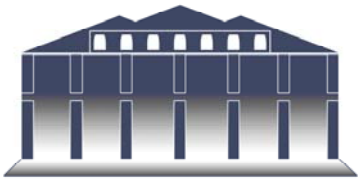
Caring for Previously Hospitalized Consumers: Progress and Challenges in Mental Health System Reform

Final Report to the Joint Legislative Program Evaluation Oversight Committee

Report Number 2008-12-04

December 10, 2008



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December 1, 2008

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Honorable Co-Chairs:

The Program Evaluation Division 2007-2008 Work Plan, approved December 5th, 2007, directed the Program Evaluation Division to evaluate mental health service delivery after the implementation of reforms in 2006. This study focused on services received in Calendar Year 2007 among a sample of 22,516 individuals who had been hospitalized at least once in Calendar Year 2006.

I am pleased to report that the Division of Mental Health, Developmental Disabilities and Substance Abuse Services and Local Management Entity administrators cooperated with us fully and were at all times courteous to our evaluators during the evaluation.

Sincerely,

John W. Turcotte
Director

PROGRAM EVALUATION DIVISION
NORTH CAROLINA GENERAL ASSEMBLY

December 2008 Report No. 2008-12-04

Caring For Previously Hospitalized Consumers: Progress and Challenges in Mental Health System Reform

Summary

The North Carolina General Assembly's Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division to evaluate services delivered by the North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS). This report follows a Program Evaluation Division report released in July 2008 that identified lessons learned from the fraught implementation of MHDDSAS reform and recommended ways to improve reporting and accountability. The present evaluation builds on the previous effort by examining services delivered since reform was introduced. Specifically, this evaluation focuses on services received by 22,516 individuals hospitalized at least once in a substance abuse or psychiatric facility.

This evaluation tested a set of assumptions about the goals of mental health system reform related to previously hospitalized consumers.

Goal of Mental Health System Reform	Evaluation Finding
Reduce rates of hospitalization	*Yes:* Rehospitalization rates were generally low in this sample
Increase capacity of community hospital psychiatric units to link with care in the community after discharge	*Yes:* More consumers discharged from community hospitals received community-based services
Reserve state psychiatric hospitals for consumers who need longer stays	*No:* Many consumers were in state psychiatric facilities for short stays of a week or less
Expand community-based services to reduce hospitalization	*No:* Consumers who received services in the community were more likely to be rehospitalized
Provide high-intensity community-based services along the full crisis continuum to high-risk consumers	*No:* Most of the services received by this high-risk group are considered low-intensity services
Ensure statewide implementation of community-based services	*No:* Local Management Entities continue to face challenges

Evaluation findings further suggested current data tracking is insufficient to assure continuity of care and does not reflect statewide system operations.

Based on these findings, the Program Evaluation Division makes two recommendations. A method for tracking individuals across facilities, service types, and funding sources is needed to better serve consumers and to generate statewide data on services provided. Second, system oversight and management should continue to focus on increasing the capacity and quality of community-based services.

Scope

The North Carolina General Assembly's Joint Legislative Program Evaluation Oversight Committee directed[1] the Program Evaluation Division to evaluate services delivered by the North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS). This report follows a Program Evaluation Division process evaluation released in July of 2008[2] that identified lessons learned from the fraught implementation of MHDDSAS reform and recommended ways to improve program reporting and accountability. The present evaluation builds on the previous effort by examining services delivered since reform was introduced.

Because MHDDSAS oversees a broad array of services for a large population of consumers with a variety of problems, investigating all services was beyond the scope of this evaluation. Instead, the Program Evaluation Division focused the present effort on mental health and substance abuse services received by consumers who had been hospitalized in a substance abuse or psychiatric facility at least once in Calendar Year 2006. Given the focus of the evaluation, consumers with only developmental disabilities (i.e., without mental health or substance abuse diagnoses) were not included because their numbers were not sufficient to ensure a representative group within this sample. Two broad research questions were addressed in the evaluation:

1. What outpatient and hospitalization services were received by previously hospitalized consumers?
2. What factors affected services received?

Data for this evaluation came from two sources. First, claims data from Medicaid and the state's integrated payment and reporting system were used to identify the sample, provide information about consumers, and document services and rehospitalizations. Second, a survey of Local Management Entity administrators captured information about local service availability and experiences with serving previously hospitalized consumers.

Data for this evaluation do not reflect services this group received that were paid for with private insurance or other funds. Consumers who do not rely on Medicaid or state funding for their care also were not included in this evaluation.

[1] The Joint Legislative Program Evaluation Oversight Committee establishes the Program Evaluation Division's work plan in accordance with N.C. Gen. Stat. § 120-36.13.

[2] North Carolina General Assembly Program Evaluation Division. (2008, July). *Compromised controls and pace of change hampered implementation of mental health services*. Report No. 2008-05-3. Raleigh: NCGA Program Evaluation Division.

Background

Since the introduction of a new array of mental health, developmental disabilities, and substance abuse services in March of 2006, concerns about cost and service utilization management prompted the North Carolina General Assembly to question the effectiveness of mental health services system reform. In response to these concerns, the General Assembly Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division to evaluate Division of Mental Health, Development Disabilities and Substance Abuse Services (MHDDSAS) service delivery, quality, and outcomes.

One goal of reform was to increase community-based services and reduce hospitalization. The United States Supreme Court's *Olmstead* decision in 1999 provided strong guidance for reform. Delivering the opinion of the Court, Justice Ginsberg wrote,

> States are required to place persons with mental disabilities in community settings rather than in institutions when the State's treatment professionals have determined that community placement is appropriate, the transfer from institutional care to a less restrictive setting is not opposed by the affected individual, and the placement can be reasonably accommodated, taking into account the resources available to the State and the needs of others with mental disabilities.

In keeping with this decision, a central goal of mental health system reform in North Carolina was ensuring all but the most acutely ill consumers would be served in the least restrictive (i.e., non-hospital), community-based settings. Legislation passed in 2001[3] transformed mental health, developmental disabilities, and substance abuse services into a community-based system intended to increase access to appropriate services. The MHDDSAS State Plan of 2001[4] describes specific goals for the system with the intent to provide mental health services in the community to support and maintain functioning among individuals requiring care. More troubled individuals at risk for hospitalization would receive more intensive community-based services, such as comprehensive crisis intervention, with the potential to keep consumers out of the hospital through local outpatient care. For consumers acutely troubled enough to require hospitalization, the capacity in community hospital psychiatric units would be expanded so that more consumers could remain in their community even when they needed inpatient care. At the highest level of intervention, the most troubled consumers with mental illness would be served in state psychiatric hospitals. Sorely needed substance abuse treatment capacity would be increased, both with outpatient services and more beds in inpatient facilities.

Reform, then, aimed to reduce hospitalizations overall by expanding and strengthening community-based services, increasing the number of consumers served in community hospitals, and increasing substance abuse treatment capacity. State psychiatric hospitals would be reserved for the

[3] 2001 Sess. Laws, 2001-437, § 1.1.
[4] MHDDSAS *State Plan 2001: Blueprint for Change*. Available at http://www.ncdhhs.gov/mhddsas/stateplans.

most extreme cases who were best cared for in a more restrictive environment for longer periods of time.

Under reform, changes were made to the way local services were provided. Area Programs, which had been service providers, were transformed into Local Management Entities (LMEs), and local service delivery was transferred to private service providers. LMEs were charged with overseeing and developing community-based services delivered by private providers within their catchment area.

Implementation challenges compromised system change. As documented in the 2008 Program Evaluation Division process evaluation report, the new services introduced in 2006 as a part of system reform marked another chapter in a history of challenges in mental health care in North Carolina. A lack of strategic planning and data systems contributed to cost overruns, poor system management, overuse of some services (e.g., community supports), and a scarcity of others (e.g., crisis). The confluence of rushed implementation, relaxed provider endorsement and service authorization requirements, and a lapse in accountability contributed to an explosion of low-intensity community support services. MHDDSAS scrambled to come to grips with and resolve the situation, while members of the General Assembly asked for greater accountability and better reporting and requested that the Program Evaluation Division evaluate the system.[5]

This evaluation focused on consumers who pose potentially significant costs to the system—those who have been previously hospitalized. Whereas recent measures implemented by MHDDSAS are addressing overuse of community support services,[6] more needs to be known about services for previously hospitalized consumers.[7] Although they comprise a relatively small proportion of those served (according to the MHDDSAS 2007 annual report, 24,760 consumers, or 8% of all consumers, were hospitalized in state facilities), individuals who have been hospitalized pose potentially significant costs to the system. A study of North Carolina consumers with a history of three or more hospitalizations over a one-year period revealed an average cost of $10,809 for each adult with mental illness for services received in Fiscal Year 2006-07 in addition to hospitalization. The average cost for children who met this criterion was over three times higher, at $38,731.

Recent reports of serious failures in state hospitals[8] have further heightened concern about caring for high-need consumers. Understanding patterns of services received by previously hospitalized consumers is critical to strategic planning and efficient use of available

[5] Unfortunately, the problems that have attracted much attention and distress in North Carolina are mirrored in national trends: failures to cope with deinstitutionalization due to inadequate planning and a shortage of community-based services have been cited for decades.

