

# **An Examination into the Relationship Between Mental Healthcare Access & Mentally Ill Inmates in North Carolina**

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## **Abstract**

The state of North Carolina increasingly faces criticism for the rising population of mentally ill prisoners. Parallel to these criticisms are a growing number of reports on the state's diminishing public mental healthcare options. National organizations such as the National Alliance on Mental Illness (NAMI) and the Treatment Advocacy Center (TAC) have identified North Carolina specifically in reports regarding what the groups consider to be state mental healthcare crises. This paper discusses several aspects of public mental healthcare in North Carolina as regards the availability and accessibility of such care. In addition, this paper examines trends in prison mental healthcare and the mental health of North Carolina state inmates. In the study of these factors, this paper attempts to discern any existing relationship between mentally ill inmates and public mental healthcare access in North Carolina.

## **1. Hypothesis**

North Carolina's deinstitutionalization of mental illness is to be related with the number of mentally ill individuals in prison. Specifically, it is hypothesized that as the number of public mental hospitals and mental hospital beds decreases, the number of mentally ill inmates increases. Substantiating this claim could be a significant step towards NC mental healthcare reform in that it could provide insight into any positive or negative patterns and factors that are currently present in the NC mental health system. This paper will examine the history of mental healthcare in both hospitals and prisons in NC, statistics of the numbers of mentally ill inmates over time, the amount of public mental healthcare available in NC over the same period of time, and legislation pertaining to these matters to address the presented hypothesis.

### **1.1 Definition of Terms**

The working definition of "mental illness" used throughout this paper follows that of the National Alliance on Mental Illness (NAMI): A medical condition that disrupts a person's thinking, feeling, mood, ability to relate to others and daily functioning<sup>1</sup>. This includes, but is not limited to: Post-Traumatic Stress Disorder (PTSD) and other Anxiety Disorders, Attention Deficit Hyperactivity Disorder (ADHD), Bipolar Disorder and other Mood Disorders, Personality Disorders, and Schizophrenia. The mental health statistics that this paper uses refer to any mental illness (AMI) as defined by the National Institute of Mental Health (NIMH). AMIs are defined by NIMH as: a mental, behavioral, or emotional disorder (excluding developmental and substance use disorders); diagnosable currently or within the past year; of sufficient duration to meet diagnostic criteria specified within the 4<sup>th</sup> edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Statistics for AMIs may indicate no or mild to disabling impairment. Occasionally statistics may refer to serious mental illness (SMI) as opposed to AMI. According to NIMH, SMIs are where the burden of mental disorders is concentrated and are identified beyond AMIs by resulting in serious functional impairment, which substantially interferes with or limits one or more major life

activities. Criteria for mental illness other than AMI and SMI will be defined by the specific sources from which the data has been taken.

## 1.2 Relevance of Data

Not all data contained in this paper refer to the same period of time, as some sources do not release reports regularly. However, the statistics and reports cited will reflect the most recent data available.

## 2. Background on North Carolina Mental Hospitals

North Carolina's first state-run psychiatric facility opened in 1850 following continuous advocacy and ongoing pressure to create such a facility by Dorothea Dix. In 1865, Dix Hill, now Dorothea Dix Hospital, was under occupation by the Union and began temporarily admitting African American patients. The patient population continued to grow as mentally ill criminals were transferred to the hospital in 1870; the 1870 U.S. Census reported a total of 779 insane individuals in NC, 242 of whom were served by the hospital<sup>2</sup>. By 1875, plans for a second and third hospital were underway as the state had deemed the Raleigh hospital insufficient to meet the needs of mentally ill NC residents. The responsibility of designating which counties were to be served by either Dorothea Dix Hospital or the new hospitals, which were under construction in Morganton and Goldsboro, was given to the hospitals themselves.

The Asylum for Colored Insane in Goldsboro, now Cherry Hospital, opened in 1880 and served African-Americans from all one hundred counties. By the early 1900s, the hospital included separate buildings for tuberculosis patients as well as the criminally insane<sup>3</sup>. The Western North Carolina Insane Asylum in Morganton, now Broughton Hospital, admitted its first patients in 1883 and continued to expand its facility through the late 1880s and early 1900s. In the early 1900s, the Morganton hospital had adopted the colony treatment approach, which established a number of residential units in which smaller groups of patients could live. By 1910, hospital facilities included vineyards, orchards, a bowling alley, a bake house and dairy, a greenhouse, a stable and farmhouse, a kitchen, and buildings for tuberculosis patients. By the end of World War I, however, the colony model had begun to lose state support and was phased out completely during the 1920s. Despite this, the hospital continued to expand its wards and assign the existing buildings towards housing the growing number of patients. The hospital census was approximately 3600 patients in 1940 and new therapies were increasingly being made available to patients. Meanwhile, the Raleigh facility had expanded in 1922 to include a building for medical and surgical services and by the 1940s had a nursing program in place.

