COMMENT ON PETITION FOR AN ADJUSTMENT TO A NEED DETERMINATION

Comment on Petition for an Adjusted Need Determination for 50 Additional Rehabilitation Beds in HSA III in the *2018 State Medical Facilities Plan*

COMMENTER

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INTRODUCTION

CHS appreciates the opportunity to comment on the petition from Novant Health, Inc. (Novant) in partnership with the HealthSouth Corporation (HealthSouth) requesting a special need determination for 50 additional inpatient rehabilitation beds in Health Service Area (HSA) III in the *2018 State Medical Facilities Plan* (*SMFP*). Based on its detailed review, CHS urges the State Health Coordinating Council (SHCC) to deny this petition.

The Novant petition includes both qualitative and quantitative analysis, which CHS believes to be flawed. In particular, the petition provides unreasonable projections for market need and makes multiple factually inaccurate statements regarding CHS's inpatient rehabilitation services. The comments address each of these issues in detail below.

Separately, William Bockenek, M.D., Chief Medical Officer of Carolinas Rehabilitation, and Vishwa Raj, M.D., Medical Director of Carolinas Rehabilitation, have submitted a letter in response to this petition. Both of these physicians are Board Certified in Physical Medicine and Rehabilitation and are experts in the field of inpatient rehabilitation.

COMMENTS ON QUANTITATIVE ANALYSIS

In support of its request for additional beds, Novant provides quantitative analyses that are unsupported by available evidence or include inappropriate assumptions. The following section provides evidence and data that demonstrate these deficiencies.

It is noteworthy that Novant is petitioning for additional rehabilitation beds in HSA III when the existing beds it operates in the service area are significantly underutilized. In fact, these underutilized beds at Novant Health Rowan Medical Center (NHRMC) are the sole reason that the standard inpatient rehabilitation bed methodology in the *Proposed 2018 SMFP* determined that no new beds were needed in HSA III. As shown below, the utilization of NHRMC's inpatient rehabilitation beds has declined over the past few years, and its utilization in the two most recent years has fallen below 50 percent. Overall, its inpatient rehabilitation days have declined 12.0 percent annually from 2013 to 2016.

Novant Health Rowan Medical Center – Inpatient Rehabilitation Beds

	2013	*2014*	*2015*	*2016*	*CAGR**
Days	2,537	1,891	1,723	1,731	-12.0%
Beds	10	10	10	10	
% Utilization	69.5%	51.8%	47.2%	47.3%	

Source: *Proposed 2018 SMFP*.
* Compound annual growth rate

It is reasonable to question why the service area needs 50 more beds, and more specifically, beds to be developed by Novant/HealthSouth, when Novant's existing capacity is so underutilized. Moreover, the petition does not discuss any strategies or factors that might result in better utilization of NHRMC. The NHRMC facility is largely ignored, including the obvious alternative to the petition of relocating some or all of the beds to other Novant facilities within the HSA.

Alleged Unique Factors in HSA III

Rather than address its own historical underutilization in the market, Novant's petition cites numerous factors that it alleges are unique to HSA III including the inmigration rate, the dedicated pediatric inpatient rehabilitation hospital, the ratio of population to beds, and the lack of competition and continuity of care. CHS believes that each of those factors is already appropriately reflected in the historical utilization of rehabilitation services in HSA III and the need for additional capacity as determined by the *SMFP*. For example, Novant asserts that HSA III's high inmigration rate is compelling factor that supports the addition of 50 beds in the service area. This is illogical. Inpatient rehabilitation utilization resulting from inmigration patients is included in the total utilization for the service area, and the *SMFP* determines the need for additional capacity based on total utilization, including inmigration. Because HSA III has higher inmigration utilization, it has higher capacity needs in the inpatient rehabilitation bed need methodology corresponding with that higher inmigration. The current methodology is based on the utilization of the beds within the HSA, irrespective of the origin of the patients served by those beds; as such, the methodology is not flawed and effectively addresses this factor. Of note, HSA III's higher inmigration is likely a natural result of the specialized programs, like spinal cord, brain injury, multiple trauma, and pediatric care, offered by Carolinas Rehabilitation that serve as regional services that are not available in most communities.

