iATTACHMENT - REQUIRED STATE AGENCY FINDINGS

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

DECISION DATE: November 21, 2012

PROJECT ANALYST: Kimberly Randolph
ASSISTANT CHIEF: Martha J. Frisone

PROJECT I.D. NUMBER: J-8848-12/ Johnston Memorial Hospital Authority (JMHA) d/b/a Johnston Health/ Change of scope for Project I.D. #J-8105-08 (relocate 27 existing acute care beds from JMC-Smithfield to JMC-Clayton) by relocating 23 additional existing acute care beds from JMC-Smithfield to JMC-Clayton for a total of 50 acute care beds/ Johnston 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

Effective October 28, 2008, Johnston Memorial Hospital Authority (JMHA) was issued a certificate of need for Project I.D. #J-8105-08 (the original application) to:

> *"Relocate 27 acute care beds from the hospital's main campus in Smithfield to develop an additional campus of the hospital in Clayton with one dedicated C-section operating room, one gastrointestinal endoscopy room, two obstetric observation beds, four Level I bassinets, and clinical and ancillary services, including nuclear medicine service, cardiopulmonary, echocardiography, physical therapy, respiratory therapy, pharmacy and laboratory services, to complement the previously approved Project I.D. #J-7773-06, development of an emergency department and two operating rooms."*

The current Project I.D. #J-8848-12 (the change of scope application) is submitted by the applicant Johnston Memorial Hospital Authority (JMHA) d/b/a Johnston Health. JMHA

is a North Carolina Hospital Authority created, organized, and existing under the North Carolina Hospital Authorities Act as documented in Exhibit 2. The hospital is currently composed of two campuses, licensed as one facility, under the license issued to Johnston Memorial Hospital. The two campuses that compose Johnston Health are:

- Johnston Medical Center-Smithfield (JMC-Smithfield); and
- Johnston Medical Center-Clayton (JMC-Clayton).

JMC-Smithfield is the acute care campus in Smithfield, formerly known as Johnston Memorial Hospital. JMC-Clayton is the emergency and outpatient services campus in Clayton, formerly known as Clayton Medical Center.

Johnston Health seeks approval for a change of scope for the previously approved Project I.D. #J-8105-08. Specifically, in Section II, page 20, of the current application, the applicant proposes to:

- Relocate 23 additional existing acute care beds from JMC-Smithfield to JMC-Clayton (to be developed as 23 medical/surgical beds);
- Develop four unlicensed Labor, Delivery and Recovery beds and two additional Level I bassinets;
- Relocate four unlicensed observation beds within JMC-Clayton;
- Develop 14 additional emergency department treatment rooms;
- Develop six additional pre/post-operative and holding areas (two additional pre/post rooms and four additional post-anesthesia care unit rooms);
- Develop one special procedures room;
- Relocate the existing MRI scanner within JMC-Clayton; and
- Develop a mobile pad.

In Section I, page 7, the applicant states in footnote two that "…*Upon completion of the proposed project and previously approved Project I.D. #J-8105-08, Johnston Health will reduce the licensed acute care bed capacity operating at Smithfield by 50 beds (which includes the 23 beds associated with this project and the 27 beds associated with previously approved Project I.D. #J-8105-08), decreasing the total number of acute care beds (excluding psychiatric) at Smithfield to 129.*" The total number of acute care beds at JMC-Clayton, after completion of the proposed project, will be 50.

The applicant does not propose to increase the number of licensed beds in Johnston County, add any new health services, or acquire equipment for which there is a need determination in the 2012 State Medical Facilities Plan (2012 SMFP). Therefore, there are no need determinations in the 2012 SMFP that are applicable to this review.

However, Policy AC-5 and Policy GEN-4 are applicable to this review.

Policy AC-5

Policy AC-5: Replacement of Acute Care Bed Capacity is applicable to this review because the applicant proposes to construct new space for the 23 existing acute care beds which will be relocated from the JMC-Smithfield campus to the JMC-Clayton campus. This policy 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 Center 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%*

According to its *2012 Hospital License Renewal Application*, JMHA provided 38,747 total days of care in FY 2011 for an average daily census (ADC) of 106.1 patients (38,747 / 365 = 106.1). Therefore, pursuant to utilization targets in Policy AC-5 of the 2012 SMFP, the current target occupancy for JMC-Smithfield's 179 existing licensed acute care beds is 71.4 percent.

The following table shows JMC-Smithfield's historical acute care bed utilization as reported in the 2008-2012 SMFPs and Table 5A for the Proposed 2013 SMFP, and the applicant's projected acute care bed utilization through the first three years of the proposed project.

Fiscal Year	JMC-Smithfield Licensed Acute Care Beds	JMC-Smithfield Patient Days	Average Daily Census	Percent Change	Average Occupancy Rate
2006 Actual	155	38,110	104	N/A	66.5%
2007 Actual	157	38,576	105	1.2%	59.0%
2008 Actual	157	38,113	104	-1.2%	58.3%
2009 Actual	157	34,709	95	-8.9%	60.5%
2010 Actual	179	36,135	99	4.1%	55.3%
2011 Actual	179	38,100	104	5.4%	58.3%
2012 Projected	179	38,704	106	1.6%	59.2%
2013 Projected	179	39,318	108	1.6%	60.2%
2014 Projected	179	39,942	109	1.6%	61.1%
2015 Projected - Year 1	129	33,850	93	1.6%	71.9%
2016 Projected- Year 2	129	34,325	94	1.6%	72.9%
2017 Projected - Year 3	129	34,805	95	N/A	73.9%

* Source: Section III.2, pages 84 & 92.

As shown in the table above, JMC-Smithfield projects its 129 licensed acute care beds will operate above the target occupancy rate of 71.4 percent by the third operating year (FFY 2017) following completion of the project.

In Section I.9, page 8, the applicant states that following completion of this project, the total licensed bed capacity for Johnston Health is unchanged. The following table illustrates Johnston Health's total projected acute care bed utilization through the first three years of the proposed project, as provided by the applicant in Section III.2, page 92 of the application.

	2015	2016	2017
JMC-Smithfield Projected Patient Days	33,850	34,325	34,805
JMC-Clayton Projected Patient Days	9,616	11,081	12,613
Total Johnston Health Patient Days	43,465	45,406	47,418
Average Daily Census (ADC)	119	124	130
Johnston Health Licensed Acute Care Beds	179	179	179
Occupancy Rate	**66.5%**	**69.5%**	**72.6%**

As shown in the table above, Johnston Health projects the 179 licensed acute care beds, at JMC-Smithfield and JMC-Clayton combined [129 + 50 = 179], will operate above the target occupancy rate of 71.4 percent by the third operating year (FFY 2017) following completion of the project. 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

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 III.2, page 96, the applicant discusses its commitment to energy efficiency and includes a written memorandum from the architect in Exhibit 19, regarding the project's plan to assure improved energy efficiency and water conservation. The written memorandum describes the energy efficient envelope; glazing; vestibules; windows; and mechanical, plumbing, and electrical systems that will be used by the facility to maintain efficient energy operation. The applicant adequately describes the project's plan to assure improved energy efficiency; however, the applicant does not describe the project's plan to assure improved water conservation.

The application is consistent with Policy GEN-4 subject to the condition which appears at the end of this criterion.

The application is consistent with Policy AC-5 and Policy GEN-4 (as conditioned). Therefore, the application is conforming to this criterion subject to the following condition.

Prior to issuance of the Certificate of Need, Johnston Memorial Hospital Authority (JMHA) d/b/a Johnston Health shall provide to the Certificate of Need Section a

written statement describing the project's plan to assure improved water conservation.

(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

The applicant, Johnston Memorial Hospital Authority (JMHA), doing business as Johnston Health, is currently composed of two campuses, licensed as one facility, under the license issued to Johnston Memorial Hospital. The two campuses that compose Johnston Health are:

- Johnston Medical Center-Smithfield (JMC-Smithfield); and
- Johnston Medical Center-Clayton (JMC-Clayton).