North Carolina began the process of deinstitutionalizing mental illness in the mid 1950s in order to shift care for mentally ill individuals away from state psychiatric hospitals and towards community-based care. The process involved rapidly removing beds available to the mentally ill from state hospitals and, eventually, closing down several hospitals altogether. For the existing hospitals, development continued through this period. By 1951, Dorothea Dix and Broughton facilities had begun residency programs for doctors and by 1965 all NC psychiatric hospitals had been desegregated. In Broughton, the early 1970s included new developments in particular:

... The Physical Therapy Department was established; electroconvulsive therapy was started: Industrial Therapy began using a token system instead of giving stuff as payment to the patients; the Outpatient Clinic closed... EEG equipment was purchased and the X-Ray Department added Nuclear Medicine; the new Vocational Rehabilitation Facility was completed and the local Foothills Area Program opened; Lithium was introduced to patients<sup>4</sup>; the old amusement hall became the sheltered workshop; group therapy was first used on all units; patients began to wear their own clothing; the Neuroscience Department was created; patients' rights policies were established; and the basement of the Chapel was completed<sup>5</sup>.

On the national level, the number of individuals in US state mental hospitals fell from 559,000 in 1955 to 154,000 in 1980<sup>6</sup> and this number continued to decline. Individuals in the US with serious mental illnesses would have been more likely to find psychiatric beds for treatment in 1955 than in 2004; NC paralleled this trend<sup>7</sup>. The number of individuals served in NC state hospitals fell from 11,963 in 2007 to 3,547 in 2011; the largest decrease in the country<sup>8</sup>, likely due to the closure of Dorothea Dix Hospital. Figure 1 reflects the demographics of the individuals served from 2009-2010. The data indicate that the majority of the total population served was white males. The majority age group served was 25-34 year olds at 21.5% and an overwhelming 81.1% of all commitments were

involuntary. The most common diagnoses were SMIs: schizophrenia (16.2%), schizoaffective disorder (15.5%), and bipolar disorder (10.1%).

As of 2014, there are three state mental hospitals in North Carolina with a total of 936 beds: Broughton Hospital in Morganton, Cherry Hospital in Goldsboro, and Central Regional Hospital in Raleigh.

	Total Percent	Total Number	Central Regional Hospital	Cherry Hospital	Broughton Hospital	Dix Hospital
<b>Total Persons Served</b>	100.0%	7,188	781*	1,780	1,641	2,986*
<b>Age Groups</b>						
0-14	3.7%	266	64	59	54	89
15-17	5.9	426	71	113	130	112
18-24	13.5	971	113	239	207	412
25-34	21.5	1,543	111	399	341	692
35-44	20.4	1,469	143	328	333	665
45-54	21.0	1,506	150	375	334	647
55-64	9.3	668	62	166	163	277
65+	4.7	339	67	101	79	92
<b>Gender</b>						
Males	57.4%	4,123	430	735	928	2,030
Females	42.6	3,065	351	1,045	713	956
<b>Race</b>						
White	53.5%	3,843	342	873	1,175	1,453
Black	41.5	2,983	390	809	415	1,369
American	0.8	58	1	34	9	14
Asian/Pacific Islander	0.3	22	5	2	6	9
Unknown	0.3	22	9	0	0	13
Other	3.6	260	34	62	36	128
<b>Ethnic Origin</b>						
Hispanic Mexican/American	0.5%	35	4	8	5	18
Hispanic Puerto Rican	0.1	6	0	2	0	4
Hispanic Cuban	0.0	1	0	0	1	0
Hispanic Other	0.1	5	0	1	4	0
Not Hispanic Origin	80.0	5,752	606	1,308	1,631	2,207
Unknown	19.3	1,389	171	461	0	757
<b>Commitment Status</b>						
Voluntary	10.1%	723	68	111	184	360
Involuntary	81.1	5,827	625	1,519	1,457	2,226
Emergency	6.6	472	88	147	0	237
Criminal	2.3	163	0	0	0	163
Other	0.0	3	0	3	0	0
<b>Diagnosis</b>						
Alcohol Abuse	4.1%	298	22	99	14	163
Drug Abuse	9.1	654	66	185	64	339
Mental Retardation	0.2	16	5	0	1	10
Schizophrenia	16.2	1,164	111	362	253	438
Schizophreniform	0.4	30	9	3	6	12
Schizoaffective	15.5	1,116	114	300	299	403
Bipolar	10.1	727	80	204	209	234
Adjustment	2.5	179	16	27	59	77
Personality	3.3	238	33	26	92	87
Dysthymia	0.3	20	1	2	13	4
Major Depressive	8.1	581	34	233	198	116
Other Psychotic	5.9	427	46	41	74	266
Primary Degenerative Dementia	0.0	2	0	0	1	1
Other Organic Mental Disorders	1.7	124	29	25	26	44
Conduct	3.2	227	33	46	67	81
Paranoid	0.3	22	1	0	15	6
All Other	19.0	1,363	181	227	250	705

