



# State Psychiatric Hospital Admission Delays in North Carolina

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January-June 2010

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Abstract: This document is a review of state hospital admission delay data collected by the NC Division of State Operated Healthcare Facilities during the first six months of 2010. Findings show that over 3,000 people were wait-listed and, on average, they waited 2.6 days for admission. Eighty-six percent of patients waited in hospital Emergency Departments (ED) or Crisis Units. A significant number of people experienced extreme delays of several days to weeks. One thousand four hundred and seventy six (1,476) waited 2 days or longer. Of these, 212 waited 7 days or longer. Delays were most pronounced in the Central Region of the state. Twenty-seven percent, over 900 patients were returned home without admission after waiting an average of 1.8 days. EDs and Crisis Units are not a therapeutic environment for paranoia, out of control thoughts, emotions, and personal nightmares. As a society, we would not condone this treatment for our pets. It is time for the State of NC to solve this problem.

## NC State Psychiatric Hospital Admission Delays January – June 2010

### Executive Summary

North Carolinians who experience psychiatric emergencies requiring hospitalization are not getting the care and treatment they need. Overall, people who visited NC Emergency Departments (EDs) in 2009 waited an average of 4.26 hours.<sup>1</sup> People waiting for psychiatric care in a state psychiatric hospital during the first 6 months of 2010 waited an average of 63.1 hours (2.6 days).

The goal of this report is to take an in-depth look at the number of people who waited for admission to a state hospital psychiatric bed during the first 6 months of 2010, how long they waited, and the final outcome of their waits.

Other patients that have experienced delays in hospital EDs and crisis units waiting for a bed in a community hospital psychiatric unit or private psychiatric hospital are not included in this report. *This report focuses strictly on people who have been wait-listed for a bed at a state operated psychiatric hospital.* This is only one piece of the puzzle. There are many more people waiting who are not accounted for in this report.

There are four state hospitals, each primarily serving patients in the geographic region where they are located-- Broughton, serving the western part of the state, Dix and Central serving the central portion, and Cherry, serving the eastern portion of the state

Three thousand three hundred and thirty nine (3,339) people were wait-listed for admission to a state hospital. Eighty-six (86) percent of the patients were waiting in hospital emergency departments or in crisis centers. Twenty-seven percent (912 patients) were “returned home.” These patients recovered sufficiently in the hospital Emergency Department (ED), Crisis Center or referring location to be removed from involuntary commitment. Or, if not on involuntary commitment (IVC), they may have simply gotten tired of waiting. The average wait before being sent home was 44 hours. Many of these patients were originally under court-ordered IVC and judged to be a danger to self or others.

In addition, seven hundred and eighty-eight (788) people were admitted to a community psychiatric hospital bed before a bed could be found at a state hospital. The average wait before the admission was 24 hours.

One thousand four hundred and thirty (1430) people were eventually admitted to a state hospital. The average wait was 37 hours. Averages can mask the reality of the number of people enduring extreme waits across the state. One thousand four hundred and seventy six (1,476) waited 2 days or longer. Of these, 212 waited 7 days or longer.

Although there are significant problems across the entire state, the severest waits are in the central region. Dix and Central had a combined total of 939 wait days per month compared to a combined total of 524 wait days per month for Broughton and Cherry. One thousand nine hundred and fifty one (1951) people were wait-listed for admission to Dix and Central Regional Hospital

and the average wait was 3 days. Seven hospital Emergency Departments in the Central Region had 3 or more delays of 7 days or longer.

In addition to the three state hospital regions, the state is also grouped into Local Management Entities for management of the DD/MH/SAS program. On average, an LME in the Central Region experienced almost 100 people who had to wait 2 or more days before admission. This was 3 times higher than the average number waiting 2 or more days in the other two regions. Wake, Center pointe, Sandhills, and Durham averaged 163 people waiting 2 or more days for admission. This average is nearly 5 times higher than the average number experienced in the Western or Eastern Regions of the state.

The lack of psychiatric hospitals is having a detrimental impact on private hospital emergency departments. A conservative estimate is that they spent over \$7M dollars boarding people with psychiatric distress in their EDs waiting for beds. A few have hired mental health staff and created special areas in the ED for patient care.

However, the really important cost is to the people who are suffering these unimaginable delays, sometimes in deplorable conditions. This is not a therapeutic environment for paranoia, out of control thoughts, emotions, and personal nightmares. As a society, we would not condone this treatment for our pets. It is time for the State of NC to solve this problem.

