Funds for Local Inpatient Psychiatric Beds or Bed Days Purchased in State Fiscal Year 2016-2017 and Other Department Initiatives to Reduce State Psychiatric Hospital Use

Session Law 2015-241, Section 12F.1.(f)

Report to the

Joint Legislative Oversight Committee on Health and Human Services

and

Fiscal Research Division

By

North Carolina Department of Health and Human Services

December 1, 2017

Reporting Requirements

Session Law 2015-241, Section 12F.1.(f) *Reporting by Department. – By no later than December 1, 2016, and by no later than December 1, 2017, the Department shall report to the Joint Legislative Oversight Committee on Health and Human Services and the Fiscal Research Division on all of the following:*
(1) A uniform system for beds or bed days purchased during the preceding fiscal year from (i) funds appropriated in this act that are designated for this purpose in subsection (a) of this section, (ii) existing State appropriations, and (iii) local funds.
(2) Other Department initiatives funded by State appropriations to reduce State psychiatric hospital use.

Session Law 2016 – 94, Section 12F.9. *Subsection (a) of Section 12F.1 of S.L. 2015-241 reads as rewritten:*

> "**SECTION 12F.1.(a)** *Use of Funds. – Of the funds appropriated in Section 2.1 of this act to the Department of Health and Human Services, Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, for crisis services, the sum of forty million five hundred eighty-three thousand three hundred ninety-four dollars ($40,583,394) for the 2015-2016 fiscal year and the sum of forty million five hundred eighty-three thousand three hundred ninety-four dollars ($40,583,394) for the 2016-2017 fiscal year shall be used to purchase additional new or existing local inpatient psychiatric beds or bed days not currently funded by or though LME/MCOs. The Department shall continue to implement a two-tiered system of payment for purchasing these local inpatient psychiatric beds or bed days based on acuity level with an enhanced rate of payment for inpatient psychiatric beds or bed days for individuals with higher acuity levels, as defined by the Department. The enhanced rate of payment for inpatient psychiatric beds or bed days for individuals with higher acuity levels shall not exceed the lowest average cost per patient bed day among the State psychiatric hospitals. In addition, at the discretion of the Secretary of Health and Human Services, existing funds allocated to LME/MCOs for community-based mental health, developmental disabilities, and substance abuse services may be used to purchase additional local inpatient psychiatric beds or bed days. Funds designated in this subsection for the purchase of local inpatient psychiatric beds or bed days shall not be used to supplant other funds appropriated or otherwise available to the Department for the purchase of inpatient psychiatric services through contracts with local hospitals.*
>
> *The Department may use up to ten percent (10%) of the funds allocated in this subsection for the 2016-2017 fiscal year for the State's three-way contracts to pay for facility-based crisis services and non-hospital detoxification services for individuals in need of these services, regardless if the individuals are medically indigent, as defined in subsection (b) of this section."*

Executive Summary

Session Law 2015-241, Section 12F.1.(f), requires the North Carolina Department of Health and Human Services (DHHS) to report to the Joint Legislative Oversight Committee on Health and Human Services and the Fiscal Research Division on the use of and expenditures for hospital beds for state-and locally-funded psychiatric and substance use inpatient care for persons who were medically indigent, and on other state-funded Department initiatives to reduce State psychiatric hospital use. In Session Law 2016-94, House Bill 1030, Section 12F.9. Subsection 12F.1 of S.L. 2015.241 was rewritten to allow DHHS to use up to 10% of the appropriation to pay for Facility-Based Crisis and Non-Hospital Medical Detoxification services.

Three-Way Contract Inpatient, Facility-Based Crisis (FBC) and Non-Hospital Medical Detoxification (NHMD): Uniform System for Beds or Bed Days

The "expanded use of funds for inpatient psychiatric beds or bed days," as directed by Session Law 2016-94, House Bill 1030, Section 12F.9, (http://www.ncleg.net/EnactedLegislation/SessionLaws/HTML/2015-2016/SL2016-94.html) was executed through Three-Way Psychiatric Inpatient contracts between the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMHDDSAS), the Local Management Entity/Managed Care Organizations (LME/MCOs), and 29 community hospitals. In addition, Session Law 2016-94 allowed for up to 10 percent of the total appropriation to be used "to pay for facility-based crisis services and non-hospital detoxification services" and DMHDDSAS allocated a total of 8 percent to the LME/MCOs for these purposes.

Three-Way Contract Inpatient, Facility-Based Crisis and Non-Hospital Medical Detoxification: Actual Paid Amounts by End of SFY 2017

The total amount of funds that were paid through the end of June 2017 for Three-Way Contract inpatient services, Facility Based Crisis, and Non-Hospital Medical Detoxification was $38,522,407.

Other State-Funded and Locally-Funded Inpatient Care: Paid Amounts for Services in SFY 2017

In addition to the financial aspects of the Three-Way Contract psychiatric and substance use inpatient services summarized above, this report provides information about other state-funded and locally-funded psychiatric and substance use inpatient services that were delivered during SFY 2017.

Single-stream state-funds that were allocated to the LME/MCOs were also used to purchase psychiatric and substance use inpatient care in SFY 2017 for persons who were indigent. Single-stream funds and some local funds, in the amount of $11,987,397, were paid to community hospitals for psychiatric and substance use inpatient service (procedure code YP 820).

Local funding was reported by the LME/MCOs in the amount of $8,979,823 (e.g., county contributions) to have been used to pay for psychiatric inpatient care. However, much of those local dollars paid for the YP 820 psychiatric and substance use inpatient care; thus, reflecting the bulk of the funding for that service.

Three-Way Contract, Other State & Locally-Funded Inpatient: Persons Served

During SFY 2017, 6,255 persons who were indigent were served in Three-Way Contract psychiatric inpatient beds and 2,458 additional persons who were indigent were served in psychiatric inpatient beds paid for by other state funds, for a total of 8,713 persons served.

It should be noted that, beyond the scope of this report, LME/MCOs also paid hospitals to serve Medicaid recipients in inpatient care funded by Medicaid dollars.

Three-Way Contract Inpatient: Expected Impact and Findings

By strengthening and expanding community psychiatric inpatient beds, three-way contract funding was expected to have substantial impacts in several areas:

1. to reduce the need for short-term lengths of stay (7 days and less) at state psychiatric hospitals;
2. to decrease emergency department (ED) wait times and impact on law enforcement; and
3. to stop trend toward closure of community inpatient beds.

Regarding these three areas of expected impact, the report explains that the following:

1. short-term lengths of stay at state hospitals continues a downward trend; and that multiple reasons, including the increase in three-way contract beds in the community, may account for that desired decrease;
2. DMHDDSAS does not have recent ED wait time data for three-way contract beds. However, with the upcoming implementation (December 2017 – January 2018) of the Behavioral Health Crisis Referral System (BH-CRSys), DMHDDSAS will attain the resource and capability of tracking and monitoring ED wait times for those EDs that participate in the BH-CRSys.
3. since 2007, the number of licensed psychiatric beds for adults has risen each year, from 1,232 beds in 2007 to 1,720 in 2017; while this increase (40%) of 488 beds includes some of the 180 three-way beds, a larger number of beds have become licensed in addition to those funded by three-way contracts.

Three-Way Contract Inpatient: Improvements & Other Initiatives

After receiving input from LME/MCOs, community hospitals, and the DHHS General Counsel on a proposed revision to the three-way contract, DMHDDSAS implemented a revised contract on February 1, 2017. The revised contract substantially improved upon the foundation of the original contract with respect to the service description:

1. identified service eligibility and medical necessity criteria,
2. clarified requirements for initial authorization and continued stays,
3. and modified some of the monitoring requirements.

DMHDDSAS has also reduced the reporting requirements of the hospitals, as DMHDDSAS has the capacity to access most of the needed monitoring data from claims in NCTracks.

Other funded initiatives are discussed in **Section V.** that are designed to reduce psychiatric and substance use admissions to EDs (i.e., 24-hour Behavioral Health Urgent Care centers) and another initiative that serve as an alternative to the psychiatric and substance use inpatient level of care (i.e., 24-hour Facility-Based Crisis beds).

Suggestions to Sustain the Success of Three-Way Contract Inpatient and Alternative Crisis Response Initiatives

Hospital Emergency Departments and inpatient services should be reserved for and used to treat persons with acute behavioral health crises that cannot be treated at a lower level of care. The needs of individuals that are appropriate for hospital Emergency Departments include the need for acute medical stabilization (e.g., injuries, emergent medical illness) along with behavioral health crisis stabilization. Persons who need only behavioral health crisis response and stabilization can be appropriately served at lower levels of care, including FBCs, NHMD, BHUCs, Assertive Community Treatment, Community Support Team, and other intensive outpatient services.

1. To ensure the sustainability of effective community hospital psychiatric and substance abuse inpatient care, and other crisis response services, Behavioral Health Urgent Care Centers (BHUCs), FBCs, and NHMDs, it is essential that these services are supported by a fully-functioning foundation of lower level, integrated community services for North Carolinians who have mental illness, substance use disorders, and intellectual and developmental disabilities.
2. In order to have a state-wide impact on unnecessary visits to hospital EDs and admission to behavioral health inpatient level of care, the number of Tier IV BHUCs, FBCs (for both adults and children/adolescents), and NHMDs should be increased, especially in locations having close proximity to hospitals with EDs and behavioral health inpatient beds.