[6] Session Law 2007-323, House Bill 1473, Section 10.49.(ee); see monthly reports on community support services to the Senate Appropriations Committee on Health and Human Services and the Joint Legislative Oversight Committee on Mental Health, Developmental Disabilities and Substance Abuse Services (available at http://www.ncdhhs.gov/mhddsas/statspublications/reports).

[7] In keeping with current practice in the field, "consumers" will be used throughout this report to refer to MHDDSAS service recipients.

[8] e.g., Compass Group, Inc. (October, 2008). *Organizational assessment and recommendations: Cherry Hospital*. See also *The Joint Commission Report on Broughton: 12/11/2007 – 12/13/2007* (available at http://www.dhhs.state.nc.us/mhfacilities/broughton/index.htm).

resources. Service patterns may provide answers to long-standing questions (e.g., Are people who receive community-based services less likely to re-enter the hospital? Are state psychiatric hospitals being used for the most acute consumers? What kinds of services are provided to consumers discharged from the hospital? What are barriers to providing those services?).

For this evaluation, the Program Evaluation Division analyzed claims data for a sample of consumers with a history of one or more hospitalizations in Calendar Year 2006. Information on services received by this group in Calendar Year 2007 provided insight into how community services were used in the wake of new Medicaid services introduced in 2006 as a part of reform. Based on the goals of reform, the Program Evaluation Division formulated six assumptions about previously hospitalized consumers. Each of these assumptions was tested in this evaluation (see Exhibit 1).

Exhibit 1

MHDDSAS Goals of Reform and Program Evaluation Division Assumptions Related to Previously Hospitalized Consumers

Goal of Mental Health System Reform Related to Previously Hospitalized Consumers	Evaluation Assumption
Reduce rates of hospitalization for all but the most acutely troubled consumers	Rehospitalization rates will be generally low
Reserve state psychiatric hospitals for the most acute consumers who need longer hospitalizations	Few consumers will be hospitalized in state psychiatric facilities for short stays
Increase capacity of community hospital psychiatric units to link with care in the community after discharge	More consumers discharged from community hospital psychiatric units will receive services than those returning to the community from state facilities
Expand community-based services to reduce hospitalization	Consumers who receive community-based services will be less likely to be rehospitalized than those who do not receive services
Provide high-intensity services along the full crisis continuum to high-risk consumers	Overall, most services delivered to previously hospitalized consumers will be relatively high-intensity
Ensure statewide implementation of community-based services	Local Management Entities will continue to face challenges

Source: Program Evaluation Division based on MHDDSAS state plans.

The aim of the present evaluation, then, was to use claims data to examine services received by previously hospitalized mental health and substance abuse consumers. These data were used to test assumptions based on the goals of reform. Given the focus of the evaluation, consumers with only developmental disabilities (i.e., without mental health or substance abuse diagnoses) were not included because their numbers were not sufficient to ensure a representative group within this sample. Electronic claims data

were requested from MHDDSAS on all consumers who met the criterion of having had at least one hospitalization of 60 days or less between January 1 and December 31, 2006. These data included information on services received and rehospitalizations between January 1 and December 31, 2007. In addition to electronic data, the Program Evaluation Division conducted a survey of LME administrators on service availability for previously hospitalized consumers, ability to provide care, and barriers to serving this population.

The evaluation sample consisted of 22,516 previously hospitalized consumers. MHDDSAS provided information on 24,353 individuals who met study criteria. The data were drawn from Medicaid and state provider claims that had been filed for payment. Upon examination of the dataset, the Program Evaluation Division identified 206 cases that did not have substance abuse and/or mental health diagnoses; these were dropped from the sample. In addition, differences in data submission requirements rendered unreliable the 2007 data submitted by Piedmont Behavioral Healthcare and Smoky Mountain Center LMEs.[9]

The resulting evaluation sample of 22,516 previously hospitalized consumers represented 7% of the total population served by MHDDSAS in Fiscal Year 2005-06. All consumers in this sample qualified for Medicaid and/or state funds to cover services.[10] Findings are limited to this group and are not intended to represent the wider population of MHDDSAS consumers.

The sample included 4,955 children (or 22% of the sample; defined as individuals under 21 years of age) and 17,561 adults (78%). A small majority of consumers were male (53%), and most were White (60%) or Black (35%). Another 5% of the sample consisted of individuals from other backgrounds (unknown race, Hispanic, and other groups too small to be analyzed alone). As compared with the total population of Fiscal Year 2005-06 mental health consumers, the evaluation sample had fewer children (22% vs. 29%) but was otherwise demographically similar.

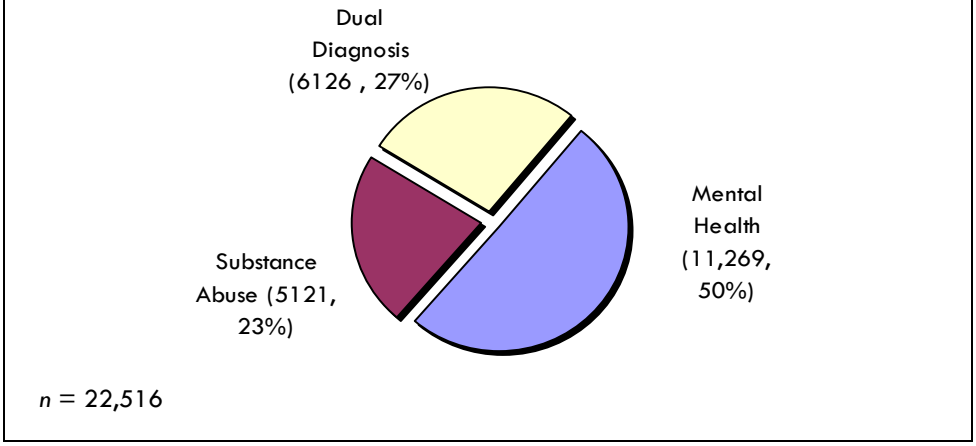
The Program Evaluation Division developed three diagnostic categories to describe the sample for analysis: those with only mental health problems, those with only substance abuse disorders, and those with dual diagnoses (i.e., mental health co-occurring with substance abuse). As shown in Exhibit 2, half of the sample had only mental health problems, and half had substance abuse alone or in conjunction with mental health problems. This distribution was different when children and adults were examined separately: over three-quarters (78%) of children were diagnosed only with mental health disorders.

[9] Whereas single-stream funding can increase LME efficiency, it also can contribute to unreliable service data because reporting is no longer tied to payment. MHDDSAS Analyst Adam Holtzman advised the Program Evaluation Division about significant missing 2007 service data from two LMEs: Smoky Mountain (which has had single-stream funding since 2004) and Piedmont (operating under a Medicaid waiver).

[10] Medicaid eligibility varies by disability, age, and other factors; see http://www.dhhs.state.nc.us/DMA/medicaid/who.htm for detailed information. See http://www.dhhs.state.nc.us/MHDDSAS/iprsmenu/iprseligibilitymatrix.xls for more information on eligibility for state-funded services.

Exhibit 2

Consumers in the Evaluation Sample with Mental Health, Substance Abuse, and Dual (Mental Health with Substance Abuse) Diagnoses



Source: Program Evaluation Division based on data from MHDDSAS.

By definition, each consumer had at least one hospitalization episode of 60 days or less in 2006. Hospitalization can be described in terms of the number of times in the hospital (episodes) and the cumulative number of days spent in the hospital.

- Most consumers (16,829; 75%) had experienced only one hospitalization episode in 2006. The remaining 25% experienced between 2 and 17 episodes, though very few (1%) had more than 4 episodes.
- Consumers who had only one episode stayed in the hospital for an average of 8 days; those with two or more episodes were hospitalized for a cumulative average of 33 days.
- Overall, total days spent in the hospital in 2006 ranged from 1 to 364, with an average of 15 days; less than 10% stayed more than 30 days.

Consumers were hospitalized in four types of facilities: state psychiatric hospitals, state alcohol and drug addiction treatment centers, private psychiatric hospitals, and psychiatric units in community hospitals. Exhibit 3 summarizes the type of facility from which children and adults were last discharged in 2006. As shown, nearly half (48%) of consumers were discharged from state psychiatric hospitals. In this sample, more adults than children were served in all facility types except for private psychiatric hospitals, where all but 1 of the 908 consumers were children.

Exhibit 3

Evaluation Sample: Children and Adults Hospitalized in Inpatient Psychiatric Facilities in 2006

Type of Facility	Consumers[i]			
	Children[ii]	Adults	Total	Percent of Total
State Psychiatric Hospital	1,811	9,055	10,866	48%
State Alcohol and Drug Addiction Treatment Center	101	2,599	2,700	12%
Private Psychiatric Hospital [iii]	907	1	908	4%
Community Hospital Psychiatric Unit	2,136	5,906	8,042	36%
Total	**4,955**	**17,561**	**22,516**	**100%**

[i] For consumers with multiple hospitalization episodes, counts reflect data from the last discharge in 2006.
[ii] Children are under 21 years of age.
[iii] Private psychiatric facilities serve adults, but Medicaid does not cover private psychiatric facilities for adults ages 21 to 64. Only one adult (age = 69 years) covered by Medicaid qualified for inclusion in this sample.