JMC-Smithfield is the acute care campus in Smithfield, formerly known as Johnston Memorial Hospital. JMC-Clayton is the emergency and outpatient services campus in Clayton, formerly known as Clayton Medical Center.

JMC-Clayton proposes a change in scope for Project I.D. #J-8105-08, also known as Clayton Phase II, (relocate 27 existing acute care beds from JMC-Smithfield to JMC-Clayton), by relocating 23 additional existing acute care beds from JMC-Smithfield to JMC-Clayton, for a total of 50 acute care beds at JMC-Clayton upon completion of the proposed project. The 23 additional acute care beds will be added to the previously approved and operational outpatient services campus, JMC-Clayton, located at 2138 NC Highway 42 West in Clayton, NC. The proposed change of scope consists of new construction which will add two additional floors and 96,991 additional square feet to the existing JMC-Clayton footprint and will be developed in conjunction with the previously approved Clayton Phase II as detailed in Exhibit 6. In Section II.1, page 20, the applicant states the proposed project includes the components discussed below.

- Relocate 23 additional existing acute care beds – the applicant proposes to relocate 23 additional existing acute care beds from JMC-Smithfield's older portion of its campus (1980's construction). The beds will be medical/surgical, private rooms with private baths, which will support the inpatient surgery and medicine services provided at JMC-Clayton. Of the 46 total medical/surgical beds (23 approved and 23 proposed) to be relocated to JMC-Clayton, as illustrated in Exhibit 6, four will be developed on the first floor in a progressive care unit, which the applicant states over time could be converted to an intensive care unit. Fourteen beds will be

developed in new construction on the first floor, adjacent to obstetrics. Twenty-four beds will be located in 12-bed units on the second floor in new construction. The remaining four medical/surgical beds will be located on the third floor and developed in new construction within the nursing unit.

- Develop four unlicensed Labor Delivery and Recovery beds – the applicant proposes to develop four unlicensed Labor, Delivery, and Recovery beds. The applicant was previously approved to develop four licensed obstetrics beds. In Section II.1, page 22, the applicant explains the proposed change is based on the *"concerns regarding the potential for noise and physicians needing to travel to different ends of the unit for laboring patients."* The obstetrics unit will be developed in new construction on the first floor and will include:

  - Newborn nursery with six Level I bassinets (two proposed + four previously approved);
  - Two obstetrics observation beds (previously approved); and
  - C-Section room (previously approved).

- Relocate four unlicensed observation beds within JMC-Clayton – the applicant states in Section II.1, page 23, that four observation rooms are operational, support the Emergency Department (ED) and were approved and completed in Clayton Phase I (Project I.D. #J-7773-06). These four observation rooms will be relocated to the third floor and developed in new construction, in the nursing unit, with the four new medical/surgical beds.

- Develop 14 additional emergency department treatment rooms – the applicant states in Section II.1, page 24, due to JMC-Clayton's high ED utilization, 14 additional treatment rooms are needed. The ten ED treatment rooms and four observation rooms built during Clayton Phase I are all currently being utilized as ED treatment rooms. The observation rooms will be moved to the third floor, freeing up space for four ED treatment rooms on the first floor in existing space. The other ten ED treatment rooms will be developed in new construction on the first floor. A second entrance will be added to improve access, efficiency and patient flow.

- Develop six additional pre/post operative and holding areas – the applicant states in Section II.1, pages 25-26, that JMC-Clayton's pre/post operative area and post-anesthesia care unit (PACU) space is currently at capacity. The applicant reports that surgical volumes at JMC-Clayton include a significant number of short procedures, with patients spending more time in recovery than surgery. Additionally, two previously approved projects, the operational GI endoscopy room from Clayton Phase II (Project I.D. #J-8105-08) and the approved additional operating room (Project I.D. #J-8360-09), did not add any pre/post operative or PACU space. Consequently, JMC-Clayton proposes two additional pre/post rooms and four additional PACU rooms. The 2 proposed pre/post rooms along with the existing and operational 14 rooms will be used as staging/recovery rooms on the

first floor. The displaced administrative areas will be moved to the third floor and developed in new construction. The four additional PACU bays will be developed in new construction, next to the five existing and operational bays, for a total of nine PACU bays.

- Develop one special procedures room – the applicant states in Section II.1, page 27, that it will renovate existing space to develop a special procedures room for performing both inpatient and outpatient procedures. The special procedures room will displace the pharmacy, which will move to the third floor to be developed in new construction.

- Relocate the existing MRI scanner within JMC-Clayton – the applicant states in Section II.1, page 27, that the existing and operational fixed MRI scanner (Project I.D. #J-7900-07) will be moved to the first floor and developed in new construction, adjacent to the existing radiology department.

- Develop a mobile pad – the applicant states in Section II.1, page 27, that the mobile pad will be developed in new construction next to the relocated MRI scanner to provide easy access for mobile vendors.

Population to Be Served

In Section III.4, pages 98-99, the applicant provides the actual FFY 2011 JMC-Clayton patient origin data for the entire campus, ED services, and MRI services, as illustrated below.

FFY 2011 JMC-Clayton

County	Percent of Patients for Entire Campus*	Percent of Patients for ED Services	Percent of Patients for MRI Services
Johnston	62.1%	61.1%	74.6%
Wake	28.4%	29.7%	19.0%
Harnett	4.3%	4.4%	3.3%
Other **	5.2%	4.8%	3.1%
Total	100.0%	100.0%	100.0%

* Includes ED and ambulatory surgery patients.

** Includes the other North Carolina counties and other states listed on page 98.

There is no historical patient origin data for acute care or special procedures services, since JMC-Clayton does not currently offer these services.

In Section III.1, pages 41-42, the applicant states:

> *"…Johnston County is experiencing population growth at some of the highest rates in the state. However, as is often the case, the population growth is not*

distributed evenly throughout the county. Rather, population growth is centered in certain locations."

In Section III.1, page 41, the applicant states:

"…The ZIP codes that comprise the Clayton region in Johnston County are not only some of the most populated areas within the county, but are also projected to experience the highest growth rate in the coming years. Moreover, this area has grown faster than previously anticipated."

In Section III.1, page 42, the applicant states:

"While substantial growth has already occurred, there exists enough land to provide capacity for even further growth, and with this growth comes increased need for expanded healthcare services."

In Section III.1, pages 44-45, the applicant states that JMC-Clayton's actual experience indicates patients are being drawn from a broader geographic area than the service area originally projected for JMC-Clayton. The following table illustrates the ZIP code areas included in JMC-Clayton's actual service area.

JMC-Clayton Service Area

ZIP Code	City	County
27520	Clayton	Johnston
27527	Clayton	Johnston
27529	Garner	Wake & Johnston
27504	Benson	Johnston
27577	Smithfield	Johnston
27592	Willow Spring	Wake & Johnston

The applicant revised the JMC-Clayton service area to include the additional ZIP code areas, based on actual experience.

In Section III.1, page 47, the applicant states:

"In FFY 2011, JMC-Clayton treated 1,193 ED patients who were admitted to JMC-Smithfield for inpatient care and another 882 patients who were admitted to another inpatient facility. Thus, a total of 2,075 JMC-Clayton ED visits were admitted for inpatient care in FFY 2011. By comparison, previously approved application to relocate 27 beds to JMC-Clayton, Clayton Phase II, projected 1,992 total inpatient admissions (both emergency and elective admission) in the third project year, resulting in 85 percent occupancy of 27 beds."

In Section III.1, pages 47-48, the applicant states:

> *"In fact, the FFY 2011 emergency admissions from JMC-Clayton would result in a 76 percent occupancy of the previously approved 27 beds, well above the target occupancy rate of 66.7 percent (76 percent occupancy = 2,075 emergency admissions x 3.59 assumed average length of stay per Section III.1.(b) ÷ 365 days ÷ 27 beds)."*

In Section III.1, page 48, the applicant states that, according to Thomson data, over 100 patients from the service area are hospitalized daily. The applicant states a majority of the patients living in the service area are seeking care outside of Johnston County. The applicant also notes Johnston Health's market share has grown since 2010, likely based on JMC-Clayton's success.