Funds for Local Inpatient Psychiatric Beds or Bed Days Purchased in State Fiscal Year 2016-2017 and Other Department Initiatives to Reduce State Psychiatric Hospital Use

December 1, 2017

I. Introduction

In 2008, NC DHHS convened a task force comprised of hospital administrators, psychiatrists, other clinicians and providers, Local Management Entity (LME) leaders, and advocates to develop a comprehensive plan for community crisis services for individuals with mental health, developmental disabilities, and substance abuse service needs. The task force focused on the problem of the decreasing availability of community psychiatric inpatient beds. Between 2001 and 2006, 200 community psychiatric inpatient beds were reportedly closed.

During that same period, admissions to state psychiatric hospitals for inpatient care had steadily risen resulting in a length of stay of seven days or less representing more than fifty percent (50%) of all admissions in State Fiscal Year (SFY) 2006–2007. In catchment areas when LMEs used county funds and/or state appropriations to purchase indigent care in the community, those trends were not as severe. The task force identified the lack of funding for community psychiatric inpatient care for indigent people as one of the main obstacles to building a full crisis service continuum in the community and developed a plan to request funding for the purchase of this care. The NC General Assembly appropriated $8,121,644 for community psychiatric inpatient care in SFY 2008-2009, although the funding was limited to new beds only.

In response to the closure of Dorothea Dix Hospital and the reduction of state psychiatric beds over the past two decades, the NC General Assembly (NCGA) has appropriated state funds to increase access to psychiatric inpatient care in community hospitals beyond the state and local funds that had been already made available. The newly funded inpatient beds became known as Three-Way Contract psychiatric and substance use inpatient beds, reflecting the three partners involved in the contracted service: DMHDDSAS, LME/MCOs, and community hospitals.

The NCGA initially funded this initiative in 2008 (Session Law 2008-107), and subsequently expanded in 2009 (Session Law 2009-451), in 2013 (Session Law 2013-360), in 2017 (Session Law 2017-57). With the increases in the appropriations since SFY 2008, DMHDDSAS has been able to increase and fund community hospital inpatient psychiatric beds or bed days that were not already funded by or through LME/MCOs. The approximate number of available three-way contract inpatient beds has increased since SFY 2008 from 77 to 180 in SFY 2017. See Attachment 1 for a map showing all of the three-way contract hospital locations with the number of available beds at each facility.

The overall purpose of the funds for community hospital psychiatric inpatient care is to strengthen and expand community capacity to ensure individuals, who experience crises related to their mental illness, substance use disorder or developmental disability, receive appropriate

inpatient level of care, when necessary, in the communities in which they live. Historically, individuals in crisis situations requiring short-term inpatient hospitalization have been served at the state's three psychiatric hospitals – Broughton Hospital in Morganton in Burke County, Central Regional Hospital in Butner in Granville County, and Cherry Hospital in Goldsboro in Wayne County. By serving an individual in the community, the hospital provides care closer to home, family, friends, and community service providers; thus, reserving the state hospitals' resources for individuals whose needs require more intensive and/or longer-term hospitalization or specialty services that only state hospitals can provide.

By strengthening and expanding community psychiatric inpatient beds, the funding was expected to have substantial impacts in several areas:

1. to reduce the need for short-term lengths of stay (7 days and less) at state psychiatric hospitals;
2. decrease emergency room wait times and impact on law enforcement; and
3. stop trend toward closure of community inpatient beds.

Discussion of the above expectations and additional measures is included within the body of this report.

All beds created through this initiative must also be available for involuntarily committed individuals who would otherwise qualify for admission to a state psychiatric hospital. Community hospitals may create new beds in several ways: 1) by increasing the number of beds actually in operation if their current license for psychiatric beds is greater than the number being operated; 2) by designating inpatient units for involuntarily committed persons if they had not previously held that designation; or 3) by increasing the number of licensed psychiatric inpatient beds in the hospital, either through a transfer of beds from a state hospital or a transfer of acute beds within the hospitals.

The beds contracted through the three-way contracts serve as a regional resource. Although three-way contracts are awarded to each LME/MCO and the community hospitals in the LME/MCO's catchment area, the hospital beds are available to any indigent individual from any county in North Carolina, who requires inpatient hospitalization. For this reason, DMHDDSAS worked to locate the beds strategically throughout the state and to target areas where there have historically been a high number of admissions for short-term lengths of stay in state hospitals. The LME/MCOs managing the contracts are responsible for participating in discharge planning designed to connect individuals to community-based services upon discharge from the hospital.

In 2013, per directive of Session Law 2013-360, Section 12F.2.(a), *the Department shall develop and implement a two-tiered system of payment for purchasing these local inpatient psychiatric beds or bed days based on acuity level, with an enhanced rate of payment for inpatient psychiatric beds or bed days for individuals with higher acuity levels, as defined by the Department…*

With the SFY 2013-2014 appropriation, the General Assembly established the two-tiered (i.e., two rates) system of payment for the provision of inpatient care based on the acuity level of the

individual needing psychiatric inpatient care. Of the $38,121,644 in funding, $2 million were used to contract with three LME/MCOs and three hospitals for the enhanced three-way inpatient care.

The standard rate for the lower level of three-way contract care is $750 per day (service code YP 821), and the enhanced three-way contract level of care was established at $900 per day (service code YP 822). The higher rate was intended to purchase a higher level (enhanced three-way psychiatric inpatient) of care in community hospitals for eligible patients who met a higher level of behavioral and/or medical acuity, similar to the level of care provided in the regional State Psychiatric Hospitals. DMHDDSAS convened a workgroup, consisting of community hospitals, LME/MCOs, and DHHS representatives, which developed the eligibility criteria for admission to enhanced three-way inpatient care. These rates are inclusive of all professional and ancillary charges (laboratory tests, medications, physician's fees, etc.) and a week of psychotropic medication upon the individual's discharge.

Three-Way Contracts: Basic Agreement

The Three-Way Psychiatric Inpatient Contract is an agreement among three partners, DMHDDSAS, LME/MCOs, and community hospitals, to provide medically necessary psychiatric and/or substance use inpatient treatment to persons who are deemed to be indigent. In accord with the contract agreement, the community hospitals make beds available to admit persons who are eligible for and whose care is authorized by the LME/MCOs. The community hospitals deliver the inpatient treatment and then submit claims to the LME/MCOs. The LME/MCOs adjudicate the claims, and pay the hospitals for the episodes of care that were authorized and adjudicated for payment. The LME/MCOs then submit claims to DMHDDSAS via NC TRACKS for adjudication and reimbursement.

On February 1, 2017, DMHDDSAS implemented a revision to the three-way contract. The revised contract substantially improved upon the foundation of the original contract with respect to the service description, identifying service eligibility and medical necessity criteria, authorization for admissions and continued stays, and monitoring of the contract requirements. DMHDDSAS has also reduced the reporting requirements of the hospitals, with the current capacity of accessing most of the needed monitoring data from NCTracks.

Three-Way Contracts: Dates of Service and Dates of Payment

The appropriated funds for each state fiscal year (SFY) for Three-Way Psychiatric and Substance Use Inpatient services do not carry forward beyond the end of the SFY for which they are appropriated. As such, the data used to determine bed utilization/bed days is based on the date of service (DOS) and the data used to determine the expenditure of funds is based on the date of payment (DOP). In most cases, there is a lag in the time between the DOS and the DOP which results in some claims being paid out of the following SFY's budget.

Table 1, on the next page, reflects the pertinent S.L. 2016-94 appropriation, the pertinent Authorized Budget amounts (Fund # 1464) and the Actual amounts paid (period ending June 29,

2017), as reported in the State of North Carolina General Ledger System's Authorized Monthly Budget Report, (accessed on August 11, 2017) for the following:

1. Three-Way Contract psychiatric and substance use inpatient services provided in SFY 2016 (accounted by lagged billing and payment delayed until beginning of SFY 2017); and
2. Three-Way Contract psychiatric and substance use inpatient services provided in SFY 2017; and
3. Facility Based Crisis (FBC) and Non-Hospital Medical Detoxification (NHMD) services provided in SFY 2017.

Table 1. Total Funds Paid for Three-Way Contract Inpatient and FBC/NHMD from S.L. 2016-94 Appropriation

S.L. 2016-94 Appropriation: $40,583,394	
SERVICES	**ACTUAL AMOUNT PAID**
Three-Way Inpatient	$35,171,149
FBC/NHMD	$3,351,258
Total paid from S.L. 2016-94 Appropriation	**$38,522,407**

Three-Way Contracts: LME/MCOs, Hospitals, Beds, and Amounts for SFY 2017

The following table (Table 2) provides an overview of the three-way contracts for SFY 2017. With DMHDDSAS as the state contracting partner, the LME/MCO contractors and community hospital contractors are identified, along with the number of beds and expected number of bed days to be used, and the dollar amount of each contract. Totals for the contracts within each LME/MCO catchment area are provided. Additionally, the state-wide totals are shown: 29 hospitals and contracts; 180 available beds, 49,591 bed days; and an overall amount of $37,233,098.

