ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS
C = Conforming
CA = Conditional
NC = Nonconforming
NA = Not Applicable

DECISION DATE: June 28, 2013

PROJECT ANALYST: Bernetta Thorne-Williams
TEAM LEADER: Lisa Pittman

PROJECT I.D. NUMBER: P-10084-13 /Carteret County General Hospital Corporation d/b/a Carteret General Hospital / Renovate and expand existing services including inpatient, outpatient, women and intensive care, replace 70 acute care beds, add two units of inpatient dialysis equipment and consolidate oncology services (change of scope from Project I.D. # P-8834-12)/ Carteret County

REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

G.S. 131E-183(a) The Department shall review all applications utilizing the criteria outlined in this subsection and shall determine that an application is either consistent with or not in conflict with these criteria before a certificate of need for the proposed project shall be issued.

(1) The proposed project shall be consistent with applicable policies and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, operating rooms, or home health offices that may be approved.

CA

Carteret County General Hospital Corporation (CCGH) d/b/a Carteret General Hospital (CGH) proposes to amend its previously approved CON application, Project I.D. # P-8834-12, to construct a new 33,225 square foot Cancer Center to consolidate its existing radiation (Coleman Radiation Oncology Clinic) and medical (Raab Medical Oncology Clinic) oncology departments, and related rehabilitation services on campus. In this application, the applicant proposes to consolidate Cancer Center services and incorporate them into the first floor of a three-story Pavilion that will become the new outpatient entry and house part of the Cancer Center, Women's Services, and the Progressive Care Unit (PCU). The applicant also proposes the addition of two new floors to the North Tower to include expanded space for ambulatory surgery and outpatient procedure support, relocated GI endoscopy procedure rooms, a relocated C-section room and replacement of the Critical Care Unit. The project, as proposed, would eliminate the need to replace the existing linear accelerator, replace 70 acute care beds, add 112,179 square feet to the existing hospital and renovate space for two new units of inpatient dialysis equipment and services. The applicant does not propose to develop beds or

services or acquire equipment for which there is a need determination in the 2013 State Medical Facilities Plan (SMFP).

However, the following two policies are applicable to this review; AC-5: Replacement of Acute Care Bed Capacity and GEN-4: Energy Efficiency and Sustainability for Health Service Facilities.

Policy AC-5: Replacement of Acute Care Bed Capacity states:

*"Proposals for either partial or total replacement of acute care beds (i.e., construction of new space for existing acute care beds) shall be evaluated against the utilization of the total number of acute care beds in the applicant's hospital in relation to utilization targets found below. For hospitals **not** designated by the Center for Medicare and Medicaid Services as Critical Access Hospitals, in determining utilization of acute care beds, only acute care bed 'days of care' shall be counted. For hospitals designated by the Centers for Medicare and Medicaid Services as Critical Access Hospitals, in determining utilization of acute care beds, only acute care bed 'days of care' **and** swing bed days (i.e., nursing facility days of care) shall be counted in determining utilization of acute care beds. Any hospital proposing replacement of acute care beds must clearly demonstrate the need for maintaining the acute care bed capacity proposed within the application. Additionally, if the hospital is a Critical Access Hospital and swing bed days are proposed to be counted in determining utilization of acute care beds, the hospital shall also propose to remain a Critical Access Hospital and must demonstrate the need for maintaining the swing bed capacity proposed within the application. If the Critical Access Hospital does not propose to remain a Critical Access Hospital, only acute care bed "days of care" shall be counted in determining utilization of acute care beds and the hospital must clearly demonstrate the need for maintaining the acute care bed capacity proposed within the application.*

| *Facility Average Daily Census* | *Target Occupancy of Licensed Acute Care Beds* |
|---|---|
| *1 – 99* | *66.7%* |
| *100 – 200* | *71.4%* |
| *Greater than 200* | *75.2%* |

Policy AC-5 is applicable to this review because the CGH proposes to relocate 70 of its existing 135 general medical/surgical acute care beds. In Section III.2, page 161, the applicant states:

*"CGH had an average daily census of 62.01 beds in FY 2012, as presented in its Hospital License Renewal Application (22,634/365=62.01). … According to the 2013 SMFP, the target occupancy for a hospital facility with an average daily census of 1 – 99 beds is 66.7%.*

…

*In FFY 2025, CGH projects that the hospital will provide 32,887 days of care and an average daily census (ADC) of 90.1 (32,887/365=90.1). … This is an occupancy* [rate] *of 66.7 percent (90.1/135=0.667)."*

The following table illustrates historical and projected acute care bed utilization as reported in Section IV, pages 189-190.

| Fiscal Year | # of Licensed Acute Care Beds | # of Patient Days | Average Daily Census* | Average Occupancy Rate* |
|---|---|---|---|---|
| **FFY 2012 Actual** | 135 | 22,634 | 62 | 45.9% |
| **FFY 2013 Projected** | 135 | 24,740 | 68 | 50.2% |
| **FFY 2014 Projected** | 135 | 25,311 | 69 | 51.4% |
| **FFY 2015 Projected** | 135 | 25,899 | 71 | 52.6% |
| **FFY 2016 Projected - Year 1** | 135 | 27,023 | 74 | 54.8% |
| **FFY 2017 Projected - Year 2** | 135 | 27,929 | 77 | 56.7% |
| **FFY 2018 Projected - Year 3** | 135 | 28,730 | 79 | 58.3% |
| **FFY 2019** | 135 | 29,284 | 80 | 59.4% |
| **FFY 2020** | 135 | 29,851 | 82 | 60.6% |
| **FFY 2021** | 135 | 30,431 | 83 | 61.8% |
| **FFY 2022** | 135 | 31,024 | 85 | 63.0% |
| **FFY 2023** | 135 | 31,631 | 87 | 64.2% |
| **FFY 2024** | 135 | 32,251 | 88 | 65.5% |
| **FFY 2025** | 135 | 32,887 | 90 | 66.7% |

*Average Daily Census (ADC) and Average Occupancy Rate as calculated by the project analyst. ADC was rounded to the nearest whole number

As shown in the table above, CGH projects that the occupancy rate for 135 licensed acute care beds will be 66.7% in FFY 2025, which meets the target occupancy rate of 66.7 percent. The occupancy rate for the 135 licensed acute care beds in FY 2012 was 45.9%.

Projected utilization is based on reasonable, credible, and supported assumptions. See Criterion (3) for discussion regarding projected utilization which is incorporated hereby as if set forth fully herein. The applicant adequately demonstrates the need to maintain the acute care bed capacity proposed in this application and the application is consistent with Policy AC-5.

Policy GEN-4: Energy Efficiency and Sustainability for Health Service Facilities states:

*"Any person proposing a capital expenditure greater than $2 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178 shall include in its certificate of need application a written statement describing the project's plan to assure improved energy efficiency and water conservation.*

*In approving a certificate of need proposing an expenditure greater than $5 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178, the*

*Certificate of Need Section shall impose a condition requiring the applicant to develop and implement an Energy Efficiency and Sustainability Plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4.*

*Any person awarded a certificate of need for a project or an exemption from review pursuant to G.S. 131E-184 are required to submit a plan for energy efficiency and water conservation that conforms to the rules, codes and standards implemented by the Construction Section of the Division of Health Service Regulation. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4. The plan shall not adversely affect patient or resident health, safety or infection control."*

In Section XI.17, pages 306-307, the applicant provides its written statement for efficient energy operations and water conservation, which states:

*"Maintaining Efficient Energy Operations*

*The building and systems are designed for energy efficiency. Concepts are listed below:*

*Energy Efficient Envelope:*

1. *Building Envelope Design will meet air leakage control requirements as mandated by code.*
2. *Roof Design will meet or exceed R-25 continuous insulation (U-value of 0.039) as mandated by code.*
3. *Wall Design will meet or exceed R-13 + R-7.5 continuous insulation (U-value of 0.064) as mandated by code.*
4. *Foundation Design will include 24" minimum R-10 continuous insulation at the perimeter.*
5. *Fenestration Design in the form of curtain wall / storefront framing will meet or exceed U-value of 0.45 as mandated by code.*
6. *Vestibules will be provided at the building entrances as mandated by code.*

*Mechanical Systems*

1. *Energy Efficient Chiller selected to exceed the requirements of ASHRAE 901.*
2. *Waterside economizer with new cooling tower.*
3. *New air handling units provided with airside economizers and Variable Speed Drives on premium efficiency motors.*
4. *Variable volume control on terminal units.*
5. *Room air volume setback for selective terminal units.*
6. *Web-based DDC energy management system.*
7. *Supply air temperature re-set.*
8. *Heating hot water temperature re-set.*

9. *All equipment will comply with minimum efficiency standards as required by ASHRAE 90.1.*
10. *Insulated piping to meet or exceed minimum code requirements.*

*Plumbing System:*

1. *Low flow flushing fixtures to meet minimum requirements of the NCSBC.*
2. *Metering faucets in public areas to meet minimum requirements of the NCSBC.*
3. *Low Flow Shower Heads to meet the minimum requirements of the NCSBC.*
4. *Re-circulating pump for domestic hot water.*

*Electrical Systems:*

1. *Energy saving lamps and ballasts with multilevel lighting control.*
2. *Occupancy sensors in offices and other spaces to reduce or exclude lighting in areas not occupied.*
3. *Multi-ballasted fluorescent fixtures shall be wired for inboard/outboard switching.*
4. *A lighting control system shall be used to reduce levels of lighting during off hours of the night.*
5. *Exterior lighting shall be HID type on photocell or lighting control system."*

The applicant adequately demonstrates the proposal includes a plan to assure improved energy efficiency and water conservation.

In summary, the applicant adequately demonstrated the proposed application is consistent with Policies AC-5 and GEN-4.

(2) Repealed effective July 1, 1987.

(3) The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

C

Carteret County General Hospital Corporation d/b/a Carteret General Hospital proposes to amend its previously approved CON application, Project I.D. # P-8834-12, to construct a new 33,225 square foot Cancer Center to consolidate its existing radiation (Coleman Radiation Oncology Clinic) and medical (Raab Medical Oncology Clinic) oncology departments, and related rehabilitation services on campus. In this application, the applicant proposes to consolidate Cancer Center services and incorporate them into the first floor of a three-story Pavilion that will become the new outpatient entry and house part of the Cancer Center, Women's Services, and the Progressive Care Unit (PCU). The applicant also proposes the addition of two new floors to the North Tower to include expanded space for ambulatory surgery and outpatient procedure support, relocated GI endoscopy procedure rooms, a

relocated C-section room and replaced Critical Care Unit. The project, as proposed, would eliminate the need to replace the existing linear accelerator, replace 70 acute care beds and add 112,179 square feet to the existing hospital. Additionally, the applicant proposes to renovate space for two new units of inpatient dialysis equipment and services.

In Section II.1(a), pages 22-23, the applicant states the proposal consists of the following components:

> *"… CGH proposes to expand its approved Cancer Center project, P-8834-12, and incorporate it into the first floor of a 112,179 square foot addition to the main hospital. The addition will include a three-story Pavilion that will become the new outpatient entry and house: part of the Cancer Center, Women's Services, and an all private room Progressive Care Unit. Two floors of new construction will be added in a North Tower above the Emergency Department. The North Tower will house expanded space for ambulatory surgery and outpatient procedure support, relocated GI endoscopy procedure rooms, a relocated C-section room and a replacement Critical Care Unit.*
>
> *…*
>
> *The first floor of the Pavilion will house reception, lobby, medical oncology, conference and visitor support, along with a new Infusion Pharmacy. On the second floor, Women's Services will include postpartum, medical/surgical, and pediatric beds. Triage from the Labor and Delivery suites will be relocated to the Women's Services area, closer to the new elevators. A 30-bed replacement Progressive Care Unit (PCU) on the Pavilion third floor will be designed with universal care rooms that can support patients with changing levels of acuity. …*
>
> *The new North Tower second floor, adjacent to Outpatient Surgery will include a replacement C-section room, two replacement GI endoscopy rooms, additional pre- and post-care rooms for outpatient surgery and outpatient procedures, along with two procedure rooms. One of the procedure rooms will be designed with negative pressure. The North Tower third floor will house a 10-bed Critical Care Unit (CCU) that replaces the existing 8-bed CCU."*

In Section II.1(a), pages 24-25, the applicant provides detailed information on the proposed expansion and renovations, as illustrated in the tables below.

*Services in the Proposed New Pavilion*

| ***Floor*** | ***Square Feet*** | ***Functions*** |
|---|---|---|
| *Floor One, Outside* | | • *Drop Off Canopy*<br>• *New Parking* |
| *Floor One, Pavilion* | *17,099* | *Public Areas including:*<br>*Lobby*<br>*Chapel*<br>*Café*<br>*Greeter Area*<br>*Volunteer Services*<br>*Courtyard* |
| | *1,648* | *Centralized Registration and Support* |
| | *1,890* | *Outpatient Testing* |
| | *2,551* | *Conference Center* |
| | *2,612* | *Cancer Center Infusion Pharmacy* |
| | *11,124* | *Medical Oncology* |
| *Floor Two* | *29,376* | *Women's Services to include:*<br>*16 Replacement Medical / Surgical Beds (including 4 rooms that can be converted to pediatric rooms)*<br>*10 Replacement Postpartum Medical / Surgical Beds* |
| *Floor Three* | *22,737* | *30-bed Replacement Progressive Care Unit* |
| ***Total*** | ***89,137**** | |

*The applicant states in its application that the document was developed electronically and that totals may not foot. The totals, as represented on page 24, total 89,037 square feet for the proposed new Pavilion, and not 89,137 as stated by the applicant. This is a difference of 100 square feet [89,137-89,037=100]. Additionally, the square feet provided in Section XI.3(e)(f), pages 303-305, when totaled concurs with the square footage of 89,037 for the new Pavilion. Therefore, the project analyst assumed 89,137 is the result of a typographical error.