Source: Jeannette Barham, "Annual Statistical Report, North Carolina Psychiatric Hospitals, Fiscal Year 2010," Division of MH/DD/SAS, Raleigh, NC, Dec. 2010, Table 2-A, p. 8.

\* The Central Regional Hospital and Dix Hospital numbers should be combined. Both provider numbers were used during the reporting period. The data was pulled by location rather than by provider.

Figure 1. People served by the N.C. state psychiatric hospitals, by age, gender, race, ethnicity, commitment status, and diagnosis, 2009-10<sup>9</sup>

## 2.1 Admittance Process

In order to be admitted to a NC psychiatric hospital, an individual needs a referral from a Local Management Entity (LME). There are nine LME Managed Care Organizations (LME-MCOs) in NC as of April 2014<sup>10</sup>. Prior to making a referral to a NC hospital, the LME-MCO would assess the individual in order to ensure that he or she meets admission criteria and that a state psychiatric hospital is the most appropriate site for treatment. According to the NC Department of Health and Human Services (NCDHHS), “The individual must be assessed as meeting the diagnostic criteria (as defined by the current Diagnostic and Statistical Manual of Mental Disorders or *DSM*), for (1) acute schizophrenia and/or other psychotic disorders, (2) acute mood disorders or (3) the combination of both, with or without medical and/or physical complications that are within the parameters of what the state hospital can manage<sup>11</sup>”. Once the LME-MCO has determined that the individual has met the specified criteria, the information is faxed to the hospital’s Screening and Admissions Office. In addition to the LME-MCO report on the individual, the hospital requires the following minimal required medical records to determine whether the individual will be admitted: same day assessment and treatments performed by staff; psychiatric consultations; allergies; current medications and dosages with estimate of compliance; copy of diagnostic procedure reports including labs, X-Rays, scans, etc.; medical conditions and/or diagnoses and current assessment of stability; list of problems requiring follow-up including lab abnormalities, pregnancy, etc.; up to last three days of progress notes; and correctly completed and processed involuntary commitment (IVC) forms<sup>12</sup>.

The hospital will then provide an admission time for the individual to be evaluated after the provided information is screened for appropriateness. If the hospital has reached its capacity and cannot accept patients at that point in time, the individual who has been accepted for evaluation will be placed on a waiting list until a bed becomes available. In accordance with SB 859, also known as the Diversion Law, individuals with intellectual and developmental disabilities will generally not be admitted to state psychiatric hospitals<sup>13</sup>.

## 2.2 Psychiatric Hospital Funding

Healthcare spending constitutes 25% of the total state expenditure for the 2014-2015 fiscal year at \$23.5 billion<sup>14</sup>. The total monetary requirement for the Division of Mental Health/Developmental Disabilities/Substance Abuse Services (DMH/DD/SAS) for 2014-2015 is \$1.4 billion after legislative-recommended adjustments, which is 6% of the total healthcare budget. This number is up 0.28% from the 2014-2015 set amount prior to revision and 0.64% up from the 2013-2014 total requirements, which indicates that the needs of the mental health sector have increased in the past year<sup>15</sup>. One reason for the rise in financial requirements is the New Broughton Hospital Reserve, which “Eliminates reserve funds provided to purchase equipment, furniture, and information technology infrastructure for the new Broughton Hospital<sup>16</sup>.”

