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By K Fisk at 4:52 pm, Aug 01, 2012

Petition to the State Health Coordinating Council
Regarding Cardiac Catheterization Equipment Adjusted Need Determination
For the 2013 State Medical Facilities Plan

August 1, 2012

Petitioner
Name: Carteret County General Hospital

Address: 3500 Arendell Street (P.O. Box 1619)
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STATEMENT OF REQUESTED ADJUSTMENT

On behalf of Carteret County General Hospital, Richard A. Brvenik, CEO, requests the following special need adjustment to the *2013 State Medical Facilities Plan* (*SMFP*).

Chapter 9, Table 9Z should be changed as follows:

Table 9Z: Shared Fixed Cardiac Catheterization Equipment Need Determination
(*Proposed for Certificate of Need Review Commencing in 2013*)

Based on information submitted in a Special Needs Petition, it is determined that there is a need for one additional shared fixed cardiac catheterization laboratory in Carteret County.

Cardiac Catheterization Service Area	Shared Fixed Cardiac Catheterization Equipment Need Determination	Certificate of Need Application Due Date**	Certificate of Need Beginning Review Date
Carteret County	1***	TBD	TBD

* Need determinations as shown in this document may be increased or decreased during the year pursuant to Policy GEN-2 (See Chapter 4).

** Application Due Dates are absolute deadlines. The filing deadline is 5:30 p.m. on the Application Due Date. The filing deadline is absolute (See Chapter 3).

*** The projected need for Carteret County was revised as the result of an Adjusted Need Determination Petition.

REASONS FOR THE PROPOSED ADJUSTMENT

Overview

Carteret General Hospital (Carteret General) asks that the *Proposed 2013 State Medical Facilities Plan (SMFP)* be adjusted to include a special need for one shared fixed cardiac catheterization laboratory in the Carteret County service area. This would modify Chapter 9 of the *2013 SMFP*.

Carteret County has a year round population of approximately 68,000 that seasonally increases to approximately 150,000. Carteret General, located in Morehead City, is the sole community hospital in Carteret County. Although heart disease is tied with cancer as its leading cause of death, the county has no cardiac catheterization laboratory.

This request is the result of considerable thought, including trying and considering several other alternatives. Several aspects of Carteret County make this a unique and compelling case. The median age of Carteret County residents is 46+ years, approximately 10 years older than the average population of North Carolina. The median age is increasing, according to the State Demographer. In 10 years, the median age will be 48.4.

Carteret County is two peninsulas, a total of 100 miles long; and residents of some communities Down East are an hour from Carteret General and two and more hours from the nearest cardiac catheterization laboratory in New Bern. In good traffic, the nearest cardiac catheterization laboratory is 42 minutes away from Carteret General, at CarolinaEast Medical Center (CarolinaEast) in New Bern. The Croatan National Forest segregates Carteret from New Bern. CarolinaEast is 35 minutes away from the closest Carteret County community, Newport. By contrast, Newport is 16 minutes from Carteret General. The American Heart Association (AHA) cardiac care standard is 30 minutes door to treatment[1]. Most residents of Carteret County are more than 60 minutes from the cardiac catheterization door.

As expected, large numbers of Carteret County residents seek cardiac catheterization procedures. According to the Thomson-Reuters hospital billing database, 830 to 980 inpatient procedures and 850 to 1,200 outpatient cardiac catheterization procedures were referred out of Carteret County in each of the last three years. Please see Attachment A for the data summary. That is more than enough cases to support a full cardiac catheterization laboratory and far more than the 240 annual standard for a shared fixed laboratory. Our request is verbally supported by the two major institutions to which we refer: CarolinaEast and Vidant and by our cardiologists. Please see Attachment B for letters of support.

Carteret General offers tertiary cancer services and is an active participant in the regional cardiac care network. Carteret General is committed to strengthening the cardiac care program.

[1]American Heart Association. http://circ.ahajournals.org/content/110/5/588/F1.expansion.html

Although Carteret General is active in the American College of Cardiology/EMS sponsored Regional Approach to Cardiovascular Emergencies Cardiac Arrest Resuscitation System (RACE CARS) network, has a cardiac intensive care unit and is served by two groups of cardiologists, including three board-certified invasive cardiologists, we do not offer cardiac catheterization. The hospital offers tPA for heart attacks, but that is not enough for complete standard of care. Around us, comparable hospitals like Onslow Memorial and Lenoir Memorial provide cardiac catheterization services. Carteret General does not yet offer this service. However, we are ready now and the need is there.

Carteret General has an angiography laboratory, and has since 1989. It was replaced in 1996, and is due for another replacement soon; the community would benefit from an investment that serves both cardiac and vascular patients, many of whom have the same chronic disease. Carteret General has a cardiac rehabilitation program. We would like to expand our preventive diagnostic services. Having cardiac catheterization capacity will also help retain the level of high quality physicians who work in concert with the hospital to keep local hearts healthy.

In summary, the proposed solution would bring cardiac catheterization closer to a large and growing population of persons in need of cardiac diagnostic services. It would permit Carteret County to build reasonable capacity in a program that is already committed to and involved in a regional cardiac care network. Carteret General has demonstrated commitment to access, value and quality in all of its services and would extend that commitment to cardiac catheterization.