*Services in the Proposed New North Tower*

| ***Floor*** | ***Square Feet*** | ***Functions*** |
|---|---|---|
| *Floor Two* | *11,571* | *Expanded Surgical Support*<br>*10 New Ambulatory Surgery Preparation and Recovery Beds*<br>*2 Replacement Endoscopy Rooms*<br>*1 Replacement C-section Room*<br>*2 Procedure Rooms* |
| *Floor Three* | *8,214* | *10-bed Critical Care Unit with 8 replaced and 2 new beds* |
| | *3,357* | *4 Replacement Medical/Surgical Beds* |
| ***Total*** | ***23,142*** | |

*Renovations Associated with the Project*

| ***Floor*** | ***Square Feet*** | ***Proposed New Functions*** | ***Current Use*** |
|---|---|---|---|
| *Floor One* | *5,030* | *Radiation Oncology Improvements* | *Radiation Oncology* |
| *Floor Two* | *1,360* | *Labor and Delivery Room 1* | *Triage* |
| | | *Labor and Delivery Room 5* | *C-section Suite* |
| | *1,891* | *Outpatient Surgery Staff Lounge and Offices* | *Outpatient Surgery Reception* |
| *Floor Three* | *1,642* | *3 North Surgical Unit Offices* | *3 North Surgical Unit Patient Rooms (4)* |
| *Floor Four* | *282* | *Inpatient Dialysis* | *Patient Room 426 and Fourth Floor Pantry* |
| ***Total*** | ***10,205*** | | |

Further in Section II.1(a), pages 25, the applicant states:

*"The project will replace 70 of CGH's 135 Acute Care Hospital Beds with:*

- *10 Postpartum Medical/Surgical Beds in Women's Services*
- *16 Medical/Surgical Beds in Women's Services (including 4 rooms that can be converted to Pediatric Beds)*
- *30-Bed Progressive Care Unit on the third floor*
- *10 Critical Care Beds on the third floor*
- *4 replacement beds on the third floor in the surgery bed unit*

*At completion, 112 of the hospital's 135 beds will be in private rooms. Only 10 bedrooms will be semi-private. Three Level II bassinets will be in Nursery 2. …*

*The project will vacate 25,396 square feet that will be gradually vacated* [sic] *in subsequent projects. Departments relocated to new space will create opportunity space in which CGH will expand supportive therapy, conference, Information Technology (IT) infrastructure, waiting, support, storage and office space for hospital staff and physicians."*

*Vacated Space Associated with the Project*

| ***Floor*** | ***Square Feet*** | ***Proposed New Functions*** | ***Current Use*** |
|---|---|---|---|
| *Floor One* | *61* | *Storage Space* | *Greeter Area* |
| | *417* | *Storage Space* | *Gift Shop* |
| | *174* | *Office Space* | *Chapel* |
| | *117* | *Office Space* | *Volunteer Office* |
| | *256* | *Laboratory Office Space* | *Laboratory Blood Draw Area* |
| | *557* | *Emergency Department Office Space* | *2 Outpatient Testing Labs* |
| *Floor Two* | *11,200* | *Medical Office Space* | *35 Medical/Surgical Beds* |
| | *2,621* | *Medical Office Space* | *5 Postpartum Beds* |
| | *443* | *Nursery Support Space* | *Labor and Delivery Waiting Room* |
| | *1,113* | *Surgery and Cystoscopy Storage* | *2 Endoscopy Rooms* |
| *Floor Three* | *3,431* | *Medical Office Space* | *12 Pediatric Beds* |
| *Floor Four* | *3,596* | *Medical Office Space* | *8 Critical Care Beds* |
| | *1,410* | *Medical Office Space* | *8 Medical/Surgical Beds* |
| ***Total*** | ***25,396*** | | |

With regard to the change of scope for the previously approved Cancer Center, Project I.D. # P-8834-12, in Section II.1(a), pages 26-27, the applicant states:

*"New construction for Cancer Services will include Medical Oncology and Infusion Pharmacy. These two departments will be relocated from CGH's Raab Oncology Clinic, which is now off-campus at 302 Medical Park in a medical office complex adjacent to the hospital. …*

*…*

*The centralized Registration and Lobby will be the reception and waiting area for the Cancer Center's Radiation Oncology patients. Radiation Oncology space will undergo moderate renovations. … Patients will go a short distance from the Pavilion to Radiation Oncology … To increase patient privacy, the radiation treatment area will be separated from the radiation patient exam area. …*

*Plans for the Pavilion first floor place Medical Oncology in new space adjacent to the Infusion Pharmacy. The new spaces are immediately adjacent to existing Radiation Oncology. Medical Oncology includes 20 infusion bays and eight exam rooms. …*

*Space for Cancer Center alternative therapies will be located in first floor Pavilion space. …"*

In Section II.1(a), page 28, the applicant provides a table that illustrates the change of scope from the previously approved Cancer Center application (Project I.D. # P-8834-12), and the proposed application, as summarized below:

Components of the previously approved Cancer Center, Project I.D. # P-8834-12 included:

Radiation Oncology
- Replacement of existing linear accelerator
- Relocation of CT simulator
- Treatment planning and oncology medical offices

Medical Oncology
- 18 treatment bays
- Medical oncologist offices
- Patient/family consultation
- Pharmacy
- Laboratory

Space for Rehabilitation Services
- Physical therapy
- Speech therapy
- Occupational therapy
- Massage therapy
- Yoga therapy
- Reiki therapy
- Art therapy

Space for Support Services
- Care coordination and screening
- Multi-disciplinary patient/family support
- Conference room and media center

Components of the proposed Cancer Center include:

Coleman Radiation Center would remain on the first floor of CGH, including the existing linear accelerator, the CT simulator, treatment planning, the medical offices, and the laboratory.

Medical Oncology
- 20 treatment bays (increase of two)
- Medical oncologist offices
- 8 exam rooms
- Infusion Pharmacy
- Blood draw with testing area lab

- Phlebotomy carts

The space for all rehabilitation therapy services (physical, speech, occupational, massage, yoga, reiki, and art) will occur in the physician's clinical conference room, education resource room and main conference center room. And the multi-disciplinary patient and family support including conferences and media will occur in the conference center.

Population to be Served

In Section III.5(a), page 171, the applicant states:

*"CGH defines the primary geographic boundaries of the proposed service area as Carteret, Craven, and Onslow Counties."*

The following table illustrates historical and projected patient origin for the entire hospital and for acute care beds for the first two operating years of the project, as reported by the applicant in Section III.4(b), pages 166-167 and Section III.5(c), pages 172-173.

| | **Entire Hospital** | | | **Acute Care Beds** | | |
|---|---|---|---|---|---|---|
| | Actual FFY 2012 | Projected FFY 2016 | Projected FFY 2017 | Actual FFY 2012 | Projected FFY 2016 | Projected FFY 2017 |
| County | % of Total | % of Total | % of Total | % of Total | % of Total | % of Total |
| Carteret | 76.3% | 76.3% | 76.3% | 75.9% | 75.9% | 75.9% |
| Craven | 9.4% | 9.4% | 9.4% | 9.6% | 9.6% | 9.6% |
| Onslow | 10.7% | 10.7% | 10.7% | 10.0% | 10.0% | 10.0% |
| Other* | 2.2% | 2.2% | 2.2% | 2.6% | 2.6% | 2.6% |
| Out of State** | 1.5% | 1.5% | 1.5% | 2.0% | 2.0% | 2.0% |
| **Total** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** |

*Includes: Alamance, Beaufort, Brunswick, Buncombe, Cabarrus, Catawba, Chatham, Columbus Cumberland, Davidson, Duplin, Durham, Edgecombe, Forsyth, Franklin, Gaston, Graham, Greene, Guilford, Halifax, Harnett, Hertford, Hyde, Johnston, Jones, Lee, Lenoir, Martin, Mecklenburg, Nash, New Hanover, Northampton, Onslow, Orange, Pamlico, Pasquotank, Pender, Pitt, Randolph, Richmond, Rockingham, Sampson, Surry, Wake, Watauga, Wayne, Wilkes, Wilson and Yadkin.
**Includes: Georgia, South Carolina, Tennessee, Virginia and other.

In Section III.4(b), page 167, the applicant states that the percent of patients illustrated in the table above for the entire hospital, represents patients who received acute care inpatient services, inpatient surgical services, outpatient surgical services, gastrointestinal surgical services, MRIs, linear accelerator and PET scanner services. Further on page 167, the applicant states the acute bed patients, as illustrated in the table above, represents patient origin for progressive care, critical care, pediatric, adult surgical, adult medical, obstetrics and Level II nursery beds. Additionally, in Section III.4(b) and III.5(c), pages 168-176, the applicant provides historical and projected patient origin for the first two operating years of the project for the other components proposed in this application, as illustrated in the tables that follow:

| | Radiation Oncology | | | Medical Oncology | | |
|---|---|---|---|---|---|---|
| | Actual FFY 2012 | Projected FFY 2016 | Projected FFY 2017 | Actual FFY 2012 | Projected FFY 2016 | Projected FFY 2017 |
| County | % of Total | % of Total | % of Total | % of Total | % of Total | % of Total |
| Carteret | 82.7% | 82.9% | 83.1% | 75.2% | 80.6% | 80.7% |
| Craven | 8.0% | 4.1% | 4.0% | 13.7% | 3.6% | 3.5% |
| Onslow | 7.6% | 12.4% | 12.4% | 7.8% | 13.9% | 13.9% |
| Other* | 1.3% | 0.5% | 0.5% | 2.2% | 1.9% | 1.9% |
| Out of State** | 0.4% | | | 1.1% | | |
| **Total** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** |

*Radiation Oncology includes: Nash and Mecklenburg
* Medical Oncology includes: Duplin, Mecklenburg, Nash, Pamlico, Pender and Wake
** Radiation Oncology: Other
**Medical Oncology: Virginia, Massachusetts and Pennsylvania

| **Women Services – C - Section Procedures** | | | |
|---|---|---|---|
| | Actual FFY 2012 | Projected FFY 2016 | Projected FFY 2017 |
| County | % of Total | % of Total | % of Total |
| Carteret | 66.7% | 66.7% | 66.7% |
| Craven | 19.8% | 19.8% | 19.8% |
| Onslow | 12.2% | 12.2% | 12.2% |
| Other* | 1.0% | 1.0% | 1.0% |
| Out of State** | 0.3% | 0.3% | 0.3% |
| **Total** | **100.0%** | **100.0%** | **100.0%** |

*Includes: Jones and Catawba
**Includes: Virginia

| | GI Endoscopy Procedures | | | | | |
|---|---|---|---|---|---|---|
| | **Actual FFY 2012** | | **Projected FFY 2016** | | **Projected FFY 2017** | |
| County | # of Patients | % of Total | # of Patients Year 1 | % of Total | # of Patients Year 2 | % of Total |
| Carteret | 962 | 80.64% | 1,456 | 85.63% | 1,562 | 86.36% |
| Craven | 75 | 6.29% | 75 | 4.41% | 75 | 4.15% |
| Onslow | 133 | 11.15% | 133 | 7.82% | 133 | 7.35% |
| Out of Area* | | | 36 | 2.14% | 39 | 2.14% |
| Durham | 1 | 0.08% | | | | |
| Halifax | 1 | 0.08% | | | | |
| Johnston | 1 | 0.08% | | | | |
| Jones | 2 | 0.17% | | | | |
| Nash | 2 | 0.17% | | | | |
| New Hanover | 2 | 0.17% | | | | |
| Pamlico | 5 | 0.42% | | | | |
| Wake | 1 | 0.08% | | | | |
| Georgia | 1 | 0.08% | | | | |
| South Carolina | 1 | 0.08% | | | | |
| Virginia | 2 | 0.17% | | | | |
| Other states | 4 | 0.34% | | | | |
| **Total** | **1,193** | **100.0%** | **1,700** | **100.0%** | **1,809** | **100.0%** |

*Note: On page 175, the applicant reports, because of its location, Carteret County is a tourist destination. As such, the area attracts out-of-area patients. CGH based its projected out-of-area patients on historical data, however, CGH reports not knowing what counties will be represented in future projections.

Additionally, on page 170, the applicant states, "[T]*he above table reports only GI endoscopy and non-GI endoscopy patients who received a procedure in an endoscopy room."*

In Section III.4(b), page 169, the applicant states that CGH does not currently provide inpatient dialysis services. In Section III.5(c), page 175, the applicant provides its projected patient origin for dialysis patients, as illustrated in the table below.

| Projected Dialysis Patient Origin | | | | |
|---|---|---|---|---|
| | FFY 2016 | | FFY 2017 | |
| County | **# of Patients** | % of Total | **# of Patients** | % of Total |
| Carteret | 61 | 77.50% | 66 | 78.11% |
| Craven | 9 | 11.09% | 9 | 10.64% |
| Onslow | 8 | 9.67% | 8 | 9.61% |
| Out of State | 1 | 1.75% | 1 | 1.64% |
| **Total** | **79** | **100.00%** | **84** | **100.00%** |

In Section VI.1-2, pages 259-262, the applicant states how the residents of the service area will have access to the proposed services, including those residents that are low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups. The applicant states:

*"CGH is currently a Medicare and Medicaid certified provider. CGH will continue to be Medicare and Medicaid certified through project completion."*

The applicant adequately identified the population it proposes to serve.