The applicant adequately identifies the population to be served.

Demonstration of Need

In Section III.1, page 36, the applicant states that the unmet need served by the proposed project results from the following factors:

- *"Johnston County is one of the fastest growing counties in North Carolina.*
- *Within Johnston County, the Clayton area is growing faster than other areas of the county and that growth has exceeded what was expected in the previously approved CON application for a 27-bed hospital, Clayton Phase II.*
- *The success of JMC-Clayton's existing facility demonstrates that the previously approved 27 acute care beds would be inadequate to serve the needs of the population, and that a total of 50 beds are needed."*

In Section III.1, pages 37-39, and Exhibit 14, the applicant states that according to data from the North Carolina Office of State Budget and Management (NC OSBM), Johnston County ranked sixth in population growth over the ten years from 2000 – 2010. Johnston County is projected to rank ninth in projected growth rates and is projected to grow 17.1 percent from 2010 – 2020, yielding a compound annual growth rate (CAGR) of 1.6 percent.

In Section III.1, page 42, the applicant describes Clayton's location as sought after because of the following: close proximity to the ever-growing Research Triangle Park; lower housing costs; new local jobs; and vacant land which provides for the capacity to grow.

In Section III.1, pages 42-43, the applicant describes industries that have expanded operations or relocated to Clayton. Caterpillar Inc. plans to invest $33 million in its manufacturing plant in Clayton, creating 199 jobs over the next five years (Exhibit 16). Northeast Food, Inc. opened a $25.4 million bakery in 2011, employing 84 workers, plus Grifols and Novo Nordisk plan to expand their Clayton facilities.

In Section III.1, page 43, the applicant states that as Johnston County's population increases, healthcare needs will also increase and development trends indicate the County's growth will be localized in the JMC-Clayton service area.

In Section III.1, pages 43-46, the applicant states an expanded hospital in Clayton is needed based on the actual utilization at JMC-Clayton. On page 43, the applicant states, *"In JMC-Clayton's first year of operation, its ED treated 23,410 patients or nearly 250 percent more than the 9,399 ED visits projected in the original CON application for the development of its outpatient services, Clayton Phase 1."*

In Section III.1, page 47, the applicant states that the JMC-Clayton campus serves a broader geographic area than originally projected and expanded inpatient capacity is needed because of ED patients transferred to JMC-Smithfield for admission.

In Section III.1, page 49, the applicant states that Johnston Health's market share is increasing, demonstrating that an increasing number of Johnston County residents are choosing care in Johnston County when available, while surrounding counties do not have the capacity to handle the increasing demand. The applicant states:

> *"Thus, based on the current number of patients from the Clayton service area in need of inpatient care, the increasing desire of those patients to remain in the county for that care, and the decreasing availability of acute care beds in Wake County to accommodate those patients, the proposed project is needed to adequately meet the needs for acute care inpatient services in the service area."*

In Section III.1, page 83, the applicant states the proposed site is the most effective location for the following reasons:

- A majority of the population growth in Johnston County is in the Clayton area.
- JMC-Clayton needs additional acute care beds and the need can be met effectively by relocating existing acute care beds from JMC-Smithfield to JMC-Clayton.

The applicant adequately demonstrates the need to relocate additional acute care beds from JMC-Smithfield to JMC-Clayton.

Projected Utilization

In Section IV.1, page 108, the applicant projects utilization, by service component, for the first three fiscal years after completion of the project, as illustrated in the table below.

JMC-Clayton Projected Utilization FY 2014-2017

	10/01/2014-09/30/2015	10/01/2015-09/30/2016	10/01/2016-09/30/2017
Emergency Department			
# of Treatment Rooms	24	24	24

# of Visits	31,308	32,068	32,848
MRI Scanner			
# of Units	1	1	1
# of Procedures	1,896	2,005	2,118
# of Weighted Procedures	2,885	3,122	3,369
Acute Care Beds			
# of Beds	50	50	50
# of Discharges	2,615	3,014	3,431
# of Patient Days	9,616	11,081	12,613
Unlicensed Observation Beds			
# of Beds	4	4	4
# of Patients	939	962	985
Average Length of Stay (ALOS)	Less than 24 hours	Less than 24 hours	Less than 24 hours
Special Procedures			
# of Rooms	1	1	1
# of Procedures	1,025	1,182	1,345

Acute Care Bed Utilization

In Section III.1, pages 51-82, the applicant summarizes the assumptions and methodology used to project utilization of acute care beds at JMC-Clayton as follows.

Acute Care Utilization Methodology*	
Step	**Description**
1	Determine JMC-Clayton's service area.
2	Determine historic and projected acute care utilization for JMC-Clayton's service area.
3	Determine JMC-Clayton's projected acute care market share.
4	Determine JMC-Clayton's acute care discharges from its service area.
5	Determine JMC-Clayton's inmigration and total acute care discharges.
6	Determine JMC-Clayton's average length of stay (ALOS) and total acute care days.

* Source: Section III.1, page 51.

Step 1: Determine JMC-Clayton's service area.

On page 52, the applicant states JMC-Clayton has been highly utilized and has served a broader geographic area than was previously projected in Project I.D. #J-8105-08. On page 53, the applicant evaluates FFY 2011 utilization data for existing JMC-Clayton outpatient services, by ZIP code, to determine the actual geographic area served. The applicant states of the 28,358 emergency department (ED) visits at JMC-Clayton, 72.2 percent originated from the ZIP codes identified below.

FFY 2011 JMC-Clayton Service Area Patient Origin

ZIP Code	City	County	ED Visits	Percent of Total
27520	Clayton	Johnston	9,712	34.2%
27529*	Garner	Wake & Johnston	3,628	12.8%
27527	Clayton	Johnston	2,218	7.8%

27577	Smithfield	Johnston	1,732	6.1%
27592**	Willow Springs	Wake & Johnston	1,744	6.1%
27504	Benson	Wake & Johnston	1,441	5.1%
Other ZIP Codes***			7,883	27.8%
Total			28,358	100.0%

* 26.6% of the population of ZIP code 27529 is within Johnston County (Claritas Data).
** 42.4% of the population of ZIP code 27592 is within Johnston County (Claritas Data).
*** Other ZIP codes include other NC Counties and other States, as listed in Section III.3, pages 98-103.

The applicant assumes patient origin for ED visits and outpatient surgical cases is a predictor of patient origin for acute care service. Based on actual patient origin data for ED and outpatient surgical services provided at JMC-Clayton, the applicant adequately demonstrates the proposed service area is based on reasonable, credible, and supported assumptions.

Step 2: Determine historic and projected acute care utilization for JMC-Clayton's service area.

In Section III.1, page 55, the applicant states FFY 2011 Thomson data for the JMC-Clayton service area shows 14,779 acute care discharges (not adjusted) from the service area. The applicant adjusts the total acute care discharges to include only the Johnston County portion for ZIP codes 27529 and 27592, or 11,335 acute care discharges (adjusted) for the proposed JMC-Clayton service area.

On page 56, the applicant determined the compound annual growth rates (CAGRs) for each ZIP code area in the service area using Claritas data to projected acute care utilization for the JMC-Clayton service area. The applicant's base year was FFY 2011. Utilization was projected through FFY 2017. The following table illustrates the applicant's historical and projected acute care discharges for the JMC-Clayton service area.

ZIP Code	2011	2012	2013	2014	2015	2016	2017	CAGR**
27527	1,078	1,116	1,155	1,195	1,237	1,280	1,325	3.5%
27592*	510	525	540	556	572	589	606	2.9%
27520	3,269	3,353	3,439	3,528	3,618	3,711	3,807	2.6%
27529*	997	1,023	1,050	1,077	1,105	1,133	1,163	2.6%
27504	1,949	1,978	2,008	2,038	2,068	2,099	2,131	1.5%
27577	3,532	3,575	3,619	3,663	3,708	3,753	3,799	1.2%
Total* **	11,335	11,570	11,811	12,057	12,308	12,566	12,831	

* Adjusted to include Johnston County only.
** CAGRs based on 2012 to 2017 Claritas population growth data provided in Exhibit 15.
*** Excludes normal newborns, behavioral health and rehabilitation patients.

