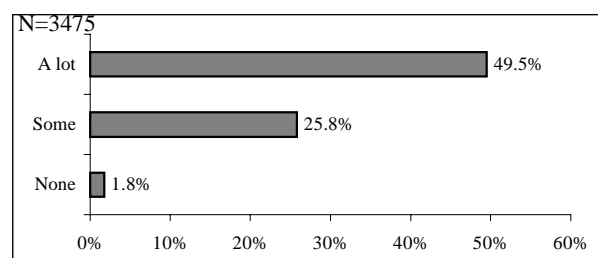
^DClients may use more than one drug, therefore the percentages will not add to 100%.

Graph 4-3 - Current Treatment Status at Update:



Explanation: 40.0% (3475 of 8691) of total State clients are expected to continue services.

Graph 4-4^C - Clients' response to how helpful the program services have been in improving the quality of his/her life at Update:



Explanation: 1.8% (61 of 3475) of total State clients responded that they had no help from the program in improving the quality of their life.

APPENDIX I:

***ARRAY OF SYSTEM OF CARE
SERVICES—DEFINITIONS***

APPENDIX I

ARRAY OF SYSTEM OF CARE SERVICES—DEFINITIONS

CATEGORY 1: Core Services

All North Carolina youth and families must be able to access these services. There are 1,851,191 youth/families in North Carolina with youth under 18 years old. Consequently, on average, each Local Management Entity (LME) will have about 185,000 youth/families. For the purposes of this report, we assume that North Carolina will have 10 LMEs.¹

1.1 Family Advocacy and Support—Services assist the child/youth and family in understanding and coping with the family stressors associated with the child's mental health need/improvement. The services could be provided singly or in combination with immediate or extended family (or an individual acting in the role of family). These services are most appropriately delivered through family members/family organizations and may include, but are not limited to:

- coaching and assisting the family in increasing its knowledge and awareness of its child/youth's needs;
- the process of interpreting choices offered by service providers;
- explanations and interpretations of policies, procedures, and regulations that affect the children/youth and family; and
- parenting skills training and promotion/support to families forming and leading support groups.

1.2 Education/Consultation/Prevention Services—Services or planned activities, including education or other measures intended to promote mental health/quality of life, elevate psychosocial functioning, and prevent or reduce the prevalence, severity, and/or consequences of emotional disturbances and/or functional impairment for children, youth, and families. Outreach services actively target primary care settings, schools, and other neighborhood/community locations.

1.3 Care Coordination—Coordination of care and advocacy to enable children, youth, and their families to access services and benefits to which they may be entitled. Coordination should include attention to the development and strengthening of community resources to help families help their children avoid behavioral health problems. Case Consultation allows different systems to link up and determine the best course of treatment and/or referrals for a young person.

¹ All figures are based on 10 Local Management Entities (LMEs) across North Carolina. Please see note on p. I-16 for data sources.

Case management support (non-Medicaid) includes:

- Additional case management activities not covered by Medicaid, but reimbursed through Community Treatment Services Program. These activities should be billed to Case Management Support, and include travel related to child and family (to and from client location, and to and from client related meetings). If more than one client is involved, travel time is to be distributed equally among clients.
- Time spent in preparing, dictating, or writing documentation for record keeping purposes, including Service Activity Log. Documentation to be signed by staff person providing the service, specifying child, activity, and amount of time on activity.
- Time spent in general advocacy; informing others about the client; supervising activities of volunteers or contracted personnel who provide services to clients.
- Supportive counseling and crisis stabilization.
- Time spent in assessing referrals for At-Risk Children's funding, prior to determining that the child meets criteria, is limited to five hours per child referred per year.

These services include case conferences, treatment planning and conferences, and case consultations in conjunction with the client, his/her legal guardian, and other stakeholders. For CTSP purposes, documentation is still required in the support category even though it is not a Medicaid-billable service. The documentation should be signed by the staff person(s) providing the service and should specify the activity that occurred, what child the activity relates to, and the amount of time that was spent in the activity.

1.4 Outpatient Screening—Screening is a triage service that can be provided by telephone or face-to-face to active clients as well as to nonclients. Screenings generally are performed when a child first comes into contact with an agency or individual professional. A child may be screened up to six visits. Screenings can, and should, occur in homes, schools, doctor's offices, and pastoral counseling centers, for example.