Quality, Access and Value

Quality

The Centers for Medicare and Medicaid Services (CMS), The American Heart Association, the Agency for Health Care Research and Quality (AHRQ), North Carolina Hospital Quality Center, and Joint Commission have set standards for quality of hospital and cardiac care.

Carteret General will be featured in the U.S News and World Report for our achievement of the American Heart Association Gold Award for Heart Failure. We achieved Silver last year and bronze the year prior. Carteret General focuses on clinical excellence and quality improvement strategies. We have incorporated evidence-based practices into daily protocols, standardized procedures, and use electronic information systems as tools to gather information, provide feedback, and support clinical decisions. We are in the top 10-percent for all core CMS measures. See Attachment C for a list of Carteret General's recent quality recognitions.

AHA quality standard for cardiac care is 30 minutes, door to treatment. Presently, Carteret County residents are restricted to tPA and referral as the treatment options. A cardiac catheterization laboratory in Carteret County would enable a good portion of the 39,000+ at risk residents (age 45+), and more in the tourist season to get appropriate treatment sooner, even before heart attacks occur. Even our part time residents favor the 45+ age group.

Invasive cardiologists who practice in Carteret County are members of a larger group based in New Bern. They have an established mechanism for maintaining volume-based skills. They have participated with Carteret General in developing our cardiac program to meet our own and their quality standards.

Access

Although a need in the *2013 SMFP* does not guarantee Carteret General as the awardee, the hospital has an excellent track record of serving all persons. It is the county hospital. Last year, 4.5 percent of net revenue was charity patients and 15.7 percent was bad debt. Even with health reform, both are growing. Medicaid covers 10 percent of our patients. The hospital charity policy is generous, extending to persons up to 300-percent of the federal poverty level. Hospital patient origin tracks the county's diversity, and the hospital has an aggressive patients' rights policy.

Value

Cost and quality together make up value. In addition to the high quality standards set for every service in the hospital, Carteret General is consistently the low charge provider for comparable services used by county residents. This is intentional. An attentive Board of Trustees works to contain the local cost of health care services. Having cardiac catheterization available in on equipment that will also be used for vascular procedures will provide efficiency and scale that will help sustain lower pricing.

Limitations of the *2013 SMFP* Methodology

The *2013 Proposed SMFP* has two methodologies for calculating cardiac catheterization need. One addresses facilities and their related service areas that have cardiac catheterization equipment. The other addresses counties that have no cardiac catheterization laboratories. The first allocates a cardiac catheterization lab need when the number of diagnostic equivalent procedures in an existing equipment service area divided by the number of laboratories exceeds 1,500. However, the service area for the needed equipment is restricted to the acute care hospital service area where current equipment is located, regardless of where patients of the cardiac catheterization laboratory originate.

The second methodology permits applicants in a service area that has no laboratory to lease a mobile lab and allocates a shared fixed laboratory when the number of mobile procedures reaches 240 in the last reported state planning year.

Neither methodology recognizes the need generated when patients are forced to leave their home county for service because no service is available locally.

Neither Licensure nor Planning Section collects patient origin data for cardiac catheterization. Data are available only from proprietary databases, like Thomson-Reuters. Moreover, the North Carolina Hospital License Renewal Applications, the database for the *SMFP*, lists ICD-9 codes for cardiac catheterization. ICD-9 codes cover only inpatients. Cardiac catheterization has shifted and more than half of the procedures are now done as outpatient services, often with overnight observation care. Outpatient procedures are coded with CPT codes. While patterns in reported data suggest that providers are reporting all procedures, it is unclear if some have excluded outpatient data in licensure reports. CPT code designations also changed in 2011, making it difficult to match year to year data. Nonetheless, Carteret General has matched CPT and ICD codes in Thomson-Reuters data, included in Attachment A.

Statement of Adverse Effects on the Population if the Adjustment is Not Made

If the proposed adjustment is not made, people seeking approximately 1,500 to 1,800 non- EP procedures a year will have no alternative but to travel 45 minutes to two hours to get cardiac catheterization and will likely continue travelling to get all of their cardiac care. Residents will be more likely to delay and defer appointments because of travel difficulties; and the county's cardiac care program will have a very limited scope. Residents of Carteret County will remain geographically isolated and continue to have higher out of pocket costs for travel and transportation.

The 35,700 residents of Carteret County who are over 45 today, and more in future years, will not have a local option. According to the State Demographer, in 2012, Lenoir has approximately 27,000 people over 45. Lenoir County has cardiac catheterization services.

Carteret General will find it difficult to develop its cardiac care program. It will be required to direct most emergency cardiac patients to leave town. This does not make sense in a community the size of Carteret County, with a population of persons over 45 as large as it is. Moreover, it will be difficult for the county to retain cardiologists, when they cannot work to the full scale of their certification and training. These adverse effects are not necessary, given the demonstrated number of procedures originating from the county.

Statement of Alternatives Considered and Found Not Feasible

The *Proposed 2013 SMFP* includes a need for an additional cardiac catheterization laboratory in neighboring Craven, Jones and Pamlico county service area. (*SMFP Table 9Y*) The procedures that generated that need include residents of Carteret County. Carteret General could apply for a CON to respond to that need. However, the *SMFP* would require that it be located in one of those counties and not at Carteret General.