The applicant projects a total of 12,831 acute care discharges in the third operating year (FFY 2017) as shown above. On pages 56-57, the applicant states it utilized projected population growth rates to project acute care discharges for the following reasons:

- *"Over the past four years, the proposed service area has shown growth in inpatient utilization whereas utilization in many other geographies has declined due to the economic downturn."*
- Service area acute care discharges have been increasing and are showing a CAGR of 0.4% since 2009. *"Over this same time period, discharges in Wake County have increased by only 0.2% and have been declining since 2009."*
- Current utilization rates are not likely to continue as the economy improves.
- National health care reform could increase utilization in the short term, while focus on reducing admissions for preventable conditions might mitigate that growth in the long term.

The applicant adequately demonstrates it is reasonable to assume that acute care discharges will increase at the same rate population is projected to increase.

Step 3: Determine JMC-Clayton's projected acute care market share.

In Section III.1, pages 57-58, the applicant analyzed Johnston Health's current market share for ED services to project the acute care market share for JMC-Clayton. Because JMC-Clayton's and JMC-Smithfield's ED utilization is combined in the Thomson database for FFY 2011, rather than use the combined ED services reported by Thomson, the applicant used internal Johnston Health ED utilization data, as reported on the 2012 Hospital License Renewal Application (LRA), to calculate JMC-Clayton's market share of ED services for each ZIP code area in the service area. The applicant applied the market share percentage to the total ED services reported by Thomson to determine the market share percentages shown below.

JMC-Clayton ED Market Share*

ZIP Code	JMC-Clayton ED Services	Total ED Services	JMC-Clayton's Market Share
27520	9,193	15,322	60.0%
27527	2,035	4,111	49.5%
27592	1,638	5,127	32.0%
27529	3,410	16,093	21.2%
27504	1,353	7,998	16.9%
27577	1,654	16,208	10.2%
Total	19,283	64,859	**29.7%**

* Source: Section III.1, page 58.

In Section III.1, pages 58-59, the applicant compared JMC-Smithfield's existing market share of acute care discharges to ED services. The applicant states that, based on the calculations provided in Exhibit 17, JMC-Smithfield's service area (which comprises approximately 70-80 percent of its patients) has almost equal market shares for acute care discharges and ED services. Therefore, to project JMC-Clayton's acute care market share based on its ED market share, the applicant applied the JMC-Smithfield ratios to the current market share at JMC-Clayton.

JMC-Clayton's Acute Care Market Share*
Based on JMC-Smithfield's Market Share Ratios

	JMC-Clayton Market Share for ED Services	JMC-Smithfield's Market Share Ratio for Acute Care Discharges to ED Services	JMC-Clayton Market Share for Acute Care Discharges
Primary Service Area (PSA)	41.2%	0.97	40.1%
Secondary Service Area (SSA)	15.8%	0.81	12.9%

* Source: Section III.1, page 59.

The applicant states that although a 40.1 percent market share for acute care discharges for the primary service area and a 12.9 percent market share for acute care discharges for the secondary service area would be reasonable, the applicant performed additional calculations to be more "conservative."

In Section III.1, page 60, for the primary service area, the applicant calculated the average of the JMC-Smithfield market share for acute care discharges in the JMC-Clayton service area and the JMC-Clayton market share for acute care discharges based on the JMC-Smithfield ratio of acute care discharges as a percent of ED services, as shown below.

Primary Service Area Acute Care Market Share Assumption

JMC-Smithfield Market Share for Acute Care Discharges in JMC-Clayton Service Area *	JMC-Clayton Market Share for Acute Care Discharges as a Percent Based on JMC-Smithfield Ratio Market Share for Acute Care Discharges to ED Services	Average
21.2%	40.1%	30.6%

* Calculated in Exhibit 17 using FFY 2011 Thomson data.

In Section III.1, page 60, the applicant used a different methodology to calculate the secondary service area market share for acute care discharges. The applicant assumed a market share of 9.8 percent which was calculated by reducing the 12.9 percent market share shown on the previous page by 23.5 percent.

On page 61, the applicant assumes it will achieve the 30.6 percent market share for the primary service area and the 9.8 percent market share for the secondary service area in the third operating year (FFY 2017).

The applicant adequately demonstrates it is reasonable to project market share for acute care discharges based on the market share for existing ED services.

Step 4: Determine JMC-Clayton's acute care discharges from its service area.

In Section III.1, page 62, the applicant determined the number of acute care discharges from the JMC-Clayton service area as shown below.

JMC-Clayton Projected Acute Care Discharges

	2015	2016	2017
Primary Service Area Total Acute Care Discharges	5,960	6,125	6,294
Primary Service Area Market Share	24.5%	27.6%	30.6%
JMC-Clayton Primary Service Area Acute Care Discharges	1,461	1,689	1,929
Secondary Service Area Total Acute Care Discharges	6,349	6,442	6,537
Secondary Service Area Market Share	7.9%	8.9%	9.8%
JMC-Clayton Secondary Service Area Acute Care Discharges	500	571	644
Total JMC-Clayton Service Area Acute Care Discharges	1,962	2,260	2,573

The applicant projects 2,573 acute care discharges in the third operating year (FFY 2017), for residents of the primary and secondary service area, which is a 20.1 percent market share [2,573 / (6,294 + 6,537) = 0.201].

The applicant states Johnston Health is not adding acute care beds, just shifting existing licensed acute care beds from JMC-Smithfield to the fastest growing area of Johnston County.

In Section III.1, page 63, the applicant also states that the 20 percent projected market share in its service area is ten percent below JMC-Smithfield's existing market share for the service area. Additionally, the applicant assumes more than 50 percent of the patients expected to utilize the acute care beds at JMC-Clayton will be existing patients shifted from JMC-Smithfield.

In Section III.1, page 62, the applicant states *"JMC-Clayton believes its service area discharge projections are based on reasonable and conservative assumptions including its strong existing share in ED services."* The applicant states, in the JMC-Clayton service area, JMC-Smithfield currently serves 32 percent of ED visits while WakeMed Raleigh currently serves 28.3 percent of ED visits.

The applicant adequately demonstrates projected utilization by residents of the primary and secondary service area is based on reasonable, credible, and supported assumptions.

Step 5: Determine JMC-Clayton's inmigration and total acute care discharges.

In Section III.1, page 68, the applicant examined the actual inmigration rate for existing services provided at JMC-Clayton to determine JMC-Clayton's expected inmigration, as shown below.

FFY 2011 JMC-Clayton Inmigration for Existing Services

	ED Visits	OP* Surgery	OP* CT	OP* Mammo	OP* Ultrasound
Primary Service Area	54.9%	37.3%	57.0%	65.1%	54.4%
Secondary Service Area	17.3%	22.5%	16.1%	15.1%	16.8%

Inmigration	27.8%	40.3%	26.9%	19.8%	28.8%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

* Outpatient (OP).

The applicant states it assumes a 25 percent inmigration rate because all the existing services, except Mammography, exceed 25 percent.

To determine JMC-Clayton's total acute care discharges, the applicant applied the 25 percent projected inmigration rate to the acute care discharges projected in Step 4 as shown below.

JMC-Clayton Total Projected Acute Care Discharges

	2015	2016	2017
JMC-Clayton Service Area Acute Care Discharges (Step 4)	1,962	2,260	2,573
Inmigration (25% of Total)	654	753	858
Total	**2,615**	**3,014**	**3,431**

The applicant projects 3,431 acute care discharges in the third operating year (FFY 2017).

In FFY 2011, the applicant states 1,193 ED patients from JMC-Clayton were admitted to JMC-Smithfield and 882 ED patients from JMC-Clayton were admitted to other facilities. The applicant states that 1,193 ED admissions represent about 35 percent of JMC-Clayton's total projected acute care discharges for FFY 2017.