Need for the Proposed Project

The applicant states in Section III, page 62 that Carteret County is an attractive area for retirees, as such in 2012 the median age for those residents residing in Carteret County was nearly 10 years older than that of the State with this differential expected to be sustained through 2025. The applicant further states on page 62 that two factors are driving the need for improved acute care services in Carteret County; an increase in the population growth and an aging population. The applicant states on page 66, that CGH serves a higher volume of patients with cardiovascular disease, cancer, digestive, respiratory and COPD health issues than the state. Because of CGH unique location in Carteret County which is 1,341 square miles, of which 520 square miles is land and 821 square miles is water, (see Map in Exhibit 32), travel within the county requires traversing on two lane roads. During the peak summer seasons when many tourist and second home owners are in the area, travel time for medical treatment increases (see page 78).

Additionally, the applicant states the need to develop the project as proposed, instead of developing the project as approved in CON application, Project I. D. # P-8834-12, (construct a freestanding facility to consolidate oncology services), is based on the following factors:

- Sustained growth of the service area (Carteret, Craven and Onslow County) population;
- Health status and inpatient bed use in the service area;
- Changing approach to inpatient care;
- Building Code changes;
- Containment of cost;

- Increased demand for Women and Birthing services;
- Improved efficiencies for emergency C-Sections;
- Consolidation of support offices currently located off-site;
- Shift of surgery patients to outpatient and improved patient centered care for pre and post surgery patients;
- Improved GI endoscopy setting and services;
- Growing need for inpatient acute care beds;
- Growing need for critical care unit (CCU);
- Need for negative pressure room;
- Sustained and growing need for outpatient services;
- Need for inpatient dialysis capability;
- Sustained and growing need for observations beds; and
- Need for geographical access to a community hospital.

**Sustained Growth of Service Area Population**

In Section III.1(a), page 62, the applicant states:

> *"The North Carolina Office of State Budget and Management (NCOSBM) forecasts continued growth in the size of the primary service area population through the next ten years. Carteret County is growing faster than the state, with a total population increase of nearly … 18 percent by 2025, compared with a 14 percent forecast … between 2012 and 2015. NCOSBM also forecasts that the median age of Carteret County will continue to increase. … Table III.4 shows that the 2012 median age in Carteret County was nearly 10 years older than in the state and the differential will sustain through 2025. Carteret's median age of 47 will grow to almost 49 in the interim. These two factors, population growth and aging will contribute to an increasing need for acute inpatient care services provided by CGH, the only hospital in the county.*
>
> *NCOSBM also forecasts growth for the other two counties in the service area, Craven and Onslow. …"*

In Section III.1(a), pages 63-64, the applicant provides the projected population and the percentage of the projected 65+ population by county for its proposed service area, as illustrated in the tables below.

Projected Population and Percentage of Population 65+ by County

| County | 2012 | | 2013 | | 2014 | |
|---|---|---|---|---|---|---|
| | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ |
| Carteret | 68,645 | 20% | 69,602 | 21% | 70,562 | 22% |
| Craven | 105,788 | 16% | 106,624 | 16% | 107,459 | 16% |
| Onslow | 188,154 | 8% | 191,888 | 8% | 195,622 | 8% |
| Total PSA | 362,587 | 13% | 368,114 | 13% | 373,643 | 13% |
| Total NC | 9,780,740 | 14% | 9,886,347 | 14% | 9,992,391 | 15% |

| County | 2015 | | 2016 | | 2017 | |
|---|---|---|---|---|---|---|
| | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ |
| Carteret | 71,522 | 22% | 72,482 | 23% | 73,439 | 23% |
| Craven | 108,296 | 17% | 109,131 | 17% | 109,968 | 17% |
| Onslow | 199,355 | 8% | 203,089 | 9% | 206,823 | 9% |
| Total PSA | 379,173 | 13% | 384,702 | 14% | 390,230 | 14% |
| Total NC | 10,096,810 | 15% | 10,201,611 | 15% | 10,305,263 | 16% |

| County | 2018 | | 2019 | | 2020 | |
|---|---|---|---|---|---|---|
| | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ | Total Population | % of age Population 65+ |
| Carteret | 74,400 | 24% | 75,358 | 24% | 76,317 | 25% |
| Craven | 110,803 | 17% | 111,639 | 17% | 112,477 | 18% |
| Onslow | 210,555 | 9% | 214,288 | 9% | 218,021 | 9% |
| Total PSA | 395,758 | 14% | 401,285 | 14% | 406,815 | 15% |
| Total NC | 10,409,046 | 16% | 10,511,877 | 16% | 10,614,863 | 17% |

| County | 2021 | | 2022 | | 2023 | |
|---|---|---|---|---|---|---|
| | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ |
| Carteret | 77,275 | 25% | 78,235 | 26% | 79,194 | 26% |
| Craven | 113,312 | 18% | 114,148 | 18% | 114,984 | 18% |
| Onslow | 221,756 | 10% | 225,490 | 10% | 229,223 | 10% |
| Total PSA | 412,343 | 15% | 417,873 | 15% | 423,401 | 15% |
| Total NC | 10,717,106 | 17% | 10,819,523 | 17% | 10,921,252 | 18% |

| County | 2024 | | 2025 | | % Change 2012-2025 | |
|---|---|---|---|---|---|---|
| | Total Population | % of Population age 65+ | Total Population | % of Population age 65+ | Total Population | % of age 65+ Population |
| Carteret | 80,154 | 27% | 81,112 | 27% | 18.3% | 4.3% |
| Craven | 115,821 | 18% | 116,658 | 19% | 10.4% | |
| Onslow | 232,957 | 10% | 236,690 | 10% | 25.7% | |
| Total PSA | 428,932 | 15% | 434,460 | 16% | 19.8% | |
| Total NC | 11,023,154 | 18% | 11,124,477 | 18% | 13.7% | 3.8% |

In Section III.1(a), page 65, the applicant states:

> *"AHA* (American Hospital Association) *Trendwatch notes that, in 2008, two-thirds of Medicare beneficiaries had two or more chronic conditions … and that rates are increasing. Chronic kidney disease is the fastest growing. Centers for Medicare and Medicaid (CMS) studies of Medicare Severity-adjusted Diagnostic Related Groups (MS-DRGs) reflect trends of increased disease severity among Medicare patients. This correlates with an increased use of ICU days. …*
>
> *Offering inpatient rental dialysis will enable CGH to respond to the expected increase in end-stage kidney patients. Offering the service will increase demand for inpatient days, … At present, CGH cannot accept patients who require inpatient dialysis during their stay, and many people with chronic kidney disease require frequent dialysis."*

**Health Status and Inpatient Bed Use in the Service Area**

In Section III.1(a), pages 65-67, the applicant provides its inpatient discharge trends as compared to that of North Carolina. The applicant concludes that its hospitalization trends for certain diagnostic categories were higher than the State's average in 2010 by 10% and the Average Annual Days per 1,000 residents exceeded the state average by 50. The applicant also states that Carteret County has higher rates of cancer, heart disease, unintentional injuries, motor vehicle injuries, chronic liver disease/cirrhosis and suicide than the State's average which further emphasizes the need for inpatient bed capacity in the proposed service area.

**Changing Approach to Inpatient Care**

In Section III.1(a), pages 67-68, the applicant states:

> *"The hospital was designed without patient conference areas, without rooms for multiple specialty provider meetings … space for multidisciplinary therapy, and without space for family and other patient support persons to be present when instructions are given during outpatient visits or inpatient stays. These support spaces are even more important in the outpatient setting, where contact between patients and care professionals is briefer that* [sic] *for inpatients. The proposed conference center, centralized outpatient registration and support*

*area, and larger, more accommodating care rooms for patients and their families are critical to improving patient – family engagement.*

*New regulations from the Joint Commission and from CMS also emphasize the importance of these patient engagement features. … Patients need calming space in which to translate the information on their own terms. And, for efficient use of the time of expensive providers, the space should be close to treatment and diagnostic areas. …"*

**Building Code Changes**

In Section III.6(b), page 84 the applicant states, some of the 135 beds at CGH have not been renovated in over 45 years. In Section III.1(a), pages 68-69, the applicant states:

*"CGH has had ten additions to that first three-story inpatient structure, but many of the spaces are still in use as built. Many existing patient rooms on the second floor, the PCU, and Postpartum have only toilets; some have shared showers. Current pediatric rooms have only toilets. The CCU has no toilets or showers. Only 76 percent of patient rooms are private. Upon completion, 87 percent of patient rooms will be private. These missing amenities make it difficult to sustain infection control programs, to accommodate persons of different sex on the nursing unit, and to accommodate critical privacy in patient communications.*

*The new standard for patient rooms that accommodate all privacy and engagement features is about 310 square feet. Current rooms have about 200 square feet. Some have less.*

*The 2013 Health Care Design standard is private rooms with 120 square feet of clear floor area, with a minimum dimension of three feet area between the sides and foot of the bed and any wall or other fixed obstruction. Current medical / surgical rooms with 183 to 252 square feet, many with semi-private occupancy do not meet this standard.*

*Since 2006, the American Institute of Architects (AIA) has recommended private rooms as the standard of care for hospitals. …"*

**Containment of Cost**

In Section III.1(a), pages 69-70, the applicant discusses how the proposed application would assist CGH with containment of cost. The applicant states:

*"CGH was granted a Certificate of Need for a Cancer Center in January 2013. That project will consolidate Medical Oncology, the Infusion Pharmacy and Radiation Oncology and provide continuity of care for patients in a single location. At the time, an adjacent-site location was the most cost effective solution. With space made available by this project, CGH will keep the cancer services inside the main hospital building, build fewer square feet, eliminate duplication of services …*

*Locating Critical Care (CCU) and Progressive Care Units (PCU) adjacent to one another is needed to provide economies of scale in nurse staffing. Designing the PCU rooms as universal care rooms in which technology can be brought to the patient will enable CGH to keep many patients in the same room throughout their entire inpatient stay. This will … save on housekeeping, support infection control, and reduce nurse communication costs.*

*… Inpatient women's services, pediatric and labor –delivery programs are all small and meet the criterion for similar nursing skills. … Locating C-section on the same floor as Labor and Delivery and in the Surgical Suite will minimize transit and staff assembly time. … Pediatricians have a heavy workload that will only increase under health reform provisions designed to increase family coverage. Hence, designs that co-locate pediatrics and nurseries are important to making inpatient pediatric care more efficient.*

*… By locating all services on the central campus, CGH will make maximum use of existing boiler, chiller and electrical capability and will minimize the size of mechanical, electrical and plumbing upgrades necessary to support the new construction.*

**Increased Demand for Women and Birthing Services**

In Section III.1(a), page 70, the applicant states:

*"The proposed Women's Services will house 12 inpatient gynecology (medical/surgical) beds, ten postpartum beds, four pediatric beds and six labor and delivery rooms. …*

*CGH expects births in the primary service area to increase at an annual rate of 1.56 percent between 2012 and 2018 and an annual rate of 1.40 percent from 2019 to 2025 for a total of 7,463 and 8,124 service area births in 2018 and 2025 respectively."*

The applicant provides projected service area births, as illustrated in the table below and reported in Section III.1(a), page 71 of the application.

| County | FFY 2012 | FFY 2018 | FFY 2025 | CAGR FFY 2012-2018 | CAGR FFY 2018-2025 |
|---|---|---|---|---|---|
| Carteret | 652 | 707 | 771 | 1.35% | 1.23% |
| Craven | 1,767 | 1,850 | 1,948 | 0.77% | 0.74% |
| Onslow | 4,384 | 4,906 | 5,515 | 1.89% | 1.67% |
| Total | 6,803 | 7,463 | 8,234 | 1.56% | 1.40% |

In pages 70-72, the applicant states that women tend to make the healthcare decisions for their families and therefore it is important that services for women are provided in a comfortable and aesthetically pleasing environment. Thus, the first experience that most women have with a hospital is during the birth of their first child. The applicant states for many women this experience drives the decision making for future use of the hospital. Therefore, the applicant concludes that it is imperative that CGH be perceived as a medical center that is able to provide virtually all the needs for the family in the present and continuing into the future. The applicant

states that concerns voiced by CGH physicians center around patients recognizing the hospital is outdated and therefore, patients perceive that the care proved at CGH is outdated as well. The applicant states patients have voiced dissatisfaction with the poor aesthetics in patient rooms and in the waiting areas throughout the hospital, especially within the women's and children's units. The applicant states that those complaints by patients make it difficult to recruit new physicians to CGH. With the proposed project, CGH expects to eliminate those concerns and provide an aesthetically pleasing environment that will encourage patients, especially women to want to utilize the hospital for the birth of their children and their future medical needs. The applicant projects that six labor and delivery rooms will better allow CGH to accommodate peak load demands which include first-time mothers, a high percentage of Medicaid mothers and high risk pregnancies.

**Improved Efficiencies for Emergency C-Sections**

In Section III.1(a), page 72, the applicant states:

> *"The CGH C-section room is currently located on the second floor in the Birthing Suite, adjacent to LDR # 4, at some distance from the Anesthesia Department and the Surgical Suite. Because C-section is a surgical procedure that requires presence of Anesthesia and Surgical Nursing, CGH must mobilize those staff from the Surgical Suite …. This staffing shift can add as much as 18 minutes to response time. Having C-section adjacent to both Surgery and Labor Delivery will eliminate much of the staff travel and give more of the 30-minute window to preparation of mother and room for the procedure.*
>
> *… CGH also proposes a procedure room adjacent to the new C-section room. … This procedure room can share C-section support functions and provide a location for both gynecological procedures that do not require an operating room and for other outpatient procedures that can be performed safely outside the Surgical Suite …"*

**Consolidation of Support Offices Currently Located Off-site**

In Section III.1(a), page 72, the applicant provides a list of those services that were moved off-site including, fiscal services, CGH's physician group, Carteret Medical Group and GI physicians, to make space available for critical patient services. However, the applicant reports that the move has been expensive and resulted in increased communication time. The proposed expansion and renovations are projected to free up approximately 25,396 square feet of space that could support consolidating some of the services discussed into office space within the hospital.