Source: Program Evaluation Division based on data from MHDDSAS.

State funds covered most of the cost of 2006 hospitalization in the evaluation sample. As a rule, state funds covered hospitalization in state facilities and Medicaid funds paid for hospitalization in private or community hospital settings. In 2006, hospitalization claims for this sample of 22,516 consumers were paid with $147,170,066 in state funds and $61,936,240 in Medicaid funds, for a total of $209,106,306.

Findings

The Program Evaluation Division's analysis of electronic and survey data yielded seven central findings. First, following the first Program Evaluation Division assumption, rehospitalization rates were generally low in 2007. Second, many consumers stayed in state psychiatric hospitals for a week or less, indicating that more progress needs to be made on this aspect of reform. Third, in line with the intent of reform, consumers discharged from community hospital psychiatric units were more likely to receive services than those returning to the community from a state facility. Fourth, contrary to evaluation expectations, those who received community-based services were more likely to be rehospitalized in 2007 than those who did not receive services. Fifth, whereas it was expected that this sample of consumers would receive relatively high-intensity services, this hypothesis was not borne out in the analysis. Sixth, better system-wide information is needed to track consumers across providers and facilities. Finally, Local Management Entities (LMEs) indeed continue to face challenges in providing services to previously hospitalized consumers two years after the introduction of new services that were a part of reform.

Finding 1. One-fifth of consumers in this sample were rehospitalized at least once in 2007. A low psychiatric hospital readmission rate is accepted by the United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration as a standard that reflects the success of community-based services. In this evaluation sample, about one-fifth (21%, 4,831 individuals) were readmitted to the hospital at least once in Calendar Year 2007. Although this rate is consistent with the evaluation assumption of a relatively low readmission rate, it exceeds the target set by the Division of Mental Health, Development Disabilities and Substance Abuse Services (MHDDSAS). Based on federal guidelines, MHDDSAS adopted a target rate of 18% or less for readmission to state psychiatric facilities within 180 days of discharge. MHDDSAS began tracking this outcome in January of 2008 and reported a 22% rate in the last quarter of Fiscal Year 2007-08.[11]

Consumers with a history of multiple hospitalizations were more likely to be re-hospitalized than others in the sample. The strongest indicator of who was re-hospitalized in 2007 was the number of hospitalization episodes in 2006: consumers who had multiple episodes in 2006 were more likely to be rehospitalized in 2007 than consumers who had only one episode. As shown in Exhibit 4, 39% of consumers with multiple 2006 episodes were rehospitalized, compared with just 16% of those with one.

Exhibit 4

In This Sample, Consumers Hospitalized More Than Once in 2006 Were More Likely to be Rehospitalized in 2007

2006 Hospitalizations	Rehospitalized in 2007?		Total
	No	Yes	
One Episode	14,210 84%	2,619 16%	**16,829** **74%**
Multiple Episodes	3,475 61%	2,212 39%	**5,687** **25%**
Total	**17,685** **79%**	**4,831** **21%**	**22,516** **100%**

Note: Percentages in interior cells reflect proportion within each row.

Source: Program Evaluation Division based on data from MHDDSAS.

Consumers who were re-hospitalized experienced an average of 1.8 episodes in 2007, with a range of 1 to 16 episodes. Of these, most consumers (82%) were readmitted one or two times. In terms of the length of time spent in the hospital in 2007, the average cumulative time was about three weeks (21.9 days), with a range from 1 to 342 days. As with the number of readmissions, most consumers (74%) were at the lower end of the range and were hospitalized for 22 days or less.

The number of episodes and length of stay varied across the four types of facilities. Consumers in state psychiatric and community hospitals had the highest number of episodes—an average of 1.6—with a higher range in state (1 to 16) than community (1 to 9) hospitals. The average cumulative

[11] The readmission rate for the evaluation sample is not directly comparable to MHDDSAS statistics because the evaluation examined readmission to all facility types over the course of a full year.

length of stay at state psychiatric hospitals was the greatest: 26.1 days, with a range of from 1 to 342 days. Cumulative stays in state alcohol and drug addiction treatment centers averaged 15.8 days (range = 1 to 118 days), whereas stays in private psychiatric (mean = 13.6, range up to 72 days) and community hospitals (mean = 11.9, range up to 96 cumulative days) were relatively shorter.

Finding 2. Contrary to Program Evaluation Division expectations, state psychiatric hospitals accommodated many consumers for less than one week. One goal of reform was to reduce the number of short hospitalization episodes (i.e., stays of a week or less) at state psychiatric hospitals. Data collected for the present evaluation suggest more needs to be done to improve on this indicator.[12]

In the evaluation sample, about one-third (34%, or 1,624) of the 4,831 consumers who were rehospitalized in 2007 had one episode of one week or less. In keeping with reform, the proportion of short stays at state psychiatric facilities should be relatively lower than at other facilities. However, as shown in Exhibit 5, the second highest proportion (42%) of all short stays was in state psychiatric hospitals.

Exhibit 5

State Psychiatric Hospitals Were Used for Short Hospital Stays in 2007

Facility Type	Consumers with Stays of One Week or Less in 2007	
	Number	Percent
State Psychiatric Hospital	685	**42%**
State Alcohol and Drug Addiction Treatment Center	97	6%
Private Psychiatric Hospital	68	4%
Community Hospital Psychiatric Unit	774	48%
Total	**1,624**	**100%**

Note: Information on facility type is based on data for the first hospitalization episode in 2007.

Source: Program Evaluation Division based on data from MHDDSAS.

To some degree, for particularly ill consumers who pose a danger to themselves or others, rehospitalization is a clinical necessity. However, beyond that threshold, rehospitalization is an indicator of the success of community-based services. One Local Management Entity administrator suggested rehospitalizations, particularly when stays are brief, may be the result of systemic issues: "There is no negative consequence for hospitalizing consumers, and it is easier than seeking appropriate clinical alternatives." If this is the case, then hospitalization may be perceived as a treatment

[12] MHDDSAS data from the last quarter of Fiscal Year 2007-08 revealed half of all discharges from state psychiatric hospitals were from a stay of a week or less. See Quality Management Team, Community Policy Management Section, MHDDSAS. (2008, September). *MH/DD/SAS Community Systems Progress Report: Fourth Quarter SFY 2007-2008*. Retrieved from http://www.ncdhhs.gov/mhddsas/announce/commbulletins/commbulletin98/communityprogressrptq4sfy08.pdf.

option that is easier to pursue than securing community-based services. A lack of adequate crisis services was blamed for overuse of hospitals by another administrator: "More intensive non-hospital crisis services are needed in order to prevent utilization of inpatient hospitalization."

Finding 3. As expected, consumers discharged from community hospital psychiatric units were more likely to receive services than those returning to the community from a state facility. One assumption of reform was that consumers served in community-based hospitals would achieve better integration into the community and less disruption after discharge. Presumably, closer connections exist between community-based hospitals and local outpatient service providers, and therefore consumers discharged from these hospitals would be more likely to receive community-based services.[13]

Consistent with this assumption, most of the consumers (69%) discharged from community hospital psychiatric units in 2006 received outpatient services in 2007 (see Exhibit 6). This level of follow-up was only exceeded among those discharged from private psychiatric hospitals, where 81% of consumers (all but one of whom were children) received services. There was a significant difference[14] in rates of follow-up between state and non-state (i.e., private and community) hospital facilities: just half (50%) of consumers discharged from state psychiatric facilities received follow-up community-based services.