Similarly, Novant asserts that HSA III's dedicated pediatric inpatient rehabilitation unit at Levine Children's Hospital (LCH) is a compelling reason to add 50 beds to the HSA. As with the inmigration issue, however, the utilization of these beds actually increases the overall utilization of beds in the HSA, which is used in determining future need in the methodology. While it might be sensible to consider excluding these beds if they were underutilized as a result of their pediatric status, the opposite is actually the case. As shown in the *Proposed 2018 SMFP*, LCH's 13 inpatient rehabilitation beds operated above the target utilization threshold of 80 percent of capacity in each of the last three years. Overall, LCH's inpatient rehabilitation days have increased 6.0 percent annually from 2013 to 2016. Further, approximately 65 percent of LCH's admissions are Medicaid and it is the only inpatient pediatric rehabilitation provider in North and South Carolina. As such, this facility provides a substantial community benefit.

Levine Children's Hospital – Inpatient Rehabilitation Beds

	2013	2014	2015	2016	CAGR
Days	3,489	3,811	4,250	4,159	6.0%
Beds	13	13	13	13	
% Utilization	73.5%	80.3%	89.6%	87.4%	

Source: *Proposed 2018 SMFP*.

The beds at LCH are not only well-utilized, *they are actually the most highly utilized inpatient rehabilitation beds in the state*. The inpatient rehabilitation bed need methodology appropriately reflects the utilization of these beds. Because HSA III has a highly utilized pediatric inpatient rehabilitation unit, the methodology shows higher average utilization in the service area.

