HEALTH SERVICES AND DEVELOPMENT AGENCY
DECEMBER 13, 2017
APPLICATION SUMMARY

NAME OF PROJECT:	Chattanooga-Hamilton County Hospital Authority d/b/a Erlanger Sequatchie Valley Regional Hospital
PROJECT NUMBER:	CN1709-027
ADDRESS:	17399 Rankin Avenue Dunlap (Sequatchie County), TN 37367
LEGAL OWNER:	Chattanooga-Hamilton County Hospital Authority dba Erlanger Health System 975 East 3rd Street Chattanooga, TN 37403
OPERATING ENTITY:	N/A
CONTACT PERSON:	Joseph Winick (423) 778-8088
DATE FILED:	September 11, 2017
PROJECT COST:	$32,653,836.00
FINANCING:	Tax Exempt Bonds
PURPOSE FOR FILING:	Relocation of an existing twenty-five (25) bed critical access hospital, and the initiation of 3.0T magnetic resonance imaging (MRI) services

DESCRIPTION:

Chattanooga-Hamilton County Hospital Authority d/b/a Erlanger Sequatchie Valley Regional Hospital a 25 bed critical access hospital located at 71 Wheelertown Avenue, Pikeville, (Bledsoe County), TN proposes to relocate and replace its existing 46 year old facility with a new 61,500 SF facility that will be located approximately 20 miles south at 17399 Rankin Avenue Dunlap, TN in adjoining Sequatchie County. The applicant also seeks approval for the initiation of MRI services. It will acquire a 3.0 Tesla magnetic resonance imaging (MRI) scanner. The new hospital's licensed bed complement will not change and will

continue to offer the same services currently provided, which includes acute, emergency, swing bed, and outpatient services.

A companion application (CN1709-028) will also be heard for a new provider based emergency department in Pikeville (Bledsoe County), Tennessee to replace the existing provider based emergency department located at 16931 Rankin Avenue, Dunlap (Sequatchie County), Tennessee.

In effect these applications swap locations (counties, not specific sites) for the parent hospital and satellite ED. The 25 bed critical access hospital located at Erlanger Bledsoe will relocate to Sequatchie County and be renamed Erlanger Sequatchie Valley Regional Hospital. The current Erlanger Bledsoe Hospital emergency department (satellite of Erlanger Bledsoe Hospital) will move from Sequatchie County to Bledsoe County and be renamed to Erlanger Sequatchie Valley Regional Hospital, Satellite ED. The following chart illustrates the proposed changes.

	Current Name/ Location	**Proposed Name/ Location**
25 Bed Critical Access Hospital	**Erlanger Bledsoe Hospital** 71 Wheelertown Avenue, Pikeville (**Bledsoe County**), TN	**Erlanger Sequatchie Valley Regional Hospital** 17399 Rankin Avenue Dunlap (**Sequatchie County**), TN
Satellite Emergency Department	**Erlanger Bledsoe Hospital, Satellite ED** 17399 Rankin Avenue Dunlap (**Sequatchie County**), TN	**Erlanger Sequatchie Valley Regional Hospital, Satellite ED** 533 US Highway 127 Bypass Pikeville (**Bledsoe County**), TN

Note to Agency members: The Social Security Act permits certain small, rural hospitals to enter into a swing bed agreement, under which the hospital can use its beds, as needed, to provide either acute or skilled nursing (SNF) care. As defined in the regulations, a swing bed hospital is a hospital or critical access hospital (CAH) participating in Medicare that has CMS approval to provide post-hospital SNF care and meets certain requirements.

SERVICE SPECIFIC CRITERIA AND STANDARD REVIEW

CONSTRUCTION, RENOVATION, EXPANSION, AND REPLACEMENT OF HEALTH CARE INSTITUTIONS

1. **For relocation or replacement of an existing licensed health care institution:**

a. The applicant should provide plans which include costs for both renovation and relocation, demonstrating the strengths and weaknesses of each alternative

Renovation is not an option because of the age and condition of the hospital's physical plant. Renovation of the existing 46 year old facility would require expensive upgrades and renovation to sustain operation of the hospital to meet current space requirement standards.

It appears that this criterion has been met.

b. The applicant should demonstrate that there is an acceptable existing or projected future demand for the proposed project.

Erlanger Bledsoe Hospital's licensed bed occupancy (acute inpatient and swing beds) was 25.4% in 2016. With a newly designed modern hospital, the applicant projects the inpatient occupancy (acute inpatient and swing beds) to grow to 60.1% and 61.3% in Year 1 and Year 2, respectively, following completion of the project. The applicant projects 2,523 MRI scans in Year One and 2,539 scans in Year Two on a new 3.0 Tesla MRI. In addition, the applicant is proposing a new surgical suite consisting of 2 operating rooms and 1 procedure room. The applicant is projecting 312 operating rooms cases and 104 procedure room cases in Year One.

It appears that this criterion has been met.

MAGNETIC RESONANCE IMAGING SERVICES

1. Utilization Standards for non-Specialty MRI Units.

a. An applicant proposing a new non-Specialty stationary MRI service should project a minimum of at least 2160 MRI procedures in the first year of service, building to a minimum of 2520 procedures per year by the second year of service, and building to a minimum of 2880 procedures per year by the third year of service and for every year thereafter.

The applicant projects 2,523 MRI scans in Year One (2020), 2,539 MRIs in Year Two (2021), and 2,553 MRI scans in Year 3 (2022).

It appears that this criterion has been partially met. It appears that the applicant is on track to meet the MRI standard for the first two years of the project, however, the minimum of 2,880 procedures for Year Three will not be met.

b. Providers proposing a new non-Specialty mobile MRI service should project a minimum of at least 360 mobile MRI procedures in the first year of service per day of operation per week, building to an annual minimum of 420 procedures per day of operation per week by the second year of service, and building to a minimum of 480 procedures per day of operation per week by the third year of service and for every year thereafter.

c. An exception to the standard number of procedures may occur as new or improved technology and equipment or new diagnostic applications for MRI units are developed. An applicant must demonstrate that the proposed unit offers a unique and necessary technology for the provision of health care services in the Service Area.

d. Mobile MRI units shall not be subject to the need standard in paragraph 1 b if fewer than 150 days of service per year are provided at a given location. However, the applicant must demonstrate that existing services in the applicant's Service Area are not adequate and/or that there are special circumstances that require these additional services.

e. Hybrid MRI Units. The HSDA may evaluate a CON application for an MRI "hybrid" Unit (an MRI Unit that is combined/utilized with medical equipment such as a megavoltage radiation therapy unit or a positron emission tomography unit) based on the primary purposes of the Unit.

The criteria identified in items 1.b – 1.e above are not applicable to the applicant's proposed project.

2. Access to MRI Units. All applicants for any proposed new MRI Unit should document that the proposed location is accessible to approximately 75% of the Service Area's population. Applications that include non-Tennessee counties in their proposed Service Areas should provide evidence of the number of existing MRI units that service the non-Tennessee counties and the impact on MRI unit utilization in the non-Tennessee counties, including the specific location of those units located in the non-

Tennessee counties, their utilization rates, and their capacity (if that data are available).

The defined service area for the proposed project includes all of Sequatchie, the southern portion of Bledsoe County, and the Eastern portion of Grundy County. These counties comprise up to 75% of the service area population.

It appears that this criterion has been met.

3. Economic Efficiencies. All applicants for any proposed new MRI Unit should document that alternate shared services and lower cost technology applications have been investigated and found less advantageous in terms of accessibility, availability, continuity, cost, and quality of care.

Currently, there are no MRI units located within the service area.

It appears that the applicant will meet this criterion.

4. Need Standard for non-Specialty MRI Units.

A need likely exists for one additional non-Specialty MRI unit in a Service Area when the combined average utilization of existing MRI service providers is at or above 80% of the total capacity of 3600 procedures, or 2880 procedures, during the most recent twelve month period reflected in the provider medical equipment report maintained by the HSDA. The total capacity per MRI unit is based upon the following formula:

Stationary MRI Units: 1.20 procedures per hour x twelve hours per day x 5 days per week x 50 weeks per year = 3,600 procedures per year

Mobile MRI Units: Twelve (12) procedures per day x days per week in operation x 50 weeks per year. For each day of operation per week, the optimal efficiency is 480 procedures per year, or 80 percent of the total capacity of 600 procedures per year.

Prior to this application, there have not been any MRI services available in the proposed service area.

It appears that this criterion is not applicable.

5. Need Standards for Specialty MRI Units.

This standard does not apply to this application.

6. Separate Inventories for Specialty MRI Units and non-Specialty MRI Units.

This standard does not apply to this application.

7. Patient Safety and Quality of Care. The applicant shall provide evidence that any proposed MRI Unit is safe and effective for its proposed use.

a. The United States Food and Drug Administration (FDA) must certify the proposed MRI Unit for clinical use.

The applicant notes MRI units are standard in the industry and the proposed 3.0T MRI has been in use for more than 5 years.

It appears that this criterion has been met.

b. The applicant should demonstrate that the proposed MRI Procedures will be offered in a physical environment that conforms to applicable federal standards, manufacturer's specifications, and licensing agencies' requirements.

The applicant provided an Architect's letter stating the proposed MRI procedures will meet the above requirements.

It appears that this criterion has been met.

c. The applicant should demonstrate how emergencies within the MRI Unit facility will be managed in conformity with accepted medical practice.

The applicant provided MRI Safety procedures to appropriately care for emergent patients.

It appears that this criterion has been met.

d. The applicant should establish protocols that assure that all MRI Procedures performed are medically necessary and will not unnecessarily duplicate other services.

The applicant has protocols that ensure all MRI procedures performed are medically necessary and will not unnecessarily duplicate other services.

It appears that this criterion has been met.

e. An applicant proposing to acquire any MRI Unit or institute any MRI service, including Dedicated Breast and Extremity MRI Units, shall demonstrate that it meets or is prepared to meet the staffing recommendations and requirements set forth by the American College of Radiology, including staff education and training programs.

Erlanger Health System currently operates 5 MRI units at other locations and is prepared to meet all American College of Radiology (ACR) standards including those regarding staffing recommendations and requirements.

It appears that this criterion will be met.

f. All applicants shall commit to obtain accreditation from the Joint Commission, the American College of Radiology, or a comparable accreditation authority for MRI within two years following operation of the proposed MRI Unit.

All existing Erlanger MRI services are accredited by the American College of Radiology and will also apply to the proposed MRI service.

It appears that this criterion has been met.

g. All applicants should seek and document emergency transfer agreements with local area hospitals, as appropriate. An applicant's arrangements with its physician medical director must specify that said physician be an active member of the subject transfer agreement hospital medical staff.

The applicant will have a direct affiliation with Erlanger Medical Center in Chattanooga for emergency transfers. The

service contract with Tennessee Interventional and Imaging Associates stipulates that all physicians must be an active member of the medical staff.

It appears that this criterion has been met.

8. The applicant should provide assurances that it will submit data in a timely fashion as requested by the HSDA to maintain the HSDA Equipment Registry.

The applicant indicates that appropriate data is currently submitted to the HSDA Equipment Registry by Erlanger Health System and that data for the proposed MRI unit will be submitted accordingly as well.

It appears that this criterion has been met.

9. In light of Rule 0720-11.01, which lists the factors concerning need on which an application may be evaluated, and Principle No. 2 in the State Health Plan, "Every citizen should have reasonable access to health care," the HSDA may decide to give special consideration to an applicant:

a. Who is offering the service in a medically underserved area as designated by the United States Health Resources and Services Administration; or

The applicant states that Bledsoe, Grundy, and Sequatchie Counties are designated as medically underserved areas.

It appears that this criterion has been met.

b. Who is a "safety net hospital" or a "children's hospital" as defined by the Bureau of TennCare Essential Access Hospital payment program; or

Erlanger Medical Center is classified by the Bureau of TennCare as a "safety net hospital" and also as a "children's hospital". Erlanger Sequatchie Valley Regional Hospital, as a member institution of Erlanger Health System will have a direct affiliation with Erlanger Medical Center in Chattanooga (Hamilton County).

It appears that this criterion has been met.

c. Who provides a written commitment of intention to contract with at least one TennCare MCO and, if providing adult services, to participate in the Medicare program; or

The applicant contracts with all four TennCare MCOs and participates in the Medicare program.

It appears that this criterion has been met.

d. Who is proposing to use the MRI unit for patients that typically require longer preparation and scanning times (e.g., pediatric, special needs, sedated, and contrast agent use patients). The applicant shall provide in its application information supporting the additional time required per scan and the impact on the need standard.

The applicant plans to serve children who may need sedation that requires approximately 30 to 45 minutes longer in preparation time. The applicant anticipates the impact on the need standard may be to reduce the full need standard to something less than 3,600, when children are served.

It appears that this criterion has been met.

SERVICE SPECIFIC CRITERIA AND STANDARD REVIEW

ACUTE CARE BED NEED SERVICES

1. The following methodology should be used and the need for hospital beds should be projected four years into the future from the current year:

Using the latest utilization and patient origin data from the Joint Annual Report of Hospitals and the most current population projection series from the Department of Health, perform the following:

Step 1

Determine the current Average Daily Census (ADC) in each county.

$$ADC = \frac{\text{Patient Days}}{365 \text{ (366 in leap year)}}$$

Step 2

To determine the service area population (SAP) in both the current and projected year:

a. Begin with a list of all the hospital discharges in the state, separated by county, and showing the discharges both by the county where the patient actually lives (resident discharges), and the county in which the patient received medical treatment.

b. For the county in which the hospital is (or would be) located (service county), determine which other counties have patients who are treated in your county (resident counties). Treat all of the discharges from another state as if that whole state were a single resident county. The total discharges of residents from another state should be calculated from state population estimates and the latest National Center for Health Statistics southeastern discharge rates.

c. For each resident county, determine what percent of their total resident discharges are discharged from a hospital in your service county (if less than one percent, disregard).

d. For each resident county, apply the percentage determined above to the county's population (both projected and current). Add together the resulting numbers for all the resident counties and add that sum to the projected and current population of your service county. This will give you the service area population (SAP).

Step 3

Determine projected Average Daily Census as:

$$\text{Projected ADC} = \text{Current ADC} \times \frac{\text{Projected SAP}}{\text{Current SAP}}$$

Step 4

Calculate Projected Bed Need for each county as:

Projected Need = Projected ADC + 2.33 x Projected ADC

However, if projected occupancy:

$$\text{Projected Occupancy:} \quad \frac{\text{Projected ADC}}{\text{Projected Need}} \times 100$$

is greater than 80 percent, then calculate projected need:

$$\text{Projected Need} = \frac{\text{Projected ADC}}{.8}$$

Tennessee Department of Health's (TDH) Acute-Care Bed Need Projections Report for 2017 and 2022 indicates the applicant's 3-county service area will have a licensed bed need of 11 acute care beds in CY2022 (as reflected in the TDH project summary). However, the need of 11 beds is the result of the limitation of the Tennessee bed need methodology which allocates bed need by the county in which the hospital is located. Since the Erlanger Bledsoe Hospital is located in Bledsoe County and no hospitals are located in either Grundy or Sequatchie County, the Tennessee methodology only recognizes acute care bed need for Bledsoe County.

The applicant used an alternative estimate that would represent all 3 counties in the service area based on Tennessee Hospital Association inpatient utilization data which concluded an estimated bed need (adjusted) of 24.4 beds in 2022. A summary table of the calculation is found on page 35 of the original application.

It appears that the applicant meets this criterion.

2. New hospital beds can be approved in excess of the "need standard for a county" if the following criteria are met:

   a) All existing hospitals in the projected service area have an occupancy level greater than or equal to 80 percent for the most recent Joint Annual Report. Occupancy should be based on the number of licensed beds that are staffed for two consecutive years.

   This criterion is not applicable.

b) All outstanding CON projects for new acute care beds in the proposed service area are licensed.

This criterion is not applicable.

c) The Health Facilities Commission may give special consideration to acute care bed proposals for specialty health service units in tertiary care regional referral hospitals.

This criterion is not applicable.

Staff Summary

The following information is a summary of the original application and all supplemental responses. Any staff comments or notes, if applicable, will be in bold italics.

Erlanger Sequatchie Valley Regional Hospital proposes a state-of-the art modern 25 bed replacement critical access hospital for residents of Sequatchie County. A new hospital will enable the applicant to take care of patients locally rather than having to travel to out of county for inpatient acute care, skilled nursing, surgical and MRI services.

If a new replacement hospital and companion application for a satellite emergency department is approved, it is anticipated the vacated Erlanger Bledsoe Hospital will be renovated and adapted for use by the Bledsoe County Nursing Home, which is currently attached to the existing hospital facility.

An overview of the project is provided on pages 4-8 of the original application.

Need

- The construction of a new modern 25 licensed bed critical access hospital will provide for a more energy efficient replacement hospital that allows for expansion, meets current standards for healthcare and building codes, and provides needed services such as MRI and surgery in a rural area.
- The life span of the hospital's physical plant is past its date of replacement.
- All 25 licensed beds may be used as "swing beds" which can accommodate either acute care or skilled nursing patients. The swing beds will help to keep patients in their home community.

Ownership

- The applicant, Erlanger Sequatchie Valley Regional Hospital, is owned by Chattanooga-Hamilton County Hospital Authority d/b/a the Erlanger Health System.
- If approved, Erlanger Sequatchie Valley Regional Hospital will maintain its 25 bed critical access hospital status and affiliation in the Erlanger Health Services Network that includes Erlanger Medical Center.
- Erlanger Medical Center is a 788 licensed hospital beds located at 975 East Third Avenue, Chattanooga (Hamilton County), TN that is part of the Erlanger Health System.
- Erlanger Health Systems is also associated with the Vanderbilt Health Affiliated Network.

Facility Information

- The proposed new 61,500 square foot hospital will be located on a 15.95 acre parcel of land.
- A floor plan drawing of the surgical suite is included in Attachment A-6-B.
- Erlanger Bledsoe Hospital is a 25 bed licensed critical-access hospital. The Joint Annual Report for 2016 indicates the applicant staffs all 25 beds. Licensed bed occupancy and staffed bed occupancy was 25.4%.

The following provides the Department of Health's definition of the two bed categories pertaining to occupancy information provided in the Joint Annual Reports:

- *Licensed Beds - The maximum number of beds authorized by the appropriate state licensing (certifying) agency or regulated by a federal agency. This figure is broken down into adult and pediatric beds and licensed bassinets (neonatal intensive or intermediate care bassinets).*
- *Staffed Beds - The total number of adult and pediatric beds set up, staffed and in use at the end of the reporting period. This number should be less than or equal to the number of licensed beds.*

Note to Agency members: All of Erlanger Bledsoe Hospital's twenty-five beds are designated as swing beds. The 2016 licensed occupancy is 25.4% when the acute inpatient bed days of 652 and skilled nursing bed days of 1,662 totaling 2,314 inpatient days are used to calculate licensed occupancy.

Service Area Demographics

Erlanger Sequatchie Valley Regional Hospital's declared primary service area is Bledsoe, Grundy, and Sequatchie Counties.

- The total population of the proposed service area is estimated at 42,888 residents in calendar year (CY) 2017 increasing by approximately 2.4% to 43,938 residents in CY 2021.
- The proposed service area 65 and older population will increase 11.4% from 8,350 in 2017 to 9,303 in 2021. The statewide 65 and older population will increase 17.9% between 2017 and 2021 from 1,078,446 to 1,227,838.
- The overall Tennessee statewide population is projected to grow by 4.2% from 2017 to 2021.
- The latest 2017 percentage of the 3 county service area population enrolled in the TennCare program is approximately 26.1% as compared to the statewide enrollment proportion of 20.5%.

Service Area Historical Utilization

Erlanger Bledsoe Hospital is the only hospital in Bledsoe, Grundy, and Sequatchie Counties.

The following two tables will display inpatient and outpatient historical and projected utilization for Year One (2020) and Year Two (2021) of the proposed project.

Erlanger Bledsoe Hospital and Erlanger Sequatchie Velley Regional Hospital Inpatient Historical and Projected Utilization

Year	Acute Days	SNF Days	Total Patient Days	Licensed Beds	Licensed Occupancy %
Erlanger Bledsoe Hospital (Bledsoe County)					
2014	561	973	1,534	25	16.8%
2015	783	1,221	2,004	25	22%
2016	652	1,662	2,314	25	25.4%
Erlanger Sequatchie Valley Regional Hospital (Sequatchie County)					
2020	2,002	3,482	5,484	25	60.1%
2021	2,042	3,552	5,594	25	61.3%
% Change 14-20	+257%	+258%	+258%	25	

Source: CN1709-027, Page 80

The table above reflects the following:

- Acute inpatient days are projected to increase from 561 in 2014 to 2,002 in 2020 reaching a licensed occupancy percentage of approximately 60.1%.
- SNF days are projected to increase 258% from 973 days in 2014 to 3,482 days in Year One (2020).

- Total inpatient days (acute inpatient and Swing beds) are projected to increase 258% from 1,534 days in 2014 to 5,584 days in Year One (2019).

Projected Surgical Cases

	No. of Rooms	Year 1 IP Cases	Year 1 OP Cases	Year 1 Total Cases	Year IP Cases	Year 2 OP Cases	Year 2 Total Cases
Operating Rooms	2		273	273		312	312
Procedure Rooms	1		91	91		104	104
Total Surgical Suite	3		364	364		416	416

- Outpatient surgeries are projected to increase 14.2% from 364 in Year One to 416 Year Two.
- The applicant will not be providing inpatient surgical care.

Projected Imaging Scans

Department	**Year 1 Scans**	**Year 2 Scans**
Magnetic Resonance Imaging (MRI)	2,523	2,539

- Total MRI (3.0T) scans are projected to be at 2,523 cases in Year One increasing to 2,539 scans in Year Two.

Erlanger Sequatchie Valley and Satellite ED Historical and Projected Utilization

	Actual			Projected		
Year	**2014**	**2015**	**2016**	**Yr. 1**	**Yr.2**	**Yr. 5**
Main Campus Visits	6,105	5,341	5,546	11,000	11,220	11,907
Main Campus Rooms	5	5	5	9	9	9
Main Campus Visits/ Room	1,221.0	1,068.2	1,109.2	1,222.2	1,246.7	1,323
Satellite Visits	3,842	9,581	10,229	5,600	5,678	5,918
Satellite Rooms	5	5	5	7	7	7
Satellite Visits Per Room	768.4	1916.2	2,045.8	800.00	811.1	845.4
Total Visits	9947	14,922	15,775	16,600	16,898	17,825
Total Rooms	10	10	10	16	16	16
Total Visits Per Room	**994.7**	**1492.2**	**1577.5**	**1,037.5**	**1,056.1**	**1,114.1**

The previous table reflects the following:

- Utilization of the Erlanger Bledsoe Hospital Main ED decreased by approximately 9.1% from 6,105 ED visits in 2014 to 5,546 total ED visits in 2016.
- By Year 1 of the proposed project, the applicant expects total main ED visits to be at 11,000 at the proposed Erlanger Sequatchie Valley Regional Hospital (Sequatchie County), a 98% projected increase from 5,526 total main ED visits at Erlanger Bledsoe Hospital (Bledsoe County) in 2016.
- The applicant projects a 5.6% increase in the proposed Satellite ED's utilization from 5,600 ED visits in Year 1 to 5,918 visits in Year Five.
- The combined utilization of the main ED and proposed satellite ED is expected to increase by approximately 7.4% from 16,600 total combined visits in Year 1 to 17,825 visits (1,114 visits/room) in Year 5.

Project Cost

Major costs are:

- Construction Cost-$19,958,500 or 61.2% of total cost.
- Moveable Equipment-$3,681,034 or 11.3% of total cost.
- For other details on Project Cost, see the Project Cost Chart on page 82 of the original application.
- Average total construction cost is expected to be $324.52 per square foot for new construction, which is above the median cost of $289.85 but below

the 3rd quartile cost of of $394.94/SF of previously approved hospital projects from 2014-2016.

Statewide Hospital Construction Cost per Square Foot
2014-2016

	Renovated Construction	New Construction	Total Construction
1st Quartile	$160.66/sq. ft.	$260.18/sq. ft.	$208.97/sq. ft.
Median	$218.86/sq. ft.	$289.85/sq. ft.	$274.51/sq. ft.
3rd Quartile	$287.95/sq. ft.	$394.94/sq. ft.	$330.50/sq. ft.

Source: HSDA Applicant's Toolbox

Historical Data Chart (excludes Satellite ED)
Project Only

- According to the Historical Data Chart Erlanger Bledsoe Hospital experienced positive Free Cash Flow (Net Balance + Depreciation) for the three most recent years reported: $708,829 for 2014; $681,832 for 2015; and $1,482,613 for 2016.

Total Hospital (includes Satellite ED)

- According to the Historical Data Chart Erlanger Bledsoe Hospital experienced positive Free Cash Flow (Net Balance + Depreciation) for the three most recent years reported: $745,448 for 2014; $653,510 for 2015; and $1,504,683 for 2016.

Projected Data Chart (excludes Satellite ED)
Project Only

- 842 admissions are projected in Year 1 (2020) and 859 in Year 2 (2021).
- The applicant is projecting positive Free Cash Flow (Net Balance + Depreciation) will equal $1,315,224 in Year 2020 increasing to $1,379,064 in Year 2019.

Total Hospital (includes Satellite ED)

- The applicant is projecting positive Free Cash Flow (Net Balance + Depreciation) for the total hospital will equal $1,297,015 in Year 2020 increasing to $1,374,957 in Year 2021.

Charges

In Year One of the proposed project, the average charge per inpatient case is as follows:

Average Gross Charge
- $51,876

Average Deduction from Operating Revenue
- $35,497

Average Net Charge
- $16,379

Payor Mix

- The applicant indicates it has contracts with all TennCare MCOs available to its service area population: United HealthCare Community Plan (formerly AmeriChoice), TennCare Select, Blue Care, and AmeriGroup.
- The applicant's projected payor mix in Year 1 of the project is shown in the table below.

Erlanger Sequatchie Valley Regional Hospital
Service Payor Mix, Year 1

Payor Source	Gross Revenue Year 1	as a % of Gross Revenue Year 1
Medicare	$11,662,441	26.7%
TennCare/Medicaid	$15,200,485	34.8%
Commercial/Other	$10,701,491	24.5%
Self-Pay	$3,887,480	8.9%
Charity Care	$2,140,298	4.9%
Other	$87,359	0.2%
Total	$43,679,554	100%

Source: CN1709-027

Financing

The project will be funded from tax exempt bonds.

- A copy of a funding commitment letter dated August 1, 2017 from Charles G. Seivers, President and CEO of the Tennessee Municipal Bond Fund is provided in Attachment C-II-2 of the application.
- Review of the Audited Combined Financial Statements of Erlanger Health System provided in the attachments revealed cash & cash equivalents of $90,387,026, current assets of $268,949,694 and current liabilities of $104,927,579 for the fiscal year ending June 30, 2016. Based on these amounts, HSDA staff calculated a current ratio of approximately 2.56 to 1.0.

Note to Agency Members: current ratio is a measure of liquidity and is the ratio of current assets to current liabilities which measures the ability of an entity to cover its current liabilities with its existing current

assets. A ratio of 1:1 would be required to have the minimum amount of assets needed to cover current liabilities.

Staffing

The applicant's proposed Year One staffing includes the following:

Position	Existing FTEs (2017)	Projected FTEs Year One (2020)
LPN	4.3	4.3
RNs	11.7	11.7
MA-Physician Practice	1.0	1.0
Nurse Practitioner (Non Exempt)	0.8	0.8
Certified Nursing Assistant	4.1	4.1
Patient Care Tech	1.2	1.2
Patient Service Rep	2.0	2.0
Pharm Tech	1.0	1.0
Staff Pharmacist	1.0	1.0
PRN Pharmacist	0.1	0.1
Rad Tech	3.7	3.7
Radiology Supr.	1.1	1.1
Respiratory Therapy	1.0	1.0
Surgical-First Assistant		2.0
Surgical-OR Tech		2.0
Surgical-Central Sterile		1.0
Surgical-Nurse Manager		1.0
Employed Physicians		4.0
Total Direct Care	33	43
Non Direct Care	36	36
Total	**69**	**79**

Note: Generally speaking, one (1) FTE is equivalent to an individual that works 2,080 regular hours.

PROVIDE HEALTHCARE THAT MEETS APPROPRIATE QUALITY STANDARDS

Licensure

- Erlanger Sequatchie Valley Regional Hospital will be licensed by the Tennessee Department of Health.
- The most recent licensure survey of Erlanger Bledsoe Hospital was conducted on May 17, 2017.
- The applicant (Erlanger Bledsoe Hospital) was notified on May 24, 2017 by the East Tennessee Regional Office, Division of Health Care Facilities, Tennessee Department of Health that no deficiencies were cited as a result of the May 17, 2017 licensure survey.

Certification

- The applicant is currently certified by Medicare and TennCare.

Accreditation

- The Joint Commission conducted an unannounced full survey from March 27, 2017 to March 29, 2017 for the purposes of assessing compliance with the Medicare conditions for critical access hospitals including swing bed services.
- The applicant is accredited by The Joint Commission effective March 20, 2017 valid up to 36 months.

Other Quality Standards

- In the first supplemental response the applicant commits to obtaining and/or maintaining the following:
  - Staffing levels
  - Licenses in good standing
  - TennCare/Medicare certifications
  - Three years compliance with federal and state regulations
  - Has not been decertified in last three years
  - Self-assessment and external peer assessment processes
  - Data reporting, quality improvement, and outcome/process monitoring systems

CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTHCARE

Agreements

- Erlanger Health System currently has patient transfer agreements in place with more than 70 hospitals and other providers in four states.
- A complete listing of contractual and/or working relationships of the applicant is located in attachment B-III-1 in the original application.

Impact on Existing Providers

- The applicant does not anticipate the proposed project will negatively impact other providers since there are no other providers in the service area.

Corporate documentation, real estate deed information, performance improvement plan, utilization review plan, and patient bill of rights are on file at the Agency office and will be available at the Agency meeting.

Should the Agency vote to approve this project, the CON would expire in three years.

CERTIFICATE OF NEED INFORMATION FOR THE APPLICANT:

There are no other Letters of Intent, denied applications, or outstanding Certificates of Need for this applicant.

Pending Applications

Erlanger Sequatchie Valley Regional Hospital-Satellite Emergency Department, CN1709-028A, has a pending application to be heard at the December 13, 2017 Agency meeting for the establishment of a satellite Emergency Department of Erlanger Sequatchie Valley Regional Hospital. The satellite emergency department is currently located at 16931 Rankin Avenue, Dunlap (Sequatchie County), TN 37327 and will be relocated to 533 US Highway 127 Bypass, Pikeville (Bledsoe County), TN 37367. The satellite ED's primary service area will be Bledsoe County. The applicant is owned by the Chattanooga-Hamilton County Hospital Authority d/b/a Erlanger Health System. The estimated project cost is **$4,388,484.00.**

Erlanger Health System has financial interests in this project and the following:

Outstanding Certificates of Need

Erlanger Behavioral Health, CN1603-012A, has an outstanding Certificate of Need that will expire on September 1, 2019. The project was approved at the August 24, 2016 Agency meeting for the establishment an eighty-eight (88) bed mental health hospital located at an unaddressed site at the intersection of North Holtzclaw Avenue and Citico Avenue, Chattanooga, (Hamilton County), TN 37404. The estimated project cost is **$25,112,600**. *Project Status Update: An annual progress report dated July 3, 2017 indicates the project is on schedule with the site earthwork mostly complete, underground plumbing layout and installation underway, and structural steel procurement and fabrication on schedule.*

Children's Hospital at Erlanger and Erlanger East Hospital, CN1601-002A, has an outstanding Certificate of Need that will expire on July 1, 2019. The project was approved at the May 25, 2016 Agency meeting for the initiation of a 10 bed level 3 neonatal intensive care service, through the transfer of 10 medical/surgical beds from Erlanger Medical Center to Erlanger East Hospital located at 1755 Gunbarrel Road in Chattanooga (Hamilton County), TN 3416 and reclassification of the 10 beds as Level III Neonatal Intensive Care beds. These beds will be built in 8,805 SF of new construction resulting in a project cost in excess of $5M. The licensed bed complement of Erlanger East Hospital will increase from 113 to 123 total beds. The estimated project cost is **$7,021,555.** *Project Status: An email dated 11/17/17 from a representative of the applicant noted the first phase has begun with training of staff utilizing best practices from the Children's Hospital @ Erlanger. Construction for this project will follow staff training. However, if it is delayed, the applicant may need to request an extension for this CON.*

Chattanooga-Hamilton County Hospital Authority d/b/a Erlanger Medical Center, CN1412-048A, has an outstanding Certificate of Need that will expire on May 1, 2019. The project was approved at the March 25, 2015 Agency meeting for the acquisition of a linear accelerator and the initiation of services at Erlanger East Hospital at 1755 Gunbarrel Road, Chattanooga, TN a satellite hospital operating under the license of Erlanger Medical Center, 975 East 3rd Street, Chattanooga (Hamilton County), Tennessee. If approved, the new linear accelerator at Erlanger East Hospital will replace a linear accelerator at Erlanger Medical Center reducing the number of linear accelerators at Erlanger Medical Center from two to one. The estimated project cost is **$10,532,562.00.** *Project Status Update: An email dated 11/17/17 from a representative of the applicant noted the expansion of Erlanger East Hospital has continued with the addition of the Cancer Center and Linear Accelerator. An extension was approved by the Agency for this CON due to environmental issues which were encountered. This phase began in July, 2017, with the beginning of construction and is scheduled to be completed by the summer of 2018.*

CERTIFICATE OF NEED INFORMATION FOR OTHER FACILITIES IN THE SERVICE AREA:

There are no Letters of Intent, denied applications, pending applications or outstanding Certificates of Need for other health care organizations in the service area proposing this type of service.

PLEASE REFER TO THE REPORT BY THE DEPARTMENT OF HEALTH, DIVISION OF HEALTH STATISTICS FOR A DETAILED ANALYSIS OF THE STATUTORY CRITERIA OF NEED, ECONOMIC FEASIBILITY, HEALTH CARE THAT MEETS APPROPRIATE QUALITY STANDARDS, AND CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTH CARE IN THE AREA FOR THIS PROJECT. THAT REPORT IS ATTACHED TO THIS SUMMARY IMMEDIATELY FOLLOWING THE COLOR DIVIDER PAGE.

PME (12/05/17)

LETTER OF INTENT

LETTER OF INTENT
TENNESSEE HEALTH SERVICES & DEVELOPMENT AGENCY

The Publication of Intent is to be published in The Dunlap Tribune, a newspaper of general circulation in Sequatchie County, Tennessee, on or before September 7, 2017, for one day.

This is to provide official notice to the Health Services & Development Agency and all interested parties, in accordance with T.C.A. § 68-11-1601 *et. seq.*, and the Rules of the Health Services & Development Agency, that Erlanger Sequatchie Valley Regional Hospital, with an ownership type of governmental, and to be managed by itself, intends to file an application for a Certificate of Need ("CON") to construct a regional community hospital (critical access hospital), with a total complement of twenty-five (25) inpatient beds, to include services for inpatients, outpatients, emergency medical services, and magnetic resonance imaging (MRI) in Dunlap, Sequatchie County, Tennessee.

This facility will replace the existing Erlanger Bledsoe Hospital, located at 71 Wheelertown Avenue, Pikeville, TN 37367. The new Erlanger Sequatchie Valley Regional Hospital, MRI and equipment will be located at 17399 Rankin Avenue, Dunlap, Sequatchie County, Tennessee, 37327, otherwise described as map 041, parcels 021.00 and 020.01, at the Sequatchie County Tax Assessor's Office.

A companion CON application will be filed with the Health Services & Development Agency for a new provider based emergency department in Pikeville, Tennessee, to replace the existing provider based emergency department located at 16931 Rankin Avenue, Dunlap, Sequatchie County, Tennessee.

The total project cost is estimated to be $ 32,653,836.

The anticipated date of filing the application is September 12, 2017.

The contact person for this project is Joseph M. Winick, Sr. Vice President, Erlanger Health System, 975 East 3rd Street, Chattanooga, Tennessee, 37403, and by phone at (423) 778-7274.

Joseph M. Winick	September 6, 2017 Date:	Joseph.Winick@erlanger.org E-Mail:

The Letter Of Intent must be filed in triplicate and received between the first and the tenth day of the month. If the last day for filing is a Saturday, Sunday or State Holiday, filing must occur on the preceding business day. File this form at the following address:

Health Services & Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

The published Letter Of Intent must contain the following statement pursuant to T.C.A. §68-11-1607(c)(1): (A) Any health care institution wishing to oppose a Certificate of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled; and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

Original Application
(COPY)

Erlanger Sequatchie Valley Regional Hospital (Dunlap)

CN1709-027

SEP 11 '97 AM 9:19

CERTIFICATE OF NEED APPLICATION

Chattanooga-Hamilton County Hospital Authority

D / B / A

Erlanger Sequatchie Valley Regional Hospital

Application To Relocate & Replace Existing

Inpatient Acute Medical / Surgical Services From

Erlanger Bledsoe Hospital
(Pikeville, Bledsoe County, TN)

To

Erlanger Sequatchie Valley Regional Hospital
(Dunlap, Sequatchie County, TN)

ERLANGER HEALTH SYSTEM
Chattanooga, Tennessee

Section A: APPLICANT PROFILE

1. Name of Facility, Agency, or Institution.

Chattanooga-Hamilton County Hospital Authority
D / B / A
Erlanger Sequatchie Valley Regional Hospital
17399 Rankin Avenue
Dunlap, Sequatchie County, Tennessee 37327

** Site information - Approximately 15.95 acres +/- located in Sequatchie County, Tennessee, which is shown as map 041, parcels 021.00 and 020.01, at the Sequatchie County Tax Assessor's Office.

The replacement hospital will also include a provider based Emergency Department, detailed in a companion CON application, concurrently filed, as follows:

Erlanger Sequatchie Valley Regional Hospital - Satellite Emergency Department
553 US Highway 127 Bypass
Pikeville, Bledsoe County, Tennessee 37367

** Site information - Approximately 10 acres +/- located in Bledsoe County, Tennessee, which begins at an iron rod set situated in the northeastern corner of the property at South 18 degrees 34 minutes 40 seconds West, 1,128.65 feet to a monument situated in the right of way of the U.S. Highway 127 Bypass; then South 17 degrees 4 minutes 0 seconds East 792.01 feet to an iron rod set; then North 17 degrees 4 minutes 0 seconds East 560.61 feet to the beginning.

Website Address - www.erlanger.org

Note: The facility's name and address **must be** the name and address of the project and **must be** consistent with the *Publication Of Intent*.

2. Contact Person Available For Responses To Questions.

Joseph M. Winick, Sr. Vice President
Planning & Business Development
Erlanger Health System
975 East 3rd Street
Chattanooga, TN 37403
(423) 778-8088
(423) 778-5776 -- FAX
Joseph.Winick@erlanger.org -- E-Mail

3. Executive Summary

A. Overview

Please provide an overview not to exceed three pages in total, explaining each numbered point.

Since 2010, a total of nine (9) rural hospitals in Tennessee have either closed outright, or, have discontinued inpatient services … including three (3) facilities in Southeast Tennessee, as follows: *(1)*

Parkridge West Hospital	Marion County
Copper Basin Medical Center	Polk County
Starr Regional (Etowah)	McMinn County

Rural populations are at risk due to limited, or no access, to essential healthcare services.

Erlanger Sequatchie Valley Regional Hospital seeks approval to relocate and replace an existing critical access hospital, from Pikeville, Bledsoe County, to Dunlap, Sequatchie County, and to relocate and replace a provider based ED in Dunlap, Sequatchie County, to Pikeville, Bledsoe County. With this CON application and the companion CON application, *Erlanger Sequatchie Valley Regional Hospital* seeks to reverse the current trend of hospital closures in Southeast Tennessee.

CMS has already approved this project and has recognized *Erlanger Sequatchie Valley Regional Hospital* as a "necessary provider CAH" (critical access hospital). *(2)* The letter from CMS recognizes that the replacement

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1 *Rural Hospitals Across Tennessee At Risk Of Closing – Emergency At The ER.* See article and TV news report by Chris Conte at Nashville TV station WTVF on Tuesday, July 27, 2017. Retrieved from … http://www.newschannel5.com/news/emergency-at-the-er.

2 See letter of June 14, 2017, from CMS attached to this CON application.

hospital to be constructed in Sequatchie County, and the provider based ED to be constructed in Bledsoe County, as replacements for existing facilities are configured as a single provider as proposed herein.*(3)*

It should be noted that members of the Medicare Payment Advisory Commission ("MedPAC") visited Erlanger Bledsoe Hospital in Pikeville, Tennessee, and it's provider based ED in Dunlap, Tennessee, on August 21-22, 2017. The purpose of the visit was to obtain a better understanding of how this critical access hospital and provider based emergency department can operate successfully when so many rural hospitals are closing. Potentially, this model may be suggested and/or extended to other critical access hospitals across the nation.

1.) *Description* - *Erlanger Bledsoe Hospital* was originally built in 1971 in Pikeville, Bledsoe County, Tennessee. At the present time, the hospital is forty-six (46) years old and in need of significant renovation and updates. Maintenance is ongoing and requires a significant effort to sustain operation of the hospital. The physical plant of the Erlanger Bledsoe Hospital has outlived it's useful life. It is time to replace this 25 bed critical access hospital, which has been designated by the State of Tennessee as a *necessary provider.*

The replacement facility, *Erlanger Sequatchie Valley Regional Hospital* will be located in Dunlap, Sequatchie County, Tennessee, about 20 miles south of *Erlanger Bledsoe Hospital.* The hospital based Emergency Department, described in the companion CON application, and currently located in Dunlap, Sequatchie County, which was opened in 2013, will be closed and relocated with the opening of *Erlanger Sequatchie Valley Regional Hospital.* *Erlanger Bledsoe Hospital* in Pikeville, Bledsoe County, Tennessee, will be closed and relocated with the opening of the *Erlanger Sequatchie Valley Regional Hospital - Satellite Emergency Department.*

The strategy for relocating the hospital from

3 See letter of February 24, 2017, to CMS from Ms. Stephanie Boynton, CEO of *Erlanger Bledsoe Hospital*, attached to this CON application.

Bledsoe County to Sequatchie County is to foster access by creating a centrally located "regional community hospital" for three (3) rural counties which are directly West of Hamilton County, Tennessee. These counties are Grundy, Sequatchie and Bledsoe. By relocating the hospital to Dunlap, in Sequatchie County, Tennessee, the population of the service area will have improved access with a more centrally located facility which is accessible by the entire Sequatchie Valley region. Thus, patients will not need to travel to Chattanooga, Tennessee, or elsewhere, for needed health services.

The service area for the hospital based ED in Pikeville, described in the companion CON application, will be primarily Bledsoe County, however, patients from other surrounding counties may utilize this facility as well.

Renovation of *Erlanger Bledsoe Hospital* was considered. However, the facility has outlived it's usefule life, the age and condition of the physical plant are such that it is simply not practical to renovate. Current standards for space requirements are significantly different than what was applicable in 1971. The facility is also located in a residential area and is not readily accessible.

Patients from Grundy County and Sequatchie County must travel a significant distance to Chattanooga, or some other location to access needed services. While patients in Bledsoe County have access to needed services in the current hospital, they don't currently have access to surgery, MRI and other services that are planned for *Erlanger Sequatchie Valley Regional Hospital*. Thus, the provision of effective hospital services are limited by accessibility and space, impacting continuity of care, quality, and cost.

2.) *Ownership Structure* - The hospital facility in Sequatchie County will be owned by *Sequatchie County* and leased to *Erlanger*. The hospital

based ED in Bledsoe County, describeded in the companion CON application, will be owned by *Bledsoe County* and leased to *Erlanger*. Both of these locations are linked together to provide needed healthcare services to the defined service area, and to provide a stable reimbursement structure to ensure sustainability. (See note 3)

3.) *Service Area* - *Erlanger Sequatchie Valley Regional Hospital* will foster access to a centrally located "regional community hospital" for three (3) rural counties … Sequatchie, Bledsoe and Grundy. The service area for the hospital based ED in Pikeville, described in the companion CON application, will be primarily Bledsoe County, however, patients from other surrounding counties may utilize this facility as well.

Patients from Grundy County and Sequatchie County must travel a significant distance to Chattanooga, or some other location to access needed services. While patients in Bledsoe County have access to needed services in the current hospital, they don't currently have access to surgery, MRI and other services that are planned for *Erlanger Sequatchie Valley Regional Hospital*. Thus, the provision of Effective hospital services are limited by accessibility and space, impacting continuity of care, quality, and cost.

4.) *Existing Similar Service Providers* - Within the defined service area of Sequatchie, Bledsoe and Grundy counties, there are no other existing service providers for either acute medical/surgical services, or for ED services.

5.) *Project Cost* - The total project cost for the replacement hospital and provider based emergency department is $ 36,988,230, with total construction cost of $ 22,411,900. The cost for the replacement hospital is $ 32,653,836, with construction cost of $ 19,958,999, which yields a construction cost per square foot of $324.52, which is above the

median SF cost of $289.85, but well below the 3rd Quartile SF cost of $395.94, for new construction.

6.) *Funding* – Funding for *Erlanger Sequatchie Valley Regional Hospital* will be provided by the Tennessee Municipal Bond fund through *Sequatchie County, Tennessee.*

7.) *Financial Feasibility (including when the proposal will realize a positive financial margin)* – The proposed project will have a positive financial margin beginning in year one. Please see the *Projected Data Chart.*

8.) *Staffing* – It is anticipated that there will be a small increase in the number of employees at *Erlanger Sequatchie Valley Regional Hospital.* All current employees of *Erlanger Bledsoe Hospital,* a total of one hundred seven (107) FTE's will be offered employment at the new hospital. A total of ten (10) new positions are expected to be created at *Erlanger Sequatchie Valley Regional Hospital,* as follows.

Surgical - First Assistant	2.0
Surgical - OR Tech	2.0
Surgical - Central Sterile	1.0
Surgical - Nurse Manager	1.0
Employed Physicians	4.0

B. Overview

A certificate of need can only be granted when a project is necessary to provide needed health care in the area to be served, can be economically accomplished and maintained, will provide healthcare that meets appropriate quality standards, and will contribute to the orderly development of adequate and effective health care in the service area. This section should provide rationale for each criterion using the data and information points provided in section B of this application. Please summarize in one page or less each of the criteria.

Since 2010, a total of nine (9) rural hospitals in Tennessee have either closed outright, or, have discontinued inpatient services … including three (3) facilities in Southeast Tennessee, as follows:

Parkridge West Hospital	Marion County
Copper Basin Medical Center	Polk County
Starr Regional (Etowah)	McMinn County

Rural populations are at risk due to limited, or no access, to essential healthcare services.

Erlanger Sequatchie Valley Regional Hospital seeks approval to relocate and replace an existing critical access hospital, from Pikeville, Bledsoe County, to Dunlap, Sequatchie County, and to relocate and replace a provider based ED in Dunlap, Sequatchie County, to Pikeville, Bledsoe County. With this CON application and the companion CON application, *Erlanger Sequatchie Valley Regional Hospital* seeks to reverse the current trend of hospital closures in Southeast Tennessee.

For long term planning pertaining to *Erlanger Sequatchie Valley Regional Hospital*, it should be of interest to know that we are evaluating the possibility of a second provider based emergency department which would be strategically located in Grundy County, Tennessee. The precise location is not yet known.

CMS has already approved this project and has recognized *Erlanger Sequatchie Valley Regional Hospital* as a "necessary provider CAH" (critical access hospital). The letter from CMS recognizes that the replacement hospital to be constructed in Sequatchie County, and the provider based ED to be constructed in Bledsoe County, as replacements for existing facilities are configured as a single provider as proposed herein.

It should be noted that members of the Medicare Payment Advisory Commission ("MedPAC") visited Erlanger Bledsoe Hospital in Pikeville, Tennessee, and it's provider based ED in Dunlap, Tennessee, on August 21-22, 2017. The purpose of the visit was to obtain a better understanding of how this critical access hospital and provider based emergency department can operate successfully when so many rural hospitals are closing. Potentially, this model may

be suggested and/or extended to other critical access hospitals across the nation.

1.) *Need* - According to the *Acute Care Bed Need Projections For 2017 and 2022* (based on 2015 Hospital JAR Reports), prepared by the *Tennessee Dept. of Health, Division of Health Statistics*, the bed need for the service area is eleven (11) acute care beds. This is due to the limitation of the Tennessee bed need methodology which allocates bed need by the county in which the hospital is located. Since *Erlanger Bledsoe Hospital* is located in Bledsoe County and no hospitals are located in either Grundy County or Sequatchie County, the Tennessee methodology only recognizes acute care bed need for Bledsoe County.

With the constraint imposed by the Tennessee methodology, in a telephone conversation with Mark Farber in February, 2017, it was agreed that we should prepare an acute care bed need estimate based on utilization data from the THA inpatient data.

It should be noted that *Erlanger Bledsoe Hospital* is a critical access hospital. As such, all twenty-five (25) beds may also be utilized as "swing beds", which can accommodate either acute care or skilled nursing patients. This is very beneficial to the hospital as well as community, and is not considered in the Tennessee bed need methodology. Further, the swing beds help to keep patients in the community and discharged home.

The following table shows the adjusted bed need for the three (3) county service area.

Summary Of Inpatient Utilization
For The Three (3) County Service Area
[*Excluding Pyschiatry, Substance Abuse & Rehabilitation*]

		========== CY ==========			Projected
		2014	**2015**	**2016**	**2022**
Total	Discharges	5,849	5,915	5,708	6,029
	Patient Days	27,521	28,761	27,705	29,035
	ALOS	4.7	4.9	4.9	4.8
Total	**Gross Bed Need**	75.4	78.8	75.9	79.5
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	94.3	98.5	94.9	99.4
	Est. % Pt. Days -- LOS 1-4 (*)	35.1%	35.1%	35.1%	35.1%
	Est. Pt. Days (LOS 1-4)	9,660	10,095	9,724	10,191
	Est. Service Area Population	42,102	42,364	42,626	44,200
	Growth Rate - Population		0.6%	0.6%	3.7%
	Est. Use Rate - Discharges	0.138925	0.139623	0.133909	0.136417
	Est. Use Rate - Patient Days	0.653674	0.678902	0.649955	0.651815
LOS 1-4	**Gross Bed Need**	26.5	27.7	26.6	27.9
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	33.1	34.6	33.3	34.9
EBH Census Estimate	Market Share Adjustment (50%)	4,830	5,048	4,862	5,096
	Population Growth Adjustment (3.7%)				189
	Swing Bed Adjustment (35%)	1,691	1,767	1,702	1,850
	Estimated Patient Days	6,521	6,815	6,564	7,135
	Estimated Beds	17.9	18.7	18.0	19.5
	Occupancy Adjustment	80%	80%	80%	80%
	Estimated Beds - Adjusted	22.3	23.3	22.5	24.4

(*) *NOTES* (1) Please note that for a critical access hospital, CMS requires that ALOS not be more than 4 days (96 hours).
(2) Estimated percent of patient days pertaining to LOS 1-4 is derived from the ratio in CY 2014 (9664/27521).
(3) Actual swing bed utilization for Erlanger Bledsoe Hospital in 2015 was 61%.
(4) Population data obtained from Tennessee Dept. of Health, *Tennessee Population Estimates 2017 and 2021*.

2.) *Economic Feasibility* - Economic feasibility for this project is demonstrated by the *Projected Data Chart* contained in this CON application. The project has a positive net income in both years 1 and 2.

3.) *Appropriate Quality Standards* - *Erlanger Bledsoe Hospital* and it's existing provider based ED are currently accredited by *The Joint Commission*. They also participate in quality reporting and monitoring, as evidenced by the quality information discussed previously and attached to this CON application. The quality reporting and monitoring will continue with *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED.

4.) *Orderly Development* - This projects represents orderly development of the healthcare system. It seeks to relocate an existing critical access hospital and it's provider based ED, which are linked to performance of the broader healthcare system of care delivery in such a manner, as to place each facility where maximum access can occur for the rural population which has the most need.

It will also provide healthcare facilities which meet "current" spatial requirements for the services to be offered. Please keep in mind that the facility for *Erlanger Bledsoe Hospital* was built in 1971 and is now forty-six (46) years old. The existing physical plant has outlived it's useful life as an acute care hospital.

Further, the facilities outlined in this and the companion CON application for a critical access hospital and provider based ED, demonstrates a sustainable model for rural healthcare delivery.

C.) Consent Calendar Justification

If Consent Calendar is requested, please provide the rationale for an expedited review.

A request for Consent Calendar must be in the form of a written communication to the Agency's Executive Director at the time the application is filed.

Response

*** Not Applicable. ***

4. A. Owner of the Facility, Agency, or Institution.

Chattanooga-Hamilton County Hospital Authority
D / B / A
Erlanger Health System
975 East 3rd Street
Hamilton County
Chattanooga, TN 37403

B. Type of Ownership or Control (*Check One*).

A.	Sole Proprietorship	
B.	Partnership	
C.	Limited Partnership	
D.	Corporation (For Profit)	
E.	Corporation (Not-for-Profit)	
F.	Governmental (State of TN or Political Subdivision)	X
G.	Joint Venture	
H.	Limited Liability Company	
I.	Other (Specify)	

ATTACH a copy of the partnership agreement, or corporate charter and certificate of corporate existence. Please provide documentation of the active status of the entity from the Tennessee Secretary of State's web-site at https://tnbear.tn.gov/ECommerce/Filingearch.aspx. **Attachment Section A-4A.**

***Describe** the existing or proposed ownership structure of the applicant, including an ownership structure organizational chart. Explain the corporate structure and the manner in which all entities of the ownership structure relate to the applicant. As applicable, identify the members with 5% ownership interest (direct or indirect).*

5. Name of Management / Operating Entity (if applicable).

*** Not Applicable. ***

***For new facilities or existing facilities** without a current management agreement, attach a copy of a draft management agreement that at least includes the anticipated scope of management services to be provided, the anticipated term of the*

agreement, and the anticipated management fee payment methodology and schedule. For facilities with existing management agreements, attach a copy of the fully executed final contract. **Attachment Section A-5.**

6. **A. Legal Interest in the Site of the Institution**
(*Check One*)

A.	Ownership	____
B.	Option to Purchase	____
C.	Lease of ____ Years	____
D.	Option to Lease	X
E.	Other (Specify)	____

Check appropriate line above: *For applicant or applicant's parent company/owner that currently own the building/land for the project location, attach a copy of the title/deed. For applicant or applicant's parent company/owner that currently lease the building/land for the project location, attach a copy of the fully executed lease agreement. For projects where the location of the project has not been secured, attach a fully executed document including Option To Purchase Agreement, Option To Lease Agreement, or other appropriate documentation. Option To Purchase Agreements* ***must include*** *anticipated purchase price. Lease/Option To Lease Agreements* ***must include*** *the actual/anticipated term of the agreement* ***and*** *actual/anticipated lease expense. The legal interests described herein* ***must be valid*** *on the date of the Agency's consideration of the certificate of need application.*

B. Attach **a copy of the site's plot plan, floor plan, and if applicable, public transportation route to and from the site** on an 8 ½" x 11" sheet of white paper, single or double sided. ***DO NOT SUBMIT BLUEPRINTS***. Simple line drawings should be submitted and need not be drawn to scale.

1.) Plot Plan **must include:**

a.) Size of site (**in acres**);

Response

The size of the hospital site in Dunlap, Sequatchie County, is approximately 15.95 acres. The size of the provider based ED site in Pikeville, Bledsoe County, as described in the companion CON

application is approximately 10 acres.

A copy of the site plan for *Erlanger Sequatchie Valley Regional Hospital* is attached to this CON application.

b.) Location of structure on the site;

Response

In Dunlap, the hospital will be placed on the Eastern portion of the site, nearest to Tennessee Highway 127 with direct access to Tennessee Highway 111. In Pikeville, the provider based ED, as described in the companion CON application, will be placed on the northeastern section of the site, nearest to Tennessee Highway 127.

c.) Location of the proposed construction / renovation; and

Response

*** Not applicable. ***

d.) Names of streets, roads or highway that cross or border the site.

Response

In Dunlap, the hospital will be located on Tennessee Highway 127 with direct access to Tennessee Highway 111. In Pikeville, the provider based ED, as described in the companion CON application will be located on Tennessee Highway 127.

2.) Attach a floor plan drawing for the facility which includes legible labeling of patient care rooms (noting private or semi-private),

ancillary areas, equipment areas, etc. On an 8 ½ by 11 sheet of paper or as many necessary to illustrate the floor plan.

Response

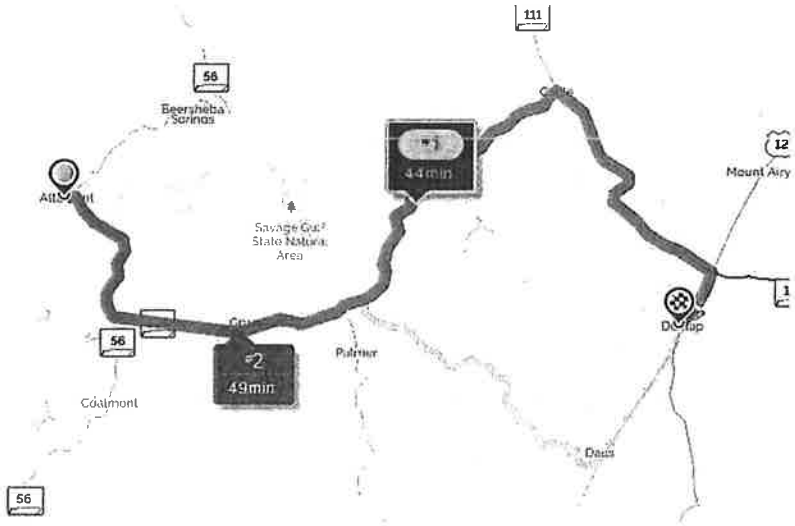
Copies of the floor plans for *Erlanger Sequatchie Valley Regional Hospital* in Dunlap, Sequatchie County, and it's provider based ED in Pikeville, Bledsoe County, as described in the companion CON application, are attached to this CON application.

3.) Describe the relationship of the site to public transportation routes, if any, and to any highway or major road developments in the area. Describe the accessibility of the proposed site to patients/clients.

Response

Sequatchie County is the middle point of the defined service area, with Dunlap being the county seat. The travel distance from Pikeville (county seat), Bledsoe County, Tennessee, to Dunlap, Sequatchie County, Tennessee, is 20.2 miles for approximately 25 minutes, directly along Tennessee State Road 127.

The travel distance from Altamont (county seat), Grundy County, Tennessee, to Dunlap, Sequatchie County, Tennessee, is 33.1 miles for approximately 44 minutes, along Tennessee State 108 and 111.



There is no public transportation available in these rural Tennessee counties.

Attachment Section A-6A, 6B-1 a-d, 6B-2, 6B-3.

7. **Type of Institution**

(Check as appropriate - more than one response may apply)

A.	Hospital (Specify) *** General Medical/Surgical Acute Care - Critical Access	X
B.	Ambulatory Surgical Treatment Center (ASTC), Multi-Specialty	
C.	ASTC, Single Specialty	
D.	Home Health Agency	
E.	Hospice	
F.	Mental Health Hospital	
G.	Intellectual Disability / Institutional Habilitation Facility ICF / IID	
H.	Nursing Home	
I.	Outpatient Diagnostic Center	
J.	Rehabilitation Facility	
K.	Residential Hospice	
L.	Non-Residential Substitution-Based Treatment Center For Opiate Addiction	

M. Other (Specify) X
Provider Based Emergency Dept. (*)
(*) Described in companion CON application, concurrently filed.

8. Purpose of Review

(Check appropriate line(s) appropriate - more than one response may apply)

A. New Institution ____
B. Modifying an ASTC With Limitation Still Required Per CON ____
C. Addition Of MRI Unit X
D. Pediatric MRI ____
E. Initiation of Health Care Service As Defined In TCA § 68-11-1607(a)(4) (Specify) ____ ____
F. Change In Bed Complement ____
[*Please note the type of change by underlining the appropriate response:* Increase, Decrease, Designation, Distribution, Conversion, Relocation]
G. Satellite Emergency Dept. ____
H. Change Of Location X
I. Other (Specify) ____
____

9. Medicaid / TennCare, Medicare Participation

MCO Contracts [Check all that apply]

X AmeriGroup X United Healthcare Community Plan
X BlueCare X TennCare Select

Medicare Provider Number 044-1306
Medicaid Provider Number 044-1306
Certification Type General Medical / Surgical

If a new facility, will certification be sought for Medicare and/or Medicaid/TennCare ?

Medicare ___ **Yes** ___ **No** X **N/A**
Medicaid / TennCare ___ **Yes** ___ **No** X **N/A**

10. Bed Complement Data

A. Please indicate current and proposed distribution and certification of facility beds.

		Current Licensed	*Beds Staffed*	*Beds Proposed*	*(*)Beds Approved*	*(**)Beds Exempted*	*TOTAL Beds at Completion*
1.)	Medical						
2.)	Surgical						
3.)	ICU / CCU						
4.)	Obstetrical						
5.)	NICU						
6.)	Pediatric						
7.)	Adult Psychiatric						
8.)	Geriatric Psychiatric						
9.)	Child / Adolescent Psychiatric						
10.)	Rehabilitation						
11.)	Adult Chemical Dependency						
12.)	Child / Adolescent Chemical Depend.						
13.)	Long Term Care Hospital						
14.)	Swing Beds	25	25	25			25
15.)	Nursing Home – SNF (Medicare only)						
16.)	Nursing Home – NF (Medicaid only)						
17.)	Nursing Home – SNF / NF (dually certified M'care/M'caid)						
18.)	Nursing Home – Licensed (non-certified)						
19.)	ICF / IID						
20.)	Residential Hospice						
	TOTAL	25	25	25			25

(*) Beds approved but not yet in service. (**) Beds exempted under 10% per 3 year provision.

B. Describe the reasons for change in bed allocations and describe the impact the bed change will have on the applicant facility's existing services. **Attachment Section A-10.**

Response

*** Not Applicable. ***

SUPPLEMENTAL #1
September 22, 2017
10:08 am

C. Please identify all the applicant's outstanding Certificate of Need projects that have a licensed bed change component. If applicable, complete chart below.

CON Number	CON Expiration Date	Total Licensed Beds Approved

11. Home Healthcare Organizations – Home Health Agency, Hospice Agency (excluding Residential Hospice), identify the following by checking all that apply:

	Existing Licensed County	Patient Office County	Proposed Licensed County		Existing Licensed County	Patient Office County	Proposed Licensed County
Anderson	☐	☐	☐	Lauderdale	☐	☐	☐
Bedford	☐	☐	☐	Lawrence	☐	☐	☐
Benton	☐	☐	☐	Lewis	☐	☐	☐
Bledsoe	☐	☐	☐	Lincoln	☐	☐	☐
Blount	☐	☐	☐	Loudon	☐	☐	☐
Bradley	☐	☐	☐	McNairy	☐	☐	☐
Campbell	☐	☐	☐	Macon	☐	☐	☐
Cannon	☐	☐	☐	Madison	☐	☐	☐
Carroll	☐	☐	☐	Marion	☐	☐	☐
Carter	☐	☐	☐	Marshall	☐	☐	☐
Cheatham	☐	☐	☐	Maury	☐	☐	☐
Chester	☐	☐	☐	Meigs	☐	☐	☐
Claiborne	☐	☐	☐	Monroe	☐	☐	☐
Clay	☐	☐	☐	Montgomery	☐	☐	☐
Cocke	☐	☐	☐	Moore	☐	☐	☐
Coffee	☐	☐	☐	Morgan	☐	☐	☐
Crockett	☐	☐	☐	Obion	☐	☐	☐
Cumberland	☐	☐	☐	Overton	☐	☐	☐
Davidson	☐	☐	☐	Perry	☐	☐	☐
Decatur	☐	☐	☐	Pickett	☐	☐	☐
DeKalb	☐	☐	☐	Polk	☐	☐	☐
Dickson	☐	☐	☐	Putnam	☐	☐	☐
Dyer	☐	☐	☐	Rhea	☐	☐	☐
Fayette	☐	☐	☐	Roane	☐	☐	☐
Fentress	☐	☐	☐	Robertson	☐	☐	☐
Franklin	☐	☐	☐	Rutherford	☐	☐	☐
Gibson	☐	☐	☐	Scott	☐	☐	☐
Giles	☐	☐	☐	Sequatchie	☐	☐	☐
Grainger	☐	☐	☐	Sevier	☐	☐	☐
Greene	☐	☐	☐	Shelby	☐	☐	☐
Grundy	☐	☐	☐	Smith	☐	☐	☐
Hamblen	☐	☐	☐	Stewart	☐	☐	☐
Hancock	☐	☐	☐	Sullivan	☐	☐	☐
Hardeman	☐	☐	☐	Sumner	☐	☐	☐
Hardin	☐	☐	☐	Tipton	☐	☐	☐
Hawkins	☐	☐	☐	Trousdale	☐	☐	☐
Haywood	☐	☐	☐	Unicoi	☐	☐	☐
Henderson	☐	☐	☐	Union	☐	☐	☐
Henry	☐	☐	☐	Van Buren	☐	☐	☐
Hickman	☐	☐	☐	Warren	☐	☐	☐
Houston	☐	☐	☐	Washington	☐	☐	☐
Humphreys	☐	☐	☐	Wayne	☐	☐	☐
Jackson	☐	☐	☐	Weakley	☐	☐	☐
Jefferson	☐	☐	☐	White	☐	☐	☐
Johnson	☐	☐	☐	Williamson	☐	☐	☐
Knox	☐	☐	☐	Wilson	☐	☐	☐
Lake	☐	☐	☐				

12. Square Footage And Cost Per Square Foot Chart

Unit / Department	Existing Location	Existing SF	Temporary Location	Proposed Final Location	Proposed Final Square Footage		
					Renovated	New	Total
Emergency Dept.						11,200	11,200
Nursing – Medical/Surgical						13,750	13,750
Admin./Admiting						6,500	6,500
Imaging						6,500	6,500
Surgery						9,600	9,600
Pharmacy						800	800
Laboratory						1,600	1,600
Dietary						3,500	3,500
Respiratory & PT						2,400	2,400
Plant Ops/Circulation						5,650	5,650
Unit/Department GSF Sub-Total						61,500	61,500
Other GSF Total						-	-
GSF Total						61,500	61,500
(*) Total Cost						$ 19,958,500	$ 19,958,500
(**) Cost Per Square Foot						$ 324.52	$ 324.52
Cost Per Square Foot Is Within Which Range (*For quartile ranges, please refer to the Applicant's Toolbox On www.tn.gov/hsda*)					☐ Below 1st Quartile ☐ Between 1st And 2nd Quartile ☐ Between 2nd And 3rd Quartile ☐ Above 3rd Quartile	☐ Below 1st Quartile ☐ Between 1st And 2nd Quartile ☒ Between 2nd And 3rd Quartile ☐ Above 3rd Quartile	☐ Below 1st Quartile ☐ Between 1st And 2nd Quartile ☒ Between 2nd And 3rd Quartile ☐ Above 3rd Quartile

(*) The Total Construction Cost should equal the Construction Cost reported on line A5 of the Project Cost Chart.

(**) Cost Per Square foot is the construction cost divided by the square feet. Please do not include contingency costs.

13. MRI, PET and/or Linear Accelerator

1.) Describe the acquisition of magnetic Resonance Imaging (MRI) scanner that is adding an MRI scanner in counties with population less than 250,000 or initiation of pediatric MRI in counties with population greater than 250,000, and/or

Response

A Magnetic Resonance Imaging ("MRI") unit will be acquired for *Erlanger Sequatchie Valley Hospital*. This technology is consistent with the standard of care for hospital services.

2.) Describe the acquisition of any Positron Emission Tomographer (PET) or Linear Accelerator if initiating the service by responding to the following:

A.) Complete the chart below for acquired equipment.

☐ Linear Accelerator	MEV _____	Types:	☐ SRS ☐ IMRT ☐ IGRT ☐ Other _____
	Total Cost(*): _____		☐ By Purchase
			☐ By Lease -- Expected Useful Life (Yrs) ____
	☐ New	☐ Refurbished	☐ If not new, how old ? (Yrs) ____
☑ MRI	Tesla 3.0	Magnet:	☐ Breast ☐ Extremity
			☐ Open ☐ Short Bore ☐ Other _____
			☐ By Purchase
	Total Cost(*): $ 1,865,293		☑ By Lease -- Expected Useful Life (Yrs) 5
	☐ New	☐ Refurbished	☐ If not new, how old ? (Yrs) _____
☐ PET	☐ PET Only	☐ PET / CT	☐ PET / MRI
			☐ By Purchase
	Total Cost(*): _____		☐ By Lease -- Expected Useful Life (Yrs) ____
	☐ New	☐ Refurbished	☐ If not new, how old ? (Yrs) ____

(*) As defined by Agency Rule 0720-9-.01(13)

Response

The MRI unit will be a new Tesla 3.0 unit.

B.) In the case of equipment purchase, include a quote and/or proposal from an equipment vendor. In the case of equipment lease, provide a draft lease or contract that at least includes the term of the lease and the anticipated lease payments along with the fair market value of the equipment.

Response

A copy of the vendor quote is attached to this CON application.

C.) Compare lease cost of the equipment to it's fair market value. Note: Per Agency rule, the higher cost must be identified in the project cost chart.

Response

Capital cost of the equipment has been included in the *Project Cost Chart*.

D.) Schedule of Operations:

Location	Days Of Operation *(Sunday Through Saturday)*	Hours Of Operation *(Example: 8 am - 3 pm)*
Fixed Site (*Applicant*)		
Erlanger Sequatchie Valley Hosp.	Sunday - Saturday	7 am – 7 am (24 Hours)
Erlanger Bledsoe ED		
Mobile Locations		
(Applicant)	N / A	
(Name Of Other Location)		
(Name Of Other Location)		

E.) Identify the clinical applications to be provided that apply to the project.

Response

MRIs are administered to patients suffering from any of the following:

- Inflammation or infection in an organ
- Degenerative diseases
- Strokes
- Musculoskeletal disorders
- Tumors
- Other irregularities that exist in body tissue or organs

High-resolution images can be made without the need for using x-rays because MRI's use radio frequency (RF) light. Since they use RF light, MRI's do not present any known health risks to the patients. If a person's nervous system needs to be studied, an MRI image would be the best imaging method to use, especially if the brain or spinal cord need to be investigated.

F.) If the equipment has been approved by the FDA within the last 5 years, provide documentation of the same.

Response

MRI units are standard in the industry and have been in use for more than five (5) years.

Section B

GENERAL CRITERIA FOR CERTIFICATE OF NEED

Section B: GENERAL CRITERIA FOR CERTIFICATE OF NEED

In accordance with Tennessee Code Annotated § 68-11-1609(b), "no Certificate of Need shall be granted unless the action proposed in the application is necessary to provide needed health care in the area to be served, can be economically accomplished and maintained, will provide healthcare that meets appropriate quality standards, and will contribute to the orderly development of health care." Further standards for guidance are provided in the state health plan (Guidelines For Growth), developed pursuant to Tennessee Code Annotated § 68-11-1625.

The following questions are listed according to the four (4) criteria: (1) Need, (2) Economic Feasibility, (3) Applicable Quality Standards, and (4) Contribution to the Orderly Development of Healthcare. Please respond to each question and provide underlying assumptions, data sources, and methodologies when appropriate. *Please type each question and its response on 8 ½" x 11" white paper, single sided or double sided.* All exhibits and tables must be attached to the end of the application in correct sequence identifying the question(s) to which they refer, unless specified otherwise. **If a question does not apply to your project, indicate "Not Applicable (NA)".**

CONSTRUCTION, RENOVATION, EXPANSION, AND REPLACEMENT OF HEALTH CARE INSTITUTIONS

[Standards & Criteria, Effective - 2000, p. 23]

1. **Any project that includes the addition of beds, services, or medical equipment will be reviewed under those specific activities.**

Response

The standards and criteria for *Acute Care Bed Need Services* and *Magnetic Resonance Imaging*, are addressed following these criteria for construction, renovation, expansion and replacement.

2. **For relocation or replacement of an existing licensed**

health care institution:

a. The applicant should provide plans which include costs for both renovation and relocation, demonstrating the strengths and weaknesses of each alternative.

Response

Erlanger Bledsoe Hospital was originally built in 1971 in Pikeville, Bledsoe County, Tennessee. At the present time, the hospital is forty-six (46) years old and in need of significant renovation and updates. Maintenance is ongoing and requires a significant effort to sustain operation of the hospital. The physical plant of the Erlanger Bledsoe Hospital has outlived it's useful life. It is time to replace this 25 bed critical access hospital, which has been designated by the State of Tennessee as a *necessary provider*.

The replacement facility, *Erlanger Sequatchie Valley Regional Hospital* will be located in Dunlap, Sequatchie County, Tennessee, about 20 miles south of *Erlanger Bledsoe Hospital*. The hospital based Emergency Department, described in the companion CON application, in Dunlap, Sequatchie County, which was opened in 2013, will be closed and relocated with the opening of *Erlanger Sequatchie Valley Regional Hospital*. *Erlanger Bledsoe Hospital* in Pikeville, Bledsoe County, Tennessee, will be closed and relocated with the opening of the *Erlanger Sequatchie Valley Regional Hospital - Satellite Emergency Department*.

The objective for relocating the hospital from Bledsoe County to Sequatchie County is to foster access by creating a centrally located "regional community hospital" for three (3) rural counties which are directly west of Hamilton County, Tennessee. These counties are Grundy, Sequatchie and Bledsoe. By relocating the hospital to Dunlap, in Sequatchie County, Tennessee, the population of the service area will have improved access with a more centrally located facility which is accessible by the entire Sequatchie Valley region. Thus, patients will not need to travel to Chattanooga, Tennessee, or elsewhere, for needed health services.