Another alternative is to include Carteret County among the eligible locations for the Craven-Jones-Pamlico laboratory. The 2011 patient origin data for cardiac catheterization support including Carteret County in that service area. CarolinaEast, the only provider in that service area, reported 3,205 weighted cardiac catheterization procedures in 2011. Data from Thomson-Reuters indicates that 542 of those procedures (unweighted) were inpatient residents of Carteret County. Thompson Reuters' data also indicate that inpatients were half of the total. Hence, Carteret County likely represents approximately 34 percent of the CarolinaEast cardiac catheterization procedures (542 * 2 / 3,205 = 0.34). That would require us to start with a dedicated cardiac catheterization laboratory.

Another alternative is for Carteret General to lease a mobile cardiac catheterization unit and build volume to 240 catheterizations, and then apply for a shared fixed cardiac catheterization/ angiography laboratory. This alternative fits with the *Proposed 2013 SMFP* Cardiac Catheterization Methodology 2. However, it is expensive. Such a lease must support both Carteret General's and the mobile company's overhead and Carteret General would not build local asset value. Moreover, the mobile unit would not give the county full time coverage. Cardiac events do not schedule themselves to fit mobile unit schedules. Our community also tends to perceive mobile facilities as lower quality than fixed resources.

The mobile solution would provide no efficiency in use of existing resources. The mobile would come with its own staff and would not build capacity in the community. The mobile would, in fact, be redundant with equipment already available at Carteret General. Angiography equipment is currently designed to provide both angiography and cardiac catheterization procedures.

With the number of cardiac catheterization procedures provided to Carteret County residents in facilities around the state staying in excess of 1,500 a year, it is very reasonable to assume that a shared fixed laboratory located in Carteret County and operating full time can provide in excess of 240 cardiac catheterization procedures a year on equipment that would be available following a 2013 Certificate of Need application process.

Thus, the better alternative is to permit Carteret General to apply for a shared fixed cardiac catheterization/angiography laboratory in the Carteret County service area in 2013. Carteret General meets the *SMFP* test of a hospital location. This is efficient, cost effective and will let the Carteret County cardiac care system continue to work to expand local capacity within the regional cardiac care delivery system.

EVIDENCE OF NON-DUPLICATION OF SERVICES

Carteret County has no cardiac catheterization capacity. Yet, Carteret County population at risk by age is larger than Lenoir County. In 2012, Carteret County has 35,700 people over age 45; Lenoir County has 27,000. Lenoir County has a cardiac catheterization laboratory and maintains a respectable volume of procedures that would justify a shared fixed laboratory. Carteret County participates actively in a regional cardiac care program and would continue to do so, referring primarily to both CarolinaEast and Vidant Health. The scope of the shared laboratory would not adversely affect growth at either of these institutions.

A shared fixed laboratory closer to a large population at risk may increase the number of persons receiving cardiac catheterization, because the service will be more accessible. According to the Thomson-Reuters' data, 35 percent of Carteret County cardiac catheterizations (296) were done in facilities other than CarolinaEast. The threshold volume of procedures for a shared fixed lab, 240 diagnostic equivalents, is a reasonable way to offer closer services without unnecessarily duplicating capacity. Data in the *SMFP* show that diagnostic equivalent procedures at CarolinaEast increased an average 10 percent a year between 2009 and 2011. In all likelihood, CarolinaEast would soon recover any volume that might stay at Carteret General.

Together with a regional program of support for the service professionals, this would be an ideal solution.

EVIDENCE OF CONSISTENCY WITH NORTH CAROLINA MEDICAL FACILITIES PLAN BASIC GOVERNING PRINCIPLES

Safety and Quality

In a planning context, this request meets the standards of safety and quality. It moves Carteret County closer to the AHA cardiac care standard of 30 minutes door to treatment. It would put cardiac catheterization service at a county hospital that exceeds CMS minimum quality standards for heart care.

Invasive cardiologists on the medical staff whose group also serves CarolinaEast will assure that physicians can maintain volume required to sustain skill levels. Carteret General has demonstrated willingness to partner with top level tertiary providers to maintain technician competency. It is partnered with Wake Forest University Baptist Medical Center for 24/7 tertiary teleconference back up for its stroke program and works with New Hanover based radiation oncologists to sustain competency in its cancer program. Acceptance of this petition could provide Carteret County with a balance of competition and collaboration in cardiac care.

Retaining good physicians in the community is critical to maintaining high quality health care services. Cardiologists expect to work at the level at which they were trained. Carteret County has good cardiologists, and enabling them to perform cardiac catheterization in Carteret County would help us keep them in the county.

Access and Value

See discussion starting on page 4.

A shared fixed cardiac catheterization laboratory in Carteret County would remove a geographic isolation barrier and enable a hospital with an excellent track record of community access to apply for a diagnostic service that has demonstrated demand among residents of the county.

The shared fixed laboratory offers economy of scale that offsets smaller volumes of cardiac catheterization procedures with other vascular procedures. This is an ideal solution for a geographically isolated county that is starting a program.