Additional funding for 3-way contracts in the Central Region would help with this problem, but the problem is so big that other solutions are necessary. One approach that should be evaluated is to have the state build a regional psychiatric unit as part a community psychiatric hospital. Treating people who need acute psychiatric care in the community is more cost effective and will free up beds in state hospitals for people who need more specialized, longer term care.

## **Background:**

Waiting for treatment or hospitalization is a stressful situation. People complain about waiting 30 minutes in a doctor's office when the doctor is running late. And then there is that time in an examination room that seems to take forever waiting for the nurse or doctor, often with our dignity compromised. Imagine what it might be like for the thousands of people, already in psychiatric distress, who have been forced to wait in hospital EDs for days and sometimes weeks for treatment. A small number of EDs provide sitters and have mental health workers on call or on staff to check in on patients. Most, unfortunately, are not staffed or prepared to deal with mental illnesses.

The Raleigh News and Observer reported in November 2009 that people were languishing for days in emergency departments that were not equipped to deal with psychiatric emergencies.<sup>ii</sup> One source for this article was an internal document from the NC Department of Health and Human Services, *Sample Survey of Selected Community Hospitals*, June 16 – August 11, 2009. This report included feedback from ED staff in 9 hospitals which reported difficulty finding psychiatric hospital beds for these patients. Most expressed frustration

with a system that was failing these patients. Some indicated that patients were being physically or chemically restrained rather than treated. A few indicated instances of patients being tasered in the ED.

A July 2010 article in the Courier-Tribune, reported statements contained in a letter written to NC DHHS by Bob Morrison, Randolph Hospital President, “mental health patients are not getting the timely treatment that they need, as required under North Carolina law.”<sup>iii</sup> According to our review, Mr. Morrison’s hospital had 9 patients who waited in the ED for 7 days or longer during the first 6 months of 2010.

North Carolina began down-sizing state hospitals when the Mental Health Reform Act was enacted in 2001. The intent was to build a system of community-based services that would allow people with psychiatric illnesses to live in the community and to receive services close to home rather than in big state institutions. Approximately one-half of the state hospital beds have been closed, but the system of quality community based services has not materialized. In addition, from 1999-2005, community hospitals in NC closed 300 beds for financial reasons.<sup>iv</sup> The state legislature, recognizing the growing problem facing our hospital emergency departments, appropriated funds to award contracts to community hospitals to open psychiatric beds. At present there are ninety-six beds costing \$750 per day funded by state tax payer dollars at 19 community hospitals. To date, the state has spent \$20M on these beds and has included another \$9M in the 2010-11 budget.

The goal of this report is to take an in-depth look at the magnitude of the problem including the number of people who waited for admission to a state hospital psychiatric bed over the past 6 months, how long they waited, and the final outcome of their waits. (No data are available for those only waiting for a community psychiatric bed.) Raw data for this report were provided by the NC Division of Health & Human Services, Division of State Operated Services.

## Data Evaluation

The parameters of interest are the *number* of people waiting for a bed in a state hospital and the *amount of time waiting*. Most data are presented according to the state hospital where the patient is wait-listed, not where the patient is waiting. So in the following discussion, if the table heading shows Broughton Hospital, people are waiting for a psychiatric bed at Broughton, the state facility primarily serving the western part of the state. Similarly, Dix and Central facilities serve the central portion, and Cherry serves the eastern portion of the state. On a population (2009 estimate), the western region is home to 3.55 million people; the central region is home to 3.85 million; and the eastern region is home to 1.98 million.

Table 1 shows that 3,339 people waited for a bed assignment at one of the four hospitals during the six month period. On average, there were 556 people waiting each month in some hospital ED, crisis center or community psychiatric unit for transfer to a state facility. Most patients (81%) were waiting in

hospital emergency rooms as presented in Figure 1. It can also be seen that the total amount of wait time, expressed as 24-hour days, is 8,779. *On average each month, 556 people had to wait a combined total of 1,463 days for a bed, or 2.6 days each.*

Table 1 also shows that Central Regional and Dix experience the longest wait times and the most people who have to wait. Dix and Central combined had a total of 939 days compared to 524 days for Broughton and Cherry combined. Sixty-four percent of the total waits were in the central region.