The service area for the hospital based ED in Pikeville, described in the companion CON application, will be primarily Bledsoe County, however, patients from other surrounding counties may utilize this facility as well.

Renovation of *Erlanger Bledsoe Hospital* was considered. However, the facility has outlived it's usefule life, the age and condition of the physical plant are such that it is simply not practical to renovate. Current standards for space requirements are significantly different than what was applicable in 1971. The facility is also located in a residential area and is not readily accessible.

Patients from Grundy County and Sequatchie County must travel a significant distance to Chattanooga, or some other location to access needed services. While patients in Bledsoe County have access to needed services in the current hospital, they don't currently have access to surgery, MRI and other services that are planned for *Erlanger Sequatchie Valley Regional Hospital*. Thus, the provision of effective hospital services are limited by accessibility and space, impacting continuity of care, quality, and cost.

b. The applicant should demonstrate that there is an acceptable existing or projected future demand for the proposed project.

Response

According to the *Acute Care Bed Need Projections For 2017 and 2022* (based on 2015 Hospital JAR Reports), prepared by the *Tennessee Dept. of Health, Division of Health Statistics*, the bed need for the service area is eleven (11) acute care beds. This is due to the limitation of the Tennessee bed need methodology which allocates bed need by the county in which the hospital is located. Since *Erlanger Bledsoe Hospital* is located in Bledsoe County and no hospitals are located in either Grundy County or Sequatchie County, the Tennessee methodology only recognizes acute care bed need for Bledsoe County.

With the constraint imposed by the Tennessee methodology, in a telephone conversation with Mark Farber in February, 2017, it was agreed that we should prepare an

acute care bed need estimate based on utilization data from the THA inpatient data.

It should be noted that *Erlanger Bledsoe Hospital* is a critical access hospital. As such, all twenty-five (25) beds may also be utilized as "swing beds", which can accommodate either acute care or skilled nursing patients. This is very beneficial to the hospital as well as community, and is not considered in the Tennessee bed need methodology. Further, the swing beds help to keep patients in the community and discharged home.

Summary Of Inpatient Utilization
For The Three (3) County Service Area
[*Excluding Pyschiatry, Substance Abuse & Rehabilitation*]

		========== CY ==========			Projected
		2014	2015	2016	2022
Total	Discharges	5,849	5,915	5,708	6,029
	Patient Days	27,521	28,761	27,705	29,035
	ALOS	4.7	4.9	4.9	4.8
Total	**Gross Bed Need**	75.4	78.8	75.9	79.5
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	94.3	98.5	94.9	99.4
	Est. % Pt. Days -- LOS 1-4 (*)	35.1%	35.1%	35.1%	35.1%
	Est. Pt. Days (LOS 1-4)	9,660	10,095	9,724	10,191
	Est. Service Area Population	42,102	42,364	42,626	44,200
	Growth Rate - Population		0.6%	0.6%	3.7%
	Est. Use Rate - Discharges	0.138925	0.139623	0.133909	0.136417
	Est. Use Rate - Patient Days	0.653674	0.678902	0.649955	0.651815
LOS 1-4	**Gross Bed Need**	26.5	27.7	26.6	27.9
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	33.1	34.6	33.3	34.9
EBH Census Estimate	Market Share Adjustment (50%)	4,830	5,048	4,862	5,096
	Population Growth Adjustment (3.7%)				189
	Swing Bed Adjustment (35%)	1,691	1,767	1,702	1,850
	Estimated Patient Days	6,521	6,815	6,564	7,135
	Estimated Beds	17.9	18.7	18.0	19.5
	Occupancy Adjustment	80%	80%	80%	80%
	Estimated Beds - Adjusted	22.3	23.3	22.5	24.4

(*) *NOTES* (1) Please note that for a critical access hospital, CMS requires that ALOS not be more than 4 days (96 hours).
(2) Estimated percent of patient days pertaining to LOS 1-4 is derived from the ratio in CY 2014 (9664/27521).
(3) Actual swing bed utilization for Erlanger Bledsoe Hospital in 2015 was 61%.
(4) Population data obtained from Tennessee Dept. of Health, *Tennessee Population Estimates 2017 and 2021*.

3. For renovation or expansions of an existing licensed health care institution:

a. The applicant should demonstrate that there is an acceptable existing demand for the proposed project.

Response

*** Not applicable. ***

b. The applicant should demonstrate that the existing physical plant's condition warrants major renovation or expansion.

Response

*** Not applicable. ***

[End Of Responses To Construction, Renovation, Expansion, And Replacement Of Health Care Institutions, 2000, page 23]

ACUTE CARE BED NEED SERVICES

[Standards & Criteria, Effective - 2000, p. 14-15]

A. Need

1. The following methodology should be used and the need for hospital beds should be projected four years into the future from the current year:

Using the latest utilization and patient origin data from the Joint Annual Reports of Hospitals and the most current population projection series from the Department of Health, perform the following:

Step 1

Determine the current Average Daily Census (ADC) in each county.

$$ADC = \frac{\text{Patient Days}}{365 \text{ (366 in leap year)}}$$

Step 2

To determine the service area population (SAP) in both the current and projected year:

a. Begin with a list of all the hospital discharges in the state, separated by county, and showing the discharges both by the county where the patient actually lives (resident discharges), and the county in which the patient received medical treatment.

b. For the county in which the hospital is (or would be) located (service county), determine which other counties have patients who are treated in your county (resident counties). Treat all of the discharges from another state as if that whole state were a single resident county. The total discharges of residents from another state should be calculated from state population estimates and the latest National Center For Health Statistics southeastern discharge rates.

c. For each resident county, determine what percent of their total resident discharges are discharged from a hospital in your service county (if less than one percent, disregard).

d. For each resident county, apply the percentage determined above to the county's population (both projected and current). Add together the resulting numbers for all the resident counties and ad that sum to the projected and current population of your service county. This will give you the service area population (SAP).

Step 3

Determine projected Average Daily Census as:

$$\text{Projected ADC} = \text{Current ADC} \times \frac{\text{Projected SAP}}{\text{Current SAP}}$$

Step 4

Calculate Projected Bed Need for each county as:

$$\text{Projected Need} = \text{Projected ADC} + 2.33 \times \text{Projected ADC}$$

However, if projected occupancy:

$$\textbf{Projected Occupancy:} \quad \frac{\textbf{Projected ADC}}{\textbf{Projected Need}} \times 100$$

Is greater than 80 percent, then calculate projected need:

$$\textbf{Projected Need} = \frac{\textbf{Projected ADC}}{.80}$$

Response

The statistical procedure outlined in this criterion has been summarized by the Tennessee Dept. of Health - Bureau of Health Statistics ("TDH-BHS"). When the data for this procedure was requested from TDH-BHS, we were referred to the *Acute Care Bed Need Projections For 2017 And 2021 - Based On Final 2015 JAR Reports*. The reason being that they no longer make this detail data available to hospitals which request it.

According to the *Acute Care Bed Need Projections For 2017 and 2022* (based on 2015 Hospital JAR Reports), prepared by the *Tennessee Dept. of Health, Division of Health Statistics*, the bed need for the service area is eleven (11) acute care beds. This is due to the limitation of the Tennessee bed need methodology which allocates bed need by the county in which the hospital is located. Since *Erlanger Bledsoe Hospital* is located in Bledsoe County and no hospitals are located in either Grundy County or Sequatchie County, the Tennessee methodology only recognizes acute care bed need for Bledsoe County.

With the constraint imposed by the Tennessee methodology, in a telephone conversation with Mark Farber in February, 2017, it was agreed that we should prepare an acute care bed need estimate based on utilization data from the THA inpatient data.

It should be noted that *Erlanger Bledsoe Hospital* is a critical access hospital. As such, all twenty-five (25) beds may be utilized as "swing beds", which can accommodate either acute care or skilled nursing patients.

This is very beneficial to the hospital as well as community, and is not considered in the Tennessee bed need methodology. Further, the swing beds help to keep patients in the community and discharged home.

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For The Three (3) County Service Area
[Excluding Pyschiatry, Substance Abuse & Rehabilitation]

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(2) Estimated percent of patient days pertaining to LOS 1-4 is derived from the ratio in CY 2014 (9664/27521).
(3) Actual swing bed utilization for Erlanger Bledsoe Hospital in 2015 was 61%.
(4) Population data obtained from Tennessee Dept. of Health, *Tennessee Population Estimates 2017 and 2021*.

2. **New hospital beds can be approved in excess of the "need standard for a county" if the following criteria are met:**

a.) **All existing hospitals in the projected service area have an occupancy level greater than or equal to 80 percent for the most recent Joint Annual Report. Occupancy should be based on the number of licensed beds that are staffed for two consecutive years.**

Response

There are no other providers of acute hospital services in the defined service area. Further, this CON application does not seek approval of "new" hospitals beds, it seeks approval to relocate and replace currently existing hospital beds. For these reasons, Therefore, this criterion is not applicable.

b.) **All outstanding CON projects for new acute care beds in the proposed service area are licensed.**

Response

There are no CON projects for new acute care beds currently outstanding in the proposed service area.

c.) **The Health Facilities Commission may give special consideration to acute care bed proposals for specialty health service units in tertiary care regional referral hospitals.**

Response

*** Not applicable. ***

[End Of Responses To Standards & Criteria For Acute Care Bed Need Services, 2000, page 14-15]

MAGNETIC RESONANCE IMAGING

[Standards & Criteria, Effective - 2011, pp. 18-21]

1. **Utilization Standards For Non-Specialty MRI Units.**

a. An applicant proposing a new non-specialty stationary MRI service should project a minimum of at least 2160 procedures in the first year of service, building to minimum of 2520 procedures per year by the second year of service,and building to a minimum of 2880 procedures per year by the third year of service, and for every year thereafter

Response

It is estimated that the number of MRI procedures for the service area, along with estimated unit volumes, will be as follows.

Estimated MRI Utilization
For THE Three (3) County Service Area

CY	Pop.	Project Year	Est. Pop. MRI Proc's	Growth Rate MRI Proc's	Service Area MRI Proc's	Est. Unit MRI Proc's
2020	43,936	1	4,806	240	5,046	2,523
2021	44,198	2	4,835	242	5,077	2,539
2022	44,460	3	4,863	243	5,106	2,553

(*) *NOTES* (1) Estimated growth for MRI procedures is set 5%, compared to actual growth rate of 10%.
(2) Market share is assumed at 50% for the service area.

In year one (1) the estimated unit volume will be 363 procedures above the 2,160 threshold requirement, and in year two (2) the estimated unit volume will be 19 procedures above the 2,520 threshold requirement. It is noted that the estimated unit volume in year three (3) is anticipated to be below the threshold requirement of 2,880. However, we believe that the estimated volume is lower than it will actually be. This is due to the increase in MRI utilization assumption of 5%, but the actual growth rate in Southeast Tennessee is 10% in CY 2015.

Further, rural access to this modality of radiographic imaging is enhanced and provides the rural service area with what is now the standard of care.

b. Provider proposing a new non-specialty mobile MRI service should project a minimum of at least 360 mobile MRI procedures in the first year of service per day of operation per week, building to an annual minimum of 420 procedures per day of operation per week by the second year of service, and building to a minimum of 480 procedures per day of operation per week by the third year of service and for every year thereafter.

Response

*** Not applicable. ***

c. An exception to the standard number of procedures may occur as new or improved technology and equipment or new diagnostic application for MRI units are developed. An applicant must demonstrate that the proposed unit offers a unique and necessary technology for the provision of health care services in the Service Area.

Response

*** Not applicable. ***

d. Mobile MRI units shall not be subject to the need standard in paragraph 1(b) if fewer than 150 days of service per year are provided at a given location. However, the applicant must demonstrate that existing services in the applicant's Service Area are not adequate and/or that there are special circumstances that require these additional services.

Response

*** Not applicable. ***

e. Hybrid MRI Units. The HSDA may evaluate a CON application for an MRI 'hybrid" unit (an MRI unit that is combined/utilized with another medical

equipment such as a megavoltage radiation therapy unit or a positron emission tomography unit) based on the primary purposes of the unit.

Response

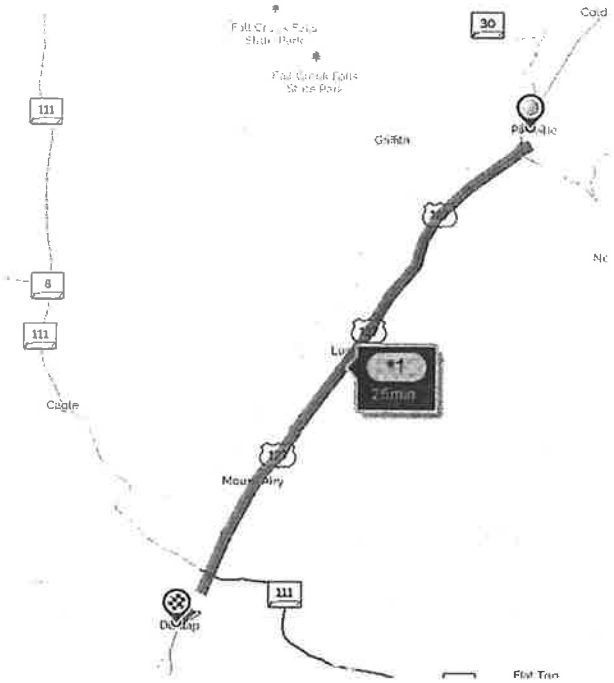
*** Not applicable. ***

2. **Access To MRI Units. All applicants for any proposed new MRI unit should document that the proposed location is accessible to approximately 75% of the Service Area's population. Applications that include non-Tennessee counties in their proposed Service Areas should provide evidence of the number of existing MRI units that service the non-Tennessee counties and the impact on MRI unit utilization in the non-Tennessee counties, including the specific location of those units located in the non-Tennessee counties, their utilization rates, and their capacity (if that data are available).**

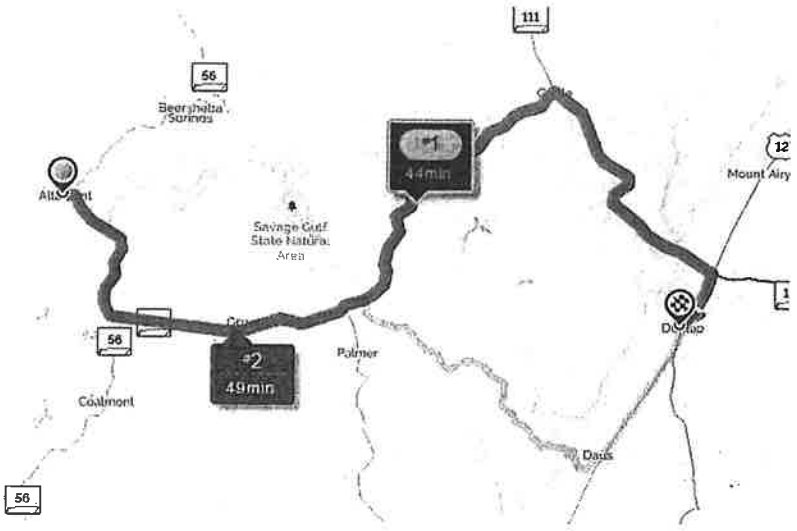
Response

Sequatchie County is the middle point of the defined service area, with Dunlap being the county seat. We approximate that all of Sequatchie County, along with the Southern portion of Bledsoe County and the Eastern portion of Grundy County, comprises roughly 60% to 75% of the service area population.

The travel distance from Pikeville (county seat), Bledsoe County, Tennessee, to Dunlap, Sequatchie County, Tennessee, is 20.2 miles for approximately 25 minutes, directly along Tennessee State 127, which is a two (2) lane road.



The travel distance from Altamont (county seat), Grundy County, Tennessee, to Dunlap, Sequatchie County, Tennessee, is 33.1 miles for approximately 44 minutes, along Tennessee State 108 and 111, which are primarily two (2) lane roads.



3. **<u>Economic Efficiencies</u>. All applicants for any proposed new MRI unit should document that alternate shared services and lower cost technology applications have been investigated and found less advantageous in terms of accessibility, availability, continuity, cost, and quality of care.**

Response

There are currently no MRI units located within the service area. All patients from these three (3) counties must travel a significant distance to Chattanooga, or some other location to access this radiographic service. As such, all the elements of this criterion (accessibility, continuity, cost, and quality) are negatively impacted by this disparity in service availability.

4. **Need Standard For Non-Specialty MRI Units.**

A need likely exists for one additional non-specialty MRI unit in a Service Area when the combined average utilization of existing MRI service providers is at or above 80% of the total capacity of 3600 procedures, or 2880 procedures, during the most recent twelve month period reflected in the provider medical equipment report maintained by the HSDA. The total capacity per MRI unit is based upon the following formula:

Stationary MRI Units: 1.20 procedures per hour x 12 hours per day x 5 days per week x 50 weeks per year = 3,600 procedures per year.

Mobile MRI Units: Twelve (12) procedures per day x days per week in operation x 50 weeks per year. For each day of operation per week, the optimal efficiency is 480 procedures per year, or 80 percent of the total capacity of 600 procedures per year.

Response

It is estimated that the number of MRI procedures for the service area, along with estimated unit volumes, will be as follows.

Estimated MRI Utilization
For THE Three (3) County Service Area

CY	Pop.	Project Year	Est. Pop. MRI Proc's	Growth Rate MRI Proc's	Service Area MRI Proc's	Est. Unit MRI Proc's
2020	43,936	1	4,806	240	5,046	2,523
2021	44,198	2	4,835	242	5,077	2,539
2022	44,460	3	4,863	243	5,106	2,553

(*) *NOTES* (1) Estimated growth for MRI procedures is set 5%, compared to actual growth rate of 10%.
(2) Market share is assumed at 50% for the service area.

In year one (1) the estimated unit volume will be 363 procedures more than the threshold requirement, and in year two (2) the estimated unit volume will be 19 procedures more than the threshold requirement. It is noted that the estimated unit volume in year three (3) is anticipated to be below the threshold requirement. However, we believe that the estimated volume is lower than it will actually be. This is due to the increase in MRI utilization assumption of 5%, but the actual growth rate in Southeast Tennessee is 10% in CY 2015.

5. **Need Standards For Specialty MRI Units.**

a. **Dedicated fixed or mobile Breast MRI unit. An applicant proposing to acquire a dedicated fixed or mobile breast MRI unit shall not receive a CON to use the MRI unit for non-dedicated purposes and shall demonstrate that annual utilization of the proposed MRI unit in the third year of operation is projected to be at least 1600 MRI procedures (.80 times the total capacity of 1 procedure per hour times 40 hours per week times 50 weeks per year), and that:**

Response

** *Not applicable.* **

1. **It has an existing and ongoing working relationship with a breast-imaging radiologist or**

radiology proactive group that has experience interpreting breast images provided by mammography, ultrasound, and MRI unit equipment, and that is trained to interpret images produced by an MRI unit configured exclusively for mammographic studies;

Response

*** Not applicable. ***

2. Its existing mammography equipment, breast ultrasound equipment, and the proposed dedicated breast MRI unit are in compliance with the Federal Mammography Quality Standards Act;

Response

*** Not applicable. ***

3. It is part of or has a formal affiliation with an existing healthcare system that provides comprehensive cancer care, including radiation oncology, medical oncology, surgical oncology and an established breast cancer treatment program that is based in the proposed service area.

Response

*** Not applicable. ***

4. It has an existing relationship with an established collaborative team for the treatment of breast cancer that includes radiologists, pathologists, radiation oncologists, hematologist/oncologists, surgeons, obstetricians/gynecologists, and primary are providers.

Response

*** Not applicable. ***

b. Dedicated fixed or mobile Extemity MRI unit. An applicant proposing to institute a dedicated fixed or mobile Extremity MRI unit shall provide documentation of the total capacity of the proposed MRI unit based on the number of days of operation each week, the number of days to be operated each year, the number of hours to be operated each day, and the average number of MRI procedures the unit is capable of performing each hour. The applicant shall then demonstrate that annual utilization of the proposed MRI Unit in the third year of operation is reasonably projected to be at least 80 per cent of the total capacity. Non-specialty MRI procedures shall not be performed on a dedicated fixed or mobile Extremity Unit and a CON granted for this use should so state on its face.

Response

*** Not applicable. ***

c. Dedicated fixed or mobile Multi-position MRI Unit. An applicant proposing to institute a dedicated or mobile Multi-position MRI Unit shall provide documentation of the total capacity of the proposed MRI Unit based on the number of days of operation per week, the number of days to be operated each year, the number of hours to be operated each day, and the average number of MRI procedures the unit is capable of performing each hour. The applicant shall then demonstrate that annual utilization of the proposed MRI Unit in the third year of operation is reasonably projected to be at least 80 percent of the total capacity. Non-specialty MRI procedures shall not be performed on a dedicated fixed or mobile Multi-position MRI Unit and a CON granted for this use should so state on its face.

Response

*** Not applicable. ***

6. Separate Inventories For Specialty MRI Units And Non-Specialty MRI Units. If data availability permits, Breast, Extremity, and Multi-position MRI

Units shall not be counted in the inventory of non-specialty fixed or mobile MRI Units, and an inventory for each category of Specialty MRI Unit shall be replaced with non-Specialty MRI fixed or mobile MRI Units and a Certificate of Need granted for any of these Specialty MRI Units shall have included on its face a statement to that effect. A non-Specialty fixed or mobile MRI Unit for which a CON is granted for Specialty MRI Unit purpose use-only shall be counted in the specific Specialty MRI Unit inventory and shall also have stated on the face of its Certificate of Need that it may not be used for non-Specialty MRI purposes.

Response

*** Not applicable. ***

7. **Patient Safety And Quality Of Care. The applicant shall provide evidence that any proposed MRI Unit is safe and effective for its proposed use.**

   a. **The United States Food & Drug Administration (FDA) must certify the proposed MRI Unit for clinical use.**

   Response

MRI units are standard in the industry and have been in use for more than five (5) years.

   b. **The applicant should demonstrate that the proposed MRI Procedures will be offered in a physical environment that conforms to applicable federal standards , manufacturer's specifications, and licensing agencies' requirements.**

   Response

Please see attached Architect's letter stating that the physical environment will conform to applicable federal standards, manufacturer's specifications, and licensing agencies' requirements.

c. The applicant should demonstrate how emergencies within the MRI Unit facility will be managed in conformity with accepted medical practice.

Response

Please see attached policy for *Erlanger Health System* pertaining to *MRI Safety*. The emergency procedure is outlined in section IV of the policy.

d. The applicant should establish protocols that assure that all MRI Procedures performed are medically necessary and will not unnecessarily duplicate other services.

Response

Please see attached a copy of the policy for *Erlanger Health System* pertaining to medical necessity in the MRI Dept.

e. An applicant proposing to acquire any MRI Unit or institute any MRI service, including Dedicated Breast and Extremity MRI Units, shall demonstrate that it meets or is prepared to meet the staffing recommendations and requirements set forth by the American College of Radiology, including staff education and training programs.

Response

Erlanger currently operates five (5) MRI units at other locations and meets all of the staffing recommendations and requirements set forth by the American College of Radiology, including staff education and training. The same standards will be applicable to the MRI unit for *Erlanger Sequatchie Valley Regional Hospital*.

f. All applicants shall commit to obtain accreditation from the Joint Commission, the American College of Radiology, or a comparable accreditation authority for MRI within two years following operation of the proposed MRI Unit.

Response

Erlanger currently operates five (5) MRI units at other locations and is accredited by the Joint Commission. The same standards will be applicable to the MRI unit for *Erlanger Sequatchie Valley Regional Hospital.*

g. All applicants should seek and document emergency transfer agreements with local area hospitals, as appropriate. An applicant's arrangements with its physician medical director must specify that said physician be an active member of the subject transfer agreement hospital medical staff.

Response

Erlanger Sequatchie Valley Regional Hospital, as a member institution of *Erlanger Health System* will have a direct affiliation with *Erlanger Medical Center* in Chattanooga, for emergency transfers. The medical director for the MRI service at *Erlanger Sequatchie Valley Regional Hospital* will be Blaise Baxter, MD, and the radiology service contract with *Tennessee Interventional & Imaging Associates* ("TIIA") stipulates that all physicians must be an active member of the medical staff.

We have also attached a current list of hospital transfer agreements to this CON application.

8. The applicant should provide assurances that it will submit data in a timely fashion as requested by the HSDA to maintain the HSDA Equipment Registry.

Response

Erlanger Health System currently operates five (5) MRI units and reports utilization data to the HSDA Equipment Registry. The same standards will be applicable to the MRI unit which is the subject of this CON application.

9. In light of Rule 0720-11-.01, which lists the factors concerning need on which an application may be evaluated, and Principle No. 2 in the State Health Plan, "Every citizen should have reasonable access to

health care," the HSDA may decide to give special consideration to an applicant:

a. Who is offering the service in a medically underserved area as designated by the United States Health Resources And Services Administration;

Response

All three (3) counties in the service area have been designated by HRSA as being medically underserved. A copy of the HRSA designation is attached to this CON application.

b. Who is a "safety net hospital" or a "children's hospital" as defined by the Bureau of TennCare Essential Access Hospital payment program; or

Response

Erlanger Medical Center is classified by the Bureau of TennCare as a "safety net hospital" and also as a "children's hospital". *Erlanger* qualifies under this criterion as a "safety net hospital" because we serve all people regardless of their ability to pay for service. Further, we have the only children's hospital within 100 miles of Chattanooga, Tennessee.

Erlanger Sequatchie Valley Regional Hospital, as a member institution of *Erlanger Health System* will have a direct affiliation with *Erlanger Medical Center* in Chattanooga, which is an academic medical center affiliated with the *University of Tennessee - College of Medicine*. *Erlanger Medical Center* is the only tertiary service provider within 100 miles of Chattanooga, Tennessee.

Erlanger Health System is also a member of the *Vanderbilt University Medical Center - Health Network*. This affiliation will further enhance our ability to provide state of the art research, education and training programs. *Erlanger Health System* has also affiliated with *Technion Institute Of Technology*, in Haifa, Israel, for training of medical students, as well as graduate medical education, residency training and research. Increased opportunity exists in various medical specialties to

potentially add to *Erlanger's* growing portfolio of medical research and training programs.

Erlanger Health System also participates with numerous schools that provide advanced training in the areas of nursing and allied health.

c. Who provides a written commitment of intention to contract with at least one TennCare MCO and, if providing adult services, to participate in the Medicare program; or

Response

Erlanger Health System currently contracts with several TennCare MCO's, as follows.

-- BlueCare
-- TennCare Select
-- United Healthcare Community Plan
-- Amerigroup Community Care

Erlanger Health System also participates in the Medicare program.

d. Who is proposing to use the MRI unit for patients that typically require longer preparation and scanning times (e.g., pediatric, special needs, sedated, and contrast agent use patients). The applicant shall provide in its application information supporting the additional time required per scan and the impact on the need standard.

Response

Erlanger is classified by the Bureau of TennCare as a "safety net hospital" and also as a "children's hospital". *Erlanger's* experience is that it takes approximately 30 to 45 minutes longer in preparation time for children and patients that are sedated. This contributes to *Erlanger's* over capacity, however, we must serve these populations regardless of the patient's ability to pay for service. The suggested impact on the need standard may be to reduce the full need standard to something less than 3,600, when children are served.

[End Of Responses To Magnetic Resonance Imaging, 2011, pp. 18-21]

FREESTANDING EMERGENCY DEPARTMENTS

[Standards & Criteria, 2016 Update To Tennessee State Health Plan]

1. Determination Of Need: The determination of need shall be based upon the existing access to emergency services in the proposed service area. The applicant should utilize the metrics below, as well as other relevant metrics, to demonstrate that the population in the proposed service area has inadequate access to emergency services due to geographic isolation, capacity challenges, or low-quality of care. The applicant shall provide information on the number of existing emergency department (ED) facilities in the service area, as well as the distance of the proposed FSED from these existing facilities. If the proposed service area is comprised of contiguous ZIP Codes, the applicant shall provide this information on all ED facilities located in the county or counties in which the service area ZIP Codes are located. The applicant should utilize Centers for Medicare and Medicaid Services (CMS) throughput measures, available from the CMS Hospital Compare website, to illustrate the wait times at existing emergency facilities in the proposed service area. Data provided on the CMS Hospital Compare website does have a three to six month lag. In order to account for the delay in this information, the applicant may supplement CMS data with other more timely data. The applicant should also provide data on the number of visits per treatment room per year for each of the existing emergency department facilities in the service area. Applicants should utilize applicable data in the Hospital Joint Annual Report to demonstrate the total annual ED volume and annual emergency room visits of the existing facilities within the proposed service area. All existing EDs in the service area should be operating at capacity. This determination should be based upon the annual visits per treatment room at the host hospital's emergency department (ED) as identified by the American College of Emergency Physicians (ACEP) in Emergency Department

Design: A Practical Guide to Planning for the Future, Second Edition as capacity for EDs. The capacity levels set forth by this document should be utilized as a guideline for describing the potential of a respective functional program. The annual visits per treatment room should exceed what is outlined in the ACEP document. Because the capacity levels set forth in the Emergency Department Design: A Practical Guide to Planning for the Future, Second Edition are labeled in the document as a "preliminary sizing chart", the applicant is encouraged to provide additional evidence of the capacity, efficiencies, and demographics of patients served within the existing ED facility in order to better demonstrate the need for expansion.

ED-1 Median time from ED arrival to ED departure for ED admitted patients
ED-2 Median time from admit decision to departure for ED admitted patients
OP-18 Median time from ED arrival to ED departure for discharged ED patients
OP-20 Door to diagnostic evaluation by a qualified medical professional
OP-22 ED-patient left without being seen

Source:
https://www.medicare.gov/hospitalcompare/search.html
https://data.medicare.gov/data/hospital-compare

Note: The above measures are found in the category "Timely and Effective Care".

If the applicant is demonstrating low-quality care provided by existing EDs in the service area, the applicant shall utilize the Joint Commission's "Hospital Outpatient Core Measure Set". These measures align with CMS reporting requirements and are available through the CMS Hospital Compare website. Full details of these measures can be found in the Joint Commission's Specification Manual for National Hospital Outpatient Department Quality Measures. Existing emergency facilities should be in the bottom quartile of the state in the measures listed below in order to demonstrate low-quality of care.

OP-1 Median Time to Fibrinolysis
OP-2 Fibrinolytic Therapy Received Within 30 Minutes

OP-3 Median Time to Transfer to Another Facility for Acute Coronary Intervention
OP-4 Aspirin at Arrival OP-5 Median Time to ECG
OP-18 Median Time from ED Arrival to Departure for Discharged ED Patients
OP-20 Door to Diagnostic Evaluation by a Qualified Medical Personnel
OP-21 ED-Median Time to Pain Management for Long Bone Fracture
OP-23 ED-Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Received Head CT or MRI Scan Interpretation With 45 Minutes of ED Arrival

Sources:

https://www.jointcommission.org/hospital outpatient department/
https://www.jointcommission.org/assets/1/6/HAP Outpatient Dept Core Measure Set.pdf
https://www.medicare.gov/hospitalcompare/search.html
https://data.medicare.gov/data/hospital-compare

Note: The above measures are found in the category "Timely and Effective Care".

The HSDA should consider additional data provided by the applicant to support the need for the proposed FSED including, but not limited to, data relevant to patient acuity levels, age of patients, percentage of behavioral health patients, and existence of specialty modules. These data may provide the HSDA with additional information on the level of need for emergency services in the proposed service area. If providing additional data, applicants should utilize Hospital Discharge Data System data (HDDS) when applicable. The applicant may utilize other data sources to demonstrate the percentage of behavioral health patients but should explain why the alternative data source provides a more accurate indication of the percentage of behavioral health patients than the HDDS data.

See Standard 2, Expansion of Existing Emergency Department Facility, for more information on the establishment of a FSED for the purposes of decompressing volumes and reducing wait times at the

host hospital's existing ED.

Note: Health Planning recognizes that limitations may exist for specific metrics listed above. When significant limitations exist (e.g. there are not adequate volumes to evaluate) applicants may omit these metrics from the application. However, the application should then discuss the limitations and reasoning for omission. Applicants are encouraged to supplement the listed metrics with additional metrics that may provide HSDA with a more complete representation of the need for emergency care services in the proposed service area.

Response

There will be no change in the availability of emergency services in Sequatchie County or Bledsoe County with approval of this CON application. *Erlanger Bledsoe Hospital* and its provider based emergency department in Dunlap, Sequatchie County, are the only existing providers of emergency medical care in the service area. The provider based emergency department is described here and in the companion CON application, concurrently filed.

The physical plant deficiencies at *Erlanger Bledsoe Hospital* necessitate that the facility be replaced. For 2016, the average number of emergency visits per room at *Erlanger Bledsoe Hospital* was 1,136 visits vs. the ACEP (American College of Emergency Physicians) low acuity standard (low range estimate) of 1,250 visits per room and the high acuity standard (high range estimate) of 909 visits per room. At the same time, the provider based emergency department in Sequatchie County has outgrown its facilities when utilization and capacity are compared to standards at 2,097 visits per room in 2016, compared to the low acuity standard of 1,250 visits per room and the high acuity standard of 909 visits per room.

For Sequatchie County, this application includes the physical integration of an existing provider based emergency department located in Dunlap, Sequatchie County, Tennessee, into a replacement hospital to be located in Dunlap, Sequatchie County, Tennessee, serving the same population. Further, a companion CON application describes a provider based emergency department in Pikeville, Bledsoe County, Tennessee. CMS has indicated that its approval

presumes that the replacement and relocation of the hospital and provider based emergency department will be the same as currently provided (copy of CMS letter attached to this CON application). The existing provider based emergency department in Sequatchie County will move less than ½ mile to the new hospital site. In Bledsoe County, the emergency department will move approximately 1.2 miles. No other changes are contemplated.

Metrics for *Erlanger Bledsoe Hospital* are attached to this CON application. As noted, metrics for *Erlanger Bledsoe Hospital* compare favorably with State and National averages, though in several instances *Erlanger Bledsoe Hospital* outperforms other hospitals at both the state and national level. For example, metrics related to communications with nurses and doctors. For emergency department specific metrics, *Erlanger Bledsoe Hospital* has better times on ED transfers and treatment. Although operating statistics for the provider based emergency department are operationally integrated into *Erlanger Bledsoe Hospital*, separate operating statistics are not maintained. CMS considers the hospital and provider based emergency department to be one in the same, effectively inseparable.

Pertaining to the operating metrics identified within this criterion, data is not available for many indicators on the *Medicare Hospital Compare* website. However, data is available for a few of the indicators, as listed here:

Ind.	*Description*	*Value*
OP-4	Aspirin At Arrival	99 %
OP-18	Median Time From ED Arrival To Departure For Discharged ED Patients	95 min.
OP-20	Door To Diagnostic Eval	25 min.
OP-21	Median Time To Pain Med	49 min.
OP-22	Left Before Being Seen	2 %

A copy of the Medicare Hospital Compare data is attached to this CON application.

2. Expansion of Existing Emergency Department Facility: Applicants seeking expansion of the existing host hospital ED through the establishment of a FSED in order to decompress patient volumes should demonstrate the existing ED of the host hospital is operating at

capacity. This determination should be based upon the annual visits per treatment room at the host hospital's emergency department (ED) as identified by the American College of Emergency Physicians (ACEP) in Emergency Department Design: A Practical Guide to Planning for the Future, Second Edition as capacity for EDs. The capacity levels set forth by this document should be utilized as a guideline for describing the potential of a respective functional program. The applicant shall utilize the applicable data in the Hospital Joint Annual Report to demonstrate total annual ED volume and annual emergency room visits. The annual visits per treatment room should exceed what is outlined in the ACEP document. Because the capacity levels set forth in the Emergency Department Design: A Practical Guide to Planning for the Future, Second Edition are labeled in the document as a "preliminary sizing chart", the applicant is encouraged to provide additional evidence of the capacity, efficiencies, and demographics of patients served within the existing ED facility in order to better demonstrate the need for expansion. See Standard 1, Demonstration of Need, for examples of additional evidence.

Additionally, the applicant should discuss why expansion of the existing ED is not a viable option. This discussion should include any barriers to expansion including, but not limited to, economic efficiencies, disruption of services, workforce duplication, restrictive covenants, and issues related to access. The applicant should also provide evidence that all practical efforts to improve efficiencies within the existing ED have been made, including, but not limited to, the review of and modifications to staffing levels.

Applicants seeking to decompress volumes of the existing host hospital ED should be able to demonstrate need for the additional facility in the proposed service area as defined in the application in accordance with Standard 1, Determination of Need.

Response

*** Not applicable. ***

3. **Relationship to Existing Similar Services in the Area: The proposal shall discuss what similar services are available in the service area and the trends in occupancy and utilization of those services. This discussion shall include the likely impact of the proposed FSED on existing EDs in the service area and shall include how the applicant's services may differ from existing services. Approval of the proposed FSED should be contingent upon the applicant's demonstration that existing services in the applicant's proposed geographical service area are not adequate and/or there are special circumstances that require additional services.**

Rural: The applicant should provide patient origin data by ZIP Code for each existing facility as well as the proposed FSED in order to verify the proposed facility will not negatively impact the patient base of the existing rural providers. The establishment of a FSED in a rural area should only be approved if the applicant can adequately demonstrate the proposed facility will not negatively impact any existing rural facilities that draw patients from the proposed service area. Additionally, in an area designated as rural, the proposed facility should not be located within 10 miles of an existing facility. Finally, in rural proposed service areas, the location of the proposed FSED should not be closer to an existing ED facility than to the host hospital.

Critical Access Hospitals (CAH): In Tennessee, certain CAHs are not located in rural areas according to the definition of rural provided in these standards. The location of the proposed FSED should not be closer to an existing CAH than to the host hospital.

Response

There are no other providers of emergency department services in Bledsoe, Sequatchie or Grundy counties. All areas to be served are classified as medically underserved. *Erlanger Bledsoe Hospital* has also received designation as a "necessary provider" from both the State of Tennessee and CMS. As part of a critical access hospital, the emergency department at *Erlanger Bledsoe Hospital* and its provider based emergency department in Sequatchie County, meets all

access and geographical standards as promulgated for critical access hospitals by CMS.

4. **Host Hospital Emergency Department Quality of Care: Additionally, the applicant shall provide data to demonstrate the quality of care being provided at the ED of the host hospital. The quality metrics of the host hospital should be in the top quartile of the state in order to be approved for the establishment of a FSED. The applicant shall utilize the Joint Commission's hospital outpatient core measure set. These measures align with CMS reporting requirements and are available through the CMS Hospital Compare website. Full details of these measures can be found in the Joint Commission's Specification Manual for National Hospital Outpatient Department Quality Measures.**

OP-1 Median Time to Fibrinolysis
OP-2 Fibrinolytic Therapy Received Within 30 Minutes
OP-3 Median Time to Transfer to Another Facility for Acute Coronary Intervention
OP-4 Aspirin at Arrival
OP-5 Median Time to ECG
OP-18 Median Time from ED Arrival to Departure for Discharged ED Patients
OP-20 Door to Diagnostic Evaluation by a Qualified Medical Personnel
OP-21 ED-Median Time to Pain Management for Long Bone Fracture
OP-23 ED-Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Received Head CT or MRI Scan Interpretation With 45 Minutes of ED Arrival

Sources:

https://www.jointcommission.org/hospital_outpatient_department/
https://www.jointcommission.org/assets/1/6/HAP_Outpatient_Dept_Core_Measure_Set.pdf
https://www.medicare.gov/hospitalcompare/search.html
https://data.medicare.gov/data/hospital-compare

Note: The above measures are found in the category "Timely and Effective Care".

Note: Health Planning recognizes that limitations may exist for specific metrics listed above. When significant limitations exist (e.g. there are not adequate volumes to evaluate) applicants may omit these metrics from the

application. However, the application should then discuss the limitations and reasoning for omission. Applicants are encouraged to supplement the listed metrics with additional metrics that may provide HSDA with a more complete representation of the need for emergency care services in the proposed service area.

Response

Pertaining to the operating metrics identified within this criterion, data is not available for many indicators on the *Medicare Hospital Compare* website. However, data is available for a few of the indicators, as listed here:

Ind.	*Description*	*Value*
OP-4	Aspirin At Arrival	99 %
OP-18	Median Time From ED Arrival To Departure For Discharged ED Patients	95 min.
OP-20	Door To Diagnostic Eval	25 min.
OP-21	Median Time To Pain Med	49 min.
OP-22	Left Before Being Seen	2 %

A copy of the Medicare Hospital Compare data is attached to this CON application.

Erlanger Bledsoe Hospital compares favorably with both state and national averages. Metrics for the provider based emergency department in Sequatchie County are combined with those of *Erlanger Bledsoe Hospital* as provider based emergency as specified by CMS. *Erlanger Bledsoe Hospital* and its provider based ED are both accredited by *The Joint Commission*. The replacement hospital in its provider based emergency department will also be accredited by *The Joint Commission*.

5. Appropriate Model for Delivery of Care: The applicant should discuss why a FSED is the appropriate model for delivery of care in the proposed service area.

Response

Erlanger Bledsoe Hospital has demonstrated that its provider based emergency department in Sequatchie County was the right model for the needs of the community as evidenced by the improvements in health status that have been realized since the emergency department was opened.

With the Sequatchie County EMS service and a helipad on-site, community residents have timely access to a full range of emergency medical services inclusive of Level I trauma services for both adults and children. As the only Level I trauma service provider, *Erlanger Medical Center - University Hospital* also provides medical supervisory oversight for the entire thirteen (13) county region to ensure access to timely medical care thru its regional operations center.

It should be noted that members of the Medicare Payment Advisory Commission ("MedPAC") visited Erlanger Bledsoe Hospital in Pikeville, Tennessee, and it's provider based ED in Dunlap, Tennessee, on August 21-22, 2017. The purpose of the visit was to obtain a better understanding of how this critical access hospital and provider based emergency department can operate successfully when so many rural hospitals are closing. Potentially, this model may be suggested and/or extended to other critical access hospitals across the nation.

As a safety net provider with six (6) helicopters, *Erlanger Health System* provides essential services to those in need. *Erlanger Health System* is the 7th largest public health system in the United States. For the proposed project, it is anticipated that the community benefit in Bledsoe County will be at least equal to that realized with the hospital, though likely greater given the improved facilities and accessible location. As integral providers of *Erlanger Health System*, the new hospital and its provider based emergency department will have access to highly specialized resources in emergency medicine, Level I trauma services for adult and children, a fleet of air ambulances and a graduate medical training program for Emergency physicians. *Erlanger's* reputation in emergency medicine is national in scope, with *Erlanger Medical Center - University Hospital* hosting national trauma meetings and associated educational and credentialing meetings. Erlanger is one of only a few hospitals in the country that have the ability to raise the standard of care in the delivery of emergency medicine.

6. Geographic Location: The FSED should be located within a 35 mile radius of the hospital that is the main provider.

Response

The provider based emergency department in Pikeville, Bledsoe County, as described in the companion CON application, will be located approximately twenty two (22) miles from *Erlanger Sequatchie Valley Regional Hospital.* Both of these sites meet CMS location standards and requirements for a critical access hospital.

7. Access: The applicant must demonstrate an ability and willingness to serve equally all of the service area in which it seeks certification. In addition to the factors set forth in HSDA Rule 0720-11-.01(1) (listing factors concerning need on which an application may be evaluated), the HSDA may choose to give special consideration to an applicant that is able to show that there is limited access to ED services in the proposed Service Area.

Response

Erlanger Health System is a safety net provider for Tennessee and has a demonstrated track record of serving all patients regardless of ability to pay. *Erlanger Health System* annually provides more uncompensated care than all other hospitals in the region combined, the annual cost of this care typically exceeds $100 million. *Erlanger Medical Center - University Hospital* is where community hospitals send their most difficult cases. *Erlanger Health System* also operates a "system of care" that facilitates access to a broad range of tertiary services including Level I trauma services for adults and children.

8. Services to High-Need Populations: Special consideration shall be given to applicants providing services fulfilling the unique needs and requirements of certain high-need populations, including patients who are uninsured, low income, or patients with limited access to emergency care.

Response

Erlanger Health System is a safety net provider for Tennessee and has a demonstrated track record of serving all patients regardless of ability to pay. *Erlanger Health*

System annually provides more uncompensated care than all other hospitals in the region combined, the annual cost of this care typically exceeds $100 million. *Erlanger Medical Center - University Hospital* is where community hospitals send their most difficult cases. *Erlanger Health System* also operates a "system of care" that facilitates access to a broad range of tertiary services including Level I trauma services for adults and children.

9. **Establishment of Non-Rural Service Area: The geographic service area shall be reasonable and based on an optimal balance between population density and service proximity of the applicant. The socio-demographics of the service area and the projected population to receive services shall be considered. The applicant shall demonstrate the orderly development of emergency services by providing information regarding current patient origin by ZIP Code for the hospital's existing ED in relation to the proposed service area for the FSED.**

   Establishment of a Rural Service Area: Applicants seeking to establish a freestanding emergency department in a rural area with limited access to emergency medical care shall establish a service area based upon need. The applicant shall demonstrate the orderly development of emergency services by providing information regarding patient origin by ZIP Code for the proposed service area for the FSED.

   Response

Erlanger Bledsoe Hospital is the only provider of emergency department services in Bledsoe County, Tennessee. *Erlanger Bledsoe Hospital*, through it's emergency department locations, currently provides 65.6% of all such services for Bledsoe County; and Erlanger Health System combined provides 76.5% of all emergency department services for Bledsoe County. See table of ED patient destination below.

ED Patient Destination From Bledsoe County, Tennessee

[*Bledsoe County = Zip Code 37367*]

	========== CY ==========		
	2014	**2015**	**2016**
Erlanger Bledsoe	4,109	4,212	4,322
Erlanger Med Cntr-Baroness Hosp	648	700	712
Erlanger Sequatchie Valley ED	174	373	359
Erlanger North Hosp	28	24	31
Erlanger East	22	14	18
Total - Erlanger Health System	4,981	5,323	5,442
Market Share	70.2%	76.1%	76.5%
CHI Memorial Hosp-Hixson	120	102	88
CHI Memorial Hosp-Chattanooga	78	75	65
Parkridge Med Cntr	64	49	22
Parkridge West Hosp	32	20	11
Parkridge East Hosp	22	15	21
Cumberland Med Cntr	873	559	631
Rhea Med Cntr	567	558	517
Cookeville Reg Med Cntr	108	94	95
Saint Thomas Highlands Hosp	102	75	76
Saint Thomas River Park Hosp	25	19	22
Other	128	109	124
Total - Bledsoe County	7,100	6,998	7,114

10. Relationship to Existing Applicable Plans; Underserved Area and Population: The proposal's relationship to underserved geographic areas and underserved population groups shall be a significant consideration.

Response

Erlanger Bledsoe Hospital is the only provider of emergency department services in Bledsoe County, Tennessee. Each of the emergency department sites will have a helipad that provides access, via Erlanger helicopter, to Level I trauma services for adults and for children. *Erlanger Medical Center – University Hospital* also provides emergency service oversight for the entire regional service area and is affiliated with the University of Tennessee – College of Medicine, to train emergency physicians,

including a fellowship in advanced emergency medicine. *Erlanger Health System* continuously demonstrates its commitment to the underserved. Its effort have had a direct impact in improving health status for rural underserved communities using independently collected metrics.

11. Composition of Services: Laboratory and radiology services, including but not limited to XRAY and CT scanners, shall be available on-site during all hours of operation. The FSED should also have ready access to pharmacy services and respiratory services during all hours of operation.

Response

As with existing ED services provided by *Erlanger Bledsoe Hospital* at both locations, the same services will be provided by *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED in Pikeville, Bledsoe County, as described in the companion CON application. Services will be inclusive of on-site X-Ray, CT, Laboratory and Respiratory Therapy. Also, emergency medical professionals will staff both ED locations twenty-four (24) hours per day.

12. Pediatric Care: Applicants should demonstrate a commitment to maintaining at least a Primary Level of pediatric care at the FSED as defined by CHAPTER 1200-08-30 Standards for Pediatric Emergency Care Facilities including staffing levels, pediatric equipment, staff training, and pediatric services. Applicants should include information detailing the expertise, capabilities, and/or training of staff to stabilize or serve pediatric patients. Additionally, applicants shall demonstrate a referral relationship, including a plan for the rapid transport, to at least a general level pediatric emergency care facility to allow for a specialized higher level of care for pediatric patients when required.

Response

Children's Hospital @ Erlanger, located in Chattanooga, Tennessee, is a state designated regional

pediatric center. Access via *LifeForce* helicopter can be accomplished in a matter of minutes from Bledsoe, Sequatchie or Grundy counties. The EMS service for Sequatchie County is also co-located with the emergency department. Staff from *Children's Hospital @ Erlanger* provide education and training on appropriate protocol and treatment of pediatric emergencies. The hospital and its provider based ED will each have a helipad to foster patient transfer as needed.

13. **Assurance of Resources: The applicant shall document that it will provide the resources necessary to properly support the applicable level of emergency services.**

    Included in such documentation shall be a letter of support from the applicant's governing board of directors or Chief Financial Officer documenting the full commitment of the applicant to develop and maintain the facility resources, equipment, and staffing to provide the appropriate emergency services. The applicant shall also document the financial costs of maintaining these resources and its ability to sustain them to ensure quality treatment of patients in the ED continuum of care.

    Response

    A letter from the CFO for *Erlanger Health System* is attached to this CON application, and is also attached to the companion CON application. The letter assures our commitment to the provider based ED which will be part of *Erlanger Sequatchie Valley Regional Hospital*. This commitment will be to provide necessary resources, operate and staff the provider based ED sufficiently as to ensure high quality care, both within and along the ED continuum.

14. **Adequate Staffing: An applicant shall document a plan demonstrating the intent and ability to recruit, hire, train, assess competencies of, supervise, and retain the appropriate numbers of qualified personnel to provide the services described in the application and that such personnel are available in the proposed service area. Each applicant shall outline planned staffing patterns including the number and type of**

physicians and nurses. Each FSED is required to be staffed by at least one physician and at least one registered nurse at all times (24/7/365). Physicians staffing the FSED should be board certified or board eligible emergency physicians. If significant barriers exist that limit the applicant's ability to recruit a board certified or board eligible emergency physician, the applicant shall document these barriers for the HSDA to take into consideration. Applicants are encouraged to staff the FSED with registered nurses certified in emergency nursing care and/or advanced cardiac life support. The medical staff of the FSED shall be part of the hospital's single organized medical staff, governed by the same bylaws. The nursing staff of the FSED shall be part of the hospital's single organized nursing staff. The nursing services provided shall comply with the hospital's standards of care and written policies and procedures.

Adequate Staffing of a Rural FSED: An applicant shall document a plan demonstrating the intent and ability to recruit, hire, train, assess competencies of, supervise, and retain the appropriate numbers of qualified personnel to provide the services described in the application and that such personnel are available in the proposed service area. Each applicant shall outline planned staffing patterns including the number and type of physicians. FSEDs proposed to be located in rural areas are required to be staffed in accordance with the Code of Federal Regulations Title 42, Chapter IV, Subchapter G, Part 485, Subpart F - Conditions of Participation: Critical Access Hospitals (CAHs). This standard requires a physician, nurse practitioner, clinical nurse specialist, or physician assistant be available at all times the CAH operates. The standard additionally requires a registered nurse, clinical nurse specialist, or licensed practical nurse to be on duty whenever the CAH has one or more inpatients. However, because FSEDs shall be in operation 24/7/365 and because they will not have inpatients, a registered nurse, clinical nurse specialist, or licensed practical nurse shall be on duty at all times (24/7/365). Additionally, due to the nature of the emergency services provided at an FSED and the hours of operation, a physician, nurse practitioner, clinical nurse specialist, or physician assistant shall be on site at all times.

Source:

http://www.ecfr.gov/cgi-bin/textidx?rgn=div6&node=42:5.0.1.1.4.4#se42.5.485_1631

Response

Erlanger Bledsoe Hospital and its provider based ED have continuously operated without interruption and has maintained full accreditation for its services by *The Joint Commission*. *Erlanger Sequatchie Valley Regional Hospital* does not anticipate difficulties in staffing the proposed project. There will be essentially no change in ED services.

As a rural CAH, Erlanger Sequatchie Valley Regional Hospital will staff the provider based ED in Bledsoe County in compliance with the Code of Federal Regulations, Title 42, Chapter IV, Subchapter G, Part 485, Subpart F - Conditions of Participation: Critical Access Hospitals (CAHs). At all times of operation, a qualified and licensed medical professional will be on-site to render patient care … such medical professional will be either a physician, nurse practitioner, clinical nurse specialist, or physician assistant. Additionally, a registered nurse, clinical nurse specialist, or licensed practical nurse will also be on duty at all times of operation.

15. Medical Records: The medical records of the FSED shall be integrated into a unified retrieval system with the host hospital.

Response

Erlanger Health System is currently implementing a new EMR system which will be completed in November, 2017. This new EMR system is fully integrated and will serve as a unified retrieval system across all hospitals and ambulatory care sites, including *Erlanger Bledsoe Hospital* and it's provider based ED in Sequatchie County. Upon approval of this project, the same EMR system will be installed in *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED in Pikeville, Bledsoe County, a described in the companion CON application.

16. Stabilization and Transfer Availability for Emergent Cases: The applicant shall demonstrate the ability of the proposed FSED to perform stabilizing treatment within the FSED and demonstrate a plan for the rapid transport of patients from the FSED to the most appropriate facility with a higher level of emergency care for further treatment. The applicant is encouraged to include air ambulance transport and an on-site helipad in its plan for rapid transport. The stabilization and transfer of emergent cases must be in accordance with the Emergency Medical Treatment and Labor Act.

Response

Erlanger Health System prides itself on the "system of care" that it has developed across a four state area, which includes *LifeForce* air ambulance & helicopter transfer, co-located EMS partnerships, emergency medical oversight and supervision, and physician training in emergency medicine. The depth and breadth of emergency medical services are unmatched elsewhere, while being fully integrated across the healthcare delivery system and the entire four (4) state regional service area. Transfer agreements are in place for many community hospitals in the regional service area. Please see the list attached to this CON application.

The provider based ED in Pikeville, Bledsoe County, as described in the companion CON application, will have a helipad to accommodate LifeForce air ambulance and helicopter transfer. EMS services from Bledsoe County are located within ½ mile of the site for *Erlanger Sequatchie Valley Regional Hospital - Satellite Emergency Department.* The stabilization and transfer of emergent cases will be in accordance with the *Emergency Medical Treatment & Labor Act.* *Erlanger's* established "system of care" serves to offset the longer EMS express times typically found in a rural market (see attached article).

17. Education and Signage: Applicants must demonstrate how the organization will educate communities and Emergency medical services (EMS) on the capabilities of the proposed FSED and the ability for the rapid

transport of patients from the FSED 13 to the most appropriate hospital for further treatment. It should also inform the community that inpatient services are not provided at the facility and patients requiring inpatient care will be transported by EMS to a full service hospital. The name, signage, and other forms of communication of the FSED shall clearly indicate that it provides care for emergency and/or urgent medical conditions without the requirement of a scheduled appointment. The applicant is encouraged to demonstrate a plan for educating the community on appropriate use of emergency services contrasted with appropriate use of urgent or primary care.

Response

Erlanger Bledsoe Hospital and its provider based ED have worked extensively with communities to educate them on the provision of services. Signage and naming conventions for *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED, as described in the companion CON application, will meet all CMS standards and guidelines. In addition, "Erlanger Notes" are delivered live monthly via the County Commission to the community to insure community awareness of essential services. *Erlanger* attributes its success in delivering services to the community, in part, to its efforts to engage and educate the community. The health of the population has shown measurable improvement.

18. Community Linkage Plan: The applicant shall describe its participation, if any, in a community linkage plan, including its relationships with appropriate health and outpatient behavioral health care system, including mental health and substance use, providers/services, providers of psychiatric inpatient services, and working agreements with other related community services assuring continuity of care. The applicant is encouraged to include primary prevention initiatives in the community linkage plan that would address risk factors leading to the increased likelihood of ED usage. Rationale: The State Health Plan moved from a primary emphasis of health care to an emphasis on "health protection and promotion". The development of primary prevention initiatives for the community advances the mission of the State Health

Plan.

Response

As indicated, *Erlanger Health System* has worked extensively to ensure there are no gaps in the provision of needed services. It's "system of care" is well known to provide access to a broad based continuum of services, while ensuring continuity via an integrated EMR system. As a safety net, *Erlanger Bledsoe Hospital* and it's provider based ED assure access to all patients, regardless of their ability to pay. This assurance will remain in place with *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED, as described in the companion CON application. *Erlanger Bledsoe Hospital* has worked extensively with communities to educate them on the provision of services. In addition, "Erlanger Notes" are delivered live monthly via the County Commission to the community to insure community awareness of essential services. *Erlanger* attributes its success in delivering services to the community, in part, to its efforts to engage and educate the community. The health of the population has shown measurable improvement.

19. Data Requirements: Applicants shall agree to provide the Department of Health and/or the HSDA with all reasonably requested information and statistical data related to the operation and provision of services and to report that data in the time and format requested. As a standard practice, existing data reporting streams will be relied upon and adapted over time to collect all needed information.

Response

Erlanger Sequatchie Valley Regional Hospital and it's provider based ED, as described in the companion CON application, will provide all reasonably requested information and statistical data related to the operation and provision of services. Also, to report such data as requested.

20. Quality Control and Monitoring: The applicant shall identify and document its existing or proposed plan for data reporting, quality improvement, and outcome

and process monitoring system. The FSED shall be integrated into the host hospital's quality assessment and process improvement processes.

Response

Erlanger Bledsoe Hospital and it's provider based ED are accredited by *The Joint Commission*. They also participate in quality reporting and monitoring, as evidenced by the quality information discussed previously and attached to this CON application. The quality reporting and monitoring will continue with *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED.

21. **Provider-Based Status: The applicant shall comply with regulations set forth by 42 CFR 413.65, Requirements for a determination that a facility or an organization has provider-based status, in order to obtain provider-based status. The applicant shall demonstrate eligibility to receive Medicare and Medicaid reimbursement, willingness to serve emergency uninsured patients, and plans to contract with commercial health insurers.**

Response

Erlanger Sequatchie Valley Regional Hospital and it's provider based ED, as described in the companion CON application, have already received approval from CMS. A copy of the letter is attached to this CON application.

Erlanger Sequatchie Valley Regional Hospital will serve uninsured emergency patients. In addition, all commercial payors which have a contractual agreement with *Erlanger Health System* will be able to access all of these services.

22. **Licensure and Quality Considerations: Any applicant for this CON service category shall be in compliance with the appropriate rules of the TDH, the EMTALA, along with any other existing applicable federal guidance and regulation. The applicant shall also demonstrate its accreditation status with the Joint Commission or other applicable accrediting agency. The**

FSED shall be subject to the same accrediting standards as the licensed hospital with which it is associated.

Response

Erlanger Bledsoe Hospital and it's provider based ED are accredited by *The Joint Commission.*, and they are also in compliance with rules of TDH, EMTALA and other applicable Federal regulations. Such accreditation will be maintained by *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED, as described in the companion CON application, upon approval and implementation of this project. A copy of the letter from *The Joint Commission* is attached to this CON application.

[End Of Responses To Standards & Criteria For Freestanding Emergency Departments, 2016 Update To Tennessee State Health Plan]

GENERAL QUESTIONS CONCERNING NEED, ECONOMIC FEASIBILITY, APPLICABLE QUALITY STANDARDS & CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTHCARE

(I.) *NEED*

1. **Provide a response to each criterion and standard in Certificate of Need Categories in the State Health Plan that are applicable to the proposed project. Criteria and standards can be obtained from the Tennessee Health services & Development Agency, or found on the Agency's website at http://www.tn.gov/hsda/article/hsda-criteria-and-standards.**

Response

Responses to the *CON Criteria & Standards* applicable to this project have been addressed.

- Construction, Renovation, Expansion, And Replacement Of Healthcare Institutions
- Acute Care Bed Need Services

- Freestanding Emergency Departments

2. Describe the relationship of this project to the applicant facility's long range development plans, if any, and how it relates to related previously approved projects of the applicant.

Response

Erlanger Health System currently holds a CON for *Erlanger East Hospital* to initiate a satellite radiation therapy service along with the relocation of a Linear Accelerator from *Erlanger Medical Center - University Hospital* (no. CN1412-048); a CON (No. CN1601-002) to transfer ten (10) medical/surgical beds from Erlanger Medical Center - University Hospital to Erlanger East Hospital and convert them to NICU beds, for initiation of a Level III NICU service. Further, a CON is outstanding for Erlanger Behavioral Health, LLC, for a new eighty eight (88) bed behavioral health hospital (no. CN1603-012).

Erlanger Health System prides itself on the "system of care" that it has developed across a four state area, which includes *LifeForce* air ambulance & helicopter transfer, co-located EMS partnerships, emergency medical oversight and supervision, and physician training in emergency medicine. The depth and breadth of emergency medical services are unmatched elsewhere, while being fully integrated across the healthcare delivery system and the entire four (4) state regional service area. Transfer agreements are in place for many community hospitals in the regional service area. Please see the list attached to this CON application.

The overall rank for health outcomes for each county in the service area, is as follows.

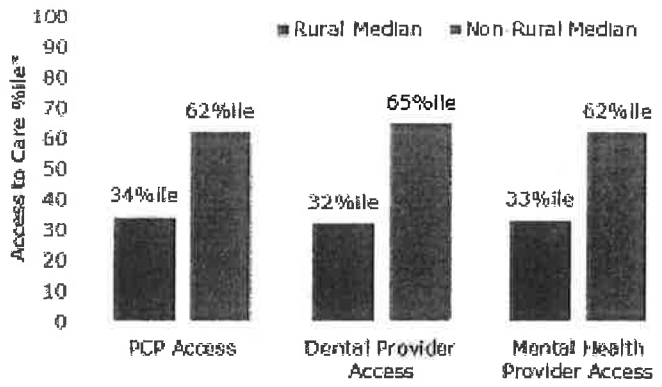
	=== Health Rank ====	
County	2013	2017
Sequatchie	91	68
Bledsoe	20	17
Grundy	95	95

As may be seen from this data, Sequatchie County was ranked 91st in Tennessee for health outcomes, and in

2017 it is ranked 68th; Bledsoe County improved to 17th in 2017 compared to 20th in 2013; and Grundy County ranks last in Tennessee, with no improvement in health outcomes over the study period.(4) These ranking are from the totalof ninety-five (95) counties in Tennessee. It should be noted that in 2013, *Erlanger Bledsoe Hospital* opened the first provider based emergency department in Tennessee which is part of a critical access hospital, in Dunlap, Sequatchie County, and wc believe this ED, along with access to essential services, was instrumental to the improvement in health outcomes.

Further, the *Chartis Center For Rural Health* has illustrated the disparity of access to health services between rural and non-rural communities.(5)

Access to Healthcare in Rural Hospital Communities



***Population Health metrics are percentile ranked for all acute care rural and non-rural providers by hospital service area such that lower ranks indicate greater population challenges.**

Not surprisingly, access to care for rural areas is essentially equivalent to half of the availability for non-rural areas.

The goal for *Erlanger Health System* is to provide a comprehensive system of care comprised of unduplicated services while also serving those who are currently under served and/or those who do not have the ability to pay for their services. As such, *Erlanger Sequatchie Valley*

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4 County rank for health outcomes retrieved from … www.countyhealthrankings.org.

5 Chartis Center For Rural Health. *Rural Relevance for 2017: Assessing The State Of Rural Healthcare In America.* Retrieved from … https://www.chartisforum.com/wp-content/uploads/2017/05/The-Rural-Relevance-Study_2017.pdf, p. 6.

Regional Hospital is part of a long term plan to make services more accessible.

3. **Identify the proposed service and justify the reasonableness of that proposed area. Submit a county level map for the Tennessee portion of the service area using the map on the following page, clearly marked to reflect the service area as it relates to meeting the requirements for CON criteria and standards that may apply to the project. Please include a discussion of the inclusion of counties in the border states, if applicable.**
Attachment - Section - Need - 3.

Please complete the following tables, if applicable:

Service Area Counties	*Historical Utilization - County Residents*	*% Of Total Procedures*
County 1		
County 2		
Etc.		
Total		

Response

The objective for *Erlanger Sequatchie Valley Regional Hospital* is to foster access by creating a "regional community hospital" for three (3) rural counties which are directly West of Hamilton County, Tennessee. These counties are Grundy, Sequatchie and Bledsoe. By relocating the hospital to Dunlap, in Sequatchie County, Tennessee, the population of the service area will have improved access with a more centrally located facility which is accessible by the entire Sequatchie Valley region. Thus, patients will not need to travel to Chattanooga, Tennessee, or elsewhere, for needed health services.

Patients from Grundy County and Sequatchie County must travel a significant distance to Chattanooga, or some other location to access needed services. While patients in Bledsoe County have access to needed services in the current hospital, they don't currently have access

to surgery, MRI and other services that are planned for *Erlanger Sequatchie Valley Regional Hospital*. Thus, the provision of effective hospital services are limited by accessibility and space, impacting continuity of care, quality, and cost.

	===== I/P Admissions =======			======= % Of Total ========		
County	2014	2015	2016	2014	2015	2016
Bledsoe	1,288	1,280	1,236	22.0%	21.6%	21.7%
Grundy	2,109	2,072	2,021	36.1%	35.1%	35.4%
Sequatchie	2,452	2,563	2,451	41.9%	43.3%	42.9%
Total	5,849	5,915	5,708	100.0%	100.0%	100.0%

The service area is reasonable and provides balance between population density and service proximity. A map showing the service area is attached to this CON application.

4-A 1) Describe the demographics of the population to be served by the proposal.

Response

For the defined service area, the general population is expected to grow 2.4% compared to 4.2% for Tennessee. Those enrolled in TennCare comprise 26.1% of the population compared to 20.5% for Tennessee. Those living below the poverty level is 23.6% compared to 16.7% for Tennessee. Those over age 25 with less than a high school diploma is 26.5% compared to 15.2% for Tennessee. The median household income is $33,425 compared to $45,247 for Tennessee. The minority population is 6.38% compared to 24.58% for Tennessee. The elderly (age 65+) comprise 21.5% compared to 17.5% for Tennessee. For each of these measures, the service area is in a position strikingly opposite that of Tennessee.

The overall rank for health outcomes for each county in the service area, is as follows.

County	Health Rank 2013	Health Rank 2017
Sequatchie	91	68
Bledsoe	20	17
Grundy	95	95

As may be seen from this data, Sequatchie County was ranked 91st in Tennessee for health outcomes, and in 2017 it is ranked 68th; Bledsoe County improved to 17th in 2017 compared to 20th in 2013; and Grundy County ranks last in Tennessee, with no improvement in health outcomes over the study period. These ranking are from the totalof ninety-five (95) counties in Tennessee. It should be noted that in 2013, *Erlanger Bledsoe Hospital* opened the first provider based emergency department in Tennessee which is part of a critical access hospital, in Dunlap, Sequatchie County, and we believe this ED was instrumental to the improvement in health outcomes.

2) Using current and projected population data from the Department of Health, the most recent enrollee data from the Bureau of TennCare, and demographic information from the US Census Bureau, complete the following table and include data for each county in your proposed service area.

Projected Population Data:
http://www.tn.gov/health/article/statistics-population
TennCare Enrollment Data:
http://www.tn.gov/tenncare/topic/enrollment-data
Census Bureau Fact Finder:
http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

	Dept. Of Health / Health Statistics						Bureau Of The Census				TennCare	
Demographic Variable / Geographic Area	Total Population - Current Year	Total Population - Projected Year	Total Population - % Change	(*) Target Population - Current Year	(*) Target Population - % Change	(*) Target Population - Projected Year As % Of Total	Median Age	Median Household Income	Persons Below Poverty Level	Persons Below Level As % Of Total	TennCare Enrollees	TennCare Enrollees As % Of Total
County A County B, etc. Service Area Total State Of TN Total												

(*) Target Population is population that project will primarily serve. For example, nursing home, home health agency, hospice agency projects typically primarily serve the Age 65+ population; projects for child & adolescent psychiatric services will serve the population ages 0-19. Projected Year is defined in select service-specific criteria and standards. If Projected Year is not defined, default should be four years from current year, e.g., if Current Year is 2016, then default Projected Year is 202.

Response

As requested, the table has been completed.

	Dept. Of Health / Health Statistics						Bureau Of The Census				TennCare	
Demographic Variable / Geographic Area	Total Population - Current Year	Total Population - Projected Year	Total Population - % Change	(*) Target Population - Current Year	(*) Target Population - % Change	(*) Target Population - Projected Year As % Of Total	Median Age	Median Household Income	Persons Below Poverty Level	Persons Below Level As % Of Total	TennCare Enrollees	TennCare Enrollees As % Of Total
Bledsoe County, Tennessee	13,333	13,516	1.4%	13,333	1.4%	100.0%	43.1	$37,013	3,480	26.1%	3,048	22.9%
Grundy County, Tennessee	13,430	13,216	-1.6%	13,430	-1.6%	100.0%	42.6	$27,373	3,505	26.1%	4,449	33.1%
Sequatchie County, Tennessee	16,125	17,206	6.7%	16,125	6.7%	100.0%	42.3	$45,408	3,015	18.7%	3,698	22.9%
Service Area Total	42,888	43,938	2.4%	42,888	2.4%	100.0%	42.6	$36,598	10,122	23.6%	11,195	26.1%
State Of TN Total	6,887,572	7,179,512	4.2%	6,887,572	4.2%	100.0%	38.7	$45,219	1,150,225	16.7%	1,412,063	20.5%

B. Describe the special needs of the service area population, including health disparities, the accessibility to consumers, particularly the elderly, women, racial and ethnic minorities, and low-income groups. Document how the business plans of the facility will take into consideration the special needs of the service area population.

Response

For the defined service area, the general population is expected to grow 2.4% compared to 4.2% for Tennessee. Those enrolled in TennCare comprise 26.1% of the population compared to 20.5% for Tennessee. Those living below the poverty level is 23.6% compared to 16.7% for Tennessee. Those over age 25 with less than a high

school diploma is 26.5% compared to 15.2% for Tennessee. The median household income is $33,425 compared to $45,247 for Tennessee. The minority population is 6.38% compared to 24.58% for Tennessee. The elderly (age 65+) comprise 21.5% compared to 17.5% for Tennessee. For each of these measures, the service area is in a position strikingly opposite that of the Tennessee.

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5. Describe the existing and approved but unimplemented CON's of similar healthcare providers in the service area. Include utilization and/or occupancy trends for each of the most recent three years of data available for this project. List each provider and its utilization and/or occupancy individually. Inpatient bed projects must include the following data: Admissions or discharges, patient days, average length of stay, and occupancy. Other projects should use the most appropriate measures, e.g., cases, procedures, visits, admissions, etc. This doesn't apply to projects that are solely relocating a service.

Response

There are not currently any outstanding CON projects in the service area. The utilization for each county within the service area is below.

	===== I/P Admissions =======			======= % Of Total ========		
County	2014	2015	2016	2014	2015	2016
Bledsoe	1,288	1,280	1,236	22.0%	21.6%	21.7%
Grundy	2,109	2,072	2,021	36.1%	35.1%	35.4%
Sequatchie	2,452	2,563	2,451	41.9%	43.3%	42.9%
Total	5,849	5,915	5,708	100.0%	100.0%	100.0%

The utilization for *Erlanger Bledsoe Hospital* is as follows.

FY	Bed Type	Admits	Pt. Days	ALOS	% Occupancy
2014	Acute Care	217	561	2.6	6.1%
	Swing Beds	79	973	12.3	10.7%
	Total	296	1,534	5.2	16.8%
2015	Acute Care	293	783	2.7	8.6%
	Swing Beds	116	1,221	10.5	13.4%
	Total	409	2,004	4.9	22.0%
2016	Acute Care	229	652	2.8	7.1%
	Swing Beds	115	1,662	14.5	18.2%
	Total	344	2,314	6.7	25.4%

6. Provide applicable utilization and/or occupancy statistics for your institution for each of the past three (3) years and the projected annual utilization for each of the two (2) years following completion of the project. Additionally, provide the details regarding the methodology used to project utilization. The methodology must include detailed calculations or documentation from referral sources, and identification of all assumptions.

Response

The utilization for *Erlanger Bledsoe Hospital* is as follows.

FY	Bed Type	Admits	Pt. Days	ALOS	% Occupancy
2014	Acute Care	217	561	2.6	6.1%
	Swing Beds	79	973	12.3	10.7%
	Total	296	1,534	5.2	16.8%
2015	Acute Care	293	783	2.7	8.6%
	Swing Beds	116	1,221	10.5	13.4%
	Total	409	2,004	4.9	22.0%
2016	Acute Care	229	652	2.8	7.1%
	Swing Beds	115	1,662	14.5	18.2%
	Total	344	2,314	6.7	25.4%

Projected utilization for *Erlanger Sequatchie Valley Regional Hospital* is below.

FY	Bed Type	Admits	Pt. Days	ALOS	% Occupancy
Year 1	Acute Care	617	2,002	3.2	21.9%
	Swing Beds	225	3,482	15.5	38.2%
	Total	842	5,484	6.5	60.1%
Year 2	Acute Care	629	2,042	3.2	22.4%
	Swing Beds	230	3,552	15.4	38.9%
	Total	859	5,594	6.5	61.3%

(II.) *ECONOMIC FEASIBILITY*

1. **Provide the cost of the project by completing the Project Costs Chart on the following page. Justify the cost of the project.**

   A. **All projects should have a project cost of at least $ 15,000 (the minimum CON filing fee). (See application instructions for filing fee.)**

   B. **The cost of any lease (building, land and/or equipment) should be based on fair market value or the total amount of the lease payments over the initial term of the lease, whichever is greater. Note: This applies to all equipment leases including by procedure or "per click" arrangements.**

The methodology used to determine the total lease cost for a "per click" arrangement must include, at a minimum, the projected procedures, the "per click" rate and the term of the lease.