**Shift of Surgery Patients to Outpatient and Improved Patient Centered Care for Pre and Post Surgery Patients**

In Section III.1(a), page 73, the applicant states:

*"In 2012, 52 percent of surgery procedures were outpatient (1,875 / 3550, per License Renewal Application), and prognosticators forecast the trend will sustain and may increase. …*

*(HIPPA) requires that surgical outpatients be afforded privacy similar to inpatients. This requires more and larger spaces for pre- and post-surgical care. CGH will increase the total number of these care spaces from 12 to 22, a ratio of 2.2 per operating and procedure room. This will enable a patient who may have a recovery lasting as long as six or eight hours stay in the same location without transfer."*

**Improved GI Endoscopy Setting and Services**

In Section III.1(a), page 73, the applicant reports that the US Preventive Services Task Force recommends colorectal cancer screening beginning at age 50 and continuing until age 75. CGH reiterates that its primary service area has an aging population. The applicant further states that according to the Eastern North Carolina Atlas of Mortality, cancer of the colon, rectum and anus is the ninth leading cause of mortality and the second leading cause of cancer related mortality in Eastern North Carolina. In Section III.1(a), pages 73-74, the applicant states:

*"Relocating CGH's two endoscopy rooms from the Surgical Suite to the Outpatient Surgery area will create critical Surgery storage space. Currently, gastroenterologists must share storage, holding space, and prep and recovery rooms with Surgery and Outpatient Surgery. The shortage of prep/recovery rooms limits the number of GI endoscopy patients that can be accommodated at any one time and constrains capacity of the hospital's two endoscopy rooms. The result is backlog, as evidenced by a seven-week waiting list that deters patients from have procedures at the hospital. A dedicated GI endoscopy suite with adjacent preparation and recovery that can also function for Ambulatory Surgery overflow will maximize efficiency for staff, equipment and facilities. The suite will allow CGH gastroenterologists to serve more patients and to focus on performing more specialized procedures … Although CGH gastroenterologists are capable of performing ECRPs (endoscopic retrograde cholangiopancreatography), many patients … out-migrate to Duke or Vidant Medical Center for these procedures. Construction of an area organized around GI endoscopy will support a more timely schedule and enable more patients to stay closer to home. …"*

**Growing Need for Inpatient Acute Care Beds**

In Section III.1(a), page 74, the applicant states:

*"Using conservative projections, CGH estimates that its proposed service area population (Carteret, Craven and Onslow Counties) will need access to between 737 and 789 general acute inpatient hospital beds by 2025. Currently, there are 604 general acute inpatient hospital beds in the proposed service area. This represents a deficit of 133 to 185 beds."*

**Growing Need for Critical Care Unit (CCU)**

In Section III.1(a), page 75, the applicant states:

*"Using conservative assumptions, CGH estimates that its proposed service area population will need access to between 56 and 65 critical care/intensive care beds by 2018. Currently, there are 54 critical care/intensive care beds in the primary service area. This represents a deficit of two to 11 beds. By 2025, CGH projects the deficit will range between 10 and 21 beds. …*

*In 2012, 82 percent of ICU patients at CGH were over age 50; half were over 65. … According to NCOSBM, 43 percent of Carteret residents were over 50 in 2012 and 46 percent will be over 50 in 2018. Carteret will have 74,400 such residents, Craven, 110,803 and Onslow, 210,555."*

**Need for Negative Pressure Room**

In Section III.1(a), page 75, the applicant states:

*"In its critical care unit, CGH serves patients who require pulmonary procedures to improve airway access. Though few in number, 46 in FY 2012, bronchoscopies require a negative pressure room to assure that infections carried by individuals are isolated from others. …"*

**Sustained Need for Outpatient Services**

In Section III.1(a), page 76, the applicant states:

*"CGH outpatient volumes have increased steadily over the last four years. …*

| | ***FFY 2009*** | ***FFY 2010*** | ***FFY 2011*** | ***FFY 2012*** | ***FFY 2009 FFY 2012 CAGR*** |
|---|---|---|---|---|---|
| *… Patients* | *117,848* | *120,627* | *128,173* | *144,339* | *6.99%* |

*Source: 2010-2013 CGH Hospital Licensure Renewal Application; includes ER visits, Outpatient Visits and surgical and non-surgical ambulatory cases.*

**Need for Inpatient Dialysis Capability**

In Section III.1(a), page 76, the applicant states:

*"Carteret County has no inpatient dialysis capability. As a result, patients who seek inpatient care at Carteret County and who also need dialysis during their inpatient stay must be referred to other hospitals. …*

*Internal data indicated that lack of dialysis services is the second leading cause of outmigration from CGH. According to reports from Crystal Coast Dialysis…60 to 84 patients from its Morehead City Outpatient Dialysis Center were referred out of county for inpatient care in the past two years.*

*The nearest hospital with dialysis stations is Carolina East, which reported six stations on its 2013 License Renewal Application. Carolina East is 35 miles from CGH. The 2013 North Carolina Semiannual Dialysis Plan Basic Principles indicates that:*

> *End-stage renal disease treatment should be provided in North Carolina such that patients who require renal dialysis are able to be served in a facility no farther than 30 miles from the patients' homes. (page 7)"*

**Sustained Need for Observation Beds**

In Section III.1(a), page 77, the applicant states:

*"Patients classified as "Observation" will be placed in unoccupied acute care beds. This efficient use of space and nursing staff will be made easier with all private rooms. Observation patients typically originate from the ED and require acute nursing care pending clear diagnosis, which may result in acute admission.*

*Other than a drop in FFY 2010, CGH observation patients have remained steady over the last-four years.*

| | ***FFY 2009*** | ***FFY 2010*** | ***FFY 2011*** | ***FFY 2012*** |
|---|---|---|---|---|
| *Observation Patients* | *1,615* | *1,408* | *1,602* | *1,596* |

*… CGH does not have a specific bed unit for observation beds. Furthermore, operationally, volumes are too low to justify a full bed unit. Use of unoccupied acute care beds is both possible and cost efficient. …"*

**Need for geographical access to a community hospital**

In Section III.1(a), page 78, the applicant states:

> *"CGH is the only hospital in Carteret County. The nearest hospital is in New Bern, which according to Google maps is 35.6 miles away. Google time assumes good driving conditions … In peak tourist season, the trip takes an hour or more. From Morehead City to the eastern part of the county, Sea Level is another 47 minutes, again assuming good driving conditions. CGH is centrally located for the county's 69,000 people. It is also a critical resource for the thousands of tourists and second home owners who populate the area's costal communities.*
>
> *At only 2 beds per 1,000, the resident population alone would justify 138 acute care beds. CGH has 135 beds."*

As the only acute care facility in the county it is important for Carteret General Hospital to be perceived as a medical center that can provide for the needs of the patients within the county and surrounding areas. On page 71, physicians reported that their patients recognize that the facility is outdated in appearance and the presumption by some of those patients is that the care provided at the facility is outdated, as well.

Additionally, on page 67 the applicant states that several members of the CGH medical staff have retired or have announced their retirement. The applicant states that as these professionals started to wand down their practices, patients were forced to seek medical care outside the county. The applicant further states on page 67 that the addition of new staff will allow CGH to serve patients that had previously sought care outside the county, especially those patients seeking care for cardiology, orthopedics, and surgery. In Exhibit 27, the applicant states that CGH will recruit physicians by specialty areas. Currently, CGH employs 90.98 physicians and by 2025, CGH projects to employ 128.88 physicians for a net gain of 37.90 new physicians (128.88-90.90=37.90). The following table takes into consideration those physicians retiring and provides only the net gain for physicians in the service areas for which the applicant projects growth in utilization, as illustrated in the table below:

| Specialty Area | Current #of Physicians | Net gain of new Physicians | Total Projected # of Physicians by 2025 |
|---|---|---|---|
| Anesthesiology | 2.80 | 1.00 | 3.80 |
| Cardiology | 4.25 | 2.20 | 6.45 |
| Emergency Med | 14.00 | 2.00 | 16.00 |
| Family/General Practice | 14.80 | 5.20 | 20.00 |
| Internal Medicine | 6.00 | 6.00 | 12.00 |
| Nephrology | 0.00 | 3.00 | 3.00 |
| OB/GYN | 9.00 | 1.00 | 10.00 |
| Orthopedics | 5.00 | 2.00 | 7.00 |
| Pediatrics | 4.10 | 1.20 | 5.30 |

Projected Utilization

In Section IV.1, pages 189-190, the applicant provides the historical and projected utilization for CGH's general acute care and ICU bed services, as illustrated in the tables below.

**Historical and Projected Acute Care Bed Utilization FFY 2011- FFY 2018**

| | **FFY 2011** | **FFY 2012** | **Interim FFY 2013** | **Interim FFY 2014** | **Interim FFY 2015** | **First Full FFY 2016** | **Second Full FFY 2017** | **Third Full FFY 2018** |
|---|---|---|---|---|---|---|---|---|
| **General Acute Care Beds** | | | | | | | | |
| # of beds | 127 | 127 | 127 | 127 | 127 | 125 | 125 | 125 |
| # of Discharges | 6,293 | 6,035 | 6,478 | 6,607 | 6,739 | 7,009 | 7,222 | 7,405 |
| # of Patient Days | 21,801 | 20,856 | 22,688 | 23,178 | 23,681 | 24,672 | 25,461 | 26,152 |
| **ICU Beds** | | | | | | | | |
| # of beds | 8 | 8 | 8 | 8 | 8 | 10 | 10 | 10 |
| # of Discharges | 234 | 223 | 257 | 268 | 278 | 295 | 309 | 323 |
| # of Patient Days | 1,758 | 1,778 | 2,052 | 2,133 | 2,218 | 2,351 | 2,468 | 2,578 |
| **Total Acute Care Beds** | | | | | | | | |
| # of beds | 135 | 135 | 135 | 135 | 135 | 135 | 135 | 135 |
| # of Discharges | 6,527 | 6,258 | 6,735 | 6,874 | 7,017 | 7,304 | 7,531 | 7,729 |
| # of Patient Days | 23,559 | 22,634 | 24,740 | 25,311 | 25,899 | 27,023 | 27,929 | 28,730 |
| % of Occupancy | 47.8% | 45.9% | 50.2% | 51.4% | 52.6% | 54.8% | 56.7% | 58.3% |

| | FFY 2019 | FFY 2020 | FFY 2021 | FFY 2022 | FFY 2023 | FFY 2024 | FFY 2025 |
|---|---|---|---|---|---|---|---|
| **General Acute Care Beds** | | | | | | | |
| # of beds | 125 | 125 | 125 | 125 | 125 | 125 | 125 |
| # of Discharges | 7,532 | 7,662 | 7,795 | 7,930 | 8,068 | 8,209 | 8,353 |
| # of Patient Days | 26,628 | 27,116 | 27,613 | 28,122 | 28,641 | 29,172 | 29,715 |
| **ICU Beds** | | | | | | | |
| # of beds | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| # of Discharges | 333 | 343 | 353 | 364 | 375 | 386 | 398 |
| # of Patient Days | 2,655 | 2,735 | 2,817 | 2,902 | 2,989 | 3,079 | 3,172 |
| **Total Acute Care Beds** | | | | | | | |
| # of beds | 135 | 135 | 135 | 135 | 135 | 135 | 135 |
| # of Discharges | 7,865 | 8,005 | 8,148 | 8,294 | 8,443 | 8,595 | 8,751 |
| # of Patient Days | 29,284 | 29,851 | 30,431 | 31,024 | 31,631 | 32,251 | 32,887 |
| % of Occupancy | 59.4% | 60.6% | 61.8% | 63.0% | 64.2% | 65.5% | 66.7% |

CGH projects that the utilization rate for the 135 acute care beds will be 58.3% in the third year of operations following completion of the proposed project and 66.7% in FFY 2025, which meets the target occupancy rate of 66.7 percent required for replacement of acute care beds (See Policy AC-5). Additionally, the applicant proposes to decrease its general acute care beds by two from 127 general acute care beds to 125 general acute care beds and to increase the number of ICU beds by two for a total of 10 ICU beds. CGH projects it will provide 2,578 intensive care patient days in Year 3 (2018) of the proposed project. The facility would operate 10 ICU beds and the occupancy rate would be 70.6%, which exceeds the 65% required for facilities with 10-19 intensive care beds as promulgated in 10A NCAC 14C .1200, Criteria and Standards for Intensive Care Services.

Projected utilization of general acute care and intensive care beds is based on reasonable, credible and supported assumptions regarding growth in utilization which is expected to continue. Furthermore, the applicant adequately demonstrated the need to increase the intensive care bed inventory from eight intensive care beds to ten.