In addressing the needs of the New Broughton Hospital Reserve in 2014-2015, the state has expanded the DMH/DD/SAS budget by the non-recurring amount of \$16.6 million. In addition to this, NC has allocated recurring funds to DMH/DD/SAS: \$2.4 million for Claims Processing, \$1.8 million to LME-MCOs, \$450,000 to Central Office Administration, \$6.1 to LME-MCO General Administration, \$225,000 to the Brain Injury Association of NC, and \$2.2 million to Community-Based Crisis Services. In all instances except for the Brain Injury Association of NC and Community-Based Crisis Services, the purpose of the allotments is to eliminate or reduce the General Fund appropriation for the specified bodies and departments or other funding<sup>17</sup>. Ultimately then, the state budgets for these bodies are reduced. In regards to LME-MCOs, the state intends to consolidate the nine LME-MCOs into seven by June 2015. There is an overall \$1.8 million cut to the LME-MCO budget and a \$24.9 million cut to the DMH/DD/SAS budget for 2014-2015<sup>18</sup>. Additionally, NC was one of only six states to decrease mental health budgets in FY 2013-2014<sup>19</sup>.

Figure 2 portrays the sources and distributions of mental health service funds. The financiers are Medicaid, state appropriations, county funds and other sources, with Medicaid being by far the largest contributor. The total budget of DMH/DD/SAS for FY 2008-09 was \$3.3 billion, 21% of which was spent on state-operated facilities<sup>20</sup>. Additionally:

In FY 2009–10...the budget included deep cuts to mental health programs to address a \$4.6 billion state budget shortfall. Overall that year, the Division’s budget was cut 19 percent. And, in FY 2010-11, \$40 million in funding for community services administered through the LMEs was restored, but that was offset by changes in mental health services provided through the Medicaid

program to save the state \$98.7 million — resulting in lower rates for providers and fewer services for consumers<sup>21</sup>.

Although from 2009 to 2011 the total NC mental healthcare expenditure increased by 20.9%, the number of patients served by NC psychiatric hospitals continued to decrease<sup>22</sup> in line with the above information. The cause of increased spending over this time period is likely Central Regional Hospital, which opened during that time period, as opposed to increased patient care: “...The total budget for the Division of MH/DD/SAS has grown by 27.3 percent, with Medicaid registering the most growth of any funding source — a 33.4 percent increase and more than \$750 million additional dollars. Funding for both state facilities and community services has increased by more than 20 percent, while funding for administration has declined by 2.8 percent<sup>23</sup>.”

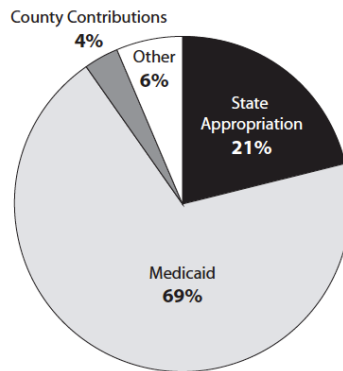


Figure 2. Source of funds for mental health services: actual expenditures for N.C. mental health, developmental disabilities, and substance abuse services, FY 2008-09<sup>24</sup>

## 2.3 Mental Healthcare for Individuals

In 2007, 13.2% of adults in the United States received mental health services while 4.9%, including those that received services, reported an unmet need for mental healthcare. Figure 3 depicts the reported reasons for not receiving mental healthcare services, with almost half of respondents stating “Could Not Afford Cost” as the reason<sup>25</sup>.