Table 2. Three-Way Contract Hospitals, Beds, and Contract Amounts in SFY17 from S.L. 2016-94 State Appropriation

LME/MCO	**3-Way Contract Hospitals**	**Number of Beds (Bed Days) Per Contract SFY17**	**SFY 17 Contract Amounts**
Alliance Behavioral Healthcare	Cape Fear Valley Hosp.	10 (950 bed days)	$ 712,603
	Duke University Health	4 (1,081 bed days)	$ 810,541
	Johnston Health System	5 (1,551 bed days)	$ 1,163,177
	UNC Hosp.-Wake Brook	7 (1,547 bed days)	$ 1,159,971
Alliance Total	**4 contracts**	**26**	**$ 3,846,292**

LME/MCO	3-Way Contract Hospitals	Number of Beds (Bed Days) Per Contract SFY17	SFY 17 Contract Amounts
*Cardinal Innovations Healthcare Solutions	Cone Health Alamance Regional	5 (817 bed days)	$ 613,104
	Carolinas Healthcare: Charlotte & Davidson	5 (2,224 bed days)	$ 1,667,816
	Halifax Regional Medical Center	5 (1,153 bed days)	$ 864,495
	*Novant Health Presbyterian Medical	11 (2,472 bed days)	$ 1,856,081
	Novant Health Forsyth Medical Center	11 (3,498 bed days)	$ 2,623,240
Cardinal Total	**5 contracts**	**37**	$ 7,624,736
Eastpointe Human Services	Nash Hospitals (Coastal Plain Hospital)	11 (3,807 bed days)	$ 2,855,200
4	Southeastern Health	2 (1,023 bed days)	$ 766,922
	Vidant Duplin Hospital	5 (1,340 bed days)	$ 1,005,364
Eastpointe Total	**3 contracts**	**18**	**$ 4,627,486**
*Partners Behavioral Health Management	*Catawba Valley Medical	14 (4,231 bed days)	$ 3,206,405
	Davis Regional Med. Center	5 (1,429 bed days)	$ 1,071,971
	DLP Frye Regional	5 (1,555 bed days)	$ 1,166,464
	Carolinas Healthcare Sys. Kings Mountain	7 (2,160 bed days)	$ 1,619,884
Partners Total	**4 contracts**	**31**	**$ 7,064,724**
Sandhills Center for MH/DD/SA Services	FirstHealth Moore Regional	9 (1,584 bed days)	$ 1,187,718
	Good Hope Hospital	5 (1,495 bed days)	$ 1,121,467
	Moses H. Cone Hospital	6 (2,448 bed days)	$ 1,836,312
Sandhills Center Total	**3 contracts**	**20**	**$ 4,145,497**
Vaya Health (formerly Smoky Mountain Center)	Charles A. Cannon Memorial Hospital	3 (1,023 bed days)	$ 767,109
	DLP Haywood Regional	4 (1,213 bed days)	$ 909,533
	Margaret R. Pardee Hosp.	5 (1,481 bed days)	$ 1,110,541
	Mission Hospital System	7 (2,061 bed days)	$ 1,545,750
	DLP Rutherford Regional	3 (679 bed days)	$ 509,353
Vaya Health Total	**5 contracts**	**22**	**$ 4,842,286**
*Trillium Health Resources	CarolinaEast Health Sys.	2 (815 bed days)	$ 611,438
	New Hanover Regional	10 (3,031 bed days)	$ 2,273,134
	Vidant Beaufort Hospital	4 (1,295 bed days)	$ 971,250
	*Vidant Medical Center	5 (921 bed days)	$ 426,014
	Vidant Roanoke-Chowan Hospital	5 (1,067 bed days)	$ 800,242
Trillium Total	**5 contracts**	**26**	**$ 5,082,078**
TOTAL	**29 contracts**	**180 (49,591 bed days)**	**$37,233,098**

*Only three hospitals, with their LME/MCO partners, have service code YP 822 beds (enhanced three-way). The three hospitals each have two beds available for enhanced three-way care.

Three-Way Contracts by LME/MCO & Hospital: Utilization and Expenditures

DMHDDSAS has paid the LME/MCOs, which in turn, paid the community hospitals, for three-way contract inpatient care provided from July 1, 2016 through June 30, 2017 (dates of service during SFY 2017) in the amount of $34,678,106. A total of 46,428 bed days were purchased, 6,255 persons were served, with an overall average of 7.4 units per person (i.e., bed days per person, which ranged from 4.6 to 13.5 days). Table 3 provides persons served, bed days, and units per person, while Table 4 shows the expenditures by LME/MCO for both SFY 2017 and SFY 2016 to ascertain any substantial changes in the data across the two years.

Table 3. Three-Way Contract Inpatient Persons Served, Bed Days, and Units Per Person Purchased (service codes YP 821 & YP 822) with State Appropriations by LME/MCOs and Community Hospitals for Services During SFY 2017 (as of 9/6/17) and SFY 2016 (as of 9/27/16)

LME/MCO	Hospital	Persons Served – SFY16	Persons Served – SFY17	Bed Days – SFY16	Bed Days – SFY17	Units Per Person – SFY16	Units Per Person – SFY17
Alliance	Cape Fear Valley	293	140	1,750	922	6.0	6.6
Alliance	Duke Univ. Health	95	110	979	930	10.3	8.5
Alliance	Johnston Health	222	213	1,460	1,561	6.6	7.3
Alliance	UNC-Wakebrook	101	122	1,233	1,649	12.2	13.5
Alliance	**Total**	**711**	**585**	**5,422**	**5,062**	**7.7**	**8.7**
Cardinal	Cone Health Alamance Regional	**162**	**170**	**772**	**774**	**4.8**	**4.6**
Cardinal	Carolinas Healthcare: Charlotte & Davidson	**249**	**255**	**2014**	**2,164**	**8.1**	**8.5**

LME/MCO	Hospital	Persons Served – SFY16	Persons Served – SFY17	Bed Days – SFY16	Bed Days – SFY17	Units Per Person – SFY16	Units Per Person – SFY17
Cardinal	Halifax Regional Medical Center	149	127	1064	1,136	7.1	8.9
*Cardinal	*Novant Health Presbyterian Medical	301	309	2161	2,353	7.2	7.6
Cardinal	Novant Health Forsyth Medical Center	499	465	3156	3,276	6.3	7.0
Cardinal	**Total**	**1,360**	**1,326**	**9,167**	**9,703**	**6.7**	**7.3**
Eastpointe	Nash Hospitals (Coastal Plain Hospital)	522	545	3865	3,807	8.6	7.0
Eastpointe	Southeastern Health	123	150	670	987	7.4	6.6
Eastpointe	Vidant Duplin Hospital	143	133	1229	1,014	5.4	7.6
Eastpointe	**Total**	**788**	**828**	**5,764**	**5,808**	**7.3**	**7.0**
*Partners	*Catawba Valley Medical	726	635	4116	3,666	5.7	5.8
Partners	Davis Regional Med. Center	235	202	1601	1,444	6.8	7.1
Partners	DLP Frye Regional	204	333	1115	1,827	5.5	5.5
Partners	Carolinas Healthcare Sys. Kings Mountain	403	284	2193	1,561	5.4	5.5
Partners	**Total**	**1,568**	**1,454**	**9,025**	**8,498**	**6.0**	**5.8**

LME/MCO	Hospital	Persons Served – SFY16	Persons Served – SFY17	Bed Days – SFY16	Bed Days – SFY17	Units Per Person – SFY16	Units Per Person – SFY17
Sandhills	FirstHealth Moore Regional	321	273	1484	1,255	4.6	4.6
Sandhills	Good Hope Hospital	168	121	1602	1,281	9.5	10.6
Sandhills	Moses H. Cone Hospital	418	385	2398	2,363	5.7	6.1
Sandhills	**Total**	**907**	**779**	**5,484**	**4,899**	**6.1**	**6.3**
Trillium	CarolinaEast Health Sys.	28	119	175	746	6.3	6.3
Trillium	New Hanover Regional	363	331	2665	2,933	7.3	8.9
Trillium	Vidant Beaufort Hospital	210	182	1296	1,234	6.2	6.8
*Trillium	*Vidant Medical Center	79	89	613	514	7.8	5.8
Trillium	Vidant Roanoke-Chowan Hospital	129	160	824	979	6.4	6.1
Trillium	**Total**	**809**	**881**	**5,573**	**6,406**	**7.1**	**7.3**
Vaya	Charles A. Cannon Memorial Hospital	70	157	416	992	5.9	6.3
Vaya	DLP Haywood Regional	114	133	814	957	7.1	7.2
Vaya	Margaret R. Pardee Hosp.	255	243	1386	1,484	5.4	6.1

LME/MCO	Hospital	Persons Served – SFY16	Persons Served – SFY17	Bed Days – SFY16	Bed Days – SFY17	Units Per Person – SFY16	Units Per Person – SFY17
Vaya	Mission Hospital System	327	195	2255	1,924	6.9	9.9
Vaya	DLP Rutherford Regional	70	75	558	695	8.0	9.3
Vaya	**Total**	**836**	**803**	**5,429**	**6,052**	**6.7**	**7.5**
TOTAL		**6,979**	**6,255**	**45,864**	**46,428**	**7.0**	**7.4**

SFY16 data: retrieved for claims adjudicated for payment through September 27, 2016 for service dates in SFY 2016.
SFY17 data: retrieved for claims adjudicated for payment through September 6, 2017 for service dates in SFY 2017.

Overall, Table 3 illustrates the following changes from SFY 2016 to SFY 2017:

- A decrease of 724 persons served;
- An increase of 564 adjudicated bed days, corresponding with,
- an increase of .4 units per person.