CONCLUSION

Carteret County has a geographically isolated population that has demonstrated demand for cardiac catheterization services sufficient to support a full cardiac catheterization laboratory. The local health care delivery system is organized to deliver sustainable quality that scores high on national benchmarks and is already associated with physicians who maintain the volume of cardiac catheterization services that are needed to maintain skills that are essential for patient safety. Those physicians support the proposal. A mobile catheterization laboratory is an expensive and unnecessary interim step. A shared fixed cardiac catheterization laboratory in this service area is a conservative and reasonable special need adjustment to the *2013 State Medical Facilities Plan.*

ATTACHMENTS

Prepared with assistance from **PDA***, Inc., Raleigh, NC*

Cardiac Catheterization Procedures Reported for Carteret County Residents

	2009	2010	2011
Inpatient ICD -9	986	947	838
Outpatient CPT	874	1,202	1,070
Total	**1,860**	**2,149**	**1,908**

Cardiac Catheterization Procedures Reported for Carteret County Residents - Exclusive of Electrophysiology

	2009	2010	2011
Inpatient ICD -9	764	792	674
Outpatient CPT	744	1030	907
Total	**1,508**	**1,822**	**1,581**

Note: Data drawn from Thomson-Reuters Market Planner inpatient and ambulatory databases. Outpatient CPT Codes changed in the middle of the state reporting year 2011.

CPT codes were cross-walked to the ICD-9 codes used in the NC Hospital License Renewal form to identify cardiac catheterization procedures.

State Inpatient PivotTable Report - Market Share by Hospital
Database: Inpatient NC (MS-DRG) 10/01/2008 - 09/30/2009
Area Selection: Carteret County
Selected Hospital: Carteret County Gen Hosp
**** Procedure count includes all codes submitted on a patient record.**

State Data Analyst 2.13
SDAT2013.SQP

Procedures	HospitalName							
PXCode	Cape Fear Valley Hlth Sys	CarolinaEast Medical Ctr	Carolinas Medical Center	Carteret County Gen Hosp	Duke Health Raleigh Hosp	Duke University Med Ctr	Forsyth Memorial Hospital	Lenoir Memorial Hospital
0050								
0051		1						
0052		1						
0054								
0066		129			2		2	
3596								
3606		15					1	
3607		106			2		1	
3721						4		
3722	1	226	1		2	1	1	
3723		11	1			3		1
3725			1			1		
3726						3		
3727						3		
3734						3		
3771		1		12				
3772		9		40		1		
3774		1						
3775				2				
3776				2				
3777								
3779								
3781				12				
3782		1						
3783		9		40		1		
3785				2				
3787				2				
3794		5						
3799								
9910		9		2		1		
Grand Total	1	524	3	114	6	21	5	1
	1	524	3	114	6	21	5	1
Less EP	1	489	3	0	6	9	5	1

State Inpatient PivotTable Report - Market Share by Hospital
Database: Inpatient NC (MS-DRG) 10/01/2008 - 09/30/2009
Area Selection: Carteret County
Selected Hospital: Carteret County Gen Hosp
**** Procedure count includes all codes submitted on a patient record.**

State Data Analyst 2.13
SDAT2013.SQP

Procedures							
PXCode	New Hanover Regional M.C.	Onslow Memorial Hospital	Pitt County Memorial Hosp	Rex Healthcare	UNC Hospitals	WakeMed	Grand Total
0050			2				2
0051			9			4	14
0052							1
0054			1				1
0066	1		35	1	2	8	180
3596			1				1
3606			11		2		29
3607	1		22	1	1	8	142
3721	1				1		6
3722	1		112	3	3	10	361
3723	1		4		1	3	25
3725							2
3726			8			3	14
3727			4		1	2	10
3734			6		1	3	13
3771							13
3772		1	5			1	57
3774			2				3
3775							2
3776						1	3
3777						1	1
3779			1			1	2
3781							12
3782							1
3783		1	5			1	57
3785							2
3787			1				3
3794			8				13
3799						1	1
9910			2		1		15
Grand Total	5	2	239	5	13	47	986
	5	2	239	5	13	47	986
Less EP	5	0	197	5	10	33	764

State Inpatient PivotTable Report - Market Share by Hospital
Database: Inpatient NC (MS-DRG) 10/01/2009 - 09/30/2010
Area Selection: Carteret County
Selected Hospital: Carteret County Gen Hosp
**** Procedure count includes all codes submitted on a patient record.**

State Data Analyst 2.13
SDAT2013.SQP

	HospitalName							
	CarolinaEast Medical Ctr	Carolinas Medical Center	Carteret County Gen Hosp	Duke Raleigh	Duke University Med Ctr	Durham Regional Hospital	New Hanover Regional M.C.	Onslow Memorial Hospital
PXCode	Procedures	Procedures	Procedures	Procedures	Procedures	Procedures	Procedures	Procedures
0050								
0051								
0066	122			1	4	1	3	
3571	1							
3606	12			1	2	1		
3607	104				2		3	
3721					8			
3722	220			1	7	2	6	1
3723	11	1			2		1	
3726	1				2			
3727	1				1			
3734					2			
3772	10		42					
3774	2							
3775	3		2					
3776	2							
3779								
3781			4		1			
3782	1							
3783	10		11					
3787	1		1					
3794	3							
3798	1							
3799					1			
9910	1		1		1		2	
Grand Total	506	1	61	3	33	4	15	1
	506	1	61	3	33	4	15	1
Less EP	470	1	0	3	25	4	13	1

State Inpatient PivotTable Report - Market Share by Hospital
Database: Inpatient NC (MS-DRG) 10/01/2009 - 09/30/2010
Area Selection: Carteret County
Selected Hospital: Carteret County Gen Hosp
**** Procedure count includes all codes submitted on a patient record.**