In Section IV.1, pages 197-200, the applicant provides the projected utilization by acute care bed category for the first three full fiscal years after project completion, as illustrated in the table below.

| | FFY 2011 | FFY 2012 | Interim FFY 2013 | Interim FFY 2014 | Interim FFY 2015 | First Full FFY 2016 | Second Full FFY 2017 | Third Full FFY 2018 |
|---|---|---|---|---|---|---|---|---|
| **PCU** | | | | | | | | |
| # of beds | 33 | 33 | 33 | 33 | 33 | 30 | 30 | 30 |
| # of Discharges | 1,495 | 1,460 | 1,499 | 1,559 | 1,621 | 1,718 | 1,803 | 1,884 |
| # of Patient Days | 6,306 | 6,064 | 6,228 | 6,475 | 6,732 | 7,135 | 7,489 | 7,824 |
| % of Occupancy | 52.4% | 50.3% | 51.7% | 53.8% | 55.9% | 61.2% | 68.4% | 71.5% |
| **Obstetric Beds** | | | | | | | | |
| # of beds | 5 | 5 | 5 | 5 | 5 | 10 | 10 | 10 |
| # of Discharges | 680 | 648 | 600 | 608 | 616 | 637 | 652 | 664 |
| # of Patient Days | 1,646 | 1,680 | 1,556 | 1,577 | 1,598 | 1,652 | 1,691 | 1,722 |
| % of Occupancy | 90.2% | 92.0% | 85.3% | 86.4% | 87.6% | 45.3% | 46.3% | 47.2% |
| **Adult Surgical Beds** | | | | | | | | |
| # of beds | 31 | 31 | 31 | 31 | 31 | 33 | 33 | 33 |
| # of Discharges | 1,745 | 1,619 | 1,937 | 1,967 | 1,998 | 2,070 | 2,123 | 2,168 |
| # of Patient Days | 5,702 | 5,323 | 6,368 | 6,469 | 6,571 | 6,806 | 6,981 | 7,126 |
| % of Occupancy | 50.4% | 47.0% | 56.3% | 57.2% | 58.1% | 56.5% | 58.0% | 59.2% |
| **Adult Medical Beds** | | | | | | | | |
| # of beds | 43 | 43 | 43 | 43 | 43 | 45 | 45 | 45 |
| # of Discharges | 1,755 | 1,654 | 1,896 | 1,926 | 1,956 | 2,026 | 2,078 | 2,122 |
| # of Patient Days | 6,936 | 6,582 | 7,544 | 7,663 | 7,784 | 8,063 | 8,271 | 8,442 |
| % of Occupancy | 44.2% | 41.9% | 48.1% | 48.8% | 49.6% | 49.1% | 50.4% | 51.4% |
| **Pediatric Beds** | | | | | | | | |
| # of beds | 12 | 12 | 12 | 12 | 12 | 4 | 4 | 4 |
| # of Discharges | 618 | 585 | 497 | 497 | 497 | 507 | 512 | 514 |
| # of Patient Days | 1,167 | 1,008 | 856 | 856 | 856 | 873 | 882 | 886 |
| % of Occupancy | 26.6% | 23.0% | 19.5% | 19.5% | 19.5% | 59.8% | 60.4% | 60.7% |

As illustrated in the above table, CGH proposes to decrease the number of beds in its PCU (Progressive Care Unit) by three from 33 beds to 30 beds and projects to have a 71.5% occupancy rate in Year 3. CGH proposes to decrease its pediatric beds from 12 beds to 4 beds for an occupancy rate of 60.7% by Year 3 (2018) of the proposed project. CGH also proposes to increase the number of its obstetric beds from 5 to 10 beds for an occupancy rate of 47.2%; increase adult surgical beds from 31 to 33 for an occupancy rate of 59.2% and increase its adult medical beds from 43 beds to 45 beds with an occupancy rate of 51.4% occupancy in Year 3 of the proposed project. The applicant's methodology and assumptions regarding all projected utilization for CGH's acute care beds is located in Section IV, pages 197-234. Projected increases are based on growth and aging in the service area population and an increase in the use of acute care services by residents residing in Carteret, Craven and Onslow counties. The applicant adequately demonstrates projected utilization for its PCU, obstetrics, adult medical, surgical and pediatric beds, is based on reasonable, credible and supported assumptions.

In Section IV, pages 235-236, the applicant states the following concerning its change of scope for CGH radiation and medical oncology services,

*"CGH assumes the same projections for FFY 2013 to FFY 2018 as were presented in the original Cancer Center CON (Project ID # P-8834-12)."*

Rule 10 NCAC 14C .3903 (b), for establishing a new licensed GI Endoscopy or developing a new GI Endoscopy room in an existing facility does not apply as the applicant proposes to replace GI Endoscopy rooms in the same acute care facility at the same physical location.

In Section IV, pages 240-247, the applicant provides the methodology and assumptions used to project its GI Endoscopy utilization. The applicant states:

*"Methodology and Assumptions GI Endoscopy*

*… CGH reasonably and conservatively forecasts GI endoscopy utilization in excess of 1,500 procedures.*

*<u>Step 1</u> – Determine historic GI endoscopy procedures performed in CGH GI endoscopy rooms from FFY 2011 through 2012.*

*Table IV.55 - Actual CGH GI Endoscopy Procedures Performed in GI Endoscopy Rooms, FFY 2011 through FFY 20012e*

| ***Actual CGH Procedures*** | *FFY 2011* | *FFY 2012* |
|---|---|---|
| *Inpatient* | *282* | *232* |
| *Outpatient* | *652* | *967* |
| ***Total*** | ***934*** | ***1,199*** |

*Source: 2012-2013 Hospital License Renewal Application, Section 8.c*

*<u>Step 2</u> – Determine historic CGH GI endoscopy procedure to patient ratios for procedures performed in GI endoscopy rooms from FFY 2011 through FFY 2012.*

*…*

*<u>Step 3</u> – Estimate inpatient and outpatient GI endoscopy procedures that were performed outside of CGH GI endoscopy rooms from FFY 2011 through FFY 2012 by applying the annual CGH procedure to patient ratio to cases treated outside GI endoscopy rooms.*

*Table IV.57 - Estimated GI Procedures Performed Outside CGH GI Endoscopy Rooms*

| | ***FFY 2011*** | | *FFY 2012* | |
|---|---|---|---|---|
| ***Metric*** | ***Inpatient*** | ***Outpatient*** | ***Inpatient*** | ***Outpatient*** |
| *License Renewal Application, Section 8.e Cases (Patients)* | *95* | *138* | *150* | *233* |
| *CGH Procedure to Patient Ratio* | *1.01* | *1.01* | *1.01* | *1.01* |
| *Subtotal* | *96* | *140* | *151* | *235* |
| ***Annual Total*** | ***236*** | | ***386*** | |

…
*Assumptions:*

*Applying the annual CGH procedure to patient ratio from GI endoscopy rooms to cases (patients) treated outside GI endoscopy rooms provides a reasonable and conservative estimate of GI endoscopy procedures performed outside of GI endoscopy rooms. CGH has no other measure for the ratio, and patients treated in the operating room are conceivably more complex and involve more procedures.*

*Step 4 – Determine total CGH GI endoscopy procedures from Steps 1 and 3 and calculate annual percent increase in procedures from FFY 2011 through 2012.*

*Table IV.58 - Total CGH GI Endoscopy Procedures, FFY 2011 through FY 2012*

| | ***FFY 2011*** | | *FFY 2012* | |
|---|---|---|---|---|
| ***Metric*** | ***Inpatient*** | ***Outpatient*** | ***Inpatient*** | ***Outpatient*** |
| *GI Endoscopy Room Procedures* | *282* | *652* | *232* | *967* |
| *Procedures Outside GI Endoscopy Rooms* | *96* | *140* | *151* | *235* |
| *Subtotal* | *378* | *792* | *383* | *1,202* |
| ***Annual Total*** | ***1,170*** | | ***1,585*** | |
| *Percent Increase* | | | *35.46%* | |

*Percent Increase = (2012 procedures – 2011 procedures) / 2011 procedures*

*Step 5 – Project CGH GI endoscopy procedures through FFY 2018 (Project Year 3).*

*Table IV.59 - Projected CGH GI Endoscopy Procedures*

| | ***Historic*** | ***Projected*** | | | | | |
|---|---|---|---|---|---|---|---|
| ***Carteret General Hospital*** | *FFY 2012* | *FFY 2013* | *FFY 2014* | *FFY 2015* | *FFY 2016 (PY 1)* | *FFY 2017 (PY 2)* | *FFY 2018 (PY 3)* |
| *Projected Annual Percent Increase* | | *3.00%* | *9.00%* | *9.00%* | *12.00%* | *12.00%* | *12.00%* |
| ***Projected CGH GI Endoscopy Procedures*** | *1,585* | *1,633* | *1,780* | *1,940* | *2,173* | *2,433* | *2,725* |

*Assumptions:*

1. *All CGH GI endoscopy procedures will be performed in the replacement GI endoscopy rooms.*
2. *…*
3. *The projections are very conservative relative to the need and planned changes at CGH.*
4. *Annual growth in number of procedures will not be as dramatic as the growth between 2011 and 2012.*
    a) *CGH did not hire a gastroenterologist, Dr. John Baillie, on staff until FFY 2012 in September of 2011. Dr. Baillie is currently CGH's only employed gastroenterologist. Increases in CGH GI endoscopy procedures in FFY 2012 reflect Dr. Baillie's immediate impact on a backlog of need.*
    b) *Retirements of some gastroenterologist at CGH have resulted in below normal use of CGH GI endoscopy services in recent years, as these physicians phased down their practices.*
    c) *CGH's two endoscopy rooms are currently located in the Surgical suite. Endoscopy patients must share holding space with surgical patients. This restricts the number of patients that can be accommodated at any one time. …the relocated endoscopy rooms will enable CGH gastroenterologists to accommodate more patients and reserve dedicated preparation and recovery rooms for GI endoscopy patients.*
5. *CGH plans to recruit another gastroenterologist in FFY 2014 …CGH projected an increase in utilization of only nine percent in FFY 2014. … This is only a fourth of the increase that occurred when Dr. Baillie joined the staff."*
6. *A second gastroenterologist will eliminate the seven-week or longer waiting list …"*

*<u>Step 6</u> – Determine the percentage of inpatient and outpatient CGH GI endoscopy procedures in FFY 2011 and FFY 2012.*

*<u>Step 7</u> – Determine projected CGH inpatient and outpatient GI endoscopy procedures through FFY 2018 by applying the 2012 CGH inpatient and outpatient distribution, 24.18 percent inpatient and 75.82 percent outpatient.*

*…"*

The applicant's assumptions and methodology used to project utilization for inpatient and outpatient GI endoscopy utilization at CGH is based historical utilization, recruitment of a second gastroenterologist and the relocation of the two GI endoscopy rooms out of the shared surgical suite to an area that will allow a better flow of scheduling and performing GI endoscopy procedures. The applicant adequately demonstrates projected utilization is based on reasonable, credible and supported assumptions.

Carteret General Hospital proposes to enter into a contract with Fresenius Medical Care (FMC) to provide inpatient dialysis services at CGH beginning in FFY 2015. In Section II.5, page 44, the applicant states:

*"Fresenius will provide the nurses and technicians to set up the dialysis machines, initiate treatment and discontinue the therapy once complete. They will work in concert with CGH ICU and nursing staff and in concert with CGH policies and procedures."*

See Exhibit 55 for a copy of a draft contract between CGH and FMC. In Section 1V.2, pages 239-240, the applicant projects its dialysis utilization by county, as illustrated in the table below.

*Table IV.53 Forecast CGH Dialysis Patients Utilization*

| **County** | **Dial PY 1 FFY 2015** | **Dial PY 2 FFY 2016** | **Dial PY 3 FFY 2017** | **Dial PY 4 FFY 2018** |
|---|---|---|---|---|
| Carteret | 61 | 66 | 71 | 76 |
| Craven | 9 | 9 | 9 | 9 |
| Onslow | 8 | 8 | 9 | 9 |
| Other | 1 | 1 | 1 | 2 |
| **Total** | 79 | 84 | 90 | 96 |

The applicant's methodology and assumptions regarding projected inpatient dialysis utilization are in Section IV.2, pages 239-240, in which the applicant states:

*"Dialysis is a new service that starts in FFY 2015. …*

*For FFY 2015, CGH inpatient market share for 2011 (65.98 percent of Carteret, 4.79 percent of Craven and 4.07 percent of Onslow) times the June 2013 cases from the January 2013 estimates for June 2013 (January 2013 NC Semiannual Dialysis Report). … times (one plus Five Year Average rate of growth for each county … to the power of 2 (e.g. Carteret is (1+0.077)^2).*

*FFY 2016 through FFY 2018: Prior year times (one plus the Five-Year Average rate of dialysis growth for each county as estimated in the January 2013 Semiannual Dialysis report). Rates are 0.077, 0.026 and 0.62, for Carteret, Craven and Onslow, respectively.*

*<u>Step 2</u> – Multiply patients from table above by one to get annual admission requiring inpatient dialysis. Assume each patient has one admission per year. This is conservatively based on local reports of 60 to 84 admissions a year from Crystal Coast Dialysis to CGH.*

*<u>Step 3</u> – Multiply admissions by two sessions per admission to get number of dialysis sessions.*

*Assume two sessions per admission, based on experience of other providers.*

*Table IV.54 Forecasts CGH Dialysis Admissions and Sessions …*

| ***County* [sic]** | ***Dial PY 1 FFY 2015*** | ***Dial PY 2 FFY 2016*** | ***Dial PY 3 FFY 2017*** | ***Dial PY 4 FFY 2018*** |
|---|---|---|---|---|
| *Patients* | *78* **[79]** | *84* | *90* | *96* |
| *Admissions* | *78* **[79]** | *84* | *90* | *96* |
| *Dialysis sessions* | *158* | *168* | *180* | *192* |

*Numbers may not foot precisely as a result of rounding"*

The applicant's assumptions and methodology used to project utilization for inpatient dialysis services at CGH begin with being the only acute care hospital in Carteret County. Projected increases are based on growth in the service area population, current outmigration of Carteret County residents to surrounding counties seeking inpatient dialysis services and an increase in renal failure rates in Carteret, Craven and Onslow counties due to an aging population. The applicant adequately demonstrates projected utilization is based on reasonable, credible and supported assumptions.