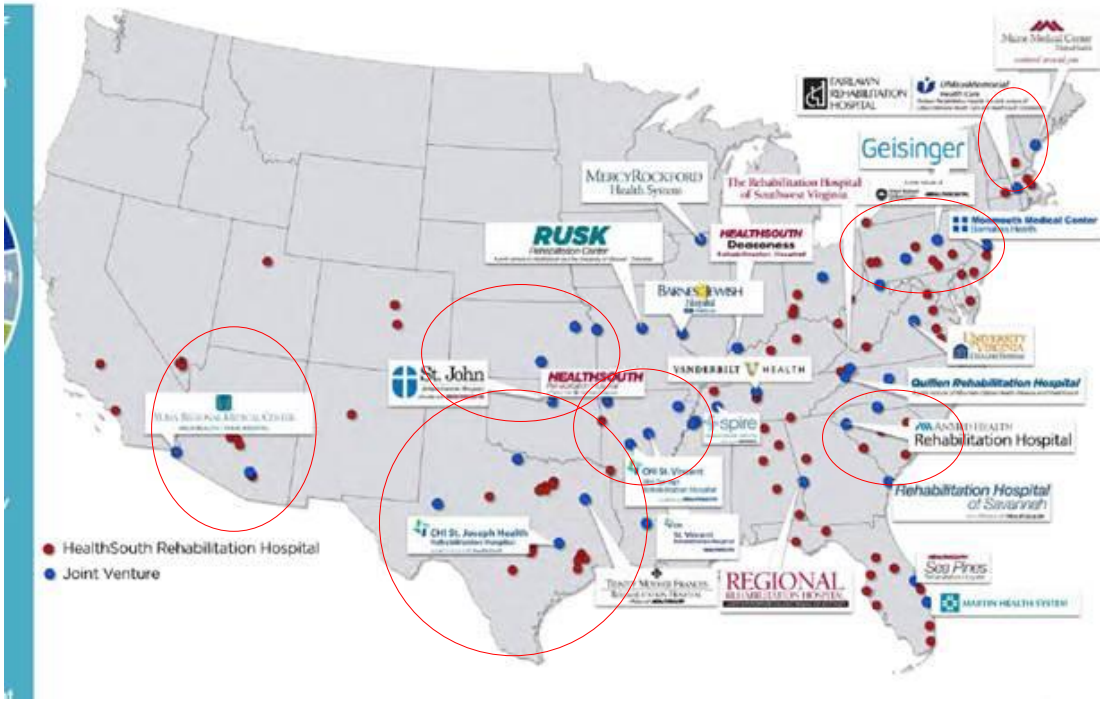
Proposed Alternative Methodologies

In support of its request for additional beds, Novant provides several alternative methodologies for projecting need that misinterpret data and make unreasonable assumptions. In its petition, Novant cites the 2016 AHA/ASA Guidelines for Adult Stroke Rehabilitation and Recovery and provides a determination of need for inpatient rehabilitation beds assuming 50, 75, and 100 percent of all stroke patients are treated at a facility. However, Novant has misinterpreted the guidelines which recommend ensuring a "sustained and coordinated effort" from a multidisciplinary team in an appropriate setting based on their medical and rehabilitation needs. It is clearly delineated in the guidelines that patients should be treated in the setting that best suits their medical and rehabilitation needs. There is no specific recommendation for increasing inpatient rehabilitation beds in any community. Further, the growing focus within healthcare on value-based care has resulted in a significant shift of patients that were previously treated in inpatient rehabilitation facilities to less intense and lower cost levels of care including skilled nursing facilities, home health care, and outpatient care. Contrary to Novant's discussion, stroke patients are a leading example of this change as patients shift to more appropriate levels of care due to aggressive early interventions leading to improved outcomes and transitions directly to home and stroke bundled payment programs that direct patients to lower cost settings. The dramatic increase in the need for inpatient rehabilitation beds assumed by Novant directly contradicts these trends. Moreover, Novant's proposed methodology represents a complete departure from the *SMFP*'s inpatient rehabilitation methodology. As the current methodology reflects actual inpatient rehabilitation utilization by HSA, its results more accurately reflect the need for inpatient rehabilitation capacity in comparison to the methodologies proposed by Novant which are purely speculative as to future trends.

Novant further cites the experience of HealthSouth in its markets and its Acute Care Conversion Rate to Inpatient Rehabilitation. Novant notes that "*discharge data from HealthSouth markets in the US showed that 13.6% of the DRG acute care discharge subset were discharged to inpatient rehabilitation hospitals. This compares to the HSA III Acute Care Conversion Rate to Inpatient Rehabilitation of only 10.5% in 2016*." In an alternative methodology, Novant estimates the number of additional HSA III inpatient rehabilitation patients assuming a 13.6 percent conversion rate. However, Novant provides no evidence to indicate that this assumed higher conversion rate is reasonable. In fact, publicly available evidence detailed below regarding HealthSouth's practices suggests that higher rates should be avoided and certainly not adopted to project future inpatient rehabilitation needs.

In states where there is a preponderance of HealthSouth hospitals, the percentage of Medicare Fee-For-Service acute discharges that utilize inpatient rehabilitation facilities or units post-discharge is well above the national average of 3.5 percent. As shown below in the map of HealthSouth facilities and the utilization rate table, states like Arkansas, Arizona, Kansas, New Hampshire, Pennsylvania, South Carolina, and Texas have a large HealthSouth presence and higher utilization of inpatient rehabilitation facilities, as suggested by HealthSouth's higher than average conversion rate.