State Data Analyst 2.13
SDAT2013.SQP

	Pitt County Memorial Hosp	Rex Healthcare	The NC Baptist Hospitals	UNC Hospitals	WakeMed	Total Procedures	Total % Down
PXCode	Procedures	Procedures	Procedures	Procedures	Procedures		
0050	2					2	0.2%
0051	4	1		1	1	7	0.7%
0066	43		1		10	186	19.6%
3571	4					5	0.5%
3606	14					30	3.2%
3607	25		1		10	146	15.4%
3721	1					9	1.0%
3722	128		3		8	376	39.7%
3723	12				4	31	3.3%
3726	6		1			10	1.1%
3727	1		1	1		5	0.5%
3734	2		1	1		6	0.6%
3772	4					56	5.9%
3774	1					3	0.3%
3775						5	0.5%
3776	2					4	0.4%
3779	2					2	0.2%
3781						5	0.5%
3782	1					2	0.2%
3783	4					25	2.6%
3787	1					3	0.3%
3794	12					15	1.6%
3798						1	0.1%
3799						1	0.1%
9910	5			1	1	12	1.3%
Grand Total	274	1	8	4	34	947	100.0%
	274	1	8	4	34	947	
Less EP	233	1	5	1	33	792	

State Inpatient PivotTable Report - Market Share by Hospital
Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
Area Selection: Carteret County
Selected Hospital: Carteret County General Hospital
**** Procedure count includes all codes submitted on a patient record.**

State Data Analyst 2.13
SDAT2013.SQP

	HospitalName							
	CarolinaEast Medical Center	Carteret County General Hospital	Cone Health	Duke Raleigh	Duke University Medical Center	Forsyth Memorial Hospital	New Hanover Regional Medical Center	Pitt County Memorial Hospital
PXCode	Procedures	Procedures	Procedures	Procedures	Procedures	Procedures	Procedures	Procedures
0050								1
0051	2						1	3
0066	124		1		2	1	6	17
3571								3
3596	1				1			
3606	25				1	1	3	6
3607	85		1		1		3	11
3721					6			
3722	242			1	2	1	9	68
3723	13				2		1	6
3726	4				1			11
3727					1			9
3734	6				2			8
3771		4						1
3772	10	26			3		1	6
3774	2							1
3775		2						
3776	1							
3777		1						1
3779	2							2
3781								
3782								1
3783	10	2			2		1	6
3787	1	1						1
3794	3							3
3798	1							1
9910	10						1	7
Grand Total	542	36	2	1	24	3	26	173
	542	36	2	1	24	3	26	173
Without EP	492	-1	2	1	15	3	23	115
	150							
	0.75							
	112.5							
	3205							
	655							
	20%							
	1084							
	3205							
	34%							
	1084							

State Inpatient PivotTable Report - Market Share by Hospital
Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
Area Selection: Carteret County
Selected Hospital: Carteret County General Hospital
**** Procedure count includes all codes submitted on a patient record.**

State Data Analyst 2.13
SDAT2013.SQP

	Rex Healthcare	The North Carolina Baptist Hospital	University of North Carolina Hospitals	WakeMed	Total Procedures	Total % Down
PXCode	Procedures	Procedures	Procedures	Procedures		
0050					1	0.1%
0051					6	0.7%
0066	1	1		2	155	18.5%
3571		1			4	0.5%
3596					2	0.2%
3606					36	4.3%
3607	1	1		2	105	12.5%
3721					6	0.7%
3722	2	2	2	7	336	40.1%
3723			1		23	2.7%
3726					16	1.9%
3727			1		11	1.3%
3734			1		17	2.0%
3771			1		6	0.7%
3772				1	47	5.6%
3774					3	0.4%
3775					2	0.2%
3776					1	0.1%
3777					2	0.2%
3779					4	0.5%
3781			1		1	0.1%
3782					1	0.1%
3783				1	22	2.6%
3787					3	0.4%
3794				1	7	0.8%
3798					2	0.2%
9910			1		19	2.3%
Grand Total	4	5	8	14	838	100.0%
	4	5	8	14	838	
Without EP	4	5	2	11	674	

542	CarolinaEast
35%	not Carolina East
296	

Carteret County
Cardiac Cath Procedures
FY 2009 through Q1 FY 2012
Thompson-Reuters Market Expert –NC Ambulatory Surgery Database - includes Hospital Outpatient

CPT Code	CPT	2009	2010	2011 estimate adjusted for code change mid year
33206	Insert heart pm atrial	-	1	-
33207	Insert heart pm ventricular	1	5	3
33208	Insrt heart pm atrial & vent	5	18	16
33212	Insert pulse gen sngl lead	7	5	9
33213	Insert pulse gen dual leads	18	27	17
33214	Upgrade of pacemaker system	-	-	1
33215	Reposition pacing-defib lead	1	1	1
33216	Insert 1 electrode pm-defib	-	-	-
33217	Insert 2 electrode pm-defib	1	-	1
33218	Repair lead pace-defib one	-	1	-
33222	Revise pocket pacemaker	1	-	2
33223	Revise pocket for defib	-	4	2
33233	Removal of pm generator	25	35	27
33234	Removal of pacemaker system	-	-	-
33235	Removal pacemaker electrode	-	1	-
33240	Insrt pulse gen w/singl lead	16	16	18
33241	Remove pulse generator	14	14	16
33244	Remove eltrd transven	2	-	-
92980	Insert intracoronary stent	6	4	-
92981	Insert intracoronary stent	1	1	-
92982	Coronary artery dilation	1	2	10
92984	Coronary artery dilation	-	2	3
92986	Revision of aortic valve	-	-	4
92995	Coronary atherectomy	-	-	1
93501	No Longer Valid - 11 Right heart catheterization	5	1	-
93505	Biopsy of heart lining	9	3	9
93510	No Longer Valid - 11 Left heart catheterization	192	264	196
93526	No Longer Valid - 11 Rt & Lt heart catheters	36	47	64
93527	No Longer Valid - 11 Rt & Lt heart catheters	-	1	-
93531	R & l heart cath congenital	-	2	3
93533	R & l heart cath congenital	1	-	-
93539	No Longer Valid - 11 Injection, cardiac cath	22	51	36