Several figures help to illustrate the magnitude of the problem. Figure 2 shows the number of people who waited in EDs by the number of days waited. Figure 3 shows the number of people who waited in community psychiatric hospital units. These figures show that people waited both in the EDs and in the psychiatric units for extremely long periods of time. Long delays in transferring patients to state psychiatric hospitals further delays the system since these beds are unavailable to care for acute patients from EDs sometimes for extended periods of time. Figure 4 shows the number of people waiting from all referral sources by number of days they have waited during the first six months of 2010. Figure 5 shows total number of days waiting for a state psychiatric hospital bed for those waiting 1 through 6 days by month. Note that this clearly shows that March was an exceptionally over-burdened month. It appears that there is a trend for increasing the numbers of people waiting for beds by month if March were excluded.

**Table 1. Total Hourly Delays by Hospital expressed as Days**

<b>Hospital</b>	<b>TOTAL Days of wait time</b>	<b>TOTAL People waiting</b>	<b>AVERAGE Wait Time (in days)</b>	<b>MONTHLY Avg. Days of wait time</b>	<b>MONTHLY Avg. People Waiting</b>
<b>Broughton</b>	1625	576	2.8	271	96
<b>Central</b>	3919	1239	3.2	653	206
<b>Dix</b>	1714	712	2.4	286	119
<b>Cherry</b>	1520	812	1.9	253	135
<b>Total</b>	<b>8779</b>	<b>3339</b>	2.6	<b>1463</b>	<b>556</b>

