University of Alabama System
Individually Distinct. Altogether Stronger.

Office of Counsel
500 22nd Street South, Suite 504
Birmingham, Alabama 35233
205.975.0113

April 10, 2023

VIA ELECTRONIC FILING ONLY: shpda.online@shpda.alabama.gov

Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
P.O. Box 303025
Montgomery, Alabama 36130-3025

Re: ***Emergency Review***
The Board of Trustees of the University of Alabama for the University of Alabama Hospital
University Hospital - Emergency Department Expansion

Dear Ms. Marsal:

In follow up to our telephone discussion and pursuant to *Alabama Certificate of Need Program Rules and Regulations* r. 410-1-10-.01, The Board of Trustees of the University of Alabama for the University of Alabama Hospital submits the attached Emergency Certificate of Need ("CON") Application to **immediately address** the urgent problem of overcrowding and boarding in the Emergency Department ("ED") of its acute care hospital located in Birmingham, Alabama ("University Hospital"). Emergency review is made necessary by unforeseen events, which endanger the health and safety of patients.

As detailed in the CON application, emergency review is necessary to (a) combat the significant, consistent ED overcrowding and ED boarding at University Hospital; (b) ensure access to specialized health care services, which may only be available at University Hospital; and (c) maintain the quality of, and continuity of urgent and emergency medical services offered in the identified medical service area. The emergency request for CON approval **does not involve** new institutional health services or the addition of new inpatient hospital beds.

University Hospital respectfully submits this Emergency CON Application for review and approval. Should you have any questions regarding this application, please do not hesitate to contact me via email at cransburgbrown@uasystem.edu or by calling 205-975-4844.

Sincerely,

Cynthia Ransburg-Brown

Cynthia Ransburg-Brown
…sel
…nterprise

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Office of Counsel
500 22nd Street South, Suite 504
Birmingham, Alabama 35233
205.975.0113

AL2023-017E

RECEIVED
April 13, 2023
STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

April 13, 2023

VIA ELECTRONIC FILING ONLY: shpda.online@shpda.alabama.gov

Ms. Emily Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

re: CON Project AL2023-017E
The Board of Trustees of the University of Alabama for the University of Alabama Hospital
University Hospital – Emergency ED Expansion Project

Ms. Marsal:

This letter is in response to your Request for Additional Information dated April 12, 2023, regarding Certificate of Need ("CON") Project AL2023-017E, the emergency CON Application submitted by The Board of Trustees of the University of Alabama for the University of Alabama Hospital ("University Hospital") to immediately address the overcrowding and boarding in the emergency department ("ED") of its acute care hospital located in Birmingham, Alabama by installing two (2) mobile emergency medical units that will provide a total of sixteen (16) patient treatment areas and the renovation of the ED waiting room to provide clinical space for nine (9) low acuity treatment areas, bring the total number of additional patient treatment areas requested to twenty-five (25).
In response to your request, please note the following:

1. **Part One, IV-D, Costs – Services: Please specify the costs classified as "Other".**

Please see the **Footnote 2** on the revised **Page A-8** for an explanation of the costs classified as "Other". Also note that the amount reflected in the original CON application did not reflect 2024's First Year Annual Operating Costs, but 2025's. We have corrected the corresponding oversight on the revised **Page A-9**, as well. The revised **Pages A-8** and **A-9** are included herein as **ATTACHMENT A**.

2. **Part Five, III-A, Inpatient Utilization Data – Historical Data: Total Admissions or Discharges reported for 2021 require corrective action. Also, Percentage reported for Year 2020 requires corrective action.**

Please see the revised **Page A-35** for the revised Historical Utilization Data for Total Admissions or Discharges reported for 2021 and for the Percentage reported for Year 2020. Please note that Calendar Year 2020 was a Leap Year. Therefore, University Hospital used 366 calendar days rather than 365 calendar days in its calculations for that year. The revised Page A-35 is included herein as **ATTACHMENT B**.

3. **Part Five, III-B, Inpatient Utilization Data – Projected Data: Total Admissions or Discharges reported for Year 2024 require corrective action. Also, Percentage reported for Year 2024 and Medicaid & Surgery for Years 2025 require correction action.**

Please see the revised **Page A-35** for the revised Projected Utilization Data for Total Admissions or Discharges reported for year 2024, for the Percentage reported for Year 2024 and Medicine & Surgery for 2025. Please note

that Calendar Year 2024 is a Leap Year. Therefore, University Hospital used 366 calendar days rather than 365 calendar days in its calculations for that year. The revised **Page A-35** is included herein as **ATTACHMENT B**.

We remain available should you have any additional questions regarding CON Project AL2023-017E submitted by University Hospital seeking emergency authorization to install two (2) mobile emergency medical units that will provide a total of sixteen (16) patient treatment areas and the renovation of the ED waiting room to provide clinical space for nine (9) low acuity treatment areas, bringing the total number of additional patient treatment areas under the emergency request to twenty-five (25).

Respectfully submitted,

Cynthia Ransburg-Brown

Cynthia Ransburg-Brown
University Counsel
UAB Medicine Enterprise

AL2023-017E RECEIVED
Apr 10 2023
STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

UAB MEDICINE

University of Alabama Hospital

Emergency Certificate of Need Application

Emergency Department Expansion Project

RECEIVED
Apr 10 2023
STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

Rev. 6-16

ALABAMA
CERTIFICATE OF NEED APPLICATION

Filing Fee Remitted: $ **24,684.00** tml

For Staff Use Only
Project # AL2023-017E
Date Rec. _____

INSTRUCTIONS: Please submit an electronic pdf copy of this completed form and the appropriate EXHIBITs to the State of Alabama, State Health Planning and Development Agency, in accordance with ALA. ADMIN. CODE r. 410-1-7-.06 (Filing of a Certificate of Need Application) and 410-1-3-.09 (Electronic Filing). Electronic filings meeting the requirements of the aforementioned rules shall be considered provisionally received pending receipt of the required filing fee and shall be considered void should the proper filing fee not be received by the end of the next business day. Refer to ALA. ADMIN. CODE r. 410-1-7-.06 to determine the required filing fee.

Filing fees should be remitted to: State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

or the fee may be submitted electronically via the payment portal available through the State Agency's website at www.shpda.alabama.gov.

PART ONE: APPLICANT IDENTIFICATION AND PROJECT DESCRIPTION

I. APPLICANT IDENTIFICATION (Check One) HOSPITAL (**X**) NURSING HOME (____)
OTHER (____) (Specify) _____

A. **The Board of Trustees of the University of Alabama for the University of Alabama Hospital**
Name of Applicant (in whose name the CON will be issued if approved)

619 19th Street, South	**Birmingham**	**Jefferson**
Address	City	County
Alabama	**35233**	**205-957-4844**
State	Zip Code	Phone Number

B. _____
Name of Facility/Organization (if different from A)

Address	City	County
State	Zip Code	Phone Number

C. _____
Name of Legal Owner (if different from A or B)

Address	City	County
State	Zip Code	Phone Number

D. **Brenda Carlisle, Chief Executive Officer, University Hospital**
Name and Title of Person Representing Proposal and with whom SHPDA should communicate

619 19th Street, South QBT-511	**Birmingham**	**Jefferson**
Address	City	County
Alabama	**35233**	**205-975-4844**
State	Zip Code	Phone Number

I. APPLICANT IDENTIFICATION (continued)

E. Type Ownership and Governing Body

1. Individual (____)
2. Partnership (____)
3. Corporate (for profit) (____) _____ Name of Parent Corporation
4. Corporate (non-profit) (____) _____ Name of Parent Corporation
5. Public (X)
6. Other (specify) (____) _____

F. Names and Titles of Governing Body Members and Owners of This Facility

OWNERS	GOVERNING BOARD MEMBERS
_____	See, **EXHIBIT A** – List of UA Board of Trustees
_____	_____
_____	_____

II. PROJECT DESCRIPTION

Project/Application Type (check all that apply)

_____ New Facility Type_____	__X__ Major Medical Equipment Type **Two Mobile Emergency Room Facility Units**
_____ New Service Type_____	_____ Termination of Service or Facility
__X__ Construction/Expansion/Renovation	_____ Other Capital Expenditure Type_____
_____ Change in Service	

III. EXECUTIVE SUMMARY OF THE PROJECT (brief description)

Pursuant to *Alabama Code* § 22-21-268, The Board of Trustees of the University of Alabama for the University of Alabama Hospital ("University Hospital" or "Hospital") seeks an Emergency Certificate of Need ("CON") to immediately address the urgent problem of overcrowding and boarding in the Emergency Department ("ED") of its acute care hospital located in Birmingham, Alabama.[1] **This emergency request for CON approval does not involve new institutional health services or the addition of new inpatient hospital beds.**

[1] See, *"Terrible Emergency" UAB Hospital plans temporary expansion to mitigate demand*, Birmingham Business Journal,https://www.bizjournals.com/birmingham/news/2023/03/07/uab-hospital-plans-temporary-er-expansion.html, accessed March 8, 2023, and *"Sick Season": Birmingham-area hospital experiencing high volume – Doctors call on legislature to act*, 1819 News, https://1819news.com/news/item/birmingham-area-hospitals-

Alabama Certificate of Need Rules and Regulations, r. 410-1-10-.01(1) provides that any person may apply, without notice, for an emergency CON for the authorization of capital expenditures made necessary by unforeseen events, which **endanger the health and safety of the patients**. The significant, consistent overcrowding and boarding in the University Hospital ED meets this threshold requirement.

During the COVID-19 national and public health emergency and through the suspension of certain regulatory requirements, University Hospital made **temporary** use of alternative spaces to accommodate the unprecedented clinical demand created by the pandemic.[2] But, even with changes to the ED's physical space and the use of alternative spaces, the demand for urgent and emergency care **has outpaced** the temporary measures even with the decrease in COVID patients, and effective May 11, 2023, the COVID-19 national and public health emergency will officially end, and, with it, the previously suspended regulatory requirements will once again be in effect. University Hospital, therefore, must act quickly to maintain overall regulatory compliance while continuing to meet the continued overwhelming demand for additional clinical capacity in the Hospital's ED. The proposed project will mitigate certain clinical demands on the existing ED by temporarily expanding the physical footprint and clinical capacity of the ED so that patients seeking urgent and emergency medical services can be assessed and treated in a timely manner.

Over the past decade, an 11% rise in volume in ED visits in Alabama has been compounded by an aging population.[3] Hospital EDs are seeing patients presenting with higher levels of acuity; more patients with mental health diagnoses; those suffering from addiction, and several other challenging social issues impacting their health and ultimate recovery including, homelessness, abuse, and abandonment. These issues contribute to more a severe level of illness and the need for longer hospital stays.[4]

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experiencing-high-volume-doctors-call-on-legislature-to-act, accessed February 16, 2023, which are attached hereto as **EXHIBIT B**.

[2] In response to the national and public health Coronavirus pandemic, the Centers for Medicare and Medicaid Services ("CMS") waived certain physical environment requirements under the Medicare Conditions of Participation at 42 C.F.R. §§ 482.41 and 485.623 to allow hospitals increased flexibilities to meet surge capacity and patient quarantine at hospitals, psychiatric hospitals, and critical access hospitals. CMS permitted facility and non-facility space that is not normally used for patient care to be utilized for direct patient care or quarantine; provided the location is approved by the state (ensuring that safety and comfort for patients and staff are sufficiently addressed) and is consistent with the state's emergency preparedness or pandemic plan. This waiver, which will end May 11, 2023, allowed University Hospital to expand the existing ED's physical footprint to non-clinical areas adjacent to the ED to meet the increased capacity related to the pandemic.

[3] See, *1999-2018 American Hospital Association Annual Survey*.

[4] Social determinants of health ("SDOH") have a major impact on a patient's health, well-being, and quality of life. SODHs can be grouped into five areas: (i) economic stability; (ii) education access and quality; (iii) health care access and quality; (iv) neighborhood and environment; and (v) social and community. SODHs contribute to wide health disparities and inequities. For example, neighborhoods with no access to adequate grocery stores (i.e., "food deserts") are more likely to have residents with poor nutrition, resulting in health conditions like heart disease, diabetes, and obesity – which lower life expectancy. See, *Healthy People 2030*, www.health.gov/healthypeople/priority-areas/social-determinants-health, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, accessed March 22, 2023.

The University Hospital EDs have experienced a 20% increase in patient volume in the last five (5) years with approximately 25% of those presenting to the University Hospital ED ultimately requiring inpatient admission. University Hospital continues to experience unprecedented demand for complex tertiary and quaternary care services as the only American College of Surgeons-accredited, Level I, Adult Trauma Center in the State of Alabama. The Hospital consistently maintains, on average, an 80-90% occupancy rate.[5] Significantly, when compared to other large academic medical centers in the United States, the University Hospital ED is ranked in the **top 80th quartile** in caring for a highly complex and critically ill patient population and for the number of patients boarding in the ED. The Hospital ranks in the **top 70th quartile** for patients who leave the ED without being seen and in **top 100th quartile** for patients boarding in the ED until an inpatient bed becomes available in the psychiatric unit.

Wait Times in the ED. To ease ED overcrowding, University Hospital has appropriated waiting rooms and hallways adjacent to the existing ED and expanded lobbies and other hospital common areas to accommodate patient overflow. Despite these efforts, the median "patient-arrival-to-provider" wait time for patients in the University Hospital ED was .55 for Calendar Year 2022, and depending on the patient's acuity level, the wait time was longer.[6] For patients with ACS Level 1 acuity, which includes trauma, heart attack, and stroke, excessive wait times) could result in significant disability or death.

ED and Hospital Diversion. To temporarily alleviate ED overcrowding, University Hospital and the University Hospital ED are often placed on hospital or ambulance diversion. When the facility is placed on diversion, however, patients are denied access to certain specialized health care services offered at University Hospital, which is the only ACS-accredited, Level I, Adult Trauma Center in the state. In 2022, University Hospital denied **1,658** transfers from outside hospitals, with **100%** of those denials due to the Hospital being on diversion and/or reaching internal service caps. University Hospital may be hindered in its ability to respond promptly to a mass casualty event in Central Alabama when it is placed on diversion so often.

Trauma Service Impact on ED overcrowding. In 2022, the University Hospital trauma service experienced a record high in trauma evaluations – **6,466** – which is a 17% increase over 2020 and 34% increase over 2019. Incidents of gun violence have doubled in last eight years, increasing the gunshot trauma cases from about 600 cases to 1,200 cases.[7] In the last three years, overall trauma cases increased by 40%.[8]

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[5] See, **Part V, Section III, A**, below.

[6] Although initial medical screening exams are completed in a timely manner, University Hospital has a median time of .55 for "patient-arrival-to-provider". **Length of stay in the University Hospital ED waiting area is lengthy and may be up to 8 to 12 hours**.

[7] See, **EXHIBIT C**, *'We're seeing this every day': UAB adds surgeons to handle surge in gunshot wounds*, AL.com, December 22, 2022, accessed March 2023; *UAB Hires more surgeons to deal with growing number of gunshot wounds and trauma victims*, first aired December 28, 2022, access March 2023, and *UAB Trauma Center meets record surge in volume with high quality of care*, UAB Health & Medicine, accessed March 2023.

[8] University Hospital trauma surgery discharges grew by 8% between Calendar Year 2019 and 2020. In Fiscal Year 2022, University Hospital issued **5,841** trauma alerts.

The increased need for trauma-related services and critically ill patients has, in turn, increased ED overcrowding. Upon arrival at the University Hospital ED and because of the high level of acuity of these patients, ED resources, including critical nursing, imaging, and diagnostic services, are swiftly engaged to treat the seriously injured or critically ill patients, ensuring timely resuscitation and prompt medical care. These intense resources are **diverted away** from other ED patients receiving active care. Responding to several trauma or critically ill patients simultaneously prolongs the wait of patients who have not yet been seen and exacerbates the challenges of ED overcrowding, **creating a patient safety issue** for those critically ill patients boarding in the overcrowded ED.

Patients Boarding in the ED. Nationwide, "patient boarding" is itself a crisis, and a significant factor in the crowded conditions in the ED. Patient boarding occurs when patients, who are admitted to the hospital, are held in the ED when there are no inpatient beds available.[9] At University Hospital, the problem of ED boarding has reached a **critical point** with approximately **264,170** hours of ED patient boarding in 2022. On average, the Hospital's ED is experiencing **25,000** boarding hours per month – an increase of 78% since 2018. On any given day, boarders may occupy **as many as half** of the ED's fifty-nine (59) patient treatment areas, reducing the ED capacity by some 20 to 30 ED "beds" for the same number of patients presenting in the ED for urgent and emergency medical conditions. Boarders are often held in the University ED for **several hours or even days**, resulting in a heightened risk for patients and significant inefficiencies for staff.[10]

Maintaining inpatients in the ED **diverts resources** that would otherwise be available for patients presenting in the ED for treatment. That is because hospital inpatients boarding in the ED require hospital services, not ED services. Most require constant monitoring and telemetry, which EDs are not designed to provide. Sometimes, patients with mental health and substance abuse issues or intellectual disabilities **remain in crisis** in the University Hospital ED for days while awaiting inpatient admission or appropriate community placement.

Because diversion offers only a temporary solution to ED overcrowding and both trauma and critically ill patients and ED boarding exacerbate the crowded conditions, University Hospital has developed a two-fold emergency plan to reduce overcrowding in the ED. The emergency plan is Phase I of a larger, multi-phase project to permanently expand the capacity of the Hospital's emergency department to meet the increasing needs of the Hospital's identified medical service area.[11]

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[9] So significant is the problem of ED overcrowding and ED boarding that several leading health care and physician organizations penned a letter to President Joseph Biden identifying patient boarding as "**its own public health emergency**". See, **EXHIBIT D**, *Letter to President Joseph Biden*, dated November 7, 2022.

[10] According to the Joint Commission, which has identified patient boarding as a **patient safety risk**, the "boarding clock" begins if a patient is **still in the ED four hours after inpatient admission** due to a lack of inpatient beds. See, **FN 25**, below.

[11] Phase II of the plan involves the permanent expansion of the University Hospital ED. University Hospital anticipates submitting a CON application to SHPDA within the next six to nine months seeking approval for the permanent expansion of the clinical areas of Hospital's emergency department.

University Hospital Emergency ED Expansion Plan

The Board of Trustees of the University of Alabama ("BOT") and the UAB Health System Authority analyzed the "**danger to the public health and safety**" caused by ED overcrowding and ED boarding at University Hospital and determined, consistent with *Alabama Code* § 39-2-2(e), that **immediate measures** must be taken to help resolve the issue. On March 7, 2023, the BOT formally adopted a resolution: *Approving the Lease and Installation of Two Mobile Treatment Units and Renovations for the Temporary Expansion of the University Hospital Emergency Department.*[12] The BOT's resolution authorizes the use of funds by the hospital to lease two mobile emergency medical units and to complete certain renovations so that the hospital may (i) increase the physical footprint and clinical capacity of the Hospital's ED to reduce overcrowding and boarding; and (ii) continue to use alternative care spaces utilized during the COVID-19 national and public health emergency.

Mobile Emergency Medical Facility Units. Part One of the Emergency ED Expansion Plan involves leasing two 53-foot refurbished, double expandable Mobile Emergency Medical Units.[13] Each mobile unit contains eight (8) patient treatment areas for a total of sixteen (16) patient care treatment areas. Each unit is equipped with its own HVAC system, medical gas tank room, an emergency generator, and connection points for power, water, sprinkler, sewer, data, and nurse call systems. The units will be installed in the pedestrian walkway adjacent to the ambulatory entrance of the University Hospital ED.

"Low Acuity" Treatment Areas. Part Two of the emergency plan involves building a temporary waiting room in the North Pavilion Lobby while renovating the hospital's existing ED waiting room and using the newly renovated space as a "low acuity treatment area" with nine (9) separate areas for patient care. The low acuity treatment area coupled with the sixteen (16) additional treatment areas (in the mobile units) will add twenty-five (25) additional patient treatment areas to the clinical capacity of the University Hospital ED.

The crowded conditions in the University Hospital ED endanger the health and safety of patients and the emergency medical treatment team. University Hospital seeks, therefore, pursuant to *Alabama Certificate of Need Rules and Regulations*, r. 410-1-10-.01(1), approval of an emergency CON to temporarily expand the physical footprint and clinical capacity of its ED because of significant, sustained ED overcrowding and ED boarding. **This emergency request for CON approval does not involve new institutional health services or the addition of new inpatient hospital beds.**

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[12]See, **EXHIBIT E**, Resolution for Board of Trustees of the University of Alabama for the University of Alabama Hospital, *Approving the Lease and Installation of Two Mobile Treatment Units and Renovations for the Temporary Expansion of the University Hospital Emergency Department.*

[13]See, **EXHIBIT F**, for detailed information regarding the mobile emergency medical units.

University Hospital and the COVID-19 Pandemic

As mentioned above, during the COVID-19 national and public health emergency and through the suspension of certain regulatory requirements, University Hospital made temporary use of alternative spaces to accommodate the unprecedented clinical demand caused by the pandemic. But, even with changes to the ED's physical space and the use of alternative spaces, the demand for urgent, emergency, and trauma care at the University Hospital ED **has outpaced** the temporary measures. In fact, ED overcrowding, ED boarding, inpatient occupancy rates at the University Hospital **has remained consistently high** despite the decrease in COVID-19 cases.

In 2022, University Hospital cared for more than **123,000** patients (including 6,000 COVID-19 patients) across all three of its emergency departments: University Hospital, Highland's Hospital, and the Gardendale Freestanding ED. Without COVID-19 patients, the number of patients cared for in the Hospital's EDs is only reduced by 5% to roughly 117,000. However, **almost half** of those patients were cared for **in the University Hospital ED**, resulting in crowded conditions, longer patient-arrival-to-provider wait times, longer lengths of stay in the ED, frequent periods of hospital and ambulance diversion, and the denial of **more than 1,600** patient transfer requests from other hospitals.

Even without the demand created by the COVID-19 national and public health emergency, the existing University Hospital ED **continues to operate at or near capacity each day**, treating more than **57,000** patients in 2022. The Emergency ED Expansion Project will ease ED overcrowding and ED boarding by temporarily expanding the physical footprint and clinical capacity of the ED so that patients may be assessed and treated in a timely manner **without** introducing a new institutional health service or the adding new inpatient hospital beds.

II. COST

A.	Construction (includes modernization expansion)		
1.	Predevelopment		$
2.	Site Acquisition		
3.	Site Development		
4.	Construction		$ 1,754,000
5.	Architect and Engineering Fees		$ 152,000
6.	Renovation		
7.	Interest during time period of construction		
8.	Attorney and consultant fees		$ 50,000
9.	Bond Issuance Costs		
10.	Other	Construction Contingency	$ 176,000
11.	Other	Survey, Testing, Inspections	$ 465,000
	TOTAL COST OF CONSTRUCTION		$ 2,597,000
B.	Purchase		
1.	Facility		$ 0
2.	Major Medical Equipment		$ 1,944,000
3.	Other Equipment		0
	TOTAL COST OF PURCHASE		$ 1,944,000
C.	Lease		
1.	Facility Cost Per Year ____ x _____ Years =		$ 0
2.	Equipment Cost per Month		
	$136,666.67 x 30 Months =		$ 4,100,000[1]
3.	Land-only Lease Cost per Year		
	_____ x _____ Years		0
	TOTAL COST OF LEASE(s)		$ 4,100,000
	(compute according to generally accepted accounting principles)		
	Cost if Purchased		$
D.	Services		
1.	_____ New Service		$
2.	_____ Expansion		$
3.	_____ Reduction or Termination		$
4.	X Other[2]		$ 1,469,498
	FIRST YEAR ANNUAL OPERATING COST		$ 1,469,498
E.	Total Cost of this Project (Total A through D)		
	(should equal V-C on page A-4)		$ 10,110,498

[1] The Equipment Cost per Month includes monthly lease fees and the cost of services, installation, and setup, and as well as removal of the mobile emergency medical units when the lease expires, bringing the total lease cost to $4,100,000.

[2] The Emergency ED Expansion Project will expand the physical footprint and clinical capacity of the emergency department to include two (2) mobile emergency units and nine (9) low acuity treatment areas for a total of twenty-five (25) additional patient treatment areas. While University Hospital expects **no new project specific revenue** from the emergency expansion, the Hospital projects related operating expenses for salaries, benefits, supplies, etc., totaling $1,456,498 for the first year.

COST (continued)

F. Proposed Finance Charges

1.	Total Amount to Be Financed	$_____
2.	Anticipated Interest Rates	_____
3.	Term of Loan	_____
4.	Method of Calculating Interest on Principal Payment	_____

IV. ANTICIPATED SOURCE OF FUNDING

			Amount	Source
A.	Federal			
	1.	Grants	$ 0	
	2.	Loans	0	
B.	Non-Federal			
	1.	Commercial Loan	0	
	2.	Tax-exempt Revenue Bonds	0	
	3.	General Obligation Bonds	0	
	4.	New Earning and Revenues	0	
	5.	Charitable Fund Raising	0	
	6.	Cash on Hand	10,110,498	
	7.	Other	0	
C.	**TOTAL (should equal IV-E on page A-3)**			$ 10,110,498

V. TIMETABLE

A.	Projected Start/Purchase Date	Upon Issuance of CON
B.	Projected Completion Date	August 2023

PART TWO: PROJECT NARRATIVE

Note: In this part, please submit the information as an EXHIBIT. This will enhance the continuity of reading the application.
The applicant should address the items that are applicable to the project.

I. MEDICAL SERVICE AREA

A. Identify the geographic (medical service) area by county (ies) or city, if appropriate, for the facility or project. Include an 8 ½ x 11" map indicating the service area and the location of the facility.

University Hospital Patient Origin Data identifies the Hospital's Primary Service Area as Jefferson, Shelby, Walker, Bibb, St. Clair, Blount, and Chilton counties. Alabama residents comprise 93% of the hospital's patients. Of that amount, approximately 55% of the hospital's patients originate from the Primary Service Area, 38% from Alabama counties outside the Primary Service Area, and 7% from outside the State of Alabama.

When Patient Origin Data for Hospital's emergency department is analyzed separately, the data reveals that patients coming to the ED are more locally concentrated with approximately 81% of the ED's patients originating from UAB Hospital's Primary Service Area, 15% from Alabama counties outside the Primary Service Area, and the remaining 4% from outside the state of Alabama.

See, **EXHIBIT G** – Map by County UAB Hospital/Emergency Department Primary Service Area

B. What population group(s) will be served by the proposed project? Define age groups, location and characteristics of the population to be served.

Demographic Data. University Hospital expects that the demographic profile of the primary and secondary medical service areas of its inpatient hospital and emergency department will remain the same for the Emergency ED Expansion Project. As indicated in **Part II, Section I, A**, above, the population to be served by this emergency expansion is primarily the residents of Jefferson, Shelby, Walker, Bibb, St. Clair, Blount, and Chilton Counties, and secondarily, all of Alabama. The Hospital's ED currently serves minority groups, women, the elderly, and the traditionally medically underserved. Upon approval of the emergency CON, University Hospital will continue to serve Medicare and Medicaid patients, BlueCross and BlueShield and other commercial third-party payor patients, and self-pay and charity care patients.

Age Group Data – University Hospital. For Calendar Year 2022, the Age Group Data for University Hospital is as follows:

TABLE I

Age Group	% of Total
0 – 18	4.3%
19 – 44	31.3%
45 – 64	32.6%
65+	31.8%
Total	**100%**

Age Group Data – University Hospital Emergency Department. For Calendar Year 2022, the Age Group Data for the University Hospital ED when analyzed separately is as follows:

TABLE II

Age Group	% of Total
0 – 19	5.0%
20 – 44	45.0%
45 – 64	30.1%
65+	19.9%
Total	**100%**

The biggest difference between inpatient admissions at University Hospital and the University Hospital ED is in the 45 – 64 age cohort, with the Hospital's ED trending almost 15% higher for patients in this age group than the hospital in general.

Population Data. In accordance with CON r. 410-1-6-.06(b), population data obtained from the University of Alabama, Center for Business and Economic Research ("CBER") shows a projected population increase of **10.7%** for the hospital's Primary Service Area through the year 2040.

See, **EXHIBIT H** – for (a) Population Estimates through the year 2040 for the entire State of Alabama and the Birmingham-Hoover MSA; and (b) Population Estimates Aged 65 and Over from 2010 through the year 2040 for the entire State of Alabama and the Birmingham-Hoover MSA.

Approval of the University Hospital Emergency ED Expansion Project will not change the patient population served by the Hospital's ED. The proposed project will allow patients in the identified medical service area to receive timely urgent and emergency medical services and significantly reduce ED overcrowding and ED boarding.

C. If medical service area is not specifically defined in the State Health Plan, explain statistical methodologies or market share studies based upon accepted demographic or statistical data available with assumptions clearly detailed. If Patient Origin Study data is used, explain whether institution or county based, etc.

The *2020-2023 State Health Plan* ("*SHP*") does not separately address hospital emergency rooms or access to emergency services. However, the Statewide Healthcare Coordinating Council ("SHCC") does address *Care of the Elderly and Chronically Ill* and *Care for the Medically Indigent* in the *SHP*.[15] The plan states that persons over the age of 65 comprise one of the "most rapidly growing age groups in the United States".[16] In Alabama, this age group is "expected to increase to over 22% of the population in the state by the year 2050" and by 2022, the "number of people aged 65 and older in Alabama will be almost 900,000".[17] These individuals, according to the *SHP*, are projected to live longer – well into their

[15] See, *2020-2023 Alabama State Health Plan*, r. 410-2-2-.03 and r. 410-2-2-.06, respectively.

[16] See, *SHP* at r. 410-2-2-.03((1)(a).

[17] *Id*. at r. 410-2-2-.03(1)(a) – (b).

80s and 90s – and with increased age, comes increased incidence of chronic disease and disability, particularly at the lower levels of severity.[18] The SHCC has determined, therefore, that the "**frail elderly**" will trigger an increased demand for attention from health care providers and that this demand will grow as the population of Alabama ages.[19]

University Hospital relied upon the *Patient Origin Data* in **Part II, Section I, B** when assessing the need for an emergency ED expansion to address ED overcrowding and ED boarding. Based upon that data, approximately 20% of the patients seeking care at the University Hospital ED are aged 65 and older and that age group, as noted in the *SHP*, will trigger an increased demand for attention from health care providers in the future. By adding twenty-five (25) new patient treatment areas to ease ED overcrowding and ED boarding, University Hospital will be better equipped to handle the future demands of an aging population as projected in the *State Health Plan*.

D. Are there any other factors affecting access to the project?

(**X**) Geographic (**X**) Economic (**X**) Emergency (**X**) Medically Underserved

Please explain.

Geographic:

University Hospital, a nationally recognized academic medical center, provides comprehensive medical services to a large geographic area and is, in fact, the only access to certain specialized health care services for many residents of the State of Alabama. See, **Part II, Section I, D, *Emergency***, below. In Calendar Year 2022, University Hospital denied **1,658** transfers from other hospitals due to the ED's or the Hospital's overall capacity. During the same year, University Hospital was placed on diversion, either ambulance diversion or inpatient diversion, an average of **633 times per month**, equaling **7,930** hours. This is a 6% increase over Calendar Year 2021. So far, in 2023, the University Hospital ED has logged **3,162** hours of diversion. When the Hospital is placed on diversion status, it is unable to accept patient transfer requests from other hospitals within and from outside the medical service area. Patients are, therefore, denied immediate access to certain specialized health care services, which are only available at University Hospital. **Diversion at University Hospital places a significant strain on the entire emergency system when it occurs so often.**

Currently, University Hospital's ED has fifty-nine (59) patient treatment areas and is equipped to adequately handle the current number of arrivals in the ED when the ED is **not** boarding admitted patients. However, in recent months, even though the average number of ED patient encounters has remained relatively steady, the number of patients boarding in the ED has increased significantly. On any given day, boarders may occupy **as many as half** of the available patient treatment areas, reducing the ED capacity by some 20 to 30 ED "beds" for the same number of patients presenting in the ED for urgent and emergency medical conditions. This increases length of stay in the ED, which can already be up to 8 to 12 hours.

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[18] *Id.* at r. 410-2-2-.03(1)(d).

[19] *Id.* at r. 410-2-2-.03(1)(b).

ED overcrowding includes those patients who are boarding in the ED because these "boarders" are managed in the ED for several hours to several days, resulting in **less resources available** for those patients from the health service area who present seeking urgent and emergency treatment in the ED. It is imperative that University Hospital, with its specialized capabilities, has adequate capacity to meet the health care needs of the existing and projected patient population in the medical service area. While the proposed Emergency ED Expansion Plan will not eliminate all factors triggering ED overcrowding and ED boarding, the addition of twenty-five (25) new patient treatment areas to the University Hospital ED will be a significant step towards alleviating the current crisis.[20]

Economic:

As noted above, the Emergency ED Expansion Project will temporarily expand the physical footprint and clinical capacity of the emergency department to include two (2) fully equipped mobile emergency medical units and nine (9) additional low acuity treatment areas for a total of twenty-five (25) additional patient care areas. The Emergency ED Expansion Project will benefit all patients presenting to University Hospital seeking emergency medical services, and the improvement in the ED's capacity will help with patient throughput in the ED, which will, in turn, improve access to emergency room services for medically complex patients in the medical service area. Certain operational problems, infrastructure, accessibility, and structural deficiencies can best be corrected by temporarily expanding overall capacity of the University Hospital ED, while finalizing a permanent solution to alleviate ED overcrowding. The proposed emergency expansion plan is the most expeditious and cost-effective solution.

See, **Part II, Section II, A**, below regarding required renovations for the University Hospital Emergency ED Expansion Project.

Emergency:

During the COVID-19 national and public health emergency and through the suspension of certain regulatory requirements, hospitals were allowed to make temporary use of alternative spaces to accommodate clinical demand. To accommodate the increased patient volume related to COVID-19, University Hospital made several changes to the ED's physical space, but the continued demand for urgent and emergency care post-COVID **has outpaced** these temporary measures. In addition, effective May 11, 2023, the national and public health emergency will officially end, and, with it, certain previously suspended regulatory requirements will once again be in effect. University Hospital, therefore, must act quickly to maintain overall regulatory compliance while meeting the urgent demand for additional clinical capacity in the ED.

University Hospital operates the largest emergency department in the State of Alabama. But, an 11% rise in volume in ED visits in Alabama over the past decade has resulted in a significant increase in the

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[20] Annually, there are over 130 million visits to emergency departments in the United States, representing the most frequent mode of access to the health care system by patients. In the state of Alabama, approximately 479 persons per 1,000 accessed the emergency department in 2018, the vast majority of whom chose a state or public institution, placing Alabama in the upper quartile of states in the nation delivering emergency care. In fact, **in the University Hospital ED, for every available treatment space in 2019, there were 1,900 patient visits**; this is 90% higher than the ED at the University of Florida (1,000), a comparable state-based institution. Over the past decade, there has been a consistent trend of increased visits to emergency departments in Alabama (11%), a challenge that has been compounded by the age and acuity level of those patients. See, 1999 - 2018 *American Hospital Association Annual Survey*.

number of patients seeking care in the emergency department. Patients are presenting to the ED with a more severe level of illness and the need for longer hospital stays. The University Hospital ED has experienced a 20% increase in patient volume in the last five (5) years with approximately 25% of those presenting to the ED ultimately requiring inpatient admission. University Hospital continues to experience **unprecedented demand** for complex tertiary and quaternary care services as the only ACS-accredited, Level I-Adult Trauma Center in the State of Alabama, and the Hospital has consistently maintained, on average, an occupancy rate of 80-90% for the past year.

In Calendar Year 2022, University Hospital cared for more than **88,000** patients at its two downtown Birmingham locations and almost **35,000** at is freestanding emergency department in Gardendale. For the same year, University Hospital denied **1,658** transfers from outside hospitals, with **100%** of those denials due to the Hospital being on diversion and/or reaching internal service caps. Moreover, the length of stay for patients in the ED (from those patients waiting to be triaged, to those placed in exam rooms for assessment and treatment, and those waiting on inpatient beds) has increased. **Patients can spend up to 8 to 12 hours in the University Hospital ED**.

As mentioned above, to ease overcrowding, University Hospital appropriated waiting rooms and hallways adjacent to the existing Emergency Department and expanded lobbies and other hospital common areas to accommodate patient overflow.[21] Despite these efforts, however, wait times have increased 43% since 2018, and **patients are being cared for in crowded conditions** especially during the University Hospital ED during peak hours (noon to 11:00pm).

At the University Hospital ED, "patient-arrival-to-provider" wait times are longer for patients who are categorized as Emergency Severity Index, Level 3. Patients in this category wait longer to be seen and board in the ED for longer periods of time waiting on an inpatient bed. As noted below, the hospital must use multiple resources to stabilize an ESI 3 patient.

TABLE III

Emergency Severity Index	Description	Median Wait Time (Patient arrival-to-Provider)
1	Patient requires immediate life-saving intervention	.62 hours
2	Patient is a high-risk situation, is disoriented, in severe paid or vitals are in danger zone	.86 hours
3[22]	If multiple resources are required to stabilize the patient, but vitals are not in the danger zone	1.05 hours
4	If one resource is required to stabilize the patient	.82 hours
5	If patient does not require any resources to be stabilized	.68 hours

Trauma and Critically Ill Patients. As the sole ACS-accredited, Level 1 Adult Trauma Center in the state, University Hospital receives seriously injured patients from throughout the state, and the number of

[21] See, **EXHIBIT I** - Floor Plan of University Hospital Overflow Areas

[22] The University Hospital ED treats more patients with at the Emergency Severity Index, Level 3, than any other category with **32,572** ESI – Level 3 patients presenting to the ED in Calendar Year 2022. The hospital must use multiple resources to stabilize an ESI 3 patient.

critically ill patients has increased significantly over the past three years.[23] The increased need for trauma-related services and the increase in critically ill patients has, in turn, increased ED overcrowding. Upon arrival at the University Hospital ED and because of the high level of acuity of these patients, ED resources, including critical nursing, imaging, and diagnostic services, are swiftly engaged to treat the seriously injured or critically ill patient to ensure timely resuscitation and provide prompt medical care. These intense resources are **diverted away** from other ED patients receiving active care. Responding to several trauma or critically ill patients simultaneously prolongs the wait of patients who have not yet been seen, exacerbates the challenges of ED overcrowding, and creates challenges for critically ill patients waiting on available bed in the hospital.

Critically ill patients boarding in the emergency room impacts clinical outcomes for the seriously ill and for those less sick awaiting beds in the hospital.[24] So urgent is the issue that the Joint Commission has identified patient boarding in the ED as a **patient safety risk** that should not exceed four hours.[25] At University Hospital, however, patients may board in the ED for several hours to several days. In 2022, ED overcrowding caused by patient boarding reached a critical point with approximately **264,170** hours of patient boarding in the University Hospital ED. On average, the Hospital's ED records **25,000 boarding hours per month** – an increase of 78% since 2018. All these factors demonstrate an urgent need to expand the physical footprint and clinical capacity of the ED at University Hospital.

Medically Underserved:

University Hospital is a "safety net" hospital and, with 1,207 CON-authorized beds, is one of the largest public hospitals in the United States.[26] The Hospital is committed to ensuring that the medically underserved in the State of Alabama receive equal access to all types of health care regardless of ability to pay, including access to quality trauma and emergency room services for medically complex patients. University Hospital is a large provider of medical services to low-income, uninsured, and vulnerable populations, including the elderly and disabled, Medicare and Medicaid beneficiaries, and minority populations. The Hospital also provides a substantial amount of charity care. During the fiscal year ending September 30, 2022, the cost of charity care provided at University Hospital was approximately $42.4 million.[27]

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[23] See, **FN 7**, above.

[24] See, Mohr NM, et. al., *Boarding of Critically Ill Patients in the Emergency Department,* Critical Care Medicine, 2020 Aug; 48(8):1180-1187.

[25]See, *The Joint Commission. R3 Report: Requirement, Rationale, Reference,* Accessed March 28, 2023. https://www.jointcommission.org/-/media/tjc/documents/ standards/r3-reports/r3_report_issue_4.pdf.

[26] Currently, University Hospital has **1,174** CON-authorized and ADPH licensed beds in operation. In 2021, SHPDA granted **CON 2942-H**, authorizing the hospital to add 50 additional acute care hospital beds. Of that number, 17 beds are now fully operational. Construction is nearing completion on 24 beds, and four (4) others are in development. Five (5) of the 50 additional beds remain in the planning phase. Once completed, University Hospital will have **1,207** CON-authorized and ADPH-licensed acute care hospital beds.

[27] Source: University Hospital Audited Financial Statement (Fiscal Year: 10/01/2021 – 9/30/2022). This amount is calculated based on the ratio of total direct and indirect cost to establish charges applied to the charges foregone under the charity care policy. This amount is roughly a 16% increase over Fiscal Year 2021 when the cost of charity care was $36.6 million.

Certain parts of Region III, as defined in the *Alabama State Health Plan* and where University Hospital is located, are designated as a Medically Underserved Area ("MUA") or Medically Underserved Population ("MUP") according to criteria developed by the Health Resource and Services Administration ("HRSA"). The MUA and MUP designations are used in the health care industry for a variety of reasons, including grant funding, physician and nurse recruitment, and for identifying a specific population within a geographic area, such as the homeless, low-income, or medically indigent. HRSA tracks MUA and MUP designations by census tract in Jefferson County, the largest and most populated county in the University Hospital Primary Service Area. Approximately, **54,128** unique patients from Jefferson County visited a University Hospital ED in Calendar Year 2022. More than 46% (or 25,147 unique patients) were from a Jefferson County MUA/MUP.

In Jefferson County alone, thirty-two (32) census tracts are identified as MUAs, and another sixty-one (61) census tracts are identified as MUPs. The other counties in the Primary Service Area are designated as either a "whole county" MUA or a "whole county" MUP. Upon approval of the proposed project, University Hospital will continue to provide urgent and emergency medical care to medically underserved, underinsured, uninsured, and indigent residents in its identified service area.

See, **EXHIBIT J**, University Hospital Primary Service Area - MUA and MUP designations.

Patients Leaving without Being Seen. When University Hospital is full and inpatients beds are unavailable for ED patients needing admission, the ED is forced to provide patient care in the overcrowded ED that would otherwise be administered in the inpatient setting. Keeping these patients in the ED for inpatient care diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients arriving by ambulance. **The ED may care for these "boarders" for several hours or even days**. With the low turnover of acute care inpatient beds and prolonged wait times in the ED for incoming patients to receive attention, the prevalence of very sick patients departing the ED without treatment has increased. **University Hospital currently ranks in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice.** For Calendar Year 2022, approximately **2,981** patients presenting in the University Hospital ED left without being seen. That number is up 38.5% since 2020.

Unfortunately, the patients that depart without being seen are frequently the sickest patients who have complex diseases (i.e., oncology or post-transplant). These patients are often underinsured and uninsured patients who present to the ED and then leave without being seen only to return to the emergency department with an even more severe illness. With an overcrowded ED, these patients are waiting longer and longer periods to be assessed and treated.

Mentally Ill and Intellectually Disabled Patients. The inadequacy of services and resources for the mentally ill, substance abusers, or intellectually disabled also impacts ED overcrowding and ED boarding at University Hospital. These patients are underserved, both medically and socially, and extremely vulnerable. They are often brought to the University Hospital ED by exhausted and concerned caregivers, distraught family members, or law enforcement.

Under Alabama Act #353, passed in 1975, if a law enforcement officer has reasonable cause to believe that a person is mentally ill and believes that the person is a danger to themselves or others, the law

enforcement officer is authorized to take the patient into custody and bring the patient to the county's "designated place".[28] University Hospital is the "designated place" for Jefferson County under Act 353.

After an evaluation in the ED, if a mentally ill patient, substance abuser, or a patient with an intellectual disability is appropriate for discharge, there is often no safe, appropriate placement available. Consequently, over the past few years, several patients suffering with from mental illness, addiction, and/or an intellectual disability have been **abandoned** in the University Hospital ED. Regrettably, these patients often end up boarding in the ED for several days until an appropriate placement can be identified. Boarding these patients, who may be medically stable, but remain psychiatrically or psychologically at risk, in the ED as hospital inpatients **creates a patient safety issue** for the patient and for the emergency medical team and diverts resources from the ED that would otherwise be used to care for patients presenting with other urgent and emergency medical conditions.[29]

Approval of the Emergency ED Expansion Project will enable University Hospital, with its specialized and unique capabilities, to meet the health care needs of the existing and projected patient population in the medical service area, including patients who are traditionally medically underserved and often identified as low-income, uninsured, underinsured, and vulnerable populations, like the elderly and disabled, the with mental illness or intellectual disabilities, Medicare and Medicaid beneficiaries, and minority populations.

II. HEALTH CARE REQUIREMENTS OF THE MEDICAL SERVICE AREA

A. What are the factors (inadequacies) in the existing health care delivery system which necessitate this project?

Over the years, University Hospital has renovated and updated its physical plant when necessary to meet patient demand.[30] Recent renovations, updates, and expansions, however, are inadequate and no longer meet current utilization demands in the ED. The primary objective of the Emergency ED Expansion Project is to increase physical footprint and clinical capacity in the ED and thereby, mitigate

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[28] *Acts of Alabama No. 353* provides for the temporary detention, care, and handling of mentally ill persons pending formal commitment proceedings to determine whether such person should be committed to the Alabama State Hospitals and was enacted by the Legislature of Alabama and approved September 16, 1975.

[29] With changes to the mental health services in the state, the closure of facilities in the community, and the increased incidence of behavioral health issues since the COVID-19 pandemic, the ED has experienced increased psychiatric emergencies over the past two years. **The ED, which can be a highly stimulating environment, is not suited for this vulnerable population and does not have the adequate space or resources to provide services to this complex patient population who frequently must wait for hours or even days boarding in the ED.** The University Hospital ED provides psychiatric care to patients as young as twelve. *See also*, Nash KA, Zima BT, Rothenberg C, et al. *Prolonged emergency department length of stay for US pediatric mental health visits* (2005-2015). Pediatrics. 2021;147(5); Hasken, C, Wagers, B, Sondhi J, Miller, J, Kanis, J. *The impact of a new on-site inpatient psychiatric unit in an urban pediatric emergency department*. Pediatric Emergency Care. 2022;38(1); and Holland KM, Jones C, Vivolo-Kantor AM, et al. *Trends in US Emergency Department Visits for Mental Health, Overdose, and Violence Outcomes Before and During the COVID-19 Pandemic*. JAMA Psychiatry. 2021;78(4):372–379.

[30] See, **CON 2978-H** granted by SHDPA in December 2021, to replace the aging Spain Inpatient Rehabilitation Facility and **CON 2942-H** granted by SHPDA in April 2020, to add 50 acute care hospital beds under the 80% occupancy rule in the *State Health Plan*.

ED overcrowding and ED boarding **without** increasing the number of CON-authorized inpatient beds or ADPH-licensed at the University Hospital.

Patients, health care providers, and hospitals throughout Alabama rely on the specialized capabilities of University Hospital. When the Hospital's specialized capabilities are unavailable due to ED overcrowding or high inpatient census, the Hospital and the ED must be placed on diversion and **cannot accept** patients in transfer from other hospitals even if those patients need the specialized services (e.g., burn unit, neonatal intensive care, transplant, etc.) offered by University Hospital. **ED overcrowding places these vulnerable patients with serious medical conditions in jeopardy**.

Ambulance or Hospital Diversion. "Ambulance diversion" or "hospital diversion" is an inadequate remedy for ED overcrowding and ED boarding. Diversion only temporarily relieves ED overcrowding and does not address the issue of ED boarding at all. Diversion assists a hospital with reducing the number of patients waiting to be seen in the ED but only if those patients arrive by ambulance. Ambulance diversion **does not apply** to patients who arrive by personal vehicle or who simply walk into the facility. University Hospital cannot simply direct these patients or others presenting with "low acuity" conditions to other less costly or less crowded treatment settings, like the UAB Urgent Care Clinic near downtown Birmingham or to a physician's office nearby. Once a patient has arrived in the ED, federal law mandates that the patient **must be given** a medical screening examination.[31]

Diversion is also inadequate because, in Alabama, an adult patient who is conscious and alert has the right to select a hospital to which he or she is to be transported.[32] Emergency medical services ("EMS") has no right to override that decision even if the patient's preferred hospital is on diversion status. If the patient insists on being transported to that hospital, the EMS provider must honor this request. Those patients, when brought to University Hospital, often must wait longer and longer periods of time to be seen and treated if the hospital ED is crowded or on diversion. In Calendar Year 2022, University Hospital was placed on diversion an average of **633 times per month**, equaling **7,930** hours. So far, in 2023, the University Hospital ED has recorded **3,162** hours of diversion. **A significant strain is placed on the entire emergency system when University Hospital is on diversion so often**.

Birmingham Fire and Rescue Services ("BFRS") reports that more than **17,000** (or 57%) of all its ambulance transports were transported to University Hospital in Calendar Year 2022. This represents a 31% increase over 2021.[33] When the University Hospital ED is overcrowded, BFRS cannot simply leave

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[31] The Emergency Medical Treatment and Labor Act ("EMTALA") provides rights to any individual who "**comes to**" the hospital emergency department of a Medicare-participating hospital and requests examination or treatment. 42 U.S.C. § 1395dd(a). If such a request is made, hospitals **must provide** an appropriate medical screening examination to determine whether an emergency medical condition exists or whether the person is in active labor. If an emergency medical condition is found to exist, the hospital **must provide** available stabilizing treatment or effectuate an appropriate transfer to another hospital that has the capabilities to provide stabilizing treatment. The EMTALA statute requires that all patients receive an appropriate medical screening examination, stabilizing treatment, and transfer, if necessary, regardless of ability to pay.

[32] See, Alabama Office of Emergency Medical Services, *Provider Services Operational Guidelines, Patient Rights and Refusal of Care*, §18.08, ¶4.

[33] Ambulance transports to University Hospital ED have risen steadily since 2019, when **14,721** ambulance transports were received at the hospital. On average, University Hospital ED routinely receives approximately **80** ambulance transports per day.

the patient unattended in the ED. The emergency medical technician ("EMT") **must remain with the patient in the ED** until a University Hospital provider assumes the patient's care and treatment. If "patient arrival-to-provider" wait times are lengthy, the **EMTs must remain with the patient at the hospital for the entire time** and neither the EMT nor the ambulance can respond to other emergencies in the medical service area. This leaves the medical service area with less EMS coverage.

While the proposed Emergency ED Expansion Plan will not eliminate all factors triggering ED overcrowding and ED boarding, the addition of twenty-five (25) new patient treatment areas to the University Hospital ED will be a significant step towards alleviating the current crisis.

B. How will the project correct the inadequacies?

The University Hospital Emergency ED Expansion Project will correct the inadequacies described in **Part II, Section II, A** above by increasing the physical footprint and clinical capacity of the ED. The improvement will increase the Hospital's overall ability to accommodate current patient demand, reduce ambulance diversion, and provide additional flexibility to accept transfers from other hospitals in within and outside the medical service area.

C. Why is your facility/organization the appropriate facility to provide the proposed project?

Rule 410-1-6-.09 of the *Certificate of Need Program Rules and Regulations* requires that a determination be made that an applicant is an appropriate applicant and that such determination be based upon direct or indirect evidence demonstrating the ability of the applicant to render adequate service to the public. University Hospital is the appropriate facility for the proposed project because the facility complies with all six (6) of the review criteria found in CON r. 410-1-6-.09 as follows:

(1) Professional capability of the facility

University Hospital, the 8th largest hospital in the nation, utilizes specialists from throughout the UAB Medicine Enterprise who use their unique skills, expertise, and professionalism to evaluate and treat patients. In particular, the Trauma and Emergency Department Teams represent more than seven subspecialty areas and include board certified and board eligible physicians, a military-civilian partnership with the U.S. Air Force, and an extensive complement of multi-disciplinary practitioners. The depth and breadth of physician services available at the hospital provides a unique opportunity for distinction among academic medical centers in the southeastern United States and positions UAB Medicine to pioneer state-of-the-art practices.

Best Doctors in America. More than 350 UAB Medicine physicians are honored with the designation of "*Best Doctors in America*", which is reserved for the top 4% of physicians in America.[34]

National Institutes of Health Grant Funding. Research funding to the University of Alabama at Birmingham from the National Institutes of Health ("NIH") in 2022 exceeded $300 million. The university received $332,830,823 according to the Blue Ridge Institute for Medical Research, placing UAB as 28th

[34] https://www.uabmedicine.org/about-uab-medicine/uab-medicine-awards-and-recognition/ accessed 3.20.2023

on the list of organizations receiving funding from the NIH. Among public universities, UAB ranked 11th.[35]

(2) Management capability of the facility

University Hospital and its staff are committed to providing clinical services of the highest quality and are consistently ranked as one of the leading academic medical centers in the nation. For example,

> ***Forbes Magazine* – No. 1 Best Large Employer in America** – In 2021, the University of Alabama at Birmingham, which includes the university and hospital entities, was named America's No. 1 Best Large Employer by *Forbes* magazine, topping the list of more than 500 public and private corporations, hospitals, universities, Fortune 500 companies and more, across dozens of industries.
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> ***Forbes Magazine* – No. 4 Diversity Best Employer for Diversity** – In 2021, the University of Alabama at Birmingham, which includes the university and hospital entities, was named America's No. 4 Best Employer for Diversity, recognizing the institution' commitment to building a workforce, which better serves and meets the needs of a diverse community.
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> **HEED Award** – Last year, the University of Alabama at Birmingham was recognized for the fifth year in a row, as a 2022 Higher Education Excellence in Diversity Award recipient and named a 2022 Diversity Champion for its ongoing commitment to diversity and inclusion. UAB is the only institution in Alabama to be recognized with the annual award.[36]

Listed below is a selection of the awards received by UAB Hospital, reflecting the hospital's commitment to providing the best clinical care, education, and research to the people of the State of Alabama.

> ***U.S. News and World Report*** – University Hospital is nationally ranked among the top hospitals in the United States, and the Number #1 hospital in Alabama for 2022 – 2023 with eight adult specialties ranked among the best in the nation, four within the top 25.[37] The magazine also notes University Hospital as "high-performing" in 16 of 20 assessed adult procedures/conditions in the 2022-2023 Best Hospital rankings. UAB's OB/GYN program ranked No. 5 in the nation – one of the highest rankings ever for a UAB Medicine specialty – in the 2022 *U.S. News & World Report* survey, which evaluated OB/GYN programs at 233 U.S. hospitals.

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[35] See, *UAB received more than $332 million in research funding from the National Institutes of Health in 2022*, https://www.uab.edu/news/research/item/13438-uab-received-more-than-332-million-in-research-funding-from-the-national-institutes-of-health-in-2022. accessed March 10, 2023.

[36] https://www.uab.edu/news/campus/item/13208-uab-named-one-of-16-diversity-champions-again-receives-excellence-in-diversity-award#:~:text=%E2%80%9CThe%20HEED%20Award%20process%20consists,diversity%20and%20inclusion%2C%E2%80%9D%20said%20Lenore. accessed 3.20.2023

[37] https://www.uabmedicine.org/news/with-eight-highly-ranked-specialties-u-s-news-again-calls-uab-best-hospital-in-alabama/ accessed 3.20.2023

Healthgrades – America's Best Hospitals – University Hospital received the "Outstanding Patient Experience Award" from Healthgrades for the last three years and has been ranked in America's 50 Best Hospital for Cardiac Surgery for the same years. The hospital received the Cranial Neurosurgery Excellence Award in 2021 and 2022. In 2020, University Hospital was the only hospital in Alabama to make the list of American's best Hospitals.

Women's Choice Award – University Hospital received the 2021 American's Best Hospitals designation from Women's Choice Award for the practice areas of obstetrics, orthopedics, heart care, stroke care, cancer care and breast care.

A Magnet Hospital – The American Nurses Credentialing Center Magnet Recognition Program certifies nursing excellence at health care organizations. University Hospital is the only hospital in Alabama designated a Magnet organization and one of only 505 worldwide. It received the designation in 2002, 2006, 2011, 2012, and most recently in 2019, which ensures the designation through 2024. University Hospital is only the 21st hospital in the world to receive this designation five consecutive times.

UAB Medicine Comprehensive Stroke Center – University Hospital was the first hospital in Alabama to be certified as a Comprehensive Stroke Center by the American Heart Association/American Stroke Association and The Joint Commission, a nonprofit national health care accreditation agency. *U.S. News & World Report* consistently ranks UAB Neurology and Neurosurgery among the top programs of their kind in the nation.

Listed below is a selection of awards and honors received separately by the UAB Emergency Room and Trauma Unit, identifying those service areas as an integral part of the continuity of care offered by University Hospital and confirming the Hospital's overall commitment to providing the best clinical care, education, and research to the people of the State of Alabama.

Level I Trauma Accreditation by the American College of Surgeons Committee on Trauma – University Hospital was re-verified as an Adult Level I Trauma Center in 2022. This verification confirms that the hospital provides not only the resources necessary for trauma care, but also the entire spectrum of care to address the needs of all injured patients, from the pre-hospital phase through the rehabilitation process.[38]

Geriatric Emergency Department Accreditation by the *American College of Emergency Physicians* – UAB Highlands was accredited by the *American College of Emergency Physicians* as a Level 1 Geriatric Emergency Department in 2021. This designation makes Highlands the only accredited geriatric ED in Alabama, the first in the Southeast, and only one of 17 centers in the world. This is the highest level of accreditation a hospital can receive from the American College of Emergency Physicians and recognizes UAB Medicine's commitment to providing a high-functioning emergency department for

[38] https://www.uab.edu/news/health/item/12992-uab-hospital-re-verified-as-a-level-i-trauma-center

older adults where everything from the processes to the facilities are tailored specifically to meet their needs.[39]

(3) Adequate manpower, including health personnel and management personnel to offer the proposed service.

University Hospital anticipates hiring additional physicians and nursing and support staff to provide direct patient care and other services when the twenty-five (25) new patient treatment areas in the ED are fully operational. University Hospital does not anticipate significant difficulty in recruiting and hiring qualified physicians, nurses, and other allied health professional necessary to fully staff the expanded ED.

As mentioned above, University Hospital is designated as a Magnet Hospital, confirming that it offers the best working environment for its nursing and support staff. The Hospital is recognized for its commitment to diversity, equity and inclusion, and satisfaction of the staff as reflected in high-quality clinical and patient satisfaction data in HCAPHS, Medallia, and Healthgrades survey results. University Hospital is ranked as the number one hospital in Alabama by U.S. News and World Report. These awards and recognitions attract talented and caring individuals to work at the Hospital. University Hospital does not anticipate difficulty in maintaining the current team of qualified nursing and allied health professionals who already staff the 59 patient treatment areas in the existing ED.

Finally, the existing nursing, emergency services, and administrative structure for University Hospital will not change.

(4) Evidence of the existence of the applicant's long-range planning program and an ongoing planning process

See, **Part II, Section II, F**, below.

(5) Evidence of existing and ongoing monitoring of utilization and the fulfilling of unmet need or under met health needs in the case of expansion

University Hospital has excellent quality assurance and utilization review programs and continuously monitors the utilization of all its services, including emergency department services. The existing quality assurance and utilization review programs have robust and timely data available, detailing the types of services rendered by the Hospital and when and to whom those services are rendered. University Hospital also continually monitors the needs of the residents of the state as evidenced by the many programs, services, and initiatives developed by UAB Medicine Enterprise to address the unmet and under met health care needs of the residents of the State of Alabama. See, **Part VI, Statement of Community Partnership for Education and Referrals**, below for a description of some of the community programs and initiatives funded and/or operated by UAB Medicine Enterprise.

(6) Evidence of communication with all planning, regulatory, utility agencies and organization that influence the facility's destiny.

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[39] https://www.uab.edu/news/health/item/12204-uab-hospital-highlands-emergency-department-designated-as-first-level-1-geriatric-ed-in-the-southeast Accessed 3.20.2023

University Hospital has communicated with all planning, regulatory, utility agencies, and organizations that influence the facility's destiny. The Hospital is licensed by the Alabama Department of Public Health, certified by the Centers for Medicare and Medicaid Services, and fully accredited by The Joint Commission. The Hospital will continue to work with all organizations influencing its destiny.

D. Describe the need for the population served or to be served for the proposed project and address the appropriate sections of the *State Health Plan* and the Rules and Regulations under r. 410-1-6-.07. Provide information about the results of any local studies which reflect a need for the proposed project.

Although the *2020-2023 State Health Plan* does not specifically address emergency rooms or emergency services, the plan does address certain *"Health Priorities"*, and provides that "when resources are limited and needs great, focused attention on the most pressing problems will promote optimal use of any new or additional investments".[40] *Care of the Elderly and Chronically Ill* and *Health Care for the Medically Indigent* are included among the *Health Priorities* outlined in SHP. These priorities overlap considerably in that many elderly – those age 65 and older – are not only chronically ill, but also medically indigent with many living at or below the poverty level.

By 2040, CBER estimates that Jefferson County's total population will be 688,786, which is an overall projected increase of 2.1% since 2020. Jefferson County had a recorded population of individuals aged 65 and older of 106,631 in 2020. By 2040, however, CBER estimates Jefferson County's population aged 65 and older will be 127,315, a projected increase of 47.3%, reflecting an aging population. These individuals, according to the SHP, will live longer – well into their 80s and 90s – and with advanced age, comes increased incidence of chronic disease and disability. These "**frail elderly**", according to the SHP, will trigger an increased demand for health care services. Moreover, this demand will continue to grow as the population ages.[41] The Emergency ED Expansion Project will allow University Hospital to respond to this anticipated change in the population to be served as projected by CBER and the *SHP*.[42]

Approval of this project will allow University Hospital to continue its current commitment to ensuring access to urgent and emergency medical services for all patients, including Medicare, Medicaid, indigent, self-pay, and charity care patients. See, **Part II, Section I, D, Emergency**, above and **Part VI**, below, describing the hospital's commitment to the population served and to be served by the Emergency ED Expansion Project.

E. If the application is for a specialized or limited-purpose facility or service, show the incidence of the particular health problem.

The mobile emergency medical units that will be installed and used as part of the University Hospital Emergency ED Expansion Project are "limited-purpose" facilities. The units will be used temporarily as part of a larger, multi-phase plan to ease ED overcrowding and ED boarding. Once the multi-phase plan is completed, the mobile units will be uninstalled and removed. While the proposed emergency ED expansion will not address all the factors triggering ED overcrowding and ED boarding, the addition of

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[40] See, *SHP*, r. 410-2-2-.01(2).

[41] See, **FN 19**, above.

[42] See, **Part II, Section 1, B and C**, for CBER Population Data and for the *SHP* analysis of the projected increase in the elderly population of Alabama.

twenty-five (25) new patient treatment areas to the University Hospital ED will be a significant, albeit temporary, step in alleviating the current crisis.

As described in **Part II, Section I, D**, above, University Hospital ED has experienced a 20% increase in patient volume in the last five (5) years with approximately 25% of those presenting to the University Hospital ED ultimately requiring inpatient admission. The Hospital continues to experience unprecedented demand for complex tertiary and quaternary care services as the only ACS-accredited, Level I-Adult Trauma Center in Alabama. The Hospital has consistently maintained, on average, an occupancy rate between 80-90% over the past year.

In Calendar Year 2022, University Hospital's ED cared for more than **88,000** patients at its downtown Birmingham locations and another **35,000** at is freestanding emergency department in Gardendale. For the same year, the Hospital denied **1,658** transfers from outside hospitals, with 100% of those denials due to the Hospital being on diversion and/or reaching internal service caps. Moreover, the length of stay for patients in the ED (from those patients waiting to be triaged, to those placed in exam rooms for assessment and treatment, and those waiting on inpatient beds) has increased.

F. Describe the relationship of this project to your long-range development plans if you have such plans.

This University Hospital Emergency ED Expansion Project, which involves the placement and utilization of two mobile emergency medical units and the renovation of the ED waiting room, is the initial phase of the Hospital's plan to develop a permanent solution to ease ED boarding and overcrowding. The mobile units are a temporary measure required to ease the current consistent ED overcrowding while allowing University Hospital sufficient time and resources to develop an overall strategic plan to accommodate the evolving needs of the medical service area.

The second phase involves a permanent expansion of the physical footprint and clinical capacity of University Hospital's existing emergency department by adding additional areas for patient care. A permanent expansion of the ED would include renovations to expand physical space, increase overall efficiency, and new construction to update existing services, facilities, and equipment. University Hospital anticipates seeking CON approval for the permanent expansion of the hospital's emergency department within six to twelve months of the approval of this emergency CON request.

III. RELATIONSHIP TO EXISTING OR APPROVED SERVICES AND FACILITIES

A. Identify by name and location the existing or approved facilities or services in the medical service area similar to those proposed in this project.

See, **EXHIBIT K**, List of Acute Care Hospitals with Emergency Rooms and List of Freestanding Emergency Rooms in the identified medical service area.[43]

B. How will the proposed project affect existing or approved services and facilities in the medical service area?

[43] Alabama Hospital Association, AlaHA.org, accessed March 2023, hospitals Archive – Alabama Hospital Association (ala.org) and U.S. Centers for Medicare and Medicaid Services, Medicare.gov. accessed March 2023.

Patients, health care providers and community hospitals in the medical service area already benefit tremendously from the proximity of, and access to, the experience, expertise, and world-class health care available at University Hospital, an academic medical center. However, ED overcrowding and ED boarding can severely limit that access. The Emergency ED Expansion Project will improve access to existing emergency medical services in the medical service area.

Additionally, prolonged ED wait times also limit ambulance services, placing a strain on outlying hospitals without the specialty resources to provide care to complex patients. These hospitals are unable to transfer the state's sickest patients to University Hospital where they could receive the specialty care needed. Moreover, an overcrowded ED at University Hospital may not have the capacity to handle a mass casualty event in central Alabama if such an event were to occur.

By expanding the physical footprint and clinical capacity of the ED, University Hospital will reduce ED overcrowding and ED boarding. In turn, the Hospital will be able to reduce the number of times the facility is placed on diversion and decrease the number of transfer denials. Improved access to ED services will help the chronically ill, the elderly, and indigent patients presenting at the Hospital, but also those medically complex patients from the medical service area (and throughout the state) in need of certain health services that are only offered at University Hospital.

C. Will there be a detrimental effect on existing providers of the service? Discuss methodologies and assumptions.

University Hospital does not anticipate any detrimental effect on existing facilities offering emergency medical services. The primary purpose of the Emergency ED Expansion Project is to improve access to the urgent and emergency medical services available at University Hospital by easing ED overcrowding and ED boarding. By renovating the existing ED waiting room and installing two mobile emergency medical units, University Hospital will add twenty-five (25) new patient treatment areas to the ED. The project will allow University Hospital to operate more efficiently and effectively and respond to the needs of the existing providers who seek access to the specialized capabilities of the Hospital for their medically complex patients. Based on the assumptions is **Part II, Section III, B** above, both general acute care hospitals with emergency rooms and freestanding emergency rooms in the medical service area will benefit from the project.

D. Describe any coordination agreements or contractual arrangements for shared services that are pertinent to the proposed project.

Not applicable.

E. List the new or existing ancillary and/or supporting services required for this project and briefly describe their relationship to the project.

No new institutional or new ancillary health services are required for the emergency ED expansion. The existing ancillary and supporting services at University Hospital will remain available and include, but are not limited to, food/dining services[44], pharmacy, laboratory, central supply and materials management,

[44] Food service/dining is furnished to hospital inpatients who are boarding in the ED.

environmental services, security, physical and behavioral therapy, hospital administration and management and facilities management and engineering.[45]

IV. POTENTIAL LESS COSTLY OR MORE EFFECTIVE ALTERNATIVES

A. What alternatives to the proposed project exist? Why was this proposal chosen?

University Hospital considered several initiatives designed to optimize the utilization of the existing facility and assure appropriate patient flow and throughput within the Hospital ED. Three alternatives to the proposed emergency expansion plan exist:

Option One: maintaining the status quo, using existing space, and continuing to provide emergency medical services in an ED and a modified overflow area that were not designed to accommodate such a significant increase in the number of patients seen and treated or boarding in the hospital ED. Option One does nothing to remedy the overcrowding, boarding, and transfer denials at the University Hospital ED and moreover, using the overflow areas is no longer a viable option because the CMS wavier, allowing hospitals to temporarily expand treatment areas to accommodate the COVID pandemic, will soon expire.

Option Two: using other clinical space within the Hospital for emergent and emergency care services. Option Two creates multiple operational challenges, including patient flow to a new location within University Hospital, staff coverage, imaging service coverage, access for labs, etc. The practical and operational challenges of Option Two make this option too difficult to implement effectively within a large academic medical center with non-emergency clinical areas that cannot easily be converted for use as an ED.

Option Three: using a conventional building methodology of design, bid, and build. Option Three involves undertaking a comprehensive renovation of the University Hospital physical plant, resulting a lengthy construction process as the renovation would be completed in multiple phases over several years during which time the ED would continue to be overcrowded and patient care would be delayed and interrupted.

After much discussion, the Hospital determined that neither of these three alternatives was less costly, more effective, or more appropriate. All three alternatives fail to adequately address the urgent needs of University Hospital, the emergency care team, and most importantly, the patients who must wait longer and longer times to be seen and treated in the Hospital's ED. The Emergency ED Expansion Project was chosen to remedy the current needs of the ED by adding twenty-five (25) additional patient treatment areas to the ED while a plan for the permanent expansion of the Hospital's ED capacity is developed and finalized.

B. How will this project foster cost containment?

The Emergency ED Expansion Project will reduce several inefficiencies created by ED overcrowding and ED boarding. In particular, when University Hospital is at capacity and inpatient beds are unavailable for ED patients needing hospital admission, the Hospital is forced to provide patient care in the ED that would otherwise be administered in the inpatient setting. Keeping "boarders" in the ED for inpatient

[45] Each mobile unit is fully equipped with its own HVAC system, medical gas tank room, an emergency generator, and connection points for power, water, sprinkler, sewer, data, and nurse call systems.

care is **costly and diverts resources** that would otherwise be available for patients presenting to the ED for treatment, including sick patients arriving by ambulance. The ED may care for these "boarders" in crowded conditions for several hours or even days, resulting in the **less-than-optimal** use of staff, support services, supplies, and equipment. The Emergency ED Expansion Project will reduce these costly inefficiencies by expanding the Hospital's physical footprint and clinical capacity. The expanded ED and renovated waiting room will be more efficient and improve patient outcomes, resulting in a more efficient use of staff, facilities, support services, supplies, and equipment – thereby lowering costs incurred by the Hospital.

C. How does the proposal affect the quality of care and continuity of care for the patients involved?

The University Hospital Emergency ED Expansion Project will have a positive impact on the quality of care and the continuity of care for the patients involved. As mentioned in **Part II, Section II, C**, above, University Hospital ED utilizes specialists from throughout the UAB Medicine Enterprise who use their unique skills, expertise, and professionalism to evaluate and treat patients. In particular, the Trauma and Emergency Department Teams represent more than seven subspecialty areas and include board certified and board eligible physicians, a military-civilian partnership with the U.S. Air Force, and an extensive complement of multi-disciplinary practitioners. The depth and breadth of physician services available at University Hospital provides a unique opportunity for distinction among academic medical centers in the southeastern United States and positions University Hospital to pioneer state-of-the-art practices.

Even with these impressive credentials, University Hospital currently ranks in the **upper quartile** in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice. Unfortunately, many patients that depart without being seen are frequently the sickest patients who have complex diseases (i.e., oncology or post-transplant). Often, these patients may be underinsured and uninsured patients who also present, leave, and then return to the emergency department with an even more severe illness. With an overcrowded ED, these patients are waiting longer and longer periods to be assessed and treated. Approval of the Emergency ED Expansion project will (i) enable University Hospital to meet the health care needs of the community by providing access to certain specialized medical services only available at University Hospital; and (ii) improve quality of care because with twenty-five (25) new patient treatment areas, door-to-provider wait times will decrease. Continuity of care will also improve when Hospital resources are no longer diverted away from the ED patients to care for ED boarders.

V. DESCRIBE COMMUNITY REACTION TO THE PROJECT (Attach endorsements if desired)

See, **EXHIBIT L**, Letters of Support for the emergency CON Application.

VI. NON-PATIENT CARE

If appropriate, describe any non-patient care objectives of the facility, i.e., professional training programs, access by health professional schools and behavioral research projects which are designed to meet a national need.

UAB Medicine's mission is to *"deliver world-class patient care to the residents of Alabama and beyond, advance medical science through pioneering research, and train the sharpest medical minds"*. As such, University Hospital is one of the top academic medical centers in the United States and the No. 1 hospital in the State of Alabama. University Hospital has clinical affiliation agreements with numerous

educational institutions and makes its facility, resources, and staff available to train physician, nurses, and technicians in multiple medical disciplines. An expanded emergency department will only enhance opportunities for clinical affiliations and training. At present, University Hospital has education and training relationships through clinical affiliation agreements with the University of Alabama, Auburn University, the Veterans' Administration, the Federal Bureau of Investigation, Birmingham Fire and Rescue, Herzing College, Lawson State and Jefferson State Community College, to name of few. For Calendar Year 2022, approximately 276 students and trainees completed clinical experiences in the University Hospital ED, including multiple surgery and emergency medicine residents as well as fellows in trauma surgery and critical care.[46]

VII. MULTI-AREA PROVIDER

If the applicant holds itself as a multi-area provider, describe those factors that qualify it as such, including the percentage of admissions which resides outside the immediate health service area in which the facility is located.

As addressed in **Part II, Section I, A – C**, University Hospital is a multi-area provider. The Hospital provides a significant number of services to individuals who do not reside in the hospital's Primary Service Area. A review of the total discharges for University Hospital confirms that 45.5% of the patients treated at Hospital reside outside the hospital's Primary Service Area, which is defined as a seven-county area. Consistent with CON r. 410-1-6-.12 and *SHP* r. 410-2-3-.02(5)(a), the special needs and circumstances of University Hospital as multi-area provider and its state-wide mission must be considered.

VIII. HEALTH MAINTENANCE ORGANIZATION

If the proposal is by or on behalf of a health maintenance organization (HMO), address the rules regarding HMOs, and show that the HMO is federally qualified.

Not applicable.

IX. ENERGY-SAVING MEASURES

Discuss as applicable the principal energy-saving measures included in this project.

The renovations necessary for the installation and subsequent operation of the mobile units and the low acuity treatment area will be implemented in accordance with University Hospital's extensive energy management program that supports the hospital's energy savings measures.

X. OTHER FACTORS

Describe any other factor(s) that will assist in understanding and evaluating the proposed project, including the applicable criteria found at 410-1-6 of the Alabama *Certificate of Need Program Rules and Regulations* which are not included elsewhere in the application.

The applicable criteria found in CON r. 410-1-6 et seq. are addressed throughout this application. The following information confirms that the University Hospital Emergency ED Expansion Project is consistent with the applicable CON Review criteria:

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[46] Additional source: https://www.uab.edu/news/health/item/12992-uab-hospital-re-verified-as-a-level-i-trauma-center Accessed 3.202.2023

CON Rule 410-1-6-.01, CON Criteria. This University Hospital Emergency ED Expansion Project is consistent with all required criteria standards and supplemental review criteria required when the CON application was submitted to the agency.

CON Rule 410-1-6-.02, State Health Plan. The CON application and the University Hospital Emergency ED Expansion Project are consistent with SHP and SHPDA regulations.

CON Rule 410-1-6-.03, Applicant Long Range Development Plan. See, **Part II, Section II, F** of this application.

CON Rule 410-1-6-.04, Availability of Alternatives. See, **Part II, Section IV, A – C** of this application.

CON Rule 410-1-6-.05, Need for the Project. The criterion outlined in Rule 410-1-6-.05 are discussed at length throughout this application. The application is (a) financial feasible; (b) specific information demonstrating the need for the University Hospital Emergency ED Expansion Project is set forth throughout the application and exhibits; (c) evidence of the project's consistency with the facility's and the community's overall health and health-related plans in **Part II, Section II, D.**; (d) evidence of consistency with the need to meet non-patient care objectives of such as teaching and research in **Part II, Section II, F and Section VI**; (e) evidence of review of the proposed facility or capital expenditure when appropriate and requested by state agencies; (f) evidence of location appropriateness of the mobile units, which will be located adjacent to the existing emergency department in **Part III**; (g) reasonable potential of the project to meet licensure standards because the existing facility is already operating pursuant to the licensures standards of the Alabama Department of Public Health and the mobile units will be installed and operated consistent with those standards; and (h) reasonable consideration has been given to the proposed project's affiliation with medical education as described in **Part II, Section IV**.

CON Rule 410-1-6-.06, Additional Criteria for Determining Need. Each criterion outlined in Rule 410-1-6-.06 are discussed at length throughout **Part II** of this application.

CON 410-1-6-.07, Access to the Facility of Service. See, **Part II, Section I, D** and **Part V** of this application.

CON 410-1-6-.08, Relationship of Existing Health Care System. See, **Part II, Section III, A – E** of this application.

CON 410-1-6-.09, Appropriate Applicant. See, **Part II, Section II, C** of this application.

CON 410-1-6-.11, Access by Health Professional Schools. See, **Part II, Section VI** this application.

CON 410-1-6-.12, Special Needs of Multi-Area Providers. See, **Part II, Section VII** of this application.

CON 410-1-6-.14, Construction Projects. The University Hospital Emergency ED Expansion Project is developed to maximize cost containment, protect of the environment, and conserve energy. Construction costs associated with the proposed project are reasonable. University Hospital will provide evidence of appropriate zoning upon request by the agency.

See, **Part I, Section IV** for a detailed cost estimate, **EXHIBIT M**, for detailed information from the architect for the University Hospital Emergency ED Expansion Project and for schematic drawings for the proposed installation of the mobile units and waiting room renovations, which will meet all ADA building standards. See also, **Part III**, below.

CON 410-1-6-.15, Supplemental Review Criteria. The ED waiting room renovation and the mobile units will conform to local zoning ordinances and building codes, as applicable, and will comply with all applicable state statutes and regulations for the protection of the environment.

CON Rule 410-1-6-.16, Compliance with State Licensure Rules, Regulations, and Standards. The proposed project shall be constructed and operated in compliance with the appropriate state licensure rules, regulations, and standards. See, **Part VI** of this application.

CON Rule 410-1-6-.17, Past Performance of Existing Services and Facilities. University Hospital has a long history of furnishing professional, quality health care services for its patients. See, **Part II, Section II, C** for a non-exclusive listing awards and designations received by UAB Hospital, recognizing the quality of care furnished at UAB and its dedication to patient and employees.

PART THREE: CONSTRUCTION OR RENOVATION ACTIVITIES

Complete the following if construction/renovation is involved in this project. Indicate N/A for any questions not applicable.

I. **ARCHITECT** H. Harold Yoder, Jr.

Firm Gresham Smith

Address 3595 Grandview Parkway, Suite 300

City/State/Zip Birmingham, Alabama 35243

Contact Person Harold Yoder

Telephone 205-298-9202

Architect's Project Number 46320

II. **ATTACH SCHEMATICS AND THE FOLLOWING INFORMATION**

A. Describe the proposed construction/renovation

The proposed project will provide utility infrastructure expansion to enable the installation of two (2) Mobile Emergency Department Units to support the current Emergency Department ("ED"). The Mobile ED Units will be installed adjacent to the current North Pavilion ED Patient drop-off and will be an extension of the existing ED. The Mobile ED Units will each have eight (8) patient treatment areas for a total of sixteen (16) additional ED treatment bays. The Mobile ED Units will be used to support the existing North Pavilion ED while a permanent ED expansion project is finalized.

In addition, the proposed project will relocate the existing Emergency Department Waiting Room area to the lover level of the North Pavilion Atrium space, allowing the renovation of the current ED Waiting Room into nine (9) "low acuity" patient treatment stations. The additional of these treatment stations will enable low acuity patients to be treated and discharged quickly and reserve the ED Exam Room available for higher acuity patients.

B. Total gross square footage to be constructed/renovated 4,358

C. Net useable square footage (not including stairs, elevators, corridors, toilets) 4,286

D. Acres of land to be purchased or leased N/A

E. Acres of land owned on site N/A

F. Anticipated amount of time for construction or renovations 7 (months)

G. Cost per square foot $ N/A

H. Cost per bed (if applicable) $ N/A

PART FOUR: UTILIZATION DATA AND FINANCIAL INFORMATION (DOES NOT APPLY)

This part should be completed for projects under $500,000.00 and/or those projects for ESRD and home health. If this project is not one of the items listed above, please omit Part Four and complete Part Five. Indicate N/A for any questions not applicable.

ENTIRE SECTION PART FOUR – N/A

I. UTILIZATION

		CURRENT		PROJECTED	
	Years:	20_____	20_____	20_____	20_____
A.	ESRD				
	# Patients	_____	_____	_____	_____
	# Procedures	_____	_____	_____	_____
B.	Home Health Agency				
	# Patients	_____	_____	_____	_____
	# of Visits	_____	_____	_____	_____
C.	New Equipment				
	# Patients	_____	_____	_____	_____
	# Procedures	_____	_____	_____	_____
D.	Other				
	# Patients	_____	_____	_____	_____
	# Procedures	_____	_____	_____	_____

II. PERCENT OF GROSS REVENUE

	Historical			Projected	
Source of Payment	**20___**	**20___**	**20___**	**20___**	**20___**
ALL Kids					
Blue Cross/Blue Shield					
Champus/Tricare					
Charity Care (see note below)					
Medicaid					
Medicare					
Other commercial insurance					
Self pay					
Other					
Veterans Administration					
Workers' Compensation					
TOTAL	%	%	%	%	%

Note: Refer to the Healthcare Financial Management Association (HFMA) Principles and Practices Board Statement Number 15, Section II.

III. CHARGE INFORMATION

A. List schedule of current charges related to this project.

B. List schedule of proposed charges after completion of this project. Discuss the impact of project cost on operational costs and charges of the facility or service.

PART FIVE: UTILIZATION DATA AND FINANCIAL INFORMATION

This part should be completed for projects which cost over $500,000.00 or which propose a substantial change in service, or which would change the bed capacity of the facility in excess of ten percent (10%), or which propose a new facility. ESRD, home health, and projects that are under $500,000.00 should omit this part and complete Part Four.

I. PERCENT OF GROSS REVENUE

	Historical			Projected	
Source of Payment	**2020**	**2021**	**2022**	**2024**	**2025**
ALL Kids	**0**	**0**	**0**	**0**	**0**
Blue Cross/Blue Shield	**24.82**	**25.66**	**26.01**	**26.01**	**26.01**
Champus/Tricare	**.99**	**.95**	**.91**	**.91**	**.91**
Charity Care (see note below)	**.78**	**.71**	**.63**	**.63**	**.63**
Medicaid	**14.76**	**13.81**	**14.17**	**14.17**	**14.17**
Medicare	**42.21**	**42.31**	**42.53**	**42.53**	**42.53**
Other commercial insurance	**7.02**	**7.12**	**7.01**	**7.01**	**7.01**
Self-Pay	**5.86**	**6.12**	**5.19**	**5.19**	**5.19**
Other	**1.66**	**1.49**	**1.57**	**1.57**	**1.57**
Veterans Administration	**1.24**	**1.19**	**1.45**	**1.45**	**1.45**
Workers' Compensation	**.66**	**.66**	**.52**	**.52**	**.52**
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**

Note: Refer to the Healthcare Financial Management Association (HFMA) Principles and Practices Board Statement Number 15, Section II.

II. CHARGE INFORMATION

A. List schedule of current charges related to this project.

See, **EXHIBIT N**, Charge information for the emergency room services that are currently and will continue to be furnished as a part of the University Hospital Emergency Expansion Project.

B. List schedule of proposed charges after completion of this project. Discuss the impact of project cost on operational costs and charges of the facility or service.

The University Hospital Emergency ED Expansion Project will not impact UAB Hospital's current pricing or reimbursement for emergency room services. The charges for emergency room services will not change after completion of the proposed project.

I. INPATIENT UTILIZATION DATA

A. Historical Data

Give information for last three (3) years for which complete data is available.

OCCUPANCY DATA

Occupancy	Number of Beds			Admissions or Discharges			Total Patient Days			Percentage (%)		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Medicine & Surgery	990	990	1,007	41,828	45,946	44,961	298,952	339,007	344,285	82.51%	93.82%	93.67%
Obstetrics	59	59	59	4,351	4,419	4,416	17,437	17,216	18,515	80.75%	79.94%	85.98%
Pediatrics	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Psychiatry	108	108	108	2,426	2,592	2,175	32,215	35,684	34,706	81.5%	90.52%	88.04%
Other												
TOTALS	1,157	1,157	1,174	48,605	52,957	51,552	348,604	391,907	397,506	82.32%	92.80%	92.76%

B. Projected Data[3]

Give information to cover the first two (2) years of operation after completion of project.

OCCUPANCY DATA

Occupancy	Number of Beds		Admissions or Discharges		Total Patient Days		Percentage (%)	
	2024	2025	2024	2025	2024	2025	2024	2025
Medicine & Surgery	1,040	1,040	46,397	46,866	356,369	359,933	93.62%	94.82%
Obstetrics	59	59	5,001	5,052	17,393	17,567	80.55%	81.57%
Pediatrics	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Psychiatry	108	108	2,659	2,686	34,029	34,369	86.09%	87.19%
Other								
TOTALS	1,207	1,207	54,057	54,604	407,791	411,869	92.31%	93.49%

[3] 2024-2025 Projected Data anticipates that all 50 beds from **CON Project AL2020-042, CON 2942-H**, will be operational, bringing to total number of CON-authorized and ADPH-licensed beds at University Hospital to 1,207 in 04.

IV. OUTPATIENT UTILIZATION DATA

A. HISTORICAL DATA

	Number of Outpatient Visits			Percentage of Outpatient Visits		
	2020	2021	2022	2020	2021	2022
Clinical	523,175	749,831	633,705	71%	75.1%	70.6%
Diagnostic	187,237	226,793	240,114	25.6%	22.7%	26.8%
Rehabilitation	4,593	5,101	6,094	0.7%	0.5%	0.7%
Surgical	14,713	17,106	17,862	2.0%	1.7%	2.0%

B. PROJECTED DATA

	Number of Outpatient Visits		Percentage of Outpatient Visits	
	2024	2025	2024	2025
Clinical	645,359	687,511	70.9%	72.1%
Diagnostic	240,114	240,231	26.4%	25.2%
Rehabilitation	6,216	7,414	0.7%	0.8%
Surgical	18,219	18,883	2.0%	2.0%

V. A. ORGANIZATION FINANCIAL INFORMATION

STATEMENT OF INCOME AND EXPENSE	HISTORICAL DATA (Give information for last 3 years for which complete data are available)			PROJECTED DATA (First 2 years after completion of project)	
	2020 (Total)	2021 (Total)	2022 (Total)	2024 (Total)	2025 (Total)
Revenue from Services to Patients					
Inpatient Services	$4,966,451,398	$5,806,199,094	$6,003,895,315	$6,702,979,484	$6,904,068,869
Routine (nursing service areas)					
Other					
Outpatient Services	3,126,360,894	3,756,740,598	4,314,810,013	4,929,600,451	5,077,488,464
Emergency Services					
Gross Patient Revenue	8,092,812,292	9,562,939,692	10,318,705,328	11,632,579,935	11,981,557,333
Deductions from Revenue					
Contractual Adjustments	5,991,481,927	7,058,595,288	7,751,265,217	8,772,534,450	9,035,710,484
Discount/Miscellaneous Allowances					
Total Deductions	5,991,481,927	7,058,595,288	7,751,265,217	8,772,534,450	9,035,710,484
NET PATIENT REVENUE (Gross patient revenue less deductions)	2,101,330,365	2,504,344,404	2,567,440,111	2,860,045,485	2,945,846,849
Other Operating Revenue	492,800,436	553,578,959	645,472,305	726,472,657	746,961,364
NET OPERATING REVENUE	2,594,130,801	3,057,923,363	3,212,912,416	3,586,518,142	3,692,808,213
OPERATING EXPENSES					
Salaries, Wages, and Benefits	856,321,681	1,011,561,667	1,169,630,606	1,305,652,940	1,344,822,529
Physician Salaries and Fees					
Supplies and other	1,266,323,698	1,443,035,618	1,541,554,841	1,736,991,245	1,789,105,681
Uncompensated Care (less recoveries) per State Health Plan 410-2-2-.06(d)	316,716,041	386,082,090	360,467,143	396,775,031	408,678,282
Other Expenses					
Total Operating Expenses	2,439,361,420	2,840,679,375	3,071,652,590	3,439,419,216	3,542,606,492
NON-OPERATING EXPENSES					
Taxes					
Depreciation	72,958,686	75,029,307	87,695,332	96,358,432	98,947,326
Interest (other than mortgage)	18,042,760	18,165,739	19,776,642	20,146,537	20,750,933
Existing Capital Expenditures				N/A	N/A
Interest				N/A	N/A
Total Non-Operating Expenses	91,001,446	93,195,046	107,471,974	116,504,969	119,698,259
TOTAL EXPENSES (Operating & Capital)	2,530,362,866	2,933,874,421	3,179,124,564	3,555,924,185	3,662,304,751
Operating Income (Loss)	63,767,935	124,048,942	33,787,852	30,593,957	30,503,462
Other Revenue (Expense) -- Net	73,825,048	241,263,496	(308,537,808)	29,772,961	30,670,331
NET INCOME (Loss)	$137,592,983	$365,312,438	$(274,749,956)	$60,366,918	$61,173,793
Projected Capital Expenditure	N/A	N/A	N/A		
Interest	N/A	N/A	N/A		

B. **PROJECT SPECIFIC FINANCIAL INFORMATION**

STATEMENT OF INCOME AND EXPENSE	**HISTORICAL DATA** (Give information for last 3 years for which complete data are available)			**PROJECTED DATA** (First 2 years after completion of project)	
	20___ (Total)	20___ (Total)	20___ (Total)	2024___ (Total)	2025___ (Total)
Revenue from Services to Patients					
Inpatient Services				**0**	**0**
Routine (nursing service areas)				**0**	**0**
Other				**0**	**0**
Outpatient Services				**0**	**0**
Emergency Services				**0**	**0**
Gross Patient Revenue				**0**	**0**
Deductions from Revenue					
Contractual Adjustments				**0**	**0**
Discount/Miscellaneous Allowances				**0**	**0**
Total Deductions				**0**	**0**
NET PATIENT REVENUE(Gross patient revenue less deductions)				**0**	**0**
Other Operating Revenue				**0**	**0**
NET OPERATING REVENUE[48]				**N/A**	**N/A**
OPERATING EXPENSES					
Salaries, Wages, and Benefits				**$1,415,745**	**$1,458,218**
Physician Salaries and Fees					
Supplies and other				**53,753**	**60,065**
Uncompensated Care (less recoveries) per State Health Plan 410-2-2-.06(d)					
Other Expenses					
Total Operating Expenses				**$1,469,498**	**$1,518,283**
NON-OPERATING EXPENSES					
Taxes					
Depreciation				**2,061,989**	**1,821,988**
Interest (other than mortgage)					
Existing Capital Expenditures				**N/A**	**N/A**
Interest				**N/A**	**N/A**
Total Non-Operating Expenses				**2,061,989**	**1,821,988**
TOTAL EXPENSES (Operating & Capital)				**$3,531,487**	**$3,340,271**
Operating Income (Loss)				**$(3,531,487)**	**$(3,340,271)**
Other Revenue (Expense) – Net					
NET INCOME (Loss)				**$(3,531,487)**	**$(3,340,271)**
Projected Capital Expenditure	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Interest	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

[48] The Emergency ED Expansion Project will expand the physical footprint and clinical capacity of the emergency department to include two (2) fully equipped mobile emergency medical units and nine (9) additional low acuity treatment areas for a total of twenty-five (25) additional patient care areas. University Hospital anticipates no **new project specific revenue** from the emergency expansion. The primary goal of the project is to resolve, albeit temporarily, the overcrowded conditions in the ED.

VI. STATEMENT OF COMMUNITY PARTNERSHIP FOR EDUCATION AND REFERRALS

A. This section is declaration of those activities your organization performs outside of inpatient and outpatient care in the community and for the underserved population. Please indicate historical and projected data by expenditures in the columns specified below.

Services and/or Programs	Historical Data (total dollars spent in last 3 years)			Projected Data (total dollars budgeted for next 2 years)	
	2020	2021	2022	2024	2025
Health Education (nutrition, fitness, etc.					
Community service workers (school nurses, etc.)					
Health screenings					
Other[49]	$128,828,588	$137,442,012	$155,552,620	$158,010,771	$162,751,095
TOTAL	$128,828,588	$137,442,012	$155,552,620	$158,010,771	$162,751,095

B. Please describe how the new services specified in this project application will be made available to and address the needs of the underserved community. If the project does not involve new services, please describe how the project will address the underserved population in your community.

Please briefly describe some of the current services or programs presented to the underserved in your community.

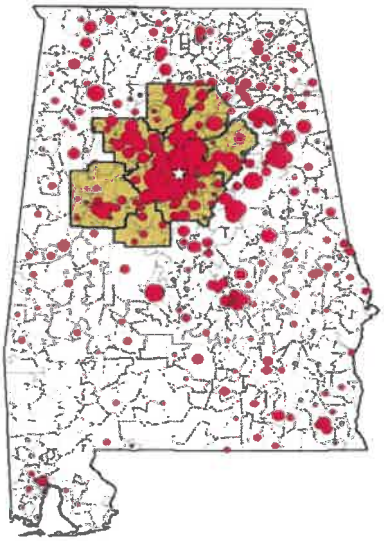
University Hospital provides a significant amount of charity care to individuals who are not covered by insurance. UAB Medicine Enterprise-related entities provide health care services to many individuals who cannot pay for some or all of their medical care. Upon approval and completion of this project, the underserved will continue to have access to the clinical and non-clinical programs and services described below. **This is not intended to be an exclusive list.**

Clinical Programs and Services

1. ***University Hospital's High-Risk Fund***. University Hospital believes that patients who no longer require acute care hospital services but do require continued care post-discharge and have no available

[49] As more fully described in **Part VI, Section B**, below, University Hospital funds many health educational programs, volunteer efforts, health screenings, free clinics, etc. to address the health care needs of its patients throughout the state of Alabama. The amount spent on community partnerships and education primarily reflects the overall effort of University Hospital to address the medical needs of its medical services area and to specifically address those social determinants of health care, (including health education, nutrition, fitness programs, etc.) impacting its patient population.

resources to financially support required care, should return to the community with needed support. In Fiscal Year 2022, University Hospital's High-Risk Fund spent **$12,488,484** on care and services to patients requiring post-discharge assistance with medications, transportation home and to medical appointments, home infusion therapy, home health services with physical therapy, and skilled or long-term nursing home care. The map embedded below illustrates the reach of the high-risk fund. Every red dot indicates a population of underserved patients who have received home health level of support in FY20.[50] With this assistance, both the patient and their caregiver can return to their families and communities.



University Hospital also uses the High-Risk Fund to fund the care of patients discharged to local contracted nursing facilities when the patient has little or no caregiver support, no skilled nursing facility benefits or who are awaiting the long-term coverage application process to become eligible for Medicaid benefits (and have no assets). University Hospital sponsors approximately 20 – 25 patients a month with an average nursing stay of 94 days. As an example, *a 34-year-old male pedestrian was hit by a motor vehicle and brought to our Level One trauma center for care. He was admitted to University Hospital with multiple internal and orthopedic injuries. As a result of his injuries, he could not bear weight on either leg for three months. His only family support was an elderly father who could not care for him while he was not able to weight bear. After 30 days of care at UAB, he was transferred to a local nursing facility funded by UAB. There he received aggressive physical and occupational therapy focusing on his ability to move from his bed to chair as well as his ability to care for himself with some assistance. After three months of intensive nursing care, he was able to discharge to his father's home to continue his healing. Without the post-acute aid, the young man would have had to stay at University Hospital until he was able to take care of himself without assistance.* Likewise, we fund several patients in nursing facilities until their Medicaid eligibility is approved for long-term nursing home care. These are patients who either lack capacity to make decisions for themselves, have little to no assets and/or no one to care for their custodial needs. These patients often don not have a home or cannot care for themselves in their own homes and the High-Risk Fund makes it possible for them to receive health care services in the safest, most appropriate care setting upon being discharged from the hospital.

UAB Hospital's ability to fund care in the post-acute setting also provides access to those in need of tertiary care services. *One such patient, a 40-year-old male admitted due to endocarditis needed six weeks of intravenous antibiotics. He was uninsured and had no income. UAB provided his antibiotics, home infusion labs and supplies, and nursing care to allow him to continue his care at home versus within the hospital over the course of the six-week treatment.*

Additionally, the High-Risk Fund allows the hospital to bridge a patient's resource needs until the patient can be admitted to other state or county-sponsored care such as Cooper Green Mercy Health Services Authority, an affiliate of UAB Health System. *One such patient, a 49-year-old male, suffered an arterial embolism requiring an above the knee amputation. He was uninsured, received no income and $50 dollars in food stamps each month. UAB Hospital's High-Risk Fund provided him with necessary equipment to aid in his home therapy plan and some prescription medications to control his chronic*

[50] In 2020 and 2021, University Hospital spent $9,959,856 and $10,649,919, respectively, from its high-risk fund to pay for care and services rendered to patients.

conditions. We referred him to Cooper Green and while he was working through the application process, his 30-day prescription ran out. We were able to refill his prescription for an additional 30 days to give him more time to complete his application and receive ongoing care from appropriate resources. These are just a few examples of how University Hospital carries out its public service mission to care for the citizens of Alabama regardless of their ability to pay for medically necessary services, even after they leave our facility.

2. ***Birmingham Regional Emergency Medical Services System***. University Hospital has actively partnered with the local and state community to create a nationally recognized emergency medical services system. The Birmingham Regional Emergency Medical Services System ("BREMSS") is administratively a component of the UAB Health System, with policy direction provided by a board with representation from local governments, hospitals, health care professionals, and other emergency medical care system within the seven counties of Jefferson, Shelby, Blount, Chilton, St. Clair, Walker, and Winston and their subsequent city jurisdictions. BREMSS works with all components of the emergency medical services (EMS) system, which includes over 200 emergency medical services organizations, 15 hospitals, more than 2,500 emergency medical technicians, 9 trauma centers, 11 stroke center hospitals, 8 STEMI hospitals, more than 80 different municipalities, and many 911 agencies. BREMSS is responsible for medical direction aspects, equipment grant funding, EMS agency improvements from Basic Life Support to Advanced Life Support functions, and EMS communication system, the Trauma System, and the Stroke System, as well as coordination of mass casualty incidents and quality improvement activities. BREMSS' programs have been extraordinarily successful in improving the quality of pre-hospital care, not only within this seven-county region, but statewide, and the system serves as model for EMS systems around the nation.

3. ***Paramedicine Agreement w/Birmingham Fire and Rescue Services***. University Hospital has developed a population health program utilizing EMTs to assist with in-home follow-up care and treatment for certain patients after hospital discharge. The EMTs provide certain medical interventions, preventive care, and the identification of new medical conditions, thereby reducing hospital emergency room visits and inpatient readmissions. The identified patients routinely obtain both non-emergency and emergency care medical services from the University Hospital ED and routinely utilize BFRS as their preferred mode of transportation to the hospital. The patients are well-known to, and have treatment relationships with, both health care providers and are identified as "Shared Patients". Within 24 hours (but no more than 72 hours) after hospital or ED discharge, these Shared Patients are seen at home by BFRS. Thereafter, the patients are seen at regularly scheduled intervals by BFRS if required by the patient's medical condition. The Paramedicine Program is aimed at preventing hospital readmissions.

4. ***UAB House Calls Program***. The *UAB House Calls Program* is comprised of a team of providers who bring quality health care services to people in their homes. The patients treated by this team are homebound, living within 30 miles of University Hospital, and are typically medically complex, functionally frail, and often face challenging social determinants that limit their ability to access primary care through usual means. Through this program, patients have access to doctors, nurse practitioners, a social worker, a nurse, a case manager, and certified medical assistants. Patients can be referred by their outpatient primary care doctor, a member of the care transitions team, or other health professionals following a recent hospitalization. The House Calls Program aims to: provide primary or transitional care in the home setting; improve and stabilize health and optimize quality of life through disease and symptom management and safe prescribing of medications; address social determinants of health through psychosocial assessments and connection with community resources; develop care plans that align with patient and family care goals; recognize and support caregivers experiencing strain; reduce ED

visits and hospitalizations; and provide appropriate support and resources to allow death in a patient's preferred setting.

5. ***Heart Failure Transitional Care Services for Adults (HRTSA) Clinic***. Born from an academic-practice partnership, the Heart Failure Transitional Care Services for Adults ("HRTSA") Clinic is a nurse-managed inter-professional collaborative clinic for underserved patients with a diagnosis of heart failure. The Mission of the HRTSA Clinic is to provide guideline directed care and education to underserved patients with heart failure and their caregivers in an inter-professional collaborative practice across care transitions. Inter-professional team members include Nurse Practitioners, Clinical Nurse Leader, Social Workers, Registered Nurse, Patient Care Technicians, Physicians, Behavioral Health professionals and Pharmacists. The HRTSA Clinic provides services across the care continuum by seeing patients in the hospital, clinic, and home.

6. ***Providing Access to Healthcare (PATH) Clinic***. The UAB School of Nursing partners with UAB Medicine to operate the nurse-managed PATH (Providing Access to Healthcare) Clinic at UAB. This collaborative effort utilizes an inter-professional, team-based model to provide diabetes care at no cost to an uninsured medically underserved population discharged from UAB Hospital. Services provided include nurse practitioner visits, physician visits, optometry, nutrition, mental health, physical therapy and assistance in obtaining needed medications at the lowest possible cost. This clinic also provides opportunities for students from a variety of disciplines to learn in an innovative inter-professional model of care.

7. ***Blazer Kitchen Food Banks for Patients***. In collaboration with UAB Medicine, Blazer Kitchen has experienced a measured expansion in support of patients in select clinics. Patients are referred to the pantry by medical professionals and onsite social workers who recognize symptoms of food insecurity or when a patient screens positive for food insecurity. Currently, Blazer Kitchen provides food to the following UAB patient groups:

Comprehensive Cancer Center – When available, protein shakes are provided to patient navigators for distribution to patients with cancer.

Cystic Fibrosis Clinic – After screening positive for food insecurity, patients are provided a bag of food to meet their unique dietary needs.

Geriatrics Clinic – After screening positive for food insecurity, seniors are provided bag of food dense with protein since studies show many senior citizens do not receive enough protein. Seniors are also referred to the Benefits Enrollment Center and food pantries within their own communities. In partnership with the Community Food Bank of Central Alabama initiative to End Senior Hunger, Blazer Kitchen volunteers assist with packing food bags to increase the amount of food that can be provided.

Heart Failure Clinic – Patients who screen positive for food insecurity will receive fresh produce, healthy dry goods, and referrals to benefit programs and food pantries within the patient's own community.

Nurse Family Partnership – Patients, who screen positive for food insecurity, will receive healthy dry goods, and referrals to benefit programs and food pantries within the patient's own community.

PATH Clinic – Patients, who have diabetes and screen positive for food insecurity, will receive fresh produce, healthy dry goods, and referrals to benefit programs and food pantries within the patient's own community.

Regional Neonatal Intensive Care Unit & Continuing Care Nursery – Serving mothers and family members with children enduring long hospital stays, the pantry is stocked with specific items – like oatmeal, tuna salad, high-protein, shelf stable and microwavable-in-its-container single serve meals, fruits, nuts, and protein bars – to benefit breastfeeding mothers.

Transplant Patients – Following a transplant, patients must stay close to the hospital, creating a financial burden for many patients. Patients in need are provided nutritious food during their stay in a nearby hotel.

UAB Psychiatry, TASC Program – Healthy snacks and meals are provided for adolescents in after-school substance abuse treatment programs, adults in a joint treatment and job training program, and a treatment program for expectant and new mothers.

Clinical Care Initiatives and Services

1. ***UAB Minority Health and Health Disparities Research Center*** has obtained more than $139.5 million in federal grant funding to accelerate disparities research in efforts to address minority health and health disparities. The UAB MHRC has supported the University's mission through community-based education, service and outreach by training more than 800 community health advisors serving in inner-city Birmingham and Alabama's Black Belt region, engaging 200 active partnerships with state and local community-based organizations, developing five "Build Healthy Communities" coalitions across the State of Alabama, involving more than 13,000 individuals in a walking program, and delivering programs for nutrition and physical activity to 1,400 underserved children in 24 Birmingham schools, the YMCA, and recreation centers.

2. University Hospital is one of only 14 centers nationwide (and the only one in Alabama) to participate in the **Maternal-Fetal Medicine Units Network** of the National Institutes of Health, a partnership that has produced groundbreaking achievements in high-risk obstetrics, helping to reduce preterm birth rates.

University Hospital's Maternal-Fetal Medicine physicians and neonatologists are available 24 hours a day, 7 days a week. University Hospital houses a Level IV Regional Neonatal Intensive Care Unit (RNICU), the highest level possible. Level IV RNICU's offer the highly specialized medical care that extremely low birth weight infants must have to survive. UAB's physicians can also manage a wide range of pregnancy complications, including diabetes, hypertension, Rh sensitization, vascular disease, multiple births, high blood pressure, heart, lung, and kidney problems, and premature delivery risk.

3. The ***UAB Department of Genetics***, a component of UAB School of Medicine, delivers outstanding care for patients and families with or at risk for genetic conditions. The department provides community education; comprehensive prenatal, pediatric, and adult inpatient and outpatient genetic services, including diagnosis, medical management, and genetic counseling; state-of-the-art laboratory services, including cytogenetics, molecular genetics, and biochemical genetics; and exceptional clinics that offer uncommon services, such as the only Adult Down Syndrome Clinic in the region, and one of only a handful in the nation, and the Tuberous Sclerosis Clinic. For some conditions,

such as neurofibromatosis and lysosomal storage disorders, the department is a national and international referral source.

Cancer genetics are now a standard and integral part of cancer care. With a dynamically evolving field of genomic medicine, the pipeline for specialized Oncology Genetics Counselors is critical to the integration of genetic information in cancer prevention and treatment. The O'Neal Comprehensive Cancer Center developed a fellowship program in partnership with the UAB School of Health-Related professions to begin to develop the future pipeline of specialized Oncology Genetics Counselors to ensure patients and clinicians have the support they need to provide the most personalized treatment options available.

4. The ***All of Us*** grant is funded by the National Institutes of Health and aims to build the most diverse and complete collection of health history the U.S has ever had on its citizens. Researchers expect to be able to use the database to learn how biology, lifestyle, and the environment affects personal health and health outcomes. The information may be used to personalize healthcare and pinpoint treatments and prevention plans for multiple diseases.

UAB leads the *All of Us* Southern Network, made up of Alabama, Louisiana, and Mississippi. The Southern Network includes over 30,000 *All of Us* participants, with nearly 24,000 in Alabama and 14,598 enrolled by UAB. *All of Us* has begun returning personal health-related DNA results--detailed reports on individuals' risk for specific health conditions and how their bodies might process certain medications--to participants. These DNA results will help *All of Us* participants better navigate their own health in addition to furthering medical research. *All of Us* makes a pointed effort to improve inclusion in precision medicine research. Two examples of these efforts include the program's structured initiative to engage American Indians and Alaskan natives and a study that links birthplace with cancer risk among Hispanic All of Us participants.

5. UAB School of Medicine faculty direct the ***Civitan International Research Center*** (CIRC), the mission of which is to improve the well-being and the quality of life of individuals and families affected by intellectual and developmental disabilities, including individuals with rare disorders that often have difficulty finding a medical home that offers state-of-the-art treatment from qualified specialists. The CIRC's activities are guided by a strong commitment to values that recognize all people first as individuals. Through partnerships with consumers, professionals, organizations, and agencies, the Center seeks to shape policy decisions related to research and to increase the opportunities for inclusion, independence, productivity, and personal life satisfaction for individuals with developmental disabilities

6. ***Equal Access Birmingham*** is a free clinic run by an interdisciplinary team of UAB volunteer physicians, medical students, and other healthcare professionals who provide free medical care and health education to medically uninsured and underinsured residents of Birmingham.

7. ***UAB Mental Health Services*** includes the Community Psychiatry Program, which serves adults with serious mental illness residing in the catchment area of central Jefferson County. It provides psychiatric evaluation, state-of-the-art treatment, an assertive community treatment team with outreach into the community, a day treatment program and an LGBTQ+ Mental Health and Wellness Clinic.

The Adult Psychiatry Program offers evaluation and treatment, including psychotherapy. The hospital staffs a 20- bed unit in response to another community need: housing patients who are in the process of

legal commitment to the state mental health hospital or who are expected to need a more prolonged hospitalization.

The UAB Substance Use Disorder Program supports the community with substance abuse prevention, treatment, offender supervision, and research, including: Treatment Alternatives for Safer Communities, a program that works to improve the criminal justice system including adult(i.e. problem solving courts, community corrections, and pretrial release) and youth efforts(i.e. Adolescent Substance Use Disorder Program, electronic monitoring, prevention, juvenile drug court); The Beacon Addiction Treatment Center, which provides abstinence-based outpatient and intensive outpatient substance abuse treatment for adults and adolescents who abuse or are dependent on drugs or alcohol.

8. UAB Hospital is also an ***ACT 353 Designated Hospital for Jefferson County***. This act gives law enforcement officers in Jefferson County the authority to take an individual into protective custody if they suspect the person is mentally ill and who may be a danger to themselves or others. University Hospital is the "designated place" identified in the statute for law enforcement to bring these individuals for assessment and treatment.

9. ***O'Neal Cancer Center Office of Community Outreach and Engagement ("COE")***. The Office of Community Outreach & Engagement within the O'Neal Comprehensive Cancer Center at UAB is a leader in sharing vital research, education, and information regarding cancer prevention, treatment, and survivorship among medically underserved communities within our catchment area of the state of Alabama. This includes both urban and rural population centers. The office shares the mission of the National Cancer Institute to "develop and disseminate culturally appropriate, evidence-based cancer information that is tailored to specific needs and expectations of underserved communities."

Through the a Community Health Advisors (CHA) model, the COE has a nationally recognized infrastructure that deploys local 'natural' helpers in more than 20 counties. In 2021, COE conducted more than 2,161 community outreach and educational programs reaching more than 73,363 individuals across Alabama and beyond.

In addition to community outreach and education, COE works to facilitate access for cancer screening and care with an emphasis on community members who are high-risk for cancer. By collaborating with community partners, the COE facilitates access to healthcare organizations that provide cancer screening and treatment in the local community. The COE also has relationships with the supportive care areas of clinical facilities to assist community members in getting appointments for screening and second opinions when appropriate.

10. ***UAB HealthFinder*** is a nationwide toll-free telephone service providing easy access to UAB physicians and health services. Appointing specialists and registered nurses assist callers in evaluating their particular health care needs and refer them to an appropriate physician or services to make an appointment. In 2022, HealthFinder answered over 175,000 consumer calls and assisted patients with scheduling over 90,000 appointments.

11. ***MIST*** or "medical information services" provides state and national health professionals with toll free access to the faculty and staff of UAB Medicine and facilitates immediate physician-to physician medical consultations, patient referrals and Critical Care Transport communications. MIST operates as an essential service 24 hours a day, 7 days a week. In 2021, MIST answered over 71,000 calls from physicians and healthcare facilities across the country, assisted with 10,340 inpatient transfer requests, 2,586 outpatient appointments, and 7,893 patient consultations.

PART SIX: ACKNOWLEDGEMENT AND CERTIFICATION BY THE APPLICANT

I. ACKNOWLEDGEMENT

In submitting this application, the applicant understands and acknowledges that:

A. The rules, regulations and standards for health facilities and services promulgated by the SHPDA have been read, and the applicant will comply with same.

B. The issuance of a certificate of need will depend on the approval of the CON Review Board, and no attempt to provide the service or incur an obligation will be made until a bona fide certificate of need is issued.

C. The certificate of need will expire in twelve (12) months after date of issuance, unless an extension is granted pursuant to the applicable portions of the SHPDA rules and regulations.

D. The certificate of need is not transferrable, and any action to transfer or assign the certificate will render it null and void.

E. The applicant will notify the State Health Planning and Development Agency when a project is started, completed or abandoned.

F. The applicant shall file a progress report on each active project every six (6) months until the project is completed.

G. The applicant must comply with all state and local building codes, and failure to comply will render the certificate of need null and void.

H. The applicants and their agents will construct and operate in compliance with appropriate state licensure rules, regulations, and standards.

I. Projects are limited to the work identified in the Certificate of Need as issued.

J. Any expenditure in excess of the amount approved on the Certificate of Need must be reported to the State Health Planning and Development Agency and may be subject to review.

K. The applicant will comply with all state statutes for the protection of the environment.

L. The applicant is not presently operating with a probational (except as may be converted by this application) or revoked license.

II. CERTIFICATION

The information contained in this application is true and correct to the best of my knowledge and belief.

Signature of Applicant

Brenda Carlisle, CEO UAB Hospital
Applicant's Name and Title
(Type or Print)

10th day of April 2023

Notary Public (Affix seal on Original)

STATE OF NOTARY PUBLIC ALABAMA
KRISTIN THOMAS
My Commission Expires
December 10, 2024

Author: Alva M. Lambert
Statutory Authority: §§ 22-21-267, -271, -275, Code of Alabama, 1975
History: Amended: March 19, 1996; July 25, 2002; Filed: July 22, 2013; effective August 26, 2013.

TABLE OF EXHIBITS

EMERGENCY ED EXPANSION PROJECT CON APPLICATION

EXHIBIT	DESCRIPTION
A	University of Alabama Board of Trustees
B	News Articles – ED Overcrowding and ED Boarding
C	News Articles – Increased Demand for Trauma Services
D	Letter to President Biden re: ED Overcrowding and ED Boarding
E	BOT Resolution re: ED Overcrowding and ED Boarding
F	Diagrams and Information on Mobile Emergency Medical Units
G	Map by County – Primary Medical Service Area
H	CBER Population Estimates through 2040
I	Emergency Measures to Address Capacity - Floor Plans
J	MUAs and MUPs by County – Primary Service Area
K	List of Acute Care Hospitals w/ED and FEDs
L	Letters of Support for Emergency ED Expansion Project
M	Architect's Information and Schematics
N	University Hospital – Charge Master for ED Services

EXHIBIT A

THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ALABAMA

THE HONORABLE KAY IVEY
Governor, State of Alabama
President ex officio

Trustees

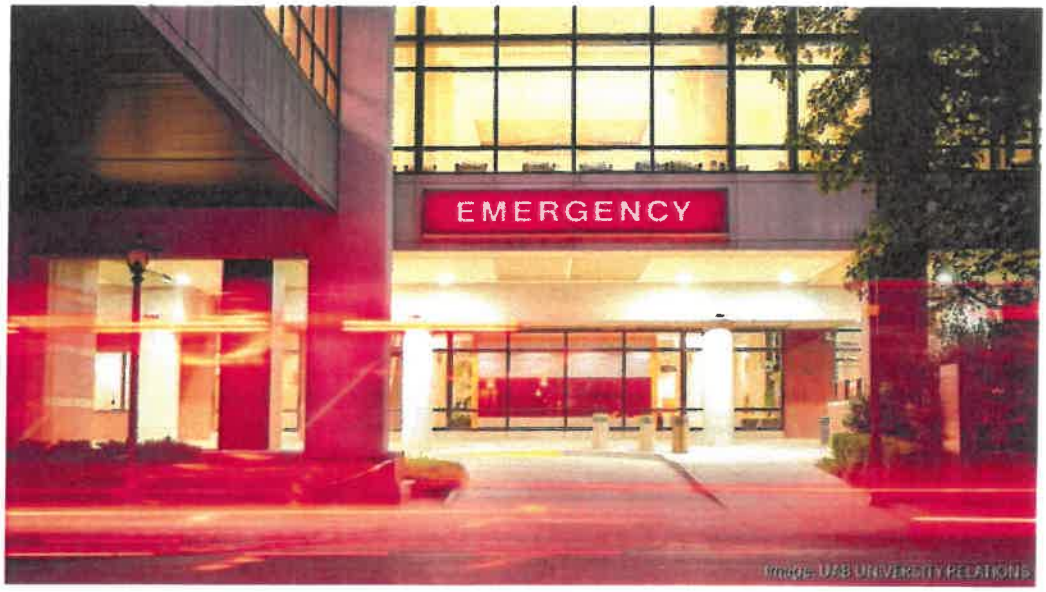
W. Stancil Starnes
President pro tempore

Mike Brock
Karen Brooks
Ronald Gray
Jeff Gronberg
Barbara Humphrey
Vanessa Leonard
W. Davis Malone, III
Evelyn VanSant Mauldin
Harris Morrissette
Scott Phelps
Kenneth Simon
Marietta Urquhart
Kenneth Vandervoort, MD

EXHIBIT B

'Terrible emergency': UAB Hospital plans temporary expansion to mitigate demand

Mar 7, 2023, 1:20pm CST



ANDREA MABRY

Exterior of the Emergency Department in the North Pavilion of UAB Hospital showing the "Emergency" sign with streaks of red lights from an ambulance driving past, April 2020.

Due to what was described as unprecedented demand in its emergency department, UAB Hospital is making a temporary expansion along with renovations.

The total project cost is $8.4 million.

A request for authorization to lease and install two mobile treatment units to temporarily expand the emergency department at the hospital, renovation plans and a project budget were approved during a special-called UA System Board of Trustees meeting Tuesday morning. The interim plan will add 26 additional treatment spaces.

The increased demand the hospital is experiencing is for complex tertiary and quaternary care services.

"Over the past five years the emergency department has experienced a 20% increase in volume with 25% of the patients now requiring admission to the hospital," said Michael Rodgers, assistant vice chancellor for construction management, during the meeting. "During the Covid-19 national and public health emergencies, the hospital was allowed to make temporary use of alternative space to accommodate increased clinical demand due to the suspension of certain regulatory requirements."

On Jan. 30, however, the White House announced that the suspension of these requirements will expire on May 11, requiring the hospital to immediately address the current demand and the expiration of the relaxed space use regulations.

The treatment units will come from Mobile Healthcare Facilities LLC of Powder Springs, Georgia.

Each unit will provide eight exam bays, a nurse's station and a bathroom as well as its own HVAC system, medical gas tank room and emergency generator. Connection points for power, water, sprinkler, sewer, data and nurse call are provided. The vendor indicated that it can provide the units in four to six months. They will be leased for 30 months for $4.1 million.

The renovation portion of the project includes renovating a portion of the North Pavilion Lobby to create additional patient waiting areas and turning the existing emergency department waiting

areas into low acuity treatment space. Gresham Smith Partners is providing architectural services. The renovation cost will be $4.3 million.

W. Stancil Starnes, president pro tempore of the Sixth Congressional District, called the overcrowding of the emergency department a "terrible emergency," adding that it is an issue affecting hospitals across the state.

The issue will come before the board at an April meeting to determine a more permanent solution.

Laurel Thrailkill
Health, Tech and Inno Reporter - *Birmingham Business Journal*

Back to Top ▲

BIRMINGHAM BUSINESS JOURNAL

'Sick season': Birmingham-area hospitals experiencing high volume – Doctors call on legislature to act

Erica Thomas | 11.29.22

UAB Emergency Department. Photo: Jay Reeves/(AP Photo).

This year's early spike in flu is straining health care providers across the state. Birmingham-area hospitals are seeing higher volumes of patients in emergency departments, and beds are filling up quickly. In fact, UAB beds are full, and some emergency department patients have to wait in the hallways.

On Monday, Dr. Marie Carmelle Elie, an emergency department physician at UAB, had just left the ER when she spoke to 1819 News. She said she had already seen three stroke patients, but since beds were full, they had to wait a long time to be seen by doctors and couldn't be moved out of the ER.

"All of our beds are full of patients that are admitted to the hospital," said Ellie. "So, you can't move out of the ER into the hospital. ... Unfortunately, we have had to put some patients in the hallways, and we are packed."

As emergency physicians, Elie said she and her colleagues are often put into high-stress situations. She was even called to serve after the attacks on 9/11 in New York City. But this issue is ongoing, making the stress even more difficult to manage.

"This is the kind of work we do. We work in a crisis state," Elie explained. "But this has been going on a very long time, and it's not just one crisis. You know, it's not one disaster. It's been a series of weeks and months of the hospital being crowded and there not being any room, essentially, to take care of patients. This has been going on a very long time, and it's stressful not only to doctors but to nurses and all sorts of health care workers that are doing the very best to take care of patients, but we just can't."

At Ascension St. Vincent's Primary Care facility in Vestavia, Dr. Colleen Donohue, DO, primary care provider, said the current trend she is seeing is a rise in flu and RSV (respiratory syncytial virus).

"We are seeing more RSV in the primary care space," Donohue said. "This is always a concern with the pediatric population, but we are seeing more adults with it this year. We are still seeing some COVID infections as well.".

Children's of Alabama said Monday was not experiencing high volume or long wait times in the emergency department but was seeing an increase in respiratory cases.

"The increase in respiratory viruses is contributing to our higher-than-normal census," said Delphene Noland, manager of Infection and Prevention Control.

Meanwhile, with over 1,200 beds full at UAB on Monday, Elie said she believes it is only a matter of time before all local hospitals are full. She said the public needs to be aware of the crisis to advocate for more resources.

"We need the public's support because, at some point, everyone is going to need an emergency visit," she said. "We might not all need a cardiologist or need a surgeon, but everyone at some point will need the emergency room, or they will know someone who needs the emergency room, and the doors need to be kept open for everyone, and we want to make sure everyone has access."

While patients are getting the care they need, Elie believes something can be done on the state level to help physicians save lives more quickly. She suggested three changes:

1. **Larger emergency departments**
   To treat more patients, more room is needed in emergency rooms, Elie contends. More beds and more

staff could help get patients treated promptly.

2. **Resources for mental health**
   Elie said often, patients in the ER seek help for panic attacks, suicidal thoughts and depression. "We need the state to provide resources to address that," she added. "There are not enough resources, and they are coming in the emergency department while struggling with underlying behavior health."

3. **Innovative, at-home care pilot programs**
   UAB is working to provide a pilot program to create hospital settings for patients to be treated in the comfort of their own homes. Elie believes the legislature should provide funds to begin these programs statewide.
   "If we can get more funding to keep patients at home, so they don't have to go to the hospital, we can save hospital beds for people that are really sick," she explained. "... That's exactly how we used to do it, and actually, there is a lot of comfort in that. Medicine has changed a great deal, but there is no reason why we can't deliver some of this care at their homes."
   Donohue said the public has a responsibility during what primary care calls "sick season."

"We would ask local leaders and businesses to be open to allowing people to work from home when possible," Donohue added. "Encouraging their staff to contact providers to get guidance on their illness."

Other suggestions are staying home if you are feeling bad, washing your hands frequently, and creating a relationship with primary care providers who can help prevent the need for ER visits.

During flu season, patients are urged to contact their doctor or use an urgent care facility first, although many urgent care facilities are also experiencing high volumes. Elie suggested using a telemedicine service first, but anyone experiencing shortness of breath should go straight to the emergency department. Also, those who are immune-compromised should get to an emergency department as soon as they start to feel sick.

To connect with the author of this story, or to comment, email erica.thomas@1819news.com.

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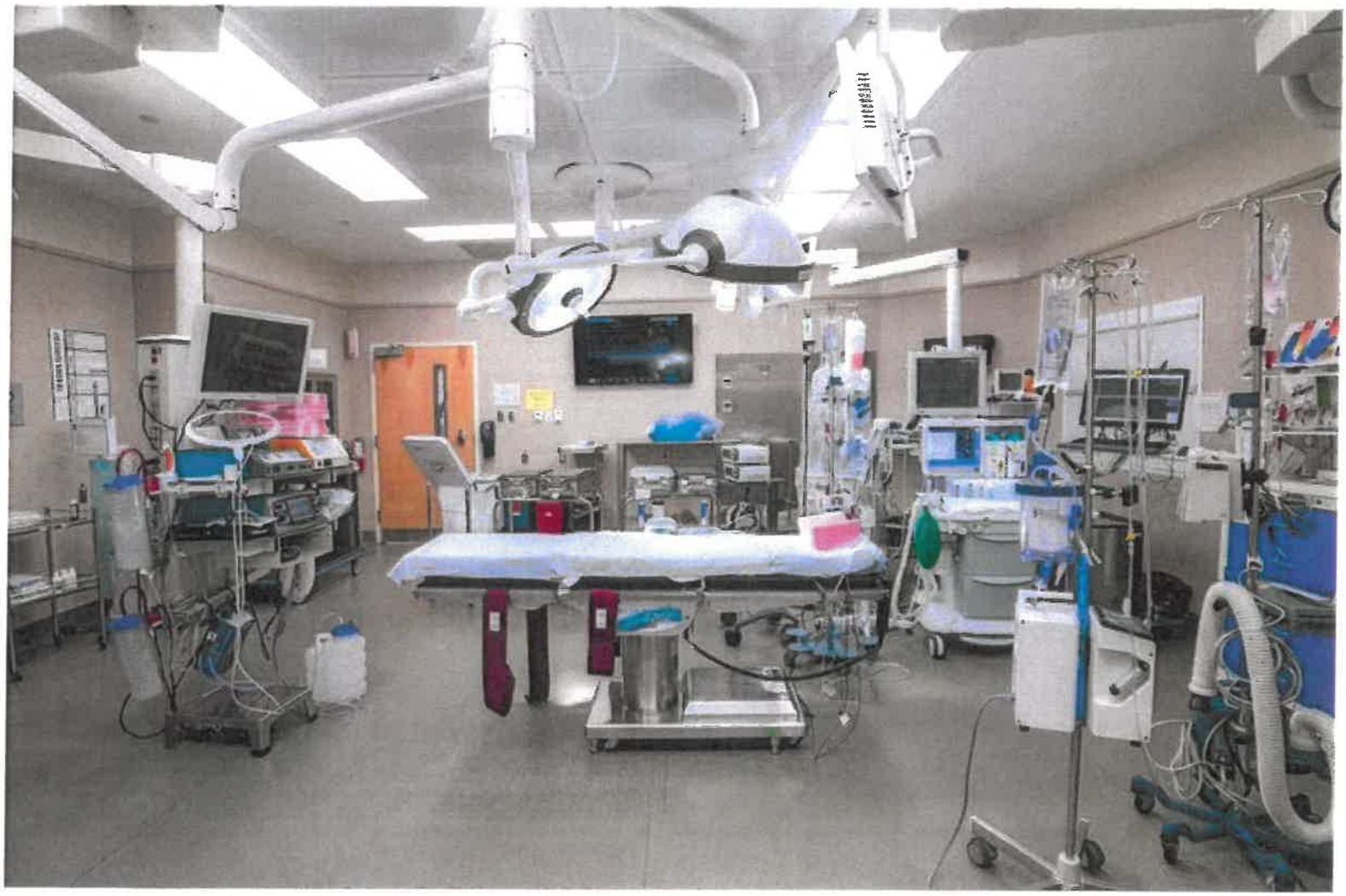
Tags: uab children's of alabama ascension st. vincent's hospital capacity flu season rsv covid emergency room doctor healthcare sickness illness influenza health

EXHIBIT C

Birmingham Real-Time News

‘We’re seeing this every day’: UAB adds surgeons to handle surge of gunshot wounds

Updated: Dec. 22, 2022, 9:25 a.m. | Published: Dec. 22, 2022, 6:30 a.m.



An empty trauma operating room at UAB. The department has seen a sharp increase in the number of gunshot victims in the last several years.

By Amy Yurkanin | ayurkanin@al.com

This is another installment in Birmingham Times/AL.com joint series "Beyond the Violence: what can be done to address Birmingham's rising homicide rate." Sign up for the newsletter here.

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The emergency department that handles the largest number of gunshot victims in Alabama has added surgeons and staff to handle a flood of cases that has doubled in the last eight years.

Dr. Jeffrey Kerby, director of the division of trauma and acute care surgery at the University of Alabama at Birmingham, said the number of gunshot victims has increased from about 600 to 1,200 a year since 2013. In the last three years, the number of overall trauma cases increased by 40 percent.

To adapt, the hospital has added full-time surgeons and trauma fellows – trained surgeons receiving extra training to treat patients who have been shot, injured in car crashes or other accidents. In 2019, the hospital added the additional trauma surgeons in part to keep up with a sharp increase in attempted gun homicides and suicides.

Some weekends, the staff handles as many as 10 to 15 gun violence victims a night – the equivalent of a mass casualty event from shootings across the city and state. The care performed in the first hour after an injury, the "golden hour," can mean the difference between life and death. It's harder to provide such life-saving care if a surgeon is already busy working on another patient.

The hospital treats gunshot victims in the Birmingham area and across the state as the only nationally-certified Level I trauma center in the state. Kerby said the trauma team activates when a page goes out from the communications center that coordinates emergency medical services.

"So, the team assembles," Kerby said. "And it's not just surgeons. It's respiratory therapists, it's nurses, it's pharmacists, X-ray technicians all show up in the room. It's like a NASCAR pit crew."

As quickly as possible, they begin their work.

"Everyone has their job and responsibility," Kerby said. "Instead of changing tires and putting in gasoline, we're identifying immediately life-threatening injury and intervening in that and deciding where they need to go."

Birmingham has struggled with rising rates of gun violence in the last several years, mirroring trends from across the country. Kerby said trauma surgeons nationwide have struggled to handle and understand rising levels of violence. They have pushed for more funding for research into firearms injuries and implemented plans to help prevent victims from being shot again.

"We're really trying to talk about treating this as an epidemic," Kerby said. "Every one of us is dealing with this at our own institutions. If we can help one, two, however many, at least it empowers us to do more than just take care of them after an injury."

If there is any silver lining to this epidemic of gun violence, it has been advances in trauma treatment. UAB operates as a kind of lab for trauma care, incorporating partnerships with the military and specially designed research trials to improve care for victims.

"If you get here with a pulse and you don't have a lethal brain injury, you have a 95 percent chance of walking out of here," Kerby said. "Studying what we do in the first hour and the first couple of hours has improved how we treat people."

Dr. Daniel Cox, the medical director for trauma, said UAB works closely with surgeons in the military. UAB Hospital hosts the Air Force Special Operations Surgical Team when they are not deployed to combat zones. Military surgeons develop many advances in trauma care in the battlefield that can then help civilians.

"We talk about with war the only good thing to come out of it are the medical advances," Cox said. "You often have young, severely injured patients and we are constantly looking at how we can do that better."

One example, whole blood, has improved outcomes for people with heavy bleeding. Decades ago, during the Vietnam War, Cox said blood banks began separating blood into its component parts: plasma, cells and clotting factor. They would give patients IV fluids and cells to replace lost blood.

"The military experience was giving matched blood products was much better," Cox said. "And we realized that whole blood was even better than that. Things we were doing in the military would translate to other teams."

Doing research on civilian trauma patients is tricky. They often can't give informed consent, so special research protocols have been created to exempt them from that requirement. When the trauma department conducts research, staff members try to reach out to the community with information. People who don't want to participate can call the hospital to get a bracelet or something else they can wear to indicate they don't want to be part of research trials.

Although UAB trauma surgeons are good at repairing gunshot wounds, they are powerless to prevent them. But UAB is trying to implement a program that could help some victims of gun violence.

The hospital violence intervention program will pair specially trained workers with survivors of gun violence to provide new housing, education or other resources to help them escape the cycle of violence. Many people who survive gun violence get shot again, often fatally. The program will start small, but Kerby said he hopes it can prevent some gun deaths.

Kerby said mass shootings attract most media attention, allowing people to ignore the daily toll of gun violence in cities like Birmingham.

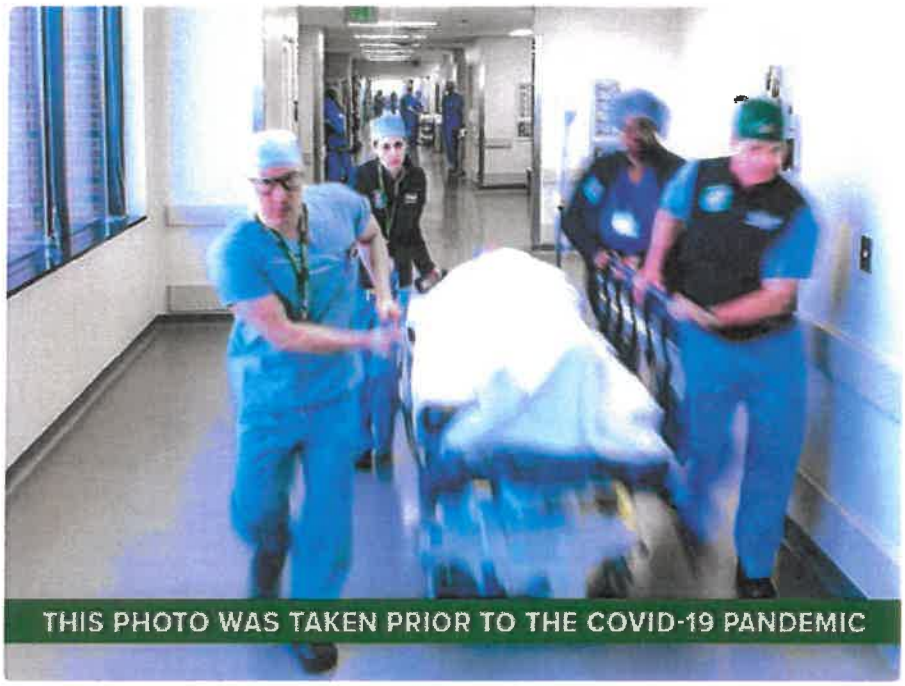
"One of the messages that trauma surgeons across the country are trying to say are don't just focus on the mass shootings," Kerby said. "We're seeing this every day."

Health & Medicine

UAB Trauma Center meets record surge in volume with high quality of care

Written by: Allie Hulcher
Media contact: Bob Shepard

2021 was a record year for the University of Alabama at Birmingham Trauma Center, with a record number of patients evaluated and admitted accompanied by the highest quality of care metrics the center has ever had.



96 percent of trauma patients who make it to UAB Hospital survive.
Photography: Steve Wood

UAB is home to the state's only American College of Surgeons-verified adult Level I Trauma Center, meaning it has met a rigorous standard and sees patients with the most severe traumatic injuries, like those from car crashes, gun violence and falls from across Alabama and neighboring states.

In 2021, UAB saw a historic increase in volume, handling 6,466 trauma evaluations — a 17 percent increase over the last year and a 34 percent increase over the past two years. There were 4,568 trauma admissions — a 10 percent increase from 2020. They also saw a 27 percent increase over the past two years in the amount of severely injured patients admitted to the hospital.

Daniel Cox, M.D., chief of the UAB Trauma Service and associate professor in the UAB Division of Trauma and Acute Care Surgery, says in the past it has taken about eight years to see an increase of 1,000 trauma evaluations — but the trauma center reached that increase in the span of just a year in 2021.

The UAB Trauma Center's rise in volume was accompanied by an increase in its level of care. 2021 saw UAB's highest survival rate ever, at 96 percent. According to metrics from the National Trauma Quality Improvement Program from the ACS, in comparison to hospitals with similar trauma volumes and adjusting for the complexity of cases, UAB was in the top 10 percent for survival rates for patients with penetrating injuries, shock patients, elderly patients with blunt injuries and patients with multisystem blunt injuries.

"Our care metrics were shown to be some of the best in the country, despite the volume and the acuity of the cases we've seen," said Jeffrey Kerby, M.D., Ph.D., director of the UAB Division of Trauma and Acute Care Surgery and the Brigham Family Endowed Professor in Trauma and Acute Care Surgery. "That's a testament to all the surgeons and the staff who contribute to the trauma program and are passionate about what they do."

Daniel Cox, M.D., chief of the UAB Trauma Service
Photography: Steve Wood

One reason the volume of patients has increased is a restructuring of the trauma service to a more efficient model. Beginning in August of 2018, the trauma service began a one-and-a-half-year process with UAB Hospital's Clinical Practice Transformation to shave time off the average length of stay for trauma patients. They did this in part by hiring 12 additional advanced practice providers for a process that ultimately began implementation in the spring of 2020. The result? The length of stay was decreased by 1.4 days on average — allowing the trauma service to admit 46 more patients a month. In 2021, the trauma center saw a record low in trauma system overload, when the trauma service is at capacity and has to divert

patients to other hospitals. The total amount of time in 2021 that UAB was on diversion was 6.5 days — down 96 percent over the previous three years.

"We felt strongly that, as we are the only ACS Level I Adult Trauma Center in the state, the residents of Alabama rely on us to be able to provide the highest quality of trauma care," Cox said. "We must be open and available for the injured patient in their hour of need."

UAB's increasingly high volume of trauma patients also mirrors and exceeds national trends of more injuries due to gun violence and vehicular accidents, but also paints a picture of a state trauma system in crisis.

Alabama has wide areas that are considered "trauma deserts" because of the lack of access to appropriate high-level definitive care for trauma patients. These deserts are caused in part by a lack of critical trauma resources at rural hospitals and have led to an increase in the length of time it takes for people to reach trauma care, as a 2020 study from investigators at UAB's Center for Injury Science and the UAB Heersink School of Medicine found. The study found that more than 470,000 residents in Alabama were unable to access a hospital within a 30-minute drive.

Kerby serves as Alabama's first state trauma consultant. And starting in March, Kerby will have a significant influence on trauma systems nationwide when he steps into the role of chair of the ACS Committee on Trauma, a group renowned for tackling global issues of trauma through education, advocacy, injury prevention measures and establishing standards of care.

According to Kerby, Alabama needs to invest in building on the current trauma system infrastructure to ensure patients get the right care at the right time — wherever in the state they are. With enough hospitals participating at a higher level, he says, Alabama is poised to have one of the best trauma systems in the country. Alabama has unique aspects, like being one of only a few states to have a Trauma Communications Center, which monitors the status of trauma hospitals across Alabama so patients are routed to the appropriate facility for their injuries in a timely manner — improving survival rates.

The Division of Trauma and Acute Care Surgery is not just reacting to a strained statewide system by providing excellent care — they are attempting to heal it through a number of initiatives. For example, the division offers the Rural Trauma Team Development Course to rural hospitals across the state. The course empowers these hospitals to evaluate and resuscitate the seriously injured and to determine whether the patient needs to be transferred to a hospital that can offer a higher level of care.

The division also teaches courses in Stop the Bleed, which trains people to perform lifesaving measures in an emergency like applying a tourniquet and pressure on a

serious wound. The division has taught Stop the Bleed courses to teachers and students in schools across central Alabama.

Working with community leaders, the Health Alliance for Violence Intervention and the Jefferson County Department of Health, the division is in the early stages of a Hospital-based Violence Intervention Program in Birmingham, which will pair mentors with survivors in the inpatient setting to connect them with resources with the goal of breaking cycles of violence.

Jeffrey Kerby, M.D., Ph.D., director of the Division of Trauma and Acute Care Surgery
Photography: Dustin Massey

"Besides taking care of our patients, we're also working outside of the hospital in the realm of injury prevention, community education and advocacy to reduce the number of traumatic injuries and preventable deaths across the state," Kerby said.

Alabamians need to be able to access the level of care required in a timely manner, no matter where in the state they are injured, Kerby says — but in the meantime?

"The UAB Trauma Center will continue its focus on access and quality of trauma care to be ready to assist in a patient's moment of crisis," he said.

UAB hires more surgeons to deal with growing number of gunshot wound and trauma victims

By Lauren Harksen

Published: Dec. 28, 2022 at 11:03 PM CST | Updated: Dec. 28, 2022 at 11:19 PM CST

BIRMINGHAM, Ala. (WBRC) - A UAB doctor says the hospital has added more surgeons to their trauma team to handle the increase in gunshot wound victims in recent years.

Most metropolitan areas are dealing with higher violent crime rates, including right here in Birmingham.

Dr. Jeffrey Kerby with UAB says the number of trauma patients has doubled over the last eight years. He's the director of division of trauma and acute care surgery.

He's calling it an epidemic.

Dr. Kerby says they saw around 1,300 patients this year and just eight years ago, they saw half of that, around 600 patients.

"It's not atypical for us to take care of between 30-40 victims of trauma on a Saturday night, Friday or Saturday night, and we could have upwards of 10-12 gunshot wound victims on those days," he explained.

That's why they needed to hire additional surgeons, to keep up with the volume.

Dr. Kerby says eight years ago, they had nine faculty surgeons but now they've increased to 24. He says they also have more surgeons staying overnight.

"A lot of times, our trauma surgeon will be tied up in the operating room and somebody else may come in who needs emergent operative intervention," he added. "So we've had to now increase that number at night to two, and for half the month, we have actually three surgeons in the hospital at all times."

They've also increased the number of fellows in training. Dr. Kerby says at this point they're fully staffed and can manage the patient volume effectively.

"If somebody gets here who comes in with a blood pressure and a pulse, doesn't have a lethal head injury, survival rates are about 95%."

He says more people need to be continuing the gun violence conversation so we can get to the root of the issue. Dr. Kerby says UAB is working with the Jefferson County Department of Health to develop hospital-based violence intervention programs to slow down the growing problem.

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EXHIBIT D

November 7, 2022

The President
The White House
1600 Pennsylvania Avenue NW
Washington, D.C. 20500

Mr. President:

There is no question that Americans have suffered great loss of life and endured financial hardships, across all sectors, over the past 32 months due to the COVID-19 pandemic. Frontline healthcare workers risked their lives, provided care during physically and emotionally demanding situations, and bore witness to their patients' goodbyes to loved ones from afar.

Yet, in recent months, hospital emergency departments (EDs) have been brought to a breaking point. Not from a novel problem – rather, from a decades-long,[1] unresolved problem known as patient "boarding," where admitted patients are held in the ED when there are no inpatient beds available. While the causes of ED boarding are multifactorial, unprecedented and rising staffing shortages throughout the health care system have recently brought this issue to a crisis point, further spiraling the stress and burnout driving the current exodus of excellent physicians, nurses and other health care professionals.

Boarding has become its own public health emergency. Our nation's safety net is on the verge of breaking beyond repair; EDs are gridlocked and overwhelmed with patients waiting – waiting to be seen; waiting for admission to an inpatient bed in the hospital; waiting to be transferred to psychiatric, skilled nursing, or other specialized facilities; or, waiting simply to return to their nursing home. And this breaking point is entirely outside the control of the highly skilled emergency physicians, nurses, and other ED staff doing their best to keep everyone attended to and alive.

Any emergency patient can find themselves boarded, regardless of their condition, age, insurance coverage, income, or geographic area. Patients in need of intensive care may board for hours in ED beds not set up for the extra monitoring they need. Those in mental health crises, often children or adolescents, board for *months* in chaotic EDs while waiting for a psychiatric inpatient bed to open anywhere. Boarding doesn't just impact those waiting to receive care elsewhere. When ED beds are already filled with boarded patients, other patients are decompensating and, in some cases, dying while in ED waiting rooms during their tenth, eleventh, or even twelfth hour of waiting to be seen by a physician. The story recently reported[2] about a nurse in Washington who called 911 as her ED became completely overwhelmed with waiting patients and boarders is not unique – it is happening right now in EDs across the country, every day.

> *"At peak times which occur up to 5 days per week we have more patients boarding than we have staffed beds. High numbers have included last week when our 22 bed emergency department had 35 boarders and an additional 20 patients in the waiting room…In addition, we have patients who unfortunately have died in our waiting room while awaiting treatment. These deaths were entirely due to boarding. Our boarding numbers have unfortunately skyrocketed in the wake of covid as a consequence of increasing surgical volumes and decreasing inpatient nurse staffing."* --anonymous emergency physician

To illustrate the stark reality of this crisis, the American College of Emergency Physicians (ACEP) recently asked its members to share examples of the life-threatening impact the recent uptick in boarding has brought to their emergency departments. Excerpts of the responses received, as well as key findings from a qualitative analysis of the submissions, are included in this letter to summarize aspects of the problem. The full compilation of anonymized stories, attached as an appendix, paint a picture of an emergency care system already near collapse. As we face this winter's "triple threat" of flu, COVID-19 surges, and pediatric respiratory illnesses that are on a sudden rise, **ACEP and the undersigned organizations hereby urge the Administration to convene a summit of stakeholders from across the health care system to identify immediate and long-term solutions to this urgent problem.** If the system is already this strained during our "new normal," how will emergency departments be able to cope with a sudden surge of patients from a natural disaster, school shooting, mass casualty traffic event, or disease outbreak?

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[1] Andrulis DP, Kellermann A, Hintz EA, Hackman BB, Weslowski VB. Emergency departments and crowding in United States teaching hospitals. Ann Emerg Med. 1991 Sep;20(9):980-6. doi: 10.1016/s0196-0644(05)82976-2. PMID: 1877784.

[2] "Silverdale hospital short on staff calls 911 for help after being overwhelmed with patients"

Background

Imagine a short-staffed restaurant with seating for 40, with a long line of starving customers that cannot be turned away. The chef and line cooks are desperately trying to keep up to provide safely prepared and high-quality meals. They create space for an extra 15 diners in a back hallway and assign one server to attend to them all. But there are 50 more customers waiting to come into the dining room to eat. They serve as many as possible in chairs in the lobby with a much more limited menu. Now imagine that those who are fed never leave and stay there until they need food again. Meanwhile, Uber Eats and other delivery service orders are also coming in, and the delivery drivers crowd the room further, waiting to pick up orders.

In this simplified analogy, the restaurant is the emergency department; the chef, line cooks, hosts, and waitstaff all comprise the emergency care team; the meals are the emergency care itself; and the Uber Eats drivers are emergency medical service (EMS) crews bringing in more patients. Customarily, patients who arrive to the ED via walk-in are checked in and either directed to a treatment area or the waiting room to wait until space is available, depending on the severity of illness. Once space becomes available, they are taken back into the treatment area for a completion of the clinical assessment and any needed treatment. A decision is then made that the patient is either well enough to go home or requires admission to the hospital for continued treatment. Inpatient beds traditionally require both a physical bed space (patient room) and nurses to care for that patient. Unlike in the ED, most hospitals have ratios of nurses to patients for inpatient beds to promote quality of care and patient safety that are set by state laws, regulatory agencies, and accrediting bodies. If there are no available (staffed) beds within the specific unit to which the patient needs transferring, the patient must wait, or be "boarded" in the ED, often for hours, sometimes days or even weeks. The same issue of required staffing ratios holds true for transfer outside the facility, such as to an inpatient psychiatric facility or a skilled nursing facility. As well, patients that arrive in an ambulance via EMS must be appropriately screened by ED staff before the EMS crew can release the patient and return their ambulance to service. So once the hospital's available inpatient beds are full, more ED patients are boarded and must be accommodated in the ED, filling up valuable ED beds and even hallways. Unless the ED can go on diversion status (which is becoming increasingly difficult), more patients continue to show up via EMS. Needed ambulances must be taken out of service as the EMS crews must often wait hours with their patient in the ED before they can safely hand them over to ED staff. And through this all, walk-in patients continue to arrive to the ED and cannot be turned away under the federal Emergency Medical Treatment and Labor Act, or EMTALA, requirements.

Boarding and ED crowding are not caused by ED operational issues or inefficiency; rather, they stem from misaligned economic drivers and broader health system dysfunction.[3] Boarding and ED crowding lead to increased cases of mortality related to downstream delays of treatment for both high and low acuity patients. Boarding can also lead to ambulance diversion, increased adverse events, preventable medical errors, lower patient satisfaction, violent episodes in the ED, and higher overall health care costs. Much has been written on causes of and potential solutions to boarding, but the issue persists, due in part to its many derivative factors, the disparate stakeholders involved, and misaligned economic incentives.

Preventable Patient Harm

There is ample evidence that boarding harms patients and leads to worse outcomes, compromises to patient privacy, increases in medical errors, detrimental delays in care, and increased mortality.[4] The Joint Commission identifies boarding as a patient safety risk that should not exceed 4 hours,[5] yet many of the responses to the ACEP's call for stories cite boarding times much longer than that as an almost routine occurrence; 97 percent of stories with times provided cited boarding times of more than 24 hours, 33 percent over one week, and 28 percent over 2 weeks.

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[3] Kelen GD, Wolfe R, D'Onofrio G, et al. Emergency Department Crowding: The Canary in the Health Care System. NEJM Catalyst. Epub 2021 Sep 28.

[4] Boudi Z, Lauque D, Alsabri M, et al. Association between boarding in the emergency department and in-hospital mortality: a systematic review. PLoS One. 2020;15(4):e0231253. doi:10.1371/journal.pone.0231253

[5] The Joint Commission. R3 report: requirement, rationale, reference. Accessed March 13, 2022.

Descriptions of the negative impact on patient outcomes, including potentially avoidable deaths, follow:

> *"We are a very rural hospital with only family practice and emergency physicians - there are no specialists within 90 miles…Recently I had a woman with abdominal pain in the ER. When she arrived she had normal vital signs and was not really very sick. Testing showed that she had an infected gallbladder - a simple problem for any surgeon to treat. We called 27 hospitals before one in a different state called us back when a bed finally opened up. She spent thirty six hours in our ER, and was in shock being treated with maximum doses of drugs to keep her alive when she was transferred. She didn't survive."*
>
> *"…The physician finally was able to see her in a side waiting room, he stepped out of the room for several minutes and on return she was face down and blue. They immediately began trying to resuscitate her, brought her back to our trauma bay in which they were unable to intubate her and then performed an emergent cricothyrotomy on her. She had anoxic brain injury and died. While this sounds like a random occurrence, I am frequently asked to come to the waiting rooms to help carry people out of their cars or off the floor because they have passed out or gone into cardiac arrest in the waiting rooms on multiple occasions. I have since reached out to nearly all my close friends and family and have begged them under no circumstances to go to the ED without reaching out to me first. I have begun doing house calls in my neighborhood as well as Zoom calls with family to keep them out of the ED's because they are so dangerous. In fact, I've gone as far as begun sending people home from the ED whom I would normally admit because the hospitals have become that dangerous. It's safer for many of these people to be discharged home and taken care of by family than run the risk of the multitude of mistakes that are taking place in the hospitals because there is no staff."*
>
> *"In the past six months, 3 people have died in our er waiting room. One only noticed when he had been sitting for > 6 hours and slumped to the floor. When he was found had been dead "awhile". The patient had been triaged by a nurse, but in a very busy urban where the waiting room is always packed and people regularly wait > 8 hours to be seen regularly the er physicians were never aware of this patient. We can only see new patients all day rotating through 3- chairs as all other beds are full. We physicians want desperately to see patients but there is a huge stop gap as we cannot pull back patients efficiently because there are no nurses for new patients. All ER nurses are now functioning floor nurses for all the boarding patients."*

Waiting Room Care

Many emergency physicians who submitted stories reported daily numbers of boarders close to or even exceeding 100 percent of the total number of beds in their EDs, while the number of patients in the waiting room comprised up to 20 times the number of free treatment beds in which they could even be seen. In the past, that often left only hallway stretchers within the ED to care for incoming patients. But now, those too are increasingly over capacity, and so the emergency department waiting room has become the latest ad-hoc location for receiving patient care.

> *"We've had lobby nurses responsible for 15-20 patients each. We've pushed diltiazem, hung amiodarone, cared for septic shock, and are now admitting patients regularly directly from the lobby. Care is being provided in chairs with little privacy and the hope of a portable monitor. Meanwhile 40 boarders are being cared for in an ED with overhead pages, lights on all the time and a total of 5 bathrooms and no showers. One night we had a septic patient waiting two hours for triage code and die in our triage room."*
>
> *"My shop is 34 bed rural tertiary care center that serves an area greater than 20,000 square miles. Month after month our boarding issues continue to exacerbate and have surpassed critical levels many months ago. We are frequently the largest in-patient ward in the hospital. Currently we average 28 boarding patients in our department and this has been as high as 41 boarded inpatients and 31 patients in the waiting room less than a week ago…Due to these challenges we have fully implemented "waiting room medicine", closed down our Provider in Triage, instead all providers pickup patients in the waiting room. Nearly 50% of our patient encounters now result in discharge from the waiting room. Finally, it is not at all uncommon to have patients in*

the waiting room with SarsCoV-2, pending orders for heparin, diltazem, or other vasoactive medications. In the past month we have had SAH [subarachnoid hemorrhage, or brain bleed], Fournier gangrene, hip fractures, Septic shock all being treated in the waiting room with no available beds to move them into."

"...our 40 bed ED was boarding a large number of patients up to several days awaiting an inpatient hospital bed with a waiting room of >30 people. We had someone in the lobby who was not being appropriately monitored and began having large bloody vomiting. Vitals were only available from when he initially presented to triage almost 8 hrs ago. He lost pulses in the waiting room in front of others including children. As the resuscitation began in the lobby, this posted high risk for other patients in the lobby as we began CPR while blood ejected from his mouth with every compression. It wasn't until he was in a proper room that we were able to obtain IV access and suction the blood. This was not only scarring for the others and hospital workers, but may have been avoided if our emergency department was decompressed and an appropriate history/exam/workup had been done by me or another physician much earlier in order to initiate treatments that have been shown to improve outcomes related to his presenting complaint and known risk factors."

Patients don't just arrive in the ED through the waiting room—they are also brought in by EMS via ambulance. Many hospitals are unable to go on diversion status, even when the emergency department is completely backed up with patients, which means EMS crews must wait with the patient until they can be seen. This means the ambulances are stuck at hospitals and unable to respond to new emergencies:

'We have 26 beds in the emergency department but often over 50 total patients. We are not allowed to go on divert as [County] does not allow us to. It is often very unsafe in the emergency department when there are too many patients without any physical space or enough nurses to care for them. It puts physicians in a bad place as we have to continue to accept ambulance traffic without being able to care for them or the 20+ patients in the lobby."

"Our County's Emergency Medical Services reduced our ability to go on diversion down to 200 hours max for the month of October. Diversion is when paramedics bypass our hospital to take patients with heart attacks and strokes to other hospitals and is the only mechanism we have to offset ED overcrowding due to inpatient boarding. Removing this ability means patients will continue to arrive despite all beds being occupied with admitted patients thereby forcing us to care for these patients in areas such as ambulance ramps and public hallway spaces. Therefore we are essentially disrobing patients in public spaces in order to care for them. All this because of inpatients boarding in the ED. Basically the ED is the largest inpatient unit in the hospital. Patients are receiving bills for 2 or 3 days of inpatient care but never actually arrive upstairs to an inpatient space."

Pediatric Care

Unfortunately, the pediatric population is not immune to the serious ED boarding issue we are facing—particularly those with mental health conditions. During the last decade, pediatric ED visits for mental health conditions have risen dramatically.[6] The COVID-19 pandemic led to a greater acceleration of these visits, causing several pediatric health organizations to issue a national emergency for children's mental health in 2021 and the U.S. Surgeon General to release an advisory on mental health among youth. According to the Centers for Disease Control and Prevention (CDC), during March–October 2020, among all ED visits, the proportion of mental health-related visits increased by 24 percent among U.S. children aged 5–11 years and 31 percent among adolescents aged 12–17 years, compared with 2019. Further, a metanalysis conducted in 2020 illustrates the detrimental effects of boarding among the pediatric population. Multiple studies show that pediatric patients with mental health conditions who are boarded are more likely to leave without being treated, and less likely to receive counseling or psychiatric medications. Beyond mental health, children with other health care conditions are experiencing similar ED wait

[6] Cutler GJ, Rodean J, Zima BT, et al. Trends in Pediatric Emergency Department visits for mental health conditions and disposition by presence of a psychiatric unit. Acad Pediatr. 2019;19:948–955.

times as adults; even children's hospitals that only serve the pediatric population are already over capacity[7] as cold and flu season is only getting started. The stories below illustrate how boarding is particularly impacting those children in the greatest need of immediate medical attention:

> *"We are a 28 bed pediatric ED, with a catchment area of 2.5 million children. I came onto shift yesterday morning. We had 15 children on psych holds, many of them waiting in the lobby for their 24-72 hours stays so we could use our beds to see medical patients. One of those patients had been in the ED for >150 hours, as their parents had relinquished their rights and DFS was refusing to take the patient back, even though our psychiatry team had cleared them as no longer a danger to self or others. We had 10 admissions boarding, 7 on high-flow oxygen, 4 of which were Peds ICU level. There are no open Peds ICU beds in our 4 closest counties, including our own. We had 35 patients in the waiting room in addition to the 20 medical patients being managed by the ED. We had 7 transfers pending from outside facilities to the ED, plus more awaiting direct admissions from an outside ED to an inpatient bed whenever a bed became available. One that left another hospital's ED against medical advice and came to our ED had been waiting 3 days for transfer. They had an AVM in their brain that needed urgent surgery."*

> *"We had a 12 month old patient who presented in respiratory distress and low oxygenation who was found to have pneumonia and required a high amount of oxygen (Opitflo) to maintain his oxygen saturations. After stabilizing him for the interim, we attempted to transfer to a Pediatric ICU (PICU). We were met with not a single open PICU bed in the state, as well as no hospitals with capability to accept transfer in every major city in the surrounding states. The critically ill child stayed in our emergency department for over 24 hours awaiting acceptance at one of our state's Children's Hospitals and still had an over 8 hour wait for EMS once a bed was available. Luckily, this child started to improve with antibiotics and treatment over those 24 hours though if they had progressed, we may have had to be boarding a child on life support (ventilator) without access to a Pediatric ICU."*

> *"My wife is a Pediatric Emergency Physician. She works at the [redacted] Children's Hospital in the world, with all available services at the hospital and patients from all over the world who come for care. She walked into her shift the other day with over 50 patients in the waiting room of a 60+ bed ER, with all hospital and ER beds already full with sick patients and others holding to be admitted. 27 ER beds were being held up with actively psychotic or suicidal children with nowhere else to go. A young child had to sit in the waiting room for 8+ hours with their lower lip lacerated and nearly completely hanging off of their face, because there weren't any beds available to properly evaluate and treat the patient."*

Psychiatric

Boarding of psychiatric patients in EDs is particularly prevalent, disproportionately affecting patients with behavioral health needs who wait on average three times longer than medical patients because of significant gaps in our health care system. While the ED is the critical frontline safety net, it is not ideal for long-term treatment of mental and behavioral health needs. Research has shown that 75 percent of psychiatric emergency patients, if promptly evaluated and treated in an appropriate location – away from the active and disruptive ED setting – have their symptoms resolve to the point they can be discharged in less than 24 hours. However, far too many Americans have limited options for accessing outpatient mental health care. This can exacerbate ED boarding from two directions: on one end, as patients who can't access outpatient treatment may then enter into a crisis that requires an ED visit, and from the other end, a lack of available outpatient follow-up care prevents patients from being discharged from inpatient psychiatric care and freeing up a bed for the next admission waiting in the ED.

> *"We have ~ 70 beds, this AM we had 42 admitted patients (admitted up to 38 hours earlier), 10 boarding Behavioral Health Patients, and 5 social boarders/group home patients. Our group home patients all have*

[7] https://www.cnn.com/2022/10/25/health/childrens-hospital-beds-delayed-care-long-waits/index.html

chronic, lifelong behavioral issues, and were inappropriately 'dumped' in ED by the group home and guardian (whether LME or DSS, after not following state guidelines related to appropriate group home discharge). Our group home patients have been here from 1200 - 3520 hours. Considering average ED visit being 3-4 hours, those 6 group home patients boarding hours = loss of ability to see upwards of 2500 other ED patients."

"Our system has failed our most vulnerable patients. We held a 14 yr old girl in a tiny ED room for 42 days (!!!) awaiting transfer/placement for inpatient psychiatric care. In our ED we routinely board patients due to the hospital at capacity, but it's particularly bad with mental health patients who need inpatient psychiatric treatment. Our hospital is not a licensed psychiatric facility, and by law we may only hold for 72 hours under a 5150 application. That said, just because there are no facilities able and/or willing to take the patients doesn't mean their psychiatric emergencies have resolved. Can you imagine being confined to a small room, without actually getting psychiatric care, for 42 days??? This could have been the subject of a Stephen King novel. Horrific."

"I'm working in a 9-bed ED with an additional 3-beds dedicated to psychiatric patients. We now have a patient who has been boarding with us for over 5 MONTHS with no end in sight. She is unfortunately a disruptive person as well, interrupting patient care elsewhere in the ED as she wanders the hallways (we do have to allow her out of her 10x10 room on occasion and tying up our security resources. She has injured herself on occasion, and has refused medications until she is so psychotic that she can't refuse them any longer."

Burnout

Overcrowding and boarding in the emergency department is a significant and ever-growing contributor to physician and nurse burnout, as they must watch patients unnecessarily decompensate or die despite their best efforts to keep up with the growing flood of sicker and sicker patients coming in. Health care professionals experiencing burnout have a much higher tendency to retire early or stop practicing all together. This increases the loss of skilled health care professionals in the workforce and adds more strain to those still practicing, which continues the cycle of burnout within the profession.

Though stress is a given in emergency medicine, the rate of burnout is of tremendous concern and causing additional strain to an already crippled healthcare system. Shift work, scheduling, risk of exposure to infectious disease, and violence in the emergency department can all affect the mental health and wellbeing of the physicians and nurses. Coupled with overcrowding and boarding in the ED, health care professionals are now facing stresses and moral injury that go well beyond everyday practice. The danger of the cycle of burnout is further demonstrated with the American Medical Association (AMA)'s recently released study that shows that **62.8 percent of physicians felt burned out in 2021.** Additionally, according to another recent study[8] in Mayo Clinic Proceedings, the burnout rate among physicians in the United States spiked dramatically during the first two years of the COVID-19 pandemic. As the winter's "triple threat" of flu, COVID- 19 surges, and pediatric respiratory illnesses approaches, it is critical that we end the burnout cycle in EDs to ensure our nation's health care workforce can meet the needs of its patient population.

"We are a large-volume ED, seeing 350-400 patients per day. When we have over 50% of our ED beds full of admitted patients (which happens frequently) we have a plan in place to move our physicians out to see patients in the waiting room. We also, at the same time, fill the hallways with stretchers, where patients are interviewed, examined and often given discharge instructions after their workup is complete. As you can imagine, this is not ideal as it is hard to ensure privacy, and patient comfort in either of these settings. Patient experience is impossible to improve for these patients (would you be happy if this was you or your family member???). Physicians are unhappy as it feels like we can't provide the care we want to, the care we went into medicine for...

[8] Tait D. Shanafelt, Colin P. West, Lotte N. Dyrbye, Mickey Trockel, Michael Tutty, Hanhan Wang, Lindsey E. Carlasare, Christine Sinsky, Changes in Burnout and Satisfaction With Work-Life Integration in Physicians During the First 2 Years of the COVID-19 Pandemic, Mayo Clinic Proceedings, 2022, https://doi.org/10.1016/j.mayocp.2022.09.002.

we are drowning, stressed and we need help - desperately."

"Evening shift with 55 boarding admitted patients, waiting room backs up to 45-50 patients. A 70 year old woman presents with abdominal and back pain but relatively normal vital signs. She is in a chair in the waiting room. Due to the # of people in the waiting room her husband is sent up to another waiting area. She waits for over 3 hours. Her husband tries communicating with his wife via text messages, but no response. He comes down to ED to find his wife slumped over in the chair and yells to the triage nurses. The patient is in cardiac arrest. She is brought back to the resuscitation bay but is not able to be resuscitated and dies. The ED team, attending physicians, residents, nurses, techs, when finding out that she had been in the waiting room that long, are devastated, many in tears, highly frustrated by the failure of our institution and US healthcare in general to be able to provide adequate access for patients, adequate staffing for our hospitals and ED's, enough options for longer term care, and a safe environment for patients and providers. Our level of burnout in physicians and nurses is at an all time high. A tragic case like this, a consequence of boarding, is another wound in this long battle which shows no signs of letting up. It even seems to be worsening."

"By the time I saw her she had been there for 6 hours, stuck on a stretcher inches from an intoxicated man who was vomiting on himself and another patient screaming obscenities. She had not gotten any pain medication and was having severe right hip pain. She also had to urinate badly but had been unable to get anyone to help her. There are 2 triage nurses who are there to watch the 15+people who were in ambulance triage that night while also receiving the new EMS patients. Orthopedic surgery saw my patient and admitted her from ambulance triage. For the rest of my 8 hour shift she remained in ambulance triage waiting for a bed upstairs or to go to the or, whichever happened first. She is only 1 of many patients with broken bones that I have seen wait for hours before being seen because of how boarded our ED is…It is demoralizing to start every patient encounter with profuse apologies for the wait and difficulty they have had to endure just being in our emergency department. It is heartbreaking to find someone who could be my grandmother languishing in pain for hours before we are finally able to see and evaluate her. We are in a crisis and although we do everything we can to MacGyver solutions to the problem while we are on shift, there is only so much we can do from the ground. We cannot fix this problem in the ED, we need help."

Staffing Shortages

Nursing shortages have exacerbated the deficiency of the health care workforce and stretched care teams to take on extra hours, care for more patients, and shoulder additional clinical and nonclinical duties. Adding to this challenge is the fact that EDs are also not subject to the same staffing ratio requirements as other parts of the hospital often are, and as a result, the ED too often becomes the only place in which to keep many patients. Prior to the pandemic, the American Association of Colleges of Nursing already projected a nursing shortage. That trend has accelerated due to COVID-19, confirmed by a recent American Nurses Foundation survey[9] which found that 21 percent of nurses surveyed intended to leave their position, with another 29 percent considering leaving. Almost half of all respondents cited insufficient staffing as a factor in their resignation, and their departures will only increase the insufficiency, forcing their fellow nurses to an even more severe condition and impeding the ability to provide high-quality patient care.

"I work in a 34 bed ED in [redacted]. At night we normally staff enough nurses a PA or NP and myself for 20 patients. We calculate one RN to 4 patients. Unfortunately over the past year or more we have nights we hold 20 or more patients in the ED waiting for beds. Some are ICU patients. In the unit they would have one nurse to 1-2 patients. Ours nurses will have one or more sick patient that takes lots of work and at least 3 other patients. Some nights 7 patients to one nurse. This is not safe. We cannot turn people away when over whelmed. That means many people sit in the waiting room uncared for 8-9 or up to 12 hours waiting to be seen."

[9] Mental Health and Wellness Survey Report. American Nurses Foundation 2021.

"While previously we were able to adapt, utilizing float pool to care for these patients and creating "care spaces" in every nook and cranny, the current boarding and staffing crisis leaves us at the breaking point. ED nurses, with less than 50% staffing sometimes at night, are left to care for boarders in the ED as well as acute patients. Inpatients rooms are closed due to staffing with ratios upstairs barely budging from 1:4."

"We are a 70 bed tertiary emergency department as part of a health system and we continually have holding of 10-30 patients in our emergency department for 7-72 hours. This holding may be a result due to volume, a lack of movement upstairs on the inpatient floors (having 'clean' beds available so the nurse doesn't get another patient), holding 'dead beds' for theoretical postoperative patients and trauma victims, nursing ratios of how many patients an inpatient nurse can see (1:4,6 vs and emergency nurse 1:6,8,10,12,18). I've seen elderly patients that cannot fend for themselves in the hallway under cared for and dwindling for hours. I've seen pediatric psychiatric patients held with no free bed to transfer to for two to three days. I've see adult psychiatric patients locked away on a constant observation order in a 4x6' room for 48-80 hours with only the freedom to walk to the bathroom and back (no sunlight, no exercise)."

Misaligned Incentives

Despite years of advocacy and research to draw attention to the harmful impacts of boarding, it continues, largely due to misaligned incentives in how health care is financed. As hospitals continue to bring in and dedicate beds to elective admissions while boarding the backlog of non-elective patients in the ED, the financial benefits of ED boarding exceed the cost.[10] This was reflected in numerous anecdotes collected in the ACEP poll:

"We are a top nationally ranked hospital that, due to budget issues, has now prioritized transfers and surgery admissions over ED admissions. We typically board 120-200 hrs/ day and LBTC rates have climbed from 3-4% to 15-20%."

"Since July boarding has become the new norm. In our 15 bed ER we are utilizing space in an adjacent unit to house holds. We have had a steady uptick from 5 in July to 5-10 in august, to now consistently 8-15 boarders/ holds per day. Last week the AM doc came in to 15 holds and 2 spaces available to see patients. A nursing leader came down and he told them he was tired of this and admin answer was "we will get through it like we have the last few weeks". We didn't get through it, our patients suffered extensive delays and suboptimal care boarding. Admin doesn't want to pay agency rates, so the ER is bearing the brunt of shortages…We are treating things like acute appendicitis out of the waiting room with IV fluids and antibiotics, fluids while awaiting OR. We have not cancelled any elective surgeries and until last week they were getting inpatient beds before people holding in ED >24 hours right after PACU."

"We are a 38 bed ED, usually with 30-40 pts in the waiting room and many EMS patients waiting for rooms in the hallway. Patients come in agitated, acutely psychotic occasionally violent. We cannot provide these patients with high-quality medical care when they are waiting for a bed for hours/ sometimes days. We also have critically ill patients requiring higher level of care who have to wait in hallways. It's not unheard of for these patients to decompensate before we are able to get them into a ED room. This is not sustainable. Saving beds for elective surgical patients while truly ill, critically ill patients waiting hallways in the emergency department is disheartening. It's unsustainable, morally, wrong, and dangerous for staff and for patients. How did we go from being healthcare heroes to an afterthought of the medical system?"

All of these stories paint a stark picture of boarding's impacts on every aspect of the health care system. Yet it is clear a disproportionate share of that burden is being carried by two key stakeholders – the emergency care team and their patients. At any time, any of our loved ones are just a moment away from becoming one of these

[10]"Despite CMS Reporting Policies, Emergency Department Boarding Is Still A Big Problem—The Right Quality Measures Can Help Fix It", Health Affairs Forefront, March 29, 2022. DOI: 10.1377/forefront.20220325.151088

patients, and their health and safety will depend on your immediate action to address a system that is heading towards collapse.

We greatly appreciate the commitment and attention your Administration has given to the health and safety of those in our nation over the last two years, and we implore you to now make the growing crisis of boarding a major priority. We stand ready to collaborate with you and other impacted stakeholders to identify near- and long-term solutions. If you have any questions, please contact Laura Wooster, MPH, ACEP's Senior Vice President of Advocacy & Practice Affairs, at lwooster@acep.org.

Sincerely,

American College of Emergency Physicians
Academy of General Dentistry
Allergy & Asthma Network
American Academy of Child and Adolescent Psychiatry
American Academy of Emergency Medicine (AAEM)
American Academy of Family Physicians
American Academy of Physical Medicine and Rehabilitation
American Academy of Physician Associates
American Association of Oral and Maxillofacial Surgeons
American College of Allergy, Asthma & Immunology (ACAAI)
American College of Osteopathic Emergency Physicians (ACOEP)
American College of Radiology
American Foundation for Suicide Prevention
American Medical Association
American Nurses Association
American Osteopathic Association
American Psychiatric Association
American Society of Anesthesiologists
Association of Academic Chairs of Emergency Medicine
Association of State and Territorial Health Officials (ASTHO)
Brain Injury Association of America
Council of Medical Specialty Societies
Council of Residency Directors in Emergency Medicine (CORD)
Emergency Medicine Residents' Association
Emergency Nurses Association
Family Voices
Infectious Diseases Society of America
International Association of Fire Chiefs
National Alliance on Mental Illness
National Association of EMS Physicians
National Health Care for the Homeless Council
National Partnership for Women & Families
Society for Academic Emergency Medicine
Society of Emergency Medicine Physician Assistants (SEMPA)
The National Alliance to Advance Adolescent Health

cc: The Honorable Xavier Becerra, Secretary, U.S. Department of Health and Human Services
The Honorable Alejandro Mayorkas, Secretary, U.S. Department of Homeland Security

EXHIBIT E

THE UNIVERSITY OF ALABAMA HOSPITAL

RESOLUTION

APPROVING THE LEASE AND INSTALLATION OF TWO MOBILE TREATMENT UNITS AND RENOVATIONS FOR THE TEMPORARY EXPANSION OF THE UNIVERSITY EMERGENCY DEPARTMENT

WHEREAS, University Hospital, an operating entity of The Board of Trustees of The University of Alabama ("UA Board") managed by the Health System Authority ("Health System"), in furtherance of its mission to provide a continuum of health services of the highest quality, operates the University Emergency Department (UED) to provide emergency clinical care services; and

WHEREAS, University Hospital and the UED continue to experience unprecedented demand to provide complex tertiary and quaternary clinical care services that greatly exceed the physical capacity of the department; and

WHEREAS, suspension of certain regulatory requirements in response to the Covid-19 national and public health emergencies allowed University Hospital to make use of alternative space to accommodate Emergency Department clinical demand; and

WHEREAS, at the termination of the national and public health emergencies on May 11th, 2023, University Hospital will no longer be able to avail itself of the alternative space arrangements; and

WHEREAS, University Hospital is planning a permanent expansion of the UED, it must act quickly to retain use of the alternate space in compliance with regulatory requirements as well as provide additional temporary capacity to continue to meet the demand for emergency clinical services; and

WHEREAS, University Hospital proposes to temporarily increase UED capacity by leasing and installing two mobile treatment units, renovating a portion of the North Pavilion lobby for temporary patient waiting, and renovating the existing UED waiting area into a low acuity treatment area; and

WHEREAS, University Hospital evaluated available mobile treatment units and determined that Mobile Healthcare Facilities, LLC is best able to meet the temporary needs of the UED; and

WHEREAS, Total Project Cost is as follows:

A. CONSTRUCTION	$ 1,754,000
B. ARCHITECT/ENGINEER (8.7%)	$ 152,000
C. SURVEYS, TESTING, INSPECTIONS	$ 465,000

D. MOVABLE EQUIPMENT & FURNISHINGS	$ 1,770,000
E. CONTINGENCY	$ 176,000
F. OTHER (30 month lease of 2 mobile treatment units)	$ 4,274,000
G. TOTAL ESTIMATED PROJECT COSTS	$8,591,000

WHEREAS, University Hospital will fund the capital expense of $4,317,000 from the Hospital Plant Fund and the mobile treatment unit lease expense in the amount of $4,274,000 from operations; and

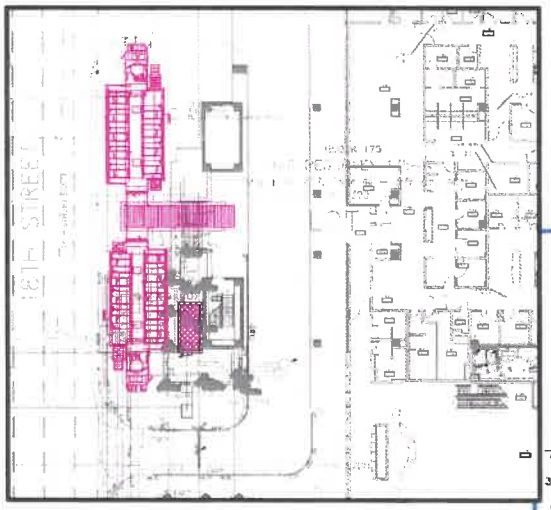
WHEREAS, the UAB Health System Authority Board of Directors have reviewed and recommend approval of this item;

NOW, THEREFORE, BE IT RESOLVED By The Board of Trustees of The University of Alabama that Bernard Mays, University Controller, or those officers named in the most recent Board Resolutions granting signature authority for University Hospital be, and each hereby is, authorized to act for and on behalf of the Board of Trustees to lease and install two mobile treatment units from Mobile Healthcare Facilities LLC and undertake renovations necessary for temporary expansion of the University Emergency Department for a Total Project Cost not to exceed $8,591,000.

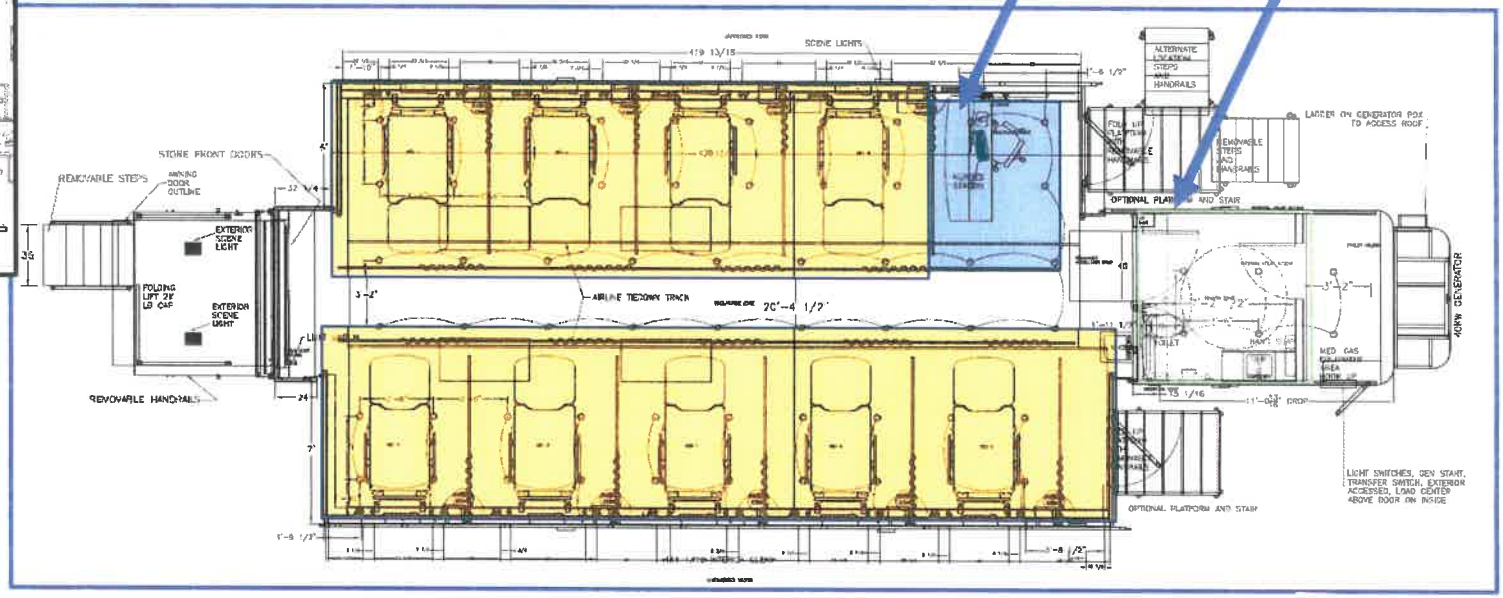
EXHIBIT F

ED Interim Solution – Phase 2

Detail of Units Location and Access



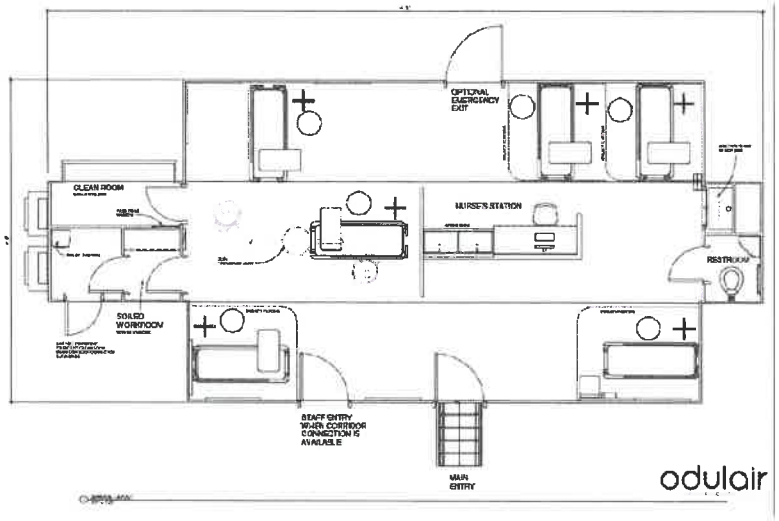
Mobile Unit Layout- 9 Exam Bays

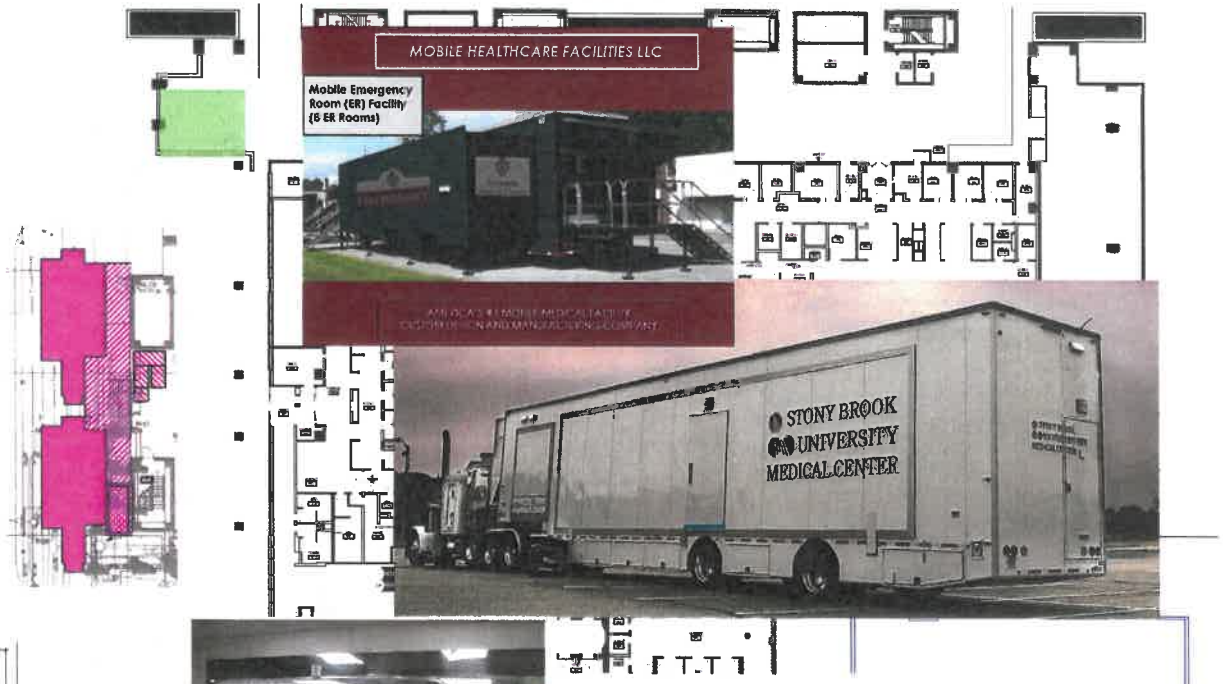


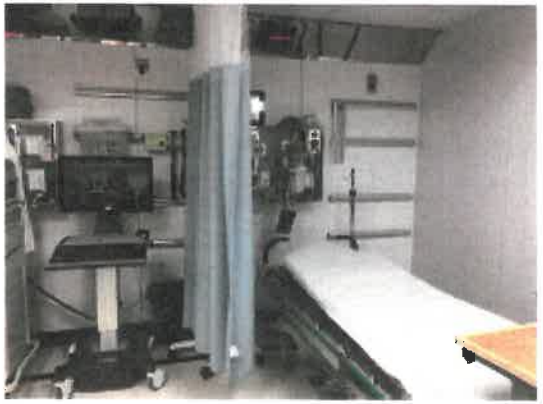
TEMPORARY MEASURES TO ADDRESS CAPACITY

Mobile Unit POD

- 5-9 Exam Bays
- Nurse Station
- Restroom
- Soiled Work Room
- Clean Work Room
- Janitor Closet

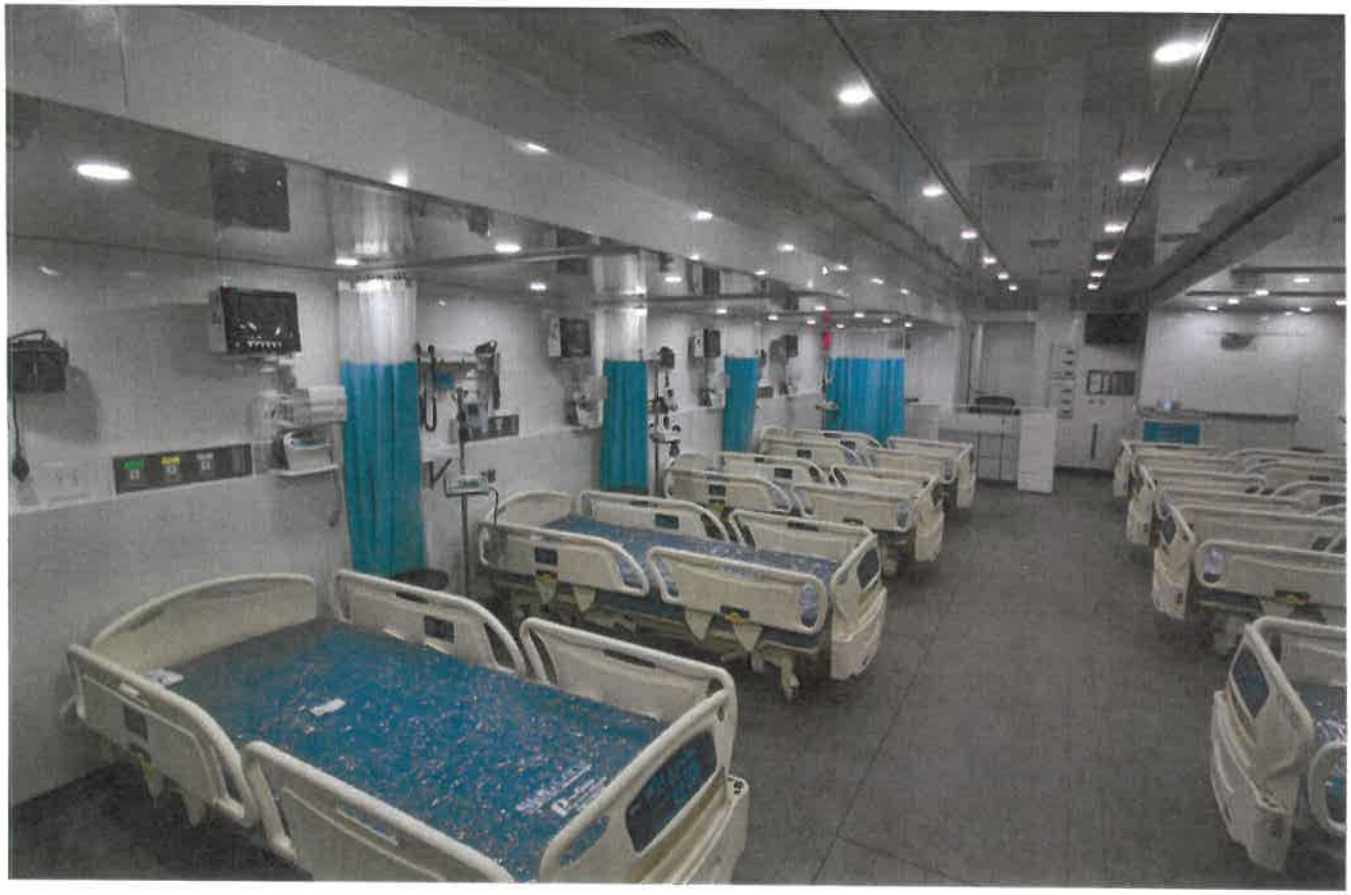


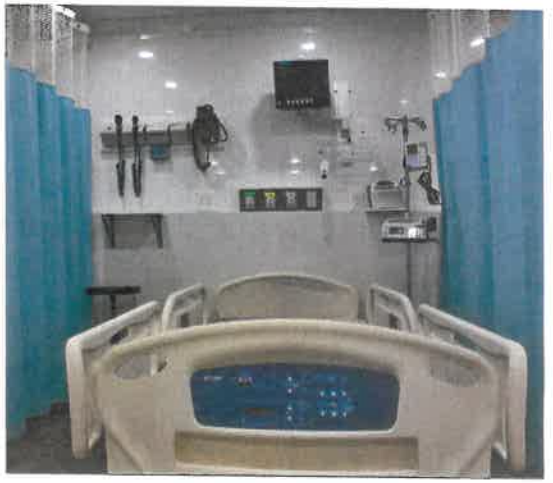




UAB HEALTH SYSTEM

ED Interim Solution – Phase 2





UAB North Pavilion

Emergency Department Expansion Phasing Planning

ED Interim Solution – Phase 3 – Interim Waiting North Option

- Construct Interim Waiting Room adjacent to the ED at the north end of the ED Patient Drop-Off, allowing the lower level of the atrium to be vacated
  - Consider adding Toilet Rooms for Low Acuity
- Waiting North Option Pro
  - The Waiting space is not adjacent to the ED Expansion Construction

Waiting North Option Con

- The drive lanes will need to be narrowed
- Toilet Rooms will need to be added to the in Interim Waiting Area

UAB North Pavilion

Emergency Department Expansion Phasing Planning

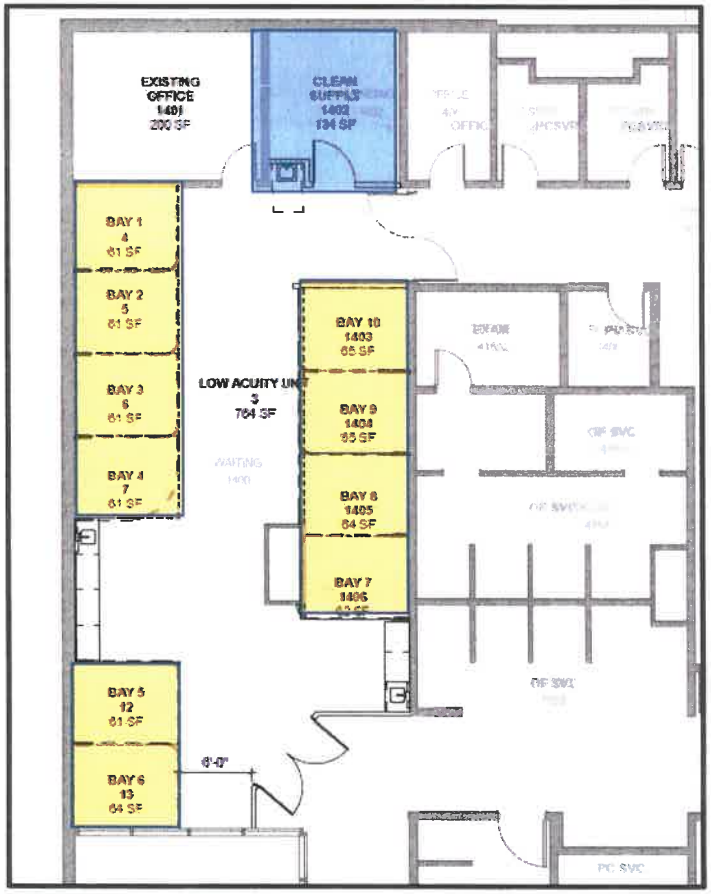
ED Interim Solution – Phase 2

- Design Utility Package for 2 Mobile Units
- Purchase 2 Mobile Unit
- Install 2 Mobile units adjacent to public entrance to Emergency Department

- 2 Mobile Units
- 18 Exam Rooms but code will allow 16
- Covered Ramp to bring patients to the unit
- Likely to require sidewalk closure
- Will add controlled entrance to the units
- Anticipate that patients would go through existing triage and then be placed in units
- Need to provide utilities to mobile Units

ED Interim Solution – Phase 1

Low Acuity Exam Rooms
10 Recliner Locations



Waiting Area Detail
~100 Seats