The applicant adequately demonstrated the need to add a three story Pavilion that will incorporate part of the Cancer Center, Women's Services and the Progressive Care Unit and to construct two new floors to the North Tower to include expanded space for ambulatory surgery and outpatient procedure support, relocated GI endoscopy procedure rooms, relocated C-section room and replacement of the Critical Care Unit, including replacement of 70 acute care beds. The applicant also adequately demonstrated the need to develop space for two units of inpatient dialysis equipment and services.

Access

In Section VI.2, pages 259-262, CGH describes how underserved persons will continue to have access to services at CGH, stating, "*CGH does not deny needed medical coverage to any person based on age, race, ethnicity, creed, religion, culture, language, handicap, economic status, social status, or ability to pay.*"

In summary, the applicant adequately identified the population to be served, demonstrated the need the population has for the project and the extent to which all residents of the area, in particular underserved groups are likely to access the services provided. Therefore, the application is conforming to this criterion subject to Condition 5 in Criterion 4.

(3a) In the case of a reduction or elimination of a service, including the relocation of a facility or a service, the applicant shall demonstrate that the needs of the population presently served will be met adequately by the proposed relocation or by alternative arrangements, and the effect of the reduction, elimination or relocation of the service on the ability of low income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly to obtain needed health care.

NA

(4) Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

CA

In Section III.3, pages 162-166, the applicant describes several alternatives considered which include the following:

1) Status Quo – The applicant decided doing nothing would not address the issue of private room shortages, cramped accommodations for outpatient services, porous outpatient entrances, an aging infrastructure and continuing to do without inpatient dialysis services. CGH concludes that to do nothing was not the most effective alternative for the hospital or the patients.

2) Construction alternatives – The applicant rejected building a large, freestanding building to accommodate some of the proposed services due to the cost associated with a freestanding facility.

3) Development of the improvements as six different projects – The applicant also rejected this idea due to infrastructure and cost challenges.

4) Prioritizing the Emergency Department – The applicant considered priority investment in the emergency department, relocation of the central sterile and the laboratory. Although, CGH agreed that this project would assist with some of the space restraints facing the hospital, this alternative was also rejected. The hospital concluded that the additions to the ED could be completed as a stand alone project for less than $2 million.

5) Relocation of the Cancer Center to a separate building – This was proposed in Project I.D. # 8834-12. Upon further reflection, CGH concluded that building the Pavilion would allow better access for the patients and staff and would allow for the continued use of the existing linear accelerator.

The plan as proposed – The applicant concluded that the addition of the Pavilion, construction of two floors over the emergency department, the replacement of 70 acute care beds and the inclusion of inpatient dialysis services and other components, as outlined in the application was the best alternative to serve the needs of the hospital and its patients. Thus, the applicant concluded that developing the project as proposed was its most effective and least costly alternative.

Furthermore, the application is conforming to all other applicable statutory and regulatory review criteria, and thus, is approvable. A project that cannot be approved cannot be an effective alternative.

The applicant adequately demonstrates that the proposed alternative is the most effective or least costly alternative to meet the need to improve and expand the hospital's services. The application is conforming to this criterion and approved subject to the following conditions.

1. **Carteret County General Hospital Corporation d/b/a Carteret General Hospital shall materially comply with all representations made in its certificate of need application.**

2. **Carteret County General Hospital Corporation d/b/a Carteret General Hospital shall replace no more than 70 acute care beds, which includes 10 postpartum medical/surgical beds in women's services, 16 medical/surgical beds in women's services (including 4 rooms that can be converted into pediatric beds), 30 progressive care beds, 10 critical care beds, and 4 surgery beds, for a total of no more than 135 acute care beds, at project completion.**

3. **Carteret County General Hospital Corporation d/b/a Carteret General Hospital shall, through a written agreement, arrange for Bio-Medical Applications of North Carolina, Inc to provide acute dialysis services.**

4. **Carteret County General Hospital Corporation d/b/a Carteret General Hospital shall not acquire, as part of this project, any equipment that is not included in the project's proposed capital expenditure in Section VIII of the application and which would otherwise require a certificate of need.**

5. **Carteret County General Hospital Corporation d/b/a Carteret General Hospital shall**
   **submit a plan of energy efficiency and water conservation to the Construction Section, DHSR, that conforms to the rules, codes and standards implemented by the Construction Section of the Division of Health Service Regulation.**

6. **Prior to issuance of the certificate of need, Carteret County General Hospital Corporation d/b/a Carteret General Hospital shall acknowledge acceptance of and agree to comply with all conditions stated herein in writing to the Certificate of Need Section.**

(5) Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

C

In Section VIII.1, page 287, the applicant states that the total capital cost of the project will be $52,689,285. The capital cost approved in the previous CON application, Project I.D. # P-

8834-12 was $19,858,383 and the proposed application is projected to cost an additional $32,830,902 for a total capital cost of $52,689,285 (19,858,383 + 32,830,902= $52,689,285). In Section VIII.1(c) pages 288-290, the applicant provides the previously approved and the proposed capital cost for the additional components of the project, as summarized in the table below.

| | Proposed Project | Approved Project I.D. # # P-8834-12 | Difference |
|---|---|---|---|
| Subtotal Site Costs | $2,236,949 | $1,436,840 | $800,109 |
| Construction Subtotal Contract | $37,783,086 | $6,983,758 | $30,799,328 |
| Miscellaneous Project Costs: | | | |
| • Total Equipment Purchase/Lease | $4,250,000 | $8,883,429 | ($4,633,429) |
| • Furniture | $775,000 | $830,625 | ($55,625) |
| • Landscaping | $185,000 | $100,000 | $85,000 |
| • Architect/Engineering Fees | $3,299,250 | $523,932 | $2,775,318 |
| • Legal Fees | $10,000 | $10,000 | $0 |
| • CON Preparation | $150,000 | $50,000 | $100,000 |
| • Other (contingency) | $4,000,000 | $1,039,799 | $2,960,201 |
| Subtotal Miscellaneous | $12,669,250 | $11,437,785 | $1,231,465 |
| **Total Capital Costs** | **$52,689,285** | **$19,858,383** | **$32,830,902** |

In Section IX, page 295, the applicant projects there will be no start-up expenses or initial operating expenses associated with the proposed project. In Section VIII.3, page 290, the applicant states that the project will be funded by means of Carteret County General Hospital Corporation's accumulated reserves in the amount of $52,589,285 and Bequests and Endorsements in the amount of $100,000 (52,589,285+100,000=52,689,285). Exhibit 44 contains a January 25, 2013 letter signed by the Chief Financial Officer for Carteret General Hospital, which states in part:

*"This letter is to confirm that the Carteret General Hospital Corporation has access to the required fixed and working capital costs for the proposed Certificate of Need …*

*The project will be financed with Carteret General Hospital Corporation accumulated reserves. As Chief Financial Officer, I have the authority to obligate up to $61,000,000 of Carteret General Hospital Corporation's accumulated reserves for the capital cost and working capital requirements of the project. Please see the line item "Cash and Cash Equivalents" on the Fiscal Year 2012 audited Balance Sheet for Carteret County General Hospital Corporation. The amount of $79,654,196 is more than sufficient to cover the capital costs and working capital requirements of the project and these funds are not committed to any other use. Moreover, we have another $4,327,386 in "Assets Limited by Board for Capital Improvements" that can be applied to the project."*

Exhibit 45 of the application contains the audited financial statements for Carteret County General Corporation (CCGC) and Affiliates for the years ending September 30, 2012 and September 30, 2011. As of September 30, 2012, CCGC had $79,654,196 in cash and cash equivalents, unrestricted net assets of $90,231,765 and $133,809,533 in total net assets (total assets less total liabilities). The applicant adequately demonstrated the availability of sufficient funds for the capital needs of the project.

The applicant provided pro forma financial statements for the first three years of the project, for the entire hospital which incorporates the proposed components outlined in this project, which the applicant refer to as the Master Facility Plan (MFP). The applicant projects that hospital revenues will exceed operating expenses in each of the first three full fiscal years, as illustrated in the table below.

**Entire Hospital**

| | Project Yr 1 10/1/15-9/30/16 | Project Yr 2 10/1/16-9/30/17 | Project Yr 3 10/1/17-9/30/18 |
|---|---|---|---|
| Gross Patient Revenue | $386,149,865 | $415,435,158 | $446,210,194 |
| Deductions from Gross Patient Revenue | $237,240,734 | $257,372,060 | $278,741,820 |
| Net Patient Revenue | $148,909,130 | $158,063,098 | $167,468,373 |
| Total Expenses | $143,250,352 | $148,468,300 | $153,919,303 |
| Net Income | $8,924,350 | $12,990,992 | $17,081,112 |

The applicant projects that operating expenses will exceed revenues for inpatient services by ($6,276,036) in Project Yr 1, ($5,520,641) in Project Yr 2 and ($4,932,264) in Project Yr 3, however, the applicant projects a positive net income for the Cancer Center and its outpatient services in each of the first three full fiscal years of the proposed project. The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs and charges. See the financial section of the application for the assumptions regarding cost and charges. See Criterion (3) for discussion of utilization projections which is incorporated hereby as if fully set forth herein. The applicant adequately demonstrated that the financial feasibility of the proposal is based upon reasonable projections of costs and charges, and therefore, the application is conforming to this criterion.

(6) The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

C

Carteret General Hospital in Morehead City is the only hospital in Carteret County. CGH currently provides the service components listed in the proposed project including radiation and medical oncology, inpatient and outpatient services, women services and intensive care services, to the residents of Carteret and surrounding counties and is the only provider of these services located in Carteret County. The only service that CGH does not currently provide to the residents in its service area is inpatient dialysis services. Inpatient dialysis services are not currently provided anywhere in Carteret County. The closest provider of this service is

CarolinaEast Medical Center in New Bern, Craven County which reports to have six units of inpatient dialysis equipment. The next closest provider of inpatient dialysis services is Onslow Memorial Hospital, in Jacksonville, Onslow County. According to Google Maps those two facilities are 35 miles and 39.5 miles away, respectively from Carteret General Hospital. The Basic Principle, 10.a in the methodology is to assure dialysis services are easily accessible to residents within their service area as outlined in the 2013 North Carolina Semiannual Dialysis Report, states:

> *"End-stage renal disease treatment should be provided in North Carolina such that patients who require renal dialysis are able to be served in a facility no farther than 30 miles from the patients homes."*

The applicant adequately demonstrates the need for its proposal. See Criterion (3) for the discussion regarding the need to consolidate Cancer Center services and incorporate it into the first floor of a three-story Pavilion, add two additional floors to the North Tower to include expanded space for ambulatory surgery, outpatient procedure support, relocated GI endoscopy procedure rooms, relocated C-section room, replaced Critical Care Unit and accommodate space for two units of inpatient dialysis equipment and services.

The applicant adequately demonstrates the relocation and expansion of existing services currently provided and the addition of two units of inpatient dialysis equipment at CGH will not result in the unnecessary duplication of existing or approved services. Consequently, the application is conforming to this criterion.

(7) The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

C

In Section VII.1(a)(b), pages 271-276, the applicant provides the current and proposed staffing for its renovated and expanded services components for the second full fiscal year. The applicant states that CGH currently employees 846.3 FTEs throughout the hospital and by the second full fiscal year, the applicant projects to have 945.9 FTEs which is an increase of 99.6 FTEs (945.9-846.3=99.6) throughout the various components and services proposed in this application. In Section VII.3(a), page 282, the applicant states:

> *"Incremental FTEs are identified … . However, the <u>positions</u> that result from this project will not be new. CGH currently employs all positions identified … at its existing facility."* [emphasis added in original]

In Section VII.2(a), pages 276-281, the applicant provides the current and projected number of FTE's to be utilized in the operating room components of the proposed project, as illustrated in the table below.

| **Department** | Current | Projected |
|---|---|---|
| | # of FTEs | # of FTEs |
| **C-Section Staffing** | | |
| Administration | 0.02 | 0.02 |
| RNs | 0.26 | 0.29 |
| LPNs | 0.10 | 0.11 |
| NA or Orderlies* | 0.04 | 0.04 |
| Surgical Techs | 0.06 | 0.07 |
| Med Records Admin | 0.02 | 0.02 |
| Med Record Techs | 0.05 | 0.06 |
| Med Techs | 0.05 | 0.06 |
| Pharmacists | 0.04 | 0.04 |
| Pharmacy Techs | 0.04 | 0.04 |
| All Others** | 0.10 | 0.11 |
| **Totals** | **0.77** | **0.85** |
| | | |
| **GI Endoscopy Staffing** | | |
| Administration | 0.03 | 0.04 |
| RNs | 2.90 | 5.08 |
| LPNs | 0.10 | 0.18 |
| NA or Orderlies* | 0.35 | 0.61 |
| Surgical Techs | 2.00 | 3.50 |
| Med Records Admin | 0.04 | 0.06 |
| Med Record Techs | 0.10 | 0.18 |
| Pharmacists | 0.08 | 0.14 |
| Pharmacy Techs | 0.08 | 0.14 |
| All Others** | 0.35 | 0.61 |
| **Totals** | **6.02** | **10.54** |

*NA = Nursing Aides
**Non-health professionals and technical personnel

As illustrated in the table above, the applicant proposes to increase the number of FTE positions from 0.77 to 0.85 in its C-section operating rooms and from 6.02 to 10.54 in its GI endoscopy procedure rooms. In Section VII.1(b) and VII.3(a), pages 276 and 282, the applicant states, *"All staff needed for Dialysis will be provided through a contract with Fresenius."*

In Section VII.8(a), page 284, the applicant states that Dr. Richard Rosania, will serve as the Chief of Staff for CGH. See Exhibit 5 for a letter dated October 10, 2012 from Dr. Joe Nutz agreeing to continue serving as the Vice President of Medical Affairs at Carteret General Hospital.