1.5 Crisis Services: Phone/Walk-In/Mobile/Residential/Respite/Hospitalization—These services include the following:

- **Telephone Crisis Services**—Emergency telephone services available 24 hours a day to assess the nature and severity of mental health and substance abuse crises, to determine the need for face-to-face emergency services, and to provide crisis intervention, support, and referral for appropriate services and support. A toll-free number should be widely publicized to ensure timely access.

- **Walk-In Crisis Services**—Emergency services available 24 hours a day at facilities/locations including clinics, hospital emergency rooms, and others to provide prompt, face-to-face assessment of the nature and severity of mental health and substance abuse crises and to provide crisis intervention, support, and referral for appropriate treatment and supports.
- **Mobile Outreach**—Emergency services available 24 hours a day to provide on-site intervention and support in the settings and locations in which the crisis is occurring. Includes assessment of the nature and severity of mental health and substance abuse crises, crisis intervention, referral for appropriate treatment, and support.
- **Crisis Residential Stabilization Services**—Short-term, acute assessment and treatment/support for purposes of crisis intervention and stabilization for children and youth experiencing crises related to mental and substance abuse problems. Includes services provided in a variety of settings including hospitals (i.e., for a period less than 24 hours), and other residential settings including family treatment homes, group crisis residences, crisis stabilization units, and others that provide structure, supervision, and a variety of therapeutic interventions.
- **Crisis Respite**—This service is provided in a consumer's home or in another setting to individuals experiencing crises, to both alleviate the stress on the person in crisis and to provide for the needs of that individual and/or family or other routine caregivers. The service should be offered, wherever possible, to families who have a non-MHDDSA crisis and the consumer needs care during his/her family's crisis (e.g., a medical procedure that requires hospitalization of a consumer's caregiver). Access to respite care is preferable on a 24/7/365 per year basis.
- **Emergency Hospitalization**—Inpatient hospitalization is the level of service that provides the most clinically intensive treatment along with a level of patient management sufficient to meet the needs of severely psychiatrically ill or acting-out youth. Emergency hospitalization is intended to meet the acute needs of the child. It is intended to provide the highest level of care for a child who is in need of temporary stabilization and/or evaluation. A child may usually function at a level indicating placement in his/her own home, but has decompensated due to an acute stress that has lead to the need for short-term stabilization in a hospital setting.

CATEGORY 2: Services for Youth with Mild to Moderate Mental Health Problems and Their Families

An estimated 389,407 total youth in North Carolina require services for youth with mild to moderate mental health problems and their families. Thus, each of the

projected 10 LMEs will have about 39,000 youth with Mild to Moderate Serious Emotional Disturbance (SED) that they must serve.

The levels of intensity and duration of service levels are listed as Low, Medium, or High for each service in Categories 2, 3, and 4 listed below. This breakout represents 60 percent—Low; 36 percent—Medium; and 4 percent—High utilizers for services in each area. (See Appendix G, Exhibit 2.) This estimated breakout means that of all youth who seek services, 60 percent utilize at low levels (frequent users—low duration), 30 percent utilize at medium levels of service (medium users—medium duration), and 4 percent are high utilizers of services (frequent users—long duration).

2.1 Early Childhood Services—These services include: screening, evaluation, and identification of services appropriate to meeting the child and family needs. Strengths, resources, and needs of the family related to enhancing the development of the child are also identified. Intervention services can be provided to the child, caregiver, or both to promote the child's developmental progress. Services can be provided individually or in groups and may include:

- assistance with activities, equipment, and learning environments that promote the child's acquisition of skills;
- working with the child to enhance the child's development;
- providing families or caregivers with information, skills, and support related to enhancing the development of the child; and
- providing families or caregivers with the information, skills, and support to strengthen the family's capacity to support the child.

2.2 Community-Based Services—Community-Based Service is psychoeducational and supportive in nature, intended to meet the mental health, developmental disability, and/or substance abuse needs of clients with significant functional deficits. It is also for those who because of negative environmental, medical, or biological factors, are at risk of developing or increasing the magnitude of such functional deficits.