Carteret County
Cardiac Cath Procedures
FY 2009 through Q1 FY 2012
Thompson-Reuters Market Expert –NC Ambulatory Surgery Database - includes Hospital Outpatient

CPT Code	CPT	2009	2010	2011 estimate adjusted for code change mid year
93540	No Longer Valid - 11 Injection, cardiac cath	26	50	44
93541	No Longer Valid - 11 Injection for lung angiograr	-	-	4
93542	No Longer Valid - 11 Injection for heart x-rays	1	-	4
93543	No Longer Valid - 11 Injection for heart x-rays	198	248	216
93544	No Longer Valid - 11 Injection for aortography	21	35	28
93545	No Longer Valid - 11 Inject for coronary x-rays	225	317	264
93566	Inject r ventr/atrial angio	-	-	1
93567	Inject suprvlv aortography	-	-	20
93580	Transcath closure of asd	-	2	-
93620	Electrophysiology evaluation	13	15	19
93621	Electrophysiology evaluation	5	6	13
93623	Stimulation pacing heart	13	10	18
93651	Ablate heart dysrhythm focus	8	13	-
	Total	874	1,202	1,070
	Total without EP	744	1,030	907

Source:

Thompson Data for Carteret County residents regardless of where they went.

2011 data likley contains 1st Qtr FY 2011 data (Oct-Dec 10) but not data from Jan 1, 2011 on because CPT codes changed in CY 2011.

No longer valid refers to codes that changed in 2011

VIDANT HEALTH™

July 26, 2012

NC Department of Health & Human Services
State Health Coordinating Council
2714 Mail Service Center
Raleigh, NC 27699-2714

To Whom It May Concern:

On behalf of Vidant Medical Center, I would like to express our strong support for Carteret General Hospital's request to modify the Proposed 2013 State Medical Facilities Plan (2013 SMFP) to include a special need for one fixed cardiac catheterization laboratory in Carteret County. This would be a modification to Chapter 9 of the SMFP, specifically addressing the Carteret County service area.

Vidant Medical Center serves as the region's only Level 1 Trauma Center and regional referral center and is committed to working with communities and other providers to ensure that patients and families are able to receive the very best care, closest to home. It is important that those resources needed to deliver on said promise are available, in place, and supported by a skilled team which includes a regional referral center. Vidant Medical Center is also the teaching hospital for the Brody School of Medicine at East Carolina University and our missions although separate are complimentary so that we are able to enhance the quality of life for the communities and citizens we serve. We accomplish this through partnerships like the one we enjoy with Carteret General Hospital.

Carteret General Hospital has demonstrated their commitment to serving their community and a commitment to high quality outcomes, superb service and they have enjoyed a strong reputation over the past many years. Carteret County participates actively in a regional cardiac care program and would continue to do so for therapeutic procedures and open heart surgery and they frequently rely on Vidant Medical Center for support.

Additionally, Carteret County is a large county that enjoys a broad geography and it is in the best interest of the people of that area to have high-end diagnostic capability at this hospital, close to home. In this case, there are some communities that are an hour travel to the hospital and two or more hours from the nearest cardiac catheterization laboratory. This proposed solution would bring this important modality closer to a large and growing population of people over 45. It would permit Carteret County to build reasonable capacity in a cardiac program that is already committed to a regional network of care. Finally, this proposal would also compliment successful programs already in place, such as the cardiac rehabilitation program.

Vidant Medical Center
2100 Stantonsburg Road
Greenville, NC 27834-2818
PO Box 6028
Greenville, NC 27835-6028
252.847.4100
VidantHealth.com

We appreciate the opportunity to support Carteret General Hospital, both in words and in actions, and we are grateful for the opportunity to comment.

Sincerely,

Stephen D. Lawler, President
Vidant Medical Center

cc: CEO, Carteret General Hospital

July 31, 2012

Nadine Pfeiffer, Chief
Planning Section
Division of Facility Services
801 Ruggles Drive
2714 Mail Service Center
Raleigh, North Carolina 27699-2714

RE: Petition for Shared Fixed Cardiac Catheterization Laboratory, Carteret County

Dear Ms. Pfeiffer,

This is to request staff endorsement and State Health Coordinating Council approval of the request from Carteret General Hospital for an amendment to the *2013 Proposed State Medical Facilities Plan* to include a special need for a shared fixed cardiac catheterization laboratory for Carteret County.

I have practiced in Carteret County for 30 years and see an increasing number of patients who need cardiac catheterization procedures to determine the best treatment program for their heart conditions. The hospital confirmed my experience of the high numbers with data from hospital bills. My colleagues and I refer patients to both Vidant and CarolinaEast. My patients travel two to eight hours round trip for these tests, and though both hospitals do their best, we still have breaks in continuity of care and communication. I tend to work more with Vidant, whose leadership has assured me of their support for this request. Though not an invasive cardiologist myself, I would welcome this service in the community for my patients.