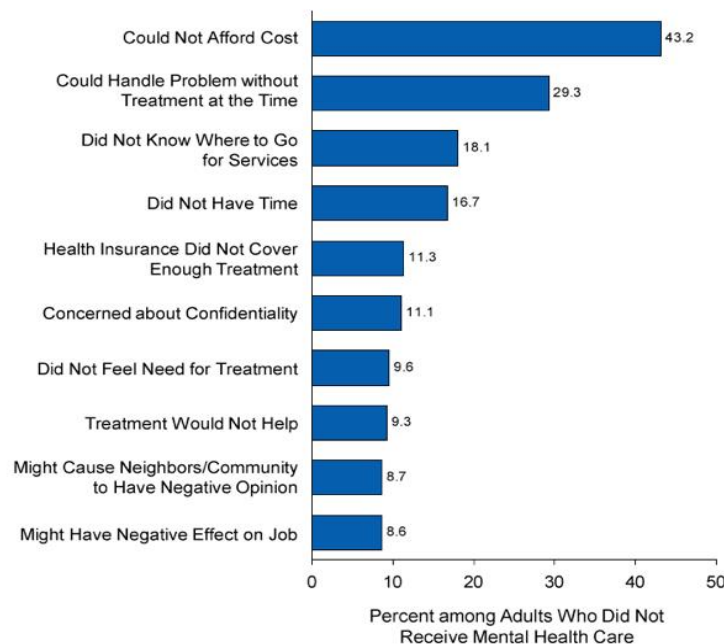
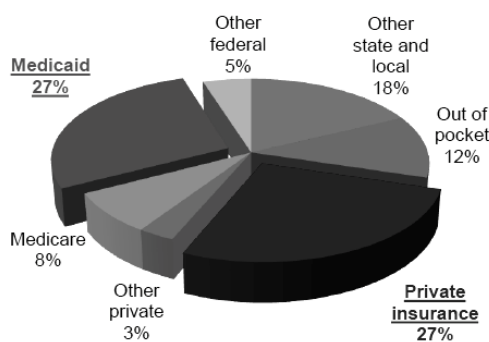


Figure 3: Reasons for not receiving mental health services in the past year among adults aged 18 or older with an unmet need for mental health services: 2007<sup>26</sup>

As of 2014, NC is one of 19 states<sup>27</sup> that have not expanded Medicaid under the Affordable Care Act, which would increase access to healthcare—including mental healthcare—for low-income adults. Medicaid and private insurance provide 27% of mental health financing in the US each, totaling 54%, as indicated in Figure 4.



Source: Garfield (2011) *Mental Health Financing in the US: A Primer*. Kaiser Commission on Medicaid and the Uninsured

Figure 4: Mental health financing in US<sup>28</sup>

### 3. Mental Illness in NC Prisons

Central Prison opened in 1884 as the first NC state prison<sup>29</sup>. As Dorothea Dix emphasized in her research, state prisons housed the mentally ill from the time the institutions were built<sup>30</sup>. It was not until 1965 that mental health services were established in prisons, with the first mental health ward built at Central Prison in 1973. Lawmakers implemented the first Drug/Alcohol Recovery program in 1987 at Wayne Correctional Center and Mental Health Services established the first sex offender treatment program at Harnett Correctional Institution in 1991<sup>31</sup>. As of December 2014 there are 37,773 state prison inmates distributed among 66 prisons in NC.

The North Carolina Division of Prisons (NCDP) uses a scale of M1-M5 to classify the mental health status of inmates where M1 = no mental health disorder; M3 = severe and persistent mental disorder; M4 = significant mental disorder manifesting symptoms that require ongoing intervention; and M5 = acutely ill or suicidal<sup>32</sup>. NCDP does not specify a definition for the M2 rating but it is noted that anything above M1 indicates the presence of mental illness in an inmate. The most recent NCDP report<sup>33</sup> referenced data collected from 2002 to 2007. The data reflected an increase in M3 and M5 inmates, indicating that there are more inmates with severe to debilitating disorders. Additionally, there has been an overall increase in the percentage of inmates with a mental health concern from 31% in 2002 to 32.2% in 2006.

#### 3.1 Comparisons with National and State Averages

Table 1 shows that a higher proportion of NC inmates have a mental health issue when compared to the general populations of both the US and NC.

Table 1. comparison of mental illness prevalence in NC inmates versus general populations<sup>34</sup>

Population	AMI	SMI
US General Adult Population	18.6 % <sup>35</sup>	4.1% <sup>36</sup>
NC General Adult Population <sup>37</sup>	16.84%	3.92%
NC Adult State Inmate Population	32.2%	14.8%

Detailed data were not found for North Carolina, however the national averages<sup>38</sup> calculated by the US Bureau of Justice Statistics (BJS) regarding the mental health of prison inmates reflect increasingly higher numbers of mentally ill individuals being imprisoned. Additionally, BJS reports that 56.2% of state inmates had a mental health problem, which is three folds higher than the US general population and 24% greater than NC inmates with AMI<sup>39</sup>. NCDP accounts for the discrepancy: “The Bureau of Justice counted inmates with ‘symptoms of a mental health problem’<sup>40</sup> in their estimates of mental health disorder prevalence while the figures provided in (the NCDP) memo rely solely on diagnosed disorders<sup>41</sup>.” Table 2 compares the averages for individuals who have had symptoms of the more common serious mental health problems in the US:

Table 2. US state inmates vs. general population with symptoms of certain SMIs<sup>42</sup>

Mental Health Problem	US Adult State Prisoner Population	US General Adult Population
Major Depression	23.5%	7.9%
Mania Disorder	43.2%	1.8%
Psychotic Disorder	15.4%	3.1%

It is evident that symptoms of mental health problems are more prevalent among inmates nationally, which is consistent with the pattern of NC prisoner averages being higher than the national population averages. In addition, 49.2% of state prisoners interviewed reported having symptoms of a mental health problem in the twelve months prior to the interview, which suggests the presence of mental disorder, while 31.6% had symptoms of a disorder without a history, which indicates that incarceration itself may prompt such symptoms in individuals who are not otherwise mentally ill.

### 3.2 Mental Healthcare Spending in NC Prisons

The state correctional budget wholly finances healthcare in prisons. NC per-inmate spending on prison healthcare rose from \$6,154 in 2007 to \$6,287<sup>43</sup> in 2011. This 2% increase in spending is below the national median increase of 10%. The growing prevalence of mental illness has been noted as a driver of spending on the national and state level<sup>44</sup>. Figure 5 displays the average allocation of funds for 10 states, four of which have similar demographics to North Carolina<sup>45</sup>.

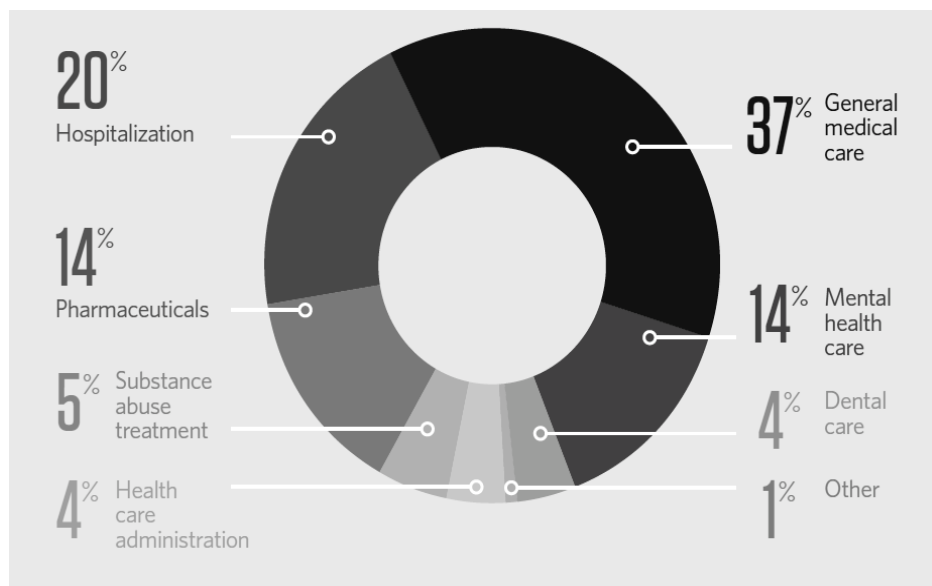


Figure 5. Average distribution of funds by category for 10 states, 2007-11

As can be seen in Figure 5, mental healthcare makes up 14% of total healthcare spending on average, however the budget allocations for NC would differ from this in that NC correctional healthcare costs exclude those of healthcare administration<sup>46</sup>. Figure 5 reflects that mental healthcare spending is generally less than general medical spending and hospitalization spending.

### 3.2.1 type of treatment

On the national level, new strategies are being implemented in prisons across the US, including those in NC. These healthcare strategies are aimed at being cost effective without sacrificing the quality of care available to inmates. Included in these strategies is Telehealth, which “refers to the use of electronic information and telecommunications technologies to support, among other things, long-distance health care services<sup>47</sup>”. Telehealth saves Corrections Departments the cost of transportation and guarding, which arise when inmates are brought outside the prisons for treatment, and it gives inmates improved access to primary care doctors and specialists.