Included among this latter group are those at risk for significant developmental delays, atypical development, substance abuse, or mental illness/serious emotional disturbance (SED) that could result in an inability to live successfully in the community without services, support, and guidance. The most typical model has a single provider working directly with clients, parents, or other caregivers (individually or groups) in a naturally occurring setting (e.g., home, school) on functional problems that occur in that setting. This service includes education and training of caregivers and others who have a legitimate role in addressing the needs identified in the service plan as well as preventive, developmental, and therapeutic interventions designed to direct client activities, assist with skill enhancement or acquisition, and support ongoing treatment and functional gains. CBS-Individual may be reimbursed up to eight hours per client per day. CBS Group may be reimbursed up to two hours and 45 minutes per day.

2.3 Evaluation (Psychiatric/Psychological/Other)—Evaluations (or assessments) are usually performed to answer a specific question to further the progress of the child and family in treatment. Children may be referred for clinical evaluations such as psychiatric evaluations, psychological evaluations (including psychological and psychoeducational testing), vocational evaluations, developmental/adaptive evaluations, OT/PT/Speech and Language evaluations, or many other types of evaluations. On certain occasions, children/family may be referred for an assessment/evaluation because they are failing to make adequate progress in an existing treatment program. Assessments/evaluations may also be directed at determining the type of service a youngster requires or eligibility for specific programs/services.

2.4 Psychotherapy: Individual, Group, Family—Several types of psychotherapies can be used. Psychotherapy can be provided individually, within couples or families, or in a group setting of unrelated people sharing a common purpose. It can happen in an office, school, home, or community. It can be as frequent and/or intensive as is necessary to meet the individual child and family's needs.

Children with emotional disturbances and their families may meet with the providers one or more times per week, depending on the need. Typically, outpatient treatment is the first treatment approach used in attempting to assist a child and family. These services have the advantage of being nonrestrictive, relatively inexpensive, flexible, and adaptable. They can be used as the only intervention for a child/family or in combination with other community-based services, according to individual needs.

Outpatient Clinical Services (non-Medicaid) activities not covered by Medicaid, but reimbursed through CTSP services, should be billed to Outpatient Clinical Services Support. These activities include:

- transporting clients;
- travel to and from a client's location; and
- travel to and from meetings addressing client needs (e.g., interagency meetings, court appearances, and preplanning meetings).

If more than one client is involved, travel time must be distributed equally among clients.

2.5 Medication Management—Psychiatric medications are now an accepted form of treatment for children and youth with emotional disturbances.

2.6 Therapeutic Respite—Child/Family Respite—This service is staffed by specially trained community members, and provides a needed break for the family and the child/youth to ease stress at home and reduce risk of out-of-home placement. It is intended to support a comprehensive service plan for a given child and family. Respite care may be provided in the recipient's home, place of residence, of the home of a respite provider, or foster home. Activities include aid in the home,

getting a child/youth to school or program, aid after school, aid at night, or any combination of these activities. It may be provided on a planned or emergency basis.

Respite/short-term residential services (non-Medicaid) are provided to clients' families or custodians who need periodic relief from the constant and often stressful care of the client. Respite/short-term residential services may be provided on either a planned or an emergency basis. While in respite/short-term residential care, a client receives care that addresses the health, nutrition, and daily living needs of the child. Respite/short-term residential services may be provided according to a variety of models. The models may include weekend care, emergency care, or continuous care up to 30 days.

2.7 Treatment Support Services—This service is designed to complement other periodic clinical services and enable clinicians to become more involved in the treatment of the children and families they see. It includes, but is not limited to, such things as:

- transportation of children to and from therapy appointments;
- attendance at Child and Family Team meetings/other meetings/court appearances that directly affects their work with the child/family;
- travel time to and from meetings that directly affect their work with children and families;
- consultation with other clinicians/team members regarding the children/families with whom they are working;
- documentation of time spent on clinical work with children/families;
or
- general advocacy for the needs of children and families with whom they work.

2.8 Wraparound Services—Wraparound Services and Supports are an individually designed set of services/supports provided to children, youth, and their families. The services include treatment services, personal support services, or any other supports necessary to maintain the child/youth in the family home, school, and community. Wraparound services/supports are developed through an individualized Child and Family Team. Service/support arrangements are the result of a collaborative planning process that focuses on the unique strengths, values, norms, and preferences of the child/youth and family. The plan is developed in partnership with other agencies and community resources.