The applicant adequately demonstrates total projected utilization is based on reasonable, credible, and supported assumptions regarding projected growth, market share and inmigration.

Step 6: Determine JMC-Clayton's average length of stay (ALOS) and total acute care days.

In Section III.1, page 70, the applicant projects acute care discharges by service line based on Thomson FFY 2011 service-line data for the JMC-Clayton service area, as shown below.

Service-Line	Percent of Total	Projected Acute Care Discharges			ALOS	Projected Acute Care Patient Days		
		2015	2016	2017		2015	2016	2017
CV/Thoracic Surgery	0.3%	7	9	10	6.21	46	53	61
Cardiovascular Dis.	17.6%	461	532	604	3.54	1,632	1,880	2,140
General Medicine	22.5%	589	678	772	4.60	2,707	3,120	3,551

General Surgery	5.3%	139	161	183	8.06	1,123	1,294	1,472
Gynecology	1.7%	44	50	57	2.72	118	136	155
Nephrology/Urology	4.7%	122	140	160	5.03	613	706	804
Neuro Sciences	4.4%	116	133	152	5.13	594	684	779
Obstetrics	20.5%	536	618	703	2.12	1,134	1,307	1,487
Oncology	2.2%	59	68	77	5.55	326	376	428
Orthopedics	12.0%	315	363	413	4.38	1,379	1,589	1,808
Pulmonary Medical	8.7%	228	263	299	5.49	1,252	1,443	1,642
Total	100.0%	2,615	3,014	3,431	4.18	10,924	12,588	14,328

The applicant calculated a 4.18 day ALOS above, but assumes an ALOS at JMC-Clayton of only 3.68 days based on the following:

- The patient mix at JMC-Clayton is expected to be different from the patient mix at JMC-Smithfield.
- A higher number of lower acuity patients, such as obstetrics and general medicine, are expected to be served at JMC-Clayton, based on input from medical staff.
- JMC-Clayton is instituting initiatives and the use of observation to reduce ALOS.

On page 71, using the 3.68 day ALOS, the applicant projects utilization of acute care beds at JMC-Clayton as shown in the table below.

	2015	**2016**	**2017**
JMC-Clayton Acute Care Discharges	2,615	3,014	3,431
Average Length of Stay (ALOS)	3.68	3.68	3.68
JMC-Clayton Acute Care Patient Days	9,616	11,081	12,613
Average Daily Census (ADC)	26.30	30.40	34.60
Occupancy Rate (50 Beds)	52.70%	60.70%	69.10%

The applicant projects an occupancy rate of 69.1 percent in the third operating year (FFY 2017) which exceeds the target occupancy rate of 66.7 percent for a hospital with an ADC of 1-99.

Obstetrics Utilization

In Section III.1, page 71, the applicant proposes to develop four additional unlicensed labor, delivery and recovery (LDR) beds and states the four previously approved obstetric beds will be developed as post-partum beds.

The applicant assumes obstetrics discharges at JMC-Clayton will equal 20.5 percent of total acute care discharges at JMC-Clayton, which the applicant states is based on evaluation of obstetrics discharges as a percent of total acute care discharges at JMC-Smithfield and other North Carolina hospitals.

The applicant also used the actual ALOS at JMC-Smithfield of 2.12 days to calculate obstetrics days at JMC-Clayton based on the following:

- The same obstetricians practicing at JMC-Smithfield are likely to practice at JMC-Clayton.
- JMC-Smithfield uses the same LDR + P model being proposed at JMC-Clayton.

In Section III.1, page 72, the applicant projects the number of obstetric days, as shown in the table below.

	2015	2016	2017
JMC-Clayton Obstetrics Discharges	536	618	703
Average Length of Stay (ALOS)	2.12	2.12	2.12
JMC-Clayton Obstetrics Patient Days	1,134	1,307	1,487

Additionally, in Section III.1, pages 73-74, the applicant assumes obstetric patients will spend 12 hours or 0.5 days in a LDR. Therefore, the applicant reduced the ALOS in post-partum rooms by 0.5 days for a 1.62 day projected ALOS in a licensed post-partum room as shown in the table below.

JMC-Clayton Projected Post-Partum Utilization

	2015	2016	2017
JMC-Clayton Obstetrics Discharges	536	618	703
Average Length of Stay (ALOS)	1.62	1.62	1.62
JMC-Clayton Post- Partum Patient Days	866	998	1,136
Average Daily Census (ADC)	2.4	2.7	3.1
Occupancy Rate (4 Post-Partum Beds)	59.3%	68.4%	77.8%

The applicant assumes it will achieve a 77.8 percent occupancy rate for the four post-partum beds in the third operating year (FFY 2017).

Also, on page 74, the applicant proposes two additional Level I bassinets for a total of six Level I bassinets. The applicant states six Level I bassinets allow for two additional bassinets in case of twins.

The applicant adequately demonstrates the need for four unlicensed LDR beds and two Level I bassinets.

Observation Bed (Unlicensed) Utilization

In Section III.1, page 79, the applicant proposes to relocate four existing unlicensed observation beds, currently being used as ED treatment rooms, to the proposed observation unit on the third floor. The applicant states that in FFY 2012, April YTD, Johnston Health provided a total of 1,176 observation days and 44,618 ED visits or a ratio of 0.03 observation days per ED visit. The applicant states it applied this ratio to the projected FFY 2015-2017 ED visits. On page 79, the applicant projects 985 total observation days [32,848 x .03 = 985] at JMC-Clayton in the third operating year (FFY 2017), resulting in an ADC of 2.7 patients and an occupancy rate of 67.5 percent for the 4 unlicensed observation beds.

The applicant states the 67.5 percent occupancy rate is reasonable based on the American College of Emergency Physicians (ACEP) recommendation of four to six observation beds for an ED with 30,000 annual visits as shown in Exhibit 18.

The applicant adequately demonstrates the need to relocate the four existing unlicensed observation beds from the ED to new space on the third floor.

Emergency Department Utilization
The applicant states current utilization of the ED at JMC-Clayton supports the need to develop an additional 14 ED treatment rooms, for a total of 24 ED treatment rooms at JMC-Clayton. In Section III.1, page 75, the applicant states, 10 of the 14 proposed ED treatment rooms require capital expense, while 4 are exiting unlicensed observation beds currently being used for examination and treatment. On page 74, the applicant states *"In JMC-Clayton's first year of operation, its ED treated 23,410 patients or nearly 250 percent of the 9,399 ED visits projected in the original CON application for the development of its outpatient service."*
In Section III.1, pages 75-78, and in Exhibit 18, the applicant projects JMC-Clayton can effectively utilize 24 ED treatment rooms based the following:

- Utilization in 2012 (annualized) of the ED at JMC-Clayton is 29,964 visits, which is 1,249 visits per treatment room [29,964 visits / 24 treatment rooms = 1,249 visits per treatment room]. This includes only "chargeable" visits. Including non-chargeable visits (wound checks and removing sutures) the number of visits is 31,632, which is 1,318 visits per treatment room [31,632 / 24 treatment rooms = 1,318 visits per treatment room];
- The American College of Emergency Physicians (ACEP) recommends 1,154 to 1,500 ED visits per treatment room for an ED with 30,000 annual visits;
- The population of the service area is expected to increase 2.4 percent per year; and
- Adding inpatient services at JMC-Clayton will attract more patients to the ED.

On page 78, the applicant states WakeMed Garner's outpatient center (Project I.D. #J-8018-07), which is scheduled to open in 2013, will have only limited impact on the JMC-Clayton ED volumes.

The applicant projects JMC-Clayton's ED services will increase at 2.4 percent annually, the same rate the population of the service area is expected to increase, as shown in the table below.