Although Telehealth is being used in NC, specific treatment methods beyond medication were not outlined or presented within the NC government’s extensive online resources. The NC Department of Correctional Services Policy and Procedure Manual states that involuntary nonemergency medication may be administered if: “There is evidence of current deterioration or worsening of the inmate’s diagnosed condition, which, if not treated, is likely to produce acute exacerbation of the inmate’s condition such that the safety of life of the inmate or other would be endangered<sup>48</sup>”.

Anecdotal evidence suggests that involuntary medication is frequently administered in prison to placate inmates rather than to provide treatment. Furthermore, medication that is prescribed to inmates to treat mental health problems is mostly short-term. When inmates with mental illness go without treatment, the result is deterioration in their psychiatric conditions. Additionally, although solitary confinement exacerbates the mental problems of inmates, it is sometimes regarded as the necessary way to house seriously mentally ill inmates<sup>49</sup>.

Overall, reports on mental healthcare treatment in NC prisons deem the current treatment practices to be inadequate to meet the needs of prisoners. Moreover, some of the current methods used to control mentally ill inmates actually make inmates’ mental illnesses more severe.

## 4. Relevant Legislation

There have been several pieces of legislation passed at both the state and national level aimed at changing or addressing the mental healthcare system. Particularly relevant are the National Mental Health Act, the Community



Mental Health Act, the US Supreme Court decision in *Estelle v. Gamble* (1976), the North Carolina Mental Health Reform Act, and North Carolina Legislative Directive SB 897.

President Harry Truman signed the National Mental Health Act in 1946. The Act primarily provided grants towards research regarding the cause and treatment of mental illness<sup>50</sup> and called for the creation of a National Institute of Mental Health<sup>51</sup>. At this time, studies had shown that the long-term placement of mentally ill individuals in large institutions did not help the individuals get well and better options for treatment were being pursued. The grants improved therapies available to patients and resulted in shorter hospital stays for individuals<sup>52</sup>.

In 1963, President John F. Kennedy called for the establishment of 2,000 community mental health centers following the passage of the Community Mental Health Act, also known as the Mental Retardation and Community Mental Health Centers Construction Act of 1963<sup>53</sup>. These community-based centers, now LME-MCOs, delivered healthcare through a mix of government and county-operated organizations.

In *Estelle v. Gamble* (1976), the respondent was state inmate J.W. Gamble who brought civil rights action against the state petitioners, the state corrections department medical director and two correctional officials. Gamble claimed that he sustained a back injury while engaged in prison work and the inadequate treatment he received amounted to cruel and unusual punishment in violation of the Eighth Amendment of the US Constitution. Chief Justice Marshall delivered the opinion of the Court:

We therefore conclude that deliberate indifference to serious medical needs of prisoners constitutes the "unnecessary and wanton infliction of pain," *Gregg v. Georgia, supra*, at 173 (joint opinion), proscribed by the Eighth Amendment. This is true whether the indifference is manifested by prison doctors in their response to the prisoner's needs or by prison guards in intentionally denying or delaying access to medical care or intentionally interfering with the treatment once prescribed. Regardless of how evidenced, deliberate indifference to a prisoner's serious illness or injury states a cause of action under § 1983<sup>54</sup>.

The decision that indifference to a prisoner's illness was unconstitutional added greater protection to mentally ill prisoners' rights.

The NC General Assembly passed the Mental Health Reform Act in 2001 to "phase in implementation of mental health system reform at the state and local level<sup>55</sup>". It required LME-MCOs to contract with private healthcare providers to meet the mental health needs of individuals. The LME-MCOs were then no longer responsible for providing care, but for managing provider contracts<sup>56</sup>. The Act was heavily criticized as highly trained health professionals left the field and private providers took control of mental healthcare delivery. The overall quality of services declined and some important services were no longer available under the new providers. Private providers frequently offered only the most profitable services, which were often "community support services" rather than treatment<sup>57</sup>.

In 2011, the NC Department of Corrections (NCDOC) published a legislative report on inmate medical cost containment, known as legislative directive SB 897. The purpose of the report was to assess any change in inmate medical costs in relation to previously instated measures. SB 897 included three major mandates: payment to non-contracted providers at 70% of charge, also known as the "70% Mandate"; the equitable distribution of inmates to providers, also known as "The Five Percent Mandate"; and it directed NCDOC to work with the NC Division of Medical Assistance to ensure that inmates who are eligible for Medicaid are enrolled in Medicaid when admitted for care outside the Department's facilities, also known as "The Medicaid Mandate"<sup>58</sup>. The creation of SB 897 was partially to address the rising costs brought on directly by the Mental Health Reform Act.