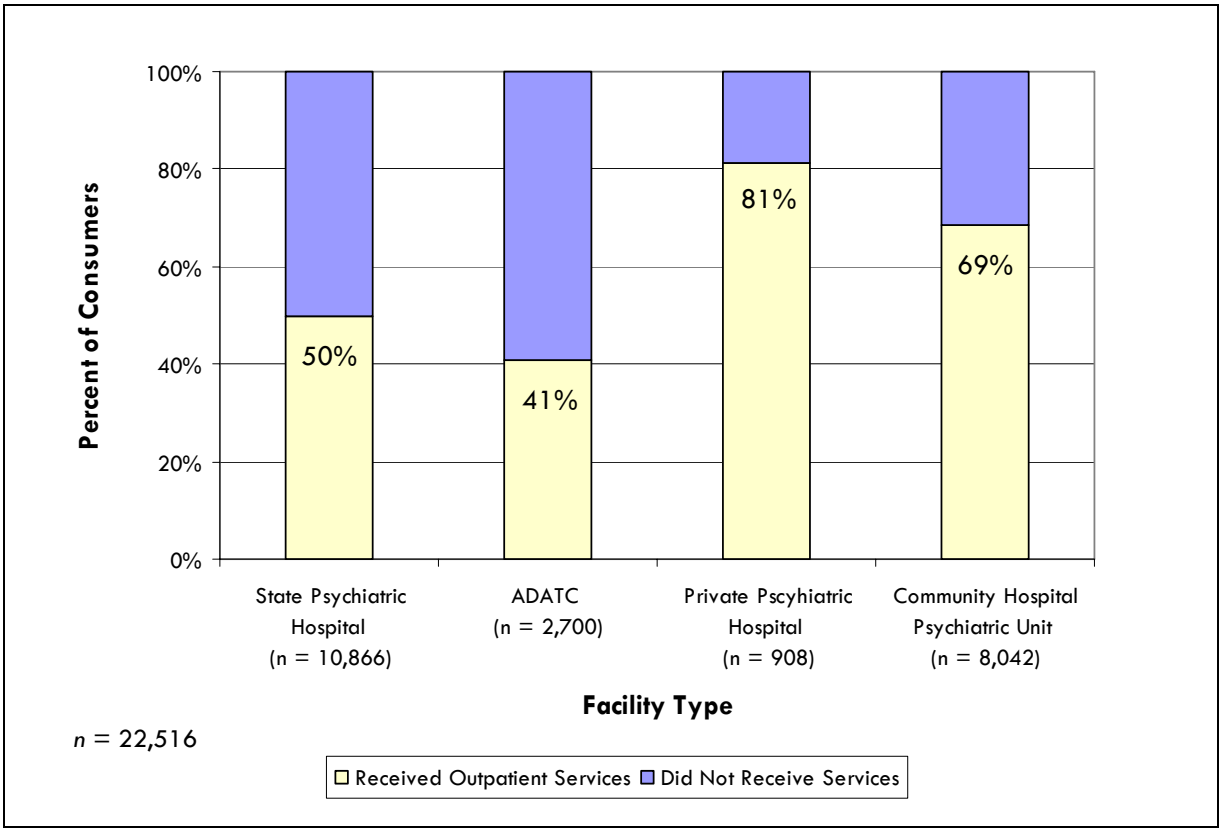
Consumers discharged from state Alcohol and Drug Addiction Treatment Centers had the lowest rate of follow-up (41%). MHDDSAS administrators suggested treating consumers with substance abuse problems is difficult for several reasons. First, there was a lack of intensive outpatient substance abuse services in 2007, which remains the case today in spite of reform. Second, most consumers with substance abuse do not have Medicaid coverage. As a result, many go untreated after discharge. Third, whereas hospital liaisons triage care for mental health consumers in most Local Management Entities, there are fewer liaisons for consumers hospitalized with substance abuse problems. Finally, many consumers with substance abuse may be noncompliant with treatment protocols even when follow-up is attempted.

[13] A map of the location of facility types represented in this evaluation can be found in Appendix A.

[14] Pearson $\chi^2 = 1062.80$, $p < .001$.

Exhibit 6

Outpatient Services Received by Consumers in the Evaluation Sample Discharged from Psychiatric Inpatient Facilities



Source: Program Evaluation Division based on data from MHDDSAS.

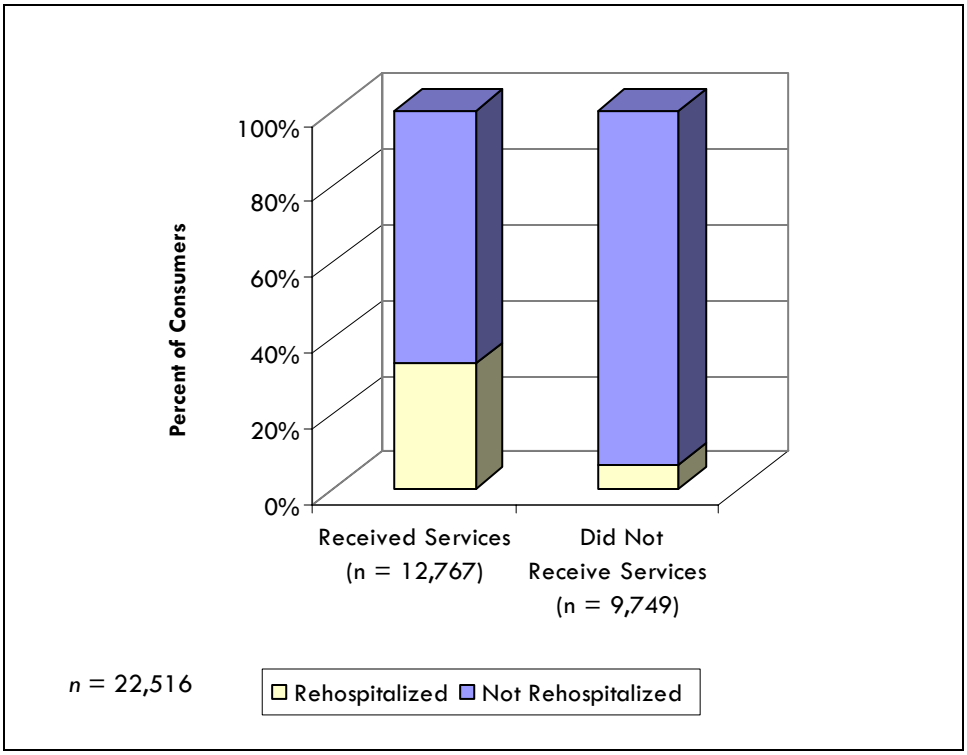
Better rates of follow-up after community hospital discharge suggest the tenets of reform are correct and integration with local services may be enhanced when consumers are treated within their community. At the same time, the finding that half of those discharged from state psychiatric hospitals in 2006 did not receive any follow-up in 2007 indicates room for improvement. This finding remains true even though some of these individuals may not have needed extensive outpatient treatment after discharge.

Finding 4. Contrary to Program Evaluation Division expectations, consumers who received community-based services were more likely to be rehospitalized than those who did not receive services. The fourth evaluation assumption presumed consumers who received outpatient services would be less likely to be rehospitalized in 2007 than those who did not receive services. Outpatient services, it was assumed, would help to maintain consumers in the community and prevent rehospitalization. Contrary to expectations, however, consumers who received outpatient services were *more* likely to be rehospitalized than those who did not receive services (see Exhibit 7). Of those rehospitalized, 87% also received outpatient services (94% of children and 86% of adults). Among those who

were not rehospitalized, less than half (48%) received outpatient services (60% of children and 45% of adults).[15]

Exhibit 7

Consumers Who Received Services Were More Likely to Be Rehospitalized in 2007 Than Those Who Did Not Receive Services



Source: Program Evaluation Division based on data from MHDDSAS.

Rather than demonstrating the ability of community-based services to keep consumers out of the hospital, this finding reflects the relative level of illness among consumers in the evaluation sample: those who were hospitalized repeatedly were presumably the most unstable and more of them required inpatient as well as outpatient care. It appears, then, the system responded to these more troubled consumers appropriately by providing most of them with outpatient services.

By the same token, however, the data suggest far fewer consumers who were not rehospitalized in 2007 received outpatient services: 48% of them appear to have not been engaged in the system of care. It may be that some of these consumers had recovered sufficiently to function without services after a brief illness, and some may have received services that were not reflected in Medicaid or state claims. However, these caveats are unlikely to fully explain why half of the consumers who were not rehospitalized appear not to have received any follow-up services.

A large proportion of state funds paid for hospitalization, whereas Medicaid funds covered most services. One of the driving forces behind mental health reform was serving more consumers with outpatient services in the community. As shown in Exhibit 8, this approach has the added

[15] Although this evaluation examined services received in 2007, a relatively small number of consumers in the sample (634, or 3% of the entire sample) received services sometime in 2006 but not in 2007.

benefit of savings to the state because Medicaid covers the majority of claims for community-based services. Federal funds covered 59% ($94 million of the over $160 million paid) of state and Medicaid claims for services in 2007. By comparison, the federal proportion paid for hospitalization was far lower, at 19% ($13.2 million) of over $71.3 million paid.

Exhibit 8

Cost of Hospitalization and Services by Public Funding Source, Calendar Year 2007

Source	Hospitalization	Community-Based Services	Total by Source
State	$ 50,676,101	$ 13,339,644	**$ 64,015,745**
Medicaid: State Share	7,449,693	52,898,826	**60,348,519**
Medicaid: Federal Share	13,243,899	94,042,356	**107,286,255**
Total	**$ 71,369,693**	**$ 160,280,826**	**$ 231,650,519**
Note: The state share of Medicaid costs was 36% in Fiscal Year 2006-07.			

Source: Program Evaluation Division based on data from MHDDSAS.

In general, children fared better when it came to follow-up services, but they were just as likely to be rehospitalized as adults. Striking similarities emerged when the 4,955 children in this sample were compared with adults. In terms of the number of hospitalization episodes and days hospitalized, differences between children and adults were indiscernible. For example, children were just as likely to be rehospitalized in 2007 as adults (21% and 22%, respectively) and they experienced 1.71 rehospitalization episodes, compared with 1.82 among adults. About one-quarter of children (24%) and adults (26%) had a history of multiple prior hospitalizations.