Figure 1

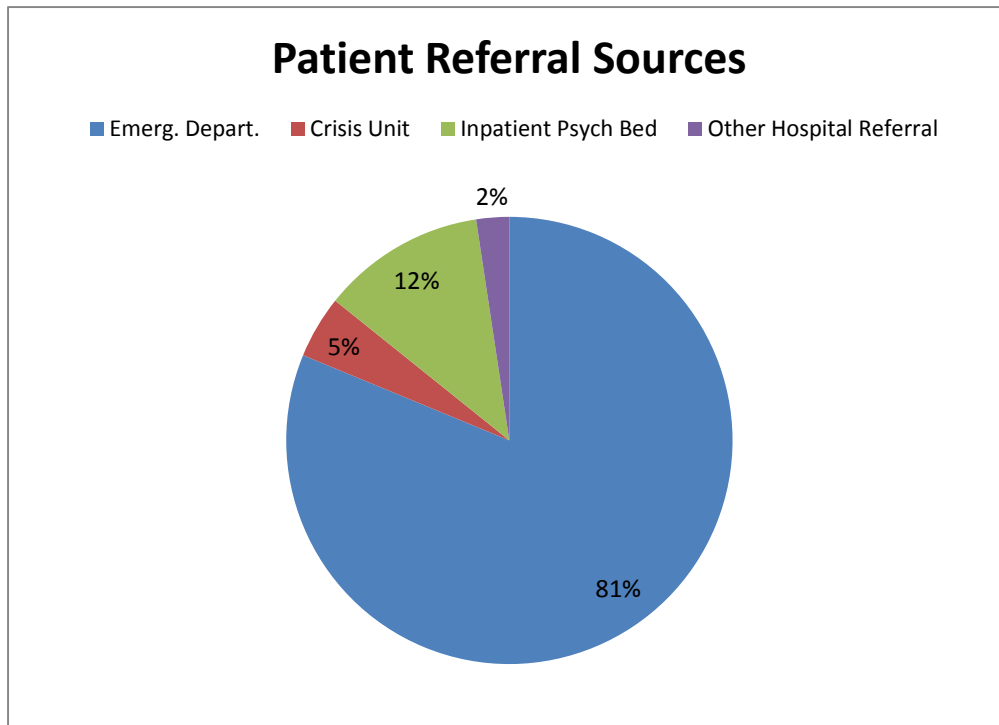


Figure 2

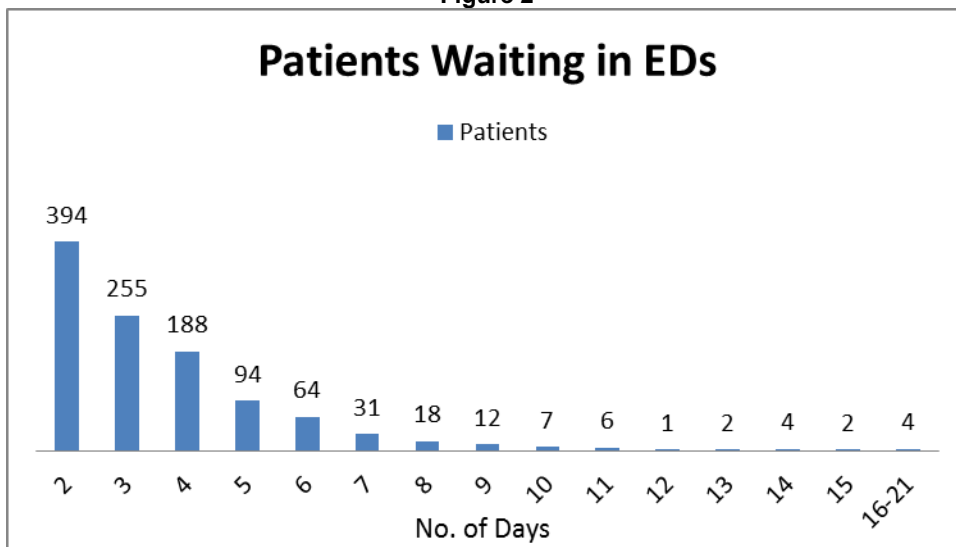


Figure 3



Figure 4

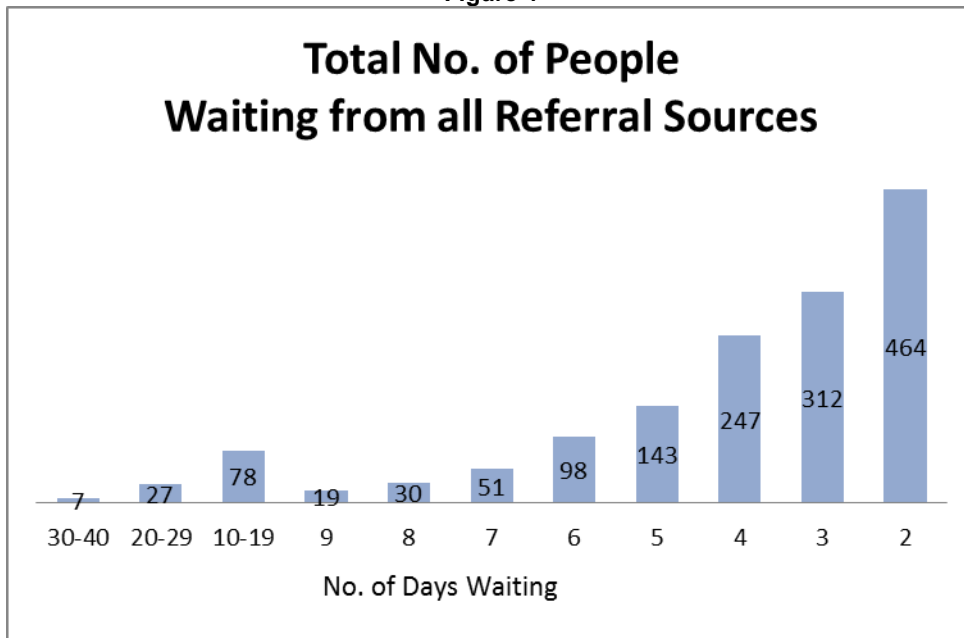


Figure 5

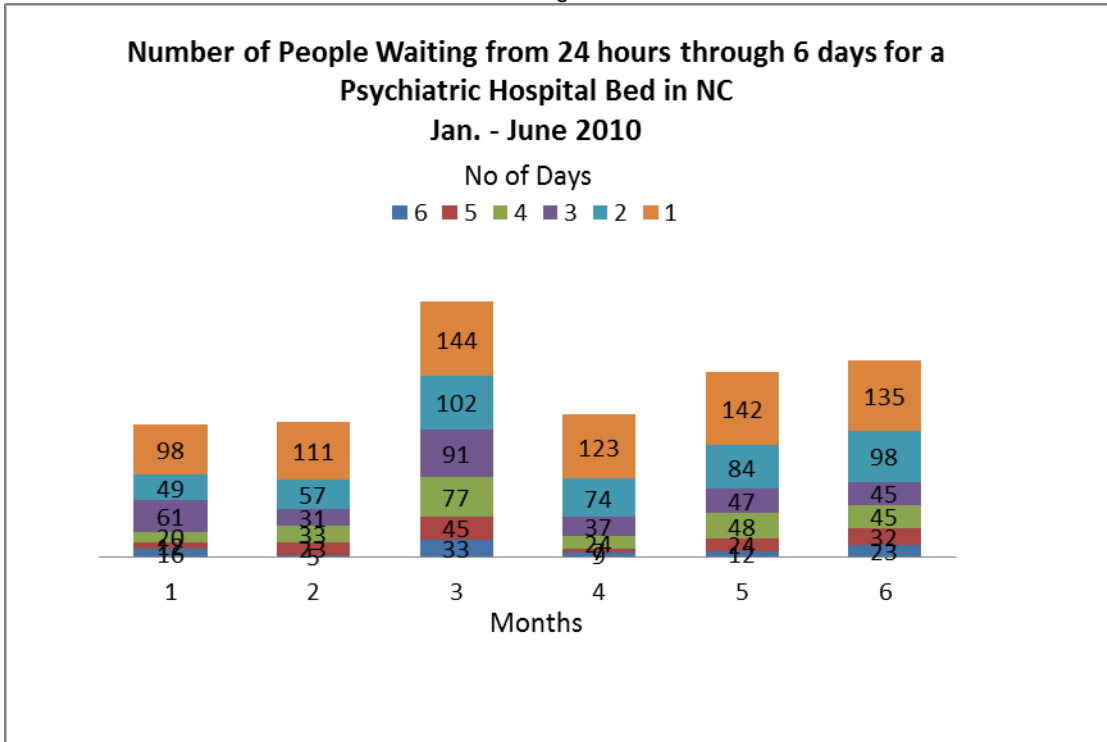


Figure 6 illustrates the number of people waiting in hospital emergency departments for seven or more days. This chart shows that there are more patients referred for admission to Dix and Central Regional hospitals with extreme waits.

Figure 6

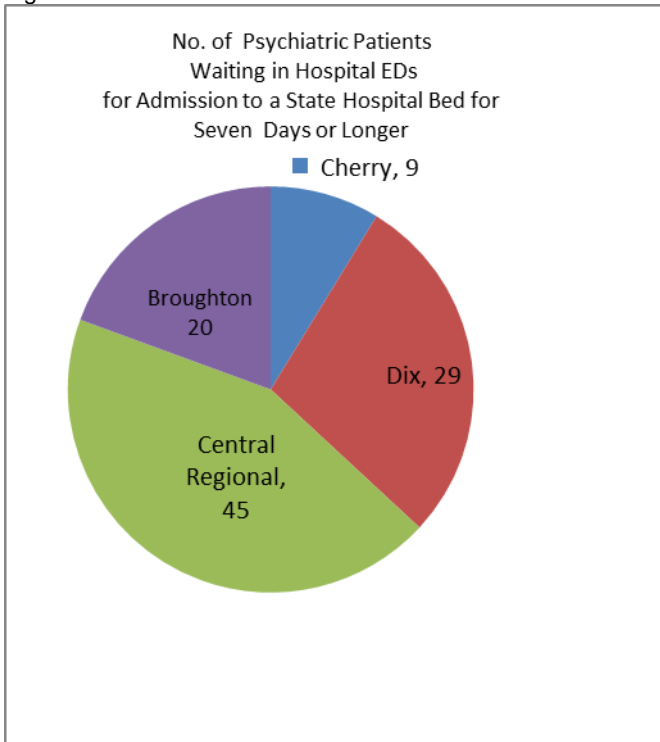


Table 2: Hospital emergency departments with the highest number of long waits (7 days or longer)

Hospital	No. Patients	Region
WakeMed NBA	13	Central
Betsy Johnson Regional Hospital	11	Central
Randolph Hospital	9	Central
Mission/St. Joseph's	5	Western
CMC Randolph	4	Central
UNC	4	Central
Anson Community Hospital	3	Central
Cape Fear Valley Medical Center	3	Central
Duke	3	Central
Iredell Memorial Hospital	3	Western
Johnston Memorial Hospital	3	Central
Wilkes Regional Medical Center	3	Western

The impact of insufficient psychiatric beds is most severe in the central region of NC. There are just not enough psychiatric beds to accommodate the need and the people in need are experiencing the greatest impact.