Wraparound services may include intervention/support provided by trained personnel who are deployed to provide one-to-one supervision and support to a child or youth in order to avert the need for more intensive treatment options, including residential or inpatient settings. Services may be provided in the home or school for a specified number of hours per day or round-the-clock for a specified period of time. Wraparound supports may include material goods that facilitate

stability of placement and functioning of the child/youth, but that cannot be obtained through existing financial resources and entitlements. These supports may include, but are not limited to, the purchase of:

- medicine;
- food;
- clothing;
- transportation assistance;
- the purchase of vocational, recreational, and educational items not covered under law by the Local Education Authority (LEA); and
- the purchase of behavioral incentives for the child or youth.

Wraparound may also include substitute activities that meet the essential treatments/support functions, service objectives, and intended outcomes of a covered service that is not available in the form or structure needed by the child and family.

CATEGORY 3: Services for Youth with Moderate to Severe Mental Health Problems and Their Families.

Each of the projected 10 LMEs will be required to address the needs of 18,500 youth with moderate to severe Serious Emotional Disturbance (SED).

3.1 Intensive Case Management—Intensive case management involves a higher level of care and clinical sophistication than does Care Coordination. Intensive Case Management involves active partnering with families, other child-serving agencies, and sources of community supports to meet the needs/goals of the child and family being served. The service includes activities with and/or on behalf of the child and his/her family. The service is designed to help address the educational, vocational, residential, health, financial, social, and other nontreatment needs of the individual, and includes the arrangement, linkage, or integration of multiple services (when provided by multiple providers) as they are needed by the child and family (within the area/county program, and/or from other agencies). It may include:

- advocacy on behalf of the individual and family;
- supportive counseling;
- preparation, writing, and revision of service plan;
- monitoring the provision of services to the child and family, including review of documentation of services on behalf of the client;
- monitoring the provision of services to the individual; and

- training or retraining activities required for successful maintenance or re-entry into the client's vocational or community living situation.

3.2 Day Treatment—This service provides a full range of activities for children/youth who need services and educational supports beyond what can be provided in a regular school setting. Day treatment services should be provided, whenever possible, on school grounds, jointly administered by treatment and school personnel, and utilized as a temporary measure with a goal to integrate the child/youth back into the regular school setting as quickly as possible.

Day Treatment, which coordinates educational activities and intensive treatment while allowing the individual to live at home or in the community, is a service for children and adolescents who are emotionally disturbed. It is also appropriate for children who, in order to be maintained in the community, need more intensive and structured treatment than can be provided by outpatient treatment. For children and youth, educational activities may be provided in an educational setting such as regular classes, special education settings within the normal school setting, or in freestanding facilities. This service is designed to increase the ability of the individual to relate to others and to function appropriately in the community. It also serves as an intervention to prevent hospitalization or placement outside the home or community.

Preschool is a service similar to Day Treatment that is directed toward meeting the day programming needs of preschool age children. Interventions are geared toward the developmental needs of this group of children.

3.3 Family-Based Residential Care (Level II, Family and Program)

Level II—Family Setting

This service provides a structured and supervised environment and acquisition of skills necessary to enable the client to improve the level of functioning to achieve or to maintain the most realistic level of independent functioning where earlier treatment gains are somewhat fragile and the client is subject to regression. This level of care responds to clients' needs for more active treatment and interventions. This service is offered in a family system, which provides a residential treatment alternative for children and youth in the homes of trained families within the community. Treatment parents are seen as the primary therapeutic agents and are specially trained, licensed, and clinically supervised.

Youth are often placed in Therapeutic Homes to avoid placement into a more restrictive level of residential care or as a step-down from a more restrictive level of care. The community-based atmosphere of the home is a valuable piece of the plan to reintegrate the youth into a family setting. It is also a valuable way to treat children who have developed maladaptive coping patterns within their own families. Youth and family should ideally be receiving outpatient services during the placement in order to ready them for reunification. Clinical, supportive, and case management services are provided to each child and treatment family. Typically, one child is served in each therapeutic family home. This service is designed to address medically necessary goals for achieving relational support

with caretakers and other support systems in the community. It is also intended to assist the client in developing more appropriate relationship skills. Therapeutic techniques and strategies are introduced into the relationship.