Table 4. Three-Way Contract Inpatient Service Purchased (service codes YP 821 & YP 822) with State Appropriations by LME/MCOs and Community Hospitals for Services During SFY 2017 (as of 9/6/17) and SFY 2016 (as of 9/27/16)

LME/MCO	Hospital	Dollars Paid – SFY16	Dollars Paid – SFY17	Difference
Alliance	Cape Fear Valley	$1,308,475	$687,000	($621,475)
Alliance	Duke Univ. Health	$731,250	$697,500	($33,750)
Alliance	Johnston Health	$1,084,821	$1,165,427	$80,606
Alliance	UNC-Wakebrook	$924,750	$1,201,971	$277,221
Alliance	**Total**	**$4,049,296**	**$3,751,898**	($297,398)
Cardinal	Cone Health Alamance Regional	$579,000	$580,104	$1,104

LME/MCO	Hospital	Dollars Paid – SFY16	Dollars Paid – SFY17	Difference
Cardinal	Carolinas Healthcare: Charlotte & Davidson	$1,510,500	$1,622,066	$111,566
Cardinal	Halifax Regional Medical Center	$797,849	$851,745	$53,896
*Cardinal	*Novant Health Presbyterian Medical	$1,640,100	$1,764,415	$124,315
Cardinal	Novant Health Forsyth Medical Center	$2,367,000	$2,457,000	$90,000
Cardinal	**Total**	**$6,894,449**	**$7,275,330**	$380,881
Eastpointe	Nash Hospitals (Coastal Plain Hospital)	$2,897,800	$2,855,200	($42,600)
Eastpointe	Southeastern Health	$502,500	$736,922	$234,422
Eastpointe	Vidant Duplin Hospital	$905,550	$760,500	($145,050)
Eastpointe	**Total**	**$4,305,850**	**$4,352,622**	$46,772
*Partners	*Catawba Valley Medical	$3,101,100	$2,731,985	($369,115)
Partners	Davis Regional Med. Center	$1,191,558	$1,065,971	($125,587)
Partners	DLP Frye Regional	$836,250	$1,369,714	$533,464

LME/MCO	Hospital	Dollars Paid – SFY16	Dollars Paid – SFY17	Difference
Partners	Carolinas Healthcare Sys. Kings Mountain	$1,644,750	$1,168,050	($476,700)
Partners	**Total**	**$6,773,658**	**$6,335,720**	($437,938)
Sandhills	FirstHealth Moore Regional	$1,107,750	$909,750	($198,000)
Sandhills	Good Hope Hospital	$1,197,023	$960,750	($236,273)
Sandhills	Moses H. Cone Hospital	$1,797,835	$1,772,250	($25,585)
Sandhills	**Total**	**$4,102,608**	**$3,642,750**	($459,858)
Trillium	CarolinaEast Health Sys.	$131,250	$559,206	$427,956
Trillium	New Hanover Regional	$1,998,000	$2,199,634	$201,634
Trillium	Vidant Beaufort Hospital	$972,000	$925,500	($46,500)
*Trillium	*Vidant Medical Center	$478,300	$388,564	($89,736)
Trillium	Vidant Roanoke-Chowan Hospital	$617,850	$733,614	$115,764
Trillium	**Total**	**$4,197,400**	**$4,806,518**	$609,118
Vaya	Charles A. Cannon Memorial Hospital	$312,000	$735,536	$423,536
Vaya	DLP Haywood Regional	$610,500	$710,338	$99,838
Vaya	Margaret R. Pardee Hosp.	$1,039,500	$1,110,541	$71,041

LME/MCO	Hospital	Dollars Paid – SFY16	Dollars Paid – SFY17	Difference
Vaya	Mission Hospital System	$1,691,250	$1,443,000	($248,250)
Vaya	DLP Rutherford Regional	$418,104	$513,853	$95,749
Vaya	**Total**	**$4,071,354**	**$4,513,268**	**$441,914**
TOTAL		**$34,394,614**	**$34,678,106**	**$283,492**

*Three LME/MCOs/hospitals have enhanced (YP 822, $900/day) three-way beds, as well as the lower rate tier (YP 821, $750/day) three-way beds. The YP 822 beds have had very little utilization, and thus were combined on this table with the more frequently used lower tier three-way beds (YP 821).

Table 4 shows an overall increase (1%) of $283,492 in the dollar value of claims that was adjudicated for payment from SFY 2016 to SFY 2017. However, there was much variability across some of hospitals in changes from year to year. Three hospitals had reductions in claims amounts of 20%, 29%, and 47%, while four hospitals had increases of 23%, 30%, 64%, 136% in claims amounts adjudicated for payment. Two hospitals' contracts, Southeastern Regional Medical Center and Carolina East Health System, were in effect for just part of SFY 2016; thus, making comparisons from one SFY to another not meaningful.

Due to utilization trends of individual hospitals prior to and during SFY 2017, four hospitals had two contract amendment reductions, and one had three reductions during the SFY; while eight hospitals each had two contract amendment increases.

II. Other Hospital Beds/Bed Days Purchased from Generic State Appropriations

In addition to the funds specifically appropriated by the NC General Assembly for community hospital psychiatric inpatient beds/bed days purchased through three-way contracts, all of the LME/MCOs used a portion of their generic allocation of state funding, known as Single Stream funding, to purchase hospital inpatient services (service code, YP 820). Further, it is known that Alliance Behavioral Health LME/MCO paid for this YP 820 psychiatric inpatient care with local funding. This YP 820 psychiatric inpatient service differed from the three-way funding (service codes, YP 821 and YP 822) in a notable way. The YP 820 inpatient payment rate, which varies across the LME/MCOs, only pays the hospital for the bed fee, not for the professional services provided by the psychiatrists and other caregivers, which may be separately billed. As described above, the three-way contract rates are inclusive of the bed fee, all professional and ancillary charges, plus seven days of psychotropic medication upon the individual's discharge.

Table 5 depicts the expenditures, bed days purchased, persons served, and units per person in State Fiscal Year 2015–2016 per LME/MCO. Seven (7) LME/MCOs paid for psychiatric inpatient services for 2,458 individuals in community hospitals at a cost of $11,987,397, paying

for 20,313 bed days. The state-wide average was 8.3 units per persons (i.e., bed days), with a range across the identified hospitals from an average of 3.0 to 11.2 units per person.

Table 5. Inpatient Bed Days Purchased (service code YP 820) with LME/MCO Allocations of State Appropriations for Services in SFY 2017 in Community Hospitals (as of 9/6/17)

LME/MCO	Hospital	Persons Served	YP 820 Dollars Paid	Bed Days	Units Per Person
Alliance	Holly Hill Hospital	834	$ 6,084,068	9,366	11.2
Alliance Total		**834**	**$6,084,068**	**9,366**	**11.2**
Cardinal	High Point Regional Health	73	$ 101,508	219	3.0
	Old Vineyard Behavioral Health	507	$ 2,448,713	4,875	9.6
	Holly Hill Hospital	238	$ 955,799	2,143	9.0
	Rowan Regional Medical Center	155	$ 324,299	699	4.5
Cardinal Total		**900**	**$3,728,811**	**7,717**	**8.6**
Eastpointe	Southeastern Regional Medical Center	105	$ 521,474	600	5.7
	Brynn Marr Behavioral Healthcare	1	$ 2,700	6	6.0
Eastpointe Total		**106**	**$524,174**	**606**	**5.7**
Partners	Gaston Memorial Hospital	57	$ 128,625	277	4.9
Partners Total		**57**	**$128,625**	**277**	**4.9**
Sandhills	High Point Regional Health	391	$ 901,413	1,252	3.2
	Moses H. Cone Memorial Hospital	7	$ 26,645	37	5.3
	Old Vineyard Behavioral Health	17	$ 65,520	96	5.6
	Sandhills Regional Medical Center	42	$ 82,134	180	4.3
Sandhills Total		**457**	**$1,075,711**	**1,565**	**3.4**
Vaya (formerly Smoky Mountain)	Charles A. Cannon, Jr. Memorial Hospital	50	$ 151,036	289	5.8
	DLP Haywood Regional	39	$ 183,849	259	6.6
Vaya Total		**89**	**$334,885**	**548**	**6.2**
Trillium	Brynn Marr Behavioral Healthcare	1	$ 5,200	8	8.0
	Holly Hill Hospital	1	$ 4,414	7	7.0
Trillium Total		**2**	**$9,614**	**15**	**7.5**
Total		**2,458**	**$11,987,397**	**20,313**	**8.3**
Source: NCTracks					
Data retrieved for claims adjudicated for payment through September 6, 2017 for service dates in SFY 2017.					

III. Beds/Bed Days Purchased with Local Funds

Four LME/MCOs reported to DMHDDSAS that they were able to access local funding to purchase or supplement additional psychiatric inpatient services in community hospitals. A total of $8,979,823 was paid to community hospitals for inpatient care. These local funds were reported to have purchased 12,212 bed days and served 1,052 people, with an overall average units per person of 11.6, as reflected in Table 6. However, as previously noted, Alliance Behavioral Health LME/MCO used much, if not all, of its local funding to pay for YP 820 inpatient care. Hence, there is significant overlap between the data in Tables 5 and 6.

Table 6. Inpatient Bed Days Purchased by Local Management Entities-Managed Care Organizations with Local Funds for Services During SFY 2017 in Community Hospitals

LME/MCO	Hospital	Persons Served	Local Dollars Paid	Bed Days	Units Per Person
Alliance	**Holly Hill Hospital**	899	$7,984,583	11,156	**12.4**
Alliance Total		**899**	**$7,984,583**	**11,156**	**12.4**
Cardinal *	**UNC Hospital ***		$214,200		
Cardinal Total		**-**	**$214,200**		
Partners	**Carolinas Health Blue Ridge**	21	$15,858	36	**1.7**
Partners Total		**21**	**$15,858**	**36**	**3.9**
VAYA Health	**Charles A. Cannon Memorial**	18	$91,714	122	6.7
	DLP Haywood Regional	49	$267,178	356	7.3
	DLP Rutherford Hospital	9	$65,250	87	9.9
	Mission Hospital	41	$276,000	368	8.9
	Margaret Pardee Memorial	15	$64,500	86	5.7
VAYA Health Total		**132**	**$764,642**	**1,020**	**7.7**
Total		**1,052**	**$8,979,283**	**12,212**	**11.6**

Source: LME/MCOs reports on local funds used for inpatient care

*The annual amount Cardinal Innovations pays to one community hospital using local funds is $214,200. These funds do not pay for actual bed days, but are used to offset the costs of indigent inpatient care.