### **Analysis by Local Management Entities**

In addition to the three state hospital regions, the state is also grouped into LMEs for management of the DD/MH/SAS program. The number of individuals waiting at least 2 days and 7 days for a State psychiatric hospital bed during the first 6 months of 2010 by LME is shown in Table 3. The LMEs were ranked based on the number of people waiting 2 or more days, from highest to lowest, adjusted for population (column 4). It can be seen that on average, an LME in the Central Region experienced almost 100 people who had to wait 2 or more days before admission. This was 3 times higher than the average number waiting 2 or more days in the other two regions. Wake, Centerpointe, Sandhills, and Durham averaged 163 people waiting 2 or more days for admission. This average is nearly 5 times more than the average number experienced in the Western or Eastern Regions of the state. The Wake LME has 4.5 times more people waiting 2 or more days than the median of 47. Centerpointe has 3.4 times more people waiting than the median waiting 2 or more days.

The last two columns in Table 2 adjust for the 2009 estimated population living in the LME's geographic area.

**Table 3**

<b>LME (REGION)</b>	<b>NUMBER WAITING 2 OR MORE DAYS</b>	<b>NUMBER WAITING 7 OR MORE DAYS</b>	<b>No. &gt;2 / (100,000)</b>	<b>No. &gt; 7/ (100,000)</b>
1. DURHAM (central)	135	10	50.7	3.8
2. O-P-C (central)	87	14	36.1	6.0
3. CENTERPOINTE (central)	158	23	29.5	4.3
4. SANDHILLS (central)	151	33	28.5	6.0
5. WAKE (central)	207	42	23.1	4.7
6. ALAMANCE-CASWELL (central)	39	3	22.7	1.7
7. SE REGIONAL (eastern)	53	3	20.7	1.2
8. FIVE COUNTY (central)	48	3	20.4	1.3
9. GUILFORD (central)	86	16	18.1	3.4
10. BEACON (eastern)	39	1	15.7	0.4
11. WESTERN (western)	77	6	15.2	1.2
12. SE CENTER (eastern)	52	1	14.7	0.3
13. MENTAL HEALTH PARTNERS (western)	36	6	14.6	2.4
14. CUMBERLAND (central)	46	4	14.3	1.2
15. CROSSROADS (western)	30	7	11.2	2.6
16. JOHNSTON (central)	16	4	9.5	2.4
17. PIEDMONT (western)	68	7	9.2	1.0
18. SMOKEY (western)	39	5	7.5	1.0
19. EASTPOINTE (eastern)	16	0	5.5	0
20. ONSLOW-CARTERET (eastern)	13	2	5.4	0.8
21. ECBH (eastern)	31	4	5.3	0.7
22. MECKLENBURG (western)	21	4	2.3	0.4
23. PATHWAYS (western)	1	0	0.3	0

The third column in Table 3 and the last column (adjusted for population) show the number of individuals who waited 7 or more days before being admitted to a state hospital bed. Again the central region is showing the greatest number of extreme waits –the 6 LMEs with the largest number are all from the central region.

### **Disposition of those waiting for admission**

During the six month period, there were 3,484 total admissions (these admissions may or may not have been wait-listed) at the four State Psychiatric

Hospitals. Ranked from highest to lowest--Central, Dix, Cherry and Broughton had 1074, 913, 796 and 701 admissions respectively. Similar to the above 2 tables, the Central Region accounts for over half the patients, 57%.

As mentioned above, not all of the admissions come from those who are waiting for beds. DHHS captures detailed information pertaining to the disposition of people who were wait-listed. The information provided by DHHS is summarized below into 4 categories, those admitted to the state hospital, those sent to a community hospital, those returned home, and those sent elsewhere, e.g., assisted living homes, jails etc. (Note that Dix reports only two categories: those admitted and those not admitted.) Table 4 captures this information by hospital. Using the reported admissions data of 3,484 admissions during this period, only 1,430 came from the wait list (41%). It is important to note that often a person waiting for a psychiatric hospital bed is placed on both a community wait list and a state hospital wait list. The person is assigned to the first available bed that satisfies the requirements for the level of care required for the person. Sixty-six (66) percent of the patients who waited for a bed were finally treated. Twenty-seven (27) percent spent days waiting for a bed only to be returned home without receiving treatment. With the very limited care most of these 912 patients received in most hospital EDs, there is little hope that many are being connected to community mental health providers for follow-up care. In fact, in many locations people are experiencing long waits for appointments for outpatient mental health treatment. This makes it more likely that they will once again become a danger to themselves or others and be back in the ED.