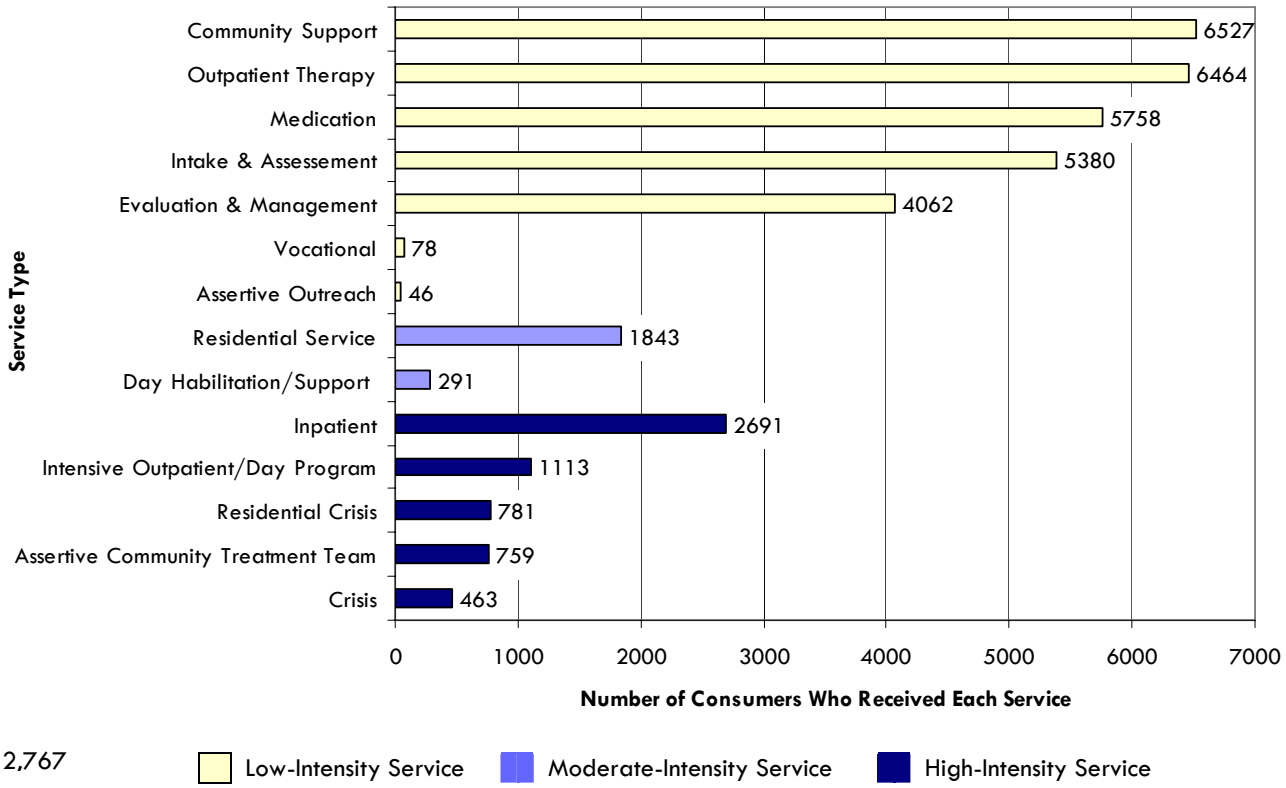
Children did differ from adults on diagnostic categories: less than one-quarter (22%) had substance abuse or dual diagnoses, as compared with half of adults. Children were more likely to receive services after discharge than adults (67% versus 54%). Among consumers who did receive services, children were more likely to see a psychiatrist (65% versus 50%). In general, then, these children were just as troubled as adults in the sample but fared better in terms of services. Faring better, however, is relative: one-third of children did not receive services at all, and, of those who did, only two-thirds saw a psychiatrist in 2007. In spite of having received relatively more services than adults, the data suggest hospitalization was just as likely among children as among adults.

Finding 5. Contrary to expectations, most consumers received low- rather than high-intensity services. The Program Evaluation Division consulted with the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS) to categorize outpatient services in terms of intensity. *High-intensity* services, such as crisis and Assertive Community Treatment Team, were provided by skilled clinicians primarily to address acute and serious mental health and substance abuse treatment needs. *Moderate-intensity* services, including residential and day support programs, provided longer term habilitation and support that enabled consumers to remain safely and successfully in the community. *Low-*

intensity services, such as medication management and community support, consisted of scheduled outpatient sessions for consumers who needed ongoing services and supports.

As shown in Exhibit 9, most consumers in this sample received relatively low-intensity services after hospital discharge. Exhibit 9 portrays the number of people who received each service type, but each individual consumer may have received several types of services (e.g., community support and outpatient therapy, two of the most highly used services). When these data were examined according to whether consumers had a history of multiple hospitalizations, the distributions were similar.

Exhibit 9: Services Received by Consumers in the Evaluation Sample in 2007



Note: Consumers may have received more than one service, so these numbers are not unduplicated counts. Numbers at the end of each bar represent the number of consumers who received each type of service.

Source: Program Evaluation Division based on data from MHDDSAS.

MHDDSAS administrators emphasized the clinical importance of seeing a psychiatrist after hospital discharge because most consumers who have been hospitalized with mental illness require medication. Access to a psychiatrist or physician ensures uninterrupted access to and ongoing monitoring of appropriate medications. This access is critical to ongoing treatment in the community because establishing an immediate relationship with a psychiatrist after discharge is key to minimizing recurrent crises and hospital readmissions.

The lack of psychiatrists and other qualified professionals, particularly in some areas of the state, has been cited as a serious challenge to providing good quality, ongoing care for high-need consumers. In this sample, just over half (6,880, or 54%) of consumers saw a psychiatrist at least once in 2007. Of these, a higher proportion of those with a history of multiple hospitalizations (60%) saw a psychiatrist, compared with 51% of consumers with a history of one episode.

In accordance with N.C. Gen. Stat. § 122C-3(38), these data suggest MHDDSAS services are targeted toward arguably more seriously troubled consumers (i.e., by virtue of repeated prior hospitalizations). This conclusion is supported by recent MHDDSAS data on time to follow-up for emergent cases. Despite stories in the media of tragic system failures,[16] these data suggest the system is successfully targeting the most acute cases for closer attention and care. Of concern, however, are the relatively high proportion of apparently less severely ill consumers (those hospitalized once in 2006) who appear not to have received follow-up community-based services.

Finding 6. Claims data provide a means to track some statewide services, but the data have limitations. Whereas they cannot account for all cases where there appears not to have been follow-up after hospital discharge, several caveats are in order when interpreting the data on outpatient services.

First, the data cannot account for consumers who moved away or died after hospital discharge in 2006. These consumers were simply gone, and there is no way to know the exact proportion of the sample that disappeared. Second, some consumers had two identifiers (one Medicaid and one assigned by the state payment system) that could not be matched. When mismatches occurred, the claims data suggest no subsequent services were received even if they were. Based on information from the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS), the Program Evaluation Division estimates 1,419 (6%) of consumers may have received services that do not appear in claims data due to identifier mismatch.

Third, services may have been paid for with county or third-party funds, and the claims data will not reflect these services. Although individual Local Management Entities know what services are covered with these funds, they are not tracked in a way that provides a statewide view of all services provided. One LME administrator reported, "For highly complex consumers we will often use county dollars to develop an individualized plan for supports" that are not paid by either Medicaid or state dollars. Another noted they provided staff to follow up with discharged consumers to link them to community services, but these services are not tracked because they are not billable to the state system. The claims system creates a "major misrepresentation" of the incidence of follow-up.[17] Without a

[16] For example, see Suicide mission fulfilled. (2008, September 17). *News & Observer*.

[17] MHDDSAS administrators dispute this claim, asserting coordination efforts alone do not reflect services actually rendered, and it is the services that matter.

way to track services provided through alternative funding, a full picture of the system's ability to care for consumers cannot be formed and potentially valuable strategies may go unnoticed because of the lack of better tracking data.

Finally, consumers may have been discharged to settings that are not reflected in claims data, including jails and nursing homes.

Given these caveats, it cannot be categorically assumed that data indicating a lack of subsequent services means that services should have been received but were not. Some consumers left the system or died, and others received services that were not captured in the available data.

Treatment noncompliance (i.e., consumers opted not to participate in offered services) among previously hospitalized consumers was likely an issue for some in this sample. One LME administrator noted that although care coordination makes a difference in serving previously hospitalized consumers, there is "a high no-show rate even when prompt appointments are made within five days because a high percentage of people seeking hospitalization are experiencing short-term crisis events." Another noted particular difficulties serving consumers with substance abuse problems, many of whom "do not want service or feel they need treatment." One study of community-based services follow-up after hospital discharge[18] suggested less acutely ill consumers may be neglected by providers who are more responsive to symptom severity. Although more unstable consumers may warrant more attention, evaluation data suggest there are likely consumers who are not receiving the follow-up they need.

Indeed, MHDDSAS acknowledges providing follow-up community-based services after hospital discharge is a challenge and the gap between discharge and follow-up is now part of performance tracking. Quarterly reports that track performance measures reflect challenges to delivering timely "routine care." Using MHDDSAS benchmarks for hospital discharge follow-up, LMEs reported providing timely emergent care services within two hours in all of the cases where it was needed. This accomplishment contrasts sharply with the reported rate of providing routine care follow-up within 14 days: about two-thirds (68%) of cases met this performance benchmark.

Caveats aside, there are no 2007 service data for 9,142 consumers in this high-need sample. Missing or incomplete data do not fully explain this number. Whereas the level of attention given to severely ill patients suggests MHDDSAS services are being focused appropriately on those who need them the most, these data raise the question of whether adequate attention remains on less severe but still high-need patients.