The applicant adequately demonstrated the availability of adequate health manpower and management personnel for the provision of the proposed services. Therefore, the application is conforming to this criterion.

(8) The applicant shall demonstrate that the provider of the proposed services will make available, or otherwise make arrangements for, the provision of the necessary ancillary and support services. The applicant shall also demonstrate that the proposed service will be coordinated with the existing health care system.

C

The applicant is an existing hospital and provider of the service components proposed in this application with the exception of inpatient dialysis services. Therefore, the necessary ancillary and support services are currently available. In Section II.2(b), pages 36-38, the applicant provides a summary of the availability of the necessary ancillary and support services. In Section II.2(b), page 38, the applicant states that inpatient dialysis services will be provided through a contract with Fresenius Medical Care. See Exhibit 55 for a copy of the sample agreement between CGH and FMC.

See Exhibit 8, for a letter dated January 25, 2013, from the President & CEO of CGH, documenting that CGH currently provides the necessary services and support for all the components proposed in this application. Exhibit 49 contains physician letters of support.

The applicant adequately demonstrated the availability of the necessary ancillary and support services and that the proposed services would be coordinated with the existing health care system. Therefore, the application is conforming to this criterion.

(9) An applicant proposing to provide a substantial portion of the project's services to individuals not residing in the health service area in which the project is located, or in adjacent health service areas, shall document the special needs and circumstances that warrant service to these individuals.

NA

(10) When applicable, the applicant shall show that the special needs of health maintenance organizations will be fulfilled by the project. Specifically, the applicant shall show that the project accommodates: (a) The needs of enrolled members and reasonably anticipated new members of the HMO for the health service to be provided by the organization; and (b) The availability of new health services from non-HMO providers or other HMOs in a reasonable and cost-effective manner which is consistent with the basic method of operation of the HMO. In assessing the availability of these health services from these providers, the applicant shall consider only whether the services from these providers:

(i) would be available under a contract of at least 5 years duration;
(ii) would be available and conveniently accessible through physicians and other health professionals associated with the HMO;
(iii) would cost no more than if the services were provided by the HMO; and
(iv) would be available in a manner which is administratively feasible to the HMO.

NA

(11) Repealed effective July 1, 1987.

(12) Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans.

C

In Section XI.3(e)(f), pages 303-305, the applicant provides the existing and the proposed new square footage of each department/section proposed to be affected by the new construction and renovations at CGH along with the construction cost per square feet, as illustrated in the tables below:

| Department / Section | Actual Sq. Feet | New Construction Sq. Feet | Renovated Sq. Feet | Total Sq. Feet at Project Completion |
|---|---|---|---|---|
| Public Area | 4,866 | 17,099 | | 21,965 |
| Registration | 953 | 1,648 | | 1,648 |
| Outpatient Testing | 1,242 | 1,890 | | 1,890 |
| Conference Center | 1,249 | 2,551 | | 3,800 |
| Medical Oncology | * | 11,124 | | 11,124 |
| Infusion Pharmacy | * | 2,612 | | 2,612 |
| Surgery | 26,560 | 11,571 | 1,891 | 38,131 |
| Women's Services | 2,621 | 8,786 | | 8,786 |
| Med/Surg Unit | 3,993 | 18,009 | | 18,009 |
| PCU | 11,200 | 22,737 | | 22,737 |
| CCU | 3,596 | 8,214 | | 8,214 |
| Labor and Delivery | 11,642 | 2,581 | 1,360 | 14,223 |
| North Surg. Bed Unit | 26,729 | 3,357 | 1,642 | 30,086 |
| Radiation Oncology | 5,030 | | 5,030 | 5,030 |
| Dialysis | | | 282 | 282 |
| Outside of Scope | 127,377 | | | 127,377 |
| Repurposed Space** | | | | 23,323 |
| Total | 227,058 | 112,179 | 10,205 | 339,237 |

*Relocated from off campus site

** Vacated spaces that will be utilized for offices or other administration support purposes. No capital costs associated with this space.

| Department / Section | Estimated Sq. Feet | Beds | Construction Cost per Sq. Feet | Construction Cost per Bed | Total Cost per Sq. Feet | Total Cost Per bed |
|---|---|---|---|---|---|---|
| Public Areas | 17,099 | | $2,210 | | $3,081 | |
| Registration | 1,648 | | $22,927 | | $31,972 | |
| Outpatient Testing | 1,890 | | $19,991 | | $27,878 | |
| Conference Center | 2,551 | | $14,811 | | $20,654 | |
| Medical Oncology | 11,124 | | $3,397 | | $4,737 | |
| Infusion Pharmacy | 2,612 | | $14,465 | | $20,172 | |
| Surgery | 13,462 | | $2,807 | | $3,914 | |
| Women's Services | 29,376 | 26 | $1,286 | $1,453,196 | $1,794 | $2,026,511 |
| PCU | 22,737 | 30 | $1,662 | $1,259,436 | $2,317 | $1,756,310 |
| CCU | 11,571 | 10 | $3,265 | $3,778,309 | $4,554 | $5,268,929 |
| Labor and Delivery | 1,360 | | $27,782 | | $38,742 | |
| North Surg. Bed Unit | 1,642 | 4 | $23,010 | $9,445,772 | $32,088 | $13,172,321 |
| Radiation Oncology | 5,030 | | $7,512 | | $10,475 | |
| Dialysis | 282 | | $133,983 | | $186,841 | |
| **Total** | **122,384** | **70** | **$309** | **$539,758** | **$431** | **$752,704** |

Exhibit 23 contains a February 1, 2013 letter from the President of Earl Architects L.L.C, which states:

*"I have reviewed the scope of work and estimated costs for construction of Carteret General Hospital Corporation's proposed Certificate of Need application to renovate and expand Carteret General Hospital Corporation. All proposed new construction and renovations will be designed and built in compliance with all applicable federal, state and local construction and licensure requirements. … The construction cost estimate is based on preliminary concept plans for the proposed project shown on the attached line drawings and site plan. This estimate reflects the total site work, renovation cost, new construction cost, and other items necessary to complete the proposed project. Please see the table below.*

*Total Site Costs* *$2,236,949*

*Total Construction Cost* *$37,783,086*

*Total Miscellaneous Costs* *$12,669,250*

*Total All* *$52,689,285*

**Note: A $4,000,000 contingency is included in the Miscellaneous Costs.*

*I certify that I am a Registered Architect Licensed in the State of North Carolina. I also certify that, to the best of my knowledge, information, and belief, and based on historical*

*cost data, and our experience with costs on comparative health care projects, the above construction related costs of the proposed project are complete and correct."*

See Section XI.7, pages 306-307, for the applicant's energy efficiency and sustainability plan and water conservation plan. See Criterion (1) for additional discussion regarding energy conservation which is incorporated hereby as if set forth fully herein.

The applicant adequately demonstrates that the cost, design, and means of construction represent the most reasonable alternative for the proposed hospital expansion and renovation project. See Criterion (5) for discussion of costs and charges which is incorporated hereby by reference as if fully set forth herein. Therefore, the application is conforming to this criterion.

(13) The applicant shall demonstrate the contribution of the proposed service in meeting the health-related needs of the elderly and of members of medically underserved groups, such as medically indigent or low income persons, Medicaid and Medicare recipients, racial and ethnic minorities, women, and handicapped persons, which have traditionally experienced difficulties in obtaining equal access to the proposed services, particularly those needs identified in the State Health Plan as deserving of priority. For the purpose of determining the extent to which the proposed service will be accessible, the applicant shall show:

(a) The extent to which medically underserved populations currently use the applicant's existing services in comparison to the percentage of the population in the applicant's service area which is medically underserved;

C

In Section VI.12 and VI.13, pages 267-268, the applicant provides the payor mix during Calendar Year 2012 for the entire hospital and inpatient and outpatient services, as illustrated in the table below:

**Entire Hospital and Inpatient and Outpatient Services**

| **Payor Mix FFY 2012 Current Patient Days / Procedures as a Percent of Total Utilization** | | | |
|---|---|---|---|
| | Entire Hospital | Inpatient Services | Outpatient Services |
| Self Pay / Indigent / Charity | 12.2% | 5.3% | 13.4% |
| Medicare / Medicare Managed Care | 42.7% | 61.4% | 39.6% |
| Medicaid | 12.2% | 11.0% | 12.4% |
| Commercial Insurance | 24.3% | 15.3% | 25.8% |
| Other (Government and Tricare) | 8.6% | 7.0% | 8.8% |
| **Total** | **100.0%** | **100.0%** | **100.0%** |

In Section VI.2, page 260, the applicant states:

> *"CGH has a patient responsibility policy that asks patients to inform staff about their cultural, psychosocial, spiritual and personal values, beliefs and preferences. CGH policy is to honor these to the extent medically and physically possible."*

See Exhibit 37 for a copy of CGH's Patient's Rights Policy.

Further in Section VI.2, page 260, the applicant states:

> *"CGH does not deny needed medical care to any person based on age, race, ethnicity, creed, religion, culture, language, handicap, economic status, social status, or ability to pay."*

The Division of Medical Assistance (DMA) maintains a website which offers information regarding the number of persons eligible for Medicaid assistance and estimates of the percentage of uninsured for each county in North Carolina. The following table illustrates those percentages for Carteret County and statewide.

| | **Total # of Medicaid Eligibles as % of Total Population** | **Total # of Medicaid Eligibles Age 21 and older as % of Total Population** | **% Uninsured CY 2009 (Estimate by Cecil G. Sheps Center)** |
|---|---|---|---|
| Carteret | 14% | 6.6% | 19.5% |
| Statewide | 17% | 6.7% | 19.7% |

*More current data, particularly with regard to the estimated uninsured percentages, was not available.

The majority of Medicaid eligibles are children under the age of 21. This age group would not typically utilize the health services proposed in this application at the same rate as the older segments of the population.

Moreover, the number of persons eligible for Medicaid assistance may be greater than the number of Medicaid eligibles who actually utilize health services. The DMA website includes information regarding dental services which illustrates this point. For dental services only, DMA provides a comparison of the number of persons eligible for dental services with the number actually receiving services. The statewide percentage of persons eligible to receive dental services who actually received dental services was 48.6% for those age 20 and younger and 31.6% for those age 21 and older. Similar information is not provided on the website for other types of services covered by Medicaid. However, it is reasonable to assume that the percentage of those actually receiving other types of health services covered by Medicaid is less than the percentage that is eligible for those services.

The Office of State Budget & Management (OSBM) maintains a website which provides historical and projected population data for each county in North Carolina. In

addition, data is available by age, race or gender. However, a direct comparison to the applicant's current payor mix would be of little value. The population data by age, race or gender does not include information on the number of elderly, minorities or women utilizing health services. Furthermore, OSBM's website does not include information on the number of handicapped persons.

The applicant demonstrated that medically underserved populations currently have adequate access to the services offered at Carteret General Hospital. Therefore, the application is conforming to this criterion.

(b) Its past performance in meeting its obligation, if any, under any applicable regulations requiring provision of uncompensated care, community service, or access by minorities and handicapped persons to programs receiving federal assistance, including the existence of any civil rights access complaints against the applicant;

C

Recipients of Hill-Burton funds were required to provide uncompensated care, community service and access by minorities and handicapped persons. In Section VI.11, page 266, the applicant states:

*"CGH has no obligation under any applicable Federal regulation to provide uncompensated care. However, CGH provided $25,259,025 in charity care and bad debt during FY 2012. As a responsible member of the community, CGH will continue to provide uncompensated care."*

In Section VI.10(a), page 266, the applicant states:

*"No civil rights equal access complaints have been filed against CGH in the last five years."*

The application is conforming to this criterion.

(c) That the elderly and the medically underserved groups identified in this subdivision will be served by the applicant's proposed services and the extent to which each of these groups is expected to utilize the proposed services; and

C

In Section VI.14(a) and Section VI.15(a), pages 268-269, the applicant provides the projected payor mix for the second full fiscal year (2017) of operations for the proposal, as illustrated in the table below.

**Entire Hospital and Inpatient and Outpatient Services**

| **Payor Mix FFY 2017** |
|---|

| Projected Patient Days / Procedures as Percent of Total Utilization | | | |
|---|---|---|---|
| | Entire Hospital | Inpatient Services | Outpatient Services |
| Self Pay / Indigent / Charity | 12.2% | 5.3% | 13.4% |
| Medicare / Medicare Managed Care | 42.7% | 61.4% | 39.6% |
| Medicaid | 12.2% | 11.0% | 12.4% |
| Commercial Insurance | 24.3% | 15.3% | 25.8% |
| Other (Government and Tricare) | 8.6% | 7.0% | 8.8% |
| **Total** | **100.0%** | **100.0%** | **100.0%** |

In Section VI.15(b), pages 269, the applicant states:

*"CGH reasonably assumes that its payor mix for inpatient and outpatient services will not change from its historical pay mix."*

The applicant demonstrated that medically underserved populations will have adequate access to the proposed services. Therefore, the application is conforming with this criterion.