Level II—Family Setting—Program

This level of service is responsive to the need for intensive, interactive, therapeutic interventions, which still falls below the level of staff secure/24-hour supervision or secure treatment settings. The staffing structure may include family and program-type settings. This service provides all Family-Type Residential Treatment Level I elements plus provision of a more intensive corrective relationship in which therapeutic interactions are dominant. Focus is broadened to include assisting the client in improving relationships at school, work, and/or other community settings.

Children admitted to this level of care have specialized needs that go beyond those of most children in a Level II Family setting. They require a level of clinical sophistication and monitoring that distinguishes them from other children in this level. Providers will require a higher level of training and experience. The home may require specialized adaptations to meet the needs of the child in treatment. A higher level of supervision is expected of the supervising adults, such that the Child and Family Team finds it temporarily necessary to augment services in the home. Child is displaying moderate to severe functional problems in home, school, or community settings. For example, the problems may include:

- history of sexually aggressive/reactive behavior that has proven to be well beyond the expected for children in this level of care;
- dually diagnosed children suffering from mental illness as well as substance abuse and/or developmental delays; or
- deaf/hard of hearing youth who suffer from serious emotional disturbances.

3.4 In-Home Therapy/Family Preservation—In-Home Therapies and Intensive Family Preservation Programs services are provided in a home-based manner. The services could include assisting children, youth, and their families in meeting basic needs such as food, housing, and medical care. The services could also provide more therapeutic interventions such as:

- supportive counseling;
- skills training;
- help in connecting family members to other needed supports and services within the community;
- individual therapy;
- family therapy;
- group therapy;

- crisis intervention;
- service coordination; and
- other family collateral contacts.

The family is defined as immediate or extended family or an individual acting in the role of family. Family Preservation must meet Intensive Family Preservation guidelines.

3.5 Therapeutic Mentoring—Therapeutic Mentoring service includes the provision of a variety of activities that are needed by a client because of his/her documented functional impairment due to mental health, developmental disability, or substance abuse diagnoses. Unless these deficits are addressed, the child's disability would be exacerbated and/or the child would not be able to live successfully in the community. The objectives of the service include promoting and assisting in the development of the skills, behaviors, and responsibilities needed to function successfully, with the greatest possible degree of self-determination and independence, in the family, school, and community. Activities include:

- providing training and assistance with activities of daily living (e.g., bathing, dressing) and with instrumental activities of daily living (e.g., meal preparation, shopping, laundry, transportation, resource management);
- promoting and assisting in developing appropriate behavioral self-control by providing monitoring and support of the child in his/her home or other places in the community during periods of symptom exacerbation;
- assisting in developing insight into the process of relapse and/or decompensation and developing motivation and skills that will increase access to community resources needed to prevent relapse and/or decompensation;
- promoting and assisting in developing appropriate behavioral self-control by providing monitoring, support, and accompaniment of the child in regular community activities or in specialized services;
- assisting in developing interpersonal relationships; and
- increasing and maintaining self-help, family, and natural community supports.

3.6 Summer/Before/After School Programs—These services provide a structured program to bridge the school and home environments, in accordance with an individualized service plan. These services are targeted for school-aged children in need of therapeutic intervention before and school hours, as well as during summer months and on school holidays. Services may include:

- group activities that promote developmentally appropriate social skills with the child/youth and with the family;
- daily clinical monitoring and intervention;
- individual, group, or family therapy;
- coordination with teachers, parents, and caregivers;
- scheduled activities that promote family involvement and support the family in meeting the child/youth's needs;
- recreational therapy;
- tutoring; and
- social skill building instruction.

3.7 Independent Living Skills Training—These services are designed to assist youth aged 16 to 21 in acquiring, retaining, and improving the self-help, socializing, and adaptive skills necessary to reside successfully in home- and community-based settings. Services include budgeting, shopping, working, engaging in recreational activities with peers, peer-to-peer support, and appropriate social and work skills to remain in the community.

3.8 Vocational Placement/Training/Support—Vocational Training/Support may be provided within school or outside of regular school or day treatment and education programs. It teaches clients aged 14 to 21 prevocational and vocational skills, including job exploration, vocational assessment, motivation training, filling out job applications, work values and behavior training, job interviewing, and job skills. It can also include sheltered work experiences, such as placement in a sheltered workshop or Adult Developmental Activity Program (ADAP), where less than minimum wage is earned. Clients who are 14 years old or older and still enrolled in school receive vocational education as part of their Individual Education Plan (IEP), as vocational education is a related educational service under Public Law 94-142.