Finding 7. Despite efforts to oversee the care of previously hospitalized consumers across the state, Local Management Entities continue to face

[18] Owen, C., Rutherford, V., Jones, M., Tennant, C., & Smallman, A. (1997). Noncompliance in Psychiatric Aftercare. *Community Mental Health Journal, 33*, 25-34.

challenges. Administrators from all 24 Local Management Entities (LMEs) completed an online survey for this evaluation. Under reform, LMEs were charged with overseeing and developing community-based services delivered by private providers within their catchment area. The evaluation survey asked LME administrators about the present-day (i.e., fall of 2008) ability of providers in their area to care for previously hospitalized consumers, the availability of services (as listed in Exhibit 9) in their area, and perceived barriers to serving previously hospitalized consumers (a copy of the survey instrument is in Appendix B; a list of LME county membership appears in Appendix C).

As expected, results confirmed many LMEs face difficulties in caring for previously hospitalized consumers. Eighteen of the 24 LMEs reported trouble providing some services, and some struggled more than others. As shown in Exhibit 10, at least five LMEs reported limited or no ability to provide each of nine features of care to previously hospitalized consumers.[19]

LMEs noted trouble providing many moderate- and high-intensity services. Specific types of services, mostly those of high and moderate intensity, were in short supply in many LMEs. For example, nearly two-thirds (63%) had limited or no intensive outpatient/day programs for children or adults.

Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS) administrators have made recent efforts to increase crisis services as a way to reduce hospitalization. Despite these efforts, however, half (12) of the LMEs commented on the shortage of mobile crisis, crisis respite, and/or residential crisis.[20] A majority reported limited or no availability of residential crisis services for adults (58%) and children (75%). One LME has two mobile crisis teams that have been "very successful," but the administrator said it needs a third team. This same LME has a six-bed residential crisis unit but its administrator believes it needs twice that number. Another LME commented, "24/7 regional crisis is available, but this re*gion lacks mobile crisis and residential crisis*" (emphasis in the original).

Claims data reflected lower levels of service follow-up among consumers with substance abuse, and LME responses suggested residential facilities and outpatient services for this group were in short supply in some areas. Ten LMEs noted the need for increased capacity, including detoxification (especially state-funded services), residential treatment facilities (in general and for women and their children), and intensive outpatient services.

[19] Two LMEs—Albemarle and Johnston—reported no or limited ability to provide *any* of the nine features, whereas seven LMEs—Beacon, Mental Health Partners, Durham, East Carolina, Mecklenburg, Onslow-Carteret, and Orange-Person-Chatham—were not challenged in any or in at most one feature.

[20] Residential crisis consists of community-based residential facilities intended to provide an alternative to hospitalization.

Exhibit 10: Most of the 24 Local Management Entity Administrators (LMEs) Reported Challenges Serving High-Need Consumers

Ability of providers to…	Overall Percent of LMEs		LMEs with No or Limited Ability to Provide Service																								
	Moderate or Strong Ability	No or Limited Ability	Alamance-Caswell-Rockingham	Albemarle	Beacon	Mental Health Partners	CenterPoint	Crossroads	Cumberland	Durham	East Carolina	Eastpointe	Five County	Guilford	Johnston	Mecklenburg	Onslow Carteret	Orange-Person-Chatham	Pathways	Piedmont	Sandhills	Smoky Mountain	Southeastern Center	Southeastern Regional	Wake	Western Highlands
1. Secure needed services outside LME when not available locally	33%	67%	✖	✖		✖	✖	✖				✖	✖	✖	✖	✖					✖	✖	✖	✖	✖	✖
2. Provide adequate crisis services	54%	46%	✖	✖			✖		✖			✖	✖	✖	✖				✖	✖				✖		
3. Secure needed hospitalization in LME	54%	46%	✖	✖				✖	✖				✖		✖				✖			✖	✖		✖	✖
4. Follow up with consumers within 7 days of hospital discharge	63%	38%	✖	✖									✖		✖				✖		✖		✖		✖	✖
5. Refer consumers to appropriate inpatient facilities within community	63%	38%	✖	✖				✖	✖				✖		✖							✖		✖	✖	
6. Secure needed hospitalization outside LME when not available locally	67%	33%	✖	✖											✖				✖			✖	✖		✖	✖
7. Provide services to previously hospitalized consumers	75%	25%		✖				✖					✖	✖	✖				✖							
8. Refer consumers to appropriate outpatient services within community	75%	25%		✖								✖		✖	✖				✖		✖					
9. Access psychiatric services	79%	21%	✖	✖											✖				✖	✖						

Note: Values may not total 100% due to rounding. A copy of the survey instrument appears in Appendix B. A list of LME member counties appears in Appendix C.

Source: Local Management Entity Survey data.

Nearly one-third of LMEs (29%; 7 LMEs) reported limited availability of Assertive Community Treatment Team (ACTT), a high-intensity service for adults that relies on multidisciplinary staff to provide a full range of treatment services. ACTT is intended to serve acutely ill consumers such as those with a history of multiple hospitalizations. One LME commented that despite having two ACTT teams, there are limited slots for consumers paid for with state funds. Another noted recent Division of Medical Assistance rate cuts for ACTT (from $324 to $301 per event, according to the Division's September Medicaid Bulletin[21]) were "a step in the wrong direction." The only services that were not in short supply in more than one LME were community support, evaluation and management, and intake and assessment—all of which are low-intensity services.

LMEs reported difficulty providing access to adequately trained professionals, particularly psychiatrists in their areas. Although MHDDSAS administrators emphasized the importance of following up with a psychiatrist after hospital discharge, only five LMEs reported virtually all (91-100%) of primary mental health providers in their area have access to psychiatric services. One noted many psychiatrists, nurses, and social workers had left in recent years for positions at other agencies (e.g., Department of Social Services and schools) that offered better pay, benefits, and stability. Eleven LMEs reported a need for more psychiatrists and other appropriately credentialed staff to care for high-need consumers in their area. One added, "the few providers who might have expertise to work with hospitalized consumers are 'booked up' so that access is not timely."

Some LMEs reported concerns about the quality of services offered by providers. One noted that even when services were available providers had "little or no ability to do them appropriately;" another reported providers had "very little idea about how to link consumers with services or other more clinical aspects of serving high-risk consumers."

System fragmentation affected care for previously hospitalized consumers. Comments from survey respondents described frustrations with a lack of continuity in the mental health-care system that made it hard to serve high-need consumers. One phrased it succinctly: "The fragmentation in design of the whole system makes it almost impossible to appropriately follow and serve these consumers." As made clear in the list of caveats to the service data, there is a lack of systemic information that fully documents the care consumers receive when multiple funding sources pay for services. Without these data, statewide reform to further improve care for previously hospitalized consumers will remain elusive.

Rehospitalizations might be avoided by contacting consumers before they leave the hospital and ensuring continuity of care. Providing continuity is the role of the hospital liaison and LMEs are responsible for ensuring liaisons are in place, but some LMEs do not believe liaisons are able to do the job. One LME administrator who receives discharges from Cherry Hospital reported sometimes consumers are discharged with such short notice that it is extremely difficult to transition them to the community. Other

[21] Retrieved from http://www.ncdhhs.gov/dma/bulletin/pdfbulletin/0908Bulletin.pdf.

LMEs have developed plans to increase coordination. For example, one reported working with two providers to create hospital transition teams that work with hospitals to link consumers to community-based services in their eight-county area.

LME administrators indicated non-clinical supports also were needed to serve previously hospitalized consumers. When asked whether there were adequate community services to maintain this population locally, most LMEs (19) mentioned insufficient housing. Half of the LMEs mentioned transportation was needed: one rural administrator said transportation "is a chronic problem" and "services may be available in a neighboring county, but clients cannot get to it."

Recommendations

Recommendation 1. The Division of Mental Health, Developmental Disabilities and Substance Abuse Services should pursue the implementation of electronic health records to track individuals across treatment facilities and outpatient service providers.

Reducing rehospitalization and enhancing community-based services are central goals of reform, but Local Management Entities (LMEs) continue to report significant challenges to improving service delivery and coordination for previously hospitalized consumers. If reform is to succeed in reducing rehospitalization, then an effective system to transition consumers from hospitals to the community is imperative. Some LME administrators expressed frustration with current Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS) data because they do not adequately reflect care provided. In particular, the data do not currently capture services funded by county or third-party sources and therefore do not always reflect the experiences of individual consumers. Individualized tracking would address this issue and would be an important tool to assure continuity of care across facilities, types of services, and payment sources.

An electronic health record system is one means of individualized tracking that is currently being explored by MHDDSAS. As described in anticipated business requirements dated September 23, 2008, this project aligns with the President's Executive Order Nos. 13335 (2004) and 13410 (2006) related to health technology, the objectives of the *DMH/DD/SAS 2007-2010 State Strategic Plan*, and recommendations of the earlier Program Evaluation Division report on MHDDSAS.[22]

Twenty-four states have enacted or considered legislation on electronic medical records, and one—Minnesota—has extended the purpose to include mental health. Electronic records create a treatment record for each consumer served in the system and have the potential to increase continuity of care, especially in a system where multiple providers and services funded by multiple sources yield piecemeal data and a fragmented system.