IV. Selected Measures of Performance for Three-Way Contract Psychiatric Inpatient Care

Claims submitted by the LME/MCOs into NCTracks for three-way contract psychiatric and substance use inpatient services contain valuable information that enables DMHDDSAS to monitor some of the basic aspects the contract. This section of the report focuses on several aspects that are being monitored on an ongoing basis.

Discharges and Average Length of Stay by Disability

Table 7 depicts two main measures by hospital for SFY 2017: number of discharges of persons with a principle mental health (MH) or substance use disorder (SUD) disability; and average length of stay (Avg LOS) of persons with a principle mental health or substance use disorder disability.

Table 7. Three-Way Contract Discharges & Average Lengths of Stay by Principal Diagnostic Category in SFY 2017

	Count of Discharges			Avg LOS		
	Principal disability			Principal disability		
Hospital	MH	SUD	Total	MH	SUD	Total
Alamance Regional Medical Center	170	23	193	4.0	3.2	3.9
Beaufort Regional Medical Center	125	83	208	6.3	5.6	6.0
Cape Fear Valley Hospital	148	3	151	7.0	4.5	6.9
Carolina East Medical Center	168		168	4.7		4.7
Carolinas Medical Center	296	2	298	7.3	9.5	7.3
Catawba Valley Medical Center	432	299	731	6.0	5.9	5.9
Charles A. Cannon, Jr. Memorial Hosp	159	7	166	7.0	6.4	7.0
Davis Regional Medical Center	233		233	7.2		7.2
Duke University Health System	113		113	9.6		9.6
Duplin General	121		121	8.5		8.5
First Health/Moore Regional Hospital	204	112	316	5.	4.8	5.0
Forsyth Memorial Hospital	442	106	548	5.9	5.4	5.8
Frye Regional	185	172	357	6.2	5.3	5.7
Good Hope	120		120	11.4		11.4
Halifax Regional	160	1	161	7.1	3.0	7.0
Haywood Regional Medical Center	138	8	146	7.5	7.8	7.5
Johnston Memorial	237	5	242	7.2	7.0	7.2
Kings Mountain Hospital	286	9	295	6.3	5.7	6.3
Margaret Pardee Memorial	152	173	325	5.5	5.3	5.4
Mission	216	19	235	10.2	7.0	9.9
Moses Cone	351	100	451	6.4	5.3	6.2
Nash Hospitals, Inc.	359	330	689	6.9	6.1	6.5
New Hanover Regional Medical Center	394	8	402	7.6	10.8	7.7
Northside	192		192	5.4		5.4
Pitt Memorial	135	1	136	3.5	1.0	3.5
Presbyterian	349	12	361	6.6	7.1	6.6
Rutherford	81		81	9.6		9.6

	Count of Discharges			Avg LOS		
	Principal disability			Principal disability		
Hospital	MH	SUD	Total	MH	SUD	Total
Southeastern Regional Medical Center	166	11	177	6.7	5.3	6.6
UNC-Wakebrook	111	16	127	13.9	6.0	12.9
Total	**6,243**	**1,500**	**7,743**	**6.8**	**5.6**	**6.6**

The total number of discharges was 7,743 with 81% of the discharges of persons having a principle MH disability and 19% having a principle SUD disability. The average LOS for persons having a principle MH disability was 6.8 days, while persons having a principle SUD disability was 5.6 days. The overall average LOS was 6.6 days, with a range across the hospitals of 3.5 to 12.9 days.

Clearly, the predominant overall principle disability at discharge was MH. The data also indicate seven of the hospitals submitted claims that did not reflect any principle SUD disability among the persons discharged from their care, while six other hospitals had a range of 35% to 53% of persons discharged with principle SUD disabilities. Moreover, it is well known that many individuals have co-occurring behavioral health needs that include both MH and SUD treatment.

As noted above, the average LOS among the 29 hospitals had a fairly wide range; though 21 of the hospitals had average LOS between 5 and 9 days. Three hospitals had average LOS below 5 days, and five were above 9 days. As in previous years, the state-wide or overall average LOS continued to remain under seven days (6.6 days) in SFY 2017.

Differences across the 29 hospitals in LOS likely has a variety of possible explanations. Higher LOS would be expected for hospitals that have the following:

- Staffing with the willingness, expertise, and resources to serve a higher proportion of the persons who have more complex psychiatric or substance use needs, and/or behavioral challenges;
- Location in areas with few community services that could prevent crises from occurring or escalating to a level requiring psychiatric or substance use inpatient care, for medically indigent people;
- Difficulty working with LME/MCOs or providers in developing proactive discharge plans and finding appropriate community services, thus delaying discharge;
- Combinations of the aforementioned factors (e.g., scarce community resources and hospital staff with the willingness, expertise, and resources to admit and treat persons with more complex psychiatric or substance use needs and/or behavioral challenges).

Lower LOS would be expected for hospitals that have the following:

- Staff who were more reluctant, have insufficient expertise, or inadequate resources to serve a higher proportion of the persons presenting with more complex psychiatric or substance use needs, and/or behavioral challenges;

- Locations in areas with few community services for medically indigent people, thus persons with less complex needs and challenging behaviors may be referred to inpatient care for short stays, in the absence of other non-hospital alternatives (e.g., Facility Based Crisis, Non-Hospital Medical Detox);
- Combinations of the aforementioned factors (e.g., scarce community resources and hospital staffing who may be more reluctant, have insufficient expertise, or inadequate resources to serve a higher proportion of the persons presenting with more complex psychiatric or substance use needs, and/or behavioral challenges).

Re-admissions to Inpatient Care

The National Committee for Quality Assurance includes follow-up care after hospitalization for mental illness among its numerous measures in the Healthcare Effectiveness Data and Information Set (HEDIS), which are applicable to the provision of care funded by commercial, Medicaid, and Medicare health insurers. This HEDIS measure considers re-admissions to inpatient hospitals when evaluating effectiveness of care. http://www.ncqa.org/Portals/0/HEDISQM/HEDIS2016/HEDIS%202016%20List%20of%20Measures.pdf

Likewise, DMHDDSAS tracks hospital re-admissions within 30 days of discharge as one way to assess performance of the publicly-funded system of care. It must be noted, however, that multiple factors can affect re-admission to inpatient care, such as:

- Incomplete stabilization/treatment: individuals may be discharged before stabilization occurred or treatment was completed during inpatient care;
- Lack of availability of more intensive recovery services and supports following inpatient: without higher levels of recovery care after discharge from hospitalization, persons with severe mental illness and substance use disorders often experience relapses and additional crisis events; more intensive step-down services include but are not limited to Partial Hospitalization, Assertive Community Treatment; Critical Time Intervention; Substance Abuse Non-Medical Community Residential Treatment; and Substance Abuse Medically Monitored Community Residential Treatment;
- Insufficient access to or availability of outpatient (e.g., prescribers), community services or support system;
- Inadequate care coordination or linkage to follow-up care; and
- Untimely follow-up care.

For persons discharged from three-way contract inpatient care during SFY 2017, the overall re-admission rate to any community hospital for psychiatric/substance use inpatient care was 10% (see Table 8). Across LME/MCOs the range varied from 6% to 15%, while across hospitals the range was broader, 1% to 34%.

Table 8. Re-admission (Post Discharge from Three-Way Contract Hospital) within 30 Days to Any Community Hospital Psychiatric/Substance Abuse Inpatient Bed in SFY 2017

LME/MCO	Hospital	Total Discharges	Readmit within 30 Days	Readmit as % of Total
ALLIANCE	Cape Fear Valley Hospital	151	7	5%
	Duke University Health System	113	4	4%
	Johnston Memorial	242	21	9%
	UNC-Wakebrook	127	8	6%
ALLIANCE Total		633	40	6%
CARDINAL	Alamance Regional Medical Center	193	12	6%
	Carolinas Medical Center	298	50	17%
	Forsyth Memorial Hospital	548	61	11%
	Halifax Regional	161	18	11%
	Presbyterian	361	47	13%
CARDINAL Total		1,561	188	12%
EASTPOINTE	Duplin General	121	4	3%
	Nash Hospitals, Inc.	689	67	10%
	Southeastern Regional Medical Center	177	18	10%
EASTPOINTE Total		987	89	9%
PARTNERS	Catawba Valley Medical Center	731	65	9%
	Davis Regional Medical Center	233	23	10%
	Frye Regional	357	28	8%
	Kings Mountain Hospital	295	11	4%
PARTNERS Total		1,616	127	8%
SANDHILLS	First Health/Moore Regional Hospital	316	19	6%
	Good Hope	120	1	1%
	Moses Cone	451	34	8%
SANDHILLS Total		887	54	6%
TRILLIUM	Beaufort Regional Medical Center	208	18	9%
	Carolina East Medical Center	168	36	21%
	New Hanover Regional Medical Center	402	39	10%
	Northside	192	29	15%
	Pitt Memorial	136	46	34%
TRILLIUM Total		1,106	168	15%
VAYA	Charles A. Cannon, Jr. Memorial Hosp	166	12	7%
	Haywood Regional Medical Center	146	11	8%
	Margaret Pardee Memorial	325	44	14%
	Mission	235	28	12%
	Rutherford	81	7	9%
VAYA Total		953	102	11%
Total Discharges		7,743	768	10%