Vocational educational (non-Medicaid) service is billable when provided outside of regular school or day treatment and education programs. It teaches clients prevocational and vocational skills, as described above. It can also include sheltered work experiences, where less than minimum wage is earned. Actual work experiences are coded as 350 VOCATIONAL PLACEMENT. When this service is provided as part of the school program under a child's IEP, it should be coded as 320 EDUCATION.

Vocational Placement—This service provides supervised work experiences for clients, such as apprenticeships, part-time or full-time jobs, and other work experiences directed toward independent employment. Job coaching may be a part of the service. Youth in vocational placements are monitored by professional staff who are available to aid the client as needed.

Vocational placement (non-Medicaid) service provides supervised work experiences for clients. Units of service are reported ONLY when the client is actually placed in a supervised work experience and receives at least minimum wage for his/her work. Preparation for employment and sheltered employment is coded as 340 VOCATIONAL EDUCATION. Actual paid work experiences are coded as 350 VOCATIONAL PLACEMENT.

3.9 Level III—Group-Based Residential—Residential Treatment-High service is responsive to the need for intensive, active therapeutic intervention, which requires a staff secure treatment setting in order to be implemented successfully. This setting has a higher level of consultative and direct service from psychologists, psychiatrists, medical professionals, and the like. This service provides all Family/Program Residential Treatment Level II elements plus the relationship that is structured to remain therapeutically positive in response to grossly inappropriate and provocative interpersonal client behaviors, including verbal and some physical aggression. This level of service is responsive to the need for intensive, interactive, therapeutic interventions, which still fall below the level of a staff-secure/24-hour supervision or secure treatment facility. The staffing structure may include family and program type settings.

3.10 Supervised Independent Living—This service provides a range of rehabilitative services for youth from 16 to 21, designed to improve quality of life by assisting them to assume responsibility over their lives and to function as actively and independently in the community as possible. Supervised Independent Living is designed both to strengthen the youth's skills and to develop informal/environmental supports necessary to enable him/her to function independently in the community.

These services may be provided in a therapeutic foster home, in a residential treatment center, or a separate group care facility, in conjunction with 24-hour supervision by staff. Staff has separate quarters within the facility. The living arrangements assist the youth to initiate independent living concepts and teach basic skills under immediate supervision through the availability of an apartment or other living arrangement which is separate from, but supervised by, on-site staff. The youth assumes primary responsibility for daily living; e.g. cooking, shopping, money management. Staff supervision is supportive and available on a 24-hour basis.

The goals of supervised independent living are to:

- build the capacity to achieve successful independent living;
- implement an independent living plan;

- develop or increase skills in stress management, decision making, problem solving, and coping skills;
- if appropriate, develop parenting skills, and
- reduce barriers to independence within the community by creating realistic opportunities for the youth to practice/apply skills learned.

3.11 Wilderness Camp Treatment—Wilderness Camp Treatment is a service designed to meet the specialized needs of children/youth deemed appropriate for a physically and emotionally challenging treatment program designed around facing up to one's limitations and working within a therapeutic group.

CATEGORY 4: Services for 185,119 Youth with Severe Mental Health Problems and Their Families.

We estimate that 18,500 youth with severe Serious Emotional Disturbance (SED) per LME will require services.

4.1 ACT Teams—Assertive Community Treatment (ACT) teams provide a service that is delivered by an interdisciplinary team and ensures service availability 24 hours a day. The team is prepared to carry out a full range of treatment functions whenever and wherever needed. The team represents the integration of a number of mental health and community services into one organizational unit providing an intensive level of service. Goals of the ACT team are to:

- promote family stability and the family's ability to maintain the child in the home;
- promote and maintain physical health and appropriate use of medication;
- promote and maintain the highest level of functioning in the community; and
- establish access to entitlements, housing, and work/social opportunities and many more.

4.2 Level IV—Group Setting—Most other service needs are met in the context of the Residential Treatment—Secure Level IV setting, including school, psychological and psychiatric consultation, nurse practitioner services, vocational training, and recreational activity. Typically, the treatment needs of clients at this level are so extreme that these activities can be undertaken only in a therapeutic context. These services are conducted in a manner that is fully integrated into ongoing treatment.