[22] Report No. 2008-05-3. See footnote 2.

In addition to improving consumer care, individualized tracking would contribute to a better understanding of how the mental health system works. Piecemeal data may not only degrade the quality of an individual's care, they make it impossible to have a full and accurate picture of how consumers are served statewide and across funding sources.

Adopting electronic health records would be costly: MHDDSAS estimates initial implementation costs at approximately $5 million. Beyond implementation, industry analysts suggest electronic health records can, but do not necessarily, produce efficiency cost savings.[23] However, electronic health records have the potential to lead to long-term savings by improving quality management—a key concern in North Carolina's mental health-care system—and streamlining the system of care.

In order for any type of tracking system to be successful, careful implementation that involves stakeholder input is essential. If those who provide data for the system—in this case, service providers and LMEs—do not agree with basic assumptions about the system, then chances of success are low.

Even though some current MHDDSAS tracking efforts are limited, they are a step in the right direction. For example, the quarterly Community Systems Progress Report provides information that tracks nationally-accepted performance indicators in a clear manner. The recent introduction of a matrix summarizes each LME's performance on each indicator.

Recommendation 2. The Division of Mental Health, Developmental Disabilities and Substance Abuse Services should continue to focus system oversight and management on increasing the capacity and quality of community-based services.

Mental health system reform was designed to improve care in the community. Evaluation findings suggest the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS) should continue to emphasize community capacity and quality of care—more needs to be done to bolster community-based services. Continued monitoring of system indicators is essential to ensure the goals of reform are met.

Evaluation results suggest placing consumers in community hospital psychiatric units—assuming it is appropriate for their level of need—is linked to better continuity of care after discharge. Increasing the number of beds in these facilities is part of reform and should be continued. In addition to keeping consumers closer to home when they do require inpatient care, increasing capacity in community hospitals should help MHDDSAS move toward the goal of reserving state institutions for long-term care for the most severely mentally ill consumers.

Reform specified increases in intensive community-based services such as the full continuum of crisis care and Assertive Community Treatment Team.

[23] See e.g., Bower, A. (2005). *The diffusion and value of healthcare information technology* (Document No. MG-272-1-HLTH). Santa Monica, CA: Rand Corporation.

Local Management Entities (LMEs) reported that whereas funds have been increased for these services, more capacity is needed in many areas of the state to meet the need.

Oversight and management are needed to improve continuity of care for all previously hospitalized consumers. Transition to community-based care after hospital discharge is lacking, especially for consumers discharged from state facilities (both psychiatric hospitals and alcohol and substance abuse treatment centers). The mental health system cannot adequately provide services to the citizens of North Carolina without continued improvement in statewide access to services.

Appendixes

Appendix A: Map of Inpatient Hospital Facilities

Appendix B: Local Management Entity Survey Instrument

Appendix C: Local Management Entities and Member Counties

Agency Response

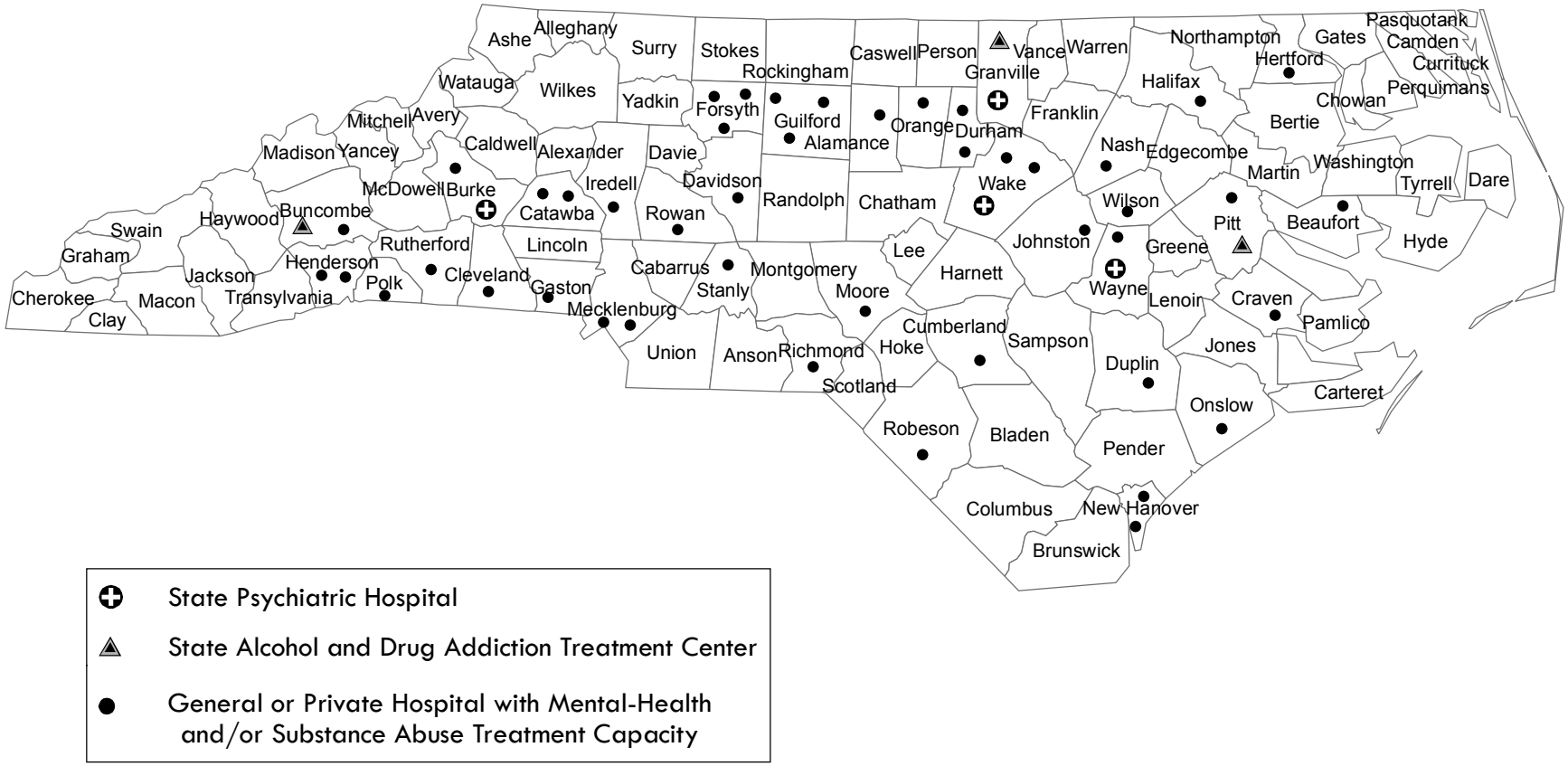
A draft of this report was submitted to the Department of Health and Human Services to review and respond. The response is provided following the appendixes.

Program Evaluation Division Contact and Staff Acknowledgments

For more information on this report, please contact the lead evaluator, Carol H. Ripple, at carolr@ncleg.net.

Staff members who made key contributions to this report include E. Kiernan McGorty, Catherine Moga Bryant, Pamela L. Taylor, and Elizabeth Walker. John W. Turcotte is the director of the Program Evaluation Division.

Appendix A: Hospital Facilities with Beds for Medicaid and State-Funded Consumers



Notes: Symbols represent county location and not exact location within each county. State Psychiatric Hospitals and Alcohol and Drug Treatment Centers are regional facilities.

Source: Program Evaluation Division based on information from MHDDSAS.

MH2 LME Survey

Welcome

As directed by the North Carolina General Assembly, the Program Evaluation Division of the General Assembly is evaluating the state mental health, developmental disabilities, and substance abuse system. This evaluation focuses on mental health and substance abuse services provided since reforms were implemented in March of 2006.

As part of the evaluation we are analyzing data from the Department of Mental Health on outpatient services and re-hospitalizations among previously hospitalized consumers. In addition, we are surveying LME Directors to get your perspective on providing services to this group. The results of this survey will be included in our final report to the Joint Legislative Program Evaluation Oversight Committee in December 2008.

The survey should take approximately 10-15 minutes to complete. Please complete the survey before exiting! Once you exit out of the survey, YOU WILL NOT BE ABLE TO ACCESS IT AGAIN.

If you have any technical difficulties or any other questions about the survey, please contact Catherine Moga Bryant, Senior Evaluator, at catherinem@ncleg.net or 919-301-1975.

Thank you for your participation.

LME Information

* 1. Please enter the following information.

Name:

Title:

Email:

Phone Number:

MH2 LME Survey

* 2. Please select your LME.