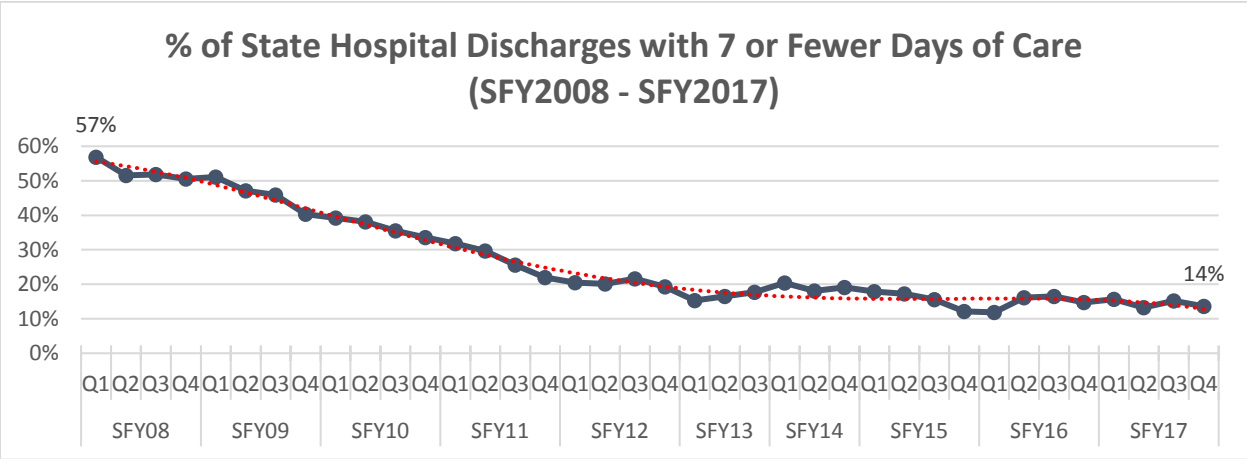
In order to impact the overall rate of re-admissions to three-way contract inpatient care and consequently the effectiveness of care, it is important to consider that funding to restore community services is needed at multiple levels of the service continuum and within the systems that fund and manage care.

State Psychiatric Hospitals' Lengths of Stay

With respect to one expected impact of the increased number of psychiatric inpatient beds in the community hospitals, that is, a reduction of short-term stays in the state psychiatric hospitals, Figure 1, on the next page, illustrates the downward trend of lengths of stay of seven days or less in the state hospitals since calendar year 2008.

The data below are presented as the percentage of state hospital discharges by quarter over the last 10 years. As indicated in the note beneath Figure 1, the source for this data is inclusive of only those persons discharged for whom the LME/MCOs are responsible for serving in the community service system.

Figure 1. Short-term (7 days or less) Lengths of Stay at State Hospitals: SFY 2008 through SFY 2017



Data Source: DMH/DD/SAS Performance Measure 5.1 Short-Term Care in State Psychiatric Hospitals. State Psychiatric Hospital data in the CDW. Discharges include only "direct" discharges to sources that fall within the responsibility of an LME-MCO to coordinate services (e.g. to other outpatient and residential non-state facility, self/no referral, unknown, community agency, private physician, other health care, family friends, nonresidential treatment/habilitation program, acute care hospital, outpatient services, residential care, other). Discharges for other reasons (e.g. transfers to other facilities, out-of-state, to correctional facilities, deaths, etc.) are not included as LME-MCOs would not be expected to coordinate services for these individuals nor to have any impact on readmission rates.

At the beginning of State Fiscal Year 2008, more than half (57%) of the discharges from the state hospitals had a length of stay of seven days or less. By the end of State Fiscal Year 2017, only 14% of discharges had a length of stay of seven days or less. During that same period, reflected in Figure 2, on the next page, the number of discharges significantly decreased from 3,381 to 382, while the average length of stay (ALOS), depicted in Figure 3 for persons treated at the state psychiatric hospitals increased from 22.6 days to 91.4 days.

Figure 2. Number of Discharges from State Hospitals: SFY 2008 through SFY 2017

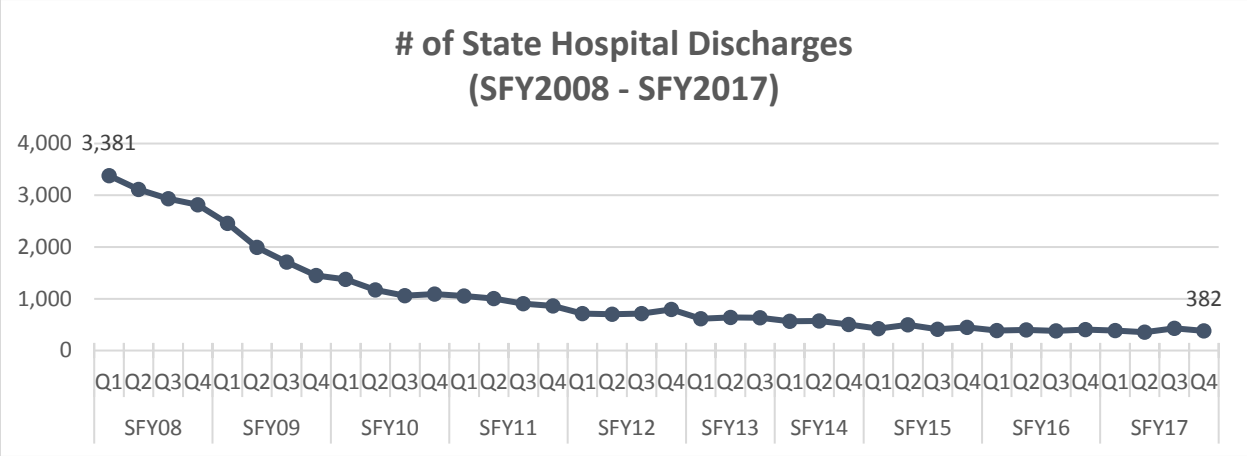
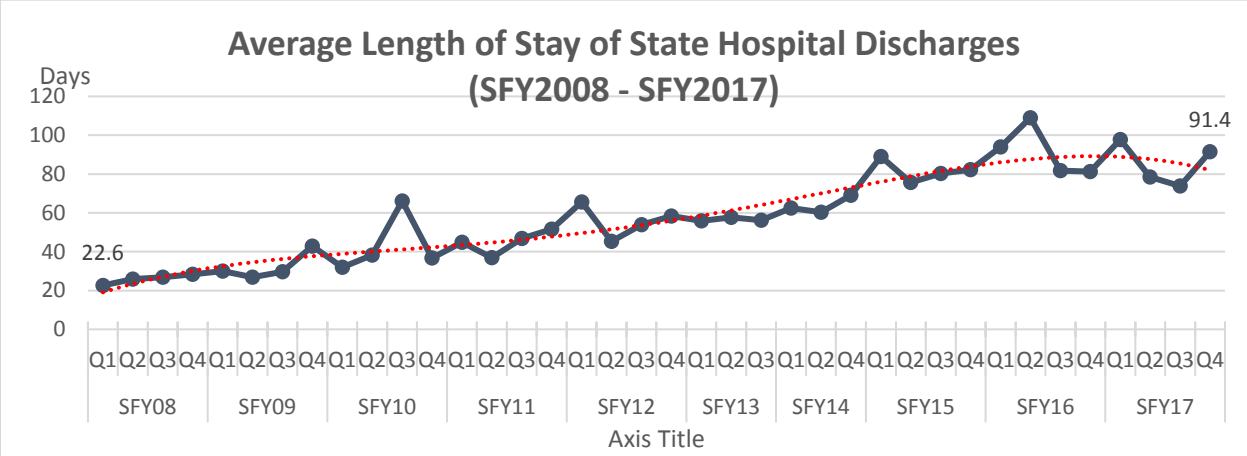


Figure 3. Average Lengths of Stay at State Hospitals: SFY 2008 through SFY 2017



While the increase of available community hospital beds, through three-way contracts, likely was a considerable reason for the reduced percentage of short-term stays in the state hospitals, other factors likely have shared contribution to this desired outcome. These factors include:

- Decrease in operational beds in the state hospitals between SFY 2008 and SFY 2010, making fewer beds available for short term admissions;
- State hospitals having a higher percentage of admission diagnoses of schizophrenia and other major psychiatric disorders (i.e., longer-term inpatient treatment needs) and lower percentage of substance use diagnoses, which occurred primarily due to the state operated Alcohol and Drug Abuse Treatment Centers beginning to admit individuals who involuntarily committed for substance use treatment;
- Admission delays at the state hospitals resulting in individuals with less significant needs being admitted to local inpatient units (including three-way contract beds) or discharged from the ED; only those with the most significant needs remain in the ED until a bed is

available in the State hospital; thus, the lengths of stay increases as the higher proportion of admitted individuals have more severe and chronic impairments; and

- Fewer community discharge options for individuals with high-support needs tends to increase lengths of stay in the state hospitals.

It should also be noted that the downward trend, depicted in Figure 1, began a few quarters before the inception of three-way contract inpatient care in community hospitals.

Emergency Department Wait Times

The Division of State Operated Health Facilities has been able to perform ongoing monitoring of the wait times in EDs for persons who are admitted to state psychiatric hospitals, as the tracking is performed by a collaborative and standardized effort between the LME/MCOs and the state hospitals. DMHDDSAS, in collaboration with the North Carolina Hospital Association and numerous community hospitals, reported to the North Carolina General Assembly on ED wait times for state hospitals and community hospitals (North Carolina Department of Health and Human Services Division of Mental Health, Developmental Disabilities and Substance Abuse Services March 2011) https://www2.ncdhhs.gov/mhddsas/statspublications/Reports/reports-generalassembly/generalreports/edreport-3-11.pdf.