This service provides all Residential Treatment—High Level III elements plus the ability to manage intensive levels of aggressiveness. Usually, the treatment needs (psychiatric, psychological, medical, vocational, recreational, educational) of

children at this level require a facility that is physically secure. The facility is locked and the child needs a high level of constant supervision to be maintained in treatment.

- 4.3 Psychiatric Residential Treatment Facility (PRTF)**—A Psychiatric Residential Treatment Facility is intended to serve as an entirely different type of care from the Residential Treatment Levels I—IV facilities. A PRTF is intended to be a more clinically intense type of treatment delivered to children who are more acutely or chronically psychiatrically ill than those served in the other levels of care. A PRTF is more appropriately seen in the continuum of hospital services than in the continuum of other levels of residential care. PRTFs must provide treatment under the daily supervision of a psychiatrist with experience in treating the types of children in the facility. They must also provide a high level of nursing specialty/coverage along with the necessary staffing to meet the management needs of the population served. PRTFs must also provide for the education of children in care.

Management intensity of PRTF services can be delivered in a nonsecure or secure setting. The child's clinical presentation should be considered in order to refer to the proper type facility. Nonsecure PRTFs are "staff-secure," meaning that the staffing ratio should allow for adequate supervision without the use of locked doors, seclusion, or restraint. The child may display many of the same behaviors as those children in a Level III facility; however, the Child and Family Team has determined a need for a higher level of clinical intensity than would be provided in a Level IV facility.

Secure PRTFs are locked, "physically secure" facilities. They still maintain a very high staffing ratio in order to meet the intense clinical and management needs of the children they serve.

4.4 State Run Residential Treatment Centers

Wright School

Wright School serves children ages 6 to 12. It is the state-run center located in Durham, North Carolina, which focuses on the treatment needs of school aged children from around the state. Wright School functions on a re-education model that teaches children appropriate ways of interacting in their environment. Children must be able to go home or to alternative community placement on weekends. Wright School incorporates the child's home environment into treatment at every step.

Population Served

Children referred to the Wright School display many of the same characteristics as those in Level IV residential care. Wright School serves children that have been difficult to treat and/or have failed treatment attempts in other settings. Wright School is seen as the placement of last resort for most of these children. They have usually failed treatment or have been rejected for treatment at private

facilities due to the level of clinical and management intensity needed to treat their conditions effectively.

Services

Wright provides a staff-secure setting for treatment and has 24-hour awake staff available to ensure appropriate supervision. The program provides residential as well as Day Treatment services.

Whitaker School

Whitaker School is the state-operated residential treatment center for youth ages 12 to 17. It focuses on the treatment needs of adolescents from around the state. Whitaker is located on the grounds of John Umstead Hospital in Butner, North Carolina. Whitaker functions with a re-education model similar to Wright's. Adolescents are encouraged to go home or to an alternative community placement on weekends; however, this is not mandatory. Many adolescents in the program are not stable enough to travel home on weekends.

Population Served

Adolescents served at Whitaker School share many of the same characteristics of adolescents served in Level IV facilities. They have usually been through multiple out-of-home placements and treatment settings before referral to Whitaker. Whitaker is seen as the placement of last resort for most of these adolescents. They have usually failed treatment or have been rejected for treatment at private facilities due to the level of clinical and management intensity needed to treat their conditions effectively.

Services

Whitaker is a locked, physically secure treatment setting. Awake staff are available on a 24-hour basis to meet the needs of adolescents served. The program provides residential as well as Day Treatment Services. Each State Residential Treatment Center should have the capacity to serve youth who need Psychiatric Residential Treatment Facility-level services (24 beds), crisis or emergency care-level services (4 beds) and transitional-level services (6 beds). This way, youth who need services at a higher or lower intensity can be served at the State Residential Treatment Center and not discharged and moved elsewhere in the state. With Medicaid-reimbursable rates, services can be sustained for those youth who are eligible for Medicaid.

- 4.5 Inpatient Hospitals**—Inpatient hospitalization, most often now occurring at the state psychiatric child/youth units, is the level of service that provides the most clinically intensive treatment along with a level of patient management sufficient to meet the needs of severely psychiatrically ill or acting-out youth. Inpatient hospitalization is intended to meet the acute needs of the child. It is intended to provide the highest level of care for a child who is in need of temporary stabilization and/or evaluation.