HealthSouth Locations Nationwide



FY 2013 Estimated Medicare FFS Acute Care Discharges to IRF/IRU

State	Rate	State	Rate	State	Rate
AK	1.1%	KY	3.1%	NY	1.9%
AL	4.3%	LA	5.5%	OH	2.5%
AR	6.9%	MA	2.8%	OK	3.4%
AZ	5.1%	MD	3.0%	OR	1.0%
CA	2.1%	ME	3.7%	PA	5.7%
CO	3.6%	MI	2.1%	RI (b)	2.1%
CT (a)	0.8%	MN	1.4%	SC	4.8%
DC (b)	3.9%	MO	3.4%	SD	2.1%
DE	2.5%	MS	2.3%	TN	3.7%
FL	3.5%	MT	2.1%	TX	7.0%
GA	2.3%	NC	2.2%	UT	3.3%
HI	2.0%	ND	2.7%	VA	3.1%
IA	1.7%	NE	2.6%	VT	1.6%
ID	2.7%	NH (b)	7.0%	WA	1.8%
IL	2.8%	NJ	3.3%	WI	2.0%
IN	4.0%	NM	4.6%	WV	4.2%
KS	4.7%	NV	9.4%	WY	4.5%

Source: Kaiser Foundation and American Hospital Directory.
(a) May be understated due to out-migration to neighboring states.
(b) May be overstated due to in-migration from neighboring states.

These higher than average conversion rates are suggestive of aggressive practices to admit patients to services with higher intensity and cost than are warranted. Such practices have led to allegations of fraud against HealthSouth over many years. In 2004, HealthSouth agreed to pay the U.S. government $325 million to settle allegations that the company defrauded Medicare and other federal healthcare programs driven both by longstanding business practices in its outpatient therapy and inpatient rehabilitation services.[1] In 2006, HealthSouth reached an agreement to pay $445 million to settle federal lawsuits resulting from a massive financial fraud.[2] In 2014, seven HealthSouth hospitals were subpoenaed by the U.S. Department of Health and Human Services as part of an ongoing probe with the U.S. Department of Justice into alleged Medicare and Medicaid fraud according to a company disclosure.[3] The HHS Office of the Inspector General sought documents from January 2008 through December 2013 relating to the inpatient rehabilitation hospitals' admission policies, in addition to proof of compliance with the Medicare reimbursement rules.

Novant Health's inpatient rehabilitation experience in other HSAs is also instructive in considering their petition's claims. Novant operates 68 significantly underutilized beds in Forsyth County. As shown below, Novant Health Rehabilitation Center (NHRC) which is operated as part of Novant Health Forsyth Medical Center (NHFMC) has not operated above 50 percent of licensed capacity in the past four years.

Novant Health Rehabilitation Center – Inpatient Rehabilitation Beds

	2013	*2014*	*2015*	*2016*	*CAGR**
Days	12,200	9,956	11,902	11,904	-0.8%
Beds	68	68	68	68	
% Utilization	49.2%	40.1%	48.0%	47.8%	

Source: *Proposed 2018 SMFP*.
* Compound annual growth rate

Novant and HealthSouth have been approved to replace those 68 beds with a $28 million facility. Given the historical utilization of those beds, it is reasonable to consider whether the development of a $28 million facility is an effective use of healthcare resources. Moreover, given HealthSouth's experience, it is reasonable to consider whether the proposed replacement facility will be aggressive in admitting patients that could be treated with lower acuity and lower cost services in order to increase utilization and benefit from the higher reimbursement provided for inpatient rehabilitation services. Rather than approving Novant's petition based on conjecture and the risk of aggressive admissions policies, it would be prudent to analyze the Forsyth County facility once it has an operational history.

Novant also unreasonably suggests a projection methodology with a longer time horizon and more aggressive growth rate calculation than any other need methodology in the *SMFP*. First, Novant suggests that inpatient rehabilitation bed need should be projected forward five years in order to account for planning, CON processes, development, and construction. In contrast, the methodology for general acute care beds, a comparable service to inpatient rehabilitation, uses a four year time horizon. CHS is not aware of any comments or criticisms provided to the SHCC suggesting that a four year time horizon is too short. A longer projection period as suggested by Novant increases the risk that the need methodology will overstate future needs based on a short-term trend by assuming that a historical

[1] See https://www.justice.gov/archive/opa/pr/2004/December/04_civ_807.htm.
[2] See http://www.foxnews.com/story/2006/02/23/healthsouth-reaches-445m-settlement-in-lawsuits.html
[3] See https://www.law360.com/governmentcontracts/articles/532377/healthsouth-hospitals-subpoenaed-in-hhs-fraud-probe

growth rate will continue consistently several years in the future. Reducing this risk is particularly important for services with high capital costs such as inpatient beds.