(d) That the applicant offers a range of means by which a person will have access to its services. Examples of a range of means are outpatient services, admission by house staff, and admission by personal physicians.

C

In Section VI.9(a), page 265, the applicant states:

*"Persons have access to services at CGH through the following means:*

- *Medical referrals by area physicians or physician extenders,*
- *Presenting in the CGH emergency department,*
- *Other acute care hospitals, and*
- *Other health care providers (health departments, skilled nursing facilities, home health agencies, rehabilitation facilities, etc.)"*

The applicant adequately demonstrated it offers a range of means by which patients will have access to the proposed services. Therefore, the application is conforming with this criterion.

(14) The applicant shall demonstrate that the proposed health services accommodate the clinical needs of health professional training programs in the area, as applicable.

C

In Section V.1(a) page 248, the applicant provides documentation that CGH will continue to accommodate the clinical needs of area health professional training programs. The list below illustrates the clinical training programs that currently utilize CGH:

- Barton College
- Carteret Community College
- Coastal Carolina Community College
- Craven Community College
- DeVry University
- Duke University
- East Carolina University
- Hampton University
- Indiana State University
- Lenoir Community College
- Martin Community College
- North Carolina Central University
- Pitt Community College
- The University of North Carolina at Charolotte

See Exhibit 34 for copies of CGH's training agreements.

Additionally, in Section V.1(a) page 248, the applicant states:

> *"CGH also has a research agreement with the National Council of State Boards of Nursing. CGH has agreed to participate in a research project … on Patient Safety and Quality Outcomes in the Hospital Setting."*

The information provided is reasonable and credible and supports a finding of conformity with this criterion.

(15) Repealed effective July 1, 1987.
(16) Repealed effective July 1, 1987.
(17) Repealed effective July 1, 1987.
(18) Repealed effective July 1, 1987.

(18a) The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost-effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for a service on which competition will not have a favorable impact.

The applicant currently provides acute care services in Carteret County that include inpatient, outpatient, women, intensive care and oncology services. In Section V.7, pages 255-256, the applicant discusses how the proposed project will foster competition by promoting cost effectiveness, quality, and access to services in the proposed service area. See Sections II, III, VI and VII of the application for additional discussion by the applicant about the impact of its proposal on cost effectiveness, quality and access to women, oncology, dialysis, inpatient and outpatient services.

The applicant adequately demonstrates that its proposal would enhance competition by promoting cost effectiveness, quality and access to the proposed services based on the information in the application and the following analysis:

1) Projected utilization of hospital services is based on reasonable, credible and supported assumptions. See Criterion (3) for discussion regarding historical and projected utilization which is incorporated hereby as if fully set forth herein. The applicant adequately demonstrates the financial feasibility of the proposal is based upon reasonable projections of costs and charges. See the Pro Formas and Criterion (5) for discussion regarding financial feasibility which is incorporated hereby as if fully set forth herein. Therefore, the applicant adequately demonstrates the cost effectiveness of its proposal.
2) The applicant projects to provide adequate access to medically underserved groups, including self pay / charity care patients, Medicare beneficiaries and Medicaid recipients. See Section VI of the application and Criterion (13c) for discussion regarding projected access by these groups which is incorporated hereby as if fully set forth herein.
3) The applicant adequately documents that it will provide quality care. See Sections II and VII of the application.

Therefore, the applicant adequately demonstrates that its proposal is conforming to this criterion.

(19) Repealed effective July 1, 1987.

(20) An applicant already involved in the provision of health services shall provide evidence that quality care has been provided in the past.

C

CGH is accredited by the Joint Commission and certified for Medicare and Medicaid participation. According to the files in the Acute and Home Care Licensure and Certification Section, Division of Health Service Regulation, no incidents occurred within the eighteen months immediately preceding the date of this decision, for which any sanctions or penalties related to quality of care were imposed by the State. Therefore, the application is conforming to this criterion.

(21) Repealed effective July 1, 1987.

(b) The Department is authorized to adopt rules for the review of particular types of applications that will be used in addition to those criteria outlined in subsection (a) of this section and may vary according to the purpose for which a particular review is being conducted or the type of health service reviewed. No such rule adopted by the Department shall require an academic medical center teaching hospital, as defined by the State Medical Facilities Plan, to demonstrate that any facility or service at another hospital is being appropriately utilized in order for that academic medical center teaching hospital to be approved for the issuance of a certificate of need to develop any similar facility or service.

C

The application is conforming with all applicable Criteria and Standards for Intensive Care Services, promulgated in 10A NCAC 14C .1200. The specific criteria are discussed below.

**SECTION .1200 – CRITERIA AND STANDARDS FOR INTENSIVE CARE SERVICES**

**10A NCAC 14C .1202INFORMATION REQUIRED OF APPLICANT**

(a) An applicant that proposes new or expanded intensive care services shall use the Acute Care Facility/Medical Equipment application form.

-C- The applicant used the Acute Care Facility/Medical Equipment application form.

(b) An applicant proposing new or expanded intensive care services shall submit the following information:

(1) the number of intensive care beds currently operated by the applicant and the number of intensive care beds to be operated following completion of the proposed project;

-C- In Section II.8, page 53, the applicant states CGH currently has eight intensive care beds. The applicant proposes to add two beds for a total of 10 intensive care beds upon project completion.

(2) documentation of the applicant's experience in treating patients at the facility during the past twelve months, including:

(A) the number of inpatient days of care provided to intensive care patients;

-C In Section II.8, page 53, the applicant reports that CGH provided 1,832 intensive care patient days of care for the twelve month period from December 2011 through November 30, 2012. Also see Exhibit 24 for additional information.

(B) the number of patients initially treated at the facility and referred to other facilities for intensive care services; and

-C- In Section II.8, page 53, the applicant states that 85 patients were initially treated at the facility and referred to other facilities for intensive care services during the period from December 2011 through November 30, 2012. The applicant notes CGH was unable to determine what unit those patients were assigned to after their transfer from CGH.

(C) the number of patients initially treated at other facilities and referred to the applicant's facility for intensive care services.

-C- In Section II.8, page 53, the applicant reports zero patients were transferred from other facilities for intensive care services.

(3) the projected number of patients to be served and inpatient days of care to be provided by county of residence by specialized type of intensive care for each of the first twelve calendar quarters following completion of the proposed project, including all assumptions and methodologies;

-C- See Exhibit 54 for the projected number of patients to be served and inpatient days of care by county of residence. The applicant reports that all intensive care beds are medical/surgical beds. See Section IV, pages 201-204 for the assumptions and methodologies used to project inpatient intensive days of care.

(4) data from actual referral sources or correspondence from the proposed referral sources documenting their intent to refer patients to the applicant's facility;

-C- See Exhibit 49 for 32 letters of support from physicians expressing their intent to refer patients CGH. Exhibit 54 contains documentation of projected utilization.

(5) documentation which demonstrates the applicant's capability to communicate effectively with emergency transportation agencies;

-C- In Section II.8, page 54, the applicant states, *"CGH has hospital- based central communication, Medical Control for all EMS calls. CGH paramedics are based at the hospital in the Emergency Department and staff both the communication center and accompany all emergency transports. Paramedics are in continuous contact with the hospital through Viper Radio, which supports both voice and data exchange. CGH provides paramedic support for emergency transport both to and from the hospital and has both voice and data connection with the hospital during the transport."*

(6) documentation of written policies and procedures regarding the provision of care within the intensive care unit, which includes the following:
(A) the admission and discharge of patients;
(B) infection control;
(C) safety procedures; and
(D) scope of services.

-C- See Exhibit 22 for documentation and written policies and procedures regarding the provision of care within the intensive care unit, including admission and discharge of patients, infection control, safety procedures, and scope of services.

(7) documentation that the proposed service shall be operated in an area organized as a physically and functionally distinct entity, separate from the rest of the facility, with controlled access;

-C- In Section II.8, page 55, the applicant states, *"The CCU will be separated with locked doors with controlled access. The unit will have a dedicated staff under the direction of Cynthia Rose, BSN, and has its own policies and procedures and Medical Director, Scott Ard, MD. Together, these features functionally separate the unit from the rest of the facility."* See Exhibit 7 for the line drawing for the of the proposed intensive care area.

(8) documentation to show that the services shall be offered in a physical environment that conforms to the requirements of federal, state, and local regulatory bodies;

-C- See Exhibit 23 for documentation from the architect that the services shall be offered in a physical environment that conforms to the requirements of federal, state, and local regulatory bodies.

(9) a floor plan of the proposed area drawn to scale; and

-C- See Exhibit VII, specify area A1.302, for a copy of the proposed floor plan drawn to scale.

(10) documentation of a means for observation by unit staff of all patients in the unit from at least one vantage point.

-C- In Section II.8, pages 55-56, the applicant states, *"The unit will be designed for direct nursing supervision of every patient at all times. All but two rooms will utilize alcoves to ensure visibility. All rooms will have transparent windows as well. The two rooms without alcoves are in a direct line of site with the nurses*

[sic] *stations. … The unit will be staffed to provide at minimum two to one staffing at all times."* See Exhibit VII for a copy of the proposed floor plan.

**10A NCAC 14C .1203PERFORMANCE STANDARDS**

(a) The applicant shall demonstrate that the proposed project is capable of meeting the following standards:

(1) the overall average annual occupancy rate of all intensive care beds in the facility, excluding neonatal and pediatric intensive care beds, over the 12 months immediately preceding the submittal of the proposal, shall have been at least 70 percent for facilities with 20 or more intensive care beds, 65 percent for facilities with 10-19 intensive care beds, and 60 percent for facilities with 1-9 intensive care beds; and

-C- In Section II.8, page 56, CGH reports that it provided 1,832 intensive care patient days of care during the twelve month period from December 2011 through November 30, 2012 for its eight intensive care beds for an occupancy rate of 62.7% (1,832 days / 365 / 8 = 62.7). This occupancy rate exceeds the 60% required for facilities with 1-9 intensive care beds.

(2) the projected occupancy rate for all intensive care beds in the applicant's facility, exclusive of neonatal and pediatric intensive care beds, shall be at least 70 percent for facilities with 20 or more intensive care beds, 65 percent for facilities with 10-19 intensive care beds, and 60 percent for facilities with 1-9 intensive care beds, in the third operating year following the completion of the proposed project.

-C- In Section II.8, page 56, and Section IV, page 189, CGH projects it will provide 2,578 intensive care patient days. The facility would operate 10 ICU beds and the occupancy rate would be 70.6%, which exceeds the 65% required for facilities with 10-19 intensive care beds.

(b) All assumptions and data supporting the methodology by which the occupancy rates are projected shall be provided.

-C- See Section IV, pages 189-247, for all assumptions and the methodology used by the applicant to support the data for projected occupancy rates.

**10A NCAC 14C .1204 SUPPORT SERVICES**

(a) An applicant proposing new or additional intensive care services shall document the extent to which the following items are available:

(1) twenty-four hour on-call laboratory services including microspecimen chemistry techniques and blood gas determinations;

(2) twenty-four hour on-call radiology services, including portable radiological equipment;
(3) twenty-four hour blood bank services;
(4) twenty-four hour on-call pharmacy services;
(5) twenty-four hour on-call coverage by respiratory therapy;
(6) oxygen and air and suction capability;
(7) electronic physiological monitoring capability;
(8) mechanical ventilatory assistance equipment including airways, manual breathing bag and ventilator/respirator;
(9) endotracheal intubation capability;
(10) cardiac pacemaker insertion capability;
(11) cardiac arrest management plan;
(12) patient weighing device for bed patients; and
(13) isolation capability.

-C- In Section II.8, pages 57-58, the applicant states that CGH currently provides all of the above listed services in its existing intensive care unit. The applicant further states that the proposed unit will have two rooms to serve as isolation rooms. Those rooms will be built in compliance with all applicable federal, state and local construction and licensure requirements.

(b) If any item in Subparagraphs (a)(1) - (13) of this Rule will not be available, the applicant shall document the reason why the item is not needed for the provision of the proposed services.

-NA- As an existing acute care facility, CGH currently provides all of the above referenced services.

**10A NCAC 14C .1205 STAFFING AND STAFF TRAINING**

The applicant shall demonstrate the ability to meet the following staffing requirements:

(1) nursing care shall be supervised by a qualified registered nurse with specialized training in the care of critically ill patients, cardiovascular monitoring, and life support;

-C- In Section II.8, page 59, the applicant documents that nursing staff will be supervised by, Cynthia Rose, a qualified registered nurse with specialized training in the care of critically ill patients, cardiovascular monitoring, and life support. See Exhibit 4 for a copy of Ms. Rose's resume.

(2) direction of the unit shall be provided by a physician with training, experience and expertise in critical care;

-C- In Section II.8, page 59, the applicant states, *"CGH ICU is under the direction of Scott Ard, MD, who is trained in Cardiology and has more than six years' experience working with critical care."*

(3) assurance from the medical staff that twenty-four hour medical and surgical on-call coverage is available; and

-C- In Section II.8, page 59, the applicant states that CGH presently provides and will continue to provide medical and surgical on call coverage 24-hours a day, seven days per week for the CCU. See Exhibit 26 for a letter from the Chief of the Medical staff attesting to the fact that CGH will continue to prove 24/7 coverage.

(4) inservice training or continuing education programs shall be provided for the intensive care staff.

-C- See Exhibit 15 for a copy of CGH's continuing education policy.