The current DHHS plan, which MGT supports, is to decrease the child/youth state psychiatric hospital beds by 25 percent per year once the SOC community-based array of services is in place. At this point, no state hospital services for children and youth are planned to be operated by the state. Private community hospitals will be the primary referral location for meeting needs of children who cannot be managed effectively in PRTF beds at the recommended State Residential Treatment Centers (STRC). Without sufficient STRC capacity across the state, the state will not be able to close any state hospital inpatient beds for youth, and a new expansion of present capacity will be needed.

Note: The data used in this report for estimates of children with mental health needs in North Carolina are from the Child Mental Health Block Grant, 2001 (9/6/01)

The SFY 2001 under-18 population in North Carolina equals 1,851,191:

- Approximately 389,407 youth (1 in 5, or 20%) have a diagnosable (mild/moderate) mental disorder for whom timely and appropriate mental health intervention can make a substantive difference in long-term outcomes (Institute of Medicine—1999, MH Block Grant Plan, 2001).
- Approximately 185,119 youth (10%) are severely impaired (have or are at risk of a Serious Emotional Disturbance) (*Federal Register*, 1998)
- Assume 10 Local Management Entities (LMEs) and 1 million population in each LME geographical area.

APPENDIX J:

***COMPARISONS OF NEEDED
NORTH CAROLINA FUNDING FOR
CHILDREN'S MENTAL HEALTH
WITH OTHER STATES ****

APPENDIX J

COMPARISONS OF NEEDED NORTH CAROLINA FUNDING FOR CHILDREN'S MENTAL HEALTH WITH OTHER STATES *

EXHIBIT 1

ESTIMATED FUNDING NEEDS OF CHILDREN'S MENTAL HEALTH PER LEVEL FOR EACH STATE (1999 DOLLARS)¹

State	Cost for Low Need (60%) ²	Cost for Moderate Need (36%)	Cost for High Need (4%)	TOTAL
Alabama	\$25,276,104	\$370,955,419	\$136,772,247	\$533,003,770
Delaware	\$ 3,284,484	\$48,203,518	\$17,772,765	\$69,260,766
Florida	\$74,937,002	\$1,099,785,27	\$405,493,745	\$1,580,216,015
Nebraska	\$ 8,885,606	\$130,406,320	\$48,081,156	\$187,373,082
North Carolina	\$37,190,820	\$545,817,348	\$201,244,304	\$784,252,472
Vermont	\$3,236,409	\$47,497,963	\$17,512,625	\$68,246,996

¹The needed funding is for both capital needs and operating costs.

²It is estimated that of the 6% with mental health disorders, half will need special education services.

EXHIBIT 2

ESTIMATED OPERATING COSTS NEEDED PER CHILD FOR TREATMENT SERVICES PER YEAR, 1997–1998

State	Low Need-60%	Moderate-36%	High Need-4%
Alabama	\$348	\$14,491	\$51,200
Delaware	\$752	\$17,675	\$58,008
Florida	\$573	\$14,513	\$51,386
Nebraska	\$722	\$14,312	\$40,847
North Carolina	\$845	\$16,902	\$55,914
Vermont	\$605	\$16,178	\$54,815
Avg. Expenditures	\$641	\$15,679	\$52,028

*Behar, L., "A Multi-State Comparison of Expenditures for Children with Mental Health Disorders Receiving Services Through Public Agencies." A Report from Duke University Medical Center, Department of Psychiatry and Behavioral Sciences, Durham, North Carolina, 1999.

Data sources listed in above report:

McFarland, B.H., George, R.A., Goldman, W., Pollack, D.A., McCulloch, J., Penner, S., Angell, R.H., "Population-based guidelines for performance measurement: A preliminary report." *Harvard Rev. Psychiatry* 6 (1998), pp. 23–37.

Comparisons of Needed North Carolina Funding for Children's Mental Health

Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, HHS. "Children with Serious Emotional Disturbance: Estimation methodology." *Federal Register*, Vol. 63, No.137 (1998), pp. 38661–65.

Costello, E.J., Angold, A., Burns, B.J., Behar, L., "Improving Mental Health Services for Children in North Carolina." A Report from Duke University Medical Center, Department of Psychiatry and Behavioral Sciences, Durham, North Carolina, 1998.