	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
ED Visits	28,441	29,132	29,840	30,565	31,308	32,068	32,848
# of ED Treatment Rooms	14	14	14	14	24	24	24
ED Visits per Room	2,032	2,081	2,131	2,183	1,304	1,336	1,369

* The 14 existing ED treatment rooms include the 4 existing unlicensed observation beds currently being used as ED treatment rooms. Thus, the net increase is only 10 new ED treatment rooms.

The applicant adequately demonstrates projected utilization of the JMC-Clayton ED is based on reasonable, credible and supported assumptions.

The applicant adequately demonstrates the need to develop 14 additional ED treatment rooms at JMC-Clayton.

Pre/Post and PACU
In Section III.1, page 82, the applicant states that maintaining JMC-Clayton's existing ratio of 6.3 pre/post rooms and PACU bays per OR/GI endoscopy rooms [(14 pre/post rooms + 5 PACU bays) / (2 ORs + 1 GI endoscopy room) = 6.3] supports the need to develop two additional pre/post rooms and four PACU bays. The applicant states that it was previously approved to add one additional operating room in Project I.D. #J-8360-09. This creates the need for two additional pre/post rooms and four PACU bays in order to maintain the same ratio [(16 pre/post rooms + 9 PACU bays) / (3 ORs + 1 GI endoscopy room) = 6.3].

The applicant adequately demonstrates the need for two additional pre/post rooms and four PACU bays.

Special Procedures Room Utilization
In Section III.1, page 81, the applicant states *"In FFY 2011, JMC-Smithfield provided 1,861 inpatient special procedures or a ratio of 0.21 per discharge. In the same year, JMC-Smithfield provided 1,544 outpatient special procedures or a ratio of 0.83 per inpatient special procedures."* The applicant used these ratios to project the number of special procedures to be performed at JMC-Clayton.

Based on 3,431 projected discharges in FFY 2017, the applicant projects 735 inpatient special procedures in the third operating year (FFY 2017). The applicant projects 610 outpatient special procedures [735 x 0.83 = 610.05] in the third operating year (FFY 2017). The applicant projects a total of 1,345 special procedures in the third operating year (FFY 2017) [735 + 610 = 1345], which is an average of 3.68 special procedures per day [1345 / 365 = 3.68].

The applicant adequately demonstrates the need for one special procedures room at JMC-Clayton.

In summary, the applicant adequately identifies the population to be served and demonstrates the need the population proposed to be served has for the proposed project. Therefore, the application is conforming to this criterion.

(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.

C

The applicant proposes to relocate 23 existing acute care beds from the JMC-Smithfield campus to the JMC-Clayton campus, a distance of approximately 15 miles. In Section III.7, page 105, the applicant states that residents from JMC-Smithfield and the surrounding area will have the same access to services, while residents in the JMC-Clayton service area will have improved access to services and access to inpatient services in Clayton. The applicant expects that over 50 percent of the patients who will utilize the acute care beds in Clayton are currently traveling to Smithfield. These patients will have improved access to acute care services closer to where they live.

On page 84, the applicant states, *"Johnston Health projects total acute care utilization for all of its beds to equal 72.6 percent in FFY 2017 or project year three. This exceeds its target occupancy of 71.4 percent in the third year of the proposed project."* The following table illustrates utilization of acute care beds at JMC-Smithfield following completion of this project (relocate 23 acute care beds) and Project I.D. #J-8105-08 (relocate 27 acute care beds).

Projected JMC-Smithfield Acute Care Discharges After Shift to JMC-Clayton

	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
JMC-Smithfield Acute Care Days Prior to Shift	38,100	38,704	39,318	39,942	40,576	41,219	41,873
Acute Care Days Shifting to JMC-Clayton	0	0	0	0	-6,726	-6,895	-7,068
JMC-Smithfield Acute Care Days After Shift to JMC-Clayton	38,100	38,704	39,318	39,942	33,850	34,325	34,805
Average Daily Census (ADC)	104	106	108	109	93	94	95
JMC-Smithfield Beds*	179	179	179	179	129	129	129
Percent Occupancy	58.3%	59.2%	60.2%	61.1%	71.9%	72.9%	73.9%

* Source: Section III, pages 91-92.

As shown in the table above, in the third operating year (FFY 2017), the applicant projects that the 129 acute care beds remaining at JMC-Smithfield will operate at 73.9 percent of capacity. In Section III.2, pages 84-93, the applicant provides the assumptions and methodology used to project utilization of acute care beds at both JMC-Smithfield and JMC-Clayton. Projected utilization is based on reasonable, credible, and supported assumptions. See Criterion (3) for discussion regarding projected utilization which is incorporated hereby as if fully set forth herein.

The applicant adequately demonstrates that the needs of the population presently served will be adequately met following the relocation of the 23 existing acute care beds from the JMC-Smithfield campus to the JMC-Clayton campus. Therefore, the application is conforming to this criterion.

(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.

C

In Section III.3, pages 96-97, the applicant describes the alternatives considered, including maintaining the status quo. The applicant states that maintaining the status quo is not an effective alternative because the demand for additional capacity at JMC-Clayton has been increasing steadily. The applicant indicates that Clayton Phase II was proposed before the outpatient services campus (Clayton Phase 1) was operational. Once utilization data was available from JMC-Clayton, Johnston Health was able to identify a need to expand the scope of Clayton Phase II. *"Given the high utilization of services at the outpatient medical center, maintaining the status quo, which would entail developing Clayton Phase II as proposed and approved, would not meet projected demand."* The applicant states the most effective way to utilize resources for project planning, development, and construction is to develop the proposed changes in conjunction with the previously approved Clayton Phase II.

Furthermore, the application is conforming or conditionally conforming to all other statutory review criteria. Therefore, the application is approvable. An application that cannot be approved is not an effective alternative.

The applicant adequately demonstrates that its proposal is the most effective or least costly alternative to meet the need for additional capacity at JMC-Clayton now and in the near future. Therefore, the application is conforming to this criterion and approved subject to the following conditions:

1. **Johnston Memorial Hospital Authority (JMHA) d/b/a Johnston Health shall materially comply with all representations made in Project I.D. # J-8105-08, Project I.D. # J-8360-09 and Project I.D. #J-8848-12. In those instances in which representations conflict, Johnston Memorial Hospital Authority (JMHA) d/b/a Johnston Health shall materially comply with the last-made representation.**
2. **Johnston Memorial Hospital Authority (JMHA) d/b/a Johnston Health shall not acquire, as part of this project, Project I.D. # J-8105-08, or Project I.D. # J-8360-09, any equipment that is not included in the project's proposed capital expenditure in Section VIII of the application and that would otherwise require a certificate of need.**
3. **Johnston Memorial Hospital Authority (JMHA) d/b/a Johnston Health shall acknowledge acceptance of and agree to comply with**

all conditions stated herein to the Certificate of Need Section in writing prior to issuance of the certificate of need.

(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.2, pages 142-143, the applicant projects that the total capital cost for this project will be $20,111,770. The applicant states the total capital cost for all 3 projects is projected to be $50,382,549, which includes the previously approved capital cost of $30,270,779, as shown below.

JMC-Clayton Capital Costs

	Previously Approved*	Proposed	Incremental Change
Subtotal Site Costs	$899,251	$908,365	$9,114
Subtotal Construction Costs	$14,640,022	$30,429,369	$15,789,347
Subtotal Miscellaneous Project Costs	$14,731,506	$19,044,815	$4,313,309
Total Capital Cost of the Project	$30,270,779	$50,382,549	$20,111,770

* Includes Project I.D. #J-8105-08, JMC-Clayton's proposal to add 27 beds, Clayton Phase II, and Project I.D. #J-8360-09, the addition of one OR.

In Section IX.1, page 148, the applicant projects there will be no start-up or initial operating expenses. In Section VIII.3, pages 143-144, the applicant states that the total capital cost ($50,382,549) will be funded with a Bond Issue.