Thank you for your time and attention. I would be happy to answer any questions you may have.

Regards,

Chandroth Purushothaman, MD
Cardiologist,
Morehead City, North Carolina

Quality

Carteret General is committed to quality. To put that in perspective, Quality and Safety are strategic board adopted imperatives for our organization. Our culture is focused on safety and excellence. We have demonstrated continued improvements in our quality outcomes over the past five (5) years, achieving the following:

1) We began work with Healthcare Performance Improvement in 2008 to improve our culture of safety and reliability. We have demonstrated drastic improvements in our outcomes, going from 34 days between serious safety events in 2008, to 324 days as of today. We have worked with the North Carolina Hospital Association in adapting a Just Culture Philosophy, implementing policies, processes and algorithm that guide our organization with event reviews, ensuring a learning culture and engagement among all levels of the organization including Medical Staff.

2) We will be featured in the U.S News and World Report for our achievement of the American Heart Association Gold Award for Heart Failure. We achieved Silver last year and bronze the year prior. Carteret General focuses on clinical excellence and quality improvement strategies. We have incorporated evidence-based practices into daily protocols, standardized procedures, and use electronic information systems as tools to gather information, provide feedback, and support clinical decisions. We are in the top 10-percent for all core measures.

3) Carteret General was the only hospital of the 21 hospitals involved in the Catheter Associated Urinary Tract Infection collaborative asked to participate in a film produced by CMS demonstrating our exemplary outcomes.

4) Readmissions are a focus today, and we have been involved in a regional collaborative and just entered the NoCVA Collaborative with the NCHA focusing on readmission improvements. Our current rate for Heart Failure-Heart Failure (HF-HF) readmission rate is 8.5-percent. Our regional data demonstrate an average for all hospitals in the collaborative, an average of 11.1-percent for October 2011 through June 2012. For all-cause readmissions, our HF rate is 13.8-percent, with our regional hospitals averaging 21.9 percent, and the national benchmark is 24.7 percent. Quality outcomes and performance is very important to the organization. To ensure we are continuing to focus on our highest readmission population, we implemented a Telehealth program. It began with HF, and is now expanding to include other chronic conditions.

5) We have Joint Commission Disease Specific Accreditation for our Joint program, as well as Blue Cross, Blue Distinction for our Joint Program. We also achieved ASMBS Designation in 2008 for our Bariatric Program. We will be surveyed October/November 2012 for Joint Commission Disease Specific Stroke. We participate in the Telestroke program with Wake Forest University Baptist Medical Center. They were chosen due to real time access to Board-certified vascular/neuro physicians 24/7.

6) We have demonstrated outcomes better than the national average for a couple of the Hospital Acquired Conditions – Central Line Assoc. Blood Stream Infections/Ventilator Associated Pneumonia outcomes are below national benchmark and 0-percent for VAP for extended period of time.

7) We have produced excellence in our outcomes and standards of care, with a focus on cost effective care. We pride ourselves in being one of the lowest cost providers. We have focused on best utilization of resources, with ensuring excellence in care delivery. Our HCAHP scores demonstrate higher averages than the state, nation and region in most indicators.

July 1, 2012
County Total
Age Groups -
Standard

	Age Groups									
County	45-54	55-59	60-64	65-74	75-84	85-99	100+	Total	Median Age	Over 45
Alamance	22,048	10,090	8,783	12,521	7,448	3,445	40	153,498	39.18	64,375
Alexander	5,744	2,610	2,531	3,822	1,852	568	8	37,800	41.84	17,135
Alleghany	1,538	854	870	1,374	787	281	3	10,978	46.56	5,707
Anson	3,886	1,902	1,705	2,282	1,216	553	7	26,738	40.1	11,551
Ashe	4,013	2,164	2,147	3,436	1,801	711	10	27,711	46.18	14,282
Avery	2,656	1,225	1,208	1,900	1,023	416	7	17,830	43.13	8,435
Beaufort	6,588	3,714	3,744	5,781	2,837	975	15	48,211	44.19	23,654
Bertie	3,107	1,641	1,386	1,929	1,256	497	5	20,726	42.72	9,821
Bladen	4,934	2,740	2,519	3,515	1,827	578	9	35,126	41.67	16,122
Brunswick	14,348	8,379	10,499	18,369	6,920	1,955	18	112,210	48.36	60,488
Buncombe	34,461	17,859	16,752	23,044	12,508	6,150	78	247,633	41.13	110,852
Burke	13,646	6,331	6,049	8,854	4,899	1,755	17	90,769	41.94	41,551
Cabarrus	27,219	10,934	9,293	12,705	6,469	2,615	30	183,933	37.29	69,265
Caldwell	12,715	6,033	5,576	8,133	4,164	1,411	10	83,292	42.2	38,042
Camden	1,647	708	555	852	404	144	1	9,837	41.02	4,311
Carteret	10,506	5,648	5,544	8,390	4,142	1,489	9	68,665	46.53	35,728
Caswell	3,791	2,026	1,765	2,440	1,207	457	5	23,727	44.48	11,691
Catawba	23,238	10,646	9,681	13,789	7,058	2,659	24	155,644	40.28	67,095
Chatham	9,551	4,915	4,872	7,369	3,998	1,874	12	65,814	44.65	32,591
Cherokee	3,681	2,173	2,362	4,148	1,997	729	8	27,380	49.04	15,098
Chowan	2,064	1,124	1,095	1,694	985	402	7	14,831	44.71	7,371
Clay	1,367	836	968	1,597	825	321	4	10,550	50.43	5,918
Cleveland	14,568	7,026	6,406	9,139	4,791	1,691	9	98,391	40.96	43,630
Columbus	8,205	4,017	3,742	5,516	2,915	900	10	57,736	40.17	25,305
Craven	12,924	6,623	6,138	9,420	5,419	2,017	17	105,812	36.06	42,558
Cumberland	41,257	18,746	15,416	19,815	10,298	3,220	30	330,958	31.65	108,782
Currituck	4,199	1,818	1,485	2,117	919	311	4	23,637	42.33	10,853
Dare	5,451	2,934	2,630	3,665	1,705	517	3	34,418	44.39	16,905
Davidson	25,444	11,448	10,253	14,875	7,723	2,615	30	164,601	41.14	72,388