In that March 2011 report of a one month (November 2010) period, the average wait times for state hospital beds (26 hours, 38 minutes) were found to be higher than the wait times for community hospital beds (14 hours, 7 minutes). DMHDDSAS does not have recent ED wait time data for three-way contract beds. However, with the upcoming implementation (December 2017 – January 2018) of the Behavioral Health Crisis Referral System (BH-CRSys), DMHDDSAS will attain the resource and capability of tracking and monitoring ED wait times for those EDs that participate in the BH-CRSys.

Trend of Closure of Community Inpatient Beds

In order to track the number of community hospital psychiatric beds for this report, data from the North Carolina State Medical Facilities Plans (SMFPs) were accessed from 2007 through 2017. https://www2.ncdhhs.gov/dhsr/ncsmfp/index.html and https://www2.ncdhhs.gov/dhsr/ncsmfp/archive.html.

The 2007 SMFP reported that there were 1,232 licensed psychiatric beds for adults in the community hospitals. By 2017, the number of licensed psychiatric beds for adults had increased by 488 (40%) to 1,720 (North Carolina Department of Health and Human Services Division of Health Service Regulation, 2007-2017). This data suggests that community hospitals were motivated to apply for Certificates of Need and psychiatric bed licensure since 2007, which indicated a reversal of any downward trend that may have existed prior to 2007. However, the reasons for the increased number of beds are unclear; and because the increase of 488 beds substantially exceeds the number of beds that were identified for three-way contract funding (i.e., 180), the creation of the 488 beds cannot be solely attributed to the three-way contracts.

V. Other Department Initiatives Funded by State Appropriations to reduce State psychiatric hospital use.

S.L. 2014-100 SECTION 12F.5.(b) *From funds appropriated in this act to the Department of Health and Human Services, Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, for community services for the 2014-2015 fiscal year, the Division shall use two million two hundred thousand dollars ($2,200,000) in recurring funds to accomplish the following:*

(1) To increase the number of co-located or operationally linked behavioral health urgent care centers and facility-based crisis centers.
(2) To increase the number of facility-based crisis centers designated by the Secretary as facilities for the custody and treatment of involuntary clients pursuant to G.S.122C-252 and 10A NCAC 26C .0101. The Department shall give priority to areas of the State experiencing a shortage of these types of facilities.
(3) To provide reimbursement for services provided by facility-based crisis centers.
(4) To establish facility-based crisis centers for children and adolescents.

The initiatives described below are intended to divert individuals who experience behavioral health crises from seeking psychiatric or substance use crisis response from EDs. Rather, these initiatives function as alternative crisis responders, diverting people from ED visits and are intended to reduce the need for psychiatric and substance use inpatient hospital care. It is anticipated that these alternative community resources will reduce the need for State Psychiatric Hospital admissions.

Behavioral Health Urgent Care and Facility Based Crisis

In SFY 2013, the NC General Assembly appropriated funding for Facility Based Crisis (FBC) centers and Behavioral Health Urgent Care (BHUC) centers to serve as alternatives to EDs and inpatient hospitalization for persons who experience crises related to mental health, substance use, or intellectual/developmental disabilities diagnoses. Several BHUCs (i.e., Tier IV BHUCs) and all of the FBCs operate on a 24-hour, seven days per week basis. The FBCs are licensed residential facilities, under Rule 10A NCAC 27G Section .5000, and provide facility-based crisis service as described in Rule 10A NCAC 27G .5001. The state currently has 22 adult FBC Service sites, 12 of those are designated for the treatment of persons who are under involuntary commitment (IVC). The 22 FBC's have 303 beds to offer alternative treatment to inpatient hospitalization.

The Session Law 2014-100 definition of Behavioral Health Urgent Care (BHUC) was as follows:

Behavioral Health Urgent Care Center. – An outpatient facility that provides walk-in crisis assessment, referral, and treatment by licensed behavioral health professionals

with prescriptive authority to individuals with an urgent or emergent need for mental health, intellectual or developmental disabilities, or substance abuse services

Some of the Tier IV BHUC sites are equipped with additional resources to help stabilize individuals in crisis. These resources are 23-hour crisis stabilization/observation beds, which provide supervised care to deescalate the behavioral health crises and reduce the need for emergent care. This service provides prompt assessments, stabilization and linking to the appropriate level of care. The intended outcome is to avoid unnecessary hospitalizations for people experiencing crises that may resolve with time and observation.

Together, Tier IV BHUCs and FBCs provide alternative routes for crisis stabilization that allow individuals in crisis to completely avoid an ED visit. The BHUCs function as effective alternatives to EDs for persons in behavioral health crisis who are not experiencing any significant medical distress. Like EDs, BHUCs are capable of providing first evaluations for involuntary commitment (IVC), and are able to refer persons needing crisis stabilization to either a hospital inpatient level of care, an FBC level of care, or an intensive outpatient level of care, depending on an individual's needs. FBCs function as local alternatives to an inpatient level of care, and typically provide three to five days of behavioral health crisis stabilization in a unit of 16 beds or less, including treatment of persons who are under involuntary commitment.
The above appropriation has helped with the development of some of these facilities:

- Vaya Health LME/MCO and RHA a provider agency, have opened a 24 hour BHUC in Buncombe County, and have moved an existing adult FBC to the same location, and will re-apply to be an IVC designated facility. This one location also encompasses RHA's outpatient services, a peer living room, a pharmacy and community resources. Of interest here is that Mission Hospital assisted with funding this project due to the expectation that ED diversion will be successful.
- Eastpointe LME/MCO and Monarch a provider agency in Robeson County renovated its existing adult FBC to add 5 additional beds making it a 16-bed facility. The facility opened on August 28, 2017, has applied for designation as an IVC treatment facility, and also added a co-located BHUC component with two 23-hour crisis stabilization/observation chairs. The provider has developed working partnership with Southeast Regional Medical Center to ensure a broader continuum of crisis care is available nearby.
- Former CenterPoint, now Cardinal Innovations Healthcare Solutions LME/MCO and Daymark a provider agency, in Forsyth County is in the construction phase for a new BHUC with co-located outpatient services and medical clinic. On August 31, 2017 Daymark had an opening for a new FBC in neighboring Davidson County which will service the Forsyth BHUC. The FBC plans to apply to be an IVC designated facility.
- Cardinal Innovations Healthcare Solutions, LME/MCO, and Monarch, a provider agency, in Mecklenburg County is constructing a child/adolescent FBC (no BHUC). The FBC functions as a viable alternative to behavioral health inpatient, when it has received designation as an IVC facility.

With respect to the main intent of the appropriation, that is, to reduce ED visits for persons who experience behavioral health crises, DMHDDSAS was able to report last year (December 1, 2016) to the Joint Legislative Oversight Committee on Health and Human Services and the Fiscal Research Division that EDs in counties, in which BHUCs that were open 24 hours/seven days a week, had 25% fewer ED visits in SFY 2015. https://ncdhhs.s3.amazonaws.com/s3fs-public/SL%202015-24112F%201%20-%20Uniform%20System%20Beds-Bed%20Day%20Report.pdf

The following projection was included in the December 2016 report:

> If similar BHUC and FBC centers could be made available statewide as an alternative to EDs and inpatient hospitalization, NC could see up to 30,000 fewer ED visits for this population per year and fewer subsequent inpatient admissions.

The NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) is the primary data source used to evaluate ED usage for this population. While DHHS access to these data for this purpose has been blocked, we are working closely with the North Carolina Hospital Association and other stakeholders to address.

VI. Summary and Recommendations to Sustain Success of Behavioral Health Crisis Alternatives and Hospital Inpatient

In response to the closure of Dorothea Dix state psychiatric hospital and the reduction of state psychiatric beds over the past two decades, the NC General Assembly has appropriated state funds to increase access to psychiatric inpatient care in community hospitals. The number of available three-way contract psychiatric beds has increased since SFY 2008 from 77 to 180 in SFY 2017. For three-way contract inpatient services provided between July 1, 2016 and June 30, 2017, DMHDDSAS has expended approximately $34.7 million, with another $12.0 million for state-funded psychiatric inpatient care paid through Single Stream allocation funds.

Local funding was reported by the LME/MCOs in the amount of $9.0 million (e.g., county contributions) to have been used to pay for psychiatric inpatient care. However, much of those local dollars paid for the YP 820 psychiatric and substance use inpatient care; reflecting the bulk of the funding for that service.

Need to Prevent Unnecessary Hospital ED Visits and Behavioral Health Inpatient Admissions

All stakeholders have acknowledged that, in many communities, hospital Emergency Departments have become the default resource for many people without health insurance who experience behavioral health crises. Over-crowding of many Emergency Departments as well as lengthy wait times for persons in EDs who are referred for behavioral health inpatient care have been repeatedly reported by the media.

Fortunately, the NC General Assembly has provided some funding for BHUCs and FBCs to reduce the burden on hospitals, and to facilitate access for persons without health insurance to obtain effective behavioral health resources that divert individuals from unnecessary hospital admissions.

While hospital inpatient care offers the most intensive level of behavioral health crisis stabilization in the continuum of services for persons with mental illness, substance use disorders, and intellectual/developmental disabilities, it is the most restrictive and expensive care within our array of services; and may not be the most appropriate level of care to address some crisis situations. In order to access this level of care, individuals, especially those who have no health insurance and who often have received no behavioral health services, experience behavioral health crises, and do not receive intervention at a lower level of care; and thus, the crises escalate until the most intensive, restrictive, and expensive intervention is determined necessary.

Hospital Emergency Departments and inpatient services should be reserved for and used to treat persons with acute behavioral health crises that cannot be treated at a lower level of care. The needs of individuals that are appropriate for hospital Emergency Departments include the need for acute medical stabilization (e.g., injuries, emergent medical illness) along with behavioral health crisis stabilization. Persons who need only behavioral health crisis response and stabilization can be appropriately served at lower levels of care, including FBCs, NHMD, BHUCs, Assertive Community Treatment, Community Support Team, and other intensive outpatient services.