**Table 4: Disposition of “Potential Patients” awaiting State Hospital Beds**

<b>Hospital</b>	<b>Admitted</b>	<b>To Comm. Hospital</b>	<b>Returned Home</b>	<b>To Other</b>	<b>Total</b>
<b>Broughton</b>	288 (50%)	148 (26%)	92 (16%)	48 (8%)	576
<b>Central</b>	468 (38%)	361 (29%)	342 (28%)	68 (5%)	1239
<b>Cherry</b>	295 (36%)	279 (34%)	156 (19%)	82 (10%)	812
<b>Dix</b>	379 (53%)	N.A.	322 (45%)	11 (2%)	712
	1430 (42.8)	788 (23.6)	912 (27.3)	209 (6.2)	3339

The impact of not having enough state or community psychiatric beds can also be looked at by the wait time for the above categories. Table 5 illustrates this impact. The most extreme cases by hospital and disposition category are shown in the last column. For example, one person waited 33 days for a bed at Central, only to be sent home.

**Table 5: Total Wait Hours by Disposition Category and by Hospital  
(in hours except for last column)**

Hospital	Admitted (avg. wait )	To Comm. Hospital (avg. wait)	Returned Home (avg. wait)	To Other (avg. wait)	Extreme Wait (days)
<b>Broughton</b>	21884 (76)	7276 (49)	6919 (75)	1714 (36)	17 (to comm. hospital)
<b>Central</b>	10675 (23)	8188 (23)	17936 (52)	4366 (64)	33 (to home)
<b>Dix</b>	12795 (34)	N.A.	10943 (34)	N.A.	33 (to state hospital)
<b>Cherry</b>	6793 (23)	4795 (17)	4149 (27)	2045 (25)	15 (to other)
<b>Total</b>	<b>52147 (36.5)</b>	<b>20259 (25.7)</b>	<b>39947 (43.8)</b>	<b>8125 (39.9)</b>	

### Hospitals/Emergency Departments Experiencing the Worst Delays

The discussion thus far has identified the portion of the state with the worst delays as being the central region, those areas being served by Dix and Central Regional Hospitals. During the six month period, 282 people were “wait listed” for Dix Hospital from outside Wake County. Of these, the largest number and percent came from 6 hospital emergency departments, shown in Table 6. The 6 hospitals are all located in the central region, as is Wake. At most 2 percent of the wait-listed patients were from counties outside the central region.

**TABLE 6 Hospitals Outside Wake Co. Referring Patients to Dix**

Hospital	County	Number	Percent
Betsy Johnson	Harnett	79	28.0
Randolph + CMC	Randolph	79	28.0
Central Carolina	Lee	29	10.3
Moore + Sandhills	Moore	21	7.4
Anson	Anson	16	5.7
UNC	Orange	12	4.2
Other	17 counties	46	16.3
		<b>Total 282</b>	<b>100.0</b>

Five hundred fourteen patients were from Wake County. There were 6 sources referring patients as shown in Table 7.

**TABLE 7**

<b>Hospital</b>	<b>Number</b>	<b>Percent</b>
Wake County Human Services	182	35.4
Wake Med	182	35.4
Holly Hill	62	12.1
Rex	35	6.8
Duke Raleigh	33	6.4
Other	20	3.9
	<b>Total 514</b>	<b>100.0</b>

During the same six month period, Central Regional had 1375 wait-listed for admission. These patients came primarily from the counties shown in Table 8. Less than 6 percent of the referrals were from counties outside the Central Region.

**TABLE 8**

<b>County</b>	<b>Number</b>	<b>Percent</b>
Durham	274	19.9
Forsyth	153	11.1
Guilford	160	11.6
Orange (UNC)	130	9.4
Wake	89	6.5
Alamance	91	6.6
Granville	52	3.4
Carteret	31	2.2
Other	396	28.7
	1375	100.0

Taken collectively, there were no more than 100 referrals to Dix and Central that came from outside the Central Region, or less than 5%. The demand for beds within the Central Region as measured by the disproportionate number of persons waiting for a psychiatric bed exceeds what beds are currently available. Additional psychiatric beds are needed within the central region to reduce the amount of waiting time and serve the need of the citizens living within that portion of the state.