Exhibit 26 contains a June 15, 2012 letter signed by the President and Chief Executive Officer of Johnston Health, which states:

> *"Johnston Health intends to fund the proposed JMC-Clayton expansion project as well as the previously approved 27-bed project (Project I.D. #J-8105-08) and single OR project (Project I.D. #J-8360-09) with USDA or FHA financing as documented in a letter provided by Stephen Pack at Armadale Capital, Inc."*

Exhibit 26 also contains a June 11, 2012 letter from Armadale Capital, Inc., indicating an interest and tentative commitment to provide financing. The letter acknowledges Johnston Health's intent to pursue USDA financing for the project with FHA supplemental loan financing as a fall-back. Exhibit 27 includes the combined financial statements and independent auditor's report for Johnston Memorial Hospital Authority d/b/a Johnston Health. As of September 30, 2011, Johnston Health had total assets of $255,143,769; $5,431,016 in cash and cash equivalents; and $76,359,329 in 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. The applicant projects revenues will exceed operating expenses in each of the first three operating years of the project, except for Outpatient Special Procedures, as illustrated in the tables below.

JMC-Clayton Inpatient Services*	**Project Year 1** 10/1/14 - 09/30/15	**Project Year 2** 10/1/15 - 09/30/16	**Project Year 3** 10/1/16 – 09/30/17
Projected # of Patients	2,615	3,014	3,431
Projected Average Charge (Gross Patient Revenue / Projected # of Patients)	$30,445	$31,967	$33,566
Gross Patient Revenue	$79,625,774	$96,347,805	$115,147,613
Deductions from Gross Patient Revenue	$57,492,152	$70,326,362	$84,968,769
Net Patient Revenue	$22,133,622	$26,021,443	$30,178,844
Total Expenses	$17,059,373	$19,759,460	$21,711,148
Net Income	$5,074,249	$6,261,983	$8,467,696

* Source: Forms C, D, & E, pages 164-166.

JMC-Clayton ED Services*	**Project Year 1** 10/1/14 - 09/30/15	**Project Year 2** 10/1/15 - 09/30/16	**Project Year 3** 10/1/16 – 09/30/17
Projected # of Patients	31,308	32,068	32,848
Projected Average Charge (Gross Patient Revenue / Projected # of Patients)	$2,116	$2,221	$2,333
Gross Patient Revenue	$66,236,850	$71,238,575	$76,617,994
Deductions from Gross Patient Revenue	$50,123,174	$54,493,071	$59,247,746
Net Patient Revenue	$16,113,676	$16,745,504	$17,370,248
Total Expenses	$8,996,970	$9,664,850	$9,789,376
Net Income	$7,116,706	$7,080,654	$7,580,872

* Source: Forms C, D, & E, pages 167-169.

JMC-Clayton Outpatient Special Procedures*	**Project Year 1** 10/1/14 - 09/30/15	**Project Year 2** 10/1/15 - 09/30/16	**Project Year 3** 10/1/16 - 09/30/17
Projected # of Procedures	465	536	610
Projected Average Charge (Gross Patient Revenue / Projected # of Procedures)	$1,556	$1,634	$1,716
Gross Patient Revenue	$723,710	$875,695	$1,046,564
Deductions from Gross Patient Revenue	$595,336	$727,344	$877,719
Net Patient Revenue	$128,374	$148,351	$168,845
Total Expenses	$289,914	$312,611	$336,476

Net Income	$(161,540)	$(164,260)	$(167,632)

* Source: Forms C, D, & E, pages 173-175.

The applicant also projects a positive net income for the entire facility in each of the first three operating years of the project.

JMC-Clayton Entire Facility*	**Project Year 1** 10/1/14 - 09/30/15	**Project Year 2** 10/1/15 - 09/30/16	**Project Year 3** 10/1/16 - 09/30/17
Gross Patient Revenue	$196,251,675	$222,568,819	$251,762,080
Deductions from Gross Patient Revenue	$145,772,531	$167,004,587	$190,856,245
Net Patient Revenue	$50,479,144	$55,564,232	$60,905,835
Total Expenses	$48,083,305	$52,540,396	$55,521,952
Net Income	$2,395,839	$3,023,836	$5,383,883

* Source: Form B, page 163.

The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs and charges. See pages 176-178 for the assumptions regarding costs and charges. See Criterion (3) for discussion regarding projected utilization which is incorporated hereby as if fully set forth herein. The applicant adequately demonstrates that the financial feasibility of the proposal is based upon reasonable projections of costs and revenues.

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

The applicant owns and operates the only hospital in Johnston County, which is composed of two campuses, JMC-Clayton and JMC-Smithfield. The campuses are approximately 15 miles apart. The applicant proposes to transfer 23 existing acute care beds from JMC-Smithfield to JMC-Clayton, for a total of 50 acute care beds at JMC-Clayton. The applicant is not proposing to add any additional beds, equipment, or new services in Johnston County.

In Section III.1, pages 36-83, the applicant adequately demonstrates that developing a total of 50 acute care beds at JMC-Clayton will improve geographic access to inpatient services and meet the demand in the Clayton area, which is based on current utilization. The applicant projects an occupancy rate of 69.1 percent in the third operating year (FFY 2017), as compared to the 2012 SMFP target rate of 66.7 percent for facilities with an average daily census of 99 patients or less. The demand for inpatient beds in the Clayton service area is currently being met by transferring patients to JMC-Smithfield or other facilities outside Johnston County. Additionally, in Section III.6, page 104, the applicant

states there are no other providers of acute care, ED, MRI, or special procedures services in the Clayton area.

The applicant adequately demonstrates the proposed project would not result in the unnecessary duplication of existing or approved health service capabilities or facilities in Johnston County. Therefore, 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

The following table illustrates the current and projected staffing at JMC-Clayton during the second operating year (FFY 2016), as reported by the applicant in Section VII.1, pages 134-135.

JMC-Clayton Current and Projected Staffing

	Current Staff FFY 2012	**Projected Staff Year 2 FFY 2016**
Functional Area and Position	**Total # of Full Time Equivalent (FTE) Positions**	**Total # of Full Time Equivalent (FTE) Positions**
Emergency Department (ED)		
Director	1.00	1.00
Clinical Coordinator	1.00	2.00
RN-Staff	23.30	27.50
Patient Care Assistant/Registrar	6.50	10.70
Total ED	31.80	40.20

MRI		
MRI Tech	3.00	3.50
Inpatient		
Director		2.00
Registered Nurse		59.10
Aides and Attendants		15.20
In-house Supervisor		2.70
Surgical Technicians for C-Section Rooms		4.20
Unit Secretary		14.60
Lactation Consultant		0.50
Total Inpatient		98.30
Special Procedures Room		
Special Procedures RN		1.00
Radiology Technician		1.00
Total Special Procedures		2.00
Total Staff	34.80	144.00

In Section VII.3, page 135, the applicant states that "*Based on past hiring experience and current requests, Johnston Health expects the staff will be available as needed.*"
Exhibit 22 contains a June 15, 2012 letter signed by the current Chief of Staff at Johnston Health documenting his intent to continue serving in his role, following completion of the proposed project, until his successor is appointed.

The applicant adequately demonstrated the availability of sufficient health manpower and management personnel to provide 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

In Section II.2, page 29, the applicant identifies the necessary ancillary and support services required and states that *"As the proposed project involves a previously approved service, all ancillary and support services needed are already approved and under development."* The applicant provides supporting documentation in Exhibit 7. The applicant discusses coordination with the existing health care system in Sections V.2 – V.6, pages 111-115. The applicant provides supporting documentation in Exhibits 8, 9, 21, 22, and 31. The information provided in those sections and exhibits is reasonable and credible and supports a finding of conformity with 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.4, page 156, the applicant proposes to construct a 96,991 square foot addition and renovate 6,551 square feet of the existing JMC-Clayton building located at 2138 NC Highway 42 West, Clayton, NC, for a total of 153,938 square feet after completion, as shown in the table below.

JMC-Clayton Current and Proposed Square Footage

Existing Building Square Feet	New Addition Square Feet	Renovated Square Feet	Project Completion Square Feet
56,947	96,991	6,551	153,938

Exhibit 5 contains the line drawing for Clayton Phase 1 and Exhibit 6 contains the proposed line drawing.