- ◯ Alamance-Caswell-Rockingham LME
- ◯ Albemarle MH Center & DD/SAS
- ◯ The Beacon Center
- ◯ Mental Health Partners
- ◯ CenterPoint Human Services
- ◯ Crossroads Behavioral Healthcare
- ◯ Cumberland County Mental Health Center
- ◯ The Durham Center
- ◯ East Carolina Behavioral Health
- ◯ Eastpointe
- ◯ Five County Mental Health Authority
- ◯ Guilford Center for Behavioral Health and Disability Services
- ◯ Johnston County Area MH/DD/SA Authority
- ◯ Mecklenburg County Area MH DD & SA Authority
- ◯ Onslow Carteret Behavioral HealthcareServices
- ◯ Orange-Person-Chatham MH/DD/SA Authority
- ◯ Pathways MH/DD/SA
- ◯ Piedmont Behavioral Healthcare
- ◯ Sandhills Center for MH/DD/SAS
- ◯ Smoky Mountain Center
- ◯ Southeastern Center for MH/DD/SAS
- ◯ Southeastern Regional MH/DD/SA Services
- ◯ Wake County Human Services
- ◯ Western Highlands Network

Availability of Services

Please tell us about your experience overseeing service provision for previously hospitalized consumers. When you respond to the survey, please answer in terms of the experiences of providers in your LME. There may be a range of experiences, but please choose the response that best represents the situation over the the past year in your LME.

The following questions ask about available services in your LME to serve this population. For this survey, "previously hospitalized consumers" are defined as those with a history of at least one hospitalization of less than 60 days in a state psychiatric hospital, ADATC, private facility, or psychiatric unit in a general hospital.

* 3. Please indicate the availability of the following services for previously hospitalized CHILDREN under age 21 in your LME.

	No Availability	Limited Availability	Moderate Availability	High Availability
ACTT	◯	◯	◯	◯
Assertive Outreach	◯	◯	◯	◯
Community Support	◯	◯	◯	◯
Crisis Services	◯	◯	◯	◯
Day Habilitation/Support/ADVP	◯	◯	◯	◯
Evaluation/Management	◯	◯	◯	◯
Intake/Assessment/Testing	◯	◯	◯	◯
Intensive Outpatient/Day Program (includes programs such as MST, SACOT, SAIOT)	◯	◯	◯	◯
Medication Services	◯	◯	◯	◯
Outpatient Therapy (individual, group, or family)	◯	◯	◯	◯
Residential Crisis	◯	◯	◯	◯
Residential Services	◯	◯	◯	◯
Vocational	◯	◯	◯	◯

* 4. Please indicate the availability of the following services for previously hospitalized ADULTS 21 or older in your LME.

	No Availability	Limited Availability	Moderate Availability	High Availability
ACTT	◯	◯	◯	◯
Assertive Outreach	◯	◯	◯	◯
Community Support	◯	◯	◯	◯
Crisis Services	◯	◯	◯	◯
Day Habilitation/Support/ADVP	◯	◯	◯	◯
Evaluation/Management	◯	◯	◯	◯
Intake/Assessment/Testing	◯	◯	◯	◯
Intensive Outpatient/Day Program (includes programs such as MST, SACOT, SAIOT)	◯	◯	◯	◯
Medication Services	◯	◯	◯	◯
Outpatient Therapy (individual, group, or family)	◯	◯	◯	◯
Residential Crisis	◯	◯	◯	◯
Residential Services	◯	◯	◯	◯
Vocational	◯	◯	◯	◯

MH2 LME Survey

* 5. Of all clinical home providers in your LME, approximately what percentage has access to psychiatric services?

- ◯ 0-10%
- ◯ 11-30%
- ◯ 31-60%
- ◯ 61-90%
- ◯ 91-100%

Availability of Services

* 6. In your LME, are there any CLINICAL SERVICES not currently available, or not available in sufficient quantity, that would help providers serve previously hospitalized consumers better?

* 7. In your LME, are there any NON-CLINICAL SERVICES OR SUPPORTS not currently available, or not available in sufficient quantity, that would help providers serve previously hospitalized consumers better? Examples might include housing, employment services, or other social supports.

Providing Services

* 8. What do you or providers in your LME do when a client needs CRISIS SERVICES that are not available in your LME? (select all that apply)

- [ ] My LME has all the crisis services needed for the community
- [ ] Find the service in a nearby LME
- [ ] Choose an alternate service that is available in my LME
- [ ] Send the client to the Emergency Room
- [ ] Admit the patient to the hospital

Other (please specify)

* 9. What do you or providers in your LME do when a client needs a SERVICE (OTHER THAN CRISIS) that is not available in your LME? (select all that apply)

- [ ] My LME has all the services needed for the community
- [ ] Find the service in a nearby LME
- [ ] Choose an alternate service that is available in my LME
- [ ] Send the client to the Emergency Room
- [ ] Admit the patient to the hospital

Other (please specify)

* 10. Please briefly describe an example when services needed by a client were not available in your LME and the actions that were taken.

Serving Previously Hospitalized Consumers

* 11. Please rate the ABILITY OF PROVIDERS in your LME to:

	No Ability	Limited Ability	Moderate Ability	Strong Ability
Provide services to previously hospitalized consumers	◯	◯	◯	◯
Follow up with consumers within 7 days of hospital discharge	◯	◯	◯	◯
Refer consumers to appropriate inpatient facilities within their community	◯	◯	◯	◯
Refer consumers to appropriate outpatient services within their community	◯	◯	◯	◯
Secure needed services outside your LME when not available locally	◯	◯	◯	◯
Secure needed hospitalization in your LME region	◯	◯	◯	◯
Secure needed hospitalization outside your LME region when not available locally	◯	◯	◯	◯
Provide adequate crisis services	◯	◯	◯	◯
Access psychiatric services	◯	◯	◯	◯

Comments?

12. Please provide any additional comments about serving previously hospitalized consumers.

Appendix C: Local Management Entities and Member Counties

Local Management Entity	Member Counties
Alamance-Caswell-Rockingham	Alamance, Caswell, Rockingham
Albemarle	Camden, Chowan, Currituck, Dare, Hyde, Martin, Pasquotank, Perquimans, Tyrell, Washington
The Beacon Center	Edgecombe, Greene, Nash, Wilson
CenterPoint Human Services	Davie, Forsyth, Stokes
Crossroads Behavioral Health Care	Iredell, Surry, Yadkin
Cumberland County Mental Health Center	Cumberland
The Durham Center	Durham
East Carolina Behavioral Health	Beaufort, Bertie, Craven, Gates, Hertford, Jones, Northampton, Pamlico, Pitt
Eastpointe	Duplin, Lenoir, Sampson, Wayne
Five County Mental Health Authority	Franklin, Granville, Halifax, Vance, Warren
Guilford Center for Behavioral Health and Disability Services	Guilford
Johnston County Area MH/DD/SA Authority	Johnston
Mecklenburg County Area MH DD & SA Authority	Mecklenburg
Mental Health Partners	Catawba, Burke
Onslow Carteret Behavioral Healthcare Services	Carteret, Onslow
Orange-Person-Chatham MH/DD/SA Authority	Chatham, Orange, Person
Pathways MH/DD/SA	Cleveland, Gaston, Lincoln
Piedmont Behavioral Healthcare	Cabarrus, Davidson, Rowan, Stanly, Union
Sandhills Center for MH/DD/SA	Anson, Harnett, Hoke, Lee, Montgomery, Moore, Randolph, Richmond
Smoky Mountain Center	Alexander, Alleghany, Ashe, Avery, Caldwell, Cherokee, Clay, Graham, Haywood, Jackson, Macon, McDowell, Swain, Watauga, Wilkes
Southeastern Center for MH/DD/SAS	Brunswick, New Hanover, Pender
Southeastern Regional MH/DD/SA Services	Bladen, Columbus, Robeson, Scotland
Wake County Human Services	Wake
Western Highlands Network	Buncombe, Henderson, Madison, Mitchell, Polk, Rutherford, Transylvania, Yancey

Source: Program Evaluation Division based on information from MHDDSAS.

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Michael F. Easley, Governor

Dempsey Benton, Secretary

November 6, 2008

John Turcotte, Director
N.C. General Assembly Program Evaluation Division
300 N. Salisbury Street
Raleigh, NC 27603-5925

Dear Mr. Turcotte:

Thank you for the opportunity to review and discuss with your staff the Program Evaluation Division's draft report titled *Caring for Previously Hospitalized Consumers: Progress and Challenges in Mental Health System Reform.* We believe the final report is a reasonable assessment of the challenges the Department has faced in building community-based services and in ensuring continuity of care for persons who have been hospitalized.

Outlined below is our formal response to the policy recommendations contained in the final report.

Recommendation 1: The Division of Mental Health, Developmental Disabilities and Substance Abuse Services should pursue the implementation of electronic health records to track individuals across treatment facilities and outpatient service providers.

DHHS Response: *We agree with this recommendation. In addition to improving service delivery and continuity of care for each individual consumer, a statewide electronic health record system would significantly improve overall quality management. Such an integrated data system could enable decision-makers to determine and monitor system performance for use in management at every level. However, we are concerned that such a system could cost considerably more than indicated in the recommendation.*

Recommendation 2: The Division of Mental Health, Developmental Disabilities and Substance Abuse Services should continue to focus system oversight and management on increasing the capacity and quality of community-based services.

DHHS Response: *We agree with this recommendation. We recognize the need and are directing resources provided with legislative support for the ongoing development of a continuum of community-based services. These services include extensive, statewide crisis services as funded through House Bill 2436.*

Thank you again for the opportunity to review the report. We appreciate the professional manner in which your staff conducted the study.

Sincerely,

Dempsey Benton

Cc: Dan Stewart
Mike Lancaster, M.D.
Leza Wainwright
Flo Stein
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Sharnese Ransome