Attachment D

Source: NC Office of State Budget and Management

July 1, 2012
County Total
Age Groups -
Standard

Davie	6,504	3,157	2,811	4,225	2,300	924	5	41,843	43.32	19,926
Duplin	8,169	4,086	3,645	5,261	2,923	1,016	9	60,329	38.44	25,109
Durham	33,848	16,161	13,874	16,285	8,250	4,173	54	275,946	33.51	92,645
Edgecombe	8,102	4,332	3,763	4,947	2,655	1,018	12	56,089	40.31	24,829
Forsyth	50,557	23,359	20,414	26,885	15,414	6,564	82	358,101	37.43	143,275
Franklin	9,699	4,539	3,916	5,248	2,541	921	11	63,214	39.98	26,875
Gaston	31,030	14,257	12,676	17,008	9,038	3,281	33	209,411	39.56	87,323
Gates	1,988	894	725	1,159	558	227	2	11,828	42.84	5,553
Graham	1,261	650	656	1,076	593	211	3	9,036	44.34	4,450
Granville	10,003	4,347	3,854	5,001	2,418	875	15	61,427	40.86	26,513
Greene	3,151	1,580	1,259	1,637	907	332	6	21,572	38.5	8,872
Guilford	69,516	31,680	27,661	36,272	19,995	8,903	99	501,003	36.62	194,126
Halifax	8,147	4,140	3,737	5,103	2,963	1,181	17	54,223	42.32	25,288
Harnett	15,526	6,709	5,843	8,109	3,995	1,307	13	121,493	33.71	41,502
Haywood	8,839	4,415	4,574	7,579	4,265	1,608	13	60,152	46.51	31,293
Henderson	14,729	7,737	8,007	13,889	8,384	3,616	33	110,199	45.97	56,395
Hertford	3,565	2,010	1,632	2,245	1,288	531	6	24,610	41.55	11,277
Hoke	6,080	2,720	2,105	2,452	1,141	364	3	50,347	31.55	14,865
Hyde	819	495	417	519	298	117	2	5,815	42.08	2,667
Iredell	25,986	10,574	9,379	13,144	6,802	2,292	20	163,282	39.69	68,197
Jackson	4,817	2,678	2,702	4,185	1,948	649	9	41,496	36.28	16,988
Johnston	25,721	10,458	9,209	12,236	5,438	1,814	18	175,467	37.01	64,894
Jones	1,543	912	740	1,052	612	228	0	10,412	43.97	5,087
Lee	7,968	3,835	3,306	4,785	2,595	1,064	12	58,712	37.52	23,565
Lenoir	8,575	4,556	3,937	5,527	3,265	1,193	12	59,287	41.37	27,065
Lincoln	12,952	5,694	5,167	7,262	3,252	1,047	7	79,726	41.51	35,381
Macon	4,613	2,577	2,905	4,997	2,822	1,017	11	34,990	48.56	18,942
Madison	3,104	1,729	1,635	2,336	1,204	480	8	21,399	44.28	10,496
Martin	3,511	2,089	1,814	2,587	1,453	486	6	23,893	45	11,946
McDowell	6,646	3,338	3,236	4,631	2,438	944	13	45,715	42.48	21,246
Mecklenburg	131,583	53,776	44,196	52,758	25,907	11,625	143	957,938	34.49	319,988
Mitchell	2,252	1,223	1,120	1,934	1,062	408	3	15,492	46.23	8,002

Source: NC Office of State Budget and Management

July 1, 2012
County Total
Age Groups -
Standard

Montgomery	3,828	1,994	1,919	2,794	1,371	600	5	28,048	40.81	12,511
Moore	11,883	6,011	6,291	11,076	7,015	3,325	44	90,387	45.43	45,645
Nash	14,447	7,068	6,417	8,342	4,326	1,752	15	96,585	40.45	42,367
New Hanover	27,368	13,548	12,566	17,926	9,164	4,029	44	210,229	37.67	84,645
Northampton	3,212	1,790	1,577	2,570	1,429	589	8	21,864	45.96	11,175
Onslow	17,852	8,169	6,654	9,030	4,667	1,379	16	188,081	26.16	47,767
Orange	18,961	8,977	7,504	8,885	3,996	1,705	19	137,760	33.61	50,047

Source: NC Office of State Budget and Management