In an additional aggressive assumption, Novant suggests that future inpatient rehabilitation bed need should be projected using a three-year average annual growth rate based on facility utilization. While this assumption is consistent with the current inpatient rehabilitation need methodology, the current methodology projects need for only one year in the future. In contrast, Novant's suggested methodology would use a three-year growth rate to project forward for five years. The imbalance is clear: it is unreasonable and risky for a statewide planning methodology to use a three-year historical period to project forward for five years. The methodology for general acute care beds, a comparable service to inpatient rehabilitation, uses a four-year average annual growth rate, based on facility utilization, to project four years into the future. Notably, few methodologies in the *SMFP* use a historical average annual growth rate based on facility utilization. Most methodologies use a growth rate derived from population projections or are based on current utilization with no projected growth. Methodologies that use a historical average annual growth rate based on facility utilization increase the risk that the need methodology will overstate future needs based on a short-term trend. Of note, it is possible that this kind of dynamic is present in HSA III. As shown below, overall HSA III rehabilitation bed utilization showed a significantly higher than average increase from 2013 to 2014. This increase appears to have been related to the development of Carolinas Rehabilitation-NorthEast, a separately licensed inpatient rehabilitation facility with 40 beds transferred from other CHS facilities. Carolinas Rehabilitation-NorthEast's utilization increased more than 9,000 patient days from 2013 to 2014 or greater than 700 percent.

HSA III Inpatient Rehabilitation Beds

	2013	***2014***	***2015***	***2016***
HSA III Days	52,173	58,583	60,520	58,810
Annual Growth		12.3%	3.3%	-2.8%
Carolinas Rehabilitation-NorthEast Days	1,270*	10,280	10,355	11,195
Annual Growth		709.4%	0.7%	8.1%

Source: *Proposed 2018 SMFP*.
*Carolinas Rehabilitation-NorthEast opened in late 2013 and only operated for part of the year.

As noted above, the current inpatient rehabilitation need methodology uses a three-year average annual growth rate for an HSA based on facility utilization. As the three-year average annual growth rate for HSA III reflects this remarkable growth at Carolinas Rehabilitation-NorthEast, HSA III's average annual growth rate is skewed by this one time rise in utilization related to the opening of a new facility. This dynamic underscores the unreasonableness of Novant's growth rate and timeline assumptions.

COMMENTS ON QUALITATIVE ANALYSIS

In support of its request for additional beds, Novant makes multiple misleading or factually incorrect statements about CHS's inpatient rehabilitation services. The following section provides the data and context that demonstrate these inaccuracies.

Alleged Monopoly in HSA III

Novant and HealthSouth allege that CHS has a "*monopoly on inpatient rehabilitation beds in Mecklenburg County and HSA III.*" The petition fails to note that HealthSouth operates a 50-bed inpatient rehabilitation hospital in Rock Hill, South Carolina. In a letter submitted in support of the petition, the CEO of HealthSouth Rock Hill, Deanna Martin, states that "Rock Hill, SC is considered part of the Greater Charlotte Metropolitan area." As such, it is clear that Novant has arbitrarily excluded this South Carolina facility in its allegation against CHS.