Exhibit 30 contains a June 4, 2012 letter from Johnson Johnson Crabtree Architects certifying "*We have developed the construction cost estimate in conjunction with TA*

Loving, a local Construction Management Company who constructed the original buildings on this campus. The estimated construction cost, including site work for the Project, would be $31,337,734 and is based on preliminary estimated provide by TA Loving dated June 1, 2012." This estimate is consistent with Section VIII, page 140, which shows total construction contract costs of $31,337,734; including anticipated site development costs of $908,365 and construction costs of $30,429,369.

In Section XI.4, page 156, the applicant estimates the following construction costs per square foot.

JMC-Clayton Estimated Construction Cost per Square Foot

Estimated Square Feet*	Construction Cost per Square Foot	Construction Cost per Bed**	Total Cost Per Square Foot	Total Cost Per Bed***
103,542	$293.88	$608,587.38	$486.59	$1,007,650.90

* Includes 96,991 square feet of new construction and 6,551 square feet of renovation.
** Using construction costs of $30,429,369.
*** Using total construction costs of $50,382,549 (not just the costs of the proposed project).

In Exhibit 19, the applicant provides a May 22, 2012 Memorandum summarizing the energy efficient and sustainable design features of the proposed facility, which include energy efficient vestibules, windows, mechanical/plumbing systems, electrical, and sustainable construction materials.

The applicant adequately demonstrates that the cost, design and means of construction represent the most reasonable alternative for the project as proposed and that the construction project will not unduly increase the costs and charges of providing health services. See Criterion (5) for discussion of costs and charges, which is incorporated hereby as if set forth fully 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

The following table illustrates the current payor mix for JMC-Clayton, as reported by the applicant in Sections VI.12 - VI.13, pages 127-128.

Payor Category	Entire Campus Patient Days/ Procedures as Percent of Total Utilization*	Emergency Services Patient Days/ Procedures as Percent of Total Utilization	Outpatient MRI Patient Days/ Procedures as Percent of Total Utilization
Self Pay/ Indigent/ Charity	22.4%	23.6%	3.8%
Medicare / Medicare Managed Care	15.9%	14.4%	39.2%
Medicaid	24.6%	25.0%	4.2%
Managed Care / Commercial Insurance	32.2%	32.0%	49.2%
Other **	4.8%	5.0%	3.6%
Total	100.0%	100.0%	100.0%

* Includes all services provided on the campus.
** Includes other Government payors and worker's compensation.

In Section VI.4, page 120, the applicant states "*No patient will be refused care because of his or her inability to pay.*" The applicant provides supporting documentation in Exhibit 23.

In Section VI.2, page 119, the applicant states, "*Johnston Health provides access to care to all patients regardless of age, race, national or ethnic origin, disability, gender, income or immediately ability to pay.*" The applicant states Johnston Health provides 10 percent of gross revenue in bad debt and charity care; 62 percent of total patient days to Medicare beneficiaries; and 17 percent of patient days to Medicaid patients.

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, as shown in the following table. More current data, particularly with regard to the estimated uninsured percentages, was not available.

	Total # of Medicaid Eligibles as % of Total Population	Total # of Medicaid Eligibles Age 21 and older as % of Total Population	% Uninsured CY 2008-2009 (Estimate by Cecil G. Sheps Center)
Johnston County	17%	6.7%	20.0%

Statewide	17%	6.7%	19.7%

The majority of Medicaid eligibles are children under the age of 21. This age group does not utilize the same health services at the same rate as older segments of the population, particularly the hospital services proposed by the applicant.

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 was 45.9 percent for those age 20 and younger and 30.6 percent 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 demonstrates that medically underserved populations currently have adequate access to services available at JMC-Clayton. 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

In Sections VI.11, page 126, the applicant states, *"…With the exception of federal EMTALA laws, Johnston Health has had no other obligation under federal regulations (such as provisions under the Hill-Burton Act) to provide uncompensated care."* On page 127, the applicant states, *"As stated previously, Johnston Health does not discriminate based on age, race, national or ethnic origin, disability, gender, or*

income." In Section VI.10, page 126, the applicant states that no civil rights access complaints have been filed against the facility 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

The following table illustrates the projected payor mix during the second operating year (FFY 2016) as reported by the applicant in Sections VI.14 - VI.15, pages 129-131.

Payor Category	Inpatient Acute Care Discharges	Emergency Services	Outpatient MRI	Outpatient Special Procedures
Self Pay/ Indigent/ Charity	4.3%	23.6%	3.8%	1.9%
Medicare / Medicare Managed Care	51.2%	14.4%	39.2%	48.4%
Medicaid	13.5%	25.0%	4.2%	16.7%
Managed Care / Commercial Insurance	28.9%	32.0%	49.2%	29.5%
Other **	2.1%	5.0%	3.6%	3.5%
Total	100.0%	100.0%	100.0%	100.0%

** Includes other governmental payors and worker's compensation.

In Section VI.2, page 119, the applicant describes the policies for providing access to the proposed facility as follows:

> *"Johnston Health does not discriminate against low-income persons, racial or ethnic minorities, women, handicapped persons, the elderly or other undeserved persons, including the medically indigent. Johnston Health provides access to care to all patients regardless of age, race, national or ethnic origin, disability, gender, income, or immediate ability to pay. Patients are admitted and services are rendered in compliance with:*
>
> 1. *Title VI of Civil Rights Act of 1963*
> 2. *Section 504 of Rehabilitation Act of 1973*
> 3. *The Age Discrimination Act of 1975*
> 4. *Americans with Disabilities Act"*

The applicant demonstrates that medically underserved populations will continue to have adequate access to the facility's services. Therefore, the application is conforming to 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, page 125, the applicant documents the range of means by which patients have access to the services provided at JMC-Clayton. The information provided is reasonable and credible and supports a finding of conformity 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, pages 110-111, and referenced exhibits, Johnston Health documents that it accommodates the clinical needs of health professional training programs in the area and that it will continue to do so. 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.

C

The applicant owns and operates the only hospital in Johnston County, which is composed of two campuses, JMC-Clayton and JMC-Smithfield. The campuses are approximately 15 miles apart. The applicant proposes to transfer 23 existing acute care beds from JMC-Smithfield to JMC-Clayton, for a total of 50 acute care beds at JMC-Clayton. The

applicant is not proposing to add any additional beds, equipment, or new services in Johnston County.

In Section V.7, pages 115-117, the applicant specifically discusses the impact of the proposed project on competition in the service area as it relates to promoting cost-effectiveness, quality, and access. See also Sections II, III, V, VI and VII. The information provided by the applicant in each of these sections is reasonable, credible and adequately demonstrates that the expected effects of the proposal on competition include a positive impact on cost-effectiveness, quality and access to acute care services in Johnston County.

This determination is based on a review of the information in the sections of the application referenced above and the following analysis:

- The applicant adequately demonstrates the need to relocate 23 additional existing acute care beds from JMC-Smithfield to JMC-Clayton for a total of 50 acute care beds, based on current and projected utilization at Johnston Health (see Section III of the application);
- The applicant adequately demonstrates that the proposal is a cost-effective alternative to meet the need (see Section III of the application);
- The applicant has and will continue to provide quality services (see Section II and VII of the application);
- The applicant has and will continue to provide adequate access to medically underserved populations (see Section III and VI of the application); and
- The proposal will have a positive impact on competition by providing patients with increased access to quality services (see Section II and VI of the application).

Therefore, the application 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

Johnston Health is accredited by the Joint Commission and certified by CMS for Medicare and Medicaid participation. According to the records in the Acute and Home Care Licensure and Certification Section, DHSR, no incidents have occurred at Johnston Health 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.

NA

The Criteria and Standards for Acute Care Beds, promulgated in 10A NCAC 14C .3800, are not applicable to this review since the applicant is not proposing to develop new acute care beds. Johnston Health is proposing to relocate existing acute care beds from JMC-Smithfield to JMC-Clayton.