The 70% Mandate, when combined with existing contracts, led to NCDOC on average paying providers 65% of the charge for medical services. Prior to this mandate, the average payment by NCDOC was 75% of charge. Section 19.6.(a) of SB 879 describes the effect this mandate had on healthcare access:

The Department of Correction has continued its effort to attain and retain contracted providers following the mandates of this provision. As of February 9, 2011, twenty-one (21) group practices or hospitals have discontinued contracting with NCDOC. A number of these providers decided not to contract with the DOC but instead elected to continue treating inmates at the rates mandated in SB 897. Two providers notified NCDOC that they decided to no longer accept inmates specifically because of the rates mandated in SB 897. Even without these vendors, Health Services has been able to continue to assure the provision of needed care around the state<sup>59</sup>.

Although the 70% Mandate resulted in an overall decrease in the number of healthcare providers that the prisons contract with, NCDOC appeared confident that this would not affect the treatment available to inmates. However, in FY 2010-11, NCDOC predicted savings of \$11-\$12 million and it appears unlikely that the same level of care would be available after this cut in spending.

The Five Percent Mandate addressed the amount of inmates for whom NCDOC would seek admission to contracting hospitals; Section 19.6.(b) states:

The Department shall make reasonable effort to equitably distribute inmates among all hospitals or other appropriate health care facilities. With respect to any single hospital, the Department of Correction shall make best efforts to seek admission of the number of inmates representing no more than five percent (5%) of all inmates requiring hospitalization or hospital services on an annual basis, unless failure to do so would jeopardize the health of an inmate or unless a higher level is agreed to by contract<sup>60</sup>.

The NCDOC utilized sixty-nine hospitals and medical centers across the state in 2010. The purpose of the Five Percent Mandate was to more evenly distribute inmates among the hospitals NCDOC contracted with. At the time the legislative report was published, the 5% distribution had not yet been realized and WakeMed, UNC Hospitals, and Catawba Valley hospital were utilized to serve a combined 40.8% of all inmates.

The Medicaid Mandate essentially allowed NCDOC to consult with the NC Department of Health and Human Services in order to shift financial responsibility for inmate healthcare costs during inmate hospitalization to Medicaid. At the time of the report, anticipated savings had not yet been projected<sup>61</sup>. It is noted, “some hospitals which provide long term acute care (LTAC) and long term care (LTC) are concerned about their rates of reimbursement being at Medicaid rates<sup>62</sup>.” This suggests that, in addition to The Medicaid Mandate not saving NCDOC as much money as was initially anticipated by the department in SB 879, that the number of contracting hospitals might decline.

Although there is further legislation on mental healthcare, the acts and decisions described above convey the general direction of NC mental healthcare since the 1940s. The quality of mental healthcare has been on a downward trend as healthcare moves significantly towards privatization. The extensive criticisms of the NC mental healthcare system stem in great part from the results of the legislation explained above.

## **5. Conclusion**

After the examination of trends both in public mental healthcare availability and the quantity of mentally ill inmates in state prisons, and in support of the hypothesis presented in this paper, it is clear that the numbers are correlated. Over the past few decades, the number of beds in NC psychiatric hospitals has dropped drastically while the number of mentally ill inmates has skyrocketed. Although this could in part be due to diagnoses becoming more common, the research conducted in this paper suggests that the two are directly related, as there is little evidence that frequency of diagnoses would differ between the general and inmate populations. The reduced funding of mental hospitals has led to a decrease in the accessibility and quality of public mental healthcare as hospitals close and fewer resources are allocated to the remaining facilities. This, along with a lack of prison resources that address mental healthcare, have led to inadequate treatment for inmates as well as the general population of NC.

The relation between mental healthcare resources and mental illness in prisons is increasingly being researched as the effects of more recent pieces of legislation, such as the Mental Health Reform Act, become evident. Based on the research contained in this paper, the state must consult directly with psychiatric experts in order to determine how best to meet mental healthcare needs in order for positive reform to be achieved. Additionally, the state would need to be willing to increase funding for mental health services and use approaches that, while more expensive, have proven to be effective. It has been made clear in the research of this paper, as it has to other individuals and organizations that have conducted research in this field, that mentally ill individuals in North Carolina will continue to filter into the prison system until significant mental healthcare reform is pursued.

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