### **Solutions**

NC DHHS provided a list of all 3-way contracts awarded at the beginning of SFY 2011. It is a compilation of beds that have been gradually added to various communities since 2009-2010 with \$20M allocated by the State Legislature. (Note that since mental health reform began, over 300 community psychiatric beds have been closed or not staffed.) Forty one beds were awarded to the western region, 29 to the central region, and 26 to the eastern region.

**Table 9: REGIONAL POPULATION ADJUSTED DAYS-WAITING  
COMPARED WITH ASSIGNMENT OF NEW 3-WAY CONTRACTS FOR  
COMMUNITY BEDS**

<b>REGION</b>	<b>TOTAL Population (x100,000)</b>	<b>No. &gt; 2 days</b>	<b>No. &gt; 2 days adjusted for population</b>	<b>Actual No. of Community beds Awarded</b>	<b>Pop. Adj. No. of beds</b>
Central	38.487	973	25.3	29	39
Eastern	19.809	204	10.3	26	20
Western	35.491	272	7.7	41	36
Total	93.8	1449	15.4	96	95

Based on analysis of these data, it appears that allocation of more three-way hospital contracts in the central region of the state would provide some help in decreasing waiting times; however, the amount of funds available for allocation is inadequate to solve the problem. In addition, it is unlikely that a sufficient number of community hospitals will participate which may be a factor in the existing distribution of the contract money.

According to people who work in emergency departments, one type psychiatric bed is not equivalent to another. There are many people who need specialized units—medical plus psychiatric, care for dementia, violence and other high clinical management needs. Some hospitals, like UNC, are more likely to be in a position to care for some of these patients, but even UNC needs to have available state hospital beds where they can refer some of these very difficult patients. More community psychiatric hospital beds are needed, especially in the central region, available to treat people who have a combination of medical and psychiatric illness. More beds are also needed in close proximity to Wake County to care for Medicaid patients. Wake County is the most populous and fastest growing region of the state, but it does not have a psychiatric unit within a general medical hospital to treat people with co-occurring disorders or one that is authorized to bill for Medicaid adults. State hospital beds should be reserved for the most severely mentally ill patients who cannot be treated outside a state hospital.

One potential solution is for the state to build a regional psychiatric unit in a community hospital with a location accessible to the majority of the people needing care. This approach would enable the hospital to bill Medicaid and private insurance rather than placing the entire burden of care on the state. The hospital could be built and staffed to care for high acuity patients which would reduce the impact on the state budget as well as overburdened state hospitals.

Some people will argue that rather than invest in more hospital beds, we need to invest in housing, more outpatient care, and recovery-based options. Granted, all of these are needed in addition to hospital beds, and the state has limited resources.

Given the magnitude of the problem—556 people per month waiting an average of 2.6 days—for a bed in a state psychiatric hospital with some extreme waits lasting weeks, a rapid solution needs to be found for this problem. The cost impact is a tremendous burden on our hospital emergency departments. Using a conservative estimate of \$1,000 per day to keep people on involuntary commitment in the ED, private hospitals have spent \$7,031,984 (3339 patients x .81 percent from EDs x 2.6 days x \$1,000/day) in the first 6 months of 2010. Some hospitals have taken extraordinary steps to accommodate people with psychiatric illness, and their efforts should be recognized by the state.

However, the really important cost is to the people who are suffering these unimaginable delays, sometimes in deplorable conditions. Many are handcuffed or otherwise restrained with ties. They are watched 24/7 by strangers, often by law enforcement officers. They are often kept in hallways on stretchers or in small cubicles. They are physically uncomfortable and most have been judged to be a danger to self or others. There is a history of law enforcement officers using tasers to restrain patients in some EDs. This is not a therapeutic environment for paranoia, out of control thoughts, emotions, and personal nightmares. As a society, we would not condone this treatment for our pets. It is time for the State of NC to solve this problem.

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Press Ganey Associates, Inc. *Emergency Department Pulse Report 2010 Patient Perspectives on American Health Care*. South Bend, Ind.

<sup>ii</sup> Raleigh News and Observer, *Mental Patients Get Stuck in ERs*, November 8, 2009, Michael Biesecker

<sup>iii</sup> Courier-Tribune, Asheboro and Randolph County, *Is Local Inpatient Psychiatric Unit Needed*, July 31, 2010, Chip Womick

<sup>iv</sup> Courier-Tribune, Asheboro and Randolph County, *Is Local Inpatient Psychiatric Unit Needed*, July 31, 2010, Chip Womick.