As most would agree, it is better to prevent crises than to have to intervene after crises have escalated. To avoid the over-crowding of and unnecessary visits to Emergency Departments and to prevent some of the need for inpatient admissions for persons without health insurance, planning and funding should focus on developing and implementing a strategy that strives to serve people in their communities within a comprehensive continuum of care.

Two reports that were previously submitted to the North Carolina legislature include a broad array of recommendations about the integration of crisis services into a robust continuum of services that offer accessible and multiple levels of care within local communities that are intended to prevent crises and intervene earlier in a crisis episode, which will reduce some of the need for Emergency Department visits and psychiatric inpatient admissions. Links to two of these reports are provided here:

- Report Joint Legislative Oversight Committee on health and Human Services and Fiscal Research Division on Strategies for Improving Mental Health, Developmental Disabilities and Substance Abuse Services

  https://www2.ncdhhs.gov/mhddsas/statspublications/Reports/reports-generalassembly/generalreports/Strategies%20for%20Improving%20MHDDSAS.pdf

- Report to Joint Legislative Oversight Committee on health and Human Services and Fiscal Research Division on Strategies to Increase Child and Adolescent Behavioral Health Inpatient Beds

  https://files.nc.gov/ncdhhs/SL 2014-10012F 3(b)(1) Child Adolescent Beds.pdf

Recommendations in both reports cited above emphasize the need for integrated care, health promotion and wellness, prevention, early intervention, alternative crisis services and diversion programs.

To ensure the sustainability of effective community hospital psychiatric and substance abuse inpatient care, and other crisis response services, BHUCs, FBCs, and NHMDs, it is essential that these services are supported by a fully-functioning foundation of lower level, integrated community services for North Carolinians who have mental illness, substance use disorders, and intellectual and developmental disabilities.

In order to have a state-wide impact on unnecessary visits to hospital EDs and admission to behavioral health inpatient level of care, the number of Tier IV BHUCs, FBCs (for both adults and children/adolescents), and NHMDs should be increased, especially in locations having close proximity to hospitals with EDs and behavioral health inpatient beds.

Need to Improve Management of Three-Way Contract Psychiatric Inpatient Care

With respect to the two-tier system of payment for three-way contract inpatient services, it has become evident that the upper tier (enhanced three-way), intended to serve individuals with higher levels of acuity (e.g., violence, medical fragility), has been infrequently utilized. DMHDDSAS will continue to review the need for this enhanced three-way level of care with the LME/MCOs and community hospitals.

Monitoring Impact of Efforts to Reduce ED Visits

DHHS is working closely with the North Carolina Hospital Association and other stakeholders to address regaining access to NC DETECT data to track ED utilization trends.

References

1. **National Committee for Quality Assurance. *Healthcare Effectiveness Data and Information Set.* HEDIS 2016 Measures. Washington, D.C. National Committee for Quality Assurance; 2016. Available from http://www.ncqa.org/Portals/0/HEDISQM/HEDIS2016/HEDIS%202016%20List%20of%20Measures.pdf Accessed September 21, 2016.**

2. **North Carolina Department of Health and Human Services Division of Health Service Regulation, North Carolina State Health Coordinating Council. *North Carolina 2017 State Medical Facilities Plan.* January 1, 2017. Available from https://www2.ncdhhs.gov/dhsr/ncsmfp/index.html. Accessed September 29, 2017.**

3. **North Carolina Department of Health and Human Services Division of Facility Services, Medical Facilities Planning Section, North Carolina State Health Coordinating Council. *North Carolina 2007 State Medical***

Facilities Plan. **January 1, 2007. Available from https://www2.ncdhhs.gov/dhsr/ncsmfp/archive.html. Accessed September 29, 2017.**

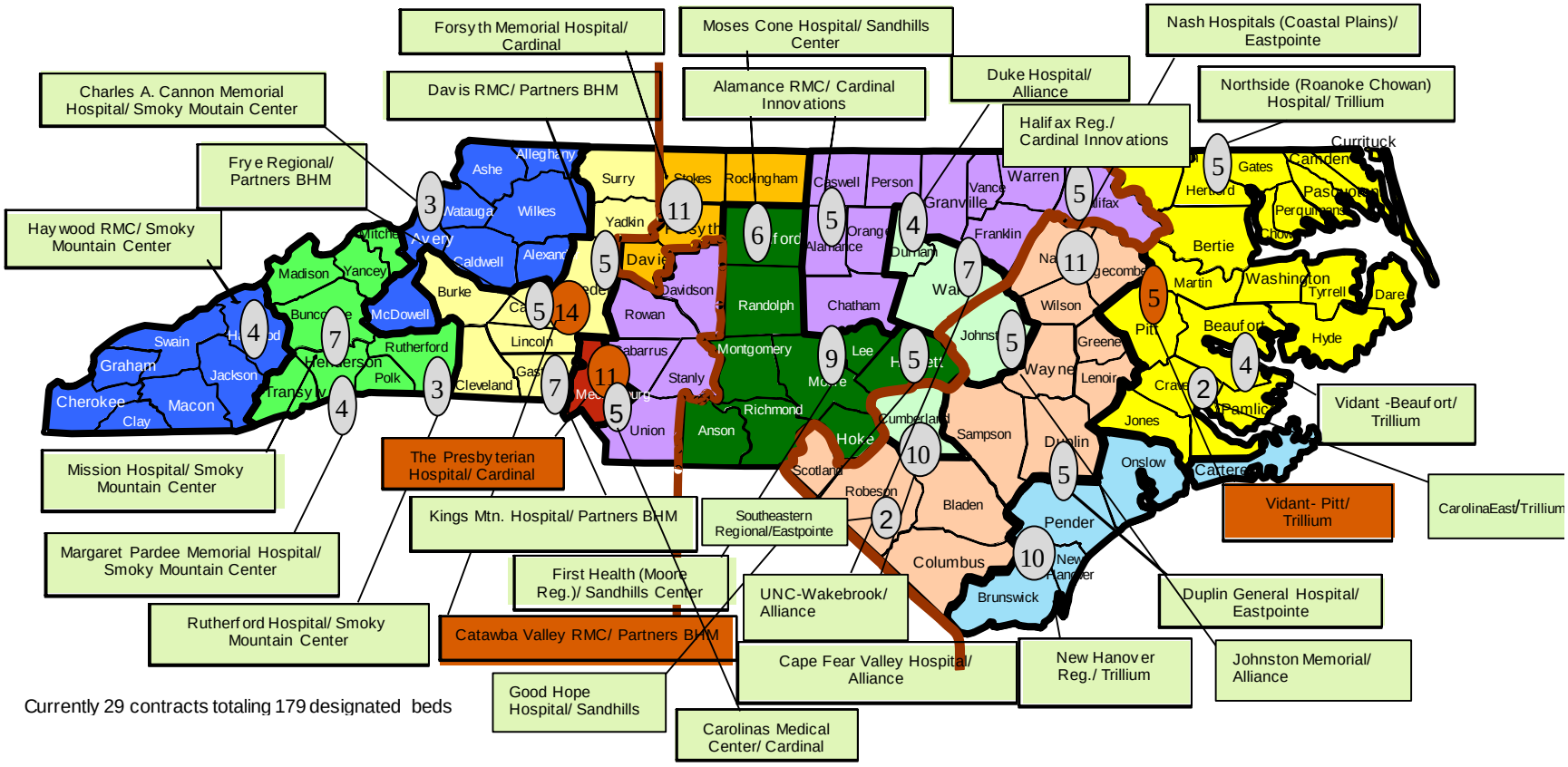
4. **North Carolina Department of Health and Human Services Division of Mental Health, Developmental Disabilities and Substance Abuse Services Report to the Senate Appropriations Committee on Health and Human Services, House of Representatives Appropriations Subcommittee on Health and Human Services, Joint Legislative Oversight Committee on Mental Health, Developmental Disabilities and Substance Abuse Services and Fiscal Research Division. *Report on the Provision of Behavioral Health Crisis Services by Hospital Emergency Departments.* March 1, 2011. Available from https://www2.ncdhhs.gov/mhddsas/statspublications/Reports/reports-generalassembly/generalreports/edreport-3-11.pdf. Accessed September 21, 2016.**

5. **North Carolina Department of Health and Human Services Division of Mental Health, Developmental Disabilities and Substance Abuse Services Report to Joint Legislative Oversight Committee on Health and Human Services and Fiscal Research Division. *Report on Strategies for Improving Mental Health, Developmental Disabilities and Substance Abuse Services.* November 1, 2014. Available from https://www2.ncdhhs.gov/mhddsas/statspublications/Reports/reports-generalassembly/generalreports/Strategies%20for%20Improving%20MHDDSAS.pdf Accessed September 30, 2017.**

6. **North Carolina Department of Health and Human Services Division of Mental Health, Developmental Disabilities and Substance Abuse Services Report to Joint Legislative Oversight Committee on Health and Human Services and Fiscal Research Division. *Report on Strategies Increase Child and Adolescent Behavioral Health Inpatient Beds.* March 1, 2015. Available from https://files.nc.gov/ncdhhs/SL 2014-10012F 3(b)(1) Child Adolescent Beds.pdf. Accessed September 30, 2017.**

Attachment 1

3-Way Contract Community Hospital Beds as of 7/1/16



* Please note that contract totals for Vidant (Pitt), Catawba Valley Medical Center, and Presbyterian Hospitals contain 2 enhanced beds each