C. The cost for fixed and moveable equipment includes, but is not necessarily limited to, maintenance agreements covering the expected useful life of the equipment; federal, state and local taxes and other government assessments; and installation charges, excluding capital expenditures for physical plant renovation or in-wall shielding, which should be included under construction costs or incorporated in a facility lease.

D. Complete the Square Footage Chart on page 8 and provide the documentation. Please note the Total Construction Cost reported on line 5 of the Project Cost Chart should equal the Total construction Cost on the Square Footage Chart.

E. For projects that include new construction, modification, and/or renovation; documentation must be provided from a contractor and/or architect that support the estimated construction costs. Provide a letter that includes the following:

1.) A general description of the project;
2.) An estimate of the cost to construct the project;
3.) A description of the status of the site's suitability for the proposed project; and
4.) Attesting the physical environment will conform to applicable federal standards, Guidelines For Design & construction Of Hospital And Health Care Facilities in current use by the licensing authority.

Response

The *Project Cost Chart* has been completed on the next page, and the architect letter is attached to this CON application.

CON 1709 Page 85

PROJECT COST CHART

A. Construction And Equipment Acquired By Purchase.

1.	Architecural And Engineering Fees	1,115,500
2.	Legal, Administrative, Consultant Fees (Excluding CON Filing Fees)	
3.	Acquisition Of Site	1,500,000
4.	Preparation Of Site	1,259,000
5.	Total Construction Cost	19,958,500
6.	Contingency Fund	1,061,875
7.	Fixed Equipment (Not Included In Construction Contract)	2,708,327
8.	Moveable Equipment (List all equipment over $ 50,000 as separate attachments)	3,681,034
9.	Other (Specify) Signage, IT, etc.	1,254,600

B. Acquisition By Gift, Donation, Or Lease.

1.	Facility (inclusive of building and land)	0
2.	Building Only	0
3.	Land Only	0
4.	Equipment (Specify)	0
5.	Other (Specify)	0

C. Financing Costs And Fees.

1.	Interim Financing	0
2.	Underwriting Costs	0
3.	Reserve For One Year's Debt Service	0
4.	Other (Specify)	0

D.	Estimated Project Cost	(A + B + C)	32,558,836
E.	CON Filing Fee		95,000
F.	Total Estimated Project Cost	(D + E) **TOTAL**	32,653,836

2. Identify the funding sources for this project.

a. Please check the applicable item(s) below and briefly summarize how the project will be financed. (Documentation for the type of funding MUST be inserted at the end of the application, in the correct alpha/numeric order and identified as Attachment C, Economic Feasibility-2.)

___ A. Commercial Loan -- Letter from lending institution or guarantor stating favorable initial contact, proposed loan amount, expected interest rates, anticipated term of the loan, and any restrictions or conditions.

_X_ B. Tax - Exempt Bonds -- Copy of preliminary resolution or a letter from the issuing authority stating favorable initial contact and a conditional agreement from an underwriter or investment banker to proceed with the issuance.

___ C. General obligation bonds -- Copy of resolution from issuing authority or minutes from the appropriate meeting.

___ D. Grants -- Notification of intent form for grant application or notice of grant award.

___ E. Cash Reserves - Appropriate documentation from Chief Financial Officer of the organization providing the funding for the project and audited financial statements of the organization; and/or

___ F. Other - Identify and document funding from all other sources.

Response

Erlanger Sequatchie Valley Regional Hospital in Dunlap, Tennessee, will be financed through the *Sequatchie County Industrial Development Authority* bond issuance occurring through the *Tennessee Municipal Bond Fund*.

3. Complete Historical Data Charts on the following two pages - *Do not modify the charts provided or submit Chart substitutions*!

Historical Data Chart represents revenue and expense information for the last three (3) years for which complete data is available. Provide a Chart for the total facility and Chart just for the services being represented in the proposed project, if applicable. Only complete on chart if it suffices.

Note that "Management Fees to Affiliates" should include management fees paid by agreement to the parent company, another subsidiary of the parent company, or a third party with common ownership as the applicant entity. "Management Fees to Non-Affiliate" should include any management fees paid by agreement to third party entities not having common ownership with the applicant.

Response

The *Historical Data Charts* for *Erlanger Bledsoe Hospital* and *Erlanger Bledsoe Hospital - Satellite ED* have been completed.

[X] Total Facility
[ ] Project Only

HISTORICAL DATA CHART

Give information for the last *three (3)* years for which complete data are available for the facility or agency. The fiscal year begins in July (Month).

		Year – 2014	Year – 2015	Year – 2016
A.	Utilization Data (Specify Unit Of Measure, e.g., 1,000 patient days, 500 visits) *Admissions*	296	409	344
B.	Revenue From Services To Patients			
	1. Inpatient Services	2,987,745	3,808,307	4,624,277
	2. Outpatient Services	13,491,463	18,308,976	15,919,874
	3. Emergency Services	6,575,324	17,545,948	27,779,684
	4. Other Operating Revenue (Specify) Cafeteria, POB Rent, etc.	556,272	493,437	553,936
	Gross Operating Revenue	23,610,804	40,156,668	48,877,771
C.	Deductions From Gross Operating Revenue			
	1. Contractual Adjustments	11,254,224	22,510,486	29,757,443
	2. Provision For Charity Care	1,499,303	2,396,456	2,557,237
	3. Provision For Bad Debt	1,514,369	2,687,029	3,146,065
	Total Deductions	14,267,896	27,593,971	35,460,745
	NET OPERATING REVENUE	9,342,908	12,562,697	13,417,026
D.	Operating Expenses			
	1. Salaries And Wages			
	a. Direct Patient Care	3,082,935	4,672,107	4,350,575
	b. Non-Patient Care	1,193,574	1,808,830	1,684,347
	2. Physician's Salaries And Wages			
	3. Supplies	437,579	679,720	737,275
	4. Rent			
	a. Paid To Affiliates			
	b. To Non-Affiliates	200,117	200,117	204,357
	5. Management Fees			
	a. Paid To Affiliates			
	b. To Non-Affiliates			
	6. Other Operating Exp. (Specify) Insurance, Purch. Svcs., etc.	3,677,760	4,543,188	4,924,723
	Total Operating Expenses	8,591,965	11,903,962	11,901,277
E.	**Earnings Before Interest, Taxes & Depr.**	750,943	658,735	1,515,749
F.	Non-Operating Expenses			
	1. Taxes	5,495	5,225	11,066
	2. Depreciation	142,626	163,585	174,263
	3. Interest			
	4. Other Non-Operating Expenses			
	Total Non-Oper. Exp.	148,121	168,810	185,329
	NET INCOME (LOSS)	602,822	489,925	1,330,420

G. Other Deductions			
1. Annual Principal Debt Repayment			
2. Annual Capital Expenditure			
Total Other Deductions			
NET BALANCE	602,822	489,925	1,330,420
DEPRECIATION	142,626	163,585	174,263
FREE CASH FLOW (Net Balance + Depreciation)	745,448	653,510	1,504,683

☑ Total Facility
☐ Project Only

HISTORICAL DATA CHART -- OTHER EXPENSES

Other Expense Categories

		Year - 2014	Year – 2015	Year – 2016
1.)	Purchased Services	2,105,584	2,939,895	3,335,312
2.)	Utilities	189,480	227,272	286,483
3.)	Drugs	230,596	224,405	223,607
4.)	Insurance	9,859	9,375	19,848
5.)	Corporate O/H Allocation	1,142,241	1,142,241	1,059,473
6.)				
7.)				
	Total -- Other Expenses	3,677,760	4,543,188	4,924,723

[ ] Total Facility
[X] Project Only

HISTORICAL DATA CHART

Give information for the last *three (3)* years for which complete data are available for the facility or agency. The fiscal year begins in July (Month).

		Year – 2014	Year – 2015	Year – 2016
A.	Utilization Data (Specify Unit Of Measure, e.g., 1,000 patient days, 500 visits) *Admissions*	296	409	344
B.	Revenue From Services To Patients			
	1. Inpatient Services	2,987,745	3,808,307	4,624,277
	2. Outpatient Services	13,491,463	18,308,976	15,919,874
	3. Emergency Services	2,105,140	5,617,468	5,758,696
	4. Other Operating Revenue (Specify) Cafeteria, POB Rent, etc.	556,272	493,437	553,936
	Gross Operating Revenue	19,140,620	28,228,188	26,856,783
C.	Deductions From Gross Operating Revenue			
	1. Contractual Adjustments	9,123,485	15,823,779	16,350,770
	2. Provision For Charity Care	1,215,443	1,684,592	1,405,121
	3. Provision For Bad Debt	1,227,657	1,888,851	1,728,663
	Total Deductions	11,566,585	19,397,222	19,484,554
	NET OPERATING REVENUE	7,574,035	8,830,966	7,372,229
D.	Operating Expenses			
	1. Salaries And Wages			
	a. Direct Patient Care	2,499,250	3,183,338	2,246,719
	b. Non-Patient Care	967,597	1,232,446	869,829
	2. Physician's Salaries And Wages			
	3. Supplies	354,733	477,810	305,109
	4. Rent			
	a. Paid To Affiliates			
	b. To Non-Affiliates	57,714	57,714	61,954
	5. Management Fees			
	a. Paid To Affiliates			
	b. To Non-Affiliates			
	6. Other Operating Exp. (Specify) Insurance, Purch. Svcs., etc.	2,981,457	3,193,641	2,395,979
	Total Operating Expenses	6,860,751	8,144,949	5,879,590
E.	**Earnings Before Interest, Taxes & Depr.**	713,284	686,017	1,492,639
F.	Non-Operating Expenses			
	1. Taxes	4,455	4,185	10,026
	2. Depreciation	115,623	136,582	147,260
	3. Interest			
	4. Other Non-Operating Expenses			
	Total Non-Oper. Exp.	120,078	140,767	157,286
	NET INCOME (LOSS)	593,206	545,250	1,335,353

G. Other Deductions			
1. Annual Principal Debt Repayment			
2. Annual Capital Expenditure			
Total Other Deductions			
NET BALANCE	593,206	545,250	1,335,353
DEPRECIATION	115,623	136,582	147,260
FREE CASH FLOW (Net Balance + Depreciation)	708,829	681,832	1,482,613

☐ Total Facility
☑ Project Only

HISTORICAL DATA CHART -- OTHER EXPENSES

Other Expense Categories

		Year – 2014	Year – 2015	Year – 2016
1.)	Purchased Services	1,706,938	2,066,604	1,622,698
2.)	Utilities	153,606	159,761	139,380
3.)	Drugs	186,938	157,746	108,789
4.)	Insurance	7,992	6,590	9,656
5.)	Corporate O/H Allocation	925,983	802,940	515,456
6.)				
7.)				
	Total -- Other Expenses	2,981,457	3,193,641	2,395,979

4. Complete Projected Data Charts on the following two pages - *Do not modify the charts provided or submit Chart substitutions*!

The Projected Data Chart requests information for the two years following the completion of the proposed services that apply to the project. Please complete two Projected Data Charts. One Projected Data Chart should reflect revenue and expense information for the *Proposal Only* (i.e., if the application is for additional beds, include anticipated revenue from the proposed beds only, not from all beds in the facility). The second Chart should reflect information for the total facility. Only complete one chart if it suffices.

Note that "Management Fees to Affiliates" should include management fees paid by agreement to the parent company, another subsidiary of the parent company, or a third party with common ownership as the applicant entity. "Management Fees to Non-Affiliate" should include any management fees paid by agreement to third party entities not having common ownership with the applicant.

Response

The *Projected Data Charts* for *Erlanger Sequatchie Valley Regional Hospital* and *Erlanger Sequatchie Valley Regional Hospital - Satellite ED* have been completed.

[X] Total Facility Project Only

PROJECTED DATA CHART

Give information for the two years following the completion of this proposal. The fiscal year begins in July (Month).

		Year – 1	Year – 2
A.	Utilization Data (Specify Unit Of Measure, e.g., 1,000 patient days, 500 visits) *I/P Admissions*	842	859
B.	Revenue From Services To Patients		
	1. Inpatient Services	9,908,361	10,581,535
	2. Outpatient Services	15,907,398	17,329,219
	3. Emergency Services	36,450,179	39,055,348
	4. Other Operating Revenue (Specify) Cafeteria, POB Rent, etc.	506,981	522,190
	Gross Operating Revenue	62,772,919	67,488,292
C.	Deductions From Gross Operating Revenue		
	1. Contractual Adjustments	37,384,542	40,720,496
	2. Provision For Charity Care	3,087,411	3,362,912
	3. Provision For Bad Debt	3,798,317	4,137,254
	Total Deductions	44,270,270	48,220,662
	NET OPERATING REVENUE	18,502,649	19,267,630
D.	Operating Expenses		
	1. Salaries And Wages		
	a. Direct Patient Care	5,004,558	5,276,732
	b. Non-Patient Care	1,809,266	1,903,226
	2. Physician's Salaries And Wages	562,500	586,688
	3. Supplies	1,106,557	1,176,516
	4. Rent		
	a. Paid To Affiliates		
	b. To Non-Affiliates	2,301,268	2,301,268
	5. Management Fees		
	a. Paid To Affiliates		
	b. To Non-Affiliates		
	6. Other Operating Exp. (Specify) Insurance, Purch. Svcs., etc.	6,415,985	6,642,743
	Total Operating Expenses	17,200,134	17,887,173
E.	**Earnings Before Interest, Taxes & Depr.**	1,302,515	1,380,457
F.	Non-Operating Expenses		
	1. Taxes	5,500	5,500
	2. Depreciation		
	3. Interest		
	4. Other Non-Operating Expenses		
	Total Non-Oper. Exp.	5,500	5,500
	NET INCOME (LOSS)	1,297,015	1,374,957

G. Other Deductions		
1. Annual Principal Debt Repayment		
2. Annual Capital Expenditure		
Total Other Deductions		
NET BALANCE	1,297,015	1,374,957
DEPRECIATION		
FREE CASH FLOW (Net Balance + Depreciation)	1,297,015	1,374,957

☑ Total Facility
☐ Project Only

PROJECTED DATA CHART -- OTHER EXPENSES

Other Expense Categories

		Year - 1	Year - 2
1.)	Purchased Services	2,400,258	2,485,467
2.)	Utilities	232,189	245,540
3.)	Drugs	288,719	298,923
4.)	Insurance	5,976	6,284
5.)	Other	627,830	631,235
6.)	Corporate O/H Allocation	2,861,013	2,975,294
7.)			
	Total -- Other Expenses	6,415,985	6,642,743

[ ] Total Facility
[X] Project Only

PROJECTED DATA CHART

Give information for the two years following the completion of this proposal. The fiscal year begins in July (Month).

		Year – 1	Year – 2
A.	Utilization Data (Specify Unit Of Measure, e.g., 1,000 patient days, 500 visits) *Admissions*	842	859
B.	Revenue From Services To Patients		
	1. Inpatient Services	9,908,361	10,581,535
	2. Outpatient Services	9,279,473	10,250,993
	3. Emergency Services	24,153,733	25,794,738
	4. Other Operating Revenue (Specify) Cafeteria, Gift Shop	337,987	348,127
	Gross Operating Revenue	43,679,554	46,975,393
C.	Deductions From Gross Operating Revenue		
	1. Contractual Adjustments	25,239,795	27,523,210
	2. Provision For Charity Care	2,084,434	2,273,011
	3. Provision For Bad Debt	2,564,395	2,796,393
	Total Deductions	29,888,624	32,592,614
	NET OPERATING REVENUE	13,790,930	14,382,779
D.	Operating Expenses		
	1. Salaries And Wages	3,409,646	3,621,175
	a. Direct Patient Care	951,654	1,010,693
	b. Non-Patient Care	562,500	586,688
	2. Physician's Salaries And Wages	886,261	943,847
	3. Supplies		
	4. Rent		
	a. Paid To Affiliates		
	b. To Non-Affiliates	1,779,822	1,779,822
	5. Management Fees		
	a. Paid To Affiliates		
	b. To Non-Affiliates		
	6. Other Operating Exp. (Specify) Insurance, Purch. Svcs., etc.	4,881,423	5,057,090
	Total Operating Expenses	12,471,306	12,999,315
E.	**Earnings Before Interest, Taxes & Depr.**	1,319,624	1,383,464
F.	Non-Operating Expenses		
	1. Taxes	4,400	4,400
	2. Depreciation		
	3. Interest		
	4. Other Non-Operating Expenses	4,400	4,400
	Total Non-Oper. Exp.		
	NET INCOME (LOSS)	1,315,224	1,379,064

G. Other Deductions		
1. Annual Principal Debt Repayment		
2. Annual Capital Expenditure		
Total Other Deductions		
NET BALANCE	1,315,224	1,379,064
DEPRECIATION		
FREE CASH FLOW (Net Balance + Depreciation)	1,315,224	1,379,064

☐ Total Facility
☑ Project Only

PROJECTED DATA CHART -- OTHER EXPENSES

Other Expense Categories

		Year - 1	Year - 2
1.)	Purchased Services	1,938,441	2,007,256
2.)	Utilities	151,430	160,137
3.)	Drugs	219,664	227,569
4.)	Insurance	4,319	4,567
5.)	Other	493,133	495,297
6.)	Corporate O/H Allocation	2,074,436	2,162,264
7.)			
	Total -- Other Expenses	4,881,423	5,057,090

SUPPLEMENTAL #3
September 29, 2017
11:01 am

5. A. Please identify the project's average gross charge, average deduction from operating revenue, and average net charge using information from the Projected Data Chart for Year 1 and Year 2 of the proposed project. Please complete the following table.

	Previous Year	*Current Year*	*Year 1*	*Year 2*	*% Change -- Current Year To Year 2*
Gross Charge (Gross Operating Revenue / Utilization Data)					
Deduction From Revenue (Total Deductions / Utilization Data)					
Average Net Charge (Net Oper. Revenue / Utilization Data)					

Response

As requested, the table has been completed.

	Previous Year	*Current Year*	*Year 1*	*Year 2*	*% Change -- Current Year To Year 2*
Gross Charge (Gross Operating Revenue / Utilization Data)	69,018	78,072	51,876	54,686	-29.9%
Deduction From Revenue (Total Deductions / Utilization Data)	47,426	56,641	35,497	37,943	-33.0%
Average Net Charge (Net Oper. Revenue / Utilization Data)	21,592	21,431	16,379	16,743	-21.9%

B. Provide the proposed charges for the project and discuss any adjustment to current charges that will result from the implementation of the proposal. Additionally, describe the anticipated revenue from the project and the impact on existing patient charges.

Response

Please see the list of average patient charges below, by service line for *Erlanger Bledsoe Hospital*. Applicant does revise it's patient charge structure on a periodic basis (i.e.-annually) during the budget cycle each fiscal year. However, applicant does not anticipate any changes to existing patient charges specifically as a result of this project.

Erlanger Bledsoe Hospital
Acute Care Discharges -- 2016

	Cases	Avg. Charge
ADVERSE EFFECTS	2	3,354
BACK & SPINE	2	8,432
DERMATOLOGY	19	8,023
ENDOCRINOLOGY	6	5,029
GASTROENTEROLOGY	18	9,601
GENERAL CARDIOLOGY	15	8,582
GYNECOLOGY	3	7,134
HEMATOLOGY	2	7,593
INFECTIOUS DISEASES	12	10,196
NEPHROLOGY	32	6,253
NEUROLOGY	4	12,113
ONCOLOGY	2	7,414
ORTHOPEDICS	6	14,612
PSYCHIATRY	2	7,422
PULMONARY MEDICINE	96	8,357
SIGNS & SYMPTOMS	7	5,843
VASCULAR DISEASES	1	6,448
Total	229	8,277

C. Compare the proposed charges to those of similar facilities in the service area/adjoining service areas, or to proposed charges of projects recently approved by the Health Services & Development Agency. If applicable, compare the proposed charges of the project to the current Medicare allowable fee schedule by common procedure terminology (CPT) codes(s).

Response

The average patient charge by inpatient service line for *Erlanger Bledsoe Hospital* and similar hospitals in Tennessee, for the calendar year 2016, is below.

Average Charge Per Inpatient -- 2016

	Erlanger Bledsoe Hospital	Lauderdale Community Hopsital	Camden General Hospital
ADVERSE EFFECTS	3,354		
BACK & SPINE	8,432	15,041	
DERMATOLOGY	8,023	20,342	6,454
ENDOCRINOLOGY	5,029	17,603	6,993
GASTROENTEROLOGY	9,601	16,133	8,666
GENERAL CARDIOLOGY	8,582	19,570	7,523
GEBERAL SURGERY			5,457
GYNECOLOGY	7,134		
HEMATOLOGY	7,593	25,776	10,664
INFECTIOUS DISEASES	10,196	17,378	10,624
NEPHROLOGY	6,253	17,693	6,522
NEUROLOGY	12,113	18,550	8,486
ONCOLOGY	7,414	20,758	
ORTHOPEDICS	14,612	21,665	
PSYCHIATRY	7,422	9,262	
PULMONARY MEDICINE	8,357	23,282	8,910
SIGNS & SYMPTOMS	5,843	13,514	
THORACIC SURGERY			12,228
UROLOGY			8,098
VASCULAR DISEASES	6,448	5,278	6,547
Total	8,277	21,054	8,060

6. A. Discuss how projected utilization rates will be sufficient to support the financial performance. Indicate when the project's financial breakeven is expected and demonstrate the availability of sufficient cash flow until viability is achieved. Provide copies of the balance sheet and income statement from the most recent reporting period of the institution and the most recent audited financial statements with accompanying notes, if applicable. For all projects, provide financial information for the corporation, partnership, or principal parties that will be a source of funding for the project. Copies must be inserted at the end of the application, in the correct alpha numeric order and labeled as Attachment C, Economic Feasibility. Note: Publicly held entities only need to reference their SEC filings.

Response

As noted previously, the occupancy of *Erlanger Sequatchie Valley Regional Hospital* is projected to increase from 25.4% in 2016, to 60.1% in year 1. This will be due to the proximity of the hospital in the central location of the service area.

As per the *Projected Data Chart* for this project, the hospital will be financially viable in both years 1 and 2. The audited financial report for *Erlanger Health System* for FY 2016, and the interim financial report for *Erlanger Health System*, are attached to this CON application.

Erlanger Sequatchie Valley Regional Hospital in Dunlap, Tennessee, will be financed through the *Sequatchie County Industrial Development Authority* bond issuance occurring through the *Tennessee Municipal Bond Fund*. *Erlanger Sequatchie Valley Regional Hospital - Satellite Emergency Department* in Pikeville, Tennessee, will be financed through the *U. S. Dept. of Agriculture (USDA)*. Copies of the letters from these financing sources are attached to this CON application.

B. Net Operating Margin Ratio - Demostrates how much revenue is left over after all the variable or operating costs have been paid. The formula for this ratio is: (Earnings Before Interest, Taxes & Depreciation / Net operating Revenue).

Utilizing information from the Historical and Projected Data Charts please report the net operating margin ratio trends in the following table.

Year	*2nd Year Previous To Current Year*	*1st Year Previous To Current Year*	*Current Year*	*Projected Year 1*	*Projected Year 2*
Net Operating Margin Ratio					

Response

As requested, the table has been completed.

Year	2nd Year Previous To Current Year	1st Year Previous To Current Year	Current Year	Projected Year 1	Projected Year 2
Net Operating Margin Ratio	9.4%	7.8%	20.2%	9.5%	9.6%

C. Capitalization Ratio (Long Term debt to capitalization) - Measures the proportion of debt financiang in a business's permanent (Long-term) financing mix. This ratio best measures a business's true capital structure because it is not affected by short-term financing decisions. The formula for this ratio is: (Long-term debt / (Long-term debt/Total Equity (Net Assets)) x 100).

For the entity (applicant and/or parent company) that is funding the proposed project please provide the capitalization ratio using the most recent available from the funding entity's audited balance sheet, if applicable. The Capitalization Ratio's are not expected from outside lenders that provide funding.

Response

Erlanger Health System does not maintain a separate balance sheet for *Erlanger Bledsoe Hospital*. As such, the asset listing is maintained on the corporate schedules of *Erlanger Health System*. For this reason, the capitalization ratios pertaining to this question represent the financial status of *Erlanger Health System*.

Based on the audited financial statements for *Erlanger Health System* at June 30, 2016 (copy attached), the capitalization ratio is 46.8, calculated as follows.

1.)	Long Term Debt	$208,007,048
2.)	Total Equity (Net Assets)	$235,907,342
3.)	Long Term Debt + Total Equity	$443,914,390
	Ratio (Line 1 / Line 3) x 100	46.86

7. Discuss the project's participation in state and federal revenue programs including a description of the extent to which Medicare, TennCare/Medicaid, and

medically indigent patients will be served by the project. Additionally, report the estimated gross operating revenue dollar amount and percentage of projected gross operating revenue anticipated by payor classification for the first year of the project by completing the table below.

Applicant's Projected Payor Mix, Year 1

	Projected Gross Operating Revenue	*As A % Of Total*
Medicare / Medicaid Managed Care		
TennCare / Medicaid		
Commercial / Other Managed Care		
Self - Pay		
Charity Care		
Other (Specify _____)		
Total		

Response

As requested, the table has been completed below.

	Projected Gross Operating Revenue	As A % Of Total
Medicare / Mdcr Managed Care	11,662,441	26.7%
TennCare / Medicaid	15,200,485	34.8%
Commercial / Other Managed Care	10,701,491	24.5%
Self Pay	3,887,480	8.9%
Charity Care	2,140,298	4.9%
Other	87,359	0.2%
Total	43,679,554	100.0%

It should be noted that *Erlanger Health System* provides close to $ 100 million in uncompensated car per year.

8. Provide the projected staffing for the project in Year 1 and compare to the current staffing for the most recent 12-month period, as appropriate. This can be reported using full-time equivalent (FTE's) positions

for these positions. Additionally, please identify projected salary amounts by position classifications and compare the clinical staff salaries to prevailing wage patterns in the proposed service area as published by the Department of Labor & Workforce Development and/or other documented sources

Position Classification	*Existing FTE's*	*Projected FTE's*	*Average Wage (Contractual Rate)*	*Area Wide / State Wide Average Wage*
A. Direct Patient Care Positions				
Position 1				
Position 2				
Etc.				
Total - Direct Patient Care Positions				
B. Non-Patient Care Positions				
Position 1				
Position 2				
Etc.				
Total - Non-Patient Care Positions				
Total Employees *(A + B)*				
C. Contractual Staff				
Total Staff *(A + B + C)*				

Response

As requested, the table has been completed.

Erlanger Sequatchie Valley Regional Hospital
Position Listing

	Existing FTE's	Projected FTE's	EHS Avg. Wage	Area Avg. Wage
Direct Patient Care Positions				
LPN, Relief	0.6	0.6	17.00	18.24
LPN	3.7	3.7	14.51	17.75
MA-Physician Practice	1.0	1.0	14.15	11.85
Nurse Practitioner (Non Exepmt)	0.8	0.8	53.88	46.70
Nursing Asst, Cert	4.1	4.1	10.88	11.56
Patient Care Tech	1.2	1.2	11.35	13.02
Patient Service Rep	2.0	2.0	13.73	14.44
Pharm Tech CPht (Cert)	1.0	1.0	17.69	14.54
Pharmacist, Staff	1.0	1.0	62.97	53.95
Pharmacist/Prn	0.1	0.1	60.00	55.19
Rad Tech, Spec Proc	3.7	3.7	23.10	23.30
Radiology Supv.	1.1	1.1	31.43	31.45
Resp Ther	1.0	1.0	22.61	24.80
RN, Staff Relief	2.2	2.2	28.00	27.71
RN, Staff	9.5	9.5	29.89	27.50
Surgical - First Assistant		2.0	34.51	40.79
Surgical - OR Tech		2.0	18.38	20.00
Surgical - Central Sterile		1.0	14.50	14.81
Surgical - Nurse Manager		1.0	34.57	48.00
Employed Physicians		4.0	116.92	99.33
Total - Direct Patient Care Positions	33.0	43.0		
Non-Direct patient Care Positions				
Administrator / CEO	1.0	1.0		
Admitting/Reg. Supv.	1.0	1.0	20.59	25.08
Cook	4.5	4.5	9.80	9.22
Data Entry Clerk	1.0	1.0	14.46	15.72
Dietary Aide	5.1	5.1	8.39	10.35
Dietary Supv	1.1	1.1	15.07	15.54
Distribution Tech	1.0	1.0	14.42	12.63
ESA I	1.1	1.1	9.12	12.96
ESA II	1.9	1.9	8.39	12.23
Human Resources Site Coord	1.0	1.0	24.14	24.62
Imaging Chart Prep/Scan/In/Bld	1.1	1.1	12.49	12.72
Maintenance Supv	1.5	1.5	21.84	29.94
Med Lab Team Leader	1.0	1.0	39.08	27.07
Med Tech Lab	3.6	3.6	24.11	20.99
Med Technologist	1.4	1.4	33.02	22.86
Medical Office Supervisor	1.3	1.3	16.92	17.04
Nurse Manager	1.0	1.0	45.36	41.83
Registration Rep	4.4	4.4	9.12	16.34
RN, Supervisor	1.6	1.6	30.86	30.95
Secretary III	0.2	0.2	12.50	12.37
Unit Clerk	0.2	0.2	13.25	12.37
Total - Non Patient Care Positions	36.0	36.0		
Total Employees	69.0	79.0		
Contractual Staff	0.0	0.0		
Total Staff	69.0	79.0		

9. Describe all alternatives to this project which were considered and discuss the advantages and disadvantages of each alternative including but not limited to:

A. Discuss the availability of less costly, more effective and/or more efficient alternative methods of providing the benefits intended by the proposal. If development of such alternatives is not practicable, justify why not, including reasons as to why they were rejected.

B. Document that consideration has been given to alternatives to new construction, e.g., modernization or sharing arrangements.

Response

Renovation of *Erlanger Bledsoe Hospital* was considered. However, the age and condition of the physical plant are such that it is not practical to renovate, simply because it has outlived it's useful life as a hospital. For example, current standards for space requirements are significantly different than what was applicable in 1971. The facility is also located in a residential area and is not readily accessible.

(III.) *CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTH CARE*

1. List all health care providers (e.g., hospitals, nursing homes, home care organizations, etc.), managed care organizations, alliances, and/or networks with which the applicant currently has or plans to have contractual and/or working relationships, e.g., transfer agreements, contractual agreements for health services.

Response

The most significant relationship between this proposal and the existing healthcare system is that it will be part of an existing health system and enhance *Erlanger*

Health System's ability to integrate its services within the regional service area as the safety net provider, trauma center and region's only academic medical center. A list of the patient transfer agreements, along with a list of the currently contracted payor organizations, is attached to this CON application.

By providing these services regardless of a patient's ability to pay, the regional healthcare delivery system is positively impacted by the services envisioned in the instant application.

The applicant will have transfer arrangements with the following hospitals which are owned by *Erlanger Health System*.

-- Erlanger Medical Center
-- Erlanger North Hospital
-- T. C. Thompson Children's Hospital
-- Erlanger Bledsoe Hospital

Further, Erlanger currently has patient transfer agreements in place with more than 70 hospitals and other providers in the four (4) state area. These providers refer patients to *Erlanger* because of the depth and breadth of its programs and services. A copy of the list of transfer agreements is attached to this CON application.

2. Describe the effects of competition and/or duplication of the proposal on the healthcare system, including the impact to consumers and existing providers in the service area. Discuss any instances of competition and/or duplication arising from your proposal including a description of the effect the proposal will have on the utilization rates of existing providers in the service area of the project.

A. Positive Effects

Response

The effects of this proposal will be positive for the healthcare system because it will deliver the most appropriate level of care for those who are in need of service regardless of ability to pay, and will also distribute needed services across the service area to

foster improved access to care by patients. The regional healthcare delivery system is positively impacted by serving those who are otherwise in need of these necessary services, regardless of their ability to pay for such services.

B. Negative Effects

Response

Applicant does not envision any negative effects of this proposal on the healthcare system. There are not any other providers in the service area, therefore, effects of competitive interest are not an issue.

3. A. Discuss the availability of and accessibility to human resources required by the proposal, including clinical leadership and adequate professional staff, as per the State Of Tennessee licensing requirements and/or requirements of accrediting agencies, such as the Joint Commission and Commission On Accreditation Of Rehabilitation Facilities.

Response

Staffing for the proposal is expected to be essentially the same as it is currently at *Erlanger Bledsoe Hospital*. All current staff will be offered their same position at *Erlanger Sequatchie Valley Regional Hospital*.

Erlanger Bledsoe Hospital and it's provider based ED are accredited by *The Joint Commission*, and they are also in compliance with rules of the Tennessee Dept. of Health, and other applicable Federal regulations. Such accreditation will be maintained by *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED, as described in the companion CON application, upon approval and implementation of this project. A copy of the letter from *The Joint Commission* is attached to this CON application.

B. Verify that the applicant has reviewed and understands all licensing and/or certification as

required by the State of Tennessee and/or accrediting agencies for medical/clinical staff. These include, without limitation, regulations concerning clinical leadership, physician supervision, quality assurance policies and programs, utilization review policies and programs, record keeping, clinical staffing requirements, and staff education.

Response

The Applicant has reviewed and intends to comply with all licensing and certification requirements imposed by applicable statutes, regulations, and accreditation standards.

C. Discuss the applicant's participation in the training of students in the areas of medicine, nursing, social work, etc. (e.g.-internships, residencies, etc.).

Response

Erlanger Health System, as the region's only academic medical center, has established strong long term relationships with the region's colleges, universities and clinical programs. *Erlanger* provides clinical sites for internships and rotation programs in nursing, radiology, respiratory, pharmacy and surgery technology, to name a few. It is also expected that *Erlanger Behavioral Health* will do so as well.

A number of regional universities offer Bachelor degree programs in nursing and physical therapy. *Erlanger* works closely with the *University of Tennessee at Chattanooga* to assist nurses transitioning from RN to BSN. Erlanger provides a teaching environment for staff as well with various on-the-job training opportunities (ex: CT for Radiologic Technologist, Certification for LPNs). Locally, two year degrees are available in many clinical allied health areas with additional programs offering advanced technical training in Radiological Imaging such as Nuclear Medicine, Diagnostic Ultrasonography, etc. *Erlanger Health System* participates with numerous schools that provide advanced training in the areas of nursing and allied health.

Erlanger has established strong long term relationships with the region's colleges, universities and clinical programs. *Erlanger* provides clinical sites for internships and rotation programs in nursing, radiology, respiratory care and pharmacy, to name a few. A number of regional universities offer Bachelor degree programs in nursing and physical therapy. Locally, two year degrees are available in many clinical allied health areas with additional programs offering advanced technical training in Radiological Imaging such as Nuclear Medicine and Diagnostic Ultrasonography.

The *University of Tennessee - College of Medicine* is co-located at *Erlanger* and includes training of senior medical students on clinical rotation as well as graduate medical education for training of residents and advanced fellowships in various medical specialties, including surgical specialties, as outlined below.

Residency Programs
- Emergency Medicine
- Family Medicine
- Internal Medicine
- Obstetrics & Gynecology
- Orthopedic Surgery
- Pediatrics
- Plastic Surgery
- Surgery
- Urology
- Transitional Year

Fellowship Programs
- Cardiovascular Disease
- Colon & Rectal Surgery
- Emergency Medicine
- Gastroenterology
- Gynecologic Surgery - Minimally Invasive
- Neuro-Interventional Surgery
- Orthopedic Trauma Surgery
- Surgical Critical Care
- Vascular Surgery
- Ultrasound
- Transitional Year

Erlanger Health System is also a member of the *Vanderbilt University Medical Center - Health Network.*

This affiliation will further enhance our ability to provide state of the art research, education and training programs. *Erlanger Health System* has also affiliated with *Technion Institute Of Technology*, in Haifa, Israel, for training of medical students, as well as graduate medical education, residency training and research. Increased opportunity exists in various medical specialties to potentially add to *Erlanger's* growing portfolio of medical research and training programs.

Erlanger Health System also participates with numerous schools that provide advanced training in the areas of nursing and allied health.

4. Identify the type of licensure and certification requirements applicable and verify the applicant has reviewed and understands them. Discuss any additional requirements, if applicable. Provide the name of the entity from which the applicant has received or will receive licensure, certification, and/or accreditation.

Licensure: State of Tennessee, Dept. of Health

Certification Type (e.g. Medicare SNF, Medicare LTAC, etc.):

** Not applicable to this project. **

Accreditation: Joint Commission on Accreditation of Healthcare Organizations

A. If an existing institution, please describe the Current standing with any licensing, certifying, or accrediting agency or commission. Provide a copy of the current license of the facility.

Response

Erlanger Bledsoe Hospital and it's provider based ED are accredited by *The Joint Commission*, and are also licensed by the Tennessee Dept. of Health and are in compliance with current rules. They are also in compliance with applicable Federal regulations. Such accreditation and licensure will be maintained by *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED, as

described in the companion CON application, upon approval and implementation of this project. A copy of the letter from *The Joint Commission* and the license for Erlanger Bledsoe Hospital are attached to this CON application.

B. For existing providers, please provide a copy of the most recent statement of deficiencies/plan of correction and document that all deficiencies/findings have been corrected by providing a letter from the appropriate agency.

Response

As requested, a copy of the most recent *Statement Of Deficiencies & Plan Of Correction*, is attached to this CON application.

C. Document and explain inspections within the last three survey cycles which have resulted in any of the following state, federal, or accrediting body actions: suspension of admissions, civil monetary penalties, notice of 23-day or 90-day termination proceedings from Medicare/Medicaid/TennCare, revocation/denial of accreditation, or other similar actions.

Response

Erlanger Bledsoe Hospital, in the last three (3) survey cycles, has not had any results leading to suspension of admissions, civil monetary penalties, or notice of termination proceedings.

1.) Discuss what measures the applicant has or will put in place to avoid similar findings in the future.

Response

*** Not applicable. ***

5. Respond to all of the following and for such occurrences, identify, explain and provide documentation:

A. Has any of the following:

1.) Any person(s) or entity with more than 5% ownership (direct or indirect) in the applicant (to include any entity in the chain of ownership for applicant);

Response

Erlanger Bledsoe Hospital, and it's successor *Erlanger Sequatchie Valley Regional Hospital*, if approved, are currently and will be a member of *Erlanger Health System*, which is a governmental unit authorized by an act of the *Tennessee General Assembly* in formation of the *Chattanooga-Hamilton County Hospital Authority*. As a governmental unit, with "public ownership" by the people of the State of Tennessee, no person or entity owns more than 5%, either directly or indirectly.

2.) Any entity in which any person(s) or entity with more than 5% ownership (direct or indirect) in the applicant (to include any entity in the chain of ownership for the applicant) has an ownership interest of more than 5%; and/or

Response

Erlanger Bledsoe Hospital, and it's successor *Erlanger Sequatchie Valley Regional Hospital*, if approved, are currently and will be a member of *Erlanger Health System*, which is a governmental unit authorized by an act of the *Tennessee General Assembly* in formation of the *Chattanooga-Hamilton County Hospital Authority*. As a governmental unit, with "public ownership" by the people of the State of Tennessee, no person or entity owns more than 5%, either directly or indirectly.

3.) Any physician or other provider of healthcare, or administrator employed by any entity in which any person(s) or entity with more than 5%

ownership in the applicant (to include any entity in the chain of ownership for applicant) has an ownership interest of more than 5%.

Response

Erlanger Bledsoe Hospital, and it's successor *Erlanger Sequatchie Valley Regional Hospital*, if approved, are currently and will be a member of *Erlanger Health System*, which is a governmental unit authorized by an act of the *Tennessee General Assembly* in formation of the *Chattanooga-Hamilton County Hospital Authority*. As a governmental unit, with "public ownership" by the people of the State of Tennessee, no person or entity owns more than 5%, either directly or indirectly.

B. Been subjected to any of the following:

1.) Final Order or Judgment in a state licensure action;

Response

Erlanger Bledsoe Hospital has not been subject to a final order or judgment in any licensure action.

2.) Criminal fines in cases involving a Federal or State health care offense;

Response

Erlanger Bledsoe Hospital has not been the subject of any criminal fines involving a Federal or State healthcare offense.

3.) Civil monetary penalties in cases involving a Federal or State health care offense;

Response

Erlanger Bledsoe Hospital has not been the subject of any civil monetary penalties involving a Federal or State healthcare offense.

4.) Administrative monetary penalties in cases involving a Federal or State health care offense;

Response

Erlanger Bledsoe Hospital has not been the subject of any administrative monetary penalties involving a Federal or State healthcare offense.

5.) Agreement to pay civil or administrative monetary penalties to the federal government or any state in cases involving claims related to the provision of health care items and services; and/or

Response

Erlanger Bledsoe Hospital has not been the subject of any administrative monetary penalties involving the Federal or State in cases involving claims related to the provision of health care items and services.

6.) Suspension or termination of participation in Medicare or Medicaid/TennCare programs.

Response

Erlanger Bledsoe Hospital has not been the subject of any suspension or termination of participation in Medicare or Medicaid/TennCare programs.

7.) Is presently the subject of/to an investigation, regulatory action, or party in any civil or criminal action of which you are aware.

Response

Erlanger Bledsoe Hospital has not been the subject of/to an investigation, regulatory action, or party in any civil or criminal action.

8.) Is presently subject to a corporate integrity agreement.

Response

Erlanger Bledsoe Hospital is not presently subject to a corporate integrity agreement.

6. Outstanding Projects

A. Complete the following chart by entering information for each applicable outstanding CON by applicant or share common ownership; and

Outstanding Projects					
			(*) Annual Progress Report(s)		
CON Number	*Project Name*	*Date Approved*	*Due Date*	*Date Filed*	*Expiration Date*

(*) Annual Progress Reports - HSDA Rules require that an Annual Progress Report (APR) be submitted each year. The APR is due annually until the Final Project Report (FPR) is submitted (FPR is due within 90 days of the completion date and/or implementation of the project). Brief progress status updates are requested as needed. The project remains outstanding until the FPR is received.

Response

Outstanding Projects					
CON Number	Project Name	Date Approved	(*) Annual Progress Report(s) Due Date	Date Filed	Expiration Date
CN1601-002	Erlanger East Hospital – Level III NICU	04/27/2016	04/27/2017	04/24/2017	07/01/2019
CN1412-048	Erlanger East Hospital – Cancer Center & Linear Accelerator	03/25/2015	03/25/2017	04/17/2017	05/01/2018
CN1603-012	Erlanger Behavioral Health, LLC	08/24/2016	10/01/2017	07/03/2017	10/01/2019

B. Provide a brief description of the current progress, and status of each applicable outstanding CON.

Response

CN1601-002 Erlanger East Hospital is in process of implementation, providing education to staff and medical professionals, as well as evaluating minimum cost options to complete the project..

CN1412-048 A request for extension has been filed with HSDA.

CN1603-012 Construction has begun and is currently on schedule.

7. Equipment Registry - For the applicant and all entities in common ownership with the applicant.

A. Do you own, lease, operate and/or contract with a mobile vendor for a Computed Tomography scanner (CT), Linear Accelerator, Magnetic Resonance Imaging (MRI), and/or Positron Emission Tomographer (PET) ?

Response

Erlanger Health System, through it's member hospitals including Erlanger Bledsoe Hospital, owns and operates several pieces of major medical equipment, including Computed Tomography, Linear Accelerator, Magnetic Resonance Imaging, and Positron Emission Tomography.

B. If yes, have you submitted their registration to HSDA ? If you have, what was the date of submission?

Response

Registration was submitted on January 24, 2017.

C. If yes, have you submitted your utilization to Health Services & Development Agency ? If you have, what was the date of submission ?

Response

Utilization data was submitted on February 9, 2017.

(IV.) *QUALITY MEASURES*

Please verify that the applicant will report annually using forms prescribed by the Agency concerning continued need and appropriate quality measures as determined by the Agency pertaining to the certificate of need, if approved.

Response

Erlanger Sequatchie Valley Regional Hospital will report annually using forms prescribed by the *Agency* concerning continued need and appropriate quality measures, if approved.

(V.) *STATE HEALTH PLAN QUESTIONS*

T.C.A. § 68-11-1625 requires the Tennessee Department of Health's, Division of Health Planning, to develop and annually update the State Health Plan (found at http://www.tn.gov/health/topic/health-planning). The State Health Plan guides the State in the development of health care programs and policies and in the allocation of health care resources in the State, including the Certificate of need program. The 5 Principles For Achieving Better Health

are from the State Health Plan's framework and inform the Certificate of Need program and its standards and criteria.

Discuss how the proposed project will relate to the 5 Principles For Achieving Better Health found in the State Health Plan.

1. The purpose of the State Health Plan is to improve the health of the people of Tennessee.

Response

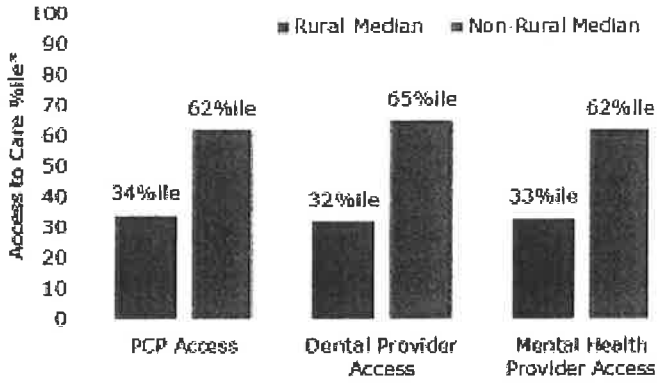
As mentioned previously, the overall rank for health outcomes for each county in the service area, is as follows.

County	Health Rank 2013	Health Rank 2017
Sequatchie	91	68
Bledsoe	20	17
Grundy	95	95

As may be seen from this data, Sequatchie County was ranked 91st in Tennessee for health outcomes, and in 2017 it is ranked 68th; Bledsoe County improved to 17th in 2017 compared to 20th in 2013; and Grundy County ranks last in Tennessee, with no improvement in health outcomes over the study period. These ranking are from the totalof ninety-five (95) counties in Tennessee. It should be noted that in 2013, *Erlanger Bledsoe Hospital* opened the first provider based emergency department in Tennessee which is part of a critical access hospital, in Dunlap, Sequatchie County, and we believe this ED was instrumental to the improvement in health outcomes.

Further, the *Chartis Center For Rural Health* has illustrated the disparity of access to health services between rural and non-rural communities.

Access to Healthcare in Rural Hospital Communities



***Population Health metrics are percentile ranked for all acute care rural and non-rural providers by hospital service area such that lower ranks indicate greater population challenges.**

Not surprisingly, access to care for rural areas is essentially equivalent to half of the availability for non-rural areas.

The goal for *Erlanger Health System* is to provide a comprehensive system of care comprised of unduplicated services while also serving those who are currently under served and/or those who do not have the ability to pay for their services. As such, *Erlanger Sequatchie Valley Regional Hospital* is part of a long term plan to make services more accessible, and to ultimately improve the health of Tennesseans.

2. People in Tennessee should have access to health care and the conditions to achieve optimal health.

Response

Erlanger Sequatchie Valley Regional Hospital will be the first critical access hospital in Tennessee to serve as a "community regional hospital". The overarching goal of this project is to locate the full range of services for a community hospital where it will be most accessible in a rural service area. It will be centrally located to all three (3) counties which comprise the service area. Also, it will be part of the "system of care" which *Erlanger Health System* has developed.

3. **Health resources in Tennessee, including health care, should be developed to address the health of people in Tennessee while encouraging economic efficiencies.**

Response

As stated previously, the relocation and replacement of *Erlanger Bledsoe Hospital* with *Erlanger Sequatchie Valley Regional Hospital*, is simply more efficient than to renovate the current physical plant. Also, it places the hospital in a central location within the service area that will enable greater access to healthcare services for the rural population.

4. **People in Tennessee should have confidence that the quality of health care is continually monitored and standards are adhered to by providers.**

Response

Erlanger Bledsoe Hospital, as a member facility of *Erlanger Health System*, has access to quality monitoring activities which most critical access hospitals do not. The applicant is accredited by *The Joint Commission* and is licensed by the *Tennessee Dept. of Health*. This monitoring consists of periodic review of quality indicators which are part of a robust program of quality improvement.

5. **The state should support the development, recruitment, and retention of a sufficient and quality health workforce.**

Response

Erlanger Health System, as the region's only academic medical center, has established strong long term relationships with the region's colleges, universities and clinical programs. *Erlanger* provides clinical sites for internships and rotation programs in nursing, radiology, respiratory, pharmacy and surgery technology, to name a few. It is also expected that *Erlanger Behavioral Health* will do so as well.

A number of regional universities offer Bachelor degree programs in nursing and physical therapy. *Erlanger* works closely with the *University of Tennessee at Chattanooga* to assist nurses transitioning from RN to BSN. Erlanger provides a teaching environment for staff as well with various on-the-job training opportunities (ex: CT for Radiologic Technologist, Certification for LPNs). Locally, two year degrees are available in many clinical allied health areas with additional programs offering advanced technical training in Radiological Imaging such as Nuclear Medicine, Diagnostic Ultrasonography, etc. *Erlanger Health System* participates with numerous schools that provide advanced training in the areas of nursing and allied health.

Erlanger has established strong long term relationships with the region's colleges, universities and clinical programs. *Erlanger* provides clinical sites for internships and rotation programs in nursing, radiology, respiratory care and pharmacy, to name a few. A number of regional universities offer Bachelor degree programs in nursing and physical therapy. Locally, two year degrees are available in many clinical allied health areas with additional programs offering advanced technical training in Radiological Imaging such as Nuclear Medicine and Diagnostic Ultrasonography.

The *University of Tennessee - College of Medicine* is co-located at *Erlanger* and includes training of senior medical students on clinical rotation as well as graduate medical education for training of residents and advanced fellowships in various medical specialties, including surgical specialties, as outlined below.

Residency Programs

- Emergency Medicine
- Family Medicine
- Internal Medicine
- Obstetrics & Gynecology
- Orthopedic Surgery
- Pediatrics
- Plastic Surgery
- Surgery
- Urology
- Transitional Year

Fellowship Programs

Cardiovascular Disease
Colon & Rectal Surgery
Emergency Medicine
Gastroenterology
Gynecologic Surgery - Minimally Invasive
Neuro-Interventional Surgery
Orthopedic Trauma Surgery
Surgical Critical Care
Vascular Surgery
Ultrasound
Transitional Year

Erlanger Health System is also a member of the *Vanderbilt University Medical Center - Health Network.* This affiliation will further enhance our ability to provide state of the art research, education and training programs. Further, *Erlanger Health System* has also affiliated with *Technion Institute Of Technology*, in Haifa, Israel, for training of medical students, as well as graduate medical education, residency training and research. Increased opportunity exists in various medical specialties to potentially add to *Erlanger's* growing portfolio of medical research and training programs.

Erlanger Health System also participates with numerous schools that provide advanced training in the areas of nursing and allied health.

PROOF OF PUBLICATION

Attach the full page of the newspaper in which the notice of intent appeared with the mast and dateline intact or submit a publication affidavit from the newspaper that includes a copy of the publication as proof of publication of the letter of intent.

Response

Attached is a copy of the *Letter Of Intent* which was filed with the *Tennessee Health Services & Development Agency*. The original publication affidavit is also attached to this CON application.

NOTIFICATION REQUIREMENTS

(Applies only to Non-Residential Substitution-Based Treatment Centers For Opiate Addiction)

Note that T.C.A. § 68-11-1607(c)(9)(A) states that "… Within ten (10) days of the filing of an application for a nonresidential substitution-based treatment center for opiate addiction with the agency, the applicant shall send a notice to the county mayor of the county in which the facility is proposed to be located, the state representative and senator representing the house district and senate district in which the facility is proposed to be located, and to the mayor of the municipality, if the facility is proposed to be located within the corporate boundaries of a municipality, by certified mail, return receipt requested, informing such officials that an application for a nonresidential substitution-based treatment center for opiate addiction has been filed with the agency by the applicant."

Failure to provide the notifications described above within the required statutory timeframe will result in the voiding of the CON application.

Please provide documentation of these notifications.

Response

*** Not applicable. ***

DEVELOPMENT SCHEDULE

T.C.A. § 68-11-1609(c) provides that a Certificate of Need is valid for a period not to exceed three (3) years (for hospital projects) or two (2) years (for all other projects) from the date of its issuance and after such time shall expire; provided, that the Agency may, in granting the Certificate of Need, allow longer periods of validity for Certificates of Need for cause shown. Subsequent to granting a Certificate of Need, the Agency may extend a Certificate of Need for a period upon application and good cause shown, accompanied by a non-refundable reasonable filing fee, as prescribed by rule. A Certificate of Need which has been extended shall expire at the end of the extended time period. The decision whether to grant such an extension is within the sole discretion of the Agency, and is not subject to review, reconsideration, or appeal.

1. **Complete the Project Completion Forecast Chart on the next page. If the project will be completed in multiple phases, please identify the anticipated completion date for each phase.**

   Response

   The *Project Completion Forecast Chart* has been completed and appears on the following page.

2. **If the response to the preceding question *indicates that the applicant does not anticipate completing the project within the period of validity as defined in the preceding paragraph*, please state below any request for an extended schedule and document the "good cause" for such an extension.**

   Response

   *** Not Applicable. ***

PROJECT COMPLETION FORECAST CHART

Assuming the CON approval becomes the final Agency action on the date listed in item 1 below, indicate the number of days from the HSDA decision date to each phase of the completion forecast.

PHASE		Days Required	Anticipated Date (MONTH / YEAR)
1.	Initial HSDA decision date.		12 / 17
2.	Architectural and engineering contract signed.	15	01 / 18
3.	Construction documents approved by the *Tennessee Dept. Of Health.*	285	11 / 18
4.	Construction contract signed.	30	12 / 18
5.	Building permit secured.	30	01 / 19
6.	Site preparation completed.	60	03 / 19
7.	Building construction commenced.	-	03 / 19
8.	Construction 40 % complete.	150	08 / 19
9.	Construction 80 % complete.	150	01 / 20
10.	Construction 100 % complete (approved for occupancy.	120	05 / 20
11.	*Issuance of license.	60	07 / 20
12.	*Initiation of service.	-	07 / 20
13.	Final Architectural Certification Of Payment.	-	05 / 20
14.	Final Project Report Form (HR0055).	60	09 / 20

(*) For projects that do NOT involve construction or renovation, please complete items 11 and 12 only.

NOTE – If litigation occurs, the completion forecast will be adjusted at the time of the final determination to reflect the actual issue date.

SEP 11 '17 PM 12:17

AFFIDAVIT

STATE OF TENNESSEE

COUNTY OF HAMILTON

Joseph M. Winick, being first duly sworn, says that he / she is the applicant named in this application or his / her / it's lawful agent, that this project will be completed in accordance with the application, that the applicant has read the directions to this application, the Rules of the Health Services & Development Agency, and and T.C.A. § 68-11-1601, *et seq*, and that the responses to this application or any other questions deemed appropriate by the Tennessee Health Services & Development Agency are true and complete.

SIGNATURE

SWORN to and subscribed before me this 7 of September (Month), 2017 (Year), a Notary Public in and for the State of Tennessee, County of Hamilton.

Shelia Hall
NOTARY PUBLIC

My commission expires 6 9 (Month / Day), 2018.

SHELIA HALL
STATE OF TENNESSEE NOTARY PUBLIC
HAMILTON COUNTY

Proof Of Publication

HSDA - Letter Of Intent
HSDA - Publication Of Intent
Affidavit Of Publication

Description	Section / Item
ARTICLE - Rural Hospitals Across Tennessee At Risk Of Closing	A-3
ARTICLE - State By State Breakdown Of 80 Rural Hospital Closures	A-3
REPORT - Rural Relevance 2017: Assessing The State Of Rural Healthcare In America	A-3
REPORT - Reducing Potentially Excess Deaths From The Five Leading Causes Of Death In The Rural United States	A-3
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Rural Hospitals Across Tennessee At Risk Of Closing

Emergency At The E.R.

BY: Chris Conte
POSTED: 4:22 PM, Jul 25, 2017
UPDATED: 8:36 PM, Jul 25, 2017

Share Article

PARSON, Tenn. - With barely 11,000 residents you could consider Decatur County to be on the front lines of a battle being fought across rural America right now, one that small town hospitals are repeated losing putting patients in life or death situations.

Built in 1964, Decatur County General Hospital lies just a few blocks from the center of the town of Parsons. The "L" shaped building is currently running with a bare minimum staff, 80 full time employees and just one doctor. Hospital officials have worked tirelessly over the last few months, trimming the staff of nurses and lab technicians down from 110 people in an effort to minimize costs. The county mayor here estimates Decatur General lost about $200,000 last year, this life line to so many is currently on life support and in danger of closing.

"If this goes away there are so many people who won't get the care they need," says Paulette Johnson who was at the emergency room on a recent Tuesday having x-rays done on her neck.

The 67-year-old lives in Scotts Hill, Tennessee, a town that lies about 20 minutes away from the emergency room at Decatur County General Hospital. If this hospital shuts its doors, it would take more than an hour for Paulette to get to the next closest emergency room.

That kind of drive could mean the difference between life or death in an emergency.

close

"They can save your life here, you're gonna lose your life if you have to go further," Paulette says.

Decatur County General is hardly alone in the struggle to stay open. Nationwide 81 rural hospitals have closed since 2010. Nine of those closures have happened in Tennessee, county run hospitals from the eastern mountains to the Mississippi River have disappeared. The only state with more rural hospital closures than Tennessee is Texas, where in 2013 an 18-month old died after being rushed to an emergency room that her parents didn't realize had closed.

List of hospitals closed in Tennessee:

- Haywood Park Community Hospital – Haywood County
- Gibson General Hospital – Gibson County
- Humboldt Medical Center – Gibson County
- Tennova Healthcare McNairy Regional – McNairy County
- United Regional Medical Center – Coffee County
- Parkridge West – Marion County
- St. Mary's – Scott County
- Starr Regional – McMinn County
- Copper Basin Medical Center - Polk County

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NEWS STORIES

Camp Bow Wow Smyrna reminds pet owners to...

Animal lovers are reminded to keep an eye on their pets as temperatures continue to soar in the Middle Tennessee area.

I-440 West Blocked After Truck Spills Debris

A portion of westbound Interstate 440 has been partially blocked after a vehicle overturned and spilled debris onto the roadway.

close

State-by-state breakdown of 80 rural hospital closures

Written by Ayla Ellison (Twitter | Google+) | August 15, 2017 | Print | Email

Of the 26 states that have seen at least one rural hospital close since 2010, those with the most closures are located in the South, according to research from the North Carolina Rural Health Research Program.

Thirteen hospitals in Texas have closed since 2010, the most of any state. Tennessee has seen the second-most closures, with eight hospitals closing since 2010. In third place is Georgia with six closures, followed by Alabama and Mississippi, which have each seen five hospitals close over the past six years.

Listed below are the 80 rural hospitals that closed between January 2010 and July 2017, as tracked by the NCRHRP. For the purposes of its analysis, the NCRHRP defined a hospital closure as the cessation in the provision of inpatient services. As of July, all of the facilities listed below no longer provided inpatient care. However, many of them still offered other services, including outpatient care, imaging, emergency care, urgent care, primary care or skilled nursing and rehabilitation services. This list does not include hospitals that have closed and re-opened.

Alabama
Chilton Medical Center (Clanton)
Elba General Hospital
Florala Memorial Hospital
Randolph Medical Center (Roanoke)
Southwest Alabama Medical Center (Thomasville)

Arizona
Cochise Regional Hospital (Douglas)
Florence Community Healthcare
Hualapai Mountain Medical Center (Kingman)

California
Colusa Regional Medical Center
Corcoran District Hospital
Kingsburg Medical Center

Florida
Campbellton-Graceville Hospital

Georgia
Calhoun Memorial Hospital (Arlington)
Charlton Memorial Hospital (Folkston)
Hart County Hospital (Hartwell)
Lower Oconee Community Hospital (Glenwood)
North Georgia Medical Center (Ellijay)
Stewart-Webster Hospital (Richland)

Illinois
St. Mary's Hospital (Streator)

Kansas
Central Kansas Medical Center (Great Bend)
Mercy Hospital Independence

Kentucky
New Horizons Medical Center (Owenton)
Nicholas County Hospital (Carlisle)
Parkway Regional Hospital (Fulton)
Westlake Regional Hospital (Columbia)

Maine
Parkview Adventist Medical Center (Brunswick)
Southern Maine Health Care – Sanford Medical Center
St. Andrews Hospital (Boothbay Harbor)

Massachusetts
North Adams Regional Hospital

Michigan
Cheboygan Memorial Hospital

Minnesota
Albany Area Hospital
Lakeside Medical Center (Pine City)

Mississippi
Kilmichael Hospital
Merit Health Natchez – Community Campus
Patient's Choice Medical Center of Humphreys County (Belzoni)
Pioneer Community Hospital of Newton
Quitman County Hospital (Marks)

Missouri
Parkland Health Center – Weber Road (Farmington)
Sac-Osage Hospital (Osceola)
SoutheastHEALTH Center of Reynolds County (Ellington)

Nebraska
Tilden Community Hospital

Nevada
Nye Regional Medical Center (Tonopah)

North Carolina
Davie Medical Center-Mocksville
Blowing Rock Hospital
Vidant Pungo Hospital (Belhaven)
Yadkin Valley Community Hospital (Yadkinville)

Ohio
Doctors Hospital of Nelsonville
Physicians Choice Hospital-Fremont

Oklahoma
Epic Medical Center (Eufaula)

Memorial Hospital & Physician Group (Frederick)
Muskogee Community Hospital

Pennsylvania
Mid-Valley Hospital (Peckville)
Saint Catherine Medical Center Fountain Springs (Ashland)

South Carolina
Bamberg County Memorial Hospital
Marlboro Park Hospital (Bennettsville)
Southern Palmetto Hospital (Barnwell)

South Dakota
Holy Infant Hospital (Hoven)

Tennessee
Copper Basin Medical Center (Copperhill)
Gibson General Hospital (Trenton)
Haywood Park Community Hospital (Brownsville)
Humboldt General Hospital
Parkridge West Hospital (Jasper)
Starr Regional Medical Center-Etowah
McNairy Regional Hospital (Selmer)
United Regional Medical Center (Manchester)

Texas
East Texas Medical Center-Clarksville
East Texas Medical Center-Gilmer
East Texas Medical Center-Mount Vernon
East Texas Medical Center-Trinity
Good Shepherd Medical Center (Linden)
Gulf Coast Medical Center (Wharton)
Hunt Regional Hospital of Commerce
Lake Whitney Medical Center (Whitney)
Nix Community General Hospital (Dilley)
Renaissance Hospital Terrell
Shelby Regional Medical Center
Timberlands Hospital (Crockett)
Wise Regional Health System-Bridgeport

Virginia
Lee Regional Medical Center (Pennington Gap)

Wisconsin
Franciscan Skemp Medical Center (Arcadia)

More information on the rural hospitals that have closed since 2010 can be accessed here.

More articles on healthcare finance:

Quorum Health sees net loss narrow to $30.6M, plans more hospital sales
Tenet's net loss balloons to $56M on lower patient volume
Physician advocates: 'We can only judge CHS by its actions, not its words'

THE CHARTIS GROUP
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iVantage
HEALTH ANALYTICS

Research

Rural Relevance 2017: Assessing the State of Rural Healthcare in America

Author: Michael Topchik

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Foreword

The 2017 Rural Relevance Study arrives at a time of great uncertainty for all healthcare providers. Congress has taken the first step toward dismantling the Patient Protection and Affordable Care Act (ACA) and House Republicans have put forward legislation to replace it with The American Health Care Act (AHCA), a hybrid model that seeks to maintain some features of the ACA while repealing others. Key elements of this proposed legislation would impact rural providers either directly or indirectly, including:

- **Reversal of ACA's cuts in federal disproportionate share hospital (DSH) Medicaid payments:** The proposed legislation reverses cuts to DSH payments, a funding stream that supports hospitals which treat an unusually large share of uninsured patients and patients covered under Medicaid. Many rural hospitals are reliant on Medicaid DSH payments as a source of revenue and will benefit from stabilization in funding.
- **An increase in the uninsured:** Several provisions from the ACA may be impacted, including the repeal of the individual mandate and, more importantly, changes to the premium support for individuals purchasing coverage on the non-group market. The Congressional Budget Office (CBO) estimates that as a result, 24 million more people may be uninsured by 2026 – a projection criticized by HHS Secretary Price. However, most believe that the number of uninsured is likely to increase and believe that under the proposed legislation, poorer, older adults would be the most impacted as they are expected to have a harder time qualifying for tax credits. Additionally, the new legislation would enable higher premium variance by age, moving from a 3:1 allowable age-based premium difference to a 5:1 differential. With a disproportionately older percentage of the population living in rural areas and fewer able to afford health coverage under the AHCA, this would ultimately increase the burden on rural providers.
- **Rolling-back Medicaid expansion and potential long-term funding constraints through Medicaid restructuring:** States may choose to maintain current funding associated with Medicaid expansion through 2020 (capped at 2016 rates). However, the CBO projects some states will consider dropping the expansion as federal dollars "dry up" under the AHCA. As a result, some rural populations will learn how far their coverage can stretch as federal dollars are first capped and then frozen.

The uncertainty surrounding the future of the ACA/AHCA will likely continue to be unsettling for rural providers – especially when the potential for changes in legislation threatens financial viability and stability. The Chartis Center for Rural Health (CCRH) and iVantage Health Analytics have devoted significant resources to evaluating the state of the rural health safety net and modeling the impact of potential policy changes on rural providers. In this state of uncertainty, the Rural Relevance Study offers a unique lens into the state of rural healthcare, the value the safety net provides, and the opportunities for the future.

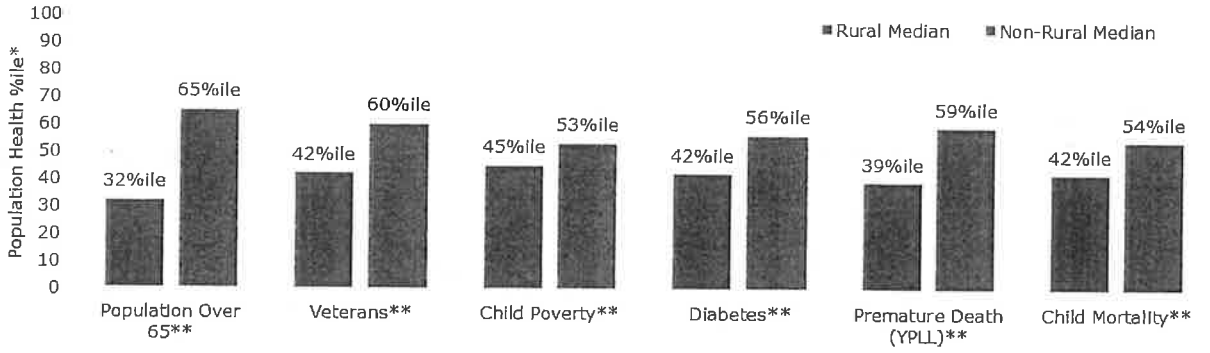
The State of Rural Healthcare

Rural Populations Suffer Many Health Disparities

As part of the 2017 study, CCRH explored the intersection of rural provider performance and the socioeconomic challenges and health disparities faced by rural communities. Our population health assessment measures the health status of rural populations by evaluating health outcomes, quality of care, access to care, health behaviors, and social, economic, and environmental determinants of health. Using nearly 70 metrics, the CCRH quantified the health status of each rural provider's community.

Our research validates the hypothesis that rural healthcare providers serve populations which are not only socioeconomically disadvantaged but also suffer from numerous health disparities and poorer outcomes than non-rural communities (Figure 1).

Comparison of Population Health in Rural and Non-Rural Hospital Communities



*Population Health metrics are percentile ranked for all acute care rural and non-rural providers by hospital service area such that **lower ranks indicate greater population challenges**.
**Lower percentile scores indicate higher density (i.e. providers serving a greater proportion of individuals over 65 receive lower scores).

Figure 1. Rural hospitals serve populations that suffer from various health disparities and poorer outcomes than non-rural providers.

While rural populations are equally challenged with baseline disparities, there are significant variations by region, state and even within communities in the same state. Highlighting these variations at a state level and then searching exceptions creates an opportunity to learn more about the unique health status of each community and provides valuable information to target services and funding to meet the highest needs of each population.

Two Distinct and Overlapping Populations Drive Up Demand

Seniors

According to the US Census Bureau, **adults in rural areas are older** than those living in non-rural areas, with a median age of 51, compared to age 45 in non-rural areas. Hospitalization rates and lengths of stay increase with age among adults, peaking for those over 65.[1] This creates increased demand for healthcare in rural areas. As a result, the majority of rural providers serve a greater proportion of patients over the age of 65 than two-thirds of all U.S. acute care hospitals.

The number of Americans over 65 is expected to increase from nearly 50 million to more than 80 million by 2050, largely driven by baby boomers.[2] In fact, seniors are expected to outnumber children under 5 for the first time in history by 2020.[3] Given the healthcare consumption, complexity of care needed, and associated costliness of healthcare services, this aging of the population will exert increasing operational, clinical and financial pressures on rural providers.[4]

Veterans

A disproportionate number of the nation's veterans live in rural and non-metropolitan counties. Nearly three-quarters of rural hospitals **serve a greater proportion of military veterans than the median non-rural provider**. Veterans living in these rural areas may need to travel greater distances to access a VHA facility, so rural hospitals are often called upon to fill a local access void. Of the 5.3 million veterans residing in rural America, 41 percent struggle with service-related disabilities, making access to quality healthcare imperative for these individuals.[5] Rural veterans utilize inpatient, emergency department, physician office visit and behavior health services at higher rates than non-veterans and more than urban veterans.[6]

Prevalence of Disease Combined with Less Access to Care

This year's research into rural healthcare revealed that rural communities have a higher burden of disease (including preventative diseases) and yet the supply of physicians and therefore access to healthcare is lower than in non-rural communities. This combination of a higher disease rate and lower access to care isn't surprising given the geographic distribution of populations across rural America. It is, however, an alarming trend and one that could be contributing to the higher premature death rates and child mortality rates in rural communities.

Rural hospitals **serve communities with greater rates of diabetes**, the seventh-leading cause of death in the nation.[7] Several factors contributing to diabetes such as obesity, physical inactivity, and a lack of exercise are more prevalent in rural communities, according to research.[8] The American Diabetes

---

[1] Agency for Healthcare Research and Quality, 2012.
[2] U.S. Census Bureau, 2014.
[3] U.S. Census Bureau, 2016.
[4] Department of Health and Human Services, 2011.
[5] National Rural Health Association, 2017.
[6] Variation in Utilization of Health Care Services for Rural VA Enrollees with Mental Health-Related Diagnoses, 2015.
[7] Center for Disease Control and Prevention, 2016.
[8] Robert Wood Johnson Foundation, 2013.

Association estimates the total cost of diabetes has risen from $174 billion in 2007 to $245 billion in 2012, a 41 percent increase. Patients with diagnosed diabetes incur average medical expenditures of about $13,700 per year. Particularly prevalent in rural America, rural hospitals are on the frontline in providing diabetic screening and care for populations which may not have access to primary or specialty care.

America is in the midst of **an opioid epidemic** that affects all income levels, educational backgrounds and geographies. However, specific demographic and socioeconomic conditions can lead to increased risk behaviors, especially opioid and other drug abuse. While this is more common among the uninsured and impoverished, the research shows significant variation.

According to the Centers for Disease Control and Prevention (CDC), the rate of death from opioid-related overdoses is 45 percent higher in **nonmetropolitan counties**.[1] Many rural emergency services may lack the resources to respond quickly and effectively. Rarely are highly-trained paramedics the first responders in rural communities. In addition, distances in rural geographies may mean longer wait times for critical interventions such as injectable antidotes like Naloxone.[2]

Rural communities are also generally isolated from treatment facilities and addiction counseling. Nationwide, only 11 percent of patients seeking addiction treatment receive care. Further, the distribution of this treatment is uneven. In those states which expanded Medicaid (a disproportionately important source of health coverage for rural populations), a higher proportion of buprenorphine prescriptions (an important therapy to wean patients off opioids) is covered, compared to those states which did not expand Medicaid.[3]

Last, the cost of providing lifesaving injectable antidote drugs such as Naloxone have skyrocketed, putting rural providers in the difficult position of providing more expensive therapies in the hands of EMS with little opportunity to recoup that cost, given the lack of commercial insurance or even Medicaid coverage in many rural communities.[4]

Thus, the lack of expedient access to advanced Emergency Medical Services, the lack of appropriate behavioral health/addiction treatment services, and the role Medicaid payments play in these interventions, combined with the skyrocketing costs of important life-saving and treatment therapies, places rural populations in the crosshairs of the opioid epidemic.

The burden of disease on rural communities is not being met with the **appropriate level of access** (Figure 2). Plagued by a physician workforce shortage, rural communities struggle to receive primary care, dental care and behavioral healthcare. This is exacerbated by geographic isolation, limited public transportation, fewer employment opportunities and limited health insurance coverage.[5] The patient-to-primary care physician ratio in rural areas is 39.8 physicians per 100,000 people, compared to 53.3 physicians per 100,000 in non-rural areas. Eighty-five percent of rural counties are designated as primary care Health Professional Shortage Areas (HPSAs), some with persistent whole county shortages.[6] This uneven distribution of physicians has an impact on the health of a population, as they lack access to preventative care as well as other types of ambulatory care. Further straining these rural access trends is

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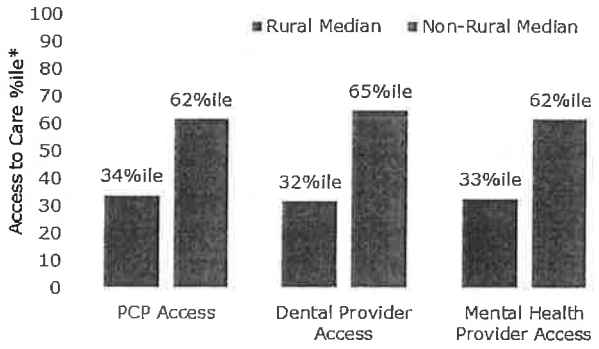
[1] Center for Disease Control and Prevention, 2015.
[2] Rural Health Information Hub, The Rural Monitor, May 18, 2016.
[3] Use of Opioid Recovery Medications, Sept, 2016.
[4] Patients get hooked on opioid overdose antidote, then prices skyrocket, Kaiser Health News, 2017.
[5] National Rural Health Association, 2017.
[6] Persistent Primary Care Health Professional Shortage Areas (HPSAs) and Health Care Access in Rural America, 2009.

the uneven aging of the provider workforce, where there are a greater proportion of providers nearing retirement.[1]

Access to Healthcare in Rural Hospital Communities



*Population Health metrics are percentile ranked for all acute care rural and non-rural providers by hospital service area such that **lower ranks indicate greater population challenges**.

Figure 2. Communities served by rural providers have less access to healthcare than non-rural areas. At the median, rural hospital communities rank in the bottom third with respect to primary, dental and mental healthcare access when compared to all acute care hospitals nationally on a 0-100 percentile scale.

Population Health Chart Book: National maps for each of the population health indicators explored in the study, as well as some state versus state comparisons are available at iVantageINDEX.com. View the population health chart book here.

The Rural Health Safety Net Remains Under Financial Pressure

The closure of 80 rural hospitals since 2010 underscores the challenges faced by rural providers, and research indicates that many more are struggling to stay open.[2] This is an indication that the rural health safety net continues to unravel, putting the mission to care for rural populations in jeopardy in a number of states.

Forty-one percent of rural hospitals operate at a negative margin. Figure 3 visualizes those facilities operating at negative margins in two cohorts (i.e. <3 percent and <0 percent), overlaid with rural providers which are achieving positive margins.

[1] The Aging of the Primary Care Physician Workforce, 2009.
[2] UNC Cecil G. Sheps Center for Health Services Research.

Rural Hospital Operating Margins

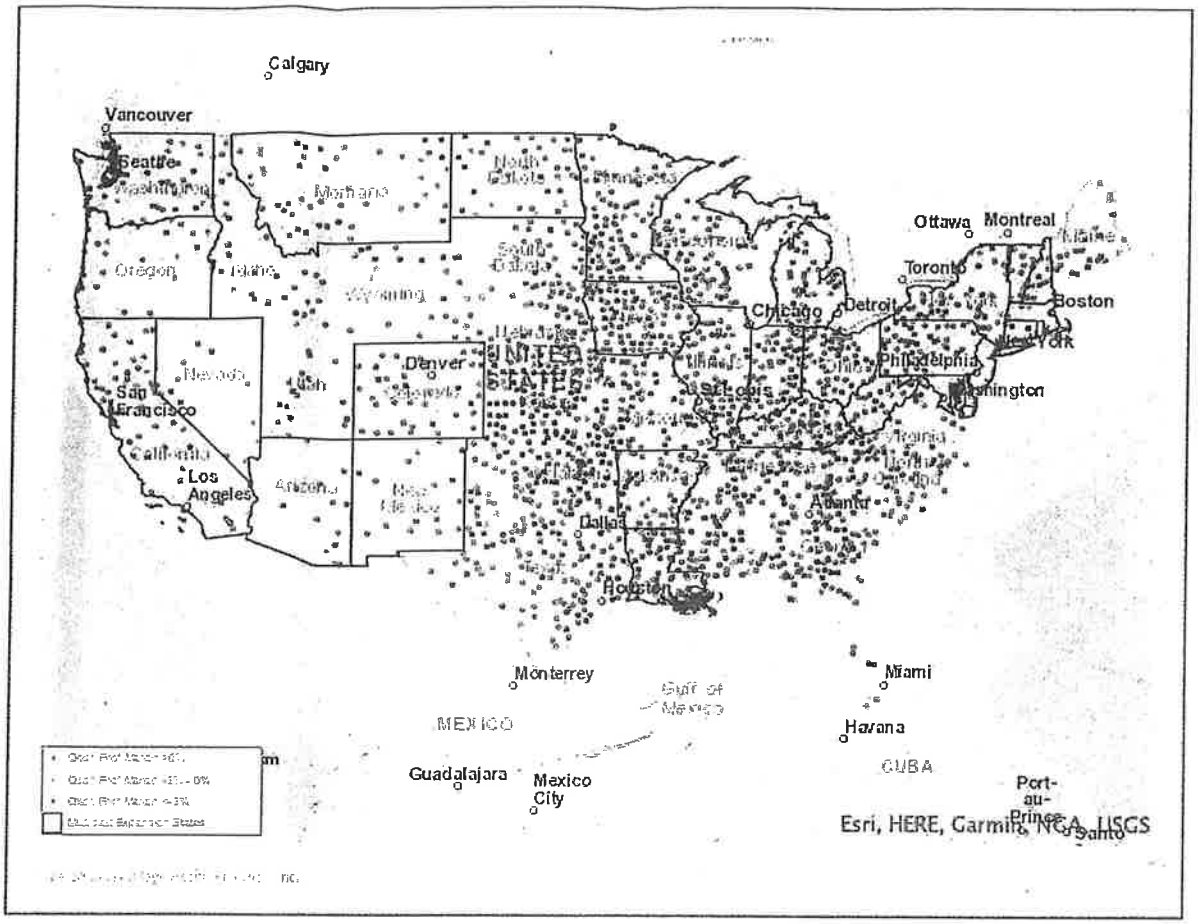


Figure 3. Each rural hospital across the country is point located in green if having a positive 2015 operating profit margin, orange if having a negative operating profit margin not exceeding -3 percent, and in red if having an operating profit margin below -3 percent.

Research Note: Rural hospital operating margins in Medicaid expansion states are statistically higher than rural hospitals in states that did not expand Medicaid. Contact CCRH for detailed metrics on your state.

Numerous factors are at play in each state which may have an impact on rural operating margins. These factors include:

- Payor mix and percentage of uninsured population
- Allowable cost-based Medicare reimbursement
- State expanded Medicaid as part of the ACA*
- Prevalence of competition and the rate of out-migration of patients seeking care in non-rural settings

- Employment rate and related availability of employer-sponsored commercial insurance
- Payor negotiated rates
- Availability of primary care
- Underlying population health and health disparities

Additionally, the healthcare industry's transition from volume to value has put increased pressure on hospital margins for many providers and a renewed focus on cost management to maintain positive margins. Jamie Orlikoff, a health governance expert, recommends that the industry work to take 5-6 percent of costs out of the system and reach a five-year target of 25-30 percent cost reduction.[1]

Cost containment is particularly challenging for Critical Access Hospitals (CAHs), currently receiving special cost-based reimbursement from Medicare. This system of reimbursement was created to ensure access to crucial services in rural communities despite not having the patient volumes to support those services in a market-based environment. This reimbursement policy has been successful in helping preserve access to care in rural America but changes to it could dramatically shift the current state.

While all hospitals strive to provide the best clinical care at the lowest cost, rural hospitals with cost-based reimbursements are not incentivized to focus on cost management. Nonetheless, benchmarks from the top performing rural hospitals reveal substantially lower cost positions when compared to their rural health peers nationally. The study offers a detailed examination of top hospital performance for Critical Access Hospitals and Rural and Community Hospitals.

Alternative payment models including Accountable Care Organizations (ACOs), which many providers now participate, make it difficult for CAHs as it introduces competing incentives. In capitated payment environments, it can become challenging to work across the continuum of care for rural providers that may have inflated cost structures to maintain access to low volume services. For ACOs that need to better manage costs across the continuum of care, patients may be redirected away from rural access points. Conversely, many types of care should be provided locally to offer a better patient experience at a lower cost, which is an area of intense focus for ACOs that include rural providers. These dynamics are driving questions about what is the right care model for covered lives within rural communities. The answer to this question is a critical one and the opportunities for innovation are exciting but the economics of new care models could very well put additional financial pressure on rural providers.

The consumer market is also adding pressure for hospitals to reduce costs as high-deductible plans shift the first out-of-pocket dollars to the consumer. Rural patients with high-deductible plans are becoming more price sensitive and showing a willingness to travel greater distances to reduce their healthcare costs. Rural hospitals therefore need to focus on improving their efficiency as lower volumes often equate to higher variable costs.

Additionally, employers are partnering with payors to form narrow networks of preferred providers. These providers are preferred by the market because they offer exceptional value and deliver quality care at the lowest cost. Rural hospitals must strive to be relevant and gain in-network status by defending and reducing their costs while continuously improving the quality of care in the face of these and other market forces.

[1] Presentation at American Hospital Association Rural Health Care Leadership Conference, February 7, 2015.

Policy Changes Impact Rural Providers

In addition to the current market forces that effect rural health operating margins, there are a number of policy changes already impacting the financial health of rural providers and a few which remain in question given the new administration in Washington. For this study, we analyzed seven current and proposed policies and their impact on rural providers, including: Sequestration, Bad Debt, CAH Reimbursement, PPS Coding Offset, Value-Based Purchasing, Medicaid Expansion, and Alternative Care Models. The methodology for the impact calculations below is available here.

State Snapshots: What's the impact of policies on rural healthcare and communities in your state? Snapshots for all states are available on our web site.

Rural Pressure Point: Sequestration

In March 2013, a range of Federal spending cuts went into effect. The cuts, commonly referred to as sequestration, included a planned two percent cut in almost all Medicare spending. The Congressional Budget Office projected that the cuts would total $123 billion over a 10-year period.

The estimated community impact of the sequestration over 10 years, based upon 2015 cost report data is:

- **$3.5 billion** in lost Medicare reimbursement among rural hospitals
- **153,000 jobs lost** in rural hospitals and communities
- **$18.0 billion** GDP loss

While the impact of sequestration impacts all hospitals with reimbursements for Medicare beneficiaries, the cuts are disproportionately harmful to rural providers. First, rural providers receive significantly more government reimbursement (Medicare and Medicaid) than non-rural counterparts, and these reimbursements tend to yield lower payments per case when compared with commercial payors. Second, rural hospitals' razor-thin or negative margins leave little room to absorb any reduction in revenues. The state-by-state impact is not evenly distributed - as is the case with many policy changes (see map on page 7).

Rural Pressure Point: Bad Debt

The Middle-Class Tax Relief and Job Creation Act[1] instituted "bad debt" cuts as a means for paying for the program. Between 2012 and 2015, rural hospitals have absorbed a reduction in reimbursable bad debt, dropping from 100 percent to 65 percent.

This 35 percent decrease for what is often referred to as charity care, has been one of the key factors negatively impacting the financial performance of rural providers. This analysis into bad debt and its ramifications on the rural health safety net estimates the 10-year impact of these cuts using 2015 Cost Report data.

The community impact of bad debt cuts over a 10-year period:

- **$1.4 billion** in lost Medicare reimbursement among rural hospitals
- **62,000 jobs lost** in rural hospitals and communities
- **$7.3 billion** GDP loss

The impact has been most severe in states which have chosen not to expand Medicaid under the ACA. In states that have expanded Medicaid, many of the charity care services previously offered are now offered to citizens newly insured under the ACA. However, for rural providers in states that did *not* expand Medicaid, the same level of charity care continues to be provided but without the ability to seek reimbursement for uncompensated services.

Further exacerbating these cuts is the emergence of commercial bad debt. Unlike charity care, which typically involves uninsured patients, commercial bad debt is associated with insured patients unable to pay for medical services due to high deductible plans which can be as much as $5,000. Anecdotes gathered from rural hospitals indicate that many providers are finding it difficult to collect full payments in a timely manner, if at all.

Rural Pressure Point: CAH Reimbursement

The Balanced Budget Act (BBA) of 1997 authorized the creation of the Critical Access Hospital (CAH) with special conditions of participation and special reimbursements intended to maintain access to critical care in rural areas with low volumes of patients. Cost-based reimbursement created an annual settlement, whereby Medicare pays the hospital 101 percent of allowable costs filed on their cost report. This program has been helpful in maintaining rural access to care and as a counter to the unintended consequences associated with the development of the Prospective Payment System. The CAH system is largely viewed as a life raft for the fragile rural health safety net.

The impact of recommended CAH Reimbursement cuts over a 10-year period:

- **$1.2 billion** in lost Medicare reimbursement among CAHs
- **52,000 jobs lost** in CAH hospitals and communities
- **$6.1 billion** GDP loss

[1] Pub.L. 112–96, H.R. 3630, 126 Stat. 156, enacted February 22, 2012.

States primarily in the Midwest would suffer the greatest losses in Critical Access Hospital revenue and see the most job loss as a result of these reimbursement cuts. In large part, this is driven by the rural nature of these states and the large number of hospitals spread out across relatively agrarian counties (see Rural Relevance Chart Book, Chapter 2, Policy Impact).

Rural Pressure Point: PPS Coding Offset

Under the American Taxpayer Relief Act (ATRA),[1] Congress required CMS to recoup "excessive" payments from 2008-2013 under the prospective payment system (PPS). Additionally, the legislation authorized further coding offset for increases seen during this period. This cut was proposed by CMS and then withdrawn, but policymakers continue to include it as part of deficit reduction and cost containment policy.

As coding changes evolve, some higher fee services have been collapsed under one lower cost code based upon CMS evaluation of physician practices that offer similar services, often at lower cost. This reflects a pain point for rural hospitals treating numerous ambulatory conditions in their outpatient clinics. In rural communities, these hospital-based clinics may be the only places to receive such interventions, and yet may carry a higher cost burden given the nature of hospital overhead structure.

The community impact of a PPS Coding Offset over a 10-year period:

- **$359 million** in lost Medicare reimbursement among rural hospitals
- **16,000 jobs lost** in rural hospitals and communities
- **$1.8 billion** GDP loss

Individual states could see losses exceeding $20 million in hospital revenue (such as California) and over $100 million in GDP (such as North Carolina) (see Rural Relevance Chart Book, Chapter 2, Policy Impact).

Value-based Purchasing (VBP)

The smallest rural hospitals, typically CAHs, can't participate in the CMS Value Based Purchasing Program (VBP), also called Pay for Performance, which withholds a percentage (two percent) of Medicare inpatient payments and puts them into a pool for bonus (and penalty) payments. Hospitals that achieve a benchmark of value will see these monies remitted and may earn additional payments if they exceed the benchmark. Hospitals that do not meet the benchmark will forfeit these payments. In this way, CMS is providing incentives (and penalties) for hospitals to chase the value curve in defined areas of Quality, Outcomes, Patient Satisfaction and Efficiency.

The 2017 Rural Relevance Study models the CMS 2018 Value Based Purchasing (VBP) rules and applies these to the rural and CAHs to empirically evaluate how well the rural safety net functions. If the 2018 CMS VBP program were in effect today and applied to all rural hospitals, it would create an inflow of nearly $207 million to these providers.

Based on the current performance of rural healthcare, CAHs should welcome value-based purchasing incentives. If 2018 rules were currently in effect, CAHs could expect to earn $23 million in bonus payments nationally based on current performance.

[1] Pub.L. 112–240, H.R. 8, 126 Stat. 2313, enacted January 2, 2013.

- Using the 2018 rules, CAHs would receive $22.8 million in value-based reimbursements, preserving over 1,000 jobs and $124 million in GDP in 2018. There would be potential to secure another $52.3 million with performance increases, which would preserve an additional 2,000 jobs and $261 million in GDP.
- The average CAH is expected to realize $17,000 in bonus payments, with the opportunity to capture an additional $38,000 with performance increases.
- CAHs outperform their rural PPS peers. Rural PPS hospitals can expect to see an overall loss of nearly $21 million from their withholding amounts nationally.
- Nearly $270 million in bonus dollars would be available for the rural PPS hospitals with performance increases.

It is important to note that the current VBP program is *inpatient* focused and is not the best fit with small rural hospitals with low inpatient volumes as CAHs see an average of 74.4 percent of their patient volume as outpatients.[1] To address this, CMS has requested the development of a candidate rural-relevant VBP measure set by the National Quality Forum (NQF). This candidate measure set has been promulgated and awaits trial in the field. A key recommendation of the NQF is the inclusion of bonus payments for high performing rural safety net facilities, but not penalties such as those that exist for larger, less rural hospitals.

Policy Impact Chart Book: A detailed impact review of the policies highlighted in the study is available at iVantageINDEX.com. View the policy impact chart book here.

[1] Flex Monitoring Team Data Summary Report No. 16, October, 2014.

Disparities in Operating Margin Among Rural Providers: Medicaid Expansion

Medicaid expansion has proven to be a key driver of the implementation of provisions under the Affordable Care Act (ACA). The expanded coverage of individuals previously uninsured is one of the key provisions made optional in the U.S. Supreme Court case challenging the constitutionality of the ACA in National Federation of Independent Business (NFIB) v. Sebelius[1]. In the decision, the mandate to have insurance was deemed constitutional but not the "coercive" mechanism where states would either accept the expansion or risk losing existing Medicaid coverage. Thus, there has been uneven expansion of this key provision that has offered (or denied) millions of rural Americans health insurance coverage. Rural providers serving these populations have been directly impacted through enhanced payment resulting from increased insurance coverage for populations previously uninsured. This has been particularly noteworthy since bad debt cuts went into full effect (35 percent reduction) in 2015.

The 2017 Study finds that the expansion states have higher median rural hospital operating margins than non-expansion states. Additionally, the study notes variation by state and region explored next (see map on page 7).

Graves-Loebsack Save Rural Hospitals Act: An Alternative Model

Our exploration of operating margins led us to consider possible paths forward toward stability and sustainability. The Graves-Loebsack Save Rural Hospitals Act (HR 3225) includes provisions to both redress some of the policies/cuts explored in this study for the last six years as well as pave a way forward to codify into law new models for providing access to care in rural settings, borrowing from pilots that have been offered around the country. Under the proposed Save Rural Hospitals Act, Community Outpatient Hospital status preserves emergency and outpatient care for rural communities. The research shows that this conversion would financially benefit 97 percent of eligible hospitals currently operating at a loss.

This act, if passed, could preserve for communities the following over a 10-year period:

- **$5.4 billion** in lost Medicare reimbursement among rural hospitals
- **237,000 jobs lost** in rural hospitals and communities
- **$27.9 billion** GDP loss

This model is based upon the following elements of the Community Outpatient Hospital reimbursement structure. Note that this model is not inclusive of grant funding.

- 105 percent of reasonable costs reimbursed
- 100 percent of bad debt reimbursed
- Exemption from two-percent sequestration

[1] (567 U.S. ___ (2012), 183 L. Ed. 2d 450, 132 S. Ct. 2566

The 2017 Study finds that **rural hospital revenues may be impacted by a conversion to a new Outpatient/Emergency Hospital model with reductions in payment cuts and enhancements in reimbursements.** Please contact CCRH to model current performance under new models of reimbursement to better understand hospital performance under alternative models of service.

Rural Leaders Show the Way

The 2017 Top 100 Rural Providers

Across the spectrum of performance indicators, the Top 100 Rural and Community Hospitals and the Top 100 CAHs, as measured by the Hospital Strength INDEX (INDEX), are writing the blueprint for success as providers in rural America. Our research shows that these leaders share key attributes that dovetail with the vision articulated by the Triple Aim: better health for populations, better outcomes for patients and doing so at lower cost.[1]

Using the INDEX, characteristics of this year's top performing rural providers are compared to one another by the applicable peer group. By comparing the Top 100 cohorts of CAHs (see Rural Relevance Chart Book, Chapter 3, Value Leaders) and Rural and Community hospitals (see Rural Relevance Chart Book, Chapter 3, Value Leaders) to their respective counterparts across the U.S., the analysis highlights the areas of strength of top performers while at the same time establishing benchmarks for all other providers.

- Top performing CAHs boast a median overall percentile rank of 95.0 versus the all-CAH median of 51.6 on the Hospital Strength INDEX.
- The median Top 100 Rural and Community facility performs in the 94.4 percentile compared to a national median of 46.5.
- Top 100 CAHs capture more Medicare IP business than 84.3 percent of all other rural hospitals and greater Medicare OP market share than 91.8 percent of all other rural hospitals within a defined PSA.
- When looking at Outcomes, top CAHs excel at keeping readmission and mortality rates low.
- Top rural and community hospitals produce consistently better outcomes at much lower average case-weight and wage-rate adjusted Medicare IP and OP costs.
- Finally, this cohort analysis reveals significant distinction in Financial Stability (measured by Capital Efficiency [Net Income/Total Revenue]), whereas Top 100 CAHs score higher than two-thirds of all other providers in the study.

[1] Institute for Healthcare Improvement, 2017.

While top performing CAHs and rural and community hospitals perform significantly better compared to their peers, there are differences in areas of relative strength when compared against one another (see Rural Relevance Chart Book, Chapter 3, Value Leaders). When looking at value, for example, Top 100 CAHs show stronger performance as compared to Top 100 Rural and Community hospitals in the Medicare Process of Care measures that comprise the Quality Pillar, as well as the Patient Satisfaction Pillar comprised of HCAHPS scores.

Across the nation, there is a wide range of performance among rural providers. The INDEX provides an analysis of the value of the safety net performance nationally and cascades this analysis to states, regions, etc. Numerous states subscribe to the INDEX to offer a hospital-by-hospital analysis of performance and to direct resources for performance improvement. The following section compares performance characteristics of the rural hospitals across the nation to non-rural providers.

Where does your facility stand in 2017? Contact CCRH to assess individual hospital performance and learn what it takes to become a Top 100 Rural Hospital.

Rural Provider Performance Compared with Non-Rural Provider Performance

Quality, Outcomes and Patient Satisfaction

- **Quality**: Rural providers score better in emergency department (ED) Arrival to Admission Times for Admitted ED Patients (rural 220 min to non-rural 311 min), ED Arrival to Departure Times for Discharged ED patients (rural 117 min to non-rural 161), Median time from ED arrival to provider contact (rural 21 min to non-rural 30 min), and Median Time to Pain Management (rural 49 min to non-rural 56 min).
- **Outcomes**: Rural providers perform better than their non-rural counterparts for Heart Failure (HF) Readmission (rural 21.8 to non-rural 22), pneumonia (PN) Readmission (rural 16.9 to non-rural 17.3) and hospital-wide readmission (rural 15.5 to non-rural 15.7).
- **Patient Satisfaction:** Rural providers outperform non-rural in overall ranking – receiving a 9 out of 10, as well as in eight individual categories including nurse communication, doctor communication, pain control, medication explanation and discharge instructions.

Costs and Charges

Costs and charges are important to consider in rural health. Even though they don't reflect the ultimate consumer price, they do influence the final payment or settlement. Costs are important because they set the floor below which hospitals will lose money. Rural hospital costs are also important because they establish the basis for a Medicare settlement for cost-based reimbursements to help keep low volume

rural safety net providers "whole." Charges, on the other hand, are set by the hospital and may serve as the basis for negotiated payments by commercial insurance companies that reimburse hospitals at a premium compared with Medicare in 96 percent of inpatient services[1]. Charges may vary widely by hospital for the same services and final payments show wide variation for the same services observed.[2] However, as noted earlier, rural hospitals receive most payments from government payors that pay on a fee schedule.

Rural providers are concerned that their cost and charge structure will become misaligned with the wider market in such a way that ultimately undermines the attractiveness of the safety net. The 2017 study examined costs and charges in inpatient areas (based upon Diagnostic Resource Group volumes (DRGs) and outpatient service areas) with the highest volumes (see Rural Relevance Chart Book, Chapter 3, Value Leaders).

- Rural hospitals charge far less than their non-rural counterparts on a case-mix and wage adjusted basis. This difference is especially apparent in the inpatient setting, but also holds true among outpatients. Rural hospital charges are particularly low for common inpatient stays such as pneumonia, kidney and urinary tract infection, heart failure and COPD when wage and case-mix adjusted.
- Non-rural hospitals outperform rural facilities with respect to outpatient Medicare costs, sustaining lower costs across many common procedures when case-mix and wage adjusted. However, rural hospitals perform just as well with respect to inpatient costs among Medicare patients.

Value Leaders Chart Book: Detailed analysis of top performing rural hospitals, as well as a review of rural provider performance versus non-rural providers is available at iVantageINDEX.com. View the value leaders chart book here.

[1] National Comparisons of Commercial and Medicare Fee-For-Service Payments to Hospitals, 2016.
[2] The Dramatic Difference: What a Hospital Charges vs. What Medicare Pays. Kaiser Family News, 2013.

Conclusion

In summary, the rural health safety net serves a population that is older, poorer and sicker with less access to care than their non-rural counterparts. This population has a higher proportional demand for healthcare given baseline health disparities. The rural health safety net is anchored by rural hospitals that offer critical access to quality care. Through federal and state polices and rural-relevant reimbursements, this safety net has been designed to provide access to populations which are geographically dispersed and often underserved. Yet this safety net continues to be threatened by potential policy changes at both state and federal levels.

Rural healthcare providers serve to support not only the health of their population, but also the health of the local economy and, by extension, the communities served. The shift from local rural access to non-rural centers of care may not offer savings, but shifts the spend from rural to non-rural, often with negative consequences in terms of access, care and cost. As cost savings initiatives are considered, care must be taken so that the industry doesn't *"trip over a dollar to save a dime"* as is typically the case when considering the overall cost of supporting local access to care for rural populations.

While there is no question that non-rural providers provide more sophisticated interventions for the sickest patients, the study confirms that rural providers offer quality care with good outcomes and high levels of patient satisfaction at the median as compared to more non-rural counterparts for the care they offer.

Preserving access to all types of care, especially inpatient care, may be out of the reach of the smallest providers. But rural providers have a critical role to play in developing alternative care models for a geographically dispersed, heterogeneous populations, leading the way toward answering the key question around the care models of the future for rural America.

Against this context, rural providers should act now to prepare for changes ahead. Developing a comprehensive understanding of an organization's current performance, position and exposure is critical, as is aligning leadership around the most likely scenarios ahead. As has been the case for the last six years, the Rural Relevance Study offers a snapshot into the state of rural healthcare, the value the safety net provides and the challenges and opportunities for the future.

About the Hospital Strength INDEX®

The Hospital Strength INDEX is rural healthcare's most comprehensive and objective assessment of rural providers. By assessing performance across more than 50 individual indicators and eight pillars of performance, INDEX brings a rural-relevant perspective to healthcare leaders making strategic and operational decisions. The INDEX is the foundation for many of rural healthcare's most prominent awards (e.g. Top 100 Critical Access Hospitals, NOSORH Performance Excellence Awards) and is used by organizations such as the National Rural Health Association in support of its advocacy and legislative initiatives.

Since its inception, the INDEX has helped more than 750 rural and Critical Access Hospitals integrate sophisticated analytics for benchmarking performance, and has also been used by more than 25 state agencies, state hospital associations, federal grant programs and both the National Rural Health Association (NRHA) and the National Organization of State Offices of Rural Health (NOSORH). INDEX analytics have also informed healthcare industry policy, research and thought leadership.

Study Note

The total number of rural hospitals included in the analysis is 2,157, which includes hospitals designated as rural by the Office of Rural Health Policy (ORHP), a division of the Health Resources & Services Administration (HRSA) and excludes hospitals with more than 200 beds.

The methodology behind INDEX uses publicly available hospital level data to (a) identify the variables that statistically contribute to the measures of cost, quality, outcomes and patient perspective and (b) score each hospital on each measure based on the weighting of each variable as determined by a principal components analysis. The use of publicly available hospital data comes with the inherent problem of missing data for some hospitals. To address this issues, INDEX uses a multiple imputation approach to provide estimates of missing variables based on available data.

All available data are included. Statistical sampling and data projection methodologies are employed only when necessary. Each INDEX release is based on the most recently available data for each indicator source. All information included in this release (version 7.0) represents the most recently available data as of December, 2016.

INDEX is based on a composite measure of eight pillars:

- Inpatient Market Share
- Quality
- Patient Perspective
- Charges
- Outpatient Market Share
- Outcomes
- Cost
- Financial Stability

The methodology is reviewed and revised as necessary each year to ensure it provides a current and relevant analysis of rural hospital performance. The current methodology is available online at www.iVantageINDEX.com.

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Michael specializes in rural health network development and benchmarking for performance improvement consulting. He has established himself as a resource for rural providers, health systems and networks leveraging diverse data sets – both public and private – to support rural-relevant benchmarking, research and advocacy. Michael has been instrumental in shaping the annual *Rural Relevance: Vulnerability to Value* study which explores the state of rural healthcare in America and is widely used by rural providers, advocacy groups, policy makers and the media.

The Chartis Center for Rural Health (CCRH) builds upon the commitment of The Chartis Group and iVantage Health Analytics to deliver expertise, performance management solutions, advisory services and research to the system-supported rural facilities, community hospitals, and Critical Access Hospitals which provide care to more than 60 million Americans.

Pairing iVantage's extensive knowledge of rural healthcare, research and solution portfolio with the healthcare expertise and resources of The Chartis Group, CCRH creates an unparalleled value proposition for rural health leaders and those advocating on their behalf. The Chartis Center for Rural Health provides insight, perspective, analysis and solutions to this important healthcare segment in order to address the biggest challenges and drive performance improvement.

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Reducing Potentially Excess Deaths from the Five Leading Causes of Death in the Rural United States

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Background

In 2014, the all-cause age-adjusted death rate in the United States reached a historic low of 724.6 per 100,000 population (*1*). However, mortality in rural (nonmetropolitan) areas of the United States has decreased at a much slower pace, resulting in a widening gap between rural mortality rates (830.5) and urban mortality rates (704.3) (*1*). During 1999–2014, annual age-adjusted death rates for the five leading causes of death in the United States (heart disease, cancer, unintentional injury, chronic lower respiratory disease (CLRD), and stroke) were higher in rural areas than in urban (metropolitan) areas (Figure 1). In most public health regions (Figure 2), the proportion of deaths among persons aged <80 years (U.S. average life expectancy) (*2*) from the five leading causes that were potentially excess deaths was higher in rural areas compared with urban areas (Figure 3). Several factors probably influence the rural-urban gap in potentially excess deaths from the five leading causes, many of which are associated with sociodemographic differences between rural and urban areas. Residents of rural areas in the United States tend to be older, poorer, and sicker than their urban counterparts (*3*). A higher proportion of the rural U.S. population reports limited

physical activity because of chronic conditions than urban populations (*4*). Moreover, social circumstances and behaviors have an impact on mortality and potentially contribute to approximately half of the determining causes of potentially excess deaths (*5*).

Potentially excess deaths (also described as potentially preventable deaths) are defined as deaths among persons aged <80 years in excess of the number that would be expected if the death rates for each cause were equivalent across all states to those that occurred among the three states with the lowest rates (*6,7*). Although not all potentially excess deaths can be prevented, many might represent deaths that could be prevented through improved public health programs that support healthier behaviors and neighborhoods and better access to health care services.

Reducing Potentially Excess Deaths in Rural Areas of the United States

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In 2014, approximately 62% of all 1,622,304 deaths in the United States were related to the five leading causes of death (6). During 2014, the number of potentially excess deaths from the five leading causes in rural areas was higher than those in urban areas (*8*). Targeted, needs-based prevention efforts, combined with improved access to treatment for chronic conditions, might reduce the rural-urban gap in age-adjusted death rates and potentially excess deaths from the five leading causes of death.

Heart Disease, Stroke, and Chronic Lower Respiratory Disease

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Heart disease, stroke, and CLRD share several substantial co-morbidities from individual behavioral and social risk factors (*9–12*). The percentage of potentially excess deaths from these three causes is higher in rural than urban areas in all 10 regions (*8*). In addition, potentially excess deaths among regions vary substantially. For example, the percentages of excess deaths in urban areas in regions 3, 4, 5, 6 and 7 related to stroke are higher than even the rural area percentages in regions 1, 2, 8, 9, and 10. For these three causes of potentially excess deaths, the highest urban percent in one or more regions is higher than the lowest rural percentages in three or more regions. Stroke is the most prominent example: urban excess deaths in regions 4 (South East) and 6 (New Mexico, Texas, Oklahoma, Arkansas, and Louisiana) far outpace rural excess deaths in regions 1, 2, 5, 7, 8, 9 and 10. In region 5 (Great Lakes), rural-urban differences in potentially excess deaths nearly disappeared for heart disease and stroke. Additional research is needed to understand the causes of these differences and what can be learned from both the broad regional differences across the United States and the near elimination of rural-urban differences in the Great Lakes region.

Tobacco use increases the risk for developing and dying from heart disease, stroke, and CLRD. Cigarette smoking is the leading cause of preventable disease and death in the United States (*13*) and is the most substantive risk factor for CLRD (*10*). Nationally, the prevalence of cigarette

smoking among adults living in rural counties is higher than in urban counties, and smoking rates differ markedly by region, making tobacco use a likely leading cause of differential mortality between urban and rural areas (*4*). Understanding where tobacco use in rural areas is higher than urban areas can help prioritize resources to reduce tobacco use and secondhand smoke exposure and begin to address the increasing numbers of CLRD-related deaths in rural areas.

Heart disease and stroke mortality rates are decreasing in both rural and urban areas. However, this improvement in mortality trends is plateauing and the rate of decline for heart disease in rural areas is slowing relative to urban areas, thus increasing the differential rural-urban gap in mortality rates (*8*). In 22 states, including rural states such as Alaska, Idaho, Kentucky, Montana, Vermont and West Virginia, the number of deaths attributed to heart disease declined below the number of cancer deaths for the first time (*8*). For stroke, the difference in the number of deaths in rural and urban areas remained constant, with substantive declines in both rural and urban areas (*8*). In 2013, stroke declined from the third to the fifth leading cause of death in nonmetropolitan areas (*14*). Lack of physical activity, poor nutrition (especially diets high in calories, sodium, added sugars, and saturated fat), and associated obesity are major risk factors for hypertension and diabetes (*15*). These risk factors and conditions contribute substantially to heart disease and stroke death rates in the United States and are more prevalent in rural areas than urban areas. Obesity has been linked to a variety of serious chronic illnesses, including diabetes, heart disease, cancer, and arthritis (*16–18*). From 1960 to 2010, the proportion of adults in the United States who were overweight or obese increased from 40.5% to 66.1% (*19*). Self-reported obesity was higher in rural areas than urban areas and increased with increasing levels of rurality (*4*). Regular physical activity and improved physical fitness offer numerous health benefits, including reduced risk for cardiovascular disease, diabetes, obesity, some cancers, and musculoskeletal conditions (*20*). Despite evidence of modest increases in the prevalence of physical activity and improved nutrition, the prevalence rates of hypertension and diabetes have not been improving over time (*21,22*). However, a greater percentage of adults with hypertension are controlling their blood pressure (*23*), and since 2006 there has been a sustained decline in the incidence of diabetes and a plateauing in the prevalence of diabetes nationally (*24*).

Barriers to health care access result in unmet health care needs that include, but are not limited to, a lack of preventive and screening services, treatment of illnesses (*25*) and timely urgent and emergency services (*26*). Residents of rural areas experience many of these barriers. Specifically, rural counties in the United States have a higher uninsured rate (*27*); experience health care workforce shortages (approximately only 11 percent of all physicians choose to practice in rural settings) (*28*); often lack subspecialty care (e.g., oncology), critical care units, or emergency facilities (*29*); have limited transportation options; and experience longer time to services caused by distance (26). Differential access to quality health care (*25*), including timely access, likely contributes to

rural-urban gaps in mortality rates and potentially excess deaths. For example, persons with CLRD and unmet health care needs in rural areas can experience serious life-threatening respiratory episodes, and the lack of timely access to emergency care could affect survival. In contrast, the parallel mortality trends for stroke might be explained by the success of complementary programs that improve the quality of stroke care. These programs (CDC's *Paul Coverdell National Acute Stroke Program*, the American Heart Association/American Stroke Association's *Get with the Guidelines* program, and The Joint Commission's Certification for Primary Stroke Centers program) organize systems that coordinate acute stroke care across both urban and rural hospitals (*30*). However, comparable programs to improve cardiac care have not been implemented in rural areas, which might account for divergent trend in myocardial infarction mortality rates.

Cancer

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During 2003–2012, the overall cancer-related age-adjusted death rate decreased by 1.5% per year (*31*); however, rates declined less in rural than urban areas (*8*). Age-adjusted death rates from cancer have mirrored decreases in the prevalence of risk factors such as tobacco use, which is a shared risk factor with heart disease, stroke, and CLRD (*10–12*), and increases in cancer screening, vaccinations, and improvements in treatment (*31*). Differences in these death rates might reflect higher prevalence of tobacco-use and obesity in rural areas (*4*) and lack of access to cancer screening services, follow-up to abnormal tests, quality care for cancer patients, and cancer survival care (*32*).

To address the rural-urban gap in cancer-related potentially excess deaths, comprehensive approaches that encompass the cancer continuum (e.g., prevention, early detection, treatment, and survivorship) are needed at the local and state level to reduce risks associated with potentially excess deaths from cancer in rural areas (*33*). Comprehensive cancer-control programs are funded by CDC in 50 states, the District of Columbia, seven tribes and tribal organizations, and seven U.S. territories and Pacific Island jurisdictions (https://www.cdc.gov/cancer/ncccp/about.htm (https://www.cdc.gov/cancer/ncccp/about.htm)). These programs build coalitions that develop and implement strategic plans for cancer prevention and reduce morbidity and mortality for persons affected by cancer.

CDC also supports cancer screening programs that address health disparities among adults who are uninsured or underinsured (*34,35*), which is a common characteristic among rural populations (*32*). Historically, funding for the National Breast and Cervical Cancer Early Detection Program and the Colorectal Cancer Control Program has focused on direct screening services. Since 2012, emphasis has shifted to population-based approaches, such as partnering with health systems to implement evidence-based interventions to increase population-level screening (*36*), including provider reminders for persons who are due for cancer screening (*37*).

As differences in cancer-related death rates are addressed at the local and state level, opportunities are available to address them at the federal level. The Cancer Moonshot is focused on accelerating the understanding of cancer and its prevention, early detection, treatment, and cure, including improving access and care (*38*). Although some components of this federal initiative target the genomic level, when combined with population-based approaches, the rural-urban gap in cancer-related deaths rates might be reduced.

Unintentional Injury

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During 2008–2010, the annual age-adjusted death rates for unintentional injury were highest in rural counties (*8*). During 1999–2014, the age-adjusted death rates for unintentional injuries were approximately 50% higher in rural areas than urban areas (Figure 1). Several factors explain the wide gap in rural-urban death rates from unintentional injuries. First, unintentional injury burden is higher in rural areas because of severe trauma associated with high speed motor vehicle traffic-related deaths (*4*). Second, rates of opioid analgesic misuse and overdose death are highest among poor and rural populations (*39*). Third, behavioral factors (e.g., alcohol impaired driving, seatbelt use, and opioid prescribing) contribute to higher injury rates in rural areas (*40–42*). Fourth, access to treatment for trauma and drug poisoning is often delayed when the injury occurs in rural areas. For life-threatening injury, higher survival is associated with rapid emergency treatment (*43,44*). Because of the geographic distance involved, emergency medical service (EMS) providers who operate ambulances take longer to reach injured or poisoned patients in rural areas. Moreover, ambulatory transport to the optimal treatment facility also can take longer because of increased distance to the treatment facility. Most life threatening trauma is best treated in advanced trauma centers, which are usually located in urban areas; care at these centers has been associated with 25% lower mortality (*45*). Trauma centers have advanced equipment and specialized staff available 24 hours, 7 days a week. Such care also includes access to advanced neurosurgical care, which is important because approximately one third of all injury-related deaths involve a traumatic brain injury. Regulatory restrictions and EMS capability and certification to treat drug overdose cases with naloxone at the scene of overdose events also might be a factor in higher opioid poisoning-related deaths in rural areas.

Interventions to address the disproportionate unintentional injury death rates in rural areas include increased adherence to guidelines for triaging ambulatory transport destinations (*46*), changing state rules to expand the types of EMS providers that can administer naloxone to reverse a drug overdose (*47*), and enforcement of motor vehicle seatbelt and alcohol laws to reduce motor vehicle crashes (*48*). Educating rural opioid prescribers on the opioid guideline (*49*) and better access to opioid agonist medication-assisted treatment programs probably would benefit rural communities

with high opioid use disorder rates (*50*). Quicker access to definitive trauma and opioid dependency treatment and additional interventions are needed to reduce unintentional injury deaths in rural areas.

Conclusion

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In the United States, there is a rural-urban gap in age-adjusted death rates and potentially excess deaths from the five leading causes of death. Rural communities experience higher age-adjusted death rates and a higher number of potentially excess deaths from the five leading causes compared with urban areas. Higher death rates and potentially excess deaths are often associated with various interconnected societal, geographic, behavioral, and structural factors. Historic trends indicate that focusing on access to health care in rural areas of the United States alone is not sufficient to adequately address complex health outcomes, including mortality among rural populations (*3*). Consistent with the recommendations and best practices described in this report, approaches to address the nonuniform achievements in rural areas must focus on strengthening the health care delivery system while improving and increasing the integration of primary, specialty, and substance abuse services (*3*). Identifying structural and societal modifiable factors contributing to the gap between rural and urban mortality outcomes from the five leading causes of death is challenging. Additional analysis can yield results that inform the strategic alignment of resources with condition-specific needs. To reverse the widening gap in age-adjusted death rates from unintentional injuries between rural and urban areas, special attention should be given to designing, implementing, and monitoring locally informed initiatives in rural communities for the effective prevention and treatment of opioid misuse, including treatment of opioid overdose. Needs-based allocation of resources can substantially impact rural health. Although rural communities are at higher risk for death from the five leading causes of death, funding to address risk factors is allocated on a population basis (*3*), often resulting in underfunded rural programs. An increased emphasis on need and epidemiologic burden of disease as major factors in targeting future allocation of public health and prevention funding might contribute, among other factors, to bridging the mortality gap from the five leading causes of death between rural and urban areas in the United States.

Acknowledgments

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Debra Houry, MD, National Center for Injury Prevention and Control; Mary G. George, MD, National Center for Chronic Disease Prevention and Health Promotion.

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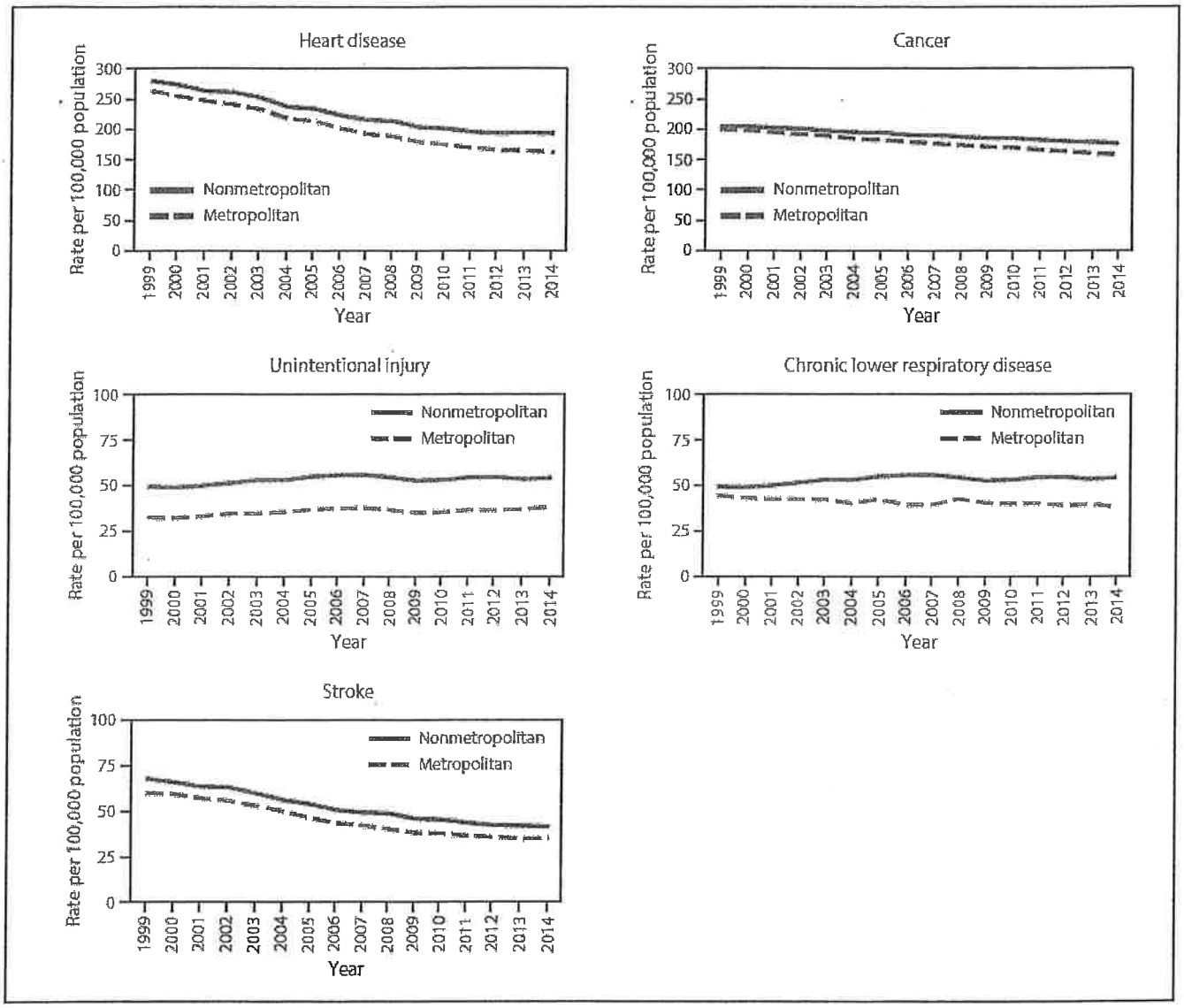
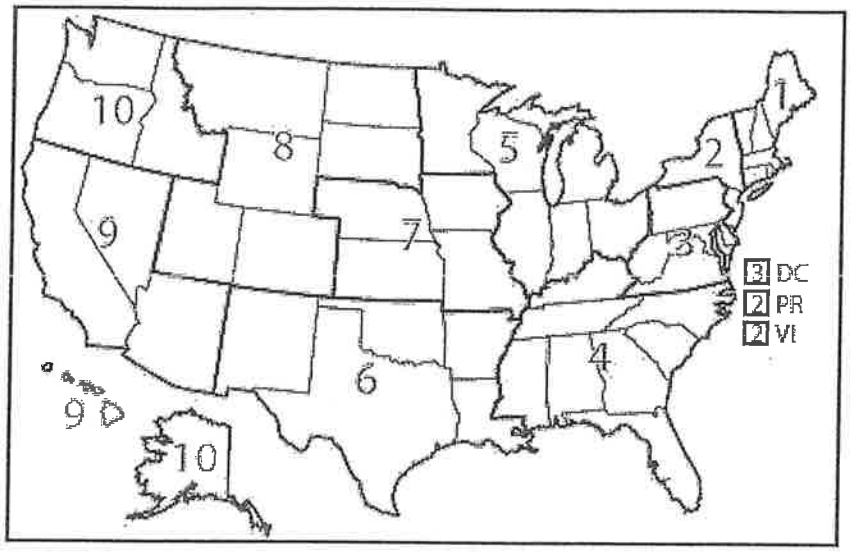
FIGURE 1. Age-adjusted death rates among persons of all ages for five leading causes of death in nonmetropolitan and metropolitan areas,* by year — National Vital Statistics System, United States, 1999–2014



Source: Moy E, García MG, Bastian B, et al. Leading causes of death in nonmetropolitan and metropolitan areas—United States, 1999–2014. MMWR Surveill Summ 2017;66(No. SS-1).

* Nonmetropolitan and metropolitan areas were identified using the Office of Management and Budget's 2013 county-based classification scheme. (**Source:** Office of Management and Budget, White House. Revised delineations of metropolitan statistical areas, micropolitan statistical areas, and combined statistical areas, and guidance on uses of the delineations of these areas. Washington, DC: Office of Management and Budget; 2013. https://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b13-01.pdf (https://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b13-01.pdf))

FIGURE 2. U.S. Department of Health and Human Services public health regions* Return Top



Source: Moy E, García MG, Bastian B, et al. Leading causes of death in nonmetropolitan and metropolitan areas—United States, 1999–2014. MMWR Surveill Summ 2017;66(No. SS-1).

* *1* = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *2* = New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands (Mortality data for residents of U.S. territories were excluded.); *3* = Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; *4* = Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; *5* = Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *6* = Arkansas, Louisiana, New Mexico, Oklahoma, and Texas; *7* = Iowa, Kansas, Missouri, and Nebraska; *8* = Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; *9* = Arizona, California, Hawaii, and Nevada; *10* = Alaska, Idaho, Oregon, and Washington.

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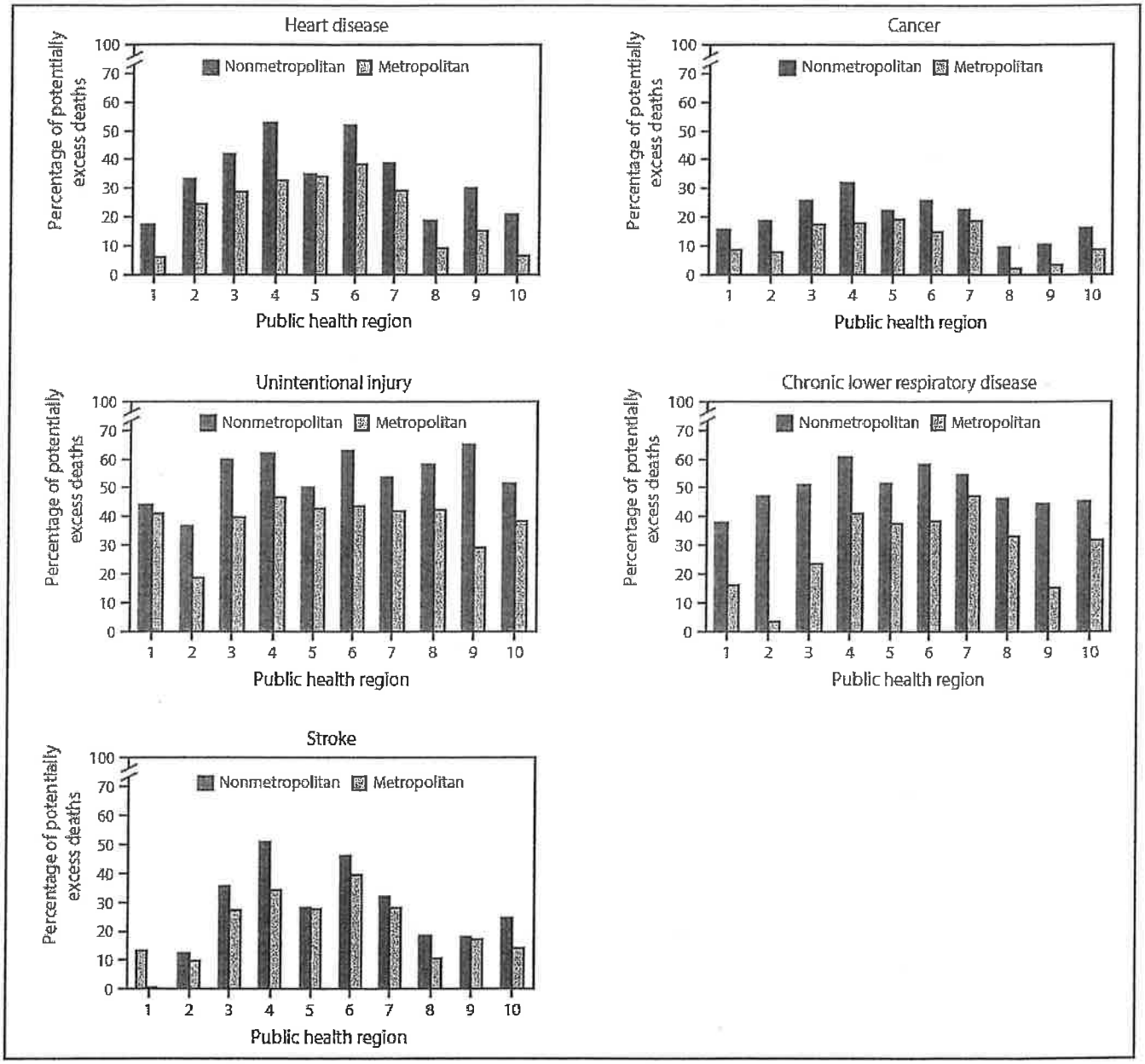
FIGURE 3. Percentage of potentially excess deaths* among persons aged <80 years for five leading causes of death in nonmetropolitan and metropolitan areas,† by year and public health region§ — National Vital Statistics System, United States, 2014



Source: Moy E, García MG, Bastian B, et al. Leading causes of death in nonmetropolitan and metropolitan areas—United States, 1999–2014. MMWR Surveill Summ 2017;66(No. SS-1).

* For each age group and cause, the death rates of the three states with the lowest rates during 2008–2010 (benchmark states) were averaged to produce benchmark rates. Potentially excess deaths were defined as deaths among persons aged <80 years in excess of the number that would be expected if the age group–specific death rates of the benchmark states occurred across all states.

† Nonmetropolitan and metropolitan areas were identified using the Office of Management and Budget's 2013 county-based classification scheme. (**Source:** Office of Management and Budget, White House. Revised delineations of metropolitan statistical areas, micropolitan statistical areas, and combined statistical areas, and guidance on uses of the delineations of these areas. Washington, DC: Office of Management and Budget; 2013. https://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b13-01.pdf (https://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b13-01.pdf)).

§ *1* = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *2* = New Jersey and New York; *3* = Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; *4* = Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; *5* = Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *6* = Arkansas, Louisiana, New Mexico, Oklahoma, and Texas; *7* = Iowa, Kansas, Missouri, and Nebraska; *8* = Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; *9* = Arizona, California, Hawaii, and Nevada; *10* = Alaska, Idaho, Oregon, and Washington.

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Page last reviewed: January 12, 2017

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Department of Health & Human Services
Centers for Medicare & Medicaid Services
61 Forsyth St., Suite. 4T20
Atlanta, Georgia 30303-8909

June 14, 2017

Stephanie Boynton, CEO
Erlanger Bledsoe Hospital
71 Wheelertown Avenue
Pikeville, TN 37367

Re: Critical Access Hospital (CAH) Relocation Preliminary Determination

Dear Mrs. Boynton:

Thank you for providing us with the information regarding the proposed relocation of Erlanger Bledsoe Hospital. You provided documentation of continuing to meet all rural location and necessary provider requirements at 42 CFR 485.610, as well as documentation attesting to compliance with the 75% requirement at 42 CFR 485.610(d)(1). Based on our preliminary evaluation, Erlanger Bledsoe Hospital will meet all regulatory requirements regarding relocation of a Necessary Provider CAH when it relocates to the new address.

Please be aware that this is a preliminary evaluation only and the final determination cannot occur until after the CAH relocates and submits evidence that it continues to meet all requirements. After the relocation is complete, Erlanger Bledsoe Hospital must attest that it remains essentially the same provider serving the same community at the new location (per 42 CFR 485.610(d)(1)), and whether the information provided with the earlier attestation remains the same.

If you have any further questions, please do not hesitate to contact Jackie Whitlock at (404) 562-7437 or Jacqueline.whitlock@cms.hhs.gov.

Sincerely,

Jackie Whitlock for

Sandra M. Pace
Associate Consortium Administrator
Division of Survey & Certification

erlanger
BLEDSOE

February 24, 2017

Ms. Sandra Pace
Associate Regional Administrator
Division of Survey and Certification Operations
Center of Medicare and Medicaid Services
63 Forsyth Street, SW, Suite 4T20
Atlanta, GA 30303-8909

RE: Erlanger Bledsoe Hospital Relocation
Request to Confirm CAH Designation

Dear Ms. Pace,

Erlanger Bledsoe Hospital, formerly Bledsoe County General Hospital, owned by Chattanooga Hamilton County Hospital Authority is a "necessary provider/critical access hospital" located in Pikeville, Bledsoe County, Tennessee (see attached documentation regarding our necessary provider designation). Erlanger Bledsoe Hospital wishes to advise you of its intent to replace and relocate its hospital facility from 71 Wheelertown Avenue, Pikeville, TN, Bledsoe County, to 17399 Rankin Avenue in Dunlap, TN, Sequatchie County. The new location is 20 miles from the current facility. The current hospital, originally a Hill Burton facility, is 45 years old and in need of replacement.

In the new location, Erlanger Bledsoe meets the criteria for maintaining the "necessary provider designation", as follows:

Population Served:
We will serve 75% of the population currently served. In the past year, we have served patients primarily in the following zip codes:
37327 Dunlap TN
37338 Graysville TN
37339 Gruetli TN
37347 Jasper TN
37365 Palmer TN
37367 Pikeville TN
37377 Signal Mtn. TN
37379 Soddy Daisy, TN
37397 Whitwell, TN

We anticipate 75% of our patients will continue to be located in these service areas, thus meeting the "75 of the same population served."

Services:
Erlanger Bledsoe will provide the same services that we currently offer, as well as, some additional services including surgery; therefore we will meet the "75% of same services offered criteria."

Employees:
Erlanger Bledsoe anticipates there will be an increase in the number of employees. All current employees will be offered employment at the new location; therefore we will meet the "75% of the same employee criteria. The new location is 20 miles from the current facility."

Rural Definition:
The proposed location will meet the rural area definition as defined by the State of Tennessee. Please see attached documentation.

Also, Erlanger Bledsoe Hospital currently operates a provider based emergency department located in Dunlap, TN, Sequatchie County. This provider based emergency department will be relocated to 553 US 127 Bypass, Pikeville, TN, Bledsoe County. The proposed location for the provider based emergency department is approximately 28 miles from Cumberland Medical Center via a two lane road, Highway 127S/ US-127S /TN-28. Rhea Medical is located approximately 22 miles via a two lane road, Dayton Mountain Highway, TN-30 (see attached map incorporating the geography and roadways referenced). The proposed location for the provider based emergency department meets the rural definition as defined by the State of Tennessee.

It is anticipated that the relocation and replacement of the facilities will be implemented and completed within 24-36 months, after all approvals are received.

We would appreciate your confirmation that our proposed relocation will not impact our current critical access designation/necessary provider status for both locations.

I am happy to answer any questions you may have about this submission either via the telephone or in person, as you review our submission. Please feel free to call me at 423-447-5350.

Thank you for your review of this matter.

Sincerely,

Stephanie Boynton

Stephanie Boynton
CEO Erlanger Bledsoe and SVED

CC: Joe Winick
Rob Brooks
Alana Sullivan

HCFA MEDICARE • MEDICAID

DEPARTMENT OF HEALTH & HUMAN SERVICES

Region IV
Health Care Financing
Administration

Bill Tolley

Refer to: tnrhp.cah

Atlanta Federal Center
61 Forsyth Street, SW, Suite 4T20
Atlanta, Georgia 30303-8909

COMMISSIONER
Received
MAR 15 1999
DEPARTMENT OF HEALTH

March 10, 1999

Fredia S. Wadley, M.D.
Commissioner
Tennessee Department of Health
Cordell Hull Building, Third Floor
425 5th Avenue, North
Nashville, TN 37247

Dear Dr. Wadley:

This is to advise you that the Health Care Financing Administration (HCFA) has approved the Tennessee Rural Health Care Plan to participate in the Medicare Rural Health Flexibility Program. We appreciate the efforts of the Office of Rural Health and Health Access and the Tennessee Hospital Association in developing the plan. Please note that no provider agreement may be issued to a critical access hospital until all network agreement signatures have been obtained.

Should there be any questions concerning this matter, please contact Bill Blanton at (404) 562-7433.

Sincerely,

Eugene A. Grasser
Associate Regional Administrator
Division of Medicaid and State Operations

- volume/capacity of the hospital and other related health care resources
- distance/travel time to other health care facilities in the service area
- any other barriers to accessing health care in the service delivery area

The following is a list of all Tennessee Hospitals with an average daily census of 15 or less in 1997. All of these hospitals meet at least one of the criteria for being designated as a necessary provider. Some of these hospitals are currently for profit and this is noted in the list.

Hospital Name	Licensed beds	Staffed Beds	Swing Beds	Patient days	ADC	Profit Status	Comment
JOHNSON COUNTY HOSPITAL	65	20	14	557	1.5	NFP	Closed in 1998
BAPTIST HICKMAN COMMUNITY HOSPITAL	44	25	10	1808	5.0	NFP	
COFFEE MEDICAL CENTER	60	36	10	2979	8.2	NFP	
BAPTIST THREE RIVERS HOSPITAL	42	42	12	2996	8.2	FP	
TROUSDALE MEDICAL CENTER	34	25	8	3242	8.9	NFP	Satellite of Carthage
METHODIST HOSPITAL OF MCKENZIE	65	27	5	3465	9.5	NFP	
GIBSON GENERAL HOSPITAL	100	73	0	3474	9.5	NFP	
CUMBERLAND RIVER HOSPITAL NORTH	27	27	10	3666	10.0	FP	
COLUMBIA EMERALD HODGSON HOSPITAL	24	12	0	3732	10.2	FP	Satellite of Col.Southern TN Med.C
* BLEDSOE COUNTY GENERAL HOSPITAL	26	26	7	3755	10.3	FP	
COPPER BASIN MEDICAL CENTER	44	44	0	3784	10.4	NFP	
MACON COUNTY GENERAL HOSPITAL	43	43	10	3994	10.9	NFP	
WAYNE MEDICAL CENTER	80	32	15	4117	11.3	NFP	
RHEA MEDICAL CENTER	57	40	8	4298	11.8	NFP	
COLUMBIA TRINITY HOSPITAL	40	31	6	4570	12.5	FP	
COLUMBIA WHITWELL MEDICAL CENTER	52	52	0	4617	12.6	FP	Satellite of Grandview
METHODIST HAYWOOD PARK HOSPITAL, INC.	62	44	10	4697	12.9	NFP	
BOLIVAR GENERAL HOSPITAL	61	57	10	4725	12.9	NFP	
MCNAIRY COUNTY GENERAL HOSPITAL	86	48	0	4814	13.2	NFP	
METHODIST HOSPITAL OF LEXINGTON	52	35	11	4970	13.6	NFP	
MARSHALL MEDICAL CENTER	119	77	0	5179	14.2	NFP	
CUMBERLAND RIVER HOSPITAL SOUTH	41	41	10	5198	14.2	FP	Satellite of Cumberland River North
CAMDEN GENERAL HOSPITAL	83	35	0	5247	14.4	NFP	
BAPTIST MEMORIAL HOSP. LAUDERDALE	70	67	10	5297	14.5	NFP	
JEFFERSON MEMORIAL HOSPITAL	67	51	14	5312	14.6	NFP	
BAPTIST PERRY COMMUNITY HOSPITAL	53	53	9	5361	14.7	FP	
MEDICAL CENTER OF MANCHESTER	49	49	0	5581	15.3	FP	
WHITE COUNTY COMMUNITY HOSPITAL	60	60	0	5632	15.4	FP	

Additional rural hospitals closed before 1997 but within the past 5 years
Lewis county closed in 1996
Baptist Hospital-Roane Co. closed in 1997.

(73) Psychologist. A person currently licensed as such by the Tennessee Board of Examiners in Psychology.

(74) Qualified Emergency Medical Service Personnel. Includes, but shall not be limited to, emergency medical technicians, paramedics, or other emergency services personnel, providers, or entities acting within the usual course of their professions, and other emergency responders.

(75) Radiological Technologist. A person currently registered as such by the American Society of Radiological Technologists.

(76) Reasonably Available. Readily able to be contacted without undue effort and willing and able to act in a timely manner considering the urgency of the patient's health care needs. Such availability shall include, but not be limited to, availability by telephone.

(77) Registered Health Information Administrator (RHIA). A person currently registered as such by the American Health Information Management Association.

(78) Registered Health Information Technician (RHIT). A person currently accredited as such by the American Health Information Management Association.

(79) Registered Nurse. A person currently licensed as such by the Tennessee Board of Nursing.

(80) Rural Area. A county classified by the federal Office of Management and Budget (OMB) as rural, all counties, excluding Davidson, Hamilton, Knox, and Shelby, currently defined as rural in Chapter 1200-20-11 of the Tennessee Comprehensive Rules and Regulations, or an area outside of a county or part of a county previously classified as rural by the OMB and reclassified by the OMB as a metropolitan statistical area as of June 6, 2003.

(81) Satellite Hospital. A freestanding hospital licensed with a parent hospital that is on separate premises and operated under the same management.

(82) Shall or Must. Compliance is mandatory.

(83) Social Worker. A person who has at least a bachelor's degree in Social Work or related field, and preferably, two (2) years medical social work or other community based work experience.

(84) Stabilize. To provide such medical treatment of the emergency medical condition as may be necessary to assure, within reasonable medical probability, that the condition will not materially deteriorate due to the transfer as determined by a physician or other qualified medical personnel when a physician is not readily available.

(85) State. A state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, or a territory or insular possession subject to the jurisdiction of the United States.

(86) Student. A person currently enrolled in a course of study that is approved by the appropriate licensing board.

(87) Supervising Health Care Provider. The designated physician or, if there is no designated physician or the designated physician is not reasonably available, the health care provider who has undertaken primary responsibility for an individual's health care.

(88) Surgical Technologist. A person who works under supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual is usually employed by a hospital, medical office, or surgical center and supervised during the surgical procedure

mapquest

Trip to:

Erlanger Bledsoe Hospital
71 Wheelertown Ave
Pikeville, TN 37367
(423) 447-2112
19.76 miles / 24 minutes

Notes

Proposed Site of New Hospital

17399 Rankin Ave, Dunlap, TN 37327-7028 — Download Free App

1. Start out going **north** on **Rankin Ave / US-127 N / TN-28 / TN-8** toward **Russell St**. Continue to follow **US-127 N / TN-28**. Map — **19.2 Mi** *19.2 Mi Total*

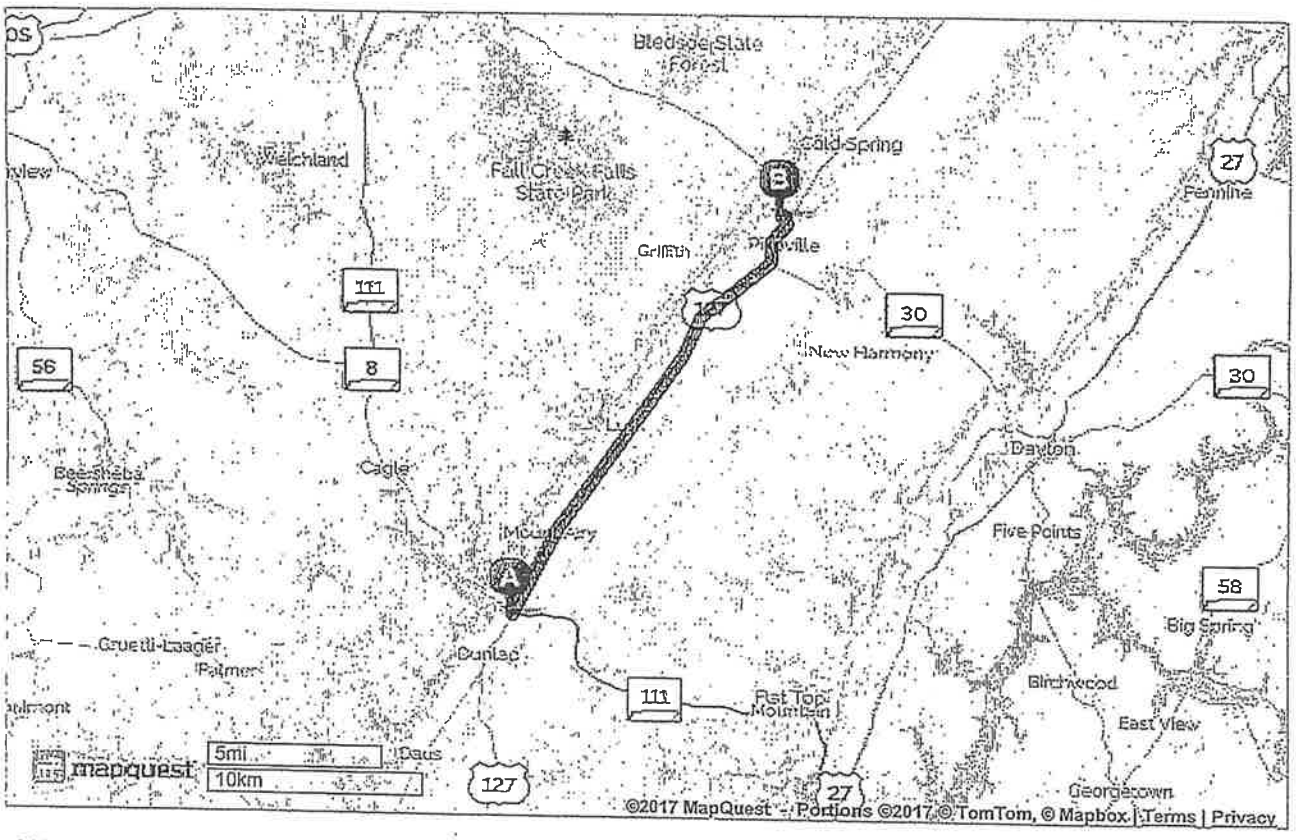
2. Turn **left** onto **State Route 30 / TN-30**. Map — **0.4 Mi** *19.6 Mi Total*
State Route 30 is just past Old State Highway 28

3. Take the 1st **left** onto **Wheelertown Ave**. Map — **0.2 Mi** *19.8 Mi Total*
If you reach Buckshot Ln you've gone a little too far

4. **71 WHEELERTOWN AVE** is on the **right**. Map
If you reach Buckshot Ln you've gone about 0.1 miles too far

Erlanger Bledsoe Hospital
71 Wheelertown Ave, Pikeville, TN 37367 > Current CAH location
(423) 447-2112

Total Travel Estimate: **19.76 miles - about 24 minutes**



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mapquest

Trip to:

[463 - 463] US 127 Byp

Pikeville, TN 37367

17.95 miles / 20 minutes

Notes

17399 Rankin Ave, Dunlap, TN 37327-7028

Download Free App

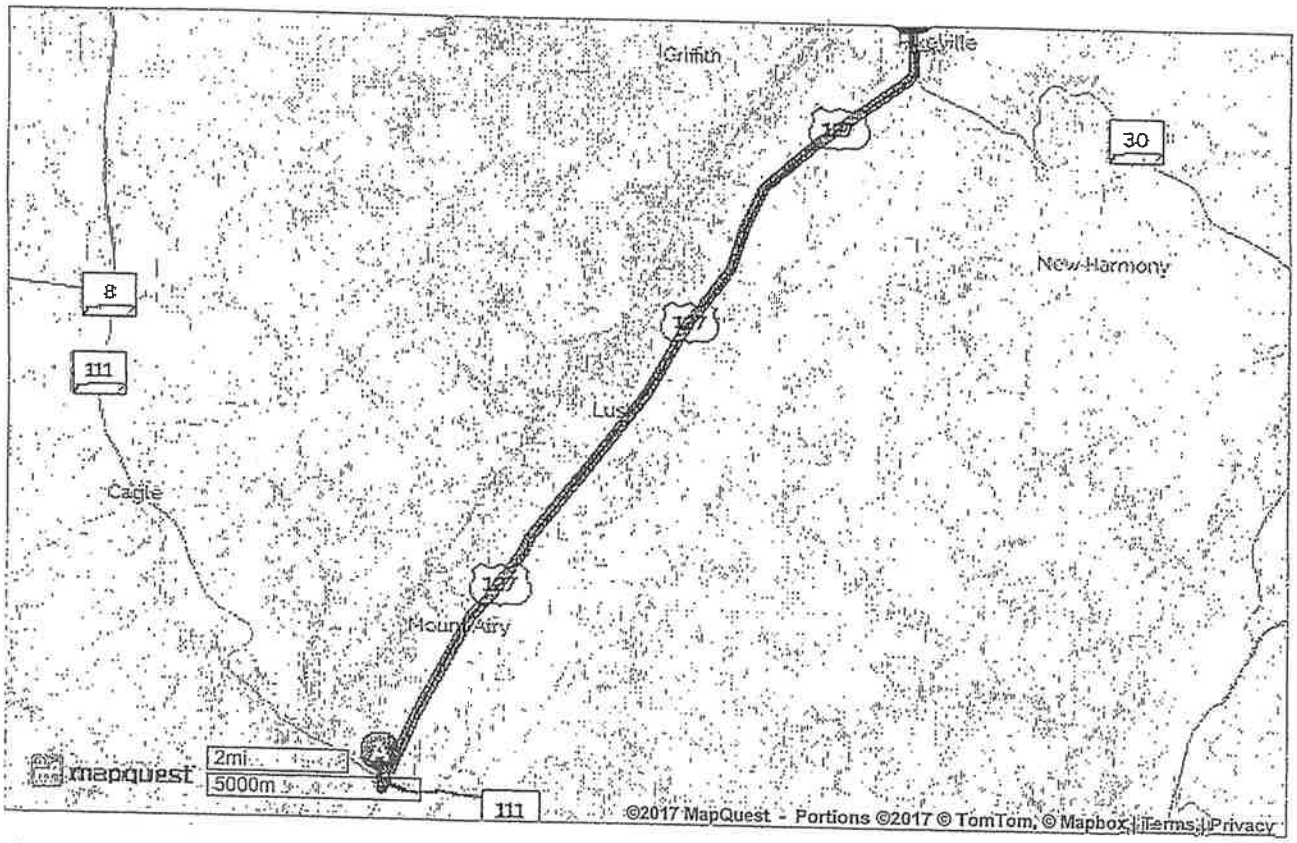
1. Start out going **north** on **Rankin Ave / US-127 N / TN-28 / TN-8** toward **Russell St.** Continue to follow **US-127 N / TN-28.** Map — **18.0 Mi** *18.0 Mi Total*

2. **[463 - 463] US 127 BYP.** Map
Your destination is 0.3 miles past Main St
If you reach Sequatchie Rd you've gone about 0.3 miles too far

[463 - 463] US 127 Byp, Pikeville, TN 37367

A= Proposed site for Hospital
B = Proposed site for Provider Based ED

Total Travel Estimate: **17.95 miles - about 20 minutes**



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Trip to:

[463 - 463] US 127 Byp

Pikeville, TN 37367

20.11 miles / 28 minutes

Notes

Rhea Medical Center
9400 Rhea County Hwy, Dayton, TN 37321
(423) 775-1121

Download Free App

1. Start out going **southwest** on **Rhea County Hwy / US-27 S / TN-29** toward **Lower Fine Ln.** Map — **2.4 Mi** — *2.4 Mi Total*

2. Turn **slight right** onto **Access Rd / US-27 Bus S / TN-378.** Continue to follow **US-27 Bus S / TN-378.** Map — **0.5 Mi** — *2.9 Mi Total*
US-27 Bus S is just past 11th Ave

3. Turn **right** onto **Dayton Mountain Hwy / TN-30.** Continue to follow **TN-30.** Map — **16.8 Mi** — *19.7 Mi Total*
TN-30 is just past 7th Ave
If you reach Church St you've gone a little too far

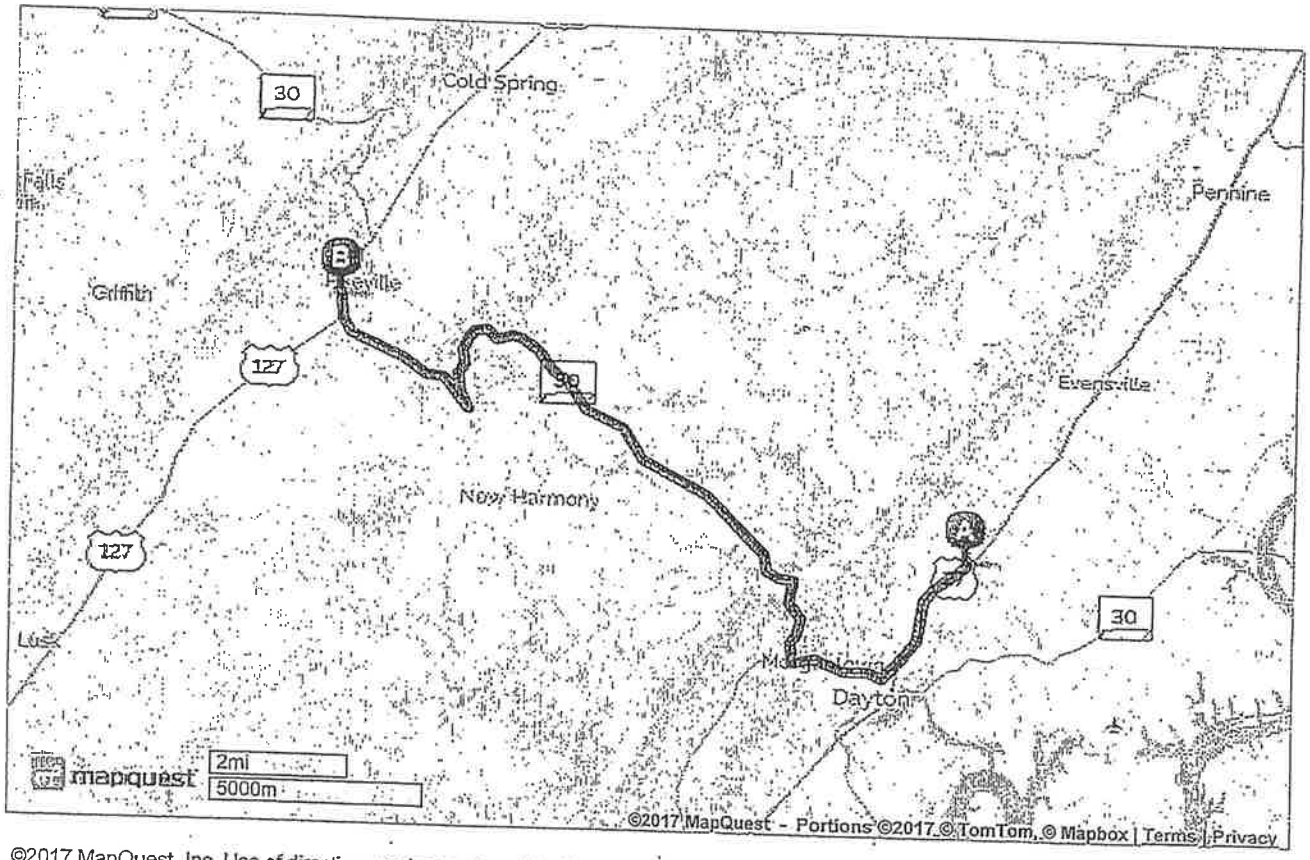
4. Turn **right** onto **US-127 N / TN-30 / TN-28 / Main St.** Continue to follow **US-127 N / TN-30 / TN-28.** Map — **0.4 Mi** — *20.1 Mi Total*

5. **[463 - 463] US 127 BYP.** Map
If you reach Sequatchie Rd you've gone about 0.3 miles too far

[463 - 463] US 127 Byp, Pikeville, TN 37367

553 US 127 Bypass
Proposed Site for Provider
Based ED.

Total Travel Estimate: **20.11 miles - about 28 minutes**



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mapquest

Trip to:

[463 - 463] US 127 Byp
Pikeville, TN 37367
28.28 miles / 34 minutes
Notes

Cumberland Medical Center
421 S Main St, Crossville, TN 38555
(931) 484-9511

Download Free App

1. Start out going **south** on **S Main St / US-127 S / TN-28** toward **Justice Center Dr.** Continue to follow **US-127 S / TN-28.** Map — **3.3 Mi** — *3.3 Mi Total*

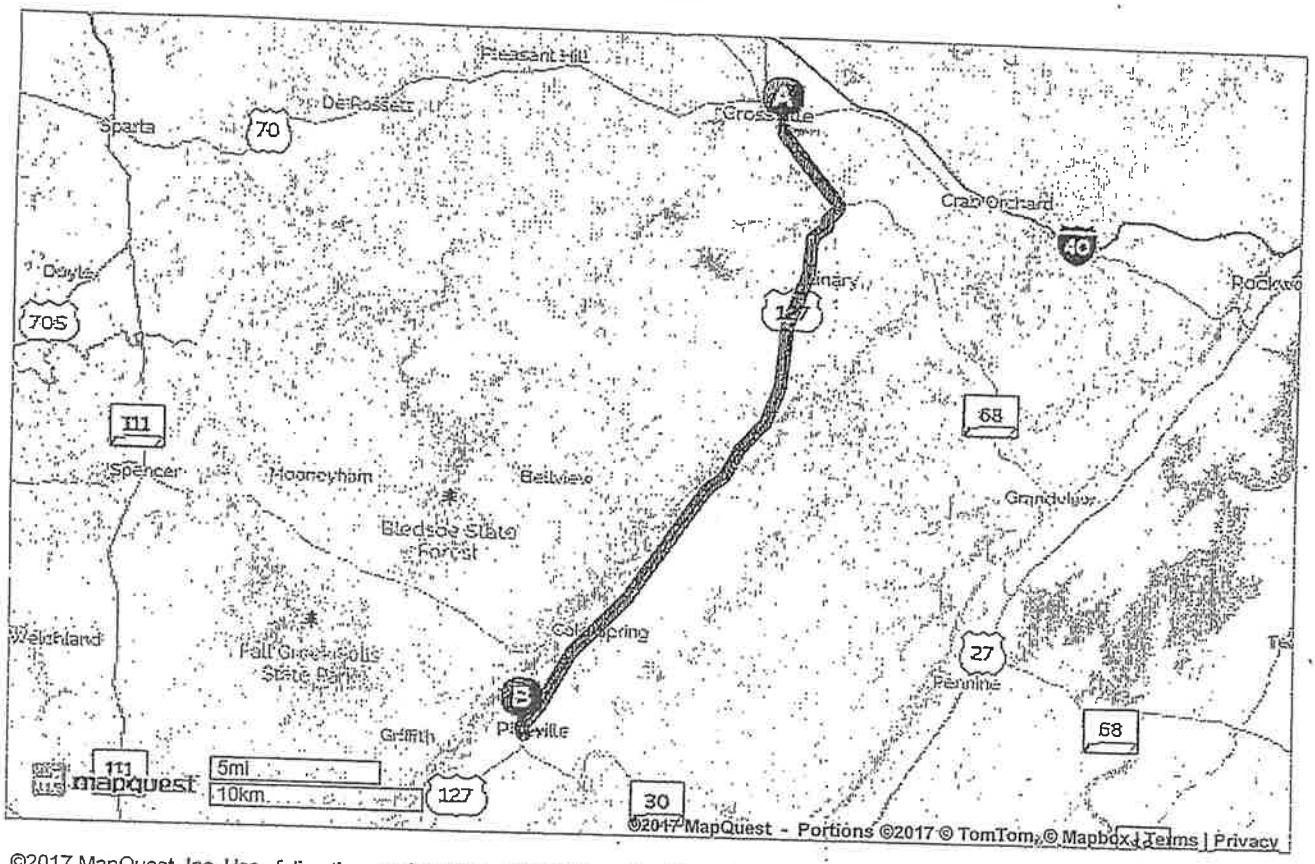
2. Turn **slight right** onto **Highway 127 S / US-127 S / TN-28.** Continue to follow **US-127 S / TN-28.** Map — **25.0 Mi** — *28.3 Mi Total*
US-127 S is 0.1 miles past Old Homestead Hwy

3. **[463 - 463] US 127 BYP.** Map
Your destination is 0.3 miles past Sequatchie Rd
If you reach Main St you've gone about 0.3 miles too far

[463 - 463] US 127 Byp, Pikeville, TN 37367 553 US 127 Bypass

Proposed Site for Provider Based ED

Total Travel Estimate: **28.28 miles - about 34 minutes**



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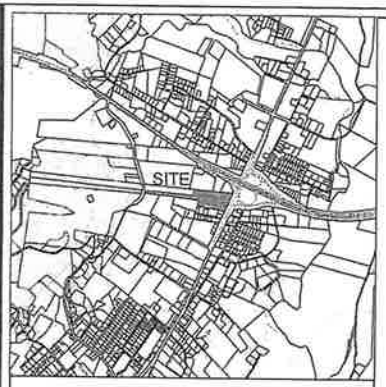
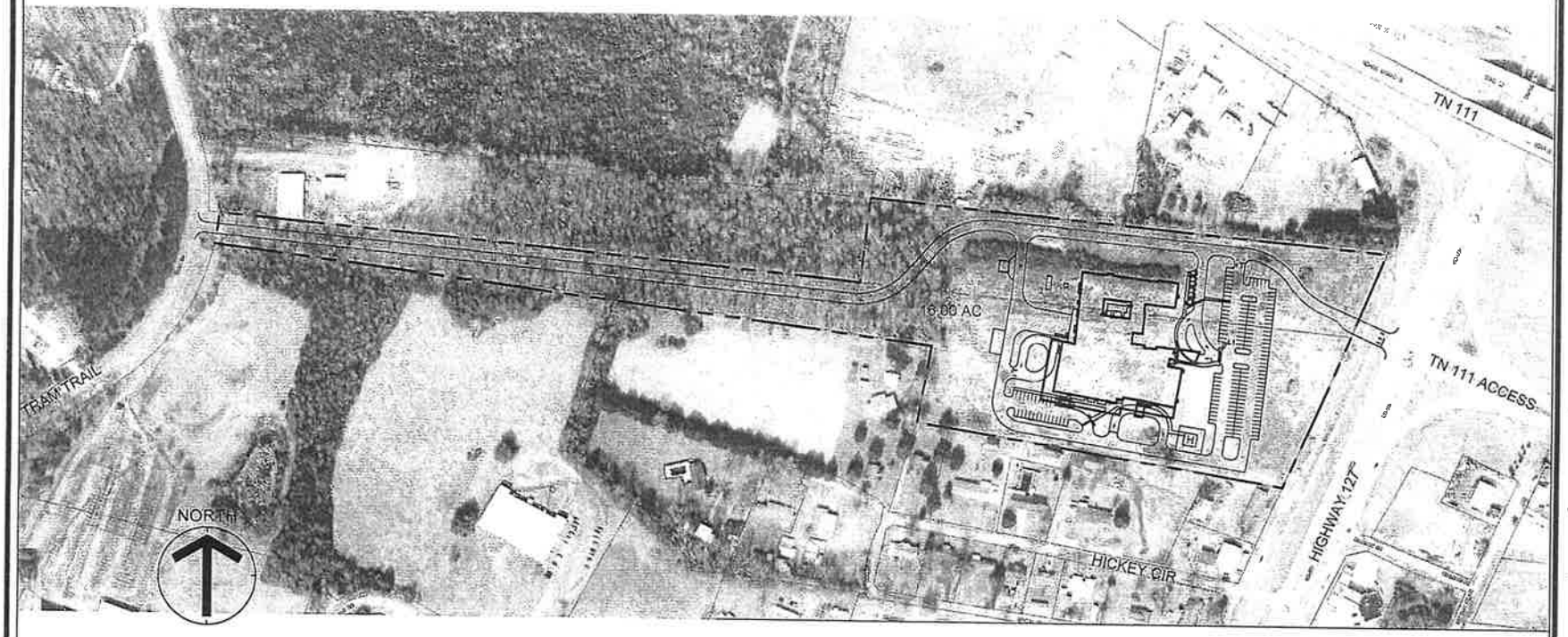
Description	Section / Item
Erlanger Sequatchie Valley Regional Hospital - Site Plan	A-6-B
Erlanger Sequatchie Valley Regional Hospital - Floor Plans	A-6-B

Drawn By: DRW
Checked By: CHK
Approved By: APL



VICINITY MAP



250 0 250 500
GRAPHIC SCALE

G:\192651\5\Erlanger\Sequatchie\CON Site Study\Site Layout_CON.dwg - Rudolph, Trey - 7/26/2017 12:16:03 PM

G S & P

Design Services For The Built Environment

GRESHAM SMITH AND PARTNERS

www.greshamsmith.com

1400 Nashville City Center
511 Union Street
Nashville, TN 37219
615.770.8800

ERLANGER SEQUATCHIE VALLEY REGIONAL HOSPITAL SEQUATCHIE CAMPUS

US HWY 127 BY-PASS, DUNLAP, TN

209

NOT FOR CONSTRUCTION

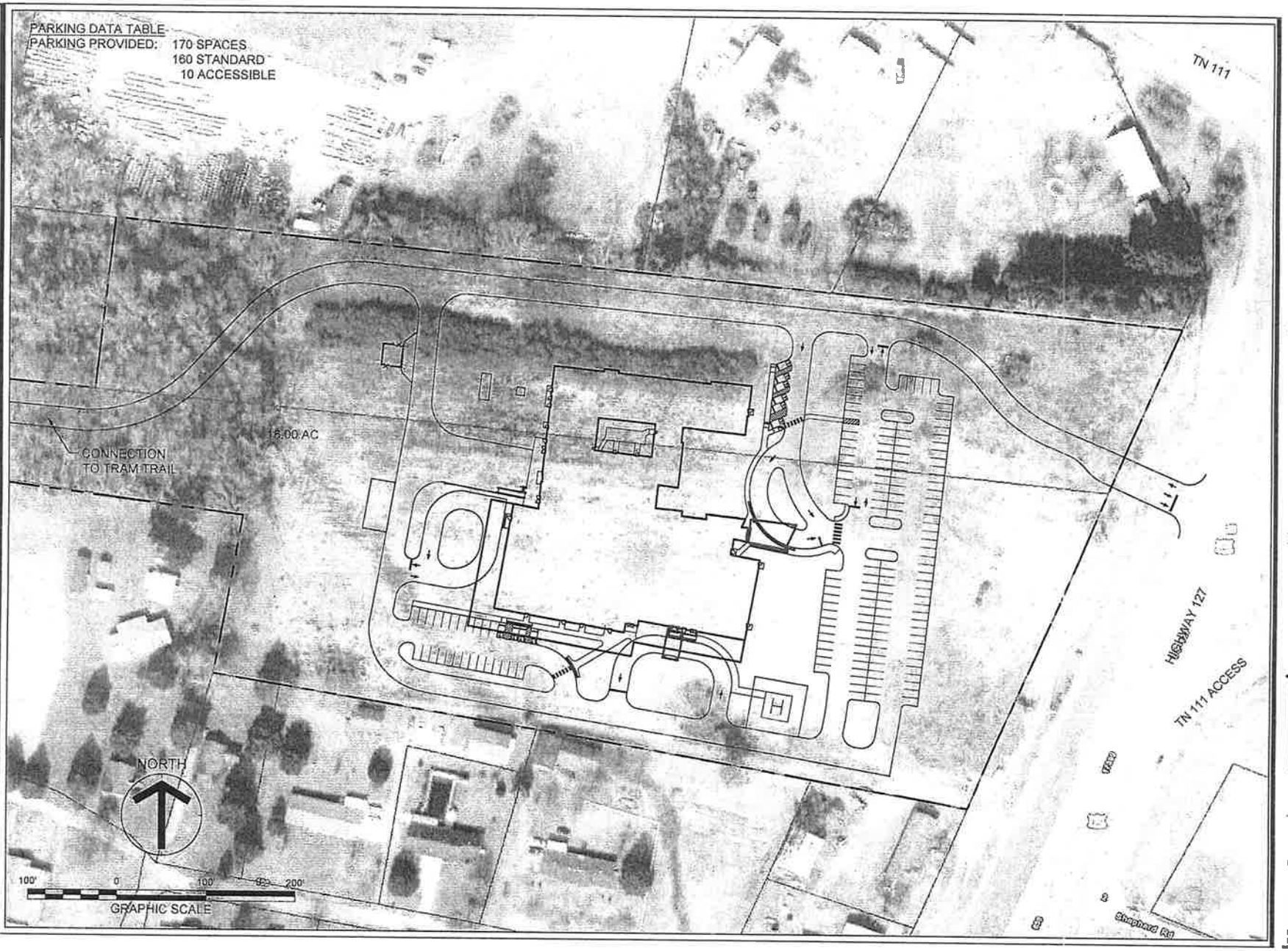
Revision		
No.	Date	Description
0	########	
#	########	
#	########	
#	########	
#	########	

OVERALL SITE EXHIBIT

EXH-C1

PROJECT: Project Number
DATE: July 26, 2017

LINE IS 3 INCHES WHEN PRINTED FULL SIZE
FULL SHEET SIZE = 24"x36"



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Drawn By: DMW
Checked By: CHK
Approved By: APR

G S & P

Design Services For The Built Environment

GRESHAM SMITH AND PARTNERS

www.greshamsmith.com

1400 Nashville City Center
315 Union Street
Nashville, TN 37210
615 726 8100

ERLANGER SEQUATCHIE VALLEY REGIONAL HOSPITAL SEQUATCHIE CAMPUS

US HWY 127 BY-PASS, DUNLAP, TN

210

NOT FOR CONSTRUCTION

Revision		
No.	Date	Description
1	mm/dd/yy	
2	mm/dd/yy	
3	mm/dd/yy	
4	mm/dd/yy	
5	mm/dd/yy	

DETAILED SITE EXHIBIT

EXH-C2

PROJECT: Project Number
DATE: July 26, 2017

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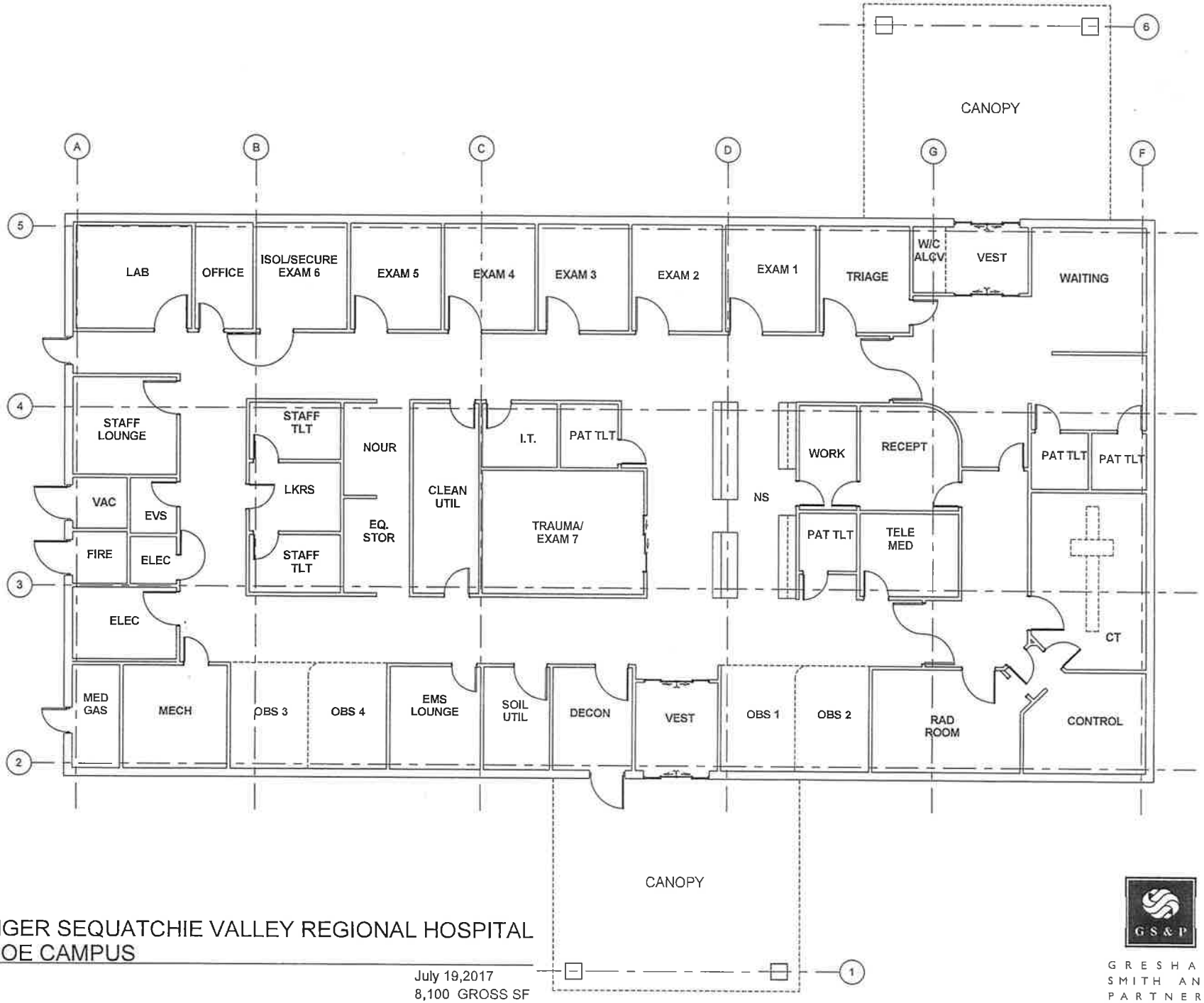
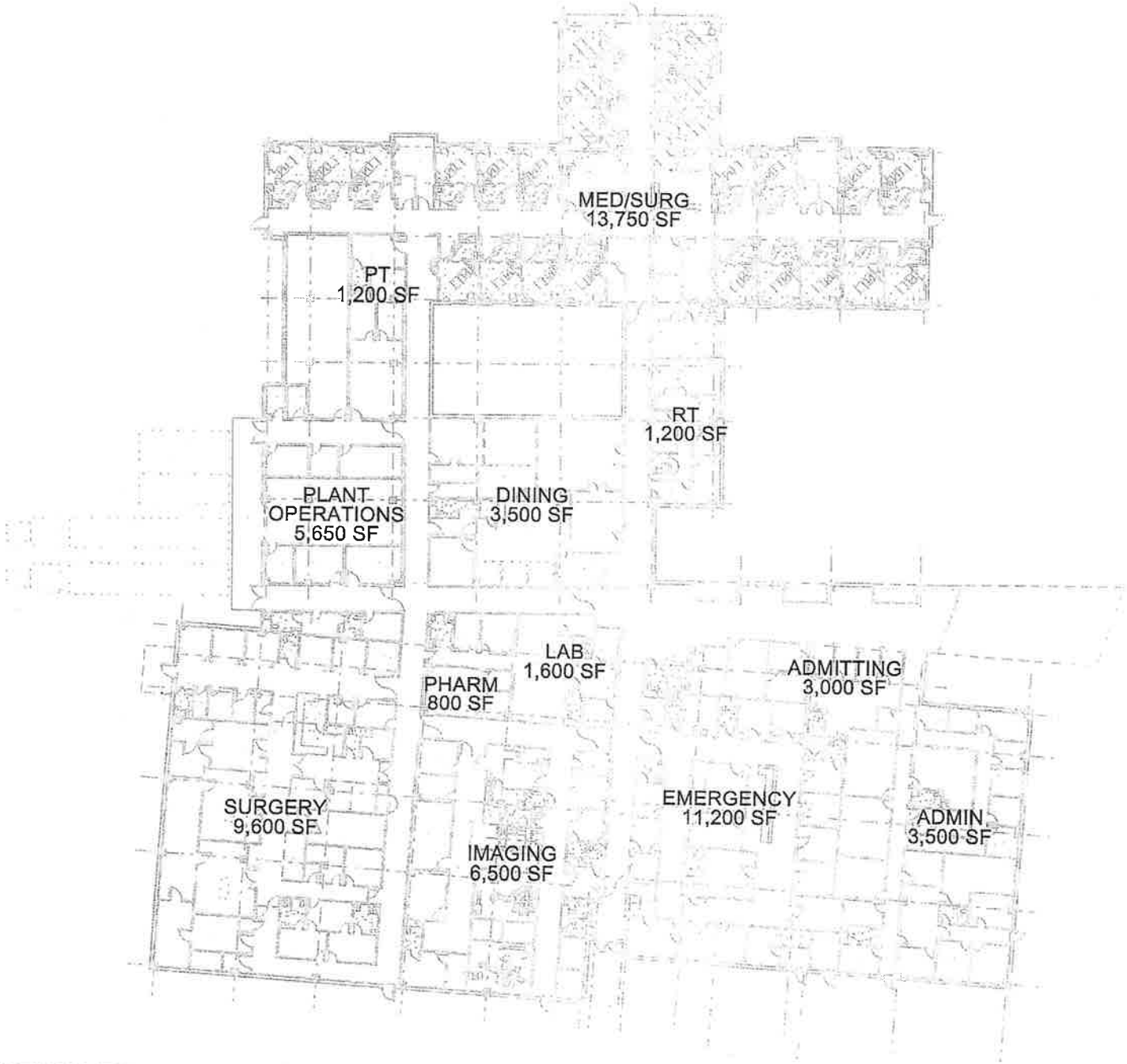
FULL SHEET SIZE = 24"X36"



1 ERLANGER SEQUATCHIE VALLEY REGIONAL HOSPITAL
BLEDSOE CAMPUS

July 19,2017
8,100 GROSS SF

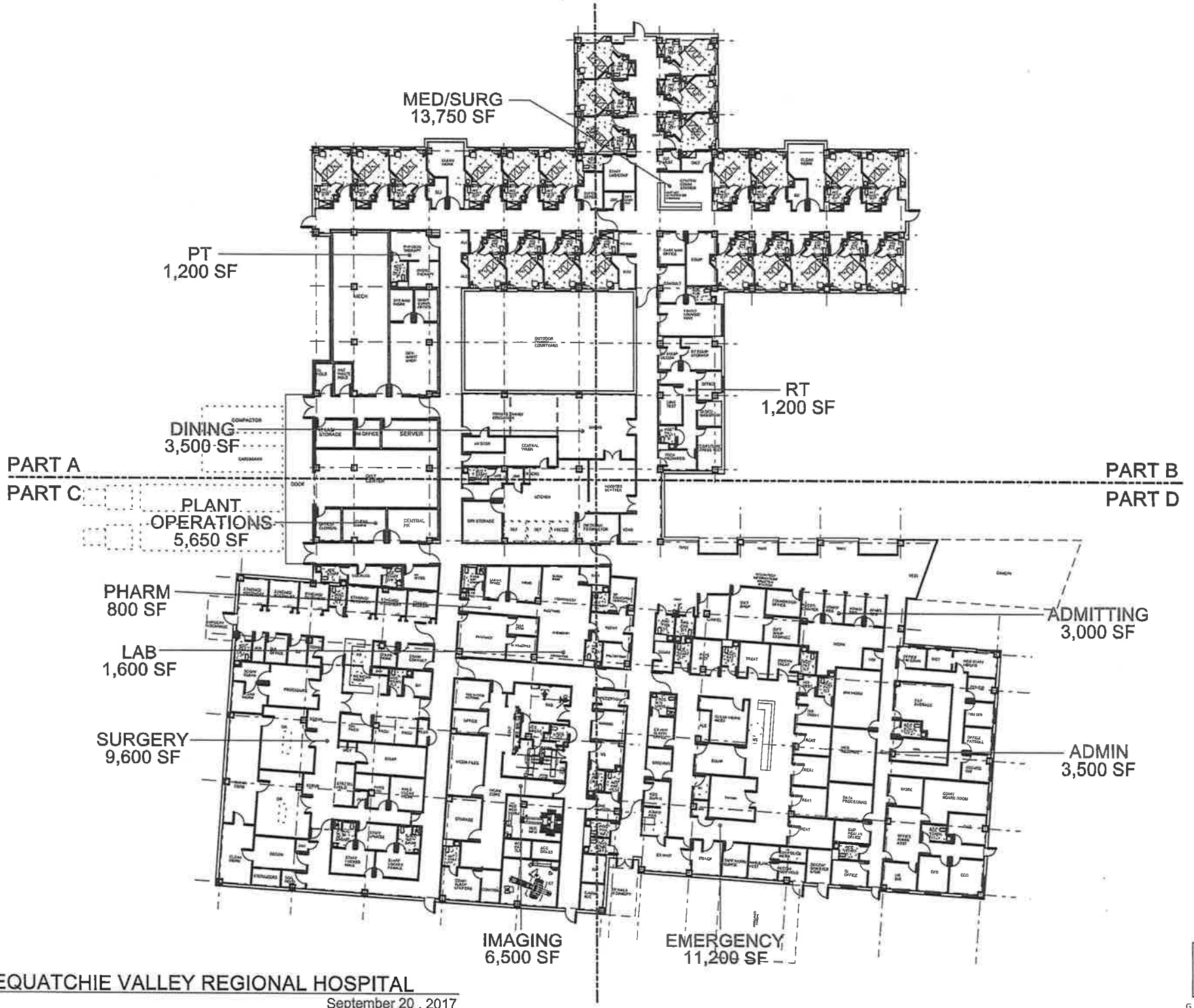
GS&P
GRESHAM SMITH AND PARTNERS



1 SEQUATCHIE VALLEY REGIONAL HOSPITAL

July 19 , 2017
61,500 GROSS SF

GRESHAM SMITH AND PARTNERS



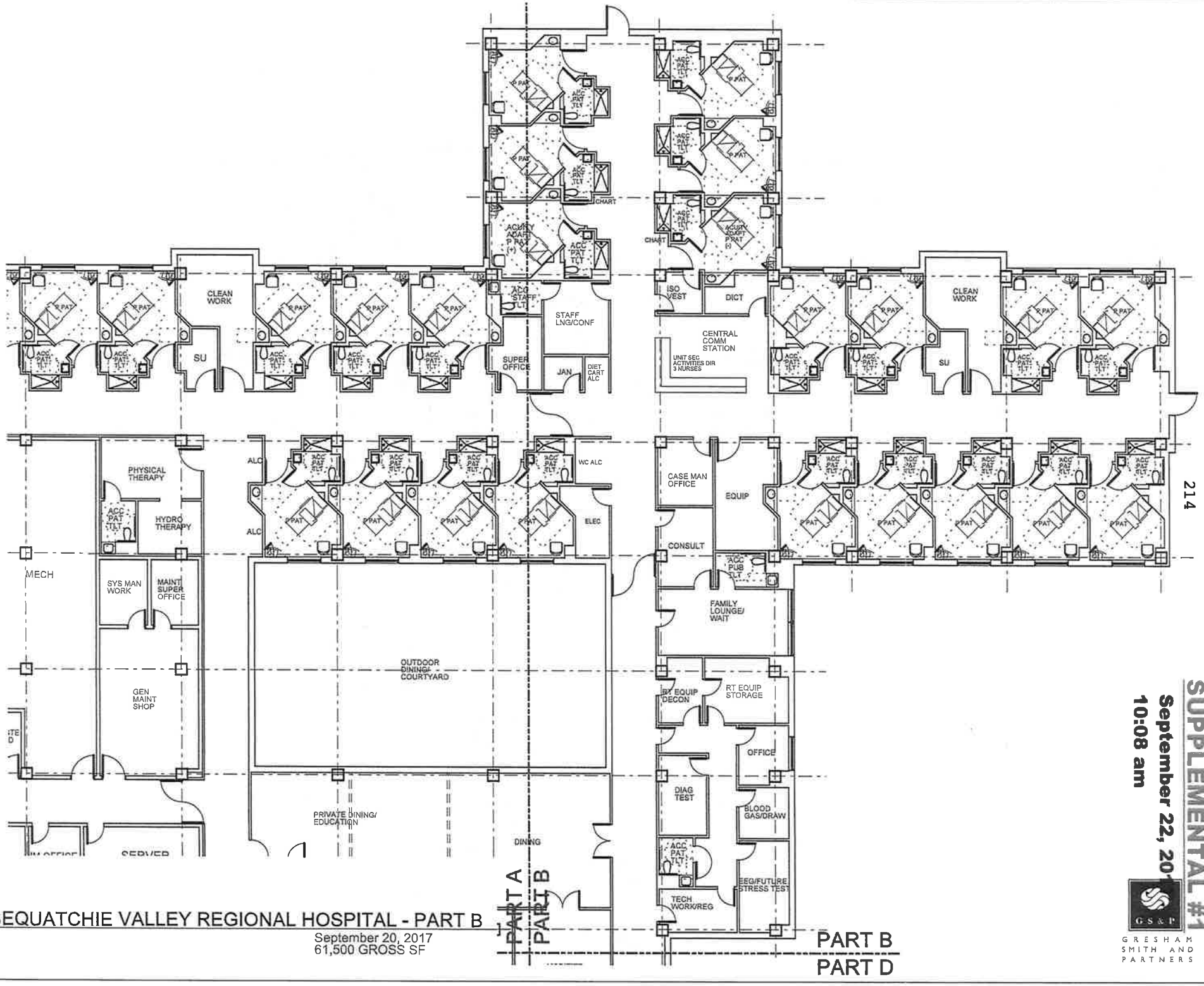
1 SEQUATCHIE VALLEY REGIONAL HOSPITAL

September 20 , 2017
61,500 GROSS SF

SUPPLEMENTAL #1

September 22, 201
10:08 am

GRESHAM SMITH AND PARTNERS



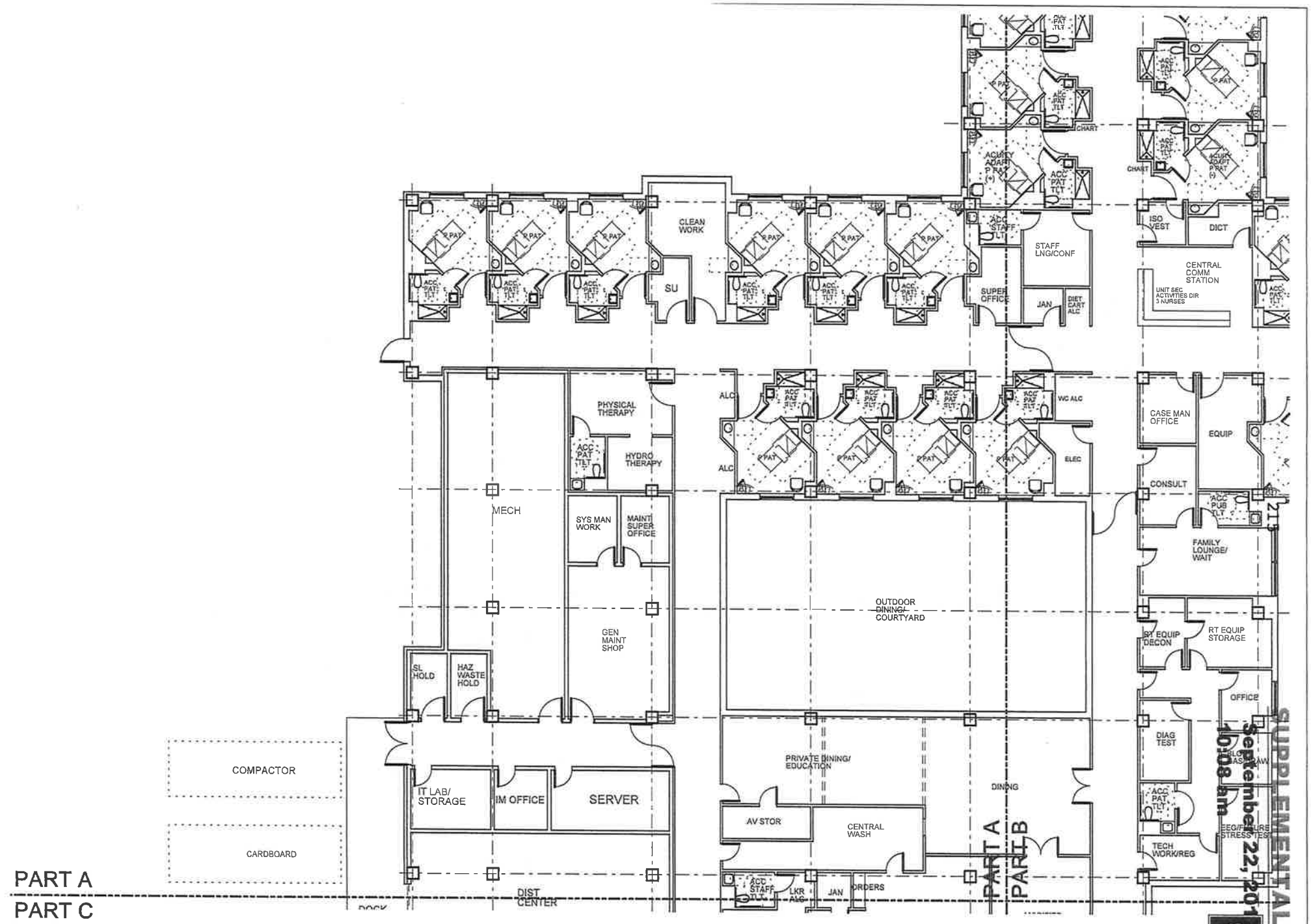
B SEQUATCHIE VALLEY REGIONAL HOSPITAL - PART B

September 20, 2017
61,500 GROSS SF

SUPPLEMENTAL #1

September 22, 20
10:08 am

GS&P
GRESHAM SMITH AND PARTNERS

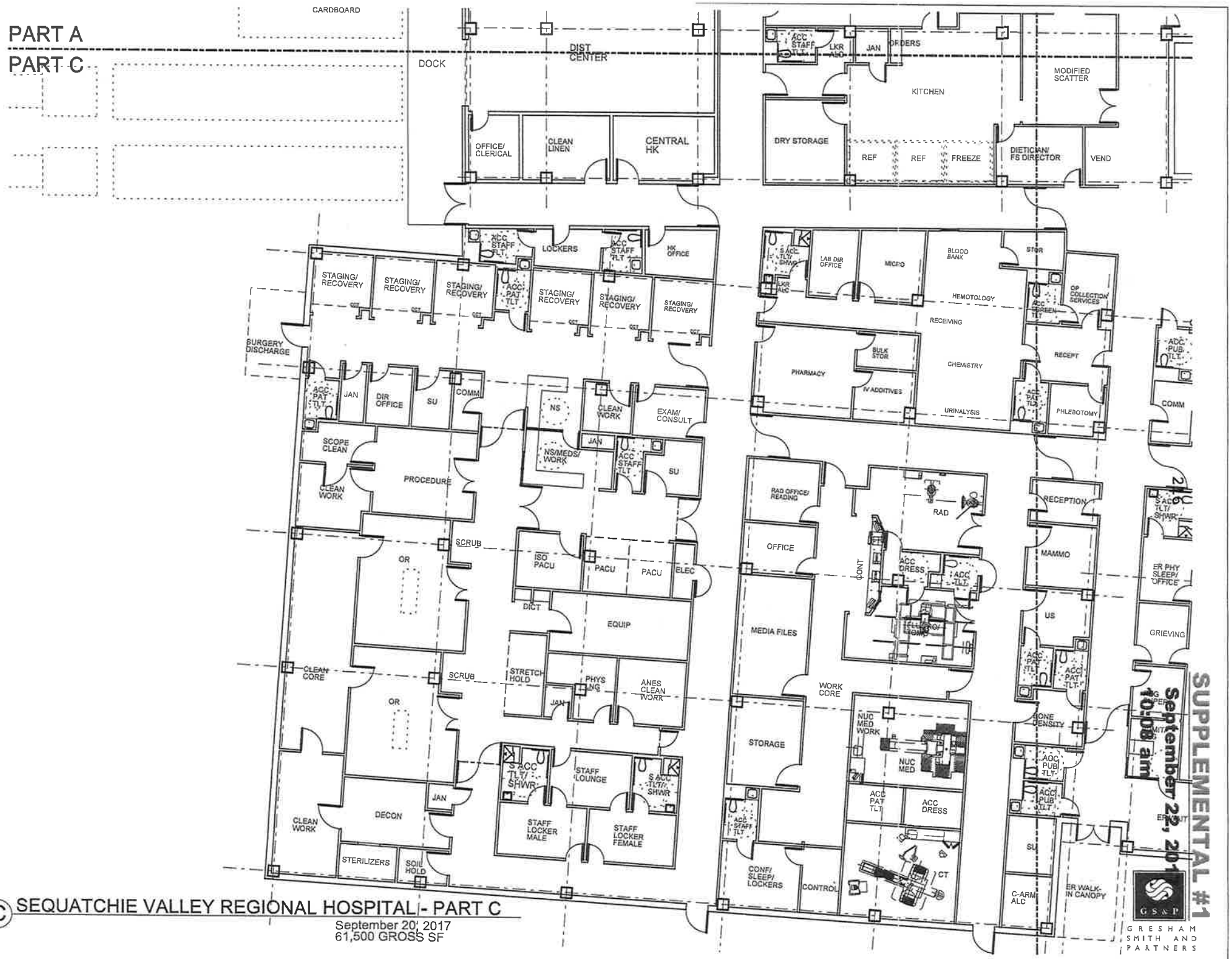


(A) SEQUATCHIE VALLEY REGIONAL HOSPITAL - PART A

September 20, 2017
61,500 GROSS SF

PART A

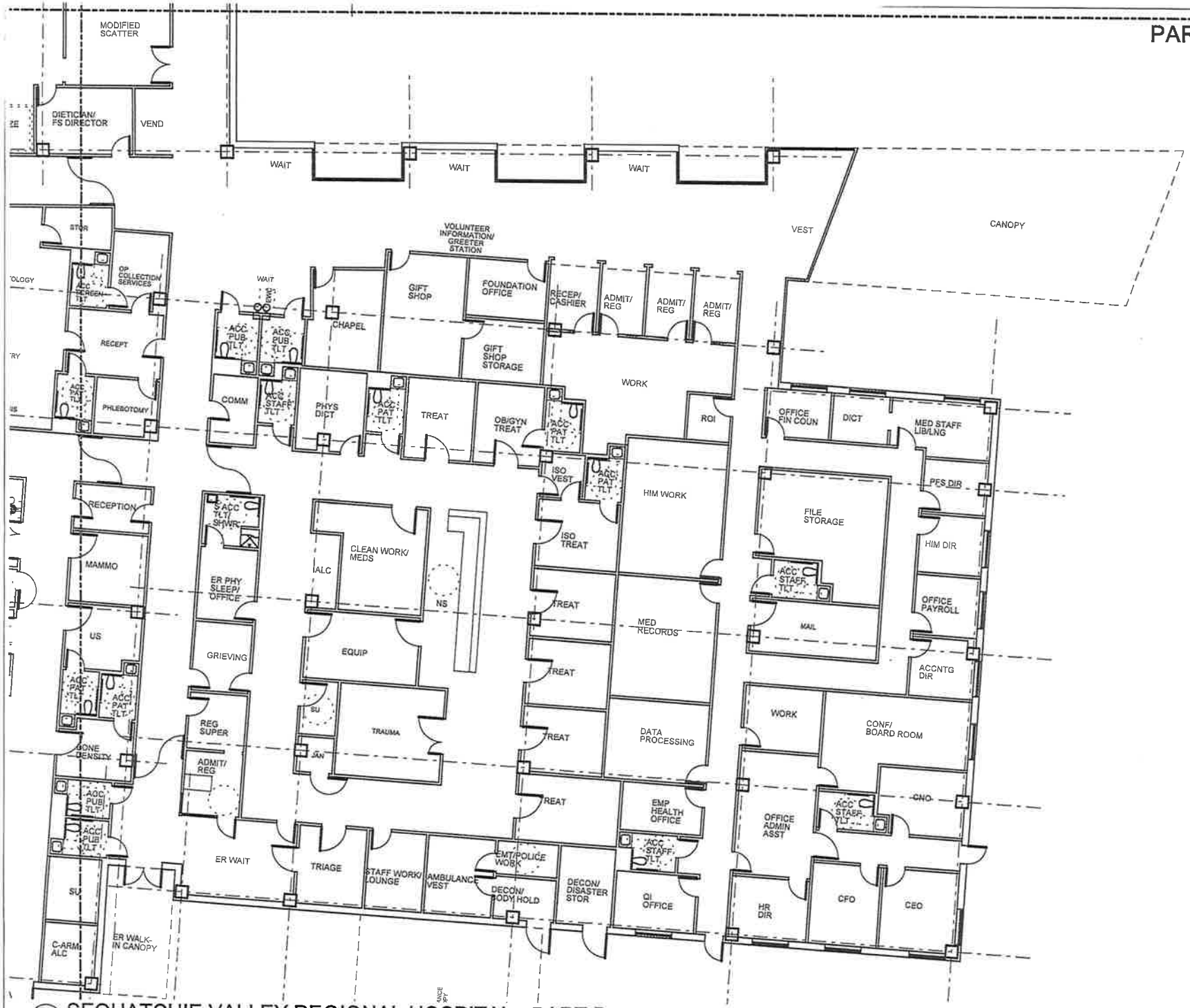
PART C



© SEQUATCHIE VALLEY REGIONAL HOSPITAL - PART C

September 20, 2017

61,500 GROSS SF



D SEQUATCHIE VALLEY REGIONAL HOSPITAL - PART D

September 20, 2017
61,500 GROSS SF

SUPPLEMENTAL #1
September 22, 201
10:08 am

GRESHAM SMITH AND PARTNERS

Description	Section / Item
Medicare Indicators	B-ED
CFO Letter For ED	B-ED

July 27, 2017

Ms. Melanie M. Hill
Executive Director
State of Tennessee
Health Services & Development Agency
500 Deaderick Street, Suite 850
Nashville, TN 37243

RE: Sequatchie Valley Regional Hospital
Provider Based Emergency Department
Certificate of Need Application

Dear. Ms. Hill:

This letter serves to confirm Erlanger's support for development and operation of the provider based emergency department associated with the above referenced Certificate of Need application. Much as we currently do with the Erlanger Bledsoe provider based emergency department, Erlanger will provide all need resources to operate the emergency department inclusive of equipment and staff. Erlanger will also document the cost of maintaining needed resources and will sustain them to insure the provision of high quality care within the emergency services continuum.

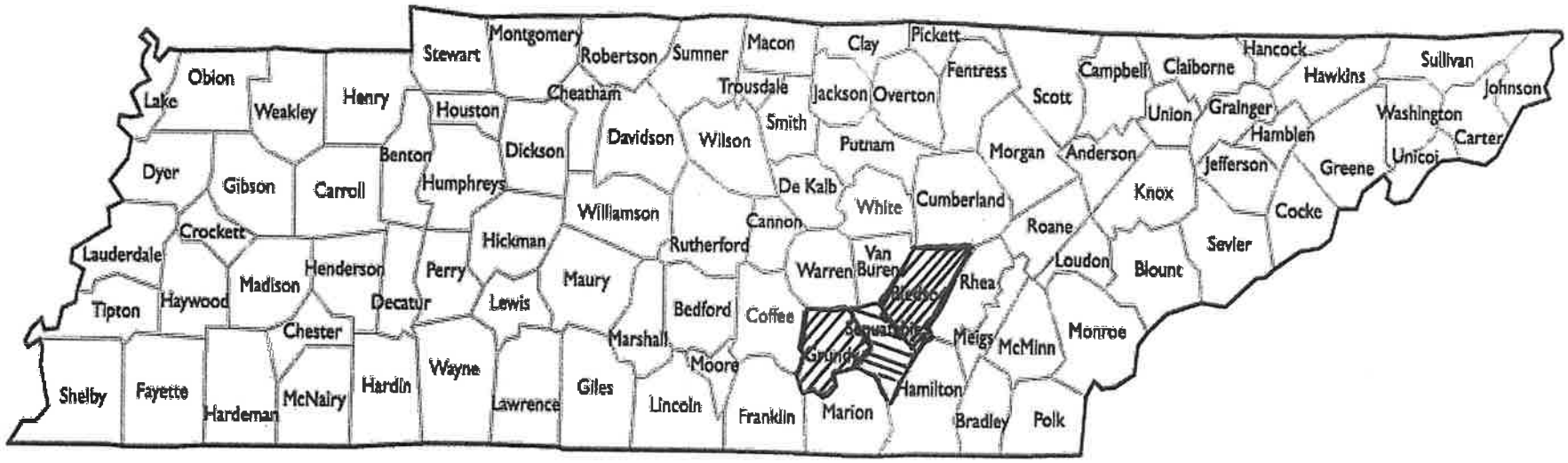
If you have questions on the above, please do not hesitate to contact me.

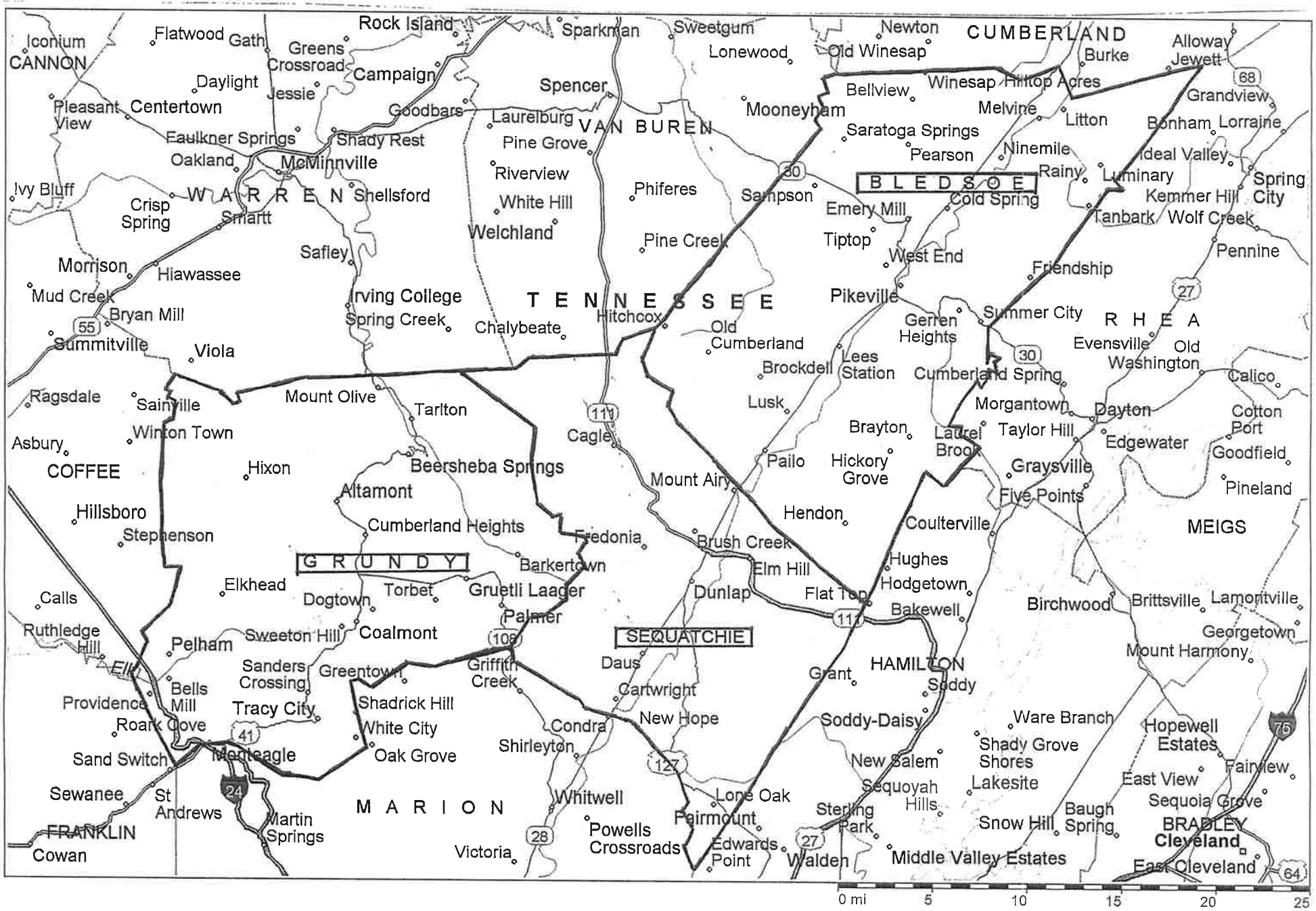
Sincerely,

J. Britton Tabor, CPA, FACHE
Executive Vice President, CFO/Treasurer

Description	Section / Item
Service Area	B-I-3

TENNESSEE COUNTY MAP




CANNON
Iconium
Flatwood
Gath
Rock Island
Greens Crossroad
Campaign
Daylight
Jessie
Pleasant View
Centertown
Goodbars
Faulkner Springs
Shady Rest
Oakland
McMinnville
Ivy Bluff
Crisp Spring
WARREN
Smartt
Shellsford
Morrison
Hiawassee
Mud Creek
Bryan Mill
Summitville
Viola
Safley
Irving College
Spring Creek
Ragsdale
Sainville
Winton Town
Asbury
COFFEE
Hixon
Mount Olive
Tarlton
Hillsboro
Stephenson
Altamont
Beersheba Springs
Cumberland Heights
GRUNDY
Elkhead
Calls
Dogtown
Torbet
Gruetli Laager
Ruthledge Hill
Pelham
Sweeton Hill
Coalmont
Palmer
Sanders Crossing
Greentown
Bells Mill
Providence
Tracy City
Shadrick Hill
Roark Cove
White City
Sand Switch
Monteagle
Oak Grove
Sewanee
St Andrews
Martin Springs
FRANKLIN
Cowan
MARION
Victoria
Sparkman
Spencer
Laurelburg
Pine Grove
VAN BUREN
Riverview
White Hill
Welchland
Chalybeate
Hitchcox
Cagle
Fredonia
Barkertown
Griffith Creek
Shirleyton
Whitwell
Powells Crossroads
Sweetgum
Lonewood
Mooneyham
Phiferes
Pine Creek
Sampson
Old Cumberland
Brockdell
Lusk
Pailo
Mount Airy
Brush Creek
Elm Hill
Dunlap
SEQUATCHIE
Daus
Cartwright
New Hope
Condra
Lone Oak
Fairmount
Edwards Point
Newton
Old Winesap
CUMBERLAND
Bellview
Winesap
Hilltop Acres
Burke
Alloway
Jewett
Melvine
Litton
Grandview
Saratoga Springs
Pearson
Ninemile
Bonham
Lorraine
Ideal Valley
Rainy
Luminary
Spring City
BLEDSOE
Cold Spring
Emery Mill
Kemmer Hill
Tanbark
Wolf Creek
Tiptop
West End
Pennine
Friendship
Pikeville
Summer City
RHEA
Gerren Heights
Evensville
Old Washington
Lees Station
Cumberland Spring
Calico
Morgantown
Dayton
Cotton Port
Brayton
Laurel Brook
Taylor Hill
Edgewater
Goodfield
Hickory Grove
Graysville
Pineland
Five Points
Hendon
Coulterville
MEIGS
Hughes
Hodgetown
Flat Top
Bakewell
Birchwood
Brittsville
Lamontville
Georgetown
Mount Harmony
Grant
HAMILTON
Soddy
Soddy-Daisy
Ware Branch
Hopewell Estates
Shady Grove Shores
New Salem
Fairview
Lakesite
East View
Sequoyah Hills
Sequoia Grove
Sterling Park
Snow Hill
Baugh Spring
BRADLEY
Cleveland
Walden
Middle Valley Estates
East Cleveland
0 mi
5
10
15
20
25

Description	Section / Item
Architect Letter - Construction Cost	B-II-1
Siemens Quote For MRI Unit	B-II-1
Siemens Quote For CT Unit	B-II-1
Siemens Quote For Equipment Maintenance	B-II-1

GRESHAM
SMITH AND
PARTNERS

July 24, 2017

Mr. Joseph M. Winick, FACHE
Senior Vice President
Planning, Analytics & Business Development
Erlanger Health System
975 East 3rd Street
Chattanooga, TN 37403

Subject: **Sequatchie Valley Regional Hospital**

Dear Joe:

Thank you for engaging Gresham Smith and Partners on the design and development of the above reference project. We are excited to be working with Erlanger on the new hospital and associated emergency department to serve residents of the Sequatchie Valley.

Based on plans developed to date and our review of the sites and building conditions, we estimate construction cost of the project, net of contingencies, equipment and related expenses at $322.00 per square foot which includes the hospital with 61,500 SF and the emergency department with 8,100 SF for a total construction cost of $22,411,900.00. The sites for the hospital and for the emergency department are both suitable for their intended uses; both will also provide convenient access from adjacent roadways.

Plans for design of the buildings will comply with the latest AIA standards and guidelines for design and construction of hospitals as prescribed by the Tennessee Department of Health.

Please let us know if you need additional information.

Sincerely,

Jeffery Morris, AIA, LEED AP, LEAN, EDAC
Principal

JEFFERY E. MORRIS
REGISTERED ARCHITECT
AGRICULTURE
COMMERCE
NO. 100200
STATE OF TENNESSEE
24 July 2017

Description	Section / Item
Funding - Tennessee Municipal Bond Fund	B-II-2

TENNESSEE MUNICIPAL BOND FUND

Making great cities even better . . . one loan at a time

August 1, 2017

Honorable Keith Cartwright
County Executive
Sequatchie County
22 Cherry Street
P. O. Box 595
Dunlap, Tennessee 37327

RE: Sequatchie County New Hospital Financing

Dear County Executive Cartwright:

This letter will confirm our discussions with you to provide financing through a public building authority and First Tennessee Bank for the County's new hospital in the amount of approximately $32,653,836.

This is a preliminary commitment, subject to receipt of necessary supporting documents, legal documents, underwriting, credit approval, and other pertinent information. The preliminary commitment is good for twelve (12) months. The loan will be payable in full over a term of twenty-five (25) years and will bear an interest at either a variable rate based on the SIFMA index and a bank spread or a fixed rate, as the County shall determine. This interest rate may change, subject to market conditions for this type of financing.

We look forward to working with you on this project. If we can provide further information, please do not hesitate to contact us.

Sincerely,

TENNESSEE MUNICIPAL BOND FUND/
TENNESSEE COUNTY SERVICES LOAN PROGRAM

Charles G. Seivers
President/CEO

226 Capitol Blvd., Suite 502 • Nashville, Tennessee 37219 • (615) 255-1561 • Fax (615) 255-7428

Description	Section / Item
Erlanger Interim Financial Statements	B-II-3
Erlanger Audited Financial Statements	B-II-3

Consolidated Interim Financial Statements

March 31, 2017

DO NOT DISSEMINATE - The documents and information contained herein are confidential and protected pursuant to T.C.A. Section 68-11-272 and/or T.C.A. Section 68-11-238, as applicable, and are neither discoverable nor subject to production under Tennessee's Public Records Act or otherwise.

Erlanger Health System
Executive Summary for the Period Ended
March 31, 2017

The following financial information represents consolidated information for the Erlanger Health System, which includes:

Erlanger Medical Center(EMC) ContinuCare(CUC) Bledsoe (BLEDSOE) Health Centers(SSDA) HMO Trust (HMO)

EMC Key Financial Indicators

- Net income from operations for Erlanger Health System for the month was $5,831,421 compared to a budgeted net income of $4,418,313. Year-to-date net income from operations was $12,067,203 compared to a budgeted net income of $11,475,256.
- Total net income for Erlanger Health System for the month was $5,302,295 compared to a budgeted total net income of $3,514,795. Year-to-date total net income was $5,502,618 compared to a budgeted total net income of $3,882,288.
- Admissions were 17.5% greater than prior year and 0.4% over budget.
- Total cash reserves are $59,997,796 (excluding $107 million for Investment Portfolio and $32 million of funds held by Bond Trustees). Current accounts payable is $38,578,954 for Erlanger Health System. Days cash on hand is 71 days.
- **Net income before interest, taxes, depreciation and amortization (EBITDA) was $34,771,475.**
- Net days in accounts receivable is 55 days.

Monthly Volumes

March had dramatic volume growth even during a month of high spring break vacations. Erlanger East exceeded expectations by virtually tripling prior year volumes. The monthly surgical inpatient volume was 11.1% greater than prior year and 11.2% under budget. Inpatient heart surgeries were 86.1% greater than prior year and were 97.1% over budget. Surgical mix was 27.2% for the month compared to 28.7% for prior year. Orthopedic inpatient surgeries were 13.7% greater than prior year and 10.5% less than budget. Neurosurgery inpatient surgeries 18.8% greater than prior year and 6.3% under budget. Observation days were on target with prior year and 6.6% under budget. Emergency room visits were on target with prior year and 4.0% under budget. Emergency room admits were 12.8% greater than prior year and 6.1% over budget. There were no divert hours and was overall a very strong inpatient volume month.

Income Statement Comments

March's income from operations exceeded prior year income by over $7 million based on tremendous growth as well as cost containment and efficiencies.. Net patient revenue was $6,926,109 over prior year and the effective cost management generated the increase in bottom line profit. Net patient revenue less essential access per adjusted admissions (Including bad debt expense and adjusted for wage index and case mix) was $7,493 as compared to a budget of $8,064. The cost per adjusted admission (including interest expense and excluding unrealized gain/loss on interest swaps) was also under budget at $7,368 compared to a budget of $8,143. The Medicare case mix index was 3.5% over budget (1.97 actual vs. 1.90 budget). Bad debt & charity care as a % of gross patient revenue was 5.71% as compared to a budget of 8.85%. The increase in uncompensated care had a negative impact on the net revenue. Medicare utilization was on target with prior year and 9.6% over budget. Indigent/Self-Pay utilization was 23.0% less than prior year and 21.9% under budget.

Case mix adjusted length of stay increased to 2.75 compared to a budget of 2.73 (0.9% over budget). Paid FTE's per adjusted occupied bed was efficient at 4.54 compared to budget of 5.20 and salary cost per hour was $33.91 compared to a budget of $33.87. Efficient productivity of operations continue to be evident even though staff is working toward the "go live" of e-chart. Also, the staffing cost was appropriately managed during the quarter given the Joint Commission survey. Supplies and drugs per adjusted admission (adjusted for wage index & case mix) was $1,708 compared to a budget of $1,810. Supply management was very effective in March.

Interest income includes a year to date unrealized loss of $2,650,653. The unrealized loss resulted from a market-to-market of the bond investment portfolio due to a rally of the stock market. Since Erlanger holds the bonds to maturity, the loss is not realized.

Balance Sheet Comments

Net patient accounts receivable decrease is reflective of the increased collections. Net days in accounts receivable is 55 days. Days in cash is 71 days and is consistent with our capital plan. The due from third party payors line represents any governmental settlements that are outstanding for fiscal years 2012-2017. The increase in prepaid expenses is due to increased annual payments to vendors amortized appropriately throughout the year. The assets whose use is limited includes $14.7 million in the bond construction fund. The post retirement benefits line item reflects the new GASB pension changes. The reserve for other liabilities includes long term PTO and self insured malpractice liability.

J. Britton Tabor, CFO

ERLANGER HEALTH SYSTEM

Unaudited Consolidated Balance Sheets as of: March 31, 2017

ASSETS	2017	2016
UNRESTRICTED FUND		
CURRENT:		
Cash and temporary investments	$ 59,100,627	$ 50,257,413
Funds held by trustee - current portion	4,407,797	4,502,982
Patient accounts receivable	544,589,652	460,716,265
Less allowances for patient A/R	(416,346,421)	(341,120,035)
Net patient accounts receivable	128,243,231	119,596,230
Other receivables	14,793,774	42,268,418
Due from third party payors	4,235,642	5,696,163
Inventories	18,022,869	14,344,385
Prepaid expenses	9,937,676	9,594,391
Total current assets	238,741,616	246,259,982
PROPERTY, PLANT, AND EQUIPMENT		
Net property, plant and equipment	216,913,311	170,569,529
LONG-TERM INVESTMENTS	897,169	699,429
OTHER ASSETS:		
Assets whose use is limited	134,238,796	166,515,206
Deferred debt issue cost	593,815	763,475
Other assets	1,156,656	1,376,861
Total other assets	135,989,267	168,655,543
DEFERRED OUTFLOWS OF RESOURCES		
Deferred pension adjustments	13,312,022	3,959,346
Deferred amounts from debt refunding	486,983	572,921
TOTAL	**$ 606,340,367**	**$ 590,716,749**

LIABILITIES	2017	2016
UNRESTRICTED FUND		
CURRENT:		
Current maturities of long term debt	$ 4,686,974	$ 4,879,593
Accounts payable/unearned income	38,578,954	50,384,226
Accrued salaries & related liabilities	15,442,835	26,627,090
Due to third party payors	-	111,465
Construction fund payable	1,650,561	1,092,112
Accrued Interest payable	4,375,864	4,568,785
Total current liabilities	64,735,189	87,663,270
POST RETIREMENT BENEFITS (GASB 67/68 & FAS 112)	67,845,960	55,268,993
RESERVE FOR OTHER LIABILITIES	24,189,626	17,773,332
DEFERRED INFLOWS OF RESOURCES		
Deferred pension adjustments	511,392	318,312
Deferred gain from sale-leaseback	3,006,213	3,470,969
LONG - TERM DEBT	202,335,637	207,107,502
FUND BALANCE:		
Unrestricted	201,867,385	196,891,939
Invested in capital assets, net of related debt	35,818,222	16,812,515
Restricted	6,030,743	5,409,917
	243,716,350	219,114,371
TOTAL	**$ 606,340,367**	**$ 590,716,749**

Erlanger Health System

Unaudited Consolidated Statement of Operations

For the periods ended March 31, 2017 and 2016

	Current Month			Year to Date		
	Actual	Budget	Prior Year	Actual	Budget	Prior Year
Net patient service revenue	$ 73,808,243	$ 75,246,947	$ 66,882,134	$ 624,439,301	$ 626,516,782	$ 571,416,285
Other revenue(expense)	4,289,520	3,243,574	3,302,502	32,007,662	29,054,030	25,497,545
Net operating revenue	78,097,763	78,490,520	70,184,636	656,446,962	655,570,813	596,913,830
Expenses						
Salaries and employee benefits	37,568,112	38,617,733	36,200,548	331,155,203	337,660,321	305,191,708
Supplies	10,576,888	10,968,375	11,483,994	93,273,749	92,976,956	83,905,476
Purchased services	15,321,716	14,325,284	14,795,289	128,939,076	125,536,209	118,615,309
Utilities	841,229	908,619	769,523	7,824,816	8,076,214	7,437,035
Drugs	6,960,292	5,877,593	5,703,660	57,230,327	49,956,384	44,221,009
Depreciation	507,615	3,047,888	2,154,300	22,436,183	26,932,466	21,168,381
Insurance & taxes	490,490	326,715	276,948	3,520,405	2,957,007	2,427,024
Total operating expense	72,266,342	74,072,207	71,384,262	644,379,759	644,095,557	582,965,941
Excess rev. over/(under) exp. from operations	5,831,421	4,418,313	(1,199,626)	12,067,203	11,475,256	13,947,889
NONOPERATING INCOME:						
Gain (Losses) on disposal of assets	(9,288)	(21,386)	126	(192,671)	(189,737)	834,702
Interest Income/Gains (Losses) on Investments	(108,121)	73,154	108,864	(1,110,896) [1]	536,951	1,508,801
Interest expense	(290,314)	(832,726)	(826,270)	(5,194,736)	(7,360,251)	(7,452,584)
Provisions for income tax	(121,403)	(122,560)	(99,995)	(66,283)	(579,930)	(543,364)
Excess rev. over/(under) expenses	$ 5,302,295	$ 3,514,795	$ (2,016,900)	$ 5,502,618	$ 3,882,288	$ 8,295,445
EBITDA	6,385,389	7,483,367	1,009,014	34,771,475	38,612,278	36,265,311
Operating Margin	7.47%	5.63%	-1.71%	1.84%	1.75%	2.34%
Total Margin	6.79%	4.48%	-2.87%	0.84%	0.59%	1.39%

1 - includes unrealized loss on investments of $2,650,653

Erlanger Health System

Unaudited Consolidated Statement of Operations

For the period ended March 31, 2017

	Current Month ACTUAL						
	Primary Health System						
	EMC	BLEDSOE	HMO TRUST	SSDA	Total	CUC	EHS Total
PATIENT SERVICE REVENUE							
Inpatient services	$ 137,411,057	805,547	-	-	138,216,604	-	138,216,604
Outpatient services	111,094,875	4,406,593	-	597,920	116,099,387	1,826,628	117,926,015
Total patient service revenue	$ 248,505,931	5,212,140	-	597,920	254,315,991	1,826,628	256,142,619
REVENUE DEDUCTIONS:							
Certified free care	$ 1,524,437	-	-	(1,042)	1,523,395	17,339	1,540,734
Charity care	7,537,788	306,749	-	241,665	8,086,201	-	8,086,201
Bad debt expense	5,119,338	264,071	-	23,600	5,407,009	30,920	5,437,929
Medicare and medicaid rate adjustments	79,268,540	1,974,744	-	5,112	81,248,397	-	81,248,397
Contractual adjustments and policy discounts	83,696,553	1,550,798	-	60,454	85,307,805	713,309	86,021,114
Total revenue deductions	$ 177,146,656	4,096,362	-	329,790	181,572,807	761,569	182,334,376
NONPATIENT SERVICE REVENUE	$ 809,897	46,660	-	799,387	1,655,945	2,633,575	4,289,520
INVESTMENT IN JOINT VENTURES	$ -	-	-	-	-	-	-
Net operating revenue	$ 72,169,173	1,162,438	-	1,067,517	74,399,129	3,698,634	78,097,763
OPERATING EXPENSE							
Salaries and employee benefits	$ 35,257,951	647,196	-	374,256	36,279,403	1,288,708	37,568,112
Supplies	10,337,708	80,045	-	13,133	10,430,886	146,002	10,576,888
Purchased services	14,704,544	327,175	-	70,743	15,102,461	219,255	15,321,716
Utilities	773,003	33,942	-	11,978	818,923	22,307	841,229
Drugs	5,282,669	41,443	-	6,032	5,330,144	1,630,148	6,960,292
Depreciation	430,816	12,632	-	9,221	452,668	54,947	507,615
Insurance & taxes	461,511	1,598	-	-	463,110	27,380	490,490
Corporate overhead allocation	(164,957)	97,012	-	67,945	-	-	-
Total operating expense	$ 67,083,244	1,241,044	-	553,307	68,877,595	3,388,747	72,266,342
Excess rev. over/(under) exp. from operations	$ 5,085,929	(78,606)	-	514,210	5,521,534	309,887	5,831,421
NONOPERATING INCOME:							
Gain (Losses) on disposal of assets	(4,954)	-	-	-	(4,954)	(4,334)	(9,288)
Interest Income/Gains (Losses) on Investments	(114,636)	(23)	2,440	(149)	(112,367)	4,246	(108,121)
Interest expense	(290,267)	-	-	-	(290,267)	(47)	(290,314)
Provisions for income tax	-	-	-	-	-	(121,403)	(121,403)
EXCESS REVENUES OVER/(UNDER) EXPENSES	$ 4,676,072	(78,628)	2,440	514,061	5,113,945	188,350	5,302,295

Er. ger Health System

Unaudited Consolidated Statement of Operations

For the period ended March 31, 2017

	YTD ACTUAL						
	Primary Health System						EHS
	EMC	BLEDSOE	HMO TRUST	SSDA	Total	CUC	Total
PATIENT SERVICE REVENUE							
Inpatient services	$ 1,157,137,070	5,122,342	-	-	1,162,259,412	-	1,162,259,412
Outpatient services	929,805,255	37,939,639	-	4,886,772	972,631,667	15,182,334	987,814,001
Total patient service revenue	$ 2,086,942,326	43,061,981	-	4,886,772	2,134,891,079	15,182,334	2,150,073,413
REVENUE DEDUCTIONS:							
Certified free care	$ 10,791,521	-	-	(9,374)	10,782,147	225,858	11,008,006
Charity care	87,803,908	2,188,771	-	2,041,200	92,033,880	-	92,033,880
Bad debt expense	64,760,294	2,455,170	-	216,269	67,431,733	408,558	67,840,290
Medicare and medicaid rate adjustments	648,425,294	15,477,473	-	17,680	663,920,447	-	663,920,447
Contractual adjustments and policy discounts	672,584,321	11,734,829	-	486,145	684,805,294	6,026,196	690,831,490
Total revenue deductions	$ 1,484,365,338	31,856,244	-	2,751,920	1,518,973,501	6,660,612	1,525,634,112
NONPATIENT SERVICE REVENUE	$ 9,656,224	529,293	-	2,886,910	13,072,427	18,789,498	31,861,925
INVESTMENT IN JOINT VENTURES	$ 145,737	-	-	-	145,737	-	145,737
Net operating revenue	$ 612,378,950	11,735,030	-	5,021,763	629,135,742	27,311,220	656,446,962
OPERATING EXPENSE							
Salaries and employee benefits	$ 311,077,438	5,789,227	-	3,535,168	320,401,833	10,753,370	331,155,203
Supplies	91,164,251	593,645	-	87,630	91,845,525	1,428,224	93,273,749
Purchased services	123,145,937	3,070,409	-	633,283	126,849,629	2,089,447	128,939,076
Utilities	7,306,919	209,930	-	120,282	7,637,131	187,685	7,824,816
Drugs	44,795,735	280,788	-	119,339	45,195,862	12,034,465	57,230,327
Depreciation	21,755,207	118,035	-	108,605	21,981,847	454,336	22,436,183
Insurance & taxes	3,260,499	22,320	-	2,455	3,285,275	235,130	3,520,405
Corporate overhead allocation	(1,458,011)	857,463	-	600,548	-	-	-
Total operating expense	$ 601,047,975	10,941,818	-	5,207,309	617,197,102	27,182,657	644,379,759
Excess rev. over/(under) exp. from operations	$ 11,330,975	793,212	-	(185,547)	11,938,640	128,563	12,067,203
NONOPERATING INCOME:							
Gain (Losses) on disposal of assets	(142,276)	-	-	-	(142,276)	(50,395)	(192,671)
Interest Income/Gains (Losses) on Investments	(1,101,288) [1]	(297)	3,326	(1,692)	(1,099,950)	(10,945)	(1,110,895)
Interest expense	(5,193,980)	-	-	-	(5,193,980)	(755)	(5,194,736)
Provisions for income tax	-	-	-	-	-	(66,283)	(66,283)
EXCESS REVENUES OVER/(UNDER) EXPENSES	$ 4,893,430	792,915	3,326	(187,238)	5,502,434	184	5,502,619

1 - Includes unrealized loss on investments of $2,650,653

Erlanger Health System

Unaudited Consolidated Statement of Operations

For the period ended March 31, 2017

	Current Month BUDGET						
	Primary Health System						EHS
	EMC	BLEDSOE	HMO TRUST	SSDA	Total	CUC	Total
PATIENT SERVICE REVENUE							
Inpatient services	$ 138,345,901	406,139	-	51,779	138,803,819	-	138,803,819
Outpatient services	110,573,704	4,005,868	-	1,046,440	115,626,012	2,245,380	117,871,392
Total patient service revenue	$ 248,919,605	4,412,007	-	1,098,219	254,429,831	2,245,380	256,675,211
REVENUE DEDUCTIONS:							
Certified free care	$ 816,125	-	-	(1,042)	815,083	37,970	853,053
Charity care	7,978,994	186,887	-	285,500	8,451,381	-	8,451,381
Bad debt expense	13,229,307	306,141	-	45,606	13,581,054	99,120	13,680,174
Medicare and medicaid rate adjustments	72,468,849	1,442,979	-	214,708	74,126,537	-	74,126,537
Contractual adjustments and policy discounts	82,075,890	1,214,895	-	116,744	83,407,529	909,590	84,317,119
Total revenue deductions	$ 176,569,166	3,150,902	-	661,517	180,381,585	1,046,680	181,428,265
NONPATIENT SERVICE REVENUE	$ 1,090,582	53,536	-	250,099	1,394,217	1,832,370	3,226,587
INVESTMENT IN JOINT VENTURES	$ 16,986	-	-	-	16,986	-	16,986
Net operating revenue	$ 73,458,008	1,314,641	-	686,801	75,459,450	3,031,070	78,490,520
OPERATING EXPENSE							
Salaries and employee benefits	$ 36,116,359	625,526	-	586,667	37,328,553	1,289,180	38,617,733
Supplies	10,806,278	59,212	-	21,891	10,887,380	80,995	10,968,375
Purchased services	13,682,944	345,931	-	85,559	14,114,434	210,850	14,325,284
Utilities	855,306	23,468	-	12,295	891,069	17,550	908,619
Drugs	4,793,615	35,932	-	10,696	4,840,243	1,037,350	5,877,593
Depreciation	2,967,619	12,529	-	11,520	2,991,668	56,220	3,047,888
Insurance & taxes	300,845	1,772	-	209	302,825	23,890	326,715
Corporate overhead allocation	(164,957)	97,012	-	67,945	-	-	-
Total operating expense	$ 69,358,010	1,201,382	-	796,781	71,356,172	2,716,035	74,072,207
Excess rev. over/(under) exp. from operations	$ 4,099,998	113,259	-	(109,980)	4,103,278	315,035	4,418,313
NONOPERATING INCOME:							
Gain (Losses) on disposal of assets	(16,986)	-	-	-	(16,986)	(4,400)	(21,386)
Interest Income/Gains (Losses) on Investments	57,223	(33)	83	-	57,274	15,880	73,154
Interest expense	(832,526)	-	-	-	(832,526)	(200)	(832,726)
Provisions for income tax	-	-	-	-	-	(122,560)	(122,560)
EXCESS REVENUES OVER/(UNDER) EXPENSES	$ 3,307,710	113,226	83	(109,980)	3,311,040	203,755	3,514,795

Er. ger Health System

Unaudited Consolidated Statement of Operations

For the period ended March 31, 2017

	YTD BUDGET						
	Primary Health System						EHS
	EMC	BLEDSOE	HMO TRUST	SSDA	Total	CUC	Total
PATIENT SERVICE REVENUE							
Inpatient services	$ 1,168,800,013	3,531,912	-	457,660	1,172,789,586	-	1,172,789,586
Outpatient services	906,295,537	35,360,127	-	9,249,176	950,904,840	17,634,920	968,539,760
Total patient service revenue	$ 2,075,095,551	38,892,039	-	9,706,836	2,123,694,426	17,634,920	2,141,329,346
REVENUE DEDUCTIONS:							
Certified free care	$ 4,833,055	-	-	(9,374)	4,823,681	298,800	5,122,481
Charity care	73,627,843	1,927,280	-	2,899,157	78,454,280	-	78,454,280
Bad debt expense	80,580,571	2,359,847	-	184,793	83,125,212	730,210	83,855,422
Medicare and medicaid rate adjustments	633,905,284	13,554,421	-	2,065,652	649,525,357	-	649,525,357
Contractual adjustments and policy discounts	680,110,121	9,992,581	-	819,301	690,922,003	6,933,020	697,855,023
Total revenue deductions	$ 1,473,056,874	27,834,130	-	5,959,530	1,506,850,534	7,962,030	1,514,812,564
NONPATIENT SERVICE REVENUE	$ 9,650,021	473,188	-	2,210,554	12,333,763	16,570,130	28,903,893
INVESTMENT IN JOINT VENTURES	$ 150,137	-	-	-	150,137	-	150,137
Net operating revenue	$ 611,838,835	11,531,097	-	5,957,861	629,327,793	26,243,020	655,570,813
OPERATING EXPENSE							
Salaries and employee benefits	$ 315,717,348	5,472,209	-	5,080,114	326,269,671	11,390,650	337,660,321
Supplies	91,060,098	520,648	-	191,204	91,771,951	1,205,005	92,976,956
Purchased services	119,779,936	3,058,786	-	756,227	123,594,949	1,941,260	125,536,209
Utilities	7,597,363	207,426	-	108,675	7,913,464	162,750	8,076,214
Drugs	40,232,603	293,096	-	94,535	40,620,234	9,336,150	49,956,384
Depreciation	26,229,925	110,737	-	101,823	26,442,486	489,980	26,932,466
Insurance & taxes	2,722,546	15,658	-	1,843	2,740,047	216,960	2,957,007
Corporate overhead allocation	(1,458,008)	857,463	-	600,548	3	-	3
Total operating expense	$ 601,881,811	10,536,024	-	6,934,970	619,352,805	24,742,755	644,095,560
Excess rev. over/(under) exp. from operations	$ 9,957,024	995,073	-	(977,109)	9,974,988	1,500,265	11,475,253
NONOPERATING INCOME:							
Gain (Losses) on disposal of assets	(150,137)	-	-	-	(150,137)	(39,600)	(189,737)
Interest Income/Gains (Losses) on Investments	505,780	(299)	750	-	506,231	30,720	536,951
Interest expense	(7,358,451)	-	-	-	(7,358,451)	(1,800)	(7,360,251)
Provisions for income tax	-	-	-	-	-	(579,930)	(579,930)
EXCESS REVENUES OVER/(UNDER) EXPENSES	$ 2,954,215	994,774	750	(977,109)	2,972,630	909,655	3,882,285

Erlanger Health System
Certified Free Care
For the period ended March 31, 2017

		YTD ACTUAL				
		EMC Charges	CUC Charges	SSDA Charges	Total Charges	Erlanger Cost
Hamilton County Free Care	$	8,923,376	225,858	0	9,149,235	4,391,633
Prisoner		2,983,771	0	0	2,983,771	1,432,210
Total Certified Hamilton County		11,907,147	225,858	0	12,133,006	5,823,843
Less: Appropriation		(1,115,627)	0	(9,374)	(1,125,000)	(1,125,000)
Net Certified Free Care	$	10,791,521	225,858	(9,374)	11,008,006	4,698,843

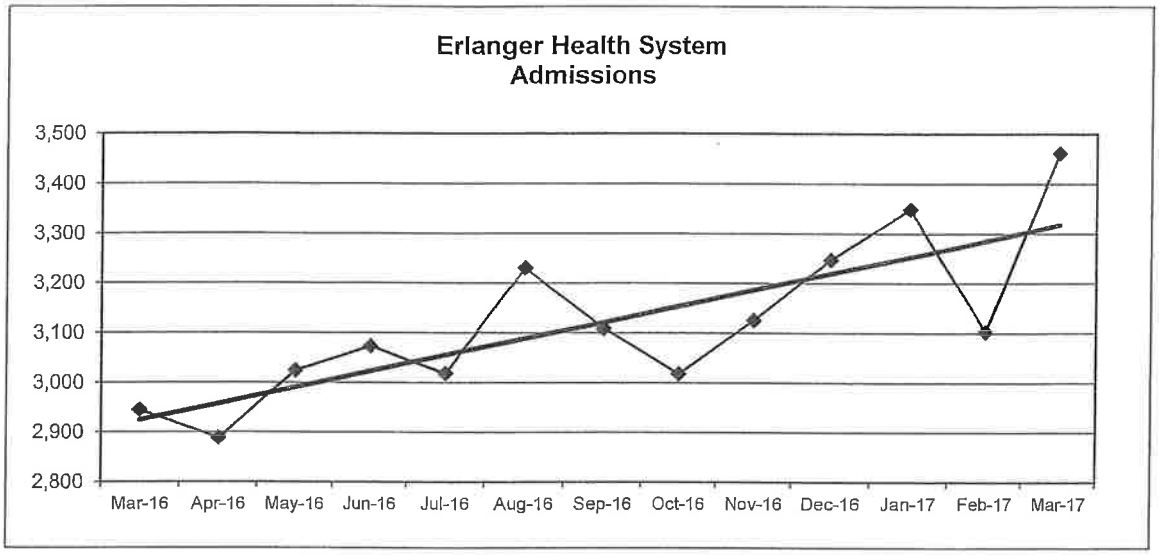
ERLANGER HEALTH SYSTEM
CONSOLIDATED STATISTICAL VOLUMES
FOR THE PERIOD ENDING JULY 2016 TO JUNE 2017

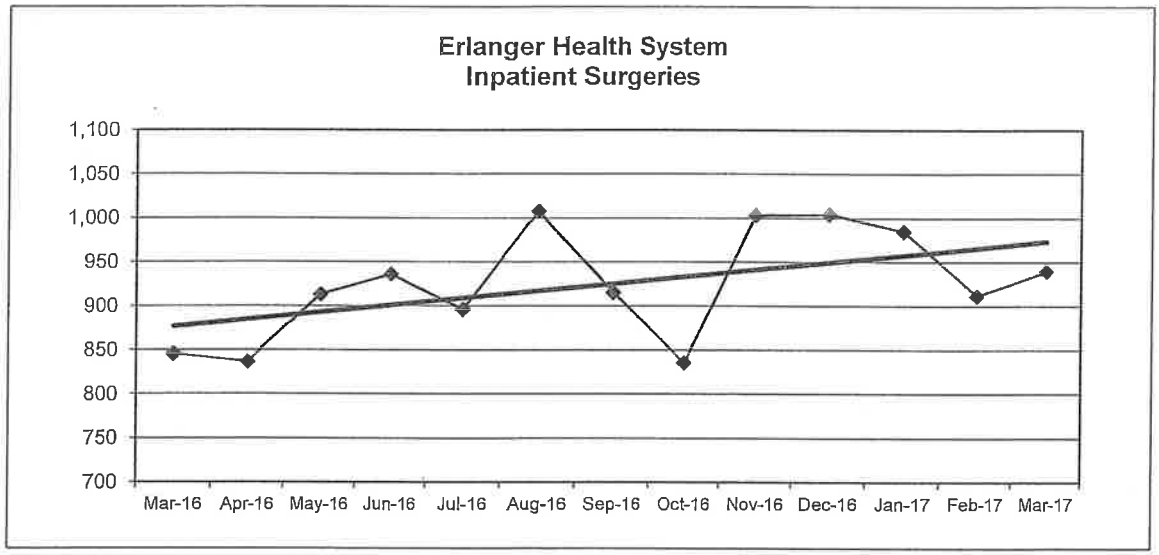
	03/31/2017					YTD THROUGH 03/31/2017				
	ACTUAL	BUDGET	VARIANCE	PRIOR YEAR	CHANGE	ACTUAL	BUDGET	VARIANCE	PRIOR YEAR	CHANGE
CENSUS										
LICENSED BEDS	788	788	0.0%	788	0.0%	788	788	0.0%	788	0.0%
BEDS IN SERVICE	657	569	15.5%	597	10.1%	657	569	15.5%	597	10.1%
AVERAGE DAILY CENSUS	515	488	5.6%	479	7.4%	498	481	3.6%	471	5.8%
OCCUPANCY PERCENTAGE	78.36%	85.71%	-8.6%	80.29%	-2.4%	75.84%	84.52%	-10.3%	78.89%	-3.9%
ADMISSIONS										
BEH	2,351	2,690	-12.6%	2,258	4.1%	21,397	22,508	-4.9%	20,851	2.6%
TCT	331	298	11.1%	343	-3.5%	2,812	2,660	5.7%	2,677	5.0%
EE	702	387	81.4%	275	155.3%	3,934	3,240	21.4%	2,432	61.8%
EN	54	52	3.8%	39	38.5%	360	465	-22.6%	276	30.4%
EN SENIOR'S PROGRAM	23	19	21.1%	30	-23.3%	157	192	-18.2%	192	-18.2%
TOTAL	3,461	3,446	0.4%	2,945	17.5%	28,660	29,065	-1.4%	26,428	8.4%
CASE MIX INDEX										
TOTAL PATIENT	1.65	1.57	5.4%	1.59	4.1%	1.65	1.57	5.2%	1.57	5.2%
TOTAL PATIENT EXCL NORMAL NEWBORN	1.77	1.72	2.8%	1.72	2.8%	1.78	1.72	3.2%	1.72	3.2%
TOTAL MEDICARE PATIENTS	1.97	1.90	3.5%	1.84	6.9%	1.94	1.90	2.0%	1.89	2.5%
BEH	1.94	1.82	6.7%	1.81	7.2%	1.91	1.82	4.8%	1.82	4.8%
TCT EXCL NORMAL NEWBORN	1.72	1.76	-2.3%	1.81	-5.0%	1.80	1.76	2.0%	1.76	2.0%
EE	0.92	0.70	31.1%	0.75	22.4%	0.86	0.77	11.5%	0.70	22.6%
PATIENT DAYS										
BEH	7,777	7,134	9.0%	7,519	3.4%	68,646	67,737	1.3%	66,244	3.6%
BEH ICU'S	3,609	2,809	28.5%	3,164	14.1%	29,282	25,366	15.4%	27,181	7.7%
TCT	683	797	-14.4%	765	-10.7%	6,191	6,224	-0.5%	6,142	0.8%
TCT PICU	233	243	-4.1%	239	-2.5%	2,091	1,899	10.1%	1,781	17.4%
TCT NICU	1,471	2,133	-31.0%	1,733	-15.1%	14,646	16,649	-12.0%	16,500	-11.2%
EE	1,426	1,049	35.9%	680	109.7%	8,640	7,205	19.9%	5,534	56.1%
EE NICU	105	149	-29.5%	104	1.0%	1,193	1,314	-9.2%	1,243	-4.0%
EN	335	352	-4.8%	305	9.8%	3,184	2,493	27.7%	1,922	65.7%
EN SENIOR'S PROGRAM	320	452	-29.2%	350	-8.6%	2,650	2,891	-8.3%	2,963	-10.6%
TOTAL	15,959	15,118	5.6%	14,859	7.4%	136,523	131,778	3.6%	129,510	5.4%
AVERAGE LOS										
TOTAL	4.55	4.28	6.3%	4.98	-8.6%	4.70	4.46	5.2%	4.82	-2.6%
MEDICARE	5.25	5.00	5.0%	5.07	3.6%	5.67	5.00	13.4%	4.98	13.9%
CASE MIX ADJUSTED	2.75	2.73	0.9%	3.13	-12.2%	2.84	2.84	0.0%	3.07	-7.5%
BEH	4.84	3.70	31.0%	4.73	2.4%	4.58	4.14	10.6%	4.48	2.1%
TCT	7.21	10.65	-32.3%	7.98	-9.6%	8.15	9.31	-12.4%	9.12	-10.6%
EE	2.03	2.71	-25.1%	2.47	-17.9%	2.20	2.22	-1.2%	2.28	-3.5%
SENIOR'S PROGRAM	13.91	23.79	-41.5%	11.67	19.3%	16.88	15.06	12.1%	15.43	9.4%
OBSERVATION DAYS										
BEH	439	551	-20.2%	506	-13.2%	4,099	4,746	-13.6%	4,355	-5.9%
TCT	135	97	39.1%	104	30.4%	949	647	46.7%	688	37.9%
EE	105	93	13.3%	81	30.5%	884	876	1.0%	568	55.7%
EN	13	1	1242.0%	1	1516.9%	31	45	-31.0%	35	-11.2%
TOTAL	693	742	-6.6%	691	0.3%	5,963	6,314	-5.6%	5,646	5.6%
UTILIZATION										
MEDICARE	24.3%	23.4%	3.8%	22.9%	6.1%	22.6%	23.4%	-3.4%	23.0%	-1.7%
MEDICARE MGT	12.1%	9.8%	23.5%	10.5%	15.2%	11.9%	9.8%	21.4%	10.6%	12.3%
MEDICAID/TENNCARE	23.0%	22.6%	1.8%	22.7%	1.3%	23.1%	22.6%	2.2%	23.4%	-1.3%
COMMERCIAL PAY	32.9%	33.4%	-1.5%	32.9%	0.0%	32.2%	33.4%	-3.6%	32.2%	0.0%
INDIGENT/SELF-PAY	5.7%	7.3%	-21.9%	7.4%	-23.0%	6.9%	7.3%	-5.5%	7.2%	-4.2%
OTHER	2.0%	3.6%	-45.8%	3.6%	-45.8%	3.3%	3.6%	-8.3%	3.7%	-10.8%
DISCHARGES BY FINANCIAL CLASS										
MEDICARE	886	868	2.1%	742	19.4%	6,868	7,320	-6.2%	6,594	4.2%
MEDICARE MGT	454	359	26.4%	321	41.4%	3,394	3,028	12.1%	2,671	27.1%
MEDICAID/TENNCARE	777	826	-5.9%	725	7.2%	6,938	6,965	-0.4%	6,324	9.7%
COMMERCIAL PAY	984	1,115	-11.8%	941	4.6%	8,794	9,406	-6.5%	8,468	3.8%
INDIGENT/SELF PAY	169	246	-31.4%	185	-8.6%	1,814	2,076	-12.6%	1,860	-2.5%
OTHER	31	32	-3.0%	25	24.0%	329	269	22.1%	235	40.0%
TOTAL	3,301	3,446	-4.2%	2,939	12.3%	28,137	29,065	-3.2%	26,152	7.6%

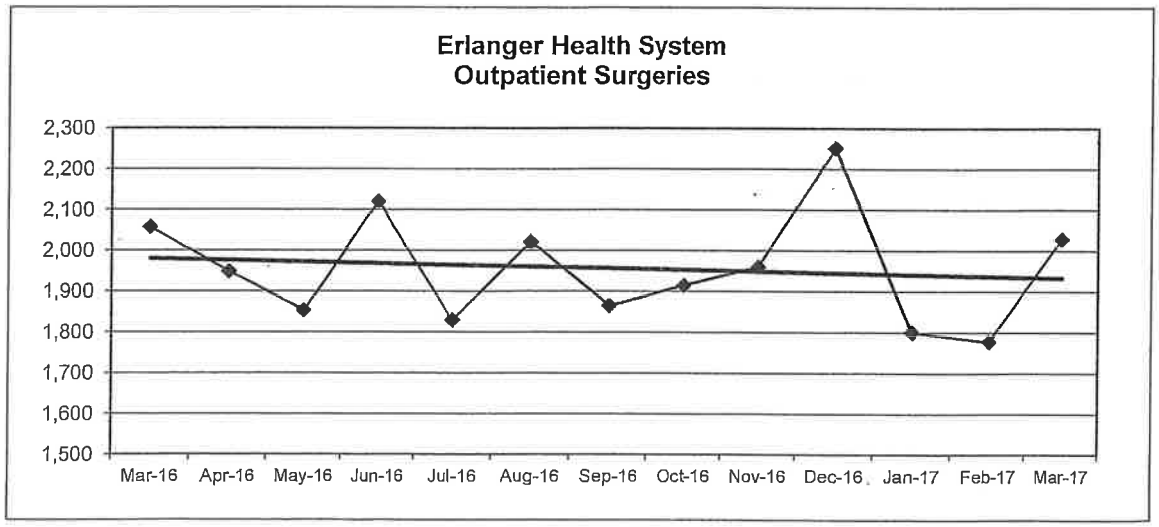
ERLANGER HEALTH SYSTEM
CONSOLIDATED STATISTICAL VOLUMES
FOR THE PERIOD ENDING JULY 2016 TO JUNE 2017

	03/31/2017					YTD THROUGH 03/31/2017				
	ACTUAL	BUDGET	VARIANCE	PRIOR YEAR	CHANGE	ACTUAL	BUDGET	VARIANCE	PRIOR YEAR	CHANGE
SURGICAL INPATIENTS										
BEH	701	795	-11.8%	768	-8.7%	6,493	7,060	-8.0%	6,819	-4.8%
OSC	119	165	-27.9%	N/A	N/A	1,076	1,264	-14.9%	N/A	N/A
TCT	65	69	-5.8%	60	8.3%	586	567	3.4%	492	19.1%
MEC	0	3	-100.0%	3	-100.0%	24	18	33.3%	18	33.3%
EE	55	26	111.5%	15	266.7%	307	220	39.5%	128	139.8%
PLAZA SURGERY	0	0	N/A	N/A	N/A	13	0	N/A	N/A	N/A
TOTAL SURGICAL INPATIENTS	940	1,058	-11.2%	846	11.1%	8,499	9,129	-6.9%	7,457	14.0%
SURGICAL OUTPATIENTS										
BEH	510	622	-18.0%	595	-14.3%	4,500	5,385	-16.4%	5,150	-12.6%
OSC	80	121	-33.9%	N/A	N/A	819	926	-11.6%	N/A	N/A
TCT	548	604	-9.3%	610	-10.2%	4,468	4,392	1.7%	4,437	0.7%
MEC	116	176	-34.1%	168	-31.0%	1,066	1,232	-13.5%	1,177	-9.4%
EE	447	457	-2.2%	377	18.6%	3,696	3,468	6.6%	2,859	29.3%
PLAZA SURGERY	328	363	-9.6%	308	6.5%	2,902	3,364	-13.7%	2,853	1.7%
TOTAL SURGICAL OUTPATIENTS	2,029	2,343	-13.4%	2,058	-1.4%	17,451	18,767	-7.0%	16,476	5.9%
TOTAL SURGICAL PATIENTS	2,969	3,401	-12.7%	2,904	2.2%	25,950	27,896	-7.0%	23,933	8.4%
TOTAL SURGICAL HOURS	5,187	5,499	-5.7%	4,804	8.0%	45,437	46,141	-1.5%	40,242	12.9%
ORTHOPEDIC INPATIENT SURGERIES	324	362	-10.5%	285	13.7%	2,652	2,991	-11.3%	2,160	22.8%
NEUROSURGERY INPATIENT SURGERIES	133	142	-6.3%	112	18.8%	1,184	1,265	-6.4%	1,081	9.5%
IP HEART/THORACIC SURGERIES WITH CABS/VALVES	67	34	97.1%	36	86.1%	390	299	30.4%	291	34.0%
DAVINCI PROCEDURES	106	71	49.3%	69	53.6%	891	626	42.3%	607	46.8%
BARIATRICS PROCEDURES	11	19	-42.1%	11	0.0%	191	166	15.1%	122	56.6%
CARDIAC CATH LAB PATIENTS	271	315	-14.0%	328	-17.4%	2,353	2,424	-2.9%	2,525	-6.8%
EE CARDIAC CATH LAB PATIENTS	69	38	81.6%	N/A	N/A	359	236	52.1%	N/A	N/A
SURGERY I/P HRS/PROCEDURE	2.72	2.46	10.7%	2.72	0.0%	2.65	2.48	7.2%	2.60	1.9%
SURGERY O/P HRS/PROCEDURE	1.29	1.24	4.8%	1.24	4.5%	1.31	1.25	4.5%	1.30	1.1%
BEH L&D (BIRTHS)	230	255	-9.8%	240	-4.2%	2,190	2,386	-8.2%	2,247	-2.5%
EE (BIRTHS)	231	211	9.5%	199	16.1%	1,969	2,040	-3.5%	1,965	0.2%
TOTAL BIRTHS	461	466	-1.1%	439	5.0%	4,159	4,426	-6.0%	4,212	-1.3%
PHYSICIAN PRACTICE OUTPATIENT VISITS	32,517	35,226	-7.7%	33,408	-2.7%	312,861	322,515	-3.0%	253,370	23.5%
HELICOPTER (PATS)										
HELICOPTER-LIFEFORCE	58	150	-61.3%	168	-65.5%	1,189	1,431	-16.9%	1,184	0.4%
HELICOPTER-OTHER VENDORS	58	24	141.7%	51	13.7%	457	219	108.7%	307	48.9%
TOTAL	116	174	-33.3%	219	-47.0%	1,646	1,650	-0.2%	1,491	10.4%
EMERGENCY ROOM VISITS										
BEH	4,120	4,633	-11.1%	4,137	-0.4%	37,313	44,245	-15.7%	39,511	-5.6%
TCT	3,886	4,065	-4.4%	4,188	-7.2%	31,867	29,858	6.7%	30,762	3.6%
EE	3,156	2,841	11.1%	2,784	13.4%	25,875	23,031	12.3%	22,572	14.6%
EN	1,274	1,420	-10.3%	1,355	-6.0%	11,257	11,403	-1.3%	10,883	3.4%
TOTAL	12,436	12,959	-4.0%	12,464	-0.2%	106,312	108,537	-2.0%	103,728	2.5%
EMERGENCY ROOM ADMITS										
BEH	1,467	1,570	-6.6%	1,380	6.3%	12,968	14,222	-8.8%	12,502	3.7%
TCT	238	185	28.6%	254	-6.3%	2,033	1,895	7.3%	1,992	2.1%
EE	290	169	71.6%	141	105.7%	1,830	1,394	31.3%	1,163	57.4%
EN	78	29	169.0%	62	25.8%	587	226	159.7%	478	22.8%
TOTAL	2,073	1,953	6.1%	1,837	12.8%	17,418	17,737	-1.8%	16,135	8.0%
DIVERT HOURS	0	0	N/A	4	N/A	0	0	N/A	4	N/A

Erlanger Medical Center
Surgery & Admission Trends



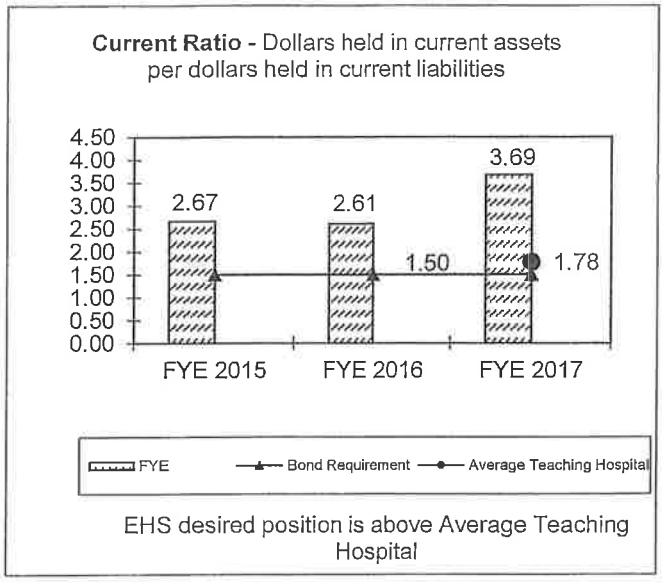


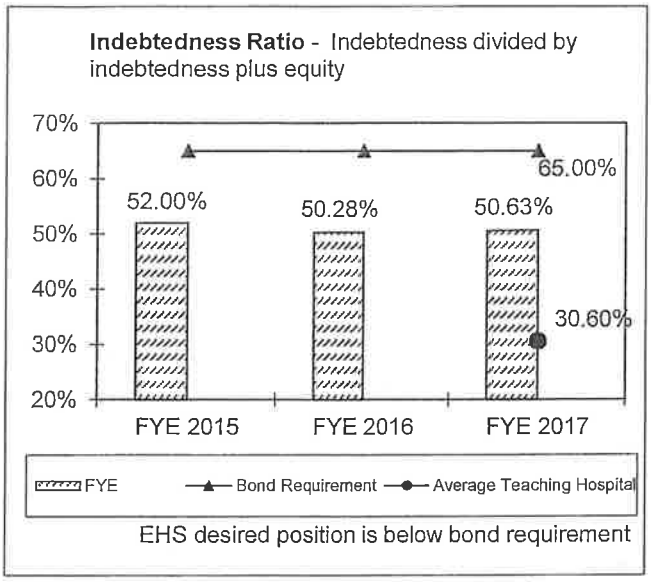


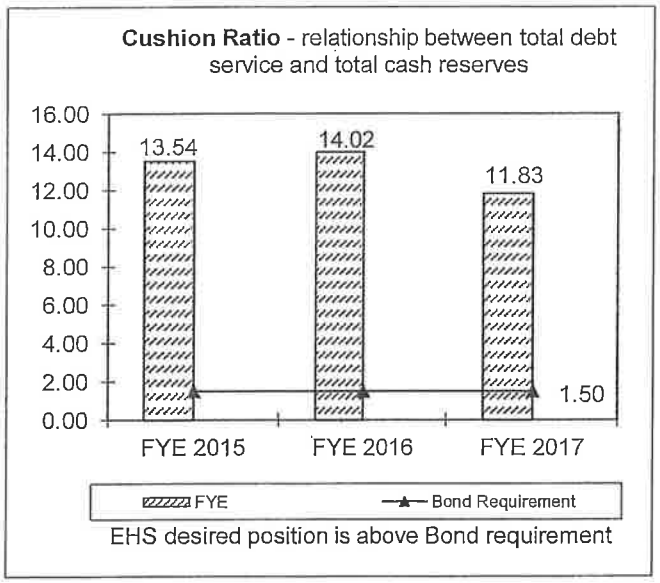
ERLANGER HEALTH SYSTEM
ERLANGER BLEDSOE
CONSOLIDATED STATISTICAL VOLUMES
FOR THE PERIOD JULY 2016 TO JUNE 2017

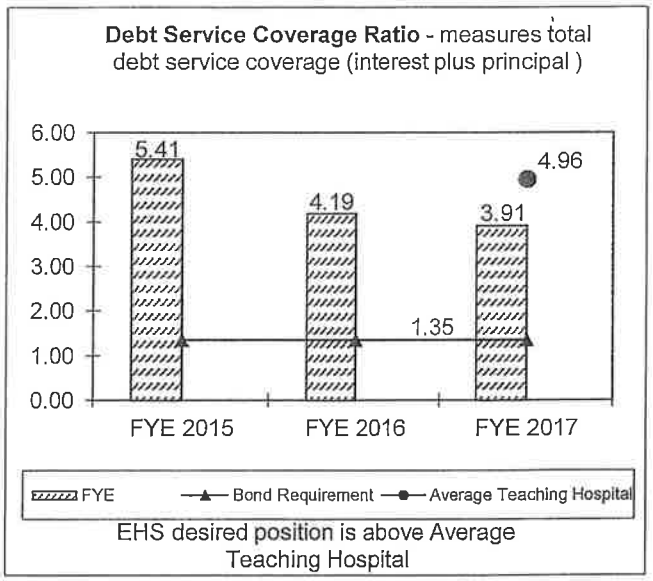
	03/31/2017					YTD THROUGH 03/31/2017				
	ACTUAL	BUDGET	CHANGE	PRIOR YEAR	CHANGE	ACTUAL	BUDGET	CHANGE	PRIOR YEAR	CHANGE
CENSUS										
LICENSED BEDS	25	25	0.0%	25	0.0%	25	25	0.0%	25	0.0%
BEDS IN SERVICE	25	25	0.0%	25	0.0%	25	25	0.0%	25	0.0%
AVERAGE DAILY CENSUS	10.97	5.54	98.1%	8.32	31.8%	8.45	5.54	52.6%	6.25	35.2%
OCCUPANCY PERCENTAGE	43.9%	22.1%	98.1%	33.3%	31.8%	33.8%	22.1%	52.6%	25.0%	35.2%
ADMISSIONS										
ROUTINE CARE	31	21	50.8%	19	63.2%	202	182	11.2%	183	10.4%
SWING BED UNIT	15	10	53.6%	14	7.1%	101	86	17.0%	94	7.4%
TOTAL	46	30	51.7%	33	39.4%	303	268	13.1%	277	9.4%
CASE MIX INDEX										
MEDICARE	0.97	1.03	-5.7%	0.92	5.6%	0.99	1.03	-3.9%	1.01	-2.0%
TOTAL PATIENT	1.00	1.02	-2.4%	0.95	4.8%	0.98	1.02	-3.5%	0.99	-0.6%
PATIENT DAYS										
ROUTINE CARE	126	58	117.5%	48	162.5%	633	512	23.6%	509	24.4%
SWING BED UNIT	214	114	88.2%	210	1.9%	1,682	1,005	67.3%	1,209	39.1%
TOTAL	340	172	98.1%	258	31.8%	2,315	1,517	52.6%	1,718	34.7%
AVERAGE LOS										
TOTAL	7.39	5.66	30.6%	7.82	-5.5%	7.64	5.66	35.0%	6.20	23.2%
ROUTINE CARE	4.06	2.82	44.2%	2.53	60.9%	3.13	2.82	11.2%	2.78	12.7%
SWING BED UNIT	14.27	11.64	22.5%	15.00	-4.9%	16.65	11.64	43.0%	12.86	29.5%
OBSERVATION DAYS										
ROUTINE CARE	27	28	-2.2%	40	-31.8%	174	244	-28.6%	259	-32.8%
GROSS REVENUE BY PAYER										
MEDICARE	29.7%	30.3%	-2.0%	31.1%	-4.5%	29.8%	30.3%	-1.7%	30.7%	-2.9%
MEDICARE MGT	7.1%	6.9%	2.9%	6.9%	2.9%	7.8%	6.9%	13.0%	5.7%	36.8%
MEDICAID/TENNCARE	22.3%	24.9%	-10.4%	23.6%	-5.5%	23.6%	24.9%	-5.2%	23.9%	-1.3%
COMMERCIAL PAY	30.2%	24.5%	23.3%	27.5%	9.8%	28.0%	24.5%	14.3%	28.1%	-0.4%
INDIGENT/SELF-PAY	9.3%	12.1%	-23.1%	9.3%	0.0%	9.6%	12.1%	-20.7%	10.3%	-6.8%
OTHER	1.4%	1.2%	16.7%	1.6%	-12.5%	1.2%	1.2%	0.0%	1.3%	-7.7%
DISCHARGES BY PAYER										
MEDICARE	27	19	41.3%	24	12.5%	185	169	9.6%	190	-2.6%
MEDICARE MGT	7	2	180.9%	4	75.0%	62	22	181.5%	36	72.2%
MEDICAID/TENNCARE	2	4	-51.8%	2	0.0%	20	37	-45.5%	17	17.6%
COMMERCIAL PAY	5	2	125.7%	3	66.7%	19	20	-3.0%	20	-5.0%
INDIGENT/SELF-PAY	0	2	-100.0%	0	N/A	3	21	-85.6%	5	-40.0%
OTHER	0	0	-100.0%	1	-100.0%	2	1	131.4%	1	100.0%
TOTAL	41	30	34.8%	34	20.6%	291	269	8.2%	269	8.2%
Bledsoe	494	477	3.5%	530	-6.8%	4,245	4,217	0.7%	4,196	1.2%
Sequatchie Valley	958	889	7.8%	898	6.7%	8,205	7,854	4.5%	7,809	5.1%
EMERGENCY ROOM VISITS	1,452	1,366	6.3%	1,428	1.7%	12,450	12,071	3.1%	12,005	3.7%

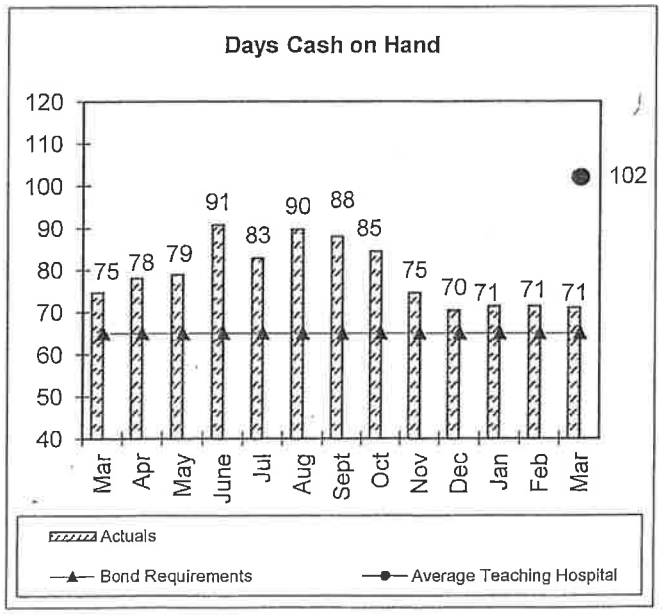
Erlanger Health System
Ratio Analysis
March 31, 2017

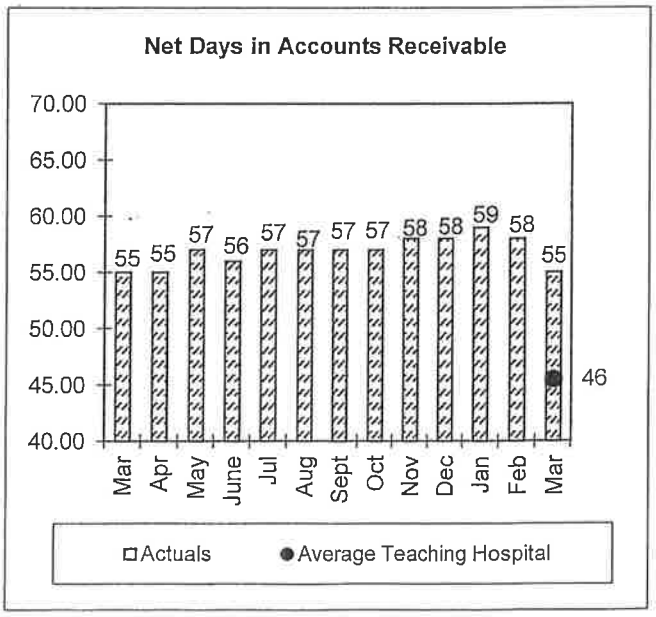




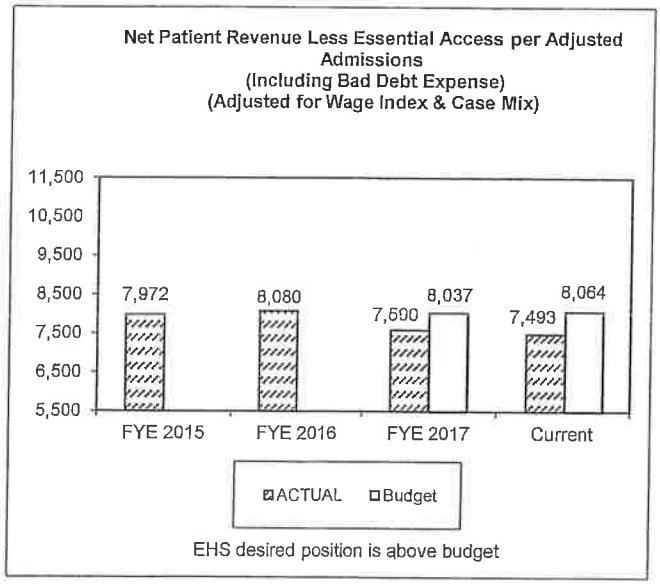


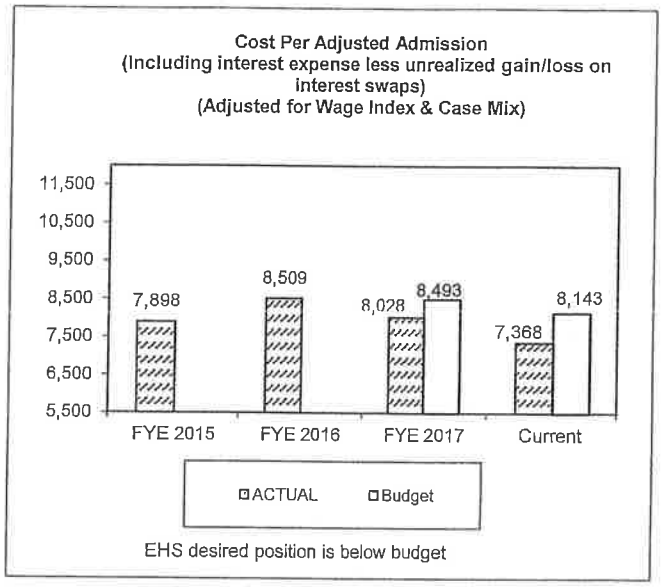


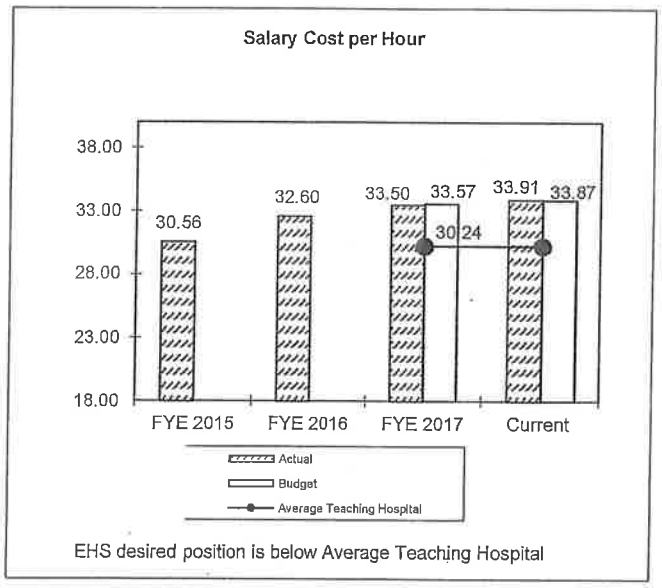


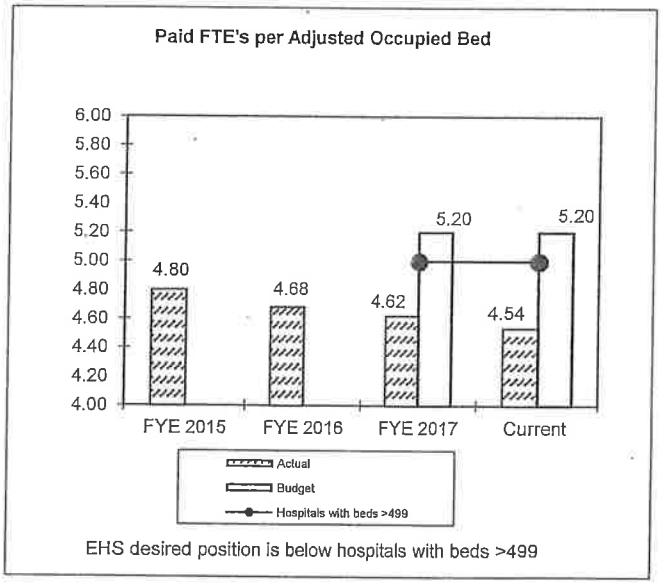


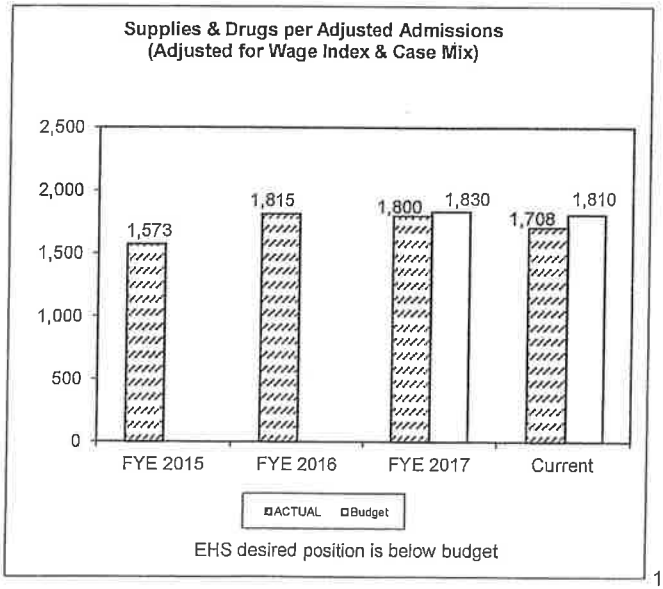
Erlanger Health System
Ratio Analysis
March 31, 2017

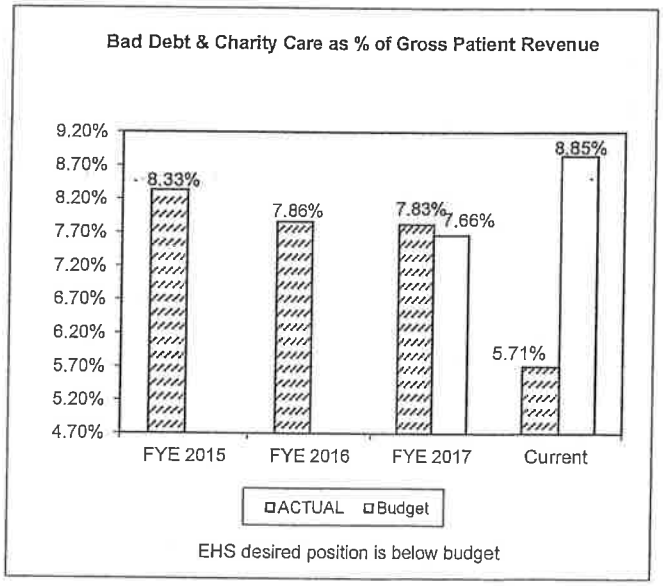












ERLANGER HEALTH SYSTEM
MARCH 2017

CURRENT MONTH
TENNCARE PAID CLAIMS & CHARITY LOSS
$5,946,410

YEAR TO DATE
TENNCARE PAID CLAIMS & CHARITY LOSS
$68,337,887

TOTAL YTD CORPORATE SOCIAL RESPONSIBILITY COSTS
$77,597,475

PATIENT #	DRG DESCRIPTION	ERLANGER COSTS	CASH RECEIVED	TENNCARE LOSS	CHARITY LOSS	TOTAL TENNCARE & CHARITY LOSS
#1	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOURS	52,231	23,392	28,839		28,839
#2	CORONARY BYPASS W CARDIAC CATH W MCC	57,338	30,496	26,842		26,842
#3	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	52,734	25,313	27,422		27,422
#4	SPINAL PROCEDURES W CC OR SPINAL NEUROSTIMULATORS	37,368	14,318	23,050		23,050
#5	MAJOR BLADDER PROCEDURES W CC	58,101	14,196	43,905		43,905
#6	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	31,437	6,781	24,656		24,656
#7	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	393,278	215,429	177,849		177,849
#8	G.I. HEMORRHAGE W CC	29,535	5,016	24,519		24,519
#9	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W MCC	46,492	7,524	38,968		38,968
#10	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	102,226	66,573	35,653		35,653
#11	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH W/O MCC	48,501	22,915	25,586		25,586
#12	TRAUMATIC STUPOR & COMA, COMA <1 HR W MCC	63,539	10,287	53,252		53,252
#13	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W MCC	73,029	22,104	50,926		50,926
#14	POISONING & TOXIC EFFECTS OF DRUGS W MCC	53,662	9,081	44,582		44,582
#16	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	52,081	20,881	31,200		31,200
#17	FOOT PROCEDURES W MCC	57,514	12,397	45,117		45,117
#18	FULL TERM NEONATE W MAJOR PROBLEMS	108,498	68,257	40,242		40,242
#19	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W/O CC/MCC	39,582	8,593	30,988		30,988
#20	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	41,721	22,434	19,287		19,287
#21	PULMONARY EMBOLISM W MCC	52,764	6,493	46,271		46,271
#22	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON W MCC	108,530	19,520	89,010		89,010
#23	CESAREAN SECTION W CC/MCC	76,476	18,490	57,986		57,986
#24	REVISION OF HIP OR KNEE REPLACEMENT W CC	46,034	17,671	28,363		28,363
#25	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOURS	56,181	19,341	36,840		36,840
#26	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	58,552	25,018	33,533		33,533
#27	ECMO OR TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	125,028	104,357	20,671		20,671
#28	PREMATURITY W/O MAJOR PROBLEMS	76,232	26,914	49,318		49,318
#29	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W MCC	53,374	21,779	31,595		31,595
#30	PERITONEAL ADHESIOLYSIS W MCC	37,617	18,184	19,433		19,433
#31	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	113,153	80,518	32,635		32,635
#32	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W CC	30,887	9,595	21,291		21,291
	ALL OTHER TENNCARE PAID AND CHARITY W/O IN MARCH 2017	7,855,401	3,168,820	398,148	4,288,433	4,686,581
	TOTAL MARCH 2017	10,089,095	4,142,685	1,657,978	4,288,433	5,946,410
	YTD TENNCARE AND CHARITY (JULY 2016 - MARCH 2017)	102,901,889	34,564,002	19,892,565	48,445,322	68,337,887
	BAD DEBT, OUT OF STATE MEDICAID & OUTSTANDING TENNCARE COSTS					9,259,588
	TOTAL CORPORATE SOCIAL RESPONSIBILITY COSTS					77,597,475

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY (d/b/a Erlanger Health System and Discretely Presented Component Units)

Audited Combined Financial Statements

Year Ended June 30, 2016

PYA

Certified Public Accountants

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY
(d/b/a Erlanger Health System)

Audited Combined Financial Statements

Years Ended June 30, 2016

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Audited Combined Financial Statements

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Schedule of Actuarial Contributions....46

PERSHING YOAKLEY & ASSOCIATES, P.C.
One Cherokee Mills, 2220 Sutherland Avenue
Knoxville, TN 37919
p: (865) 673-0844 | f: (865) 673-0173
www.pyapc.com

INDEPENDENT AUDITOR'S REPORT

To the Board of Trustees of
Chattanooga-Hamilton County Hospital Authority
(d/b/a Erlanger Health System):

Report on the Combined Financial Statements

We have audited the accompanying combined financial statements of the business-type activities of Chattanooga-Hamilton County Hospital Authority d/b/a Erlanger Health System (the Primary Health System) and its discretely presented component units, as of and for the year ended June 30, 2016, and the related notes to the combined financial statements, which collectively comprise the Primary Health System's basic combined financial statements as listed in the table of contents.

Management's Responsibility for the Combined Financial Statements

Management is responsible for the preparation and fair presentation of these combined financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combined financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these combined financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combined financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combined financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the combined financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Primary Health System's preparation and fair presentation of the combined financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Primary Health System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and

the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combined financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the discretely presented component units of the Primary Health System as of June 30, 2016, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information: Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (shown on pages 3 through 10), the Schedule of Changes in Net Pension Liability and Related Ratios (shown on page 45) and the Schedule of Actuarial Contributions (shown on page 46) be presented to supplement the basic combined financial statements. Such information, although not a part of the basic combined financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic combined financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combined financial statements, and other knowledge we obtained during our audit of the basic combined financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Pershing Yoakley & Associates PC

Knoxville, Tennessee
September 12, 2016

Audited Combined Financial Statements

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY
(d/b/a Erlanger Health System)

Combined Statements of Net Position

	June 30, 2016	
	Primary Health System	*Discretely Presented Component Units*
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 90,387,026	$ 3,393,643
Temporary investments	2,743,655	5,450,986
Patient accounts receivable, net	123,074,843	1,775,904
Estimated amounts due from third party payers	8,000,119	-
Due from other governments	254,856	496,216
Inventories	16,027,986	1,258,727
Receivable from Walker County, Georgia	8,705,000	-
Other current assets	19,756,209	1,435,555
TOTAL CURRENT ASSETS	268,949,694	13,811,031
NET PROPERTY, PLANT AND EQUIPMENT	186,065,992	7,992,444
LONG-TERM INVESTMENTS, for working capital	850,871	-
ASSETS LIMITED AS TO USE	157,641,228	-
OTHER ASSETS:		
Prepaid bond insurance	721,060	-
Equity in discretely presented component units	15,592,240	-
Other assets	12,820	509,405
TOTAL OTHER ASSETS	16,326,120	509,405
TOTAL ASSETS	629,833,905	22,312,880
DEFERRED OUTFLOWS OF RESOURCES		
Deferred pension adjustments	13,312,023	-
Deferred amounts from debt refunding	1,580,780	-
TOTAL DEFERRED OUTFLOWS OF RESOURCES	14,892,803	-
COMBINED ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	$ 644,726,708	$ 22,312,880

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY
(d/b/a Erlanger Health System)

Combined Statements of Net Position - Continued

	June 30, 2016	
	Primary Health System	*Discretely Presented Component Units*
LIABILITIES		
CURRENT LIABILITIES:		
Accounts payable and accrued expenses	$ 67,607,554	$ 1,470,211
Accrued salaries and related liabilities	28,370,165	1,161,977
Due to other governments	496,216	254,856
Current portion of long-term debt and capital leases	4,726,161	2,513,748
Other current liabilities	3,727,483	297,008
TOTAL CURRENT LIABILITIES	104,927,579	5,697,800
LONG-TERM DEBT AND CAPITAL LEASE OBLIGATIONS	208,003,442	3,606
NET PENSION LIABILITY	66,838,386	-
OTHER LONG-TERM LIABILITIES	25,532,353	310,791
TOTAL LIABILITIES	405,301,760	6,012,197
DEFERRED INFLOWS OF RESOURCES		
Deferred pension adjustments	511,392	-
Deferred gain from sale-leaseback	3,006,213	-
TOTAL DEFERRED INFLOWS OF RESOURCES	3,517,605	-
NET POSITION:		
Unrestricted	215,326,506	10,776,642
Net investment in capital assets	17,320,388	5,524,041
Restricted expendable:		
Health plan trust	1,633,882	-
Donor restricted	1,626,567	-
TOTAL NET POSITION	235,907,343	16,300,683
COMBINED LIABILITES, DEFERRED OUTFLOWS OF RESOURCES AND NET POSITION	$ 644,726,708	$ 22,312,880

See notes to combined financial statements.

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY
(d/b/a Erlanger Health System)

Combined Statements of Changes in Net Position

	Year Ended June 30, 2016	
	Primary Health System	*Discretely Presented Component Units*
OPERATING REVENUE:		
Charges for services:		
Net patient service revenue	$ 778,002,400	$ 11,463,849
Other revenue	14,980,073	21,808,250
TOTAL OPERATING REVENUE	792,982,473	33,272,099
OPERATING EXPENSES:		
Salaries, wages and benefits	406,325,308	14,117,579
Supplies and other expenses	170,844,193	12,861,808
Purchased services	159,746,508	2,761,900
Insurance and taxes	3,195,380	343,725
Depreciation	24,912,090	1,240,327
TOTAL OPERATING EXPENSES	765,023,479	31,325,339
OPERATING INCOME	27,958,994	1,946,760
NONOPERATING REVENUE (EXPENSES):		
Gain on disposal of assets	877,611	5,592
Interest and investment income, net of fees	1,998,866	81,385
Net gain from discretely presented component units	1,114,224	-
Interest expense	(6,546,731)	(126,948)
Provision for income taxes	-	(553,540)
NET NONOPERATING REVENUE (EXPENSES)	(2,556,030)	(593,511)
INCOME BEFORE CONTRIBUTIONS	25,402,964	1,353,249
Operating distributions	(429,104)	(178,000)
Capital contributions	221,306	-
CHANGE IN NET POSITION	25,195,166	1,175,249
NET POSITION AT BEGINNING OF YEAR	210,712,177	15,125,434
NET POSITION AT END OF YEAR	$ 235,907,343	$ 16,300,683

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY
(d/b/a Erlanger Health System)

Combined Statements of Changes in Net Position

	Year Ended June 30, 2016	
	Primary Health System	*Discretely Presented Component Units*
OPERATING REVENUE:		
Charges for services:		
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NET POSITION AT END OF YEAR	$ 235,907,343	$ 16,300,683

See notes to combined financial statements.

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY
(d/b/a Erlanger Health System)

Combined Statement of Cash Flows

Primary Health System	*Year Ended June 30, 2016*
CASH FLOWS FROM OPERATING ACTIVITIES:	
Receipts from third-party payers and patients	$ 748,652,990
Payments to vendors and others for supplies, purchased services, and other expenses	(324,781,774)
Payments to and on behalf of employees	(403,108,228)
Other receipts	16,894,391
NET CASH PROVIDED BY OPERATING ACTIVITIES	37,657,379
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:	
Contributions to other organizations	(429,104)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:	
Acquisition and construction of capital assets, net	(65,714,585)
Proceeds from sale of assets	749,604
Principal paid on bonds, capital lease obligations and other	(4,863,355)
Interest payments on long-term debt	(9,582,409)
Capital contributions	221,306
NET CASH USED IN CAPITAL AND RELATED FINANCING ACTIVITIES	(79,189,439)
CASH FLOWS FROM INVESTING ACTIVITIES:	
Interest, dividends, and net realized gains (losses) on investments	1,998,866
Change in temporary and long-term investments for working capital	(11,389)
Payments received on note receivable	8,840,000
Net cash transferred from assets limited as to use	28,878,211
NET CASHPROVIDED BY INVESTING ACTIVITIES	39,705,688
INCREASE IN CASH AND CASH EQUIVALENTS	(2,255,476)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	92,642,502
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 90,387,026

See notes to combined financial statements.

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY
(d/b/a Erlanger Health System)

Combined Statement of Cash Flows - Continued

Primary Health System	*Year Ended June 30, 2016*
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:	
Operating income	$ 27,958,994
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation	24,912,090
Pension adjustments	5,821,326
Gain on disposal of assets	(464,756)
Changes in assets and liabilities:	
Patient accounts receivable, net	(29,287,384)
Estimated amounts due from third party payers, net	(2,600,248)
Inventories and other assets	(10,909,394)
Accounts payable and accrued expenses	17,139,289
Accrued salaries and related liabilities	9,038,406
Other current and long-term liabilities	(3,950,944)
NET CASH PROVIDED BY OPERATING ACTIVITIES	$ 37,657,379

See notes to combined financial statements.

PRINTED: 05/22/2017
FORM APPROVED

Division of Health Care Facilities

STATEMENT OF DEFICIENCIES AND PLAN OF CORRECTION	(X1) PROVIDER/SUPPLIER/CLIA IDENTIFICATION NUMBER:	(X2) MULTIPLE CONSTRUCTION A. BUILDING: B. WING	(X3) DATE SURVEY COMPLETED
	TNP5315		05/17/2017

NAME OF PROVIDER OR SUPPLIER: ERLANGER BLEDSOE HOSPITAL

STREET ADDRESS, CITY, STATE, ZIP CODE: 71 WHEELERTOWN AVENUE, PIKEVILLE, TN 37367

(X4) ID PREFIX TAG	SUMMARY STATEMENT OF DEFICIENCIES (EACH DEFICIENCY MUST BE PRECEDED BY FULL REGULATORY OR LSC IDENTIFYING INFORMATION)	ID PREFIX TAG	PROVIDER'S PLAN OF CORRECTION (EACH CORRECTIVE ACTION SHOULD BE CROSS-REFERENCED TO THE APPROPRIATE DEFICIENCY)	(X5) COMPLETE DATE
P 001	1200-8-30 Initial During a licensure survey completed on 5/17/17 at Erlanger Bledsoe Hospital, no deficiencies were cited under Chapter 1200-8-30, Standards for Pediatric Emergency Care Facilities.	P 001		

Division of Health Care Facilities

LABORATORY DIRECTOR'S OR PROVIDER/SUPPLIER REPRESENTATIVE'S SIGNATURE | TITLE | (X6) DATE

May 24, 2017

Ms. Stephanie Boynton, Administrator
Erlanger Bledsoe Hospital
71 Wheelertown Avenue
Pikeville TN 37367

RE: TNP5315

Dear Ms. Boynton:

The East Tennessee Regional Office conducted a licensure survey at your facility on May 17, 2017. As a result of the survey, no deficiencies were cited under Standards of Pediatric Emergency Care (1200-8-30).

If our office may be of assistance to you, please feel free to call (865) 594-9396.

Sincerely,

Tamra Turberville/cw

Tamra Turberville, RN, MSN
Public Health Regional Regulatory Program Manger

TT: cw

Division of Health Licensure and Regulation • 7175 Strawberry Plains Pike • Suite 103 •
Knoxville, TN 37914 • Tel: 865-594-9396 • Fax: 865-594-5739 • tn.gov/health

Department of Health & Human Services
Centers for Medicare & Medicaid Services
61 Forsyth Street, SW, Suite 4T20
Atlanta, Georgia 30303-8909

June 15, 2017

Stephanie Boynton, CEO
Erlanger Bledsoe Hospital
71 Wheelertown Avenue
Pikeville, TN 37367

Dear Mrs. Boynton:

I am pleased to inform you that as a result of the validation survey conducted on May 17, 2017, by the Tennessee State Agency, your facility was found in compliance with the Medicare requirements to participate as a Hospital and will continue to be deemed to meet applicable Medicare requirements based upon accreditation by the Joint Commission.

Enclosed is a listing of the standard level deficiencies and life safety deficiencies found by the Tennessee State Agency. Since your hospital is in compliance, you do not have to submit a plan for correcting any of the Medicare deficiencies cited. However, you may wish to submit a plan of correction to include with any public disclosures. The plan of correction can be submitted to the address above or faxed to 443-380-5912. You may also email to jacqueline.whitlock@cms.hhs.gov. If you have any questions, please contact Jackie Whitlock at (404) 562- 7437.

Sincerely,

J. Whitlock
for Sandra M. Pace
Associate Consortium Administrator
Division of Survey & Certification

cc: Joint Commission
Tennessee State Agency

Description	Section / Item
Statement Of Deficiencies & Plan Of Correction	B-III-4

Supplemental #1
(COPY)

Chattanooga-Hamilton Co Hospital Authority dba Erlanger Sequatchie Valley Regional Hospital (Dunlap)

CN1709-027

SEP 22 '17 AM 10:06

SUPPLEMENTAL #1
September 22, 2017
10:08 am

SUPPLEMENTAL INFORMATION

Chattanooga-Hamilton County Hospital Authority

D / B / A

Erlanger Sequatchie Valley Regional Hospital

Application To Relocate & Replace Existing

Inpatient Acute Medical / Surgical Services From

Erlanger Bledsoe Hospital
(Pikeville, Bledsoe County, TN)

To

Erlanger Sequatchie Valley Regional Hospital
(Dunlap, Sequatchie County, TN)

Application Number CN1709-027

ERLANGER HEALTH SYSTEM
Chattanooga, Tennessee

SUPPLEMENTAL #1
September 22, 2017
10:08 am

Supplemental Responses To Questions Of The Tennessee Health Services & Development Agency

1.) **Section A, Executive Summary, A - Overview.**

On page 7 the applicant references construction cost of $19,958,999. However, the construction cost listed in the Project Cost Chart is 19,959,500. Please clarify.

What was the original licensed bed capacity of Erlanger Bledsoe Hospital?

Please indicate what is planned for the existing critical access hospital in Pikeville (Bledsoe County) once the structure is vacated.

Response

The construction cost shown on page 7 is a typographical error, the amount shown on the *Project Cost Chart* is correct.

The original licensed bed capacity of *Erlanger Bledsoe Hospital* was thirty-two (32) beds.

If these CON applications are approved, when the facility for *Erlanger Bledsoe Hospital* is vacated, it is anticipated that the premises will renovated and adapted for use by the *Bledsoe County Nursing Home*, which is currently attached to the hospital facility.

2.) **Section A, 5-Executive Summary, B-Rationale For Approval, 1-Need.**

Please provide a detailed narrative with calculations displayed that explains how the gross bed need was calculated, why patient days based on 1-4 days length of stay (LOS), was utilized, how the gross bed need based on LOS of 1-4 days was calculated, how market share adjustment of 50% was selected, and how the estimated beds using the EBH Census Estimate was calculated.

Response

The average length of stay for critical access hospitals is set to a maximum by CMS, at 4 days. Therefore, the inpatient hospital discharges from the service area which comprise LOS between 1-4 days is the target patient population to be served by this hospital.

The market share assumption of 50% represents an estimate which is assumed. We agreed that we should not assume a market share rate any greater than 50%, however, there is a real possibility that market share could be higher.

As an illustration for how the gross bed need was calculated, for 2014, the total patient days for the service area was 27,521. This was divided by 365 days in a year, to determine the average number of beds to be occupied daily. As per note 2 in the table … in 2014, 9,664 patient days were explained in which patients had an LOS 1-4, which is 35.1% of the total number of 27,521 patient days for the service area (9,664 / 27,521 = 35.1%). The 9,664 patient days for LOS 1-4 was multiplied by the market share assumption of 50% to obtain 4,830 patient days (9,664 x 50% = 4,830).

For the swing bed adjustment, in 2015 the total patient days for swing beds was 61%, although we assumed only 35% for this need model. Therefore, the number of patient days is estimated at 1,691 (4,830 x 35% = 1,691). This yields a total estimated patient days for 2014 of 6,521 (4,830 + 1,691 = 6,521). The total estimated patient days are then divided by 365 days in a year, to yield the estimated beds occupied each day at 17.9 (6,521 / 365 = 17.9). Then the 17.9 estimated beds occupied was divided by .80 to adjust for 80% occupancy, which results in a final adjusted bed need estimate of 22.3 acute care beds (17.9 / .80 = 22.3).

The methodology outlined is applicable to all years in the table in the CON application.

3.) Section A, Project Details, Item B.

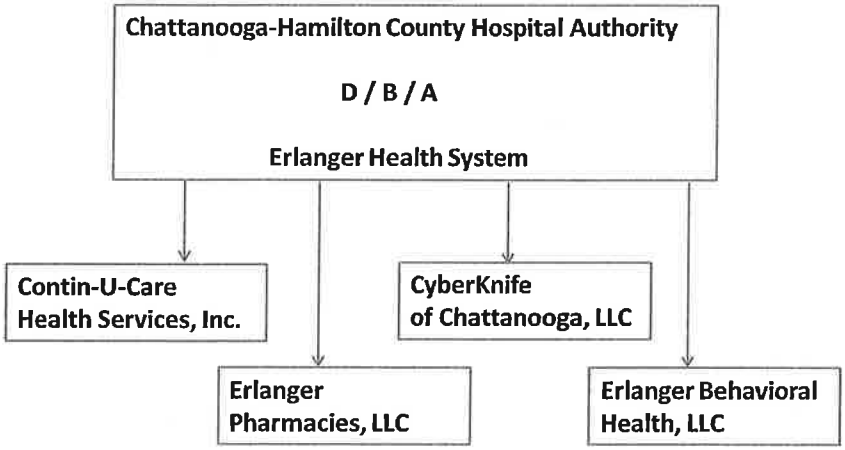
Please describe the existing ownership structure of the applicant, including an ownership structure organizational chart.

Response

The *Chattanooga-Hamilton County Hospital Authority* D/B/A *Erlanger Health System*, is a sub-division of the State of Tennessee. It is a governmental unit. The hospitals which comprise Erlanger Health System are all part of the hospital authority, they operate as revenue center components of the hospital authority.

The organizational structure is comprised of one (1) legal entity, the hospital authority, which has an ownership interest in the following legal entities. These other legal entities are Contin-U-Care Health Services, Inc. (home health), Erlanger Pharmacies, LLC, CyberKnife Of Chattanooga, LLC, and Erlanger Behavioral Health, LLC.

The ownership structure organizational chart is below.



4.) Section A, Project Details, Item 6.B-2, Floor Plan.

Please provide a revised floor plan which includes legible labeling of patient care rooms (noting private or semi-private), ancillary areas, equipment areas, etc.

Response

As requested, a floor plan is attached to this supplemental information.

5.) Section A, Project Details, Item 10(c), Bed Complement

Data Chart.

The applicant lists two outstanding Certificate of Need projects. However, the outstanding Certificate of Need projects listed are those of Erlanger Medical Center that has common ownership. Please submit a replacement page 17 listing only those Certificate of Need projects for the applicant.

Response

As requested, the CON's not related to Erlanger Bledsoe Hospital have been removed from the list, and a replacement page 20 is attached to this CON application.

6.) Section A, Project Details, Item 6.A (Legal Interest In The Site).

The option to lease agreement between Sequatchie County and Erlanger Health System is noted. Please provide a deed that confirms Sequatchie County has control of the proposed site.

Response

As requested, a copy of the deed for the property is attached to this supplemental information.

7.) Section B, Need, Item A (Specific Service Criteria-MRI).

Please provide a detailed narrative with calculations that demonstrates how the three county service area will generate 5,106 MRI procedures in 2022 and how the projected utilization of 2,553 MRI procedures for the hospital by 2022 was determined.

Response

The service area MRI total procedures was calculated using the Agency's data for MRI utilization for 2015 … *Number Of Procedures By Patient Destination - 2015*. For Bledsoe County there were 924, Sequatchie County 1,374, and Grundy County 1,284 … for a service area total of 3,582.

This yields a use rate of .084553 (3,582 / 42,364 = .084553).

Knowing that MRI utilization is increasing at a rate faster than other healthcare services, we adjusted the use rate by 30% to account for growth in utilization of this technology (.084553 x 1.30 = .109918). The adjustment to the use rate is based primarily on research which shows that over a 10 year period, MRI utilization had increased by 300%, or roughly 30% per year (copy of article attached).(1) We adopted a rate of only 30% to allow for growth in a rural service area. In 2020, the estimated 4,806 procedures is the result (43,936 x .109918 = 4,806). These same calculations are applicable to 2021 and 2022.

For the MRI unit to be located at *Erlanger Sequatchie Valley Regional Hospital*, the market share assumption is 50%, which is the same as the market share assumption for the inpatient bed need calculation. Thus, a projected utilization of 2,523 procedures in 2020, 2,539 in 2021, and 2,553 in 2021.

8.) Section B, Need, Item B.

Please identify the source of the county health rankings.

Response

The county health rankings were obtained from the internet site for County Health Rankings & Roadmaps, which is a program of the *Robert Wood Johnson Foundation*. Following is the web address …

http://www.countyhealthrankings.org/

9.) Section B, Need, Item C.

Please complete the following chart.

PATIENT ORIGIN FOR ERLANGER BLEDSOE/ SEQUATCHIE VALLEY REGIONAL HOSPITAL

Utilization Data	Bledsoe	Grundy	Sequatchie	Service	Other	Total

1 Smith-Bindman, Rebecca. *Rising Use Of Diagnostic Medical Imaging In A Large Integrated Health System*. Health Affairs, 2008 Nov-Dec, pp. 1491-1502.

	County	County	County	Area	Area	
2014 IP Admits						
2014 % of Total						
2015 IP Admits						
2015 % of Total						
2016 IP Admits						
2016 % of Total						
Year 1 IP Admits						
Year 1 % of Total						
Year 2 IP Admits						
Year 2 % of Total						

Response

As requested, the chart appears below.

Patient Origin For Erlanger Bledsoe / Sequatchie Valley Regional Hospital

	Bledsoe	Grundy	Sequatchie	Svc. Area	Other	Total
2014 - I/P Admits	282		39	321	20	341
2014 - % Of Total	82.7%	0.0%	11.4%	94.1%	5.9%	100.0%
2014 - I/P Admits	314	1	32	347	32	379
2014 - % Of Total	82.8%	0.3%	8.4%	91.6%	8.4%	100.0%
2014 - I/P Admits	261	3	47	311	29	340
2014 - % Of Total	76.8%	0.9%	13.8%	91.5%	8.5%	100.0%
Year 1 - I/P Admits	300	100	375	775	67	842
Year 1 - % Of Total	35.6%	11.9%	44.5%	92.0%	8.0%	100.0%
Year 2 - I/P Admits	310	68	387	765	94	859
Year 2 - % Of Total	36.1%	7.9%	45.1%	89.1%	10.9%	100.0%

10.) Section B, Need, Item D (Service Area Demographics).

Please complete the following chart.

Demographic Data	Bledsoe County	Grundy County	Sequatchie County	Service Area	State of TN Total
65 + Pop. - 2017					
65+ Pop. - 2021					
65+ Population % Change (2017-2021)					
65+ Population % of Total Population					

Response

As requested, the chart appears below.

SUPPLEMENTAL #1
September 22, 2017
10:08 am

Demographic Data - Age 65 +

	Bledsoe	Grundy	Sequatchie	Svc. Area	Tennessee Total
Pop. Age 65 + (2017)	2,450	2,845	3,055	8,350	1,078,446
Pop. Age 65 + (2021)	2,720	3,070	3,513	9,303	1,227,838
65 + Pop. % Change (2017-2021)	11.0%	7.9%	15.0%	11.4%	13.9%
66 + Pop. % Of Total Population	20.8%	23.3%	21.9%	22.0%	17.9%

11.) Section B, Need, Item F.

Please complete the following charts.

Historical and Projected Inpatient Utilization

Bed Type	Year 2014	Year 2015	Year 2016	Year 1	Year 2
Acute/Swing					
Beds					
Acute Admissions					
Swing Admissions					
Total Admissions					
Acute Average Daily Census (ADC)					
Swing ADC					
Total ADC					
Acute Average Length of Stay (ALOS)					
Swing ALOS					
Total ALOS					
Acute %Occupancy					
Swing %Occupancy					
Total %Occupancy					

Projected Surgical Cases

	No. of Rooms	Year 1 IP Cases	Year 1 OP Cases	Year 1 Total Cases	Year IP Cases	Year 2 OP Cases	Year 2 Total Cases
Operating Rooms							
Procedure Rooms							
Total Surgical Suite							

Projected Imaging Scans

Department	Year 1 Scans	Year 2 Scans
Magnetic Resonance Imaging (MRI)		

Erlanger Sequatchie Valley and Satellite ED Historical and Projected Utilization

	Actual			Projected		
Year	2014	2015	2016	Yr. 1	Yr.2	Yr. 5
Main Campus Visits						
Main Campus Rooms						
Main Campus Visits/ Room						
Satellite Visits						
Satellite Rooms						
Satellite Visits Per Room						
Total Visits						
Total Rooms						
Total Visits Per Room						

Please provide details of the methodology, data sources, assumptions, and rationale to project utilization in Year One and Year Two of all the above charts. Include in the discussion how the applicant projected inpatient utilization that has not attained 30% occupancy in the last three years at the Bledsoe County location will increase to over 60% occupancy in the Sequatchie County location.

Response

As requested, the charts appear below.

SUPPLEMENTAL #1
September 22, 2017
10:08 am

Hisotrical & Projected Inpatient Utilization

	2014	2015	2016	Year 1	Year 2
Beds	25	25	25	25	25
Acute Admissions	217	293	229	617	629
Swing Admissions	79	116	115	225	230
Total Admissions	296	409	344	842	859
Acute Average Daily Census	1.54	2.15	1.79	5.49	5.59
Swing ADC	2.67	3.35	4.55	9.54	9.73
Total ADC	4.21	5.50	6.34	15.03	15.32
Acute Average Length Of Stay	2.6	2.7	2.8	3.2	3.2
Swing ALOS	12.3	10.5	14.5	15.5	15.4
Total ALOS	5.2	4.9	6.7	6.5	6.5
Acute Occupancy %	6.1%	8.6%	7.1%	21.9%	22.4%
Swing Occupancy %	10.7%	13.4%	18.2%	38.2%	38.9%
Total % Occupancy	16.8%	22.0%	25.4%	60.1%	61.2%

Projected Surgical Cases

	No. Of Rooms	Yr 1 - I/P	Yr 1 - O/P	Yr 1 - Total	Yr 2 - I/P	Yr 2 - O/P	Yr 2 - Total
Operating Rooms	2	-	273	273	-	312	312
Procedure Rooms	1	-	91	91	-	104	104
Total - Surgical Suite	3	-	364	364	-	416	416

Projected Imaging Scans

	Yr 1 Scans	Yr 2 Scans
Magnetic Resonance Imaging (MRI)	2,523	2,539

Erlanger Squatchie Valley & Satellite ED -- Historical & Projected Utilization

	========== Actual ==========			========= Projected =========		
	2014	2015	2016	Year 1	Year 2	Year 5
Main Campus Visits	6,105	5,341	5,546	11,000	11,220	11,907
Main Campus Rooms	5	5	5	9	9	9
Main Campus Visits / Room	1,221.0	1,068.2	1,109.2	1,222.2	1,246.7	1,323.0
Satellite Visits	3,842	9,581	10,229	5,600	5,678	5,918
Satellite Rooms	5	5	5	7	7	7
Satellite Visits Per Room	768.4	1,916.2	2,045.8	800.0	811.1	845.4
Total Visits	9,947	14,922	15,775	16,600	16,898	17,825
Total Rooms	10	10	10	16	16	16
Total Visits Per Room	994.7	1,492.2	1,577.5	1,037.5	1,056.1	1,114.1

12.) Section B, Economic Feasibility, Item A (Project Cost Chart).

The Project Cost Chart should reflect the cost of the project to the applicant. It appears that much of the cost in this chart is the cost to Sequatchie County. Since the applicant is leasing the hospital from Sequatchie County, the lease expense is what should be considered in determining facility cost. Below is the Agency rule on project cost for guidance:

0720—9—.01 DEFINITIONS. The following terms shall have the following meanings.

(4) "Capital expenditure"
(c) Lease, loan, or gift. In calculating the value of a lease, loan, or gift, the "cost" is the fair market value of the above-described expenditures. In the case of a lease, the cost is the fair market value of the lease or the total amount of the lease payment, whichever is greater.

If necessary, please make the appropriate changes and submit a revised Project Costs Chart.

Response

The hospital lease will be a "turn key" arrangement. In other words, all of the equipment (including MRI, CT, etc.), furniture and fixtures will be included in the lease payment to Sequatchie County. The initial lease term will be for ten (10) years. The monthly lease payment to Sequatchie County will $146,204, for a total of $17.54 million over the initial lease term. This is less than the total project cost of $32.65 million shown on the *Project Cost Chart*. As per the rule cited in the question, the chart should reflect the greater amount. Therefore, the *Project Cost Chart* is unchanged.

13.) Section B, Economic Feasibility, Item B (Funding).

The applicant should discuss how it will fund the project and provide a breakdown between leased items and purchased items.

Response

The hospital lease will be a "turn key" arrangement. All of the equipment (including MRI, CT, etc.), furniture and fixtures will be included in the lease payment to

Sequatchie County. As such, the hospital will not be "purchasing" anything, and will be "leasing" everything from Sequatchie County.

14.) Section B, Economic Feasibility, Item C (Historical Data Chart) And Item D (Projected Data Chart).

For both the Historical Data Chart and the Projected Data Chart, please explain what the differences are between the Total Facility Chart and the Project Only Chart.

Response

For the *Historical Data Charts*, the "total facility" chart is for *Erlanger Bledsoe Hospital* and the satellite ED in Dunlap, Tennessee; and the "project only" chart is for *Erlanger Bledsoe Hospital*, main campus only.

For the *Projected Data Charts*, the "total facility" chart is for *Erlanger Sequatchie Valley Regional Hospital* and the satellite ED in Pikeville; and the "project only" chart is for *Erlanger Sequatchie Valley Regional Hospital*, satellite ED only.

15.) Section B, Economic Feasibility, Item E (Average Gross Charge, Average Deduction From Operating Revenue, and Average Net Charge).

The table on page 94 appears to be incorrect. Please complete the table for the gross charge, deduction from revenue, and average net charge from the project's Historical and Projected Data chart and submit a replacement page 94.

Response

As requested, the revised table appears below.

	Previous Year	*Current Year*	*Year 1*	*Year 2*	*% Change -- Current Year To Year 2*
Gross Charge (Gross Operating Revenue / Utilization Data)	69,164	78,072	51,876	54,686	-20.9%
Deduction From Revenue (Total Deductions / Utilization Data)	47,425	56,641	35,497	37,943	-20.0%
Average Net Charge (Net Oper. Revenue / Utilization Data)	21,739	21,431	16,379	16,743	-22.9%

16.) Section B, Orderly Development, Item 4.

It is noted the hospital license provided is out of date. Please provide a copy of the current license.

It is noted the applicant is Joint Commission accredited. Please provide documentation of the current accreditation and a copy of the latest survey.

Response

The license for *Erlanger Bledsoe Hospital* for 2017-2018 is attached to this supplemental information.

A copy of the letter from *The Joint Commission* documenting current accreditation for *Erlanger Bledsoe Hospital*, is attached to this supplemental information. Also, a copy of the survey report is attached to this supplemental information.

17.) Section B, Quality Measures.

Please discuss the applicant's commitment to the proposal in meeting appropriate quality standards by addressing each of the following factors:

(a) Whether the applicant commits to maintaining an actual payor mix that is comparable to the payor mix projected in its CON application, particularly as it relates to Medicare, TennCare/Medicaid, Charity Care, and the Medically Indigent;

(b) Whether the applicant commits to maintaining staffing comparable to the staffing chart presented in its CON application;

(c) Whether the applicant will obtain and maintain all applicable state licenses in good standing;

(d) Whether the applicant will obtain and maintain TennCare and Medicare certification(s), if participation in such programs was indicated in the application;

(e) Whether an existing healthcare institution applying for a CON has maintained substantial compliance with applicable federal and state regulations for the three years prior to the CON application. In the event of non-compliance, the nature of non-compliance and corrective action shall be considered;

(f) Whether an existing health care institution applying for a CON has been decertified within the prior three years. This provision shall not apply if a new, unrelated owner applies for a CON related to a previously decertified facility;

(g) Whether the applicant will participate, within 2 years of implementation of the project, in self-assessment and external peer assessment processes used by health care organizations to accurately assess their level of performance in relation to established standards and to implement ways to continuously improve.

a. This may include accreditation by any organization approved by Center for Medicare and Medicaid Services (CMS) and other nationally recognized programs. The Joint Commission or its successor would be acceptable if applicable. Other acceptable organizations may include, but are not limited to, the following:

American College of Radiology for Positron Emission Tomography, Magnetic Resonance Imaging and Outpatient Diagnostic Center projects.

Response

(a) The applicant commits to maintaining a payor mix consistent with that detailed in the application, as it relates to Medicare, TennCare/Medicaid, Charity Care, and the Medically Indigent.

(b) The applicant commits to maintaining staffing comparable to the staffing chart presented in the CON application.

(c) The applicant will obtain and maintain all

applicable state licenses in good standing.

(d) The applicant will obtain and maintain TennCare and Medicare certifications.

(e) The applicant has maintained substantial compliance with applicable federal and state regulation for the three years prior to the CON application.

(f) The applicant has not been decertified within the prior three years.

(g) The applicant will participate, within 2 years of implementation of the project, in self-assessment and external peer assessment processes used by health care organizations to accurately assess its level of performance in relation to established standards and to implement ways to continuously improve.

18.) Proof Of Publication.

Please submit a copy of the full page of the newspaper in which the notice of affidavit which is supplied by the newspaper as proof of the publication of the letter of intent.

Response

The *Affidavit Of Publication* is attached to this supplemental information.

SEP 22 '17 AM 10:05

SUPPLEMENTAL #1
September 22, 2017
10:08 am

A F F I D A V I T

STATE OF TENNESSEE |
|
COUNTY OF HAMILTON |

NAME OF FACILITY Erlanger Sequatchie Valley Regional Hospital

I, Joseph M. Winick, after first being duly sworn, State under oath that I am the applicant named in this Certificate of Need application or the lawful agent thereof, that I have reviewed all of the supplemental information submitted herewith, and that it is true, accurate, and complete.

SIGNATURE

SWORN to and subscribed before me this 21 of September (Month), 2017 (Year), a Notary Public in and for the State of Tennessee, County of Hamilton.

SHELIA HALL
STATE OF TENNESSEE NOTARY PUBLIC
HAMILTON COUNTY

Shelia Hall
NOTARY PUBLIC

My commission expires June 9 (Month / Day), 2018.

SUPPLEMENTAL #1
September 22, 2017
10:08 am

June 22, 2017

Re: # 7809
CCN: #441306
Program: Critical Access Hospital
Accreditation Expiration Date: March 30, 2020

Kevin M. Spiegel
President and CEO
Chattanooga Hamilton County Hospital Authority
975 East Third Street
Chattanooga, Tennessee 37403

Dear Mr. Spiegel:

This letter confirms that your March 27, 2017 - March 29, 2017 unannounced full resurvey was conducted for the purposes of assessing compliance with the Medicare conditions for critical access hospitals, including your swing bed service, through The Joint Commission's deemed status survey process.

Based upon the submission of your evidence of standards compliance on June 15, 2017, the Joint Commission is granting your organization an accreditation decision of Accredited with an effective date of March 30, 2017.

The Joint Commission is also recommending your organization for continued Medicare certification effective March 30, 2017. Please note that the Centers for Medicare and Medicaid Services (CMS) Regional Office (RO) makes the final determination regarding your Medicare participation and the effective date of participation in accordance with the regulations at 42 CFR 489.13. Your organization is encouraged to share a copy of this Medicare recommendation letter with your State Survey Agency.

This recommendation applies to the following locations:

Chattanooga Hamilton County Hospital Authority
d/b/a Erlanger Bledsoe Internal & Pediatric Medicine
136 Wheelertown Avenue, Pikeville, TN, 37367

Chattanooga Hamilton County Hospital Authority
d/b/a Erlanger Sequatchie Valley Emergency Department
16931 Rankin Avenue, Dunlap, TN, 37327-7029

Chattanooga Hamilton County Hospital Authority
d/b/a UT Erlanger Cardiology at Erlanger Bledsoe
121 Wheelertown, Pikeville, TN, 37367

SUPPLEMENTAL #1
September 22, 2017
10:08 am

Erlanger Bledsoe Hospital
71 Wheelertown Avenue, Pikeville, TN, 37367

Please be assured that The Joint Commission will keep the report confidential, except as required by law or court order. To ensure that The Joint Commission's information about your organization is always accurate and current, our policy requires that you inform us of any changes in the name or ownership of your organization or the health care services you provide.

Sincerely,

Mark Pelletier

Mark G. Pelletier, RN, MS
Chief Operating Officer
Division of Accreditation and Certification Operations

cc: CMS/Central Office/Survey & Certification Group/Division of Acute Care Services
CMS/Regional Office 4 /Survey and Certification Staff

Headquarters
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630 792 5000 Voice

SUPPLEMENTAL #1
September 22, 2017
10:08 am

Official Accreditation Report

Chattanooga Hamilton County Hospital Authority
975 East Third Street
Chattanooga, TN 37403

Organization Identification Number: 7809

Evidence of Standards Compliance (60 Day) Submitted: 6/15/2017

SUPPLEMENTAL #1
September 22, 2017
10:08 am

Executive Summary

Program(s)	Submit Date
Hospital Accreditation Critical Access Hospital Accreditation	6/15/2017

Hospital Accreditation :	As a result of the accreditation activity conducted on the above date(s), there were no Requirements for Improvement identified.
Critical Access Hospital Accreditation :	As a result of the accreditation activity conducted on the above date(s), there were no Requirements for Improvement identified.

If you have any questions, please do not hesitate to contact your Account Executive.

Thank you for collaborating with The Joint Commission to improve the safety and quality of care provided to patients.

Requirements for Improvement – Summary

As a result of the accreditation activity conducted, there were no Requirements for Improvement identified.

Program	Standard	Level of Compliance
HAP	EC.02.02.01	Compliant
HAP	EC.02.03.03	Compliant
HAP	EC.02.03.05	Compliant
HAP	EC.02.04.03	Compliant
HAP	EC.02.05.01	Compliant
HAP	EC.02.05.05	Compliant
HAP	EC.02.05.07	Compliant
HAP	EC.02.05.09	Compliant
HAP	EC.02.06.01	Compliant
HAP	EC.02.06.05	Compliant
HAP	IC.02.01.01	Compliant
HAP	IC.02.02.01	Compliant
HAP	IM.02.01.03	Compliant
HAP	LD.01.03.01	Compliant
HAP	LD.04.01.05	Compliant
HAP	LS.01.01.01	Compliant
HAP	LS.01.02.01	Compliant
HAP	LS.02.01.10	Compliant
HAP	LS.02.01.20	Compliant
HAP	LS.02.01.30	Compliant
HAP	LS.02.01.34	Compliant
HAP	LS.02.01.35	Compliant
HAP	MM.01.01.01	Compliant
HAP	MM.01.01.03	Compliant
HAP	MM.03.01.01	Compliant
HAP	MM.03.01.03	Compliant
HAP	MM.04.01.01	Compliant
HAP	MS.01.01.01	Compliant
HAP	MS.03.01.01	Compliant
HAP	MS.08.01.03	Compliant
HAP	NPSG.03.06.01	Compliant
HAP	NPSG.15.01.01	Compliant

HAP	PC.01.02.03	Compliant
HAP	PC.01.02.07	Compliant
HAP	PC.01.03.01	Compliant
HAP	PC.02.01.03	Compliant
HAP	PC.02.01.11	Compliant
HAP	PC.02.02.03	Compliant
HAP	PC.02.03.01	Compliant
HAP	PC.03.05.03	Compliant
HAP	RC.01.01.01	Compliant
HAP	RC.02.01.01	Compliant
HAP	RI.01.01.01	Compliant
HAP	UP.01.03.01	Compliant
HAP	WT.01.01.01	Compliant
HAP	WT.04.01.01	Compliant
CAH	EC.02.02.01	Compliant
CAH	EC.02.03.03	Compliant
CAH	EC.02.03.05	Compliant
CAH	EC.02.04.03	Compliant
CAH	EC.02.05.01	Compliant
CAH	EC.02.05.05	Compliant
CAH	EC.02.05.09	Compliant
CAH	LD.04.03.09	Compliant
CAH	LS.02.01.10	Compliant
CAH	LS.02.01.35	Compliant
CAH	MM.03.01.01	Compliant
CAH	MM.03.01.03	Compliant
CAH	MM.05.01.01	Compliant
CAH	MM.05.01.11	Compliant
CAH	NPSG.03.05.01	Compliant
CAH	NPSG.03.06.01	Compliant
CAH	PC.01.02.01	Compliant
CAH	PC.04.01.05	Compliant
CAH	RC.01.01.01	Compliant
CAH	RI.01.01.03	Compliant

CoP: §485.618 **Tag:** C-0200 **Deficiency:** Compliant

Corresponds to: CAH

Text: §485.618 Condition of Participation: Emergency Services

The CAH provides emergency care necessary to meet the needs of its inpatients and outpatients.

CoP Standard	Tag	Corresponds to	Deficiency
§485.618(b)	C-0202	CAH - MM.03.01.03/EP2	Compliant

CoP: §485.623 **Tag:** C-0220 **Deficiency:** Compliant

Corresponds to: CAH

Text: §485.623 Condition of Participation: Physical Plant and Environment

CoP Standard	Tag	Corresponds to	Deficiency
§485.623(d)(1)	C-0231	CAH - EC.02.03.03/EP3, EC.02.03.05/EP2, LS.02.01.10/EP10, LS.02.01.35/EP4	Compliant
§485.623(b)(2)	C-0223	CAH - EC.02.02.01/EP5	Compliant
§485.623(b)(1)	C-0222	CAH - EC.02.04.03/EP3, EC.02.05.05/EP6, EC.02.05.09/EP5	Compliant

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CoP: §485.638 **Tag:** C-0300 **Deficiency:** Compliant

Corresponds to: CAH

Text: §485.638 Condition of Participation: Clinical Records

CoP Standard	Tag	Corresponds to	Deficiency
§485.638(a)(4)(iv)	C-0307	CAH - RC.01.01.01/EP11	Compliant

CoP: §482.13 **Tag:** A-0115 **Deficiency:** Compliant

Corresponds to: HAP

Text: §482.13 Condition of Participation: Patient's Rights

A hospital must protect and promote each patient's rights.

CoP Standard	Tag	Corresponds to	Deficiency
§482.13(e)(4)(i)	A-0166	HAP - PC.03.05.03/EP2	Compliant
§482.13(c)(2)	A-0144	HAP - NPSG.15.01.01/EP2	Compliant

CoP: §482.23 **Tag:** A-0385 **Deficiency:** Compliant

Corresponds to: HAP

Text: §482.23 Condition of Participation: Nursing Services

The hospital must have an organized nursing service that provides 24-hour nursing services. The nursing services must be furnished or supervised by a registered nurse.

CoP Standard	Tag	Corresponds to	Deficiency
§482.23(c)(6)(ii)(D)	A-0413	HAP - MM.03.01.01/EP2	Compliant
§482.23(c)(3)	A-0406	HAP - MM.04.01.01/EP13	Compliant
§482.23(b)(4)	A-0396	HAP - PC.01.03.01/EP1	Compliant

CoP: §482.24 **Tag:** A-0431 **Deficiency:** Compliant

Corresponds to: HAP

Text: §482.24 Condition of Participation: Medical Record Services

The hospital must have a medical record service that has administrative responsibility for medical records. A medical record must be maintained for every individual evaluated or treated in the hospital.

CoP Standard	Tag	Corresponds to	Deficiency
§482.24(c)(1)	A-0450	HAP - RC.01.01.01/EP19	Compliant
§482.24(b)	A-0438	HAP - RC.01.01.01/EP8	Compliant

CoP: §482.25 **Tag:** A-0489 **Deficiency:** Compliant

Corresponds to: HAP

Text: §482.25 Condition of Participation: Pharmaceutical Services

The hospital must have pharmaceutical services that meet the needs of the patients. The institution must have a pharmacy directed by a registered pharmacist or a drug storage area under competent supervision. The medical staff is responsible for developing policies and procedures that minimize drug errors. This function may be delegated to the hospital's organized pharmaceutical service.

CoP Standard	Tag	Corresponds to	Deficiency
§482.25(b)(2)(iii)	A-0504	HAP - MM.03.01.01/EP6	Compliant
§482.25(b)(2)(i)	A-0502	HAP - MM.03.01.01/EP3	Compliant
§482.25(b)(3)	A-0505	HAP - MM.03.01.01/EP8	Compliant
§482.25(b)	A-0500	HAP - MM.03.01.01/EP5	Compliant

CoP: §482.41 **Tag:** A-0700 **Deficiency:** Compliant

Corresponds to: HAP - EC.02.06.01/EP1

Text: §482.41 Condition of Participation: Physical Environment

The hospital must be constructed, arranged, and maintained to ensure the safety of the patient, and to provide facilities for diagnosis and treatment and for special hospital services appropriate to the needs of the community.

CoP Standard	Tag	Corresponds to	Deficiency
§482.41(a)	A-0701	HAP - EC.02.02.01/EP5, EC.02.05.01/EP8, EC.02.06.01/EP1, EP26	Compliant
§482.41(b)(1)(ii)	A-0710	HAP - LS.02.01.30/EP3, EP11	Compliant
§482.41(c)		HAP - EC.02.05.09/EP7	Compliant
§482.41(b)(1)(i)	A-0710	HAP - EC.02.03.03/EP1, LS.02.01.10/EP1, EP5, EP7, EP10, LS.02.01.20/EP11, EP36, LS.02.01.30/EP18, EP19, LS.02.01.34/EP4, LS.02.01.35/EP4, EP5, EP6, EP14, EP10, EP11	Compliant
§482.41(d)(2)	A-0724	HAP - EC.02.03.05/EP3, EP15, EP16, EC.02.04.03/EP3, EC.02.05.05/EP6, EC.02.05.09/EP5	Compliant
§482.41(d)(4)	A-0726	HAP - EC.02.05.01/EP16	Compliant

CoP: §482.42 **Tag:** A-0747 **Deficiency:** Compliant

Corresponds to: HAP - IC.02.01.01/EP1, IC.02.02.01/EP4, EC.02.05.01/EP15, EC.02.06.05/EP2

Text: §482.42 Condition of Participation: Infection Control

The hospital must provide a sanitary environment to avoid sources and transmission of infections and communicable diseases. There must be an active program for the prevention, control, and investigation of infections and communicable diseases.

CoP: §482.51 **Tag:** A-0940 **Deficiency:** Compliant

Corresponds to: HAP - IC.02.02.01/EP2, EP4

Text: §482.51 Condition of Participation: Surgical Services

If the hospital provides surgical services, the services must be well organized and provided in accordance with acceptable standards of practice. If outpatient surgical services are offered the services must be consistent in quality with inpatient care in accordance with the complexity of services offered.

CoP: §485.635 **Tag:** C-0270 **Deficiency:** Compliant

Corresponds to: CAH

Text: §485.635 Condition of Participation: Provision of Services

CoP Standard	Tag	Corresponds to	Deficiency
§485.635(c)(4)(ii)	C-0292	CAH - LD.04.03.09/EP6	Compliant
§485.635(a)(3)(iv)	C-0276	CAH - MM.03.01.01/EP3, MM.05.01.11/EP2	Compliant

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CoP: §482.12 **Tag:** A-0043 **Deficiency:** Compliant

Corresponds to: HAP - LD.01.03.01/EP12

Text: §482.12 Condition of Participation: Governing Body

There must be an effective governing body that is legally responsible for the conduct of the hospital. If a hospital does not have an organized governing body, the persons legally responsible for the conduct of the hospital must carry out the functions specified in this part that pertain to the governing body.

CoP: §482.22 **Tag:** A-0338 **Deficiency:** Compliant

Corresponds to: HAP

Text: §482.22 Condition of Participation: Medical staff

The hospital must have an organized medical staff that operates under bylaws approved by the governing body, and which is responsible for the quality of medical care provided to patients by the hospital.

CoP Standard	Tag	Corresponds to	Deficiency
§482.22(c)	A-0353	HAP - MS.01.01.01/EP1, EP5	Compliant
§482.22(c)(5)(i)	A-0358	HAP - PC.01.02.03/EP4, MS.01.01.01/EP16	Compliant

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SUPPLEMENTAL #1
September 22, 2017
10:08 am

STATE OF TENNESSEE, BLEDSOE COUNTY:

This is to certify that I, Sandra S. Dodson, published the attached notice in *The Dunlap Tribune*, a newspaper published in Sequatchie County, Tennessee, for 1 ~~consecutive~~ weeks, beginning the 7TH day of SEPTEMBER, 2017, as required by law.

This 8TH day of SEPTEMBER, 2017.

Sandra S. Dodson
Publisher

Sworn and subscribed to before me this 8th day of September, 2017.

Kathy J. Mitchell
Notary Public

KATHY J. MITCHELL
STATE OF TENNESSEE NOTARY PUBLIC
BLEDSOE COUNTY

My commission expires: 7/25/20

NOTIFICATION OF INTENT TO APPLY FOR A CERTIFICATE OF NEED

This is to provide official notice to the Health Services & Development Agency and all interested parties, in accordance with T.C.A. § 68-11-1601 et. seq., and the Rules of the Health Services & Development Agency, that Erlanger Sequatchie Valley Regional Hospital, with an ownership type of governmental, and to be managed by itself, intends to file an application for a Certificate of Need ("CON") to construct a regional community hospital (critical access hospital), with a total complement of twenty-five (25) inpatient beds, to include services for inpatients, outpatients, emergency medical services, and magnetic resonance imaging (MRI) in Dunlap, Sequatchie County, Tennessee.

This facility will replace the existing Erlanger Bledsoe Hospital, located at 71 Wheelertown Avenue, Pikeville, TN 37367. The new Erlanger Sequatchie Valley Regional Hospital, MRI and equipment will be located at 17399 Rankin Avenue, Dunlap, Sequatchie County, Tennessee, 37327, otherwise described as map 041, parcels 021.00 and 020.01, at the Sequatchie County Tax Assessor's Office.

A companion CON application will be filed with the Health Services & Development Agency for a new provider based emergency department in Pikeville, Tennessee, to replace the existing provider based emergency department located at 16931 Rankin Avenue, Dunlap, Sequatchie County, Tennessee.

The total project cost is estimated to be $32,653,836.

The anticipated date of filing the application is September 12, 2017.

The contact person for this project is Joseph M. Winick, Sr. Vice President, Erlanger Health System, 975 East 3rd Street, Chattanooga, Tennessee, 37403, and by phone at (423) 778-7274.

Upon written request by interested parties, a local Fact-Finding public hearing shall be conducted. Written requests for hearing should be sent to:

Health Services & Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

Pursuant to T.C.A. § 68-11-1607(c)(1): (A) Any health care institution wishing to oppose a Certificate Of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled; and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

SUPPLEMENTAL #1
September 22, 2017
10:08 am

9/15/2017

To Whom It May Concern:

Erlanger Behavioral Health fully supports the proposal to build a new hospital in Dunlap, replacing Erlanger Bledsoe hospital, and to place a free-standing Emergency Room in Pikeville. The new hospital will reduce health disparities among the rural population by increasing accessibility to emergency management and Erlanger's trauma services. It will provide surgical and outpatient services otherwise not available to the local residents without traveling. Erlanger's behavioral health resources will be available to the Dunlap and Pikeville facilities.

This project will expand resources and accessibility of needed services to the rural community provided in a state-of-the-art facility.

Sincerely,

Jennie Mahaffey, M.D.
Medical Director
Erlanger Behavioral Health
979 East 3rd Street, Suite B-1010
Office: (423)778-2965
Fax: (423)778-2966

Greg B. Wilson Van Buren County Mayor
P.O. Box 217
Spencer, TN 38585

Phone (931)-946-2314
e-mail- mayorgwilson@outlook.com

September 05, 2017

Erlanger Health System
Stephanie Boynton,

I am writing on behalf of the citizens of Van Buren County, in support of the Regional Hospital to be located in Dunlap, TN. I strongly support this endeavor and the focus on reducing Health disparities in this regional concept. I further support clinics in the outlying counties as well. This regional concept is much needed in this area.

Through this letter be it known Van Buren County will support the efforts of Erlanger Health Systems. We look forward to the opportunity to help eliminate Health disparities in our community and achieving Health equality.

Sincerely,
Greg Wilson
Van Buren County Mayor

SUPPLEMENTAL #1

Bledsoe County Courthouse
P.O. Box 149
Pikeville, TN 37367

Bledsoe County, Tennessee

Gregg Ridley, County Mayor

Phone 423-447-6855
Fax 423-447-7265
E-mail: *bledsoemayor@bledsoe.net*

August 29, 2017

Dear Ms. Boynton,

Please accept this communication as an expression of support for Erlanger's Sequatchie Valley Medical Enhancement Project to be located in Sequatchie and Bledsoe Counties. The project will consist of a new twenty-five bed critical access hospital to be constructed in Dunlap, and a newly built emergency department in Pikeville.

The current medical facility, Erlanger Bledsoe is located in Pikeville, and is approaching fifty-years in operation, while utilizing the original structure. The current building is in need of substantial modernization, in order to maintain desired current hospital standards. By locating the new hospital in Dunlap, the newly constructed modern medical facility will centralize health care, in a center location, for the entire Sequatchie Valley.

The central location will offer enhanced accessibility throughout the region. The residents of Pikeville, Bledsoe County, and surrounding areas will have improved access to "State of the Art" emergency services linked to trauma services provided by Erlanger. With this new proximity, the hospital will become more economically viable, allowing for essential services, such as surgery and outpatient care that will limit the need for area residents to leave the Sequatchie Valley, in order to receive their healthcare services.

Erlanger's management of this new centrally located facility will be beneficial to the entire region. Our residents will gain access to a broad range of medical programs and services, such as trauma care and specialty physicians located in Chattanooga.

As Bledsoe County Mayor, I have had the privilege of working with Erlanger for eleven years. Erlanger has demonstrated their commitment to the region and to the citizens they serve. I believe Erlanger's continued operation will launch better health care to more people in the surrounding areas, and provide much needed health care to our rural region.

Sincerely,

Gregg Ridley
Bledsoe County Mayor

22 Cherry Street East
P.O. Box 595
Dunlap, Tennessee 37327

SUPPLEMENTAL #1
September 22, 2017
10:08 am

Phone: (423) 949-3479
Fax: (423) 949-2579
seqexec@bledsoe.net

Sequatchie County Executive

August 29, 2017

To whom it may concern;

Re: Letter of Support to build a new full service 25 bed critical access hospital in Dunlap and a new Emergency Department to be built in Pikeville.

In regards to the above captioned, we are in full support of the capital outlay commitment that will be required to achieve needed quality healthcare here in the Sequatchie Valley. Here are a few of the reasons why;

- The current Erlanger Bledsoe facility is nearly 50 years old and is in need of substantial modernization to meet current hospital standards.
- Placing the new hospital in Dunlap will centralize the hospital in the Sequatchie Valley, making it more accessible to more people throughout the region. Residents of Pikeville, Bledsoe County and the surrounding area will have improved access to "state of the art" emergency services linked to trauma services provided by Erlanger.
- With increased access, the hospital will be economically viable.
- The new hospital will provide essential services that will limit the need for area residents to leave the valley for their healthcare. This will include surgery and outpatient services.
- It will be beneficial for the hospital to be operated by Erlanger to gain access to a broad range of program and services including trauma care and specialty physicians located in Chattanooga. Erlanger has demonstrated its commitment to the region and to those served. Approval will help to bring health care services to more people in the surrounding area
- It is vital that residents in rural areas have access to needed medical care.

If you have any questions, please do not hesitate calling me personally at 423-949-3479 or e- mailing me at seqexec@bledsoe.net.

Thank you.

D. Keith Cartwright
Sequatchie County Executive

SUPPLEMENTAL #1
September 22, 2017
10:08 am

OUR MISSION STATEMENT:
To Be The Leader In Providing Comprehensive, High Quality, Community-Oriented Healthcare With The Goal of Being The Primary Care Medical Home of Choice In The Communities We Serve By Providing Quality Health Services With Justice, Equality, and Respect.

September 15, 2017

Ms. Stephanie Boynton, CEO
Erlanger Bledsoe Hospital
71 Wheelertown Avenue
Pikeville, TN 37367

Dear Stephanie;

I am pleased to write this letter in support of your hospital initiatives. Placing the hospital in Dunlap will centralize the hospital in the Sequatchie Valley, making it more accessible to more people throughout the region. The new hospital will provide essential services that will limit the need for area residents to leave the valley for their healthcare. We appreciate and support the mission, value and quality of services that it brings to the residents and communities we serve.

Residents of Pikeville, Bledsoe County and the surrounding area will have improved access to "state of the art" emergency services linked to trauma services provided by Erlanger. Approval will help to bring health care services to more people in the surrounding area. It is vital that residents in rural areas have access to needed medical care.

These initiatives will continue to support our mission to provide quality care and expanded access to our region. Our organization appreciates the opportunity to work in partnership and collaboration on an ongoing basis to improve access and the quality of care for the populations we serve.

Sincerely,

Angel Moore, Esq.
Chief Executive Officer
Erlanger Community Health Centers

Dodson Avenue: 200 Dodson Avenue ■ Chattanooga, TN 37406 ■ (423) 778-2800
Southside Community Location: 100 E. 37th Street ■ Chattanooga, TN 37410 ■ (423) 778-2700

SUPPLEMENTAL #1
September 22, 2017
10:08 am

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NIHMSID: NIHMS137739

Rising Use Of Diagnostic Medical Imaging In A Large Integrated Health System

The use of imaging has skyrocketed in the past decade, but no one patient population or medical condition is responsible

Rebecca Smith-Bindman, Diana L. Miglioretti, and Eric B. Larson

Rebecca Smith-Bindman, An associate professor, Radiology and Biomedical Imaging; Epidemiology and Biostatistics; and Obstetrics, Gynecology, and Reproductive Medicine, at the University of California, San Francisco;
Contributor Information.
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Abstract

Go to:

Little has been published characterizing specific patterns of the dramatic rise in diagnostic imaging during the past decade. In a large health plan, 377,048 patients underwent 4.9 million diagnostic tests from 1997 through 2006. Cross-sectional imaging nearly doubled over those years, rising from 260 to 478 examinations per thousand enrollees per year. Imaging with computed tomography (CT) doubled, and imaging with magnetic resonance imaging (MRI) tripled. Cross-sectional studies added to existing studies instead of replacing them, and the annual per enrollee cost of radiology imaging more than doubled. The dramatic rise in imaging raises both costs and radiation exposure.

The use of diagnostic imaging has increased dramatically over the past decade, contributing to medical costs and to medical exposure to ionizing radiation.[1] The recent overview from the Medicare Payment Advisory Commission (MedPAC) to the Centers for Medicare and Medicaid Services (CMS) reported that the rise in volume of imaging services per Medicare beneficiary outstripped the growth of all other services physicians provide.[2] Several factors have contributed to this increase, including wider availability of technology, increased demand by patients and physicians, favorable reimbursement, and improvements in the technology resulting in a lower threshold for using it.

Several studies have documented the increase in imaging over time, but relatively little has been published characterizing patterns of imaging in detail—specifically, how imaging patterns vary by patient factors, imaging modality, or the anatomic area being imaged.[3] This type of analysis would allow those interested in cost containment to understand where most imaging—and most expense—occurs. Further, it is largely unknown whether newer and more expensive imaging tests are replacing or being used in addition to older tests, such as x-rays. To achieve the important goal of overall cost containment, newer imaging tests should replace older and potentially less accurate exams, not supplement them.

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This study aimed to determine temporal patterns of diagnostic medical imaging and how these patterns vary by patients' age and sex, imaging modality, and anatomic area. Further, we wanted to determine whether the rise in use of imaging was due to an increase in the proportion of patients being imaged or a greater number of imaging tests being performed per person per condition.

Study Data And Methods

Go to:

We evaluated trends in diagnostic imaging among members of Group Health Cooperative, a large, mixed-model, nonprofit health care system providing integrated care and coverage to approximately 10 percent of Washington State residents. Group Health provides care through its own facilities, including twenty-eight primary care or family medical centers, five specialty medical centers, and two hospitals; it has affiliations with forty-five other major institutions for selected specialty services unavailable at Group Health. Group Health has complete and comprehensive automated information systems that capture enrollees' receipt of diagnostic imaging studies, allowing the use of imaging to be assessed per patient over time. We assessed patterns of imaging in each year from 1997 to 2006.

■ Characterizing patterns of imaging

All imaging examinations were coded in Group Health automated systems using standardized *International Classification of Diseases*, Ninth Revision (ICD-9), and *Current Procedural Terminology*, Fourth Edition (CPT-4), codes. All imaging examinations were grouped into nonoverlapping anatomic areas (abdomen, breast, cardiac, central nervous system [CNS], chest, endocrine, extremity, obstetrical, spine, vascular, and other) and imaging modality categories as computed tomography (CT), magnetic resonance imaging (MRI), ultrasound, nuclear medicine (NM), radiography (x-ray films), and arteriography. CT, MRI, and ultrasound were combined into a single cross-sectional imaging category. For subanalyses, x-ray exams of the abdomen were subdivided into those with and without contrast (that is, using oral or intravenous agents). Imaging examinations were included irrespective of the specialty that conducted or interpreted the examination.

■ Defining "utilization."

For each Group Health member, for each year of the study, we assessed the use of imaging tests during each day of the study period, by modality and anatomic area, and within defined age strata. If multiple examinations within the same modality and anatomic area were recorded on the same day, they were collapsed into a single examination to avoid overcounting examinations that might have occurred only once.

■ Analysis

We calculated the number of imaging tests per thousand enrollees per year, stratified by anatomic area, modality, and year. These rates were calculated overall and stratified within age groups. These rates were also calculated among elderly enrollees, defined as those age sixty-five and older. We calculated the proportion of patients who underwent any imaging and any cross-sectional imaging within each year, by defined age strata. Among patients who underwent cross-sectional abdominal imaging and CNS imaging, we calculated the annual mean number of abdominal and CNS tests, respectively, per patient to estimate the amount of repeat imaging. We focused on the most frequent anatomic area (CNS) and the one for which we suspected that repeat imaging would be common (abdomen). All rates were standardized to the age distribution in 2000 using direct standardization. To simplify the exhibits, we did not show results in the figures for imaging tests that accounted for a small proportion of the total.

■ Costs

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To estimate the costs associated with the increase in imaging over time, we calculated radiology costs per enrollee for each year of the study, basing costs on the Medicare fee reimbursement schedule in 2006. By choosing to estimate costs using a single-year fee schedule, we are focusing on the increase in real costs associated with the increased volume of examinations per enrollee. To estimate the cost of each examination, we included a global cost covering both the technical and professional components. We calculated the change in cost over time using compound annual growth.

■ Study population

Our study population consisted of 377,048 patients enrolled in Group Health between 1997 and 2006 who underwent approximately 4.9 million imaging examinations over the ten years of the study. Slightly more than half of the enrollees (54 percent) were female, and the age of the enrollees increased over time.[5] Overall, 13 percent of enrollees were minorities, including African Americans (3 percent), Asian and Pacific Islanders (3 percent), Hispanic (2 percent), and mixed race (5 percent).

Study Results

Go to:

Between 1997 and 2006, imaging increased for nearly every imaging modality studied (Exhibit 1). Cross-sectional imaging approximately doubled, increasing from 260 to 478 examinations per thousand enrollees (average 9 percent annual increase). Ultrasound increased 5 percent per year, from 157 to 225 examinations per thousand patients per year; CT increased 14 percent per year, from 81 to 181 examinations; and MRI increased 26 percent per year, from 22 to 72 examinations. Over the ten-year period studied, ultrasound increased by nearly 40 percent, CT doubled, and MRI nearly tripled. Utilization of NM examinations remained stable, varying between thirty-two and thirty-five imaging tests per thousand patients per year, with no temporal trend. Overall rates of imaging were approximately twice as high among elderly enrollees, but trends were similar.[6] Total use of x-ray exams was much higher than for other imaging tests and accounted for the greatest number of imaging studies during each year studied. However, because of its dramatic rise, cross-sectional imaging accounted for a larger proportion of examinations over time, increasing from approximately one in four imaging examinations (24 percent) in 1997 to one in three (35 percent) by 2006. In terms of cost, cross-sectional imaging accounted for 54.0 percent of total imaging costs in 1997, whereas it accounted for 70.2 percent of total imaging costs in 2006.

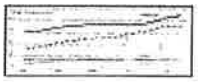

EXHIBIT 1
Cross-Sectional Imaging Tests Per Thousand Enrollees Per Year, 1997-2006

The total number of imaging tests increased markedly with age, and the types of tests used varied with age (Exhibit 2). Cross-sectional imaging accounted for around 15 percent of examinations among children and 30-40 percent among adults.

EXHIBIT 2
Number Of Imaging Tests Per Thousand Enrollees Per Year, By Modality And Age, 2000-2006

To try to ascertain whether a change in the distribution of diseases might explain the increase in imaging over time, we evaluated the use of all imaging examinations by anatomic area.[7] No large changes were seen in the distribution of which anatomic sites were being imaged. The extremities and chest were the most common areas imaged during each year studied, and imaging increased modestly over time across

SUPPLEMENTAL #1
September 22, 2017
10:08 am

all anatomic areas.

For each imaging modality we evaluated the trends in imaging stratified by anatomic area to determine if the increases in the use of specific imaging modalities were limited to selected anatomic areas. Imaging with CT and MRI increased consistently across all anatomic areas. Rates of imaging with CT and MRI were two- to threefold higher, and the increase in imaging was faster among elderly enrollees compared with younger patients (Exhibit 3). For ultrasound, imaging patterns were less consistent across different anatomic areas, with the only dramatic increase occurring for cardiac imaging (echocardiography), which increased approximately 10 percent annually.[8] This resulted in a tripling of the number of echocardiography examinations over the years studied. Breast imaging (mammography, which uses x-rays) demonstrated a consistent 5 percent annual increase. Imaging with x-rays remained relatively stable over time, with one significant change.[9] Concomitant with the dramatic rise in abdominal CT, we found a substantial decline in abdominal x-ray examinations involving use of oral or intravenous contrast.[10] This was the only decrease in imaging we could document across all imaging modalities and all anatomic areas studied.

EXHIBIT 3
Computed Tomography (CT) And Magnetic Resonance Imaging (MRI) Among Plan Enrollees Age Sixty-Five And Older, By Anatomic Area, 1997-2006

Because of the overall increase in imaging, concomitant with greater use of more expensive technologies, the annual per enrollee cost of radiology imaging more than doubled over the decade of the study. Mean annual cost increased from $229 per enrollee in 1997 to $463 per enrollee in 2006 (Exhibit 4). The costs associated with imaging of different anatomic areas varied, with particularly high growth in spending for the CNS and spine (annual increases of 12 percent, Exhibit 5). Cardiac and chest were the next most costly and showed the second highestannual increase (9 percent). The increase in costs associated with these anatomic areas resulted from the greater use of advanced and expensive imaging tests.

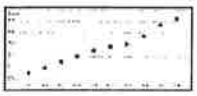

EXHIBIT 4
Annual Imaging Costs Per Health Plan Enrollee, 1997-2006

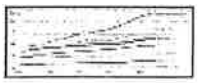

EXHIBIT 5
Annual Imaging Costs Per Health Plan Enrollee, By Anatomic Area, 1997-2006

The observed increase in cross-sectional imaging was due to increases in both the proportion of patients imaged and the number of imaging studies per patient. For example, the proportion of patients who underwent at least one cross-sectional imaging test in a year increased from 13.5 percent in 1997 to 21.0 percent in 2006. Among patients age sixty-five and older, the proportion who underwent at least one cross-sectional imaging test was even higher and increased from 26.9 percent in 1997 to 40.6 percent in 2006. The frequency of repeat imaging also increased over time. For example, among patients who underwent cross-sectional imaging of the abdomen, the median number of cross-sectional imaging tests increased 30 percent from 2.2 in 1997 to 2.9 in 2006 (Exhibit 6). Approximately 5 percent of patients underwent more than five cross-sectional imaging tests annually. Among patients who underwent CT, approximately 1 percent had more than ten CT scans annually.

EXHIBIT 6

Number Of Repeat Imaging Tests Within One Year Among Enrollees Who Underwent Abdominal Or Central Nervous System (CNS) Imaging, 1997-2006

Discussion

Go to:

Based on MedPAC's reports to Congress, Medicare spending for imaging services has been growing rapidly over the past decade.[11] For example, between 2000 and 2005, spending for imaging services more than doubled from $6.6 billion to $13.7 billion, an average annual growth rate twice the overall rate of growth in physician fee schedule services. In 2005 imaging services represented an estimated 14 percent of 2005 spending included in the sustainable growth rate (SGR) calculation, but represented 27 percent of the total increase in such spending between 2004 and 2005. The majority of the growth occurred for advanced imaging, including CT and MRI.

Our results build on these findings in several important ways. First, MedPAC reported the doubling in imaging-related spending only among the elderly and within four relatively broad categories. We have expanded on these results by completing detailed analysis across the entire age spectrum and broken down by anatomic area and modality. This level of detail is important, because imaging rates tend to be higher among the elderly, and trends in imaging may differ by age group and anatomic area (crudely reflecting different disease groups). Although absolute imaging rates differed by sex, age group, anatomic area, and modality, we found substantial and similar trends of increasing use across all groups, especially for MRI and CT. We demonstrated a decline in use for remarkably few tests. The

> *"Legislative efforts that focus entirely on self-referral are likely not sufficient to limit the drivers of imaging."*

broad patterns of increasing imaging among every group studied makes it clear that no single group—defined by age, sex, or disease—can be the single target of efforts to reduce the use of imaging. Our results also provide evidence that newer and more expensive technologies are being used widely as additions to the older tests, with relatively little substitution of the newer tests for the older ones. This pattern is often seen with the development of new technology.[12]

Second, previous studies on imaging trends have focused on the Medicare fee- for-service (FFS) population or patients with generous private insurance.[13] In these cases, clear financial incentives encourage increasing imaging. This is the first study to document the pattern of imaging over time in a managed care setting where no such financial incentives exist. We found rising use of imaging services among health maintenance organization (HMO) members, closely paralleling the trends found in FFS Medicare or privately insured populations. This suggests that incentives in a managed care model will not necessarily suffice to change the forces leading to increased use of advanced imaging techniques. Practice patterns occurring within the general FFS environment almost certainly extend to the managed care setting through clinical practice patterns, standards of care, and patients' expectations.

Third, and closely related, MedPAC, the American College of Radiology, and others have raised concern that self-referral could be contributing to the increase in imaging.[14] Although the Stark amendments prohibit physicians from making referrals to institutions with which they have a financial relationship, data from California suggest that physicians exploit broad exceptions to this law to self-refer patients for imaging, contributing to rising imaging rates.[15] It has been suggested that the increasing trend

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toward nonradiologist-ownership of imaging equipment may further exacerbate utilization resulting from self-referral. Yet we found a dramatic rise in the use of advanced imaging procedures in an environment with no opportunity to profit from self-referral. Thus, legislative efforts that focus entirely on self-referral are likely not sufficient to limit the drivers of imaging.

Rising disease prevalence

A rise in the prevalence of certain conditions and illnesses has been hypothesized to have contributed to the increase in imaging. Our detailed analyses by anatomic area do not support this hypothesis: we found no consistent shift in where in the body imaging occurred. However, we found dramatic differences in the cost of imaging associated with different anatomic areas, with the most dramatic increases for imaging of the CNS, spine, chest, and cardiac system; this primarily reflects greater relative use of CT and MRI as well as ultrasound for cardiac imaging. This suggests that certain physicians are embracing the new technology more rapidly, perhaps with greater discretionary spending in these areas.

Why the increase in CT and MRI?

Why have imaging rates increased so dramatically for CT and MRI, despite their high costs? One obvious explanation is that the techniques have improved so much over time that physicians may be using them for concerns that might not have prompted imaging in the past. For example, CT's speed and resolution for detecting pulmonary embolism have improved so dramatically over the past decade that CT is now the primary method used to evaluate this condition, and this has undoubtedly contributed to the dramatic rise in costs associated with imaging of the chest. However, for other areas, such as spine imaging, it is hard to document clear evidence of improved accuracy or outcomes that would have prompted such a dramatic increase in imaging based on the improvements in the technology. Patient-generated demand, physicians' fear of medical malpractice law-suits, and repeated surveillance among certain groups of patients (for example, those with cancer) almost certainly have also contributed to the increase, although it was not possible for us to quantify the importance of each. Improvements in resolution might have also led to identifying more lesions suspicious for cancer, which could have resulted in additional imaging tests for surveillance.

The supply of CT and MRI scanners has also increased dramatically, which might have contributed to further use of and spending on these services. Within Group Health, the availability of CT and MRI increased over time; thus, the dramatic rise may in part reflect pent-up demand. Rapid growth in the volume of these tests may also signal that Medicare's payments for these services are too high relative to the effort needed to provide them, and the difference in their profitability may therefore in part drive the use of these technologies. Within the radiology community, the profit margin is considered greatest for MRI (where we saw the steepest rise in imaging), followed by CT (where we saw the next-largest increase). Although such financial incentives might not have contributed directly to imaging in our managed care setting, widespread financial incentives in the FFS environment could affect clinical practice standards that extend into the managed care setting. The reimbursement schemes used by the CMS should not provide inappropriate incentives for growth in volume and intensity.

Connection with improved outcomes?

Our study cannot address the appropriateness of the documented increase in imaging use or whether this increase was associated with improvements in patient outcomes. Some have argued that the increase in imaging reflects improved patient care, while others have argued that the costs associated with imaging are rising out of proportion to any possible benefit. The truth likely lies somewhere between these two extremes. However, even if imaging is beneficial, the dramatic increases in costs cannot be sustained;

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thus, studies of patient outcomes are essential to help determine when imaging use is most likely to lead to improved outcomes at a cost we can afford, and conversely where value is limited or not existent. Whatever the financial structure where the imaging is provided (HMO, FFS, self-pay, or no pay), someone is bearing the substantial costs of the increase in imaging.

> *"The increased dose per CT exam, with the increased number of exams, has pushed radiation exposure into the range of concern."*

■ Increased radiation exposure

One potential harm of increased CT use bears special mention, because it is an extremely important measure of health care quality. Although CT is considered by many one of the most important technological advances in medicine, it is associated with substantial radiation exposure.[16] Radiation is of concern because extensive epidemiologic evidence has linked exposure to ionizing radiation to the subsequent development of cancer. Further, irrespective of the number of CT examinations performed, the dose per examination has also increased dramatically over the past decade, coincident with technical advances. Thus, the increased dose per exam, compounded with the increased number of examinations, has likely pushed radiation exposure into the range where carcinogenesis is of concern. David Brenner suggests that about one-third of all CT scans are unnecessary and that overusing these tests may raise the total public risk of cancer deaths due to radiation exposure in the coming decades.[17] Fred Mettler estimates that the amount of radiation from clinical imaging examinations experienced by the U.S. public has increased more than 600 percent in the past two decades.[18] Thus, diagnostic testing may expose some patients to needless risk, in addition to generating unwarranted costs. The dramatic rise in CT usage across all age groups and anatomic areas should prompt researchers to assess and quantify the risks and benefits of using it.

■ Strengths and limitations

Our study's several strengths include using data from a large integrated health care system with near-complete capture of imaging examinations, allowing us to examine detailed patterns of use by patient characteristics and across different modalities. Our study's limitations include that we likely missed imaging examinations that were not included as benefits provided by Group Health, such as coronary calcification scoring. No physician group recommends these screening studies, and Group Health does not perform them; thus, we have no way to assess how many of them might have been performed. Second, we included only a single imaging examination of the same type and anatomic area on each day of the study period. This may result in the occasional undercounting of studies. Third, use of imaging at Group Health might not be representative of imaging in other locations or within other medical fee structures. In particular, imaging rates tend to be lower in managed care settings than in FFS settings; thus, imaging rates might be even higher in other settings. However, we found that the trends in imaging among elderly Group Health enrollees resembled those documented by others among Medicare beneficiaries.

Lastly, there are numerous ways to calculate the costs associated with medical imaging, and each will reflect a different perspective (patient, provider, third-party payer, society) and emphasize a different aspect of costs (fixed equipment costs, variable costs such as payment for contrast, or professional costs related to the interpretation of the images). Changes in imaging patterns (greater reliance on outpatient imaging), differences in the reimbursement trends based on these patterns, and differences in the relative value units (RVUs) associated with specific tests can all make the interpretation of costs difficult. To simplify interpretation of the cost data, we used a single reimbursement scheme across all years of the

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study. This reflects an overview of the resource use associated with imaging. The costs cannot be seen as reflecting actual costs, but they can provide insight into the relative costs of imaging. Using this methodology, we found that the cost of imaging more than doubled over the decade of the study. Different methodologies of calculating costs might yield different results but should not affect trends, and the conclusion that the costs of imaging increased dramatically over the past ten years is unlikely to change.

Health care payers have used numerous strategies to try to slow down the soaring use of imaging, which is contributing to the rise in health care costs. The ideal way to curtail medical imaging would decrease costly yet inappropriate or ineffective imaging, while maintaining and increasing the use of imaging associated with improved health outcomes. Unfortunately, it is difficult to identify which imaging tests are most beneficial, and strategies that rely on financial disincentives tend to decrease imaging across the board, instead of selectively reducing unnecessary imaging. Cost-effectiveness and patient outcome studies are essential to decide how best to use imaging technology. Several recent studies have begun to tackle when and how best to use imaging for particular clinical questions, such as mild head trauma.[19] Given the unrelenting rise in health care spending, continued increases in imaging seem unsustainable; thus, these studies are necessary to help direct how and when to use imaging. In the absence of such studies, we should consider the development of multidisciplinary consensus processes aimed at identifying excess imaging, and perhaps use wide spread variation in testing as targets for focused efforts. At a minimum, we must consider how to limit the strong financial incentives contributing to the dramatic rise in CT and MRI.

Acknowledgments

Go to:

The authors gratefully acknowledge the help of Jane Grafton and Debbie Seger in completing the analyses for this paper.

Footnotes

Go to:

An earlier version of this paper was presented at the Fourteenth Annual HMO Research Network Conference, "Partnerships in Translation: Advancing Research and Clinical Care," 13-16 April 2008, in Minneapolis, Minnesota.

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NOTES

Go to:

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5. See Online Exhibit 1, available at http://content.healthaffairs.org/cgi/content/full/27/6/1491/DC1.

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Supplemental #2
(COPY)

Erlanger Sequatchie Valley Regional Hospital

CN1709-027

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SUPPLEMENTAL INFORMATION *(No. 2)*

Chattanooga-Hamilton County Hospital Authority

D / B / A

Erlanger Sequatchie Valley Regional Hospital

Application To Relocate & Replace Existing

Inpatient Acute Medical / Surgical Services From

Erlanger Bledsoe Hospital
(Pikeville, Bledsoe County, TN)

To

Erlanger Sequatchie Valley Regional Hospital
(Dunlap, Sequatchie County, TN)

Application Number CN1709-027

ERLANGER HEALTH SYSTEM
Chattanooga, Tennessee

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Supplemental Responses To Questions Of The Tennessee Health Services & Development Agency

1.) Section B, Need, Item A (Service Specific Criteria - MRI).

The narrative that provides calculations that demonstrates how the three county service area will generate MRI procedures and how the projected utilization of MRI procedures for the hospital was determined is noted. The applicant projected 4,806 procedures in 2020 (43,936 x .109918). However, the equation provided calculates as 4,829 procedures in 2020 rather than 4,806. Please clarify.

In addition, in 2020 to project 2,523 MRI procedures with a 50% market share, the total overall MRI utilization would need to be 5,046 rather than 4,806. Please clarify.

Also, the applicant projects 2,539 procedures in the Year 2021 using the same use rate above and a market share of 50%. However, using the use rate above (.109918) and the 2021 projected population of the service area of 43,938 (page 77 of the application) multiplied by a 50% market share, the projection calculates to 2,418 MRI procedures in Year 2021 rather than 2,539. Please clarify.

Response

The number contained in the table was an error, it should be 4,829 procedures as pointed out in the question. A revised table appears below.

Pertainng to the second and third parts of this question, it should be noted that the table contains the population based estimate as well as a growth rate for the MRI technology component equal to 5% (see note 1 on the table), this is added to the population based estimate to arrive at the service area total. The unit estimate is 50% of the service area estimated total MRI procedures. The additional 5% per year in MRI estimated procedures is reasonable due to the increasing rate of adoption for this technology (please see MRI utilization growth article submitted with supplement no. 1).

Estimated MRI Utilization
For THE Three (3) County Service Area

CY	Pop.	Project Year	Est. Pop. MRI Proc's	Growth Rate MRI Proc's	Service Area MRI Proc's	Est. Unit MRI Proc's
2020	43,936	1	4,829	241	5,070	2,535
2021	44,198	2	4,835	242	5,077	2,539
2022	44,460	3	4,863	243	5,106	2,553

(*) *NOTES* (1) Estimated growth for MRI procedures is set 5%, compared to actual growth rate of 10%.
(2) Market share is assumed at 50% for the service area.

2.) Section B, Need, Item C.

It is noted the applicant designated the year 2014 for the years 2015 and 2016 in the requested patient origin chart in Supplemental #1.Please complete the following chart by correcting the 2015 and 2016 rows of data.

PATIENT ORIGIN FOR ERLANGER BLEDSOE/
SEQUATCHIE VALLEY REGIONAL HOSPITAL

Utilization Data	Bledsoe County	Grundy County	Sequatchie County	Service Area	Other Area	Total
2014 IP Admits						
2014 % of Total						
2015 IP Admits						
2015 % of Total						
2016 IP Admits						
2016 % of Total						
Year 1 IP Admits						
Year 1 % of Total						
Year 2 IP Admits						
Year 2 % of Total						

In addition, please provide the data source for the above chart.

Why is the data in the above chart different from Joint Annual Report data?

Response

As requested, the chart has been corrected to reflect the proper years and appears below. The data source for this chart is Erlanger's internal data. The data reflects calendar year totals and admissions, whereas the Joint Annual Report data reflects fiscal year and discharges.

Patient Origin For Erlanger Bledsoe / Sequatchie Valley Regional Hospital

	Bledsoe	Grundy	Sequatchie	Svc. Area	Other	Total
2014 - I/P Admits	282		39	321	20	341
2014 - % Of Total	82.7%	0.0%	11.4%	94.1%	5.9%	100.0%
2015 - I/P Admits	314	1	32	347	32	379
2015 - % Of Total	82.8%	0.3%	8.4%	91.6%	8.4%	100.0%
2016 - I/P Admits	261	3	47	311	29	340
2016 - % Of Total	76.8%	0.9%	13.8%	91.5%	8.5%	100.0%
Year 1 - I/P Admits	300	100	375	775	67	842
Year 1 - % Of Total	35.6%	11.9%	44.5%	92.0%	8.0%	100.0%
Year 2 - I/P Admits	310	68	387	765	94	859
Year 2 - % Of Total	36.1%	7.9%	45.1%	89.1%	10.9%	100.0%

3.) Section B, Need, Item F.

As requested in supplemental #1 please provide details (narrative) of the methodology, data sources, assumptions, and rationale to project utilization in Year One and Year Two for acute and swing beds, surgical cases, MRI imaging scans, and the Erlanger Sequatchie Valley ED and Satellite ED. Please include in the inpatient discussion how the applicant projected inpatient utilization that has not attained 30% occupancy in the last three years at the Bledsoe County location and how will it will increase to over 60% occupancy at the Sequatchie County location.

Response

Acute Bed Need Methodology

According to the *Acute Care Bed Need Projections For 2017 and 2022* (based on 2015 Hospital JAR Reports), prepared by the *Tennessee Dept. of Health, Division of Health Statistics*, the bed need for the service area is eleven (11) acute care beds. This is due to the limitation

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of the Tennessee bed need methodology which allocates bed need by the county in which the hospital is located. Since *Erlanger Bledsoe Hospital* is located in Bledsoe County and no hospitals are located in either Grundy County or Sequatchie County, the Tennessee methodology only recognizes acute care bed need for Bledsoe County.

With the constraint imposed by the Tennessee methodology, in a telephone conversation with Mark Farber in February, 2017, it was agreed that we should prepare an acute care bed need estimate based on utilization data from the THA inpatient data.

It should be noted that *Erlanger Bledsoe Hospital* is a critical access hospital. As such, all twenty-five (25) beds may also be utilized as "swing beds", which can accommodate either acute care or skilled nursing patients. This is very beneficial to the hospital as well as community, and is not considered in the Tennessee bed need methodology. Further, the swing beds help to keep patients in the community and discharged home.

The following table shows the adjusted bed need for the three (3) county service area.

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Summary Of Inpatient Utilization
For The Three (3) County Service Area
[*Excluding Pyschiatry, Substance Abuse & Rehabilitation*]

		========== CY ==========			Projected
		2014	2015	2016	2022
Total	Discharges	5,849	5,915	5,708	6,029
	Patient Days	27,521	28,761	27,705	29,035
	ALOS	4.7	4.9	4.9	4.8
Total	**Gross Bed Need**	75.4	78.8	75.9	79.5
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	94.3	98.5	94.9	99.4
	Est. % Pt. Days -- LOS 1-4 (*)	35.1%	35.1%	35.1%	35.1%
	Est. Pt. Days (LOS 1-4)	9,660	10,095	9,724	10,191
	Est. Service Area Population	42,102	42,364	42,626	44,200
	Growth Rate - Population		0.6%	0.6%	3.7%
	Est. Use Rate - Discharges	0.138925	0.139623	0.133909	0.136417
	Est. Use Rate - Patient Days	0.653674	0.678902	0.649955	0.651815
LOS 1-4	**Gross Bed Need**	26.5	27.7	26.6	27.9
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	33.1	34.6	33.3	34.9
EBH	Market Share Adjustment (50%)	4,830	5,048	4,862	5,096
Census	Population Growth Adjustment (3.7%)				189
Estimate	Swing Bed Adjustment (35%)	1,691	1,767	1,702	1,850
	Estimated Patient Days	6,521	6,815	6,564	7,135
	Estimated Beds	17.9	18.7	18.0	19.5
	Occupancy Adjustment	80%	80%	80%	80%
	Estimated Beds - Adjusted	22.3	23.3	22.5	24.4

(*) *NOTES* (1) Please note that for a critical access hospital, CMS requires that ALOS not be more than 4 days (96 hours).
(2) Estimated percent of patient days pertaining to LOS 1-4 is derived from the ratio in CY 2014 (9664/27521).
(3) Actual swing bed utilization for Erlanger Bledsoe Hospital in 2015 was 61%.
(4) Population data obtained from Tennessee Dept. of Health, *Tennessee Population Estimates 2017 and 2021*.

The average length of stay for critical access hospitals is set to a maximum by CMS, at 4 days. Therefore, the inpatient hospital discharges from the service area which comprise LOS between 1-4 days is the target patient population to be served by this hospital.

The market share assumption of 50% represents an estimate which is assumed. We agreed that we should not

assume a market share rate any greater than 50%, however, there is a real possibility that market share could be higher.

As an illustration for how the gross bed need was calculated, for 2014, the total patient days for the service area was 27,521. This was divided by 365 days in a year, to determine the average number of beds to be occupied daily. As per note 2 in the table … in 2014, 9,664 patient days were explained in which patients had an LOS 1-4, which is 35.1% of the total number of 27,521 patient days for the service area (9,664 / 27,521 = 35.1%). The 9,664 patient days for LOS 1-4 was multiplied by the market share assumption of 50% to obtain 4,830 patient days (9,664 x 50% = 4,830).

For the swing bed adjustment, in 2015 the total patient days for swing beds was 61%, although we assumed only 35% for this need model. Therefore, the number of patient days is estimated at 1,691 (4,830 x 35% = 1,691). This yields a total estimated patient days for 2014 of 6,521 (4,830 + 1,691 = 6,521). The total estimated patient days are then divided by 365 days in a year, to yield the estimated beds occupied each day at 17.9 (6,521 / 365 = 17.9). Then the 17.9 estimated beds occupied was divided by .80 to adjust for 80% occupancy, which results in a final adjusted bed need estimate of 22.3 acute care beds (17.9 / .80 = 22.3).

The methodology outlined is applicable to all years in the table. Re-location of the hospital from Bledsoe County to Sequatchie County will result in significantly higher utilization of the facility from being centrally located in this rural service area. The occupancy will grow from 30% currently to approximately 60% upon re-location to Sequatchie County.

Surgery

All of the surgery at *Erlanger Sequatchie Valley Regional Hospital* is expected to be performed on an outpatient basis. The primary surgical group for *Erlanger Health System* is *University Surgical Associates* ("USA"). Extensive discussions were held with USA pertaining to how *Erlanger Sequatchie Valley Regional Hospital* could be utilized for surgical cases. During those discussions, an

article appeared in the *Journal Of The American Medical Association* pertaining to surgery at critical access hospitals which played a significant role (copy attached).*(1)* This research identified several procedures which could be performed at critical access hospitals, as follows …

- Appendectomy
- Cholecystectomy
- Colectomy
- Hernia Repair

The surgical volumes were determined in consultation with USA as to what the surgeons believed would be reasonable to perform at *Erlanger Sequatchie Valley Regional Hospital*, a critical access hospital.

MRI Methodology

The service area MRI total procedures was calculated using the Agency's data for MRI utilization for 2015 … *Number Of Procedures By Patient Destination - 2015*. For Bledsoe County there were 924, Sequatchie County 1,374, and Grundy County 1,284 … for a service area total of 3,582. This yields a use rate of .084553 (3,582 / 42,364 = .084553).

Knowing that MRI utilization is increasing at a rate faster than other healthcare services, we adjusted the use rate by 30% to account for growth in utilization of this technology (.084553 x 1.30 = .109918). The adjustment to the use rate is based primarily on research which shows that over a 10 year period, MRI utilization had increased by 300%, or roughly 30% per year. We adopted a rate of only 30% to allow for growth in a rural service area. In 2020, the estimated 4,806 procedures is the result (43,936 x .109918 = 4,829). These same calculations are applicable to 2021 and 2022.

For the MRI unit to be located at *Erlanger Sequatchie Valley Regional Hospital*, the market share assumption is 50%, which is the same as the market share assumption for the inpatient bed need calculation. Thus, a projected

1 Ibrahim, Andrew M. *Association Of Hospital Critical Access Status With surgical Outcomes & Expenditures Among Medicare Beneficiaries.* Journal Of The American Medical Association, May 17, 2016, vol. 315 – number 19, pp. 2095-2103.

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utilization of 2,523 procedures in 2020, 2,539 in 2021, and 2,553 in 2021.

Emergency Departments

The projected utilization for the ED at *Erlanger Sequatchie Valley Regional Hospital* is estimated at 2% growth per year, and the projected utilization for the provider based ED in Bledsoe County is estimated at 1.4% growth per year.

4.) Section B, Economic Feasibility, Item E.

The revised table on page 94 is noted. However, the gross charge ($69,164) and average net charge ($21,739) for the previous year column appears to be calculated incorrectly. Please revise and submit a replacement page 94 (94-R2).

Response

As requested, the table has been corrected and a replacement page is attached to this supplemental information.

5.) Section B, Quality Measures.

Please discuss the applicant's commitment to the proposal in meeting appropriate quality standards by addressing the following factor:

(a) Whether the applicant will participate, within 2 years of implementation of the project, in self-assessment and external peer assessment processes used by health care organizations to accurately assess their level of performance in relation to established standards and to implement ways to continuously improve.

(g) This may include accreditation by any organization approved by Center for Medicare and Medicaid Services (CMS) and other nationally recognized programs. The Joint Commission or its successor would be acceptable

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if applicable. Other acceptable organizations may include, but are not limited to, the following:

American College of Radiology for Positron Emission Tomography, Magnetic Resonance Imaging and Outpatient Diagnostic Center projects;

Response

The applicant will participate, within 2 years of implementation of the project, in self-assessment and external peer assessment processes used by healthcare organizations to accurately assess its level of performance in relation to established standards and to implement ways to continuously improve.

Erlanger Bledsoe Hospital and it's provider based ED are currently accredited by *The Joint Commission*. If approved, *Erlanger Sequatchie Valley Regional Hospital* and it's provider based ED will also be accredited by *The Joint Commission*, as are all Erlanger facilities. *The Joint Commission* is a CMS approved accreditation organization.

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A F F I D A V I T

STATE OF TENNESSEE |
|
COUNTY OF HAMILTON |

NAME OF FACILITY Erlanger Sequatchie Valley Regional Hospital

I, Joseph M. Winick, after first being duly sworn, State under oath that I am the applicant named in this Certificate of Need application or the lawful agent thereof, that I have reviewed all of the supplemental information submitted herewith, and that it is true, accurate, and complete.

SIGNATURE

SWORN to and subscribed before me this 26 of September (Month), 2017 (Year), a Notary Public in and for the State of Tennessee, County of Hamilton.

SHELIA HALL STATE OF TENNESSEE NOTARY PUBLIC HAMILTON COUNTY

Shelia Hall
NOTARY PUBLIC

My commission expires June 9 (Month / Day), 2018.

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ATTACHMENTS

Original Investigation

Association of Hospital Critical Access Status With Surgical Outcomes and Expenditures Among Medicare Beneficiaries

Andrew M. Ibrahim, MD; Tyler G. Hughes, MD; Jyothi R. Thumma, MPH; Justin B. Dimick, MD, MPH

Supplemental content at jama.com

CME Quiz at jamanetworkcme.com and CME Questions page 2119

IMPORTANCE Critical access hospitals are a predominant source of care for many rural populations. Previous reports suggest these centers provide lower quality of care for common medical admissions. Little is known about the outcomes and costs of patients admitted for surgical procedures.

OBJECTIVE To compare the surgical outcomes and associated Medicare payments at critical access hospitals vs non-critical access hospitals.

DESIGN, SETTING, AND PARTICIPANTS Cross-sectional retrospective review of 1 631 904 Medicare beneficiary admissions to critical access hospitals (n = 828) and non-critical access hospitals (n = 3676) for 1 of 4 common types of surgical procedures—appendectomy, 3467 for critical access and 151 867 for non-critical access; cholecystectomy, 10 556 for critical access and 573 435 for non-critical access; colectomy, 10 198 for critical access and 577 680 for non-critical access; hernia repair, 4291 for critical access and 300 410 for non-critical access—between 2009 and 2013. We compared risk-adjusted outcomes using a multivariable logistical regression that adjusted for patient factors (age, sex, race, Elixhauser comorbidities), admission type (elective, urgent, emergency), and type of operation.

EXPOSURES Undergoing surgical procedures at critical access vs non-critical access hospitals.

MAIN OUTCOMES AND MEASURES Thirty-day mortality, postoperative serious complications (eg, myocardial infarction, pneumonia, or acute renal failure and a length of stay >75th percentile). Hospital costs were assessed using price-standardized Medicare payments during hospitalization.

RESULTS Patients (mean age, 76.5 years; 56.2% women) undergoing surgery at critical access hospitals were less likely to have chronic medical problems, and they had lower rates of heart failure (7.7% vs 10.7%, $P < .0001$), diabetes (20.2% vs 21.7%, $P < .001$), obesity (6.5% vs 10.6%, $P < .001$), or multiple comorbid diseases (% of patients with ≥2 comorbidities; 60.4% vs 70.2%, $P < .001$). After adjustment for patient factors, critical access and non-critical access hospitals had no statistically significant differences in 30-day mortality rates (5.4% vs 5.6%; adjusted odds ratio [OR], 0.96; 95% confidence interval [CI], 0.89-1.03; $P = .28$). However, critical access vs non-critical access hospitals had significantly lower rates of serious complications (6.4% vs 13.9%; OR, 0.35; 95% CI, 0.32-0.39; $P < .001$). Medicare expenditures adjusted for patient factors and procedure type were lower at critical access hospitals than non-critical access hospitals ($14 450 vs $15 845; difference, −$1395, $P < .001$).

CONCLUSIONS AND RELEVANCE Among Medicare beneficiaries undergoing common surgical procedures, patients admitted to critical access hospitals compared with non-critical access hospitals had no significant difference in 30-day mortality rates, decreased risk-adjusted serious complication rates, and lower-adjusted Medicare expenditures, but were less medically complex.

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Critical access hospital designation was created to help ensure access to the more than 59 million people living in rural populations.[1] Established in 1997 under the Medicare Rural Hospital Flexibility Program when policy makers were worried these hospitals would close due to financial hardship, the critical access hospital provision entitled hospitals to increased reimbursements if they had fewer than 25 inpatient beds and were located more than 35 miles away from another hospital.[2] More than 1300 hospitals enrolled in this program, but concern about the resultant Medicare budget growing to more than $9 billion annually led government agencies and advisory groups to call for modification and even elimination of the critical access designation.[3-6] Advocates for critical access hospitals argue that changes would be disruptive to communities that heavily rely on them for their health care.[7,8]

Debates about the value of critical access hospitals continue with limited evidence about the clinical outcomes and costs to Medicare in these settings. Increased mortality rates and worse process of care measures have been reported for common medical admissions at critical access hospitals[9,10]; however, far less is known about patients undergoing surgical procedures. To date the largest study of surgical outcomes captures only approximately one-third of critical access hospitals and lacks postdischarge follow-up and payment information.[11] Nevertheless, this single study found no difference in postoperative mortality rates suggesting that critical access hospitals may provide comparable surgical care with their acute care counterparts. Whether these findings are representative of surgical care across all critical access hospitals and what the costs are to Medicare remain unknown.

The purpose of this study was to evaluate outcomes and costs among Medicare beneficiaries undergoing surgical procedures at critical access and non-critical access hospitals.

Methods

Data Source and Hospital Designation

Data from the Medicare Provider Analysis and Review (MEDPAR) file between 2009 and 2013[26] were used for this study. This represented 5 years of the most recent data available and also a time period after nearly all (1277 of 1333; 95.7%) of the current critical access hospitals had undergone designation.[12] MEDPAR Hospital provider numbers that included "13" in the third and fourth positions were identified as critical access hospitals.[13] This study was approved by the University of Michigan Investigational Review Board and deemed exempt due to use of secondary data.

Identification of Procedures and Study Cohort

Using procedure codes from the *International Classification of Diseases, Ninth Revision, Clinical Modification* (*ICD-9-CM*), a subset of general surgery procedures that would be commonly performed at both critical access and non-critical access hospitals were identified. Because larger, complex operations (eg, pancreatic and esophageal resection) are not typically performed at critical access hospitals, the most common operations performed in that setting were chosen; appendectomy (*ICD-9-CM* codes 47.01, 47.09, 47.11, 47.19), cholecystectomy (*ICD-9-CM* codes 51.22, 51.23, 51.24), colectomy (*ICD-9-CM* codes 45.70, 45.71, 45.72, 45.73, 45.74, 45.75, 45.76, 45.79, 17.31 to 17.39, 45.80) and hernia repair (*ICD-9-CM* codes 53.41, 53.42, 53.43, 53.49, 53.51, 53.59, 53.61, 53.62, 53.63, 53.69). These operations represent the 4 most common inpatient general surgery procedures performed at critical access hospitals. In review of the data, 0.004% of patients were missing information on race, and they were excluded.

Outcome Variables

Outcomes between critical access and non-critical access hospitals were assessed by determining rates of mortality, overall complications, serious complications, reoperations, and readmissions. Mortality in the hospital was determined by vital status at the time of discharge. Additionally, the Medicare beneficiary denominator file was used to ascertain any mortality occurring within 30 days of the index operation. The latter approach identified patients who died after discharge from their index admission or after transfer to another facility.

Complications were identified with *ICD-9-CM* codes using methods previously described and validated.[14,15] Overall complications included pulmonary failure, pneumonia, myocardial infarction, deep venous thrombosis, acute renal failure, postoperative hemorrhage, surgical-site infection, and gastrointestinal bleeding. Serious complications were defined as having at least 1 complication and a length of stay higher than the 75th percentile for the specific procedure that was performed previously in the administrative claims databases to improve specificity.[16,17]

Similarly, reoperation and readmission within 30 days was identified using *ICD-9-CM* codes in methods that have been previously used for surgical cohorts.[18,19] Outcomes were reported for all procedures combined as well as for each procedure group. Patients who were transferred during hospitalization were categorized based on the location of their index operation.

Medicare Payments

Medicare payments from MEDPAR were used to explore if location of care—critical access vs non-critical access hospitals—was associated with any difference in expenditures. Because there is wide variation in hospital charges that may not reflect the actual financial expense to Medicare, the analysis herein used Medicare payments. The total episode payment was defined as the sum of diagnosis related group payments, outlier payments, and payments for readmissions within 30 days of discharge.

To compare Medicare expenditures at critical access hospitals with non-critical access hospitals, actual payments (unadjusted) and price-standardized payments were examined. Actual Medicare payments were chosen because they represent the bottom line to Medicare, ie, as the actual

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amount paid to the hospital. For additional comparison, price-standardized payments were also evaluated.

This analysis was done because payments from Medicare are determined in part by geography (to account for variation in cost of living and the wage index) and the setting in which they provide care (eg, if hospitals care to a disproportionate share of low-income patients or participate in graduate medical education.) By removing these intended adjustments, the comparison of price-standardized amounts provides better insight into differences in resource use between critical access and non-critical access hospitals. For price standardization, this study used methods described initially by the Medicare Payment Advisory Commission[21,22] and later by the Dartmouth Institute to account for these adjustments,[22] as has been done in multiple previous reports using MEDPAR data to examine payments for surgical procedures.[17,23] Furthermore, because data were assessed over a 5-year period, payment amounts were adjusted to 2013 dollars to account for inflation.

Statistical Analysis

The first step of the analysis compared hospital and patient characteristics for critical access and non-critical access hospitals. Hospital characteristics included bed size, teaching status, geography, staffing ratios, surgical volume, and frequency of each procedure type. These were compared using χ^2 and Wilcoxon rank sum tests as appropriate. Similar comparisons of patient characteristics were carried out including age, sex, race, comorbidities, admission type, distance traveled to hospital for care, and destination after discharge (eg, home, transferred, skilled nursing facility.)

The second step of the analysis was to determine whether a difference existed in clinical outcomes or Medicare payments at critical access vs non-critical access hospitals. To evaluate postoperative outcomes, a multivariable logistical regression model was created with each outcome (eg, all complications, mortality, readmission, etc) as a dependent variable. The model was developed using a backward stepwise logistic regression including multiple patient and operation-level variables such as age, sex, race, comorbidities (as outlined previously by Elixhauser et al[24] and Southern et al[25]), admission type (elective, urgent, emergency), and a variable indicating the type of operation. Secular trends were accounted for by including the year of operation as a categorical variable. The model was then used to calculate a risk-adjusted rate for each outcome.

Multiple strategies were used to evaluate the statistical performance of the regression models. First, discrimination was assessed with receiver operating characteristic curves and a *C* statistic was calculated for each outcome (average *C* statistic of 0.77; eTable1 in the Supplement). Next, the calibration of each model was evaluated with a goodness-of-fit test that demonstrated a good match between observed and expected outcomes across all deciles of risk. For each independent variable, the variation inflation factor was calculated with no evidence of multicollinearity (all variance inflations factors were <1.3; eTable2 in the Supplement).

To test for possible nesting effects of patients within hospitals, a 2-tier hierarchical model was created using patient factors (level 1) and hospital factors (level 2). There was no difference in these point estimates generated by the hierarchical model compared with the multivariable regression model that used robust standard errors to account for clustering (eTable3 in the Supplement). Finally, the day of admission (weekday vs weekend) was added into the regression model and demonstrated no significant effect on the results (eTable4 in the Supplement).

Medicare payments were then compared between critical access and non-critical access hospitals. After log transformation to account for their nonparametric distribution, payments were compared in 3 different forms: (1) actual Medicare payments before any adjustment; (2) after risk-adjustment for patient characteristics, procedure type, and type of admission; and (3) after additional price standardization. To adjust for clustering within hospitals, robust standard errors were used for all models.

All reported *P* values were 2-sided and a value of <.05 was used as threshold for significance. All statistical analyses were completed with STATA version 14 (STATA Corp).

Results

Significant differences existed between patients treated at critical access vs non-critical access hospitals. Patients undergoing surgical procedures at critical access hospitals were less likely to have common or multiple comorbid conditions (Table 1). They had lower rates of heart failure, diabetes, obesity, or multiple comorbidities (% of patients with ≥2 comorbidities; 60.4% vs 70.2%, $P < .001$). Emergency operations were more common at non-critical access hospitals (44.6% vs 27.4%, $P < .001$). When comparing discharge destination, patients treated at critical access hospitals were less likely to use skilled nursing care (27.1% vs 37.9%, $P < .001$). A higher proportion of patients at critical access hospitals were transferred to another acute care hospital than those treated in non-critical access hospitals (4.7% vs 0.8%, $P < .001$).

Non-critical access hospitals had significant structural differences compared with critical access hospitals. Non-critical access hospitals on average had more operating rooms (8 vs 2), more inpatient beds (>250 beds; 28.6% vs 0.0%) and higher nursing ratios (Table 2). Despite size and resource differences, both types of hospitals performed a similar proportion of the 4 operations examined (eg, colectomy represented approximately 36% of surgical volume for both types of hospitals). Non-critical access hospitals had a higher annual median surgical volume than critical access hospitals (1624 vs 140, $P < .001$). Of the 1277 hospitals with a critical access designation during the study period, 828 (64.8%) performed at least 1 of the 4 operations examined.

For common surgical procedures, patients at critical access hospitals had either no significantly different or lower risk-adjusted clinical outcomes compared with

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Table 1. Patient Characteristics at Critical Access and Non-Critical Access Hospitals[a]

	No. (%) of Patients		
	Critical Access Hospitals	Non-Critical Access Hospitals	*P* Value
No. of patients	28 512	1 603 392	
Demographic characteristics			
Age, mean (SD), y	76.5 (7.6)	75.7 (7.4)	<.001
Men	12 497 (43.8)	701 101 (43.7)	.72
White	27 454 (96.3)	1 391 263 (86.8)	<.001
Comorbidities[b]			
Hypertension	16 548 (58.0)	1 024 777 (63.9)	<.001
Fluid and electrolyte disorders	6141 (21.5)	443 694 (27.7)	<.001
Diabetes	5747 (20.2)	347 990 (21.7)	<.001
Chronic pulmonary disease	4389 (15.4)	289 450 (18.1)	<.001
Deficiency anemias	4096 (14.4)	251 775 (15.7)	<.001
Hypothyroidism	3597 (12.6)	213 397 (13.3)	.001
Congestive heart failure	2195 (7.7)	171 694 (10.7)	<.001
Metastatic cancer	1813 (6.4)	115 959 (7.2)	<.001
Obesity	1844 (6.5)	170 456 (10.6)	<.001
Depression	1770 (6.2)	106 464 (6.6)	.003
Renal failure	1605 (5.6)	165 317 (10.3)	<.001
Other neurological disorders	1516 (5.3)	80 775 (5.0)	.04
Weight loss	1268 (4.4)	156 976 (9.8)	<.001
Peripheral vascular disease	1239 (4.3)	108 594 (6.8)	<.001
Valvular disease	931 (3.3)	87 020 (5.4)	<.001
Solid tumor	701 (2.5)	46 157 (2.9)	<.001
Rheumatoid arthritis	665 (2.3)	41 442 (2.6)	.005
Coagulopathy	578 (2.0)	71 822 (4.5)	<.001
Liver disease	531 (1.9)	42 907 (2.7)	<.001
Psychoses	495 (1.7)	28 348 (1.8)	.68
Elixhauser comorbidities			
0	4311 (15.1)	145 727 (9.1)	<.001
1	6990 (24.5)	332 621 (20.7)	<.001
≥2	17 211 (60.4)	1 125 044 (70.2)	<.001
Discharge location			
Home	19 214 (67.4)	962 837 (60.1)	<.001
Skilled nursing facility, rehabilitation	7724 (27.1)	607 525 (37.9)	<.001
Transferred	1348 (4.7)	12 506 (0.8)	<.001
Other	148 (0.5)	3688 (0.2)	<.001
Hospice	77 (0.3)	16 996 (1.1)	<.001
Distance traveled for care, median (IQR), miles	6.5 (1.6-14.4)	6.8 (3-17)	<.001
Distance traveled for care, mi			
<10	17 370 (60.9)	982 559 (61.3)	.22
≥10 to <30	8665 (30.4)	385 295 (24.0)	<.001
≥30 to <60	1223 (4.3)	118 491 (7.4)	<.001
>60	1255 (4.4)	116 887 (7.3)	<.001
Type of admission			
Emergency	7822 (27.4)	714 792 (44.6)	<.001
Urgent	8162 (28.6)	235 218 (14.7)	<.001
Elective	12 528 (43.9)	653 382 (40.7)	<.001
Type of operation			
Appendectomy	3467 (12.2)	151 867 (9.5)	<.001
Cholecystectomy	10 556 (37.0)	573 435 (35.8)	<.001
Colectomy	10 198 (35.8)	577 680 (36.0)	.36
Hernia repair	4291 (15.1)	300 410 (18.7)	<.001

Abbreviation: IQR, interquartile range.

Conversion factor: to convert miles to kilometers, multiply by 1.6.

[a] Data are from Medicare Claims, 2009-2013.[26]

[b] Comorbid diseases as defined by the Healthcare Cost and Utilization Project, of note, deficiency anemias are categorized to contrast acute blood loss anemia. Similarly, *Other neurologic disorders* describes a group of chronic underlying neurologic diseases (eg, Alzheimer) as opposed acute process (eg, acute cerebral vascular accident). Full definitions of codes used can be found here: https://www.hcup-us.ahrq.gov/toolssoftware/comorbidity/comorbidity.jsp.

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Table 2. Hospital Characteristics at Critical Access and Non-Critical Access Hospitals[a]

	No. (%) of Critical Access Hospitals (n = 828)	No. (%) of Non-Critical Access Hospitals (n = 3676)	P Value
No. of patients	28 512	1 603 392	
Ownership			
For-profit	33 (4.0)	890 (25.2)	
Nonprofit	467 (57.0)	2105 (59.7)	<.001
Other	319 (38.9)	531 (15.1)	
Beds			
<250	828 (100.0)	2516 (71.4)	
≥250 to <500	0	744 (21.1)	<.001
>500	0	266 (7.5)	
Geographic region, No. (%)			
Northeast	51 (6.2)	522 (14.8)	
Midwest	450 (54.9)	801 (22.7)	<.001
South	147 (17.9)	1559 (44.2)	
West	171 (20.9)	644 (18.3)	
Surgical volume per hospital, median (IQR)[b]	140 (56-278)	1624 (650-3669)	<.001
Surgical volume of Medicare patients per hospital, median (IQR)			
Appendectomy	3 (1-6)	26 (7-59)	<.001
Cholecystectomy	8 (3-18)	100 (27-228)	<.001
Colectomy	8 (2-18)	92 (21-226)	<.001
Hernia repair	3 (1-7)	44 (11-116)	<.001
Teaching hospital	43 (5.3)	1121 (31.8)	<.001
No. of operating rooms, median (IQR)	2 (2-3)	8 (4-13)	<.001
Nurse ratio (patient census/nurses), median (IQR)[c]	9 (4-14)	7 (5-9)	<.001

Abbreviation: IQR, interquartile range.

[a] Data are from Medicare Claims, 2009-2013[26] and the American Hospital Association.[27]

[b] Data reported to the American Hospital Association, represents annual volume of surgical procedures performed.

[c] Nursing ratio was determined using data from the American Hospital Association and represents the patient census divided by number of nurses.

non-critical access hospitals. Critical access hospitals had lower rates of in-hospital mortality (2.9% vs 3.9%; adjusted odds ratio [OR], 0.69; 95% CI, 0.62-0.77; $P < .001$) and no difference in 30-day mortality (5.4% vs 5.6%; OR, 0.96; 95% CI, 0.89-1.03; $P = .28$). Critical access hospitals also had lower rates of serious complications (6.4% vs 13.9%; OR, 0.35; 95% CI, 0.32-0.39; $P < .001$) and overall complications (17.5% vs 25.4%; OR, 0.55; 95% CI, 0.52-0.58; $P < .001$). In contrast, critical access hospitals had higher rates of readmission within 30 days than non-critical access hospitals (14.7% vs 13.3%; OR, 1.13; 95% CI, 1.08-1.18; $P < .001$). Repeat subgroup analysis for each individual procedure (appendectomy, cholecystectomy, colectomy, hernia repair) demonstrated similar findings (Table 3). Unadjusted rates of clinical outcomes are reported in eTable 5 in the Supplement.

Critical access hospitals had lower Medicare payments for common surgical procedures than non-critical access hospitals. When examining all procedures combined, actual Medicare payments at critical access hospitals were $5980 lower than non-critical access hospitals ($15 094 vs $21 074, $P < .001$). After both risk-adjustment and price-standardization, payments to critical access hospitals remained lower than non-critical access hospitals ($14 450 vs $15 845; difference −$1395, $P < .001$). Similar differences were found between payments across each of the procedures examined individually (Table 4).

Discussion

This study had 2 principal findings regarding how surgical care is delivered at critical access hospitals. First, the study found that performance of 4 common surgical procedures at critical access hospitals was associated with no difference in 30-day mortality and lower complication rates compared with non-critical access hospitals. Second, despite the reimbursement structure for critical access hospitals established in the Medicare Rural Hospital Flexibility Program, there was no evidence of higher expenditures for common surgical procedures. Both of these findings contrast previously published literature about nonsurgical admissions in these same settings and inform legislators about the valuable role critical access hospitals provide in the US health care system.

Previous studies examining outcomes at critical access hospitals have raised concern about the quality of care provided. A recent study of Medicare beneficiaries admitted for acute myocardial infarction, heart failure, or pneumonia to critical access hospitals reported worse mortality rates and lower adherence to process measures of care.[9] A follow-up study for the same medical conditions from 2002 to 2010 found that mortality rates at critical access hospitals actually increased, despite additional funding for quality improvement efforts.[10] However, these differences in

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Table 3. Postperative Complications at Critical Access and Non-Critical Access Hospitals[a]

	Risk Adjusted Rates (95% CI), %				
	Critical Access Hospitals (n = 28 512)	Non-Critical Access Hospitals (n = 1 603 392)	Absolute Difference	Risk-Adjusted Odds Ratio[b]	P Value
All Procedures Combined					
Mortality, 30-d	5.4 (5.1 to 5.7)	5.6 (5.5 to 5.7)	−0.2 (−0.5 to 0.2)	0.96 (0.89 to 1.03)	.28
Mortality, in-hospital	2.9 (2.6 to 3.1)	4.0 (3.9 to 4.1)	−1.1 (−1.3 to −0.8)	0.69 (0.62 to 0.77)	<.001
Any complication	17.5 (16.9 to 18.2)	25.4 (25.3 to 25.6)	−7.9 (−8.6 to −7.2)	0.55 (0.52 to 0.58)	<.001
Serious complications	6.4 (5.9 to 6.8)	13.9 (13.7 to 14.1)	−7.5 (−7.9 to −7.0)	0.35 (0.32 to 0.39)	<.001
Reoperations	0.6 (0.5 to 0.7)	0.6 (0.6 to 0.6)	0.0 (−0.1 to 0.1)	0.98 (0.81 to 1.20)	.88
Readmissions	14.7 (14.2 to 15.2)	13.3 (13.2 to 13.4)	1.4 (0.9 to 2.0)	1.13 (1.08 to 1.18)	<.001
Appendectomy					
Mortality, 30-d	2.7 (2.1 to 3.3)	3.1 (3.0 to 3.2)	−0.4 (−0.9 to 0.2)	0.86 (0.68 to 1.10)	.23
Mortality, in-hospital	1.4 (0.9 to 1.8)	2.1 (2.0 to 2.2)	−0.8 (−1.2 to −0.4)	0.61 (0.44 to 0.84)	.003
Any complication	13.7 (12.5 to 15.0)	20.8 (20.6 to 21.1)	−7.1 (−8.3 to −5.8)	0.53 (0.46 to 0.61)	<.001
Serious complications	6.4 (5.5 to 7.3)	12.8 (12.6 to 13.0)	−6.4 (−7.3 to −5.4)	0.39 (0.32 to 0.47)	<.001
Reoperations	0.3 (0.1 to 0.5)	0.5 (0.4 to 0.5)	−0.1 (−0.3 to 0.1)	0.71 (0.40 to 1.29)	.26
Readmissions	10.7 (9.6 to 11.7)	11.2 (11.0 to 11.3)	−0.5 (−1.6 to 0.6)	0.95 (0.85 to 1.06)	0.37
Cholecystectomy					
Mortality, 30-d	3.3 (2.9 to 3.7)	3.6 (3.5 to 3.7)	−0.3 (−0.7 to 0.1)	0.90 (0.79 to 1.03)	.12
Mortality, in-hospital	1.3 (1.1 to 1.5)	2.2 (2.1 to 2.2)	−0.9 (−1.1 to −0.6)	0.58 (0.47 to 0.72)	<.001
Any complication	13.2 (12.4 to 14.0)	21.7 (21.5 to 21.9)	−8.6 (−9.3 to −7.8)	0.48 (0.45 to 0.52)	<.001
Serious complications	5.0 (4.5 to 5.5)	12.1 (11.9 to 12.3)	−7.1 (−7.7 to −6.6)	0.32 (0.28 to 0.36)	<.001
Reoperations	0.2 (0.1 to 0.3)	0.3 (0.3 to 0.3)	−0.1 (−0.2 to 0.1)	0.75 (0.49 to 1.16)	.20
Readmissions	15.0 (14.2 to 15.7)	12.8 (12.7 to 12.9)	2.2 (1.4 to 2.9)	1.21 (1.14 to 1.28)	<.001
Colectomy					
Mortality, 30-d	9.2 (8.5 to 9.8)	9.1 (9.0 to 9.2)	0.0 (−0.6 to 0.7)	1.00 (0.92 to 1.10)	.93
Mortality, in-hospital	5.3 (4.8 to 5.8)	6.9 (6.8 to 7.0)	−1.6 (−2.1 to −1.0)	0.73 (0.65 to 0.83)	<.001
Any complication	23.7 (22.7 to 24.7)	31.6 (31.4 to 31.8)	−8.0 (−8.9 to −6.9)	0.59 (0.54 to 0.63)	<.001
Serious complications	7.6 (6.9 to 8.3)	16.1 (15.9 to 16.2)	−8.4 (−9.1 to −7.7)	0.36 (0.32 to 0.40)	<.001
Reoperations	1.1 (0.9 to 1.4)	1.0 (0.9 to 1.1)	0.1 (−0.1 to 0.4)	1.16 (0.92 to 1.46)	.22
Readmissions	16.7 (15.8 to 17.5)	14.8 (14.7 to 14.9)	1.8 (0.9 to 2.7)	1.15 (1.08 to 1.23)	<.001
Hernia Repair					
Mortality, 30-d	3.6 (3.0 to 4.2)	3.7 (3.6 to 3.8)	−0.1 (−0.7 to 0.5)	0.96 (0.79 to 1.17)	.68
Mortality, in-hospital	1.9 (1.4 to 2.4)	2.6 (2.5 to 2.7)	−0.7 (−1.1 to −0.2)	0.71 (0.55 to 0.93)	.01
Any complication	16.3 (15.2 to 17.4)	22.9 (22.7 to 23.2)	−6.6 (−7.7 to −5.5)	0.58 (0.52 to 0.64)	<.001
Serious complications	7.0 (6.1 to 7.8)	13.7 (13.5 to 13.9)	−6.7 (−7.5 to −5.9)	0.38 (0.33 to 0.45)	<.001
Reoperations	0.5 (0.3 to 0.7)	0.6 (0.6 to 0.6)	−0.1 (−0.3 to 0.1)	0.84 (0.53 to 1.32)	.45
Readmissions	12.3 (11.3 to 13.3)	12.3 (12.1 to 12.4)	0.1 (−1.0 to 1.1)	1.01 (0.91 to 1.11)	.91

[a] Data are from Medicare Claims, 2009-2013.[26]

[b] Risk-adjustment for patient characteristics, procedure type, and type of admission.

mortality between critical access vs non-critical access hospitals have not been observed for surgical procedures. For example, work done by Gadzinski and colleagues[11] evaluated patients in the National Inpatient Sample, a 20% stratified sampled of nonfederal hospitals in the United States, and found no difference in in-hospital mortality for multiple surgical procedures.

The present study goes beyond these findings by assessing a wider range of surgical outcomes and evaluating all critical access hospitals in the United States performing common surgical procedures in Medicare beneficiaries.

Although the data from this study cannot identify a clear mechanism for the contrast between medical and surgical outcomes, the findings do suggest several possible explanations. First, with surgery, critical access hospitals have the opportunity to select appropriate candidates before deciding whether to operate. In this study, critical access hospitals generally operated on fewer complex patients (vs non-critical access hospitals) and demonstrated relatively low postoperative transfer rates (4.8% in this study compared with ≤29% reported for medical admissions[9,10]). These findings are consistent with the dual role rural surgeons perform in providing safe local care on appropriately selected patients but also in triaging higher-risk patients to larger centers before an operation. For medical conditions, which are less elective than the surgical procedures that we studied it is often not possible to make decisions before hospitalization occurs.

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Table 4. Payments per Patient for Surgical Admission at Critical Access and Non-Critical Access Hospitals[a]

	Mean Payments (95% CI), $			
	Critical Access Hospitals (n = 28 512)	Non-Critical Access Hospitals (n = 1 603 392)	Difference	P Value
All Procedures Combined				
Actual Medicare payments[b]	15 094 (14 890-15 297)	21 074 (21 030-21 118)	−5980	<.001
Risk-adjusted payments[c]	15 787 (15 692-15 882)	19 437 (19 416-19 457)	−3650	<.001
Risk-adjusted and price-standardized payments[d]	14 450 (14 377-14 522)	15 845 (15 830-15 860)	−1395	<.001
Appendectomy				
Actual Medicare payments[b]	13 103 (12 578-13 627)	17 163 (17 046-17 281)	−4061	<.001
Risk-adjusted payments[c]	13 861 (13 628-14 094)	16 230 (16 173-16 287)	−2369	<.001
Risk-adjusted and price-standardized payments[d]	12 553 (12 376-12 730)	13 471 (13 429-13 513)	−918	<.001
Cholecystectomy				
Actual Medicare payments[b]	11 960 (11 683-12 238)	17 696 (17 633-17 758)	−5735	<.001
Risk-adjusted payments[c]	12 301 (12 199-12 404)	16 581 (16 559-16 604)	−4280	<.001
Risk-adjusted and price-standardized payments[d]	11 378 (11 301-11 455)	13 607 (13 590-13 624)	−2229	<.001
Colectomy				
Actual Medicare payments[b]	19 924 (19 547-20 301)	27 129 (27 044-27 214)	−7205	<.001
Risk-adjusted payments[c]	21 147 (20 979-21 315)	24 668 (24 630-24 707)	−3521	<.001
Risk-adjusted and price-standardized payments[d]	19 104 (18 976-19 232)	19 863 (19 834-19 891)	−759	<.001
Hernia Repair				
Actual Medicare payments[b]	13 104 (12 563-13 644)	18 137 (18 044-18 230)	−5033	<.001
Risk-adjusted payments[c]	13 465 (13 251-13 679)	16 645 (16 602-16 687)	−3180	<.001
Risk-adjusted and price-standardized payments[d]	12 624 (12 459-12 788)	13 785 (13 753-13 817)	−1161	<.001

[a] Data are from Medicare Claims, 2009-2013.[26]

[b] Total Medicare payment to hospital before any adjustments

[c] Payment adjusted for patient characteristics, procedure type, and type of admission.

[d] Payment priced standardized for hospital and geographic variation and adjusted for patient characteristics, procedure type, and type of admission.

Second, this study only includes a subset of relatively well-resourced critical access hospitals; ie, those with the capabilities to perform inpatient general surgery. These hospitals likely have more staff and resources than do the larger population of critical access hospitals that offer medical care.

Another important finding from this study was that critical access hospitals were less likely to refer patients to rehabilitation or skilled nursing facilities after discharge. Although this finding may simply represent a healthier patient population or less complex surgical procedures at critical access hospitals, it could also reflect limited access to postdischarge care that has been previously described in rural settings.[28] Specifically, patients were much less likely to be discharged to postacute care facilities (27.1% vs 37.9%) from critical access than from non-critical access hospitals. This lower use of postdischarge care at critical access hospi-:als could in turn account for the higher rate of readmission ɔbserved in this study.

This study should be interpreted within the context of :ertain limitations. First, administrative data have well-:nown limitations for assessing comorbid conditions and scertaining complications of care factors.[29,30] To minimize ny potential coding bias, this study used selected codes :om the Complication Screening Project that significantly ıcrease the specificity of detecting complications in claims ata.[14,15] In addition, an extended length-of-stay criteria was ɔplied to increase the specificity of the complication measures. This approach has been demonstrated to more accurately capture complicated hospital courses.[31] Moreover, other sources of data (eg, clinical registries) with more detailed clinical and payer information do not include the majority of rural and critical access hospitals.[32,33]

Second, because non-critical access hospitals are reimbursed based on disease severity and have more resources, they may be more thoroughly documenting diagnoses codes. As a result, this study could potentially overestimate complication rates and comorbidities of patients treated at non-critical access hospitals. However, the comparisons between critical access vs non-critical access hospitals were consistent in measures that were not sensitive to this type of coding bias (eg, mortality rates, reoperations, expenditures) making the differences found in this study unlikely to be due to documentation alone.

Finally, by using Medicare data, this study population did not include many younger patients who also seek care at critical access hospitals. Although this group of younger patients is important to evaluate, the Medicare Rural Affordability Program in the Balanced Budget Act of 1997 was specifically designed for Medicare beneficiaries and as such, evaluation in Medicare data are most relevant to policy makers.

This study may have important policy implications for payers and policy makers responding to mandates in the Affordable Care Act to evaluate health care services for rural Americans. First, patients in rural settings are sometimes

reluctant to travel for surgical care, even when told it would lead to a better outcome.[34] These same patients may often prefer follow-up locally, independent of where their initial operation occurred. Recent evidence suggests that, among patients requiring rehospitalization, admission to the same hospital where they had surgery improved survival.[35] Maintaining payment policies that secure safe, local surgical care allows rural clinicians to accommodate strong patient preferences without putting them at increased risk of undergoing common operations. Second, although currently exempt from Hospital-Value Based Purchasing, and many other payment reforms, these findings suggest that critical access hospitals may benefit from participating in these reforms. By providing comparable outcomes at a lower cost for common surgical procedures, critical access hospitals may find it profitable to enroll in bundled payment programs.

Third, although only a minority of critical access hospitals (≈5%) are currently participating in Medicare accountable care organizations (ACOs), they may find that creating a network relationship with larger facilities located in the nearest metropolitan area could facilitate the important role they are already playing in triaging and transferring patients to higher levels of care when needed. Nevertheless, critical access hospitals and rural surgical practices may have difficulty meeting the reporting and regulatory requirements of these new payment models.

Conclusions

Among Medicare beneficiaries undergoing common surgical procedures, patients admitted to critical access hospitals compared with non-critical access hospitals had no significant difference in 30-day mortality rates, decreased risk-adjusted serious complication rates, and lower-adjusted Medicare expenditures, but were less medically complex.

ARTICLE INFORMATION

Author Contributions: Dr Ibrahim and Ms Thumma had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.
Study concept and design: Ibrahim, Hughes, Dimick.
Acquisition, analysis, or interpretation of data: Ibrahim, Thumma, Dimick.
Drafting of the manuscript: Ibrahim, Thumma, Dimick.
Critical revision of the manuscript for important intellectual content: Ibrahim, Hughes, Dimick.
Statistical analysis: Ibrahim, Thumma, Dimick.
Obtained funding: Dimick.
Administrative, technical, or material support: Dimick.
Study supervision: Hughes, Dimick.

Conflict of Interest Disclosures: All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Dimick is a cofounder and has a financial interest in ArborMetrix Inc, which had no role in the analysis herein, and has received grant support from the Agency for Healthcare Research and Quality, personal fees from the National Institutes of Health, and honoraria from Stanford and Emory universities and the University of Texas. No other disclosures were reported.

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Role of the Funder/Sponsor: The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

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SEP 7 '17 AM 1:08

LETTER OF INTENT
TENNESSEE HEALTH SERVICES & DEVELOPMENT AGENCY

The Publication of Intent is to be published in The Dunlap Tribune, a newspaper of general circulation in Sequatchie County, Tennessee, on or before September 7, 2017, for one day.

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This is to provide official notice to the Health Services & Development Agency and all interested parties, in accordance with T.C.A. § 68-11-1601 *et. seq.*, and the Rules of the Health Services & Development Agency, that Erlanger Sequatchie Valley Regional Hospital, with an ownership type of governmental, and to be managed by itself, intends to file an application for a Certificate of Need ("CON") to construct a regional community hospital (critical access hospital), with a total complement of twenty-five (25) inpatient beds, to include services for inpatients, outpatients, emergency medical services, and magnetic resonance imaging (MRI) in Dunlap, Sequatchie County, Tennessee.

This facility will replace the existing Erlanger Bledsoe Hospital, located at 71 Wheelertown Avenue, Pikeville, TN 37367. The new Erlanger Sequatchie Valley Regional Hospital, MRI and equipment will be located at 17399 Rankin Avenue, Dunlap, Sequatchie County, Tennessee, 37327, otherwise described as map 041, parcels 021.00 and 020.01, at the Sequatchie County Tax Assessor's Office.

A companion CON application will be filed with the Health Services & Development Agency for a new provider based emergency department in Pikeville, Tennessee, to replace the existing provider based emergency department located at 16931 Rankin Avenue, Dunlap, Sequatchie County, Tennessee.

The total project cost is estimated to be $ 32,653,836.

The anticipated date of filing the application is September 12, 2017.

The contact person for this project is Joseph M. Winick, Sr. Vice President, Erlanger Health System, 975 East 3rd Street, Chattanooga, Tennessee, 37403, and by phone at (423) 778-7274.

Joseph M. Winick	September 6, 2017 Date:	Joseph.Winick@erlanger.org E-Mail:

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The Letter Of Intent must be <u>filed in triplicate</u> and <u>received between the first and the tenth</u> day of the month. If the last day for filing is a Saturday, Sunday or State Holiday, filing must occur on the preceding business day. File this form at the following address:

Health Services & Development Agency
Andrew Jackson Building, 9th Floor
502 Deaderick Street
Nashville, Tennessee 37243

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The published Letter Of Intent must contain the following statement pursuant to T.C.A. §68-11-1607(c)(1): (A) Any health care institution wishing to oppose a Certificate of Need application must file a written notice with the Health Services and Development Agency no later than fifteen (15) days before the regularly scheduled Health Services and Development Agency meeting at which the application is originally scheduled; and (B) Any other person wishing to oppose the application must file written objection with the Health Services and Development Agency at or prior to the consideration of the application by the Agency.

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RULES
OF
HEALTH SERVICES AND DEVELOPMENT AGENCY

CHAPTER 0720-11
CERTIFICATE OF NEED PROGRAM – GENERAL CRITERIA

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0720-11-.01 General Criteria for Certificate of Need

0720-11-.01 GENERAL CRITERIA FOR CERTIFICATE OF NEED. The Agency will consider the following general criteria in determining whether an application for a certificate of need should be granted:

(1) Need. The health care needed in the area to be served may be evaluated upon the following factors:

(a) The relationship of the proposal to any existing applicable plans;

(b) The population served by the proposal;

(c) The existing or certified services or institutions in the area;

(d) The reasonableness of the service area;

(e) The special needs of the service area population, including the accessibility to consumers, particularly women, racial and ethnic minorities, TennCare participants, and low-income groups;

(f) Comparison of utilization/occupancy trends and services offered by other area providers;

(g) The extent to which Medicare, Medicaid, TennCare, medically indigent, charity care patients and low income patients will be served by the project. In determining whether this criteria is met, the Agency shall consider how the applicant has assessed that providers of services which will operate in conjunction with the project will also meet these needs.

(2) Economic Factors. The probability that the proposal can be economically accomplished and maintained may be evaluated upon the following factors:

(a) Whether adequate funds are available to the applicant to complete the project;

(b) The reasonableness of the proposed project costs;

(c) Anticipated revenue from the proposed project and the impact on existing patient charges;

(d) Participation in state/federal revenue programs;

(e) Alternatives considered; and

(f) The availability of less costly or more effective alternative methods of providing the benefits intended by the proposal.

(Rule 0720-11-.01, continued)

(3) Quality. Whether the proposal will provide health care that meets appropriate quality standards may be evaluated upon the following factors:

(a) Whether the applicant commits to maintaining an actual payor mix that is comparable to the payor mix projected in its CON application, particularly as it relates to Medicare, TennCare/Medicaid, Charity Care, and the Medically Indigent;

(b) Whether the applicant commits to maintaining staffing comparable to the staffing chart presented in its CON application;

(c) Whether the applicant will obtain and maintain all applicable state licenses in good standing;

(d) Whether the applicant will obtain and maintain TennCare and Medicare certification(s), if participation in such programs was indicated in the application;

(e) Whether an existing healthcare institution applying for a CON has maintained substantial compliance with applicable federal and state regulation for the three years prior to the CON application. In the event of non-compliance, the nature of non-compliance and corrective action shall be considered;

(f) Whether an existing health care institution applying for a CON has been decertified within the prior three years. This provision shall not apply if a new, unrelated owner applies for a CON related to a previously decertified facility;

(g) Whether the applicant will participate, within 2 years of implementation of the project, in self-assessment and external peer assessment processes used by health care organizations to accurately assess their level of performance in relation to established standards and to implement ways to continuously improve.

1. This may include accreditation by any organization approved by Centers for Medicare and Medicaid Services (CMS) and other nationally recognized programs. The Joint Commission or its successor, for example, would be acceptable if applicable. Other acceptable accrediting organizations may include, but are not limited to, the following:

(i) Those having the same accrediting standards as the licensed hospital of which it will be a department, for a Freestanding Emergency Department;

(ii) Accreditation Association for Ambulatory Health Care, and where applicable, American Association for Accreditation of Ambulatory Surgical Facilities, for Ambulatory Surgical Treatment Center projects;

(iii) Commission on Accreditation of Rehabilitation Facilities (CARF), for Comprehensive Inpatient Rehabilitation Services and Inpatient Psychiatric projects;

(iv) American Society of Therapeutic Radiation and Oncology (ASTRO), the American College of Radiology (ACR), the American College of Radiation Oncology (ACRO), National Cancer Institute (NCI), or a similar accrediting authority, for Megavoltage Radiation Therapy projects;

(v) American College of Radiology, for Positron Emission Tomography, Magnetic Resonance Imaging and Outpatient Diagnostic Center projects;

(Rule 0720-11-.01, continued)

(vi) Community Health Accreditation Program, Inc., Accreditation Commission for Health Care, or another accrediting body with deeming authority for hospice services from CMS or state licensing survey, and/or other third party quality oversight organization, for Hospice projects;

(vii) Behavioral Health Care accreditation by the Joint Commission for Nonresidential Substitution Based Treatment Center, for Opiate Addiction projects;

(viii) American Society of Transplantation or Scientific Registry of Transplant Recipients, for Organ Transplant projects;

(ix) Joint Commission or another appropriate accrediting authority recognized by CMS, or other nationally recognized accrediting organization, for a Cardiac Catheterization project that is not required by law to be licensed by the Department of Health;

(x) Participation in the National Cardiovascular Data Registry, for any Cardiac Catheterization project;

(xi) Participation in the National Burn Repository, for Burn Unit projects;

(xii) Community Health Accreditation Program, Inc., Accreditation Commission for Health Care, and/or other accrediting body with deeming authority for home health services from CMS and participation in the Medicare Quality Initiatives, Outcome and Assessment Information Set, and Home Health Compare, or other nationally recognized accrediting organization, for Home Health projects; and

(xiii) Participation in the National Palliative Care Registry, for Hospice projects.

(h) For Ambulatory Surgical Treatment Center projects, whether the applicant has estimated the number of physicians by specialty expected to utilize the facility, developed criteria to be used by the facility in extending surgical and anesthesia privileges to medical personnel, and documented the availability of appropriate and qualified staff that will provide ancillary support services, whether on- or off-site.

(i) For Cardiac Catheterization projects:

1. Whether the applicant has documented a plan to monitor the quality of its cardiac catheterization program, including but not limited to, program outcomes and efficiencies;

2. Whether the applicant has agreed to cooperate with quality enhancement efforts sponsored or endorsed by the State of Tennessee, which may be developed per Policy Recommendation; and

3. Whether the applicant will staff and maintain at least one cardiologist who has performed 75 cases annually averaged over the previous 5 years (for an adult program), and 50 cases annually averaged over the previous 5 years (for a pediatric program).

(j) For Open Heart projects:

(Rule 0720-11-.01, continued)

1. Whether the applicant will staff with the number of cardiac surgeons who will perform the volume of cases consistent with the State Health Plan (annual average of the previous 2 years), and whether the applicant will maintain this volume in the future;

2. Whether the applicant will staff and maintain at least one surgeon with 5 years of experience;

3. Whether the applicant will participate in a data reporting, quality improvement, outcome monitoring, and peer review system that benchmarks outcomes based on national norms, with such a system providing for peer review among professionals practicing in facilities and programs other than the applicant hospital (demonstrated active participation in the STS National Database is expected and shall be considered evidence of meeting this standard);

(k) For Comprehensive Inpatient Rehabilitation Services projects, whether the applicant will have a board-certified physiatrist on staff (preferred);

(l) For Home Health projects, whether the applicant has documented its existing or proposed plan for quality data reporting, quality improvement, and an outcome and process monitoring system;

(m) For Hospice projects, whether the applicant has documented its existing or proposed plan for quality data reporting, quality improvement, and an outcome and process monitoring system;

(n) For Megavoltage Radiation Therapy projects, whether the applicant has demonstrated that it will meet the staffing and quality assurance requirements of the American Society of Therapeutic Radiation and Oncology (ASTRO), the American College of Radiology (ACR), the American College of Radiation Oncology (ACRO), National Cancer Institute (NCI), or a similar accrediting authority;

(o) For Neonatal Intensive Care Unit projects, whether the applicant has documented its existing or proposed plan for data reporting, quality improvement, and outcome and process monitoring system; whether the applicant has documented the intention and ability to comply with the staffing guidelines and qualifications set forth by the Tennessee Perinatal Care System Guidelines for Regionalization, Hospital Care Levels, Staffing and Facilities; and whether the applicant will participate in the Tennessee Initiative for Perinatal Quality Care (TIPQC);

(p) For Nursing Home projects, whether the applicant has documented its existing or proposed plan for data reporting, quality improvement, and outcome and process monitoring systems, including in particular details on its Quality Assurance and Performance Improvement program. As an alternative to the provision of third party accreditation information, applicants may provide information on any other state, federal, or national quality improvement initiatives;

(q) For Inpatient Psychiatric projects:

1. Whether the applicant has demonstrated appropriate accommodations for patients (e.g., for seclusion/restraint of patients who present management problems and children who need quiet space; proper sleeping and bathing arrangements for all patients), adequate staffing (i.e., that each unit will be staffed with at least two direct patient care staff, one of which shall be a nurse, at all

times), and how the proposed staffing plan will lead to quality care of the patient population served by the project;

2. Whether the applicant has documented its existing or proposed plan for data reporting, quality improvement, and outcome and process monitoring system; and

3. Whether an applicant that owns or administers other psychiatric facilities has provided information on satisfactory surveys and quality improvement programs at those facilities.

(r) For Freestanding Emergency Department projects, whether the applicant has demonstrated that it will satisfy and maintain compliance with standards in the State Health Plan;

(s) For Organ Transplant projects, whether the applicant has demonstrated that it will satisfy and maintain compliance with standards in the State Health Plan; and

(t) For Relocation and/or Replacement of Health Care Institution projects:

1. For hospital projects, Acute Care Bed Need Services measures are applicable; and

2. For all other healthcare institutions, applicable facility and/or service specific measures are applicable.

(u) For every CON issued on or after the effective date of this rule, reporting shall be made to the Health Services and Development Agency each year on the anniversary date of implementation of the CON, on forms prescribed by the Agency. Such reporting shall include an assessment of each applicable volume and quality standard and shall include results of any surveys or disciplinary actions by state licensing agencies, payors, CMS, and any self-assessment and external peer assessment processes in which the applicant participates or participated within the year, which are relevant to the health care institution or service authorized by the certificate of need. The existence and results of any remedial action, including any plan of correction, shall also be provided.

(v) HSDA will notify the applicant and any applicable licensing agency if any volume or quality measure has not been met.

(w) Within one month of notification the applicant must submit a corrective action plan and must report on the progress of the plan within one year of that submission.

(4) Contribution to the Orderly Development of Adequate and Effective Healthcare Facilities and/or Services. The contribution which the proposed project will make to the orderly development of an adequate and effective health care system may be evaluated upon the following factors:

(a) The relationship of the proposal to the existing health care system (for example: transfer agreements, contractual agreements for health services, the applicant's proposed TennCare participation, affiliation of the project with health professional schools);

(b) The positive or negative effects attributed to duplication or competition; and

(Rule 0720-11-.01, continued)

(c) The availability and accessibility of human resources required by the proposal, including consumers and related providers.

(5) Applications for Change of Site. When considering a certificate of need application which is limited to a request for a change of site for a proposed new health care institution, The Agency may consider, in addition to the foregoing factors, the following factors:

(a) Need. The applicant should show the proposed new site will serve the health care needs in the area to be served at least as well as the original site. The applicant should show that there is some significant legal, financial, or practical need to change to the proposed new site.

(b) Economic factors. The applicant should show that the proposed new site would be at least as economically beneficial to the population to be served as the original site.

(c) Quality of Health Care to be provided. The applicant should show the quality of health care to be provided will be served at least as well as the original site.

(d) Contribution to the orderly development of health care facilities and/or services. The applicant should address any potential delays that would be caused by the proposed change of site, and show that any such delays are outweighed by the benefit that will be gained from the change of site by the population to be served.

(6) Certificate of need conditions. In accordance with T.C.A. § 68-11-1609, The Agency, in its discretion, may place such conditions upon a certificate of need it deems appropriate and enforceable to meet the applicable criteria as defined in statute and in these rules.

Authority: *T.C.A. §§ 4-5-202, 4-5-208, 68-11-1605, 68-11-1609, and 2016 Tenn. Pub. Acts Ch. 1043.* ***Administrative History:*** *Original rule filed August 31, 2005; effective November 14, 2005. Emergency rule filed May 31, 2017; effective through November 27, 2017.*

CERTIFICATE OF NEED
REVIEWED BY THE DEPARTMENT OF HEALTH
DIVISION OF POLICY, PLANNING AND ASSESSMENT
615-741-1954

DATE: November 30, 2017

APPLICANT: Erlanger Sequatchie Valley Regional Hospital
17399 Rakin Avenue
Dunlap, Tennessee 37327

CONTACT PERSON: Joseph M. Winick

Erlanger Health System
975 East 3rd Street
Chattanooga, Tennessee 37403

COST: $32,653,836

In accordance with Section 68-11-1608(a) of the Tennessee Health Services and Planning Act of 2002, the Tennessee Department of Health, Division of Policy, Planning, and Assessment, reviewed this certificate of need application for financial impact, TennCare participation, compliance with *Tennessee's State Health Plan*, and verified certain data. Additional clarification or comment relative to the application is provided, as applicable, under the heading "Note to Agency Members."

SUMMARY:
The applicant, Sequatchie Valley Regional Hospital, to le located at 17399 Rankin Avenue, Dunlap, Tennessee 37327 seeks Certificate of Need (CON) approval for the replacement and construction of a new 25-bed regional community critical access hospital to included services for inpatients, outpatients, emergency medical services and magnetic resonance imaging (MRI) in Dunlap (Sequatchie County), Tennessee.

This facility will replace the existing Erlanger Bledsoe Hospital located at 71 Wheelertown Avenue, Pikeville, Tennessee 37367. The total project cost is $32,653,836 and will be financed through Sequatchie County Industrial Authority bond issuance occurring through the Tennessee Municipal Bond Fund.

GENERAL CRITERIA FOR CERTIFICATE OF NEED

The applicant responded to all of the general criteria for Certificate of Need as set forth in the document *Tennessee's State Health Plan.*

NEED:
The applicant's service area is Sequatchie, Bledsoe, and Grundy counties.

2017-2021 Service Area Total Population Projections

County	2017	2021	% Increase or Decrease
Sequatchie	16,125	17,206	6.7
Bledsoe	13,333	13,516	1.4
Grundy	13,430	13,216	-1.6
Total	**42,888**	**43,938**	**2.4**

Tennessee Population Projections 2015 Revised UTCBER, Tennessee Department

Erlanger Sequatchie Valley Regional Hospital seeks approval to relocate and replace an existing critical access hospital from Pikeville, Bledsoe County, to Dunlap, Sequatchie County. The original

Erlanger Bledsoe Hospital was built in 1971 and is current 46 years old and in need of significant renovation and updates. Maintenance is ongoing and requires a significant effort to sustain operation of the hospital. The physical plant has outlived its useful life. It is time to replace this 25 bed critical access hospital which has been designated by the State of Tennessee as a necessary provider.

The replacement facility, Erlanger Sequatchie Valley Regional Hospital will be located 20 miles south of Erlanger Bledsoe Hospital. The strategy for relocating the hospital from Bledsoe County to Sequatchie County is to foster access by creating a centrally located "regional community hospital" for three rural counties which are directly West of Hamilton County, Tennessee. These counties are Grundy, Sequatchie, and Bledsoe. By relocating the hospital to Dunlap, the population of the service area will have improved access with a more centrally located facility which is accessible by the entire Sequatchie Valley region. Patients will not have to travel to Chattanooga or elsewhere for needed health services.

The applicant will offer MRI services at the new replacement facility. The applicant projects 2,535 MRI procedures in 2020, 2,539 MRI procedures in 2021 and 2,553 MRI procedures in 2022.

TENNCARE/MEDICARE ACCESS:
The applicant participates in the TennCare and Medicare programs. The applicant contracts with TennCare MCOs AmeriGroup, United HealthCare Community Plan, BlueCare, and TennCare Select.

The applicant's year one Medicare revenue are projected to be $11,662,441or 26.7% of total gross revenues, and TennCare revenues are projected to be $15,200,485 or 34.8% of total gross revenues.

ECONOMIC FACTORS/FINANCIAL FEASIBILITY:
The Department of Health, Division of Policy, Planning, and Assessment have reviewed the Project Costs Chart, the Historical Data Chart, and the Projected Data Chart to determine if they are mathematically accurate and if the projections are based on the applicant's anticipated level of utilization. The location of these charts may be found in the following specific locations in the Certificate of Need Application or the Supplemental material:

Project Costs Chart: The Project Cost Chart is located on page 82 0f the application. The total project cost is $32,653,836.

Historical Data Chart: The Historical Data Chart for the total facility is located on page 85 of the application. The applicant reports 296, 409, and 344 admissions each year with net operating revenues of $602,822, $489,925, and $1,330,420 each year, respectively.

Historical Data Chart: The Historical Data Chart for this project only is located on page 87 of the application. The applicant reports 296, 409, and 344 admissions each year with net operating revenues of $593,206, $545,250, and $1,335,353 each year, respectively.

Projected Data Chart: The Projected Data Chart for the total facility is located on page 90. The applicant projects 842 admissions in year one and 859 and 859 in year two with net operating revenues of $1,297,015 in year one and $1,374,957 in year two, respectively.

Projected Data Chart: The Projected Data Chart for the total facility is located on page 90. The applicant projects 842 admissions in year one and 842 and 859 in year two with net operating revenues of $1,297,015 in year one and $1,374,957 in year two, respectively.

Projected Data Chart: The Projected Data Chart for the project only is located on page 92. The applicant projects 842 admissions in year one and 842 and 859 in year two with net operating revenues of $1,315,224 in year one and $1,379,064 in year two, respectively.

Proposed Charge Schedule

	Previous Year	Current Year	Year One	Year Two	% Change
Gross Charge	60,018	78,072	51,876	54,686	-29.9
Average Deduction	47,426	56,641	35,497	37,943	-33.0
Average Net Charge	21,592	21,431	16,379	16,743	-21.9

Direct Patient Care Staffing

Title	FTE
LPN, relief	0.6
LPN	3.7
MA physician practice	1.0
Nurse practitioner	0.8
Nursing Asst.	4.1
Patient care tech	1.0
Patient service rep	2.0
Pharm tech	1.0
Pharmacist	1.0
Radiologist tech	3.7
Radiologist Supv.	1.1
Respiratory therapist	1.0
RN Staff relief	2.2
RN Staff	9.5
Surgical First Asst.	2.0
Surgical OR Tech	2.0
Surgical Central Sterile	1.0
Surgical Nurse Manager	1.0
Surgical Employed Physicians	4.0
Total	43.3

Project Payor Mix Year One

Payor Source	Projected Gross Operating Revenue	% of Total
Medicare/Medicare Managed Care	11,662,441	26.7
TennCare/Medicaid	15,200,485	34.8
Commercial/Other Managed Care	10,701,491	24.5
Self-Pay	3,887,480	8.9
Charity Care	2,140,298	4.9
Other	87,359	0.2
Total	43,679,554	100

CONTRIBUTION TO THE ORDERLY DEVELOPMENT OF HEALTHCARE:
This project will enhance Erlanger's ability to integrate its services within the regional service area as the safety net provider, trauma center, and region's only academic medical center. A list of transfer agreements and currently contracted payor organizations is attached to the application.

The effects of this proposal will be positive for the healthcare system because it will deliver the most appropriate level of care for those who are in need of service regardless of ability to pay, and will distribute needed services across the service area to foster improved access to care to patients.

There are no negative aspects to this project.

Erlanger Health System, as the region's only academic medical center, has established strong long term relationships with the region's colleges, universities, and clinical programs. Erlanger provides clinical sites for internships and rotation programs in nursing, radiology, respiratory, pharmacy, and surgery technology, to name a few.

Further, affiliation with the University of Tennessee, College of Medicine includes training of senior medical students on clinical rotation as well as graduate medical education for training of residents and advanced fellowships in various specialties.

Erlanger is licensed by the Tennessee Department of Health, Board for Licensing Healthcare Facilities and accredited by The Joint Commission.

QUALITY MEASURES:

SPECIFIC CRITERIA FOR CERTIFICATE OF NEED

The applicant responded to all relevant specific criteria for Certificate of Need as set forth in the document *Tennessee's State Health Plan.*

ACUTE CARE BED NEED SERVICES

The applicant is already a 25-bed critical access hospital. All 25 beds cans be used to accommodate nursing home patients. Swing Bed services are no longer a reviewable service category.

That being said, the Tennessee Department of Health calculated the bed need of the service area to be 11 acute care beds. This is due to the limitation of the Tennessee bed need methodology which allocates bed need by county in which the hospital is located. Since Erlanger Bledsoe Hospital is located in Bledsoe County and no hospitals are located in either Grundy in Sequatchie County, the Tennessee methodology only recognizes acute care bed need for Bledsoe County.

With this constraint imposed by the Tennessee methodology, in a telephone conversation with Mark Farber in February, 2017, it was agreed that the applicant should prepare an acute care bed need estimate based on utilization data from THA inpatient data.

1. The following methodology should be used and the need for hospital beds should be projected four years into the future from the current year:

Using the latest utilization and patient origin data from the Joint Annual Report of Hospitals and the most current population projection series from the Department of Health, perform the following:

Step 1

Determine the current Average Daily Census (ADC) in each county.

$$\frac{\text{Patient Days}}{365 \text{ (366 in leap year)}} = \text{ADC}$$

Step 2

To determine the service area population (SAP) in both the current and projected year:

a. Begin with a list of all the hospital discharges in the state, separated by county, and showing the discharges both by the county where the patient actually lives (resident discharges), and the county in which the patient received medical treatment.

b. For the county in which the hospital is (or would be) located (service county), determine which other counties have patients who are treated in your county (resident counties). Treat all of the discharges from another state as if that whole state were a single resident county. The total discharges of residents from another state should be calculated from state population estimates and the latest National Center for Health Statistics southeastern discharge rates.

c. For each resident county, determine what percent of their total resident discharges are discharged from a hospital in your service county (if less than one percent,

d. For each resident county, apply the percentage determined above to the county's population (both projected and current). Add together the resulting numbers for all the resident counties and add that sum to the projected and current population of your service county. This will give you the service area population (SAP).

Step 3

Determine projected Average Daily Census as:

$$\text{Projected ADC} = \text{Current ADC} \times \frac{\text{Projected SAP}}{\text{Current SAP}}$$

Step 4

Calculate Projected Bed Need for each county as:

$$\text{Projected Need} = \text{Projected ADC} + 2.33 \times \sqrt{\text{Projected ADC}}$$

However, if projected occupancy:

$$\text{Projected Occupancy:} \quad \frac{\text{Projected ADC}}{\text{Projected Need}} \times 100$$

is greater than 80 percent, then calculate projected need:

$$\text{Projected Need} = \frac{\text{Projected ADC}}{.8}$$

According to the *Acute Care Bed Need Projections For 2017 and 2022* (based on 2015 Hospital JAR Reports), prepared by the *Tennessee Dept. of Health, Division of*

Health Statistics, the bed need for the service area is eleven (11) acute care beds. This is due to the limitation of the Tennessee bed need methodology which allocates bed need by the county in which the hospital is located. Since *Erlanger Bledsoe Hospital* is located in Bledsoe County and no hospitals are located in either Grundy County or Sequatchie County, the Tennessee methodology only recognizes acute care bed need for Bledsoe County.

With the constraint imposed by the Tennessee methodology, in a telephone conversation with Mark Farber in February, 2017, it was agreed that we should prepare an acute care bed need estimate based on utilization data from the THA inpatient data.

It should be noted that *Erlanger Bledsoe Hospital* is a critical access hospital. As such, all twenty-five (25) beds may also be utilized as "swing beds", which can accommodate either acute care or skilled nursing patients. This is very beneficial to the hospital as well as community, and is not considered in the Tennessee bed need methodology. Further, the swing beds help to keep patients in the community and discharged home.

Summary Of Inpatient Utilization For The Three (3) County Service Area
[Excluding Pvschiatry, Substance Abuse & Rehabilitation

		2014	2015	2016	Projected 2022
Total	Discharges	5,849	5,915	5,708	6,029
	Patient Days	27,521	28,761	27,705	29,035
	ALOS	4.7	4.9	4.9	4.8
Total	**Gross Bed Need**	75.4	78.8	75.9	79.5
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	94.3	98.5	94.9	99.4
	Est. % Pt. Days -- LOS 1-4 (*)	35.1%	35.1%	35.1%	35.1%
	Est. Pt. Days (LOS 1-4)	9,660	10,095	9,724	10,191
	Est. Service Area Population	42,102	42,364	42,626	44,200
	Growth Rate - Population		0.6%	0.6%	3.7%
	Est. Use Rate - Discharges	0.138925	0.139623	0.133909	0.136417
	Est. Use Rate - Patient Days	0.653674	0.678902	0.649955	0.651815
LOS 1-4	**Gross Bed Need**	26.5	27.7	26.6	27.9
	Occupancy Adjustment	80%	80%	80%	80%
	Adjusted Bed Need	33.1	34.6	33.3	34.9
EBH Census Estimate	Market Share Adjustment (50%)	4,830	5,048	4,862	5,096
	Population Growth Adjustment				189
	Swing Bed Adjustment (35%)	1,691	1,767	1,702	1,850
	Estimated Patient Days	6,521	6,815	6,564	7,135
	Estimated Beds	17.9	18.7	18.0	19.S
	Occupancy Adjustment	80%	80%	80%	80%
	Estimated Beds - Adjusted	22.3	23.3	22.5	24.4

*(*) NOTES (*1) Please note that for a critical access hospital, CMS requires that ALOS not be more than 4 days (96 hours).

(2) Estimated percent of patient days pertaining to LOS 1-4 is derived from the ratio in CY 2014 (9664/27521).

(3) Actual swing bed utilization for Erlanger Bledsoe Hospital in 2015 was 61%.

(4) Population data obtained from Tennessee Dept. of Health, *Tennessee Population Estimates 2017 and 2021.*

2. New hospital beds can be approved in excess of the "need standard for a county" if the following criteria are met:

   a) All existing hospitals in the projected service area have an occupancy level greater than or equal to 80 percent for the most recent Joint Annual Report. Occupancy should be based on the number of licensed beds that are staffed for two consecutive years.

      There are no other providers of acute care hospital services in the defined service area. Further, this application does not seek approval of new hospital beds, but seeks approval to relocate and replace currently existing hospital beds. For those reasons, this criterion is not applicable.

   b) All outstanding CON projects for new acute care beds in the proposed service area are licensed.

      There are no CON projects for acute care beds in the proposed service area.

   c) The Health Facilities Commission may give special consideration to acute care bed proposals for specialty health service units in tertiary care regional referral hospitals.

      Not applicable

MAGNETIC RESONANCE IMAGING SERVICES

The Health Services and Development Agency (HSDA) may consider the following standards and criteria for applications seeking to provide Magnetic Resonance Imaging (MRI) services. Existing providers of MRI services are not affected by these standards and criteria unless they take an action that requires a new certificate of need (CON) for MRI services.

These standards and criteria are effective immediately as of December 21, 2011, the date of approval and adoption by the Governor of the State Health Plan changes for 2011. Applications to provide MRI services that were deemed complete by HSDA prior to this date shall be considered under the Guidelines for Growth, 2000 Edition.

Standards and Criteria

1. Utilization Standards for non-Specialty MRI Units.

   a. An applicant proposing a new non-Specialty stationary MRI service should project a minimum of at least 2160 MRI procedures in the first year of service, building to a minimum of 2520 procedures per year by the second year of service, and building to a minimum of 2880 procedures per year by the third year of service and for every year thereafter.

      The applicant projects 2,535 MRI procedures in 2020, 2,539 MRI procedures in 2021 and 2,553 MRI procedures in 2022.

   b. Providers proposing a new non-Specialty mobile MRI service should project a minimum of at least 360 mobile MRI procedures in the first year of service per day of operation per week, building to an annual minimum of 420 procedures per day of operation per week by the second year of service, and building to a minimum of 480 procedures per day of operation per week by the third year of service and for every year thereafter.

Not applicable

c. An exception to the standard number of procedures may occur as new or improved technology and equipment or new diagnostic applications for MRI units are developed. An applicant must demonstrate that the proposed unit offers a unique and necessary technology for the provision of health care services in the Service Area.

Not applicable

d. Mobile MRI units shall not be subject to the need standard in paragraph 1 b if fewer than 150 days of service per year are provided at a given location. However, the applicant must demonstrate that existing services in the applicant's Service Area are not adequate and/or that there are special circumstances that require these additional services.

Not applicable

e. Hybrid MRI Units. The HSDA may evaluate a CON application for an MRI "hybrid" Unit (an MRI Unit that is combined/utilized with another medical equipment such as a megavoltage radiation therapy unit or a positron emission tomography unit) based on the primary purposes of the Unit.

Not applicable

2. Access to MRI Units. All applicants for any proposed new MRI Unit should document that the proposed location is accessible to approximately 75% of the Service Area's population. Applications that include non-Tennessee counties in their proposed Service Areas should provide evidence of the number of existing MRI units that service the non-Tennessee counties and the impact on MRI unit utilization in the non-Tennessee counties, including the specific location of those units located in the non-Tennessee counties, their utilization rates, and their capacity (if that data are available).

Sequatchie County is the middle point of the defined service area, with Dunlap being the county seat. The applicant approximates that all of Sequatchie County, along with the Southern portion of Bledsoe County and the Eastern portion of Grundy County, comprises 60% to 70% of the service area population.

The travel distance from Pikeville, Tennessee to Dunlap is 20.2 miles for approximately 25 minutes, directly along Tennessee State 127, which is a two lane road.

3. Economic Efficiencies. All applicants for any proposed new MRI Unit should document that alternate shared services and lower cost technology applications have been investigated and found less advantageous in terms of accessibility, availability, continuity, cost, and quality of care.

There are currently no MRI units located within the service area. All patients from these three counties must travel a significant distance to Chattanooga or some other location to

access this service. As such, all elements of this criterion are negatively impacted by this disparity in service availability.

4. Need Standard for non-Specialty MRI Units.

A need likely exists for one additional non-Specialty MRI unit in a Service Area when the combined average utilization of existing MRI service providers is at or above 80% of the total capacity of 3600 procedures, or 2880 procedures, during the most recent twelve-month period reflected in the provider medical equipment report maintained by the HSDA. The total capacity per MRI unit is based upon the following formula:

Stationary MRI Units: 1.20 procedures per hour x twelve hours per day x 5 days per week x 50 weeks per year = 3,600 procedures per year

Mobile MRI Units: Twelve (12) procedures per day x days per week in operation x 50 weeks per year. For each day of operation per week, the optimal efficiency is 480 procedures per year, or 80 percent of the total capacity of 600 procedures per year.

The applicant projects 2,535 MRI procedures in 2020, 2,539 MRI procedures in 2021 and 2,553 MRI procedures in 2022.

The year one estimate will be 262 procedures more than the threshold requirement, and year two the estimated unit volume will be 19 procedures more than the threshold requirement. It is note that the estimate unit volume in year three is anticipated to be below the estimated volume requirement. However, we believe that the estimated volume is lower than it will actually be. This is due to the increase in MRI utilization assumption of 5%, but the actual growth rate in Southeast Tennessee is 10% in 2015.

5. Need Standards for Specialty MRI Units.

a. Dedicated fixed or mobile Breast MRI Unit. An applicant proposing to acquire a dedicated fixed or mobile breast MRI unit shall not receive a CON to use the MRI unit for non-dedicated purposes and shall demonstrate that annual utilization of the proposed MRI unit in the third year of operation is projected to be at least 1,600 MRI procedures (.80 times the total capacity of 1 procedure per hour times 40 hours per week times 50 weeks per year), and that:

Not applicable

1. It has an existing and ongoing working relationship with a breast-imaging radiologist or radiology proactive group that has experience interpreting breast images provided by mammography, ultrasound, and MRI unit equipment, and that is trained to interpret images produced by an MRI unit configured exclusively for mammographic studies;

Not applicable

2. Its existing mammography equipment, breast ultrasound equipment, and the proposed dedicated breast MRI unit are in compliance with the federal Mammography Quality Standards Act;

   Not applicable

3. It is part of or has a formal affiliation with an existing healthcare system that provides comprehensive cancer care, including radiation oncology, medical oncology, surgical oncology and an established breast cancer treatment program that is based in the proposed service area.

4. It has an existing relationship with an established collaborative team for the treatment of breast cancer that includes radiologists, pathologists, radiation oncologists, hematologist/oncologists, surgeons, obstetricians/gynecologists, and primary care providers.

5. *Not applicable*

b. Dedicated fixed or mobile Extremity MRI Unit. An applicant proposing to institute a Dedicated fixed or mobile Extremity MRI Unit shall provide documentation of the total capacity of the proposed MRI Unit based on the number of days of operation each week, the number of days to be operated each year, the number of hours to be operated each day, and the average number of MRI procedures the unit is capable of performing each hour. The applicant shall then demonstrate that annual utilization of the proposed MRI Unit in the third year of operation is reasonably projected to be at least 80 per cent of the total capacity. Non-specialty MRI procedures shall not be performed on a Dedicated fixed or mobile Extremity MRI Unit and a CON granted for this use should so state on its face.

   Not applicable

c. Dedicated fixed or mobile Multi-position MRI Unit. An applicant proposing to institute a Dedicated fixed or mobile Multi-position MRI Unit shall provide documentation of the total capacity of the proposed MRI Unit based on the number of days of operation each week, the number of days to be operated each year, the number of hours to be operated each day, and the average number of MRI procedures the unit is capable of performing each hour. The applicant shall then demonstrate that annual utilization of the proposed MRI Unit in the third year of operation is reasonably projected to be at least 80 per cent of the total capacity. Non-specialty MRI procedures shall not be performed on a Dedicated fixed or mobile Multi-position MRI Unit and a CON granted for this use should so state on its face.

d. Not applicable

6. Separate Inventories for Specialty MRI Units and non-Specialty MRI Units. If data availability permits, Breast, Extremity, and Multi-position MRI Units shall not be counted in the inventory of non-Specialty fixed or mobile MRI Units, and an inventory for each category of Specialty MRI Unit shall be counted and maintained separately. None of the Specialty MRI Units may be replaced with non-Specialty MRI fixed or mobile MRI Units and a Certificate of Need granted for any of these Specialty MRI Units shall have included on its face a statement to that effect. A non-Specialty fixed or mobile MRI Unit for which a CON is granted for Specialty MRI Unit purpose use-only shall be counted in the specific Specialty MRI Unit inventory and shall also have stated on the face of its Certificate of Need that it may not be used for non-Specialty MRI purposes.

   Not applicable.

7. Patient Safety and Quality of Care. The applicant shall provide evidence that any proposed MRI Unit is safe and effective for its proposed use.

   a. The United States Food and Drug Administration (FDA) must certify the proposed MRI Unit for clinical use.

      MRI units are standard in the industry and have been in use for more than five years.

   b. The applicant should demonstrate that the proposed MRI Procedures will be offered in a physical environment that conforms to applicable federal standards, manufacturer's specifications, and licensing agencies' requirements.

      A letter from the project architect is provided in the application.

   c. The applicant should demonstrate how emergencies within the MRI Unit facility will be managed in conformity with accepted medical practice.

      Please see attached policy for Erlanger Health System pertaining to MRI Safety. The emergency procedure is outlined in Section IV of the policy.

   d. The applicant should establish protocols that assure that all MRI Procedures performed are medically necessary and will not unnecessarily duplicate other services.

      Please see attached copy of the policy for Erlanger Health System pertaining to medical necessity in MRI Dept.

   e. An applicant proposing to acquire any MRI Unit or institute any MRI service, including Dedicated Breast and Extremity MRI Units, shall demonstrate that it meets or is prepared to meet the staffing recommendations and requirements set forth by the American College of Radiology, including staff education and training programs.

      Erlanger currently operates 5 MRI units at other locations and meets all of the staffing recommendations and requirements of the American College of Radiology, including staff education and training. The same standards will be applicable to the MRI unit for the Erlanger Sequatchie Valley Regional Hospital MRI.

   f. All applicants shall commit to obtain accreditation from the Joint Commission, the American College of Radiology, or a comparable accreditation authority for MRI within two years following operation of the proposed MRI Unit.

Erlanger currently operates 5 MRI units at other locations and is accredited by the Joint Commission. The same standards will be applicable to the MRI unit for the Erlanger Sequatchie Valley Regional Hospital unit.

g. All applicants should seek and document emergency transfer agreements with local area hospitals, as appropriate. An applicant's arrangements with its physician medical director must specify that said physician be an active member of the subject transfer agreement hospital medical staff.

Erlanger Sequatchie Valley Regional Hospital as a member of Erlanger Health System will have a direct affiliation with Erlanger Medical Center in Chattanooga for emergency transfers. Dr. Blaise Baxter, MD.

8. The applicant should provide assurances that it will submit data in a timely fashion as requested by the HSDA to maintain the HSDA Equipment Registry.

The applicant commits to supplying the required HSDA documentation in a timely fashion.

9. In light of Rule 0720-11.01, which lists the factors concerning need on which an application may be evaluated, and Principle No. 2 in the State Health Plan, "Every citizen should have reasonable access to health care," the HSDA may decide to give special consideration to an applicant:

a. Who is offering the service in a medically underserved area as designated by the United States Health Resources and Services Administration;

All three counties are designated Medically Underserved Areas.

b. Who is a "safety net hospital" or a "children's hospital" as defined by the Bureau of TennCare Essential Access Hospital payment program; or

Erlanger Medical Center is classified by the Bureau of TennCare as a "Safety Net Hospital".

c. Who provides a written commitment of intention to contract with at least one TennCare MCO and, if providing adult services, to participate in the Medicare program; or

The applicant participates in TennCare and contracts with TennCare MCOs BlueCare , TennCare Select, United Healthcare Community Plan, and AmeriGroup Community Care. The applicant also participates in Medicare.

d. Who is proposing to use the MRI unit for patients that typically require longer preparation and scanning times (e.g., pediatric, special needs, sedated, and contrast agent use patients). The applicant shall provide in its application information supporting the additional time required per scan and the impact on the need standard

Erlanger is classified as a safety net hospital and a children's hospital.