Further, the number of inpatient rehabilitation beds operated by CHS in HSA III has evolved over time as a function of multiple events. Inpatient rehabilitation beds at CHS Pineville (Mercy Hospital) and CHS Stanly were in operation prior to those facilities joining the CHS system. As part of CHS, those beds have been combined with other beds in the system, redeployed as needed to improve geographic access, and their utilization has increased. Novant has had the opportunity to develop and utilize inpatient rehab beds in HSA III, but has not done so effectively. Novant (as Presbyterian Orthopaedic Hospital) obtained a CON to relocate 12 inpatient rehab beds from Novant's Forsyth Medical Center, but it relinquished that CON (see footnote on page 47 of the *2003 SMFP*). Pursuant to an adjusted need determination in the *2009 SMFP*, Novant received a CON for 10 inpatient rehabilitation beds to be located at NHRMC. As noted above, these beds have never operated above 50% occupancy, and utilization has steadily declined over the past few years. Given this context, it is clear that CHS's alleged "monopoly" is both a function of Novant's historical decisions as well as those of previously unaffiliated hospitals.

Allegations of Delayed/Denied Admissions

In the context of unfairly describing CHS's market position, Novant and HealthSouth state that "*Novant Health patients often experience delayed admission or are denied admission to CHS inpatient rehabilitation facilities due to the high utilization of those facilities.*" Notably, Novant provides no supporting data for this claim.

According to CHS data, Novant facilities refer more than 700 patients annually to Carolinas Rehabilitation facilities resulting in more than 300 annual admissions, or percentage admitted of more than 40 percent. Additionally, many patients who do not meet acute inpatient rehabilitation criteria are admitted to more appropriate sub-acute level rehabilitation providers in skilled nursing and rehab centers or specialized home health providers.

Carolinas Rehabilitation Referrals and Admissions

	2015		***2016***		***2017****	
	Referral	***Admissions***	***Referral***	***Admissions***	***Referral***	***Admissions***
Novant Main	544	243	558	232	568	234
Novant Huntersville	78	41	63	26	54	26
Novant Matthews	129	63	110	51	98	58
Novant Ortho	13	6	25	8	16	2
Total Novant	**764**	**353**	**756**	**317**	**736**	**320**
% Admitted		**46.2%**		**41.9%**		**43.5%**

Source: CHS internal data.
*January to June year-to-date annualized.

In total, Carolinas Rehabilitation receives nearly as many referrals from non-CHS affiliated hospitals, including Novant, as from CHS acute care hospitals. According to CHS internal data, referrals from Novant hospitals had a higher percentage admitted than CHS hospitals in each of the last three years, as shown below.

Carolinas Rehabilitation Referrals and Admissions

	2015	*2016*	*2017*
% Admitted for Novant	46.2%	41.9%	43.5%
% Admitted for CHS	34.9%	35.2%	37.9%

Source: CHS internal data.

Contrary to Novant's allegations, this data indicates that a substantial number of patients who receive care within the Novant system are admitted to Carolinas Rehabilitation for inpatient rehabilitation services and a higher percentage of Novant referrals are admitted compared to CHS referrals. Of those Novant patients who are not admitted, CHS internal data indicates that just 0.5 percent were due to lack of an available bed. More frequently, Novant patients were not admitted because there was no need for multidisciplinary care, the patient was unable to participate in the level of care, or the inability to secure the necessary authorizations from the patient's insurance provider.

CHS data also indicates that Novant's patients are admitted faster than CHS patients. In 2016 and 2017, the number of onset days (or days from the time of acute care hospital admission to the time of transition to inpatient rehabilitation) for patients admitted from Novant hospitals was lower than those admitted from CHS hospitals, as shown below.

Carolinas Rehabilitation Onset Days

	2016 Onset Days	*2017 Onset Days*
Novant Admissions	12.59	13.07
CHS Admissions	13.54	13.26

Source: CHS Erehabdata.

Novant further states that the delays experienced by Novant physicians are related to the inability to refer patients on the weekend to Carolinas Rehabilitation. This allegation is misleading as the vast majority of Carolinas Rehabilitation patients, regardless of the referral source, are admitted Monday through Friday. Carolinas Rehabilitation's total number of weekend admissions across all facilities facility was just 65, or 1.25 per weekend, in both 2015 and 2016. This represents less than two percent of total admissions. Weekend admissions are infrequent for several reasons. Patient admission on a weekend most often involves the need for pre-approval for inpatient rehabilitation services based on specific third party payers. Many of these payers only make these decisions during business hours Monday through Friday. Collection and interpretation of this information by third party payers tends to delay approvals.

It is clear from this data that Novant's allegations are unfounded. In support of these allegations, Novant/HealthSouth included several letters from Novant physicians alleging "long delays in the admission of [their] patients." CHS reviewed referral and admission data by physician and found that the Novant physicians that signed these letters of support referred a total of 32 patients to Carolinas Rehabilitation facilities over three years, of which 21, or 65.6 percent, were admitted.

Carolinas Rehabilitation Referrals and Admissions

		2015		2016		2017*	
	Specialty	Referrals	Admissions	Referrals	Admissions	Referrals	Admissions
Laurie McWilliams	Neurology	0	0	0	0	2	2
Stephanie Plummer	Spine	0	0	0	0	0	0
Naveen Bandarupalli	Hospitalist	6	4	8	2	4	4
C. J. Atkinson	Family Med.	0	0	0	0	0	0
David Rentz	Emergency	0	0	0	0	0	0
Paul Ledford	Hospitalist	7	6	4	2	0	0
Santosh Gopali	Hospitalist	1	1	0	0	0	0
James Schaffer	Family Med.	0	0	0	0	0	0
Total		**14**	**11**	**12**	**4**	**6**	**6**
% Admitted			**78.6%**		**33.3%**		**100.0%**

Source: CHS internal data.
*January to June year-to-date annualized.

In fact, these physicians represent just 2.1 percent of the 990 total patients that were admitted to Carolinas Rehabilitation from Novant hospitals over the last three years. Given the limited experience of these physicians, their small percentage of Novant's total patients, and the clear evidence in contradiction to their claims, these letters should not be considered to be representative of the actual experience of those Novant physicians that refer patients to Carolinas Rehabilitation services.

Finally, Novant alleges that its physicians and staff "*have had difficulty getting medical records and patient information once a patient is discharged*." It is disappointing that Novant would insinuate that CHS in any way prevents it from having access to patient records or in any way obstructs Novant in its desire to provide continuity of care to its patients. The shared Health Information Exchange (HIE), which connects the medical record of the two systems, has been in effect for over a year. The HIE allows Novant providers to see real time information directly within the Novant Epic EMR, collecting information from patients during the Carolinas Rehabilitation inpatient stay, and any other CHS interface the patient may experience. In July 2017 alone, Novant queried and successfully retrieved patient information on 68,000 patients in CHS' medical record system. CHS believes that as time passes and providers become accustomed to accessing and using the shared data, coordination will continue to improve. In addition, CHS and Novant both joined the statewide health information exchange, NC HealthConnex, within the past month. These efforts will improve communication and coordination.

SUMMARY

As demonstrated in the discussion above, CHS believes that the quantitative and qualitative analyses in Novant's petition are flawed, misleading, or inaccurate. In particular, Novant's arguments that inpatient rehabilitation services in HSA III exhibit unique characteristics that are not addressed by the standard methodology fail to hold up to scrutiny. As such, Novant's petition is simply a request to apply a revised methodology to a single HSA for the benefit of a single joint venture. As noted above, CHS believes that the methodologies proposed by Novant which inappropriately assume increased referrals for stroke patients, a higher conversion rate for acute care discharges, and a longer projection timeline for the

existing methodology are unsupported or unreasonable. However, if the SHCC believes that any of the characteristics or assumptions of these alternative methodologies should be addressed, CHS urges consideration of a methodology workgroup so that all parties could provide input, rather than applying an alternative methodology to a single HSA. Given this discussion, CHS urges the SHCC to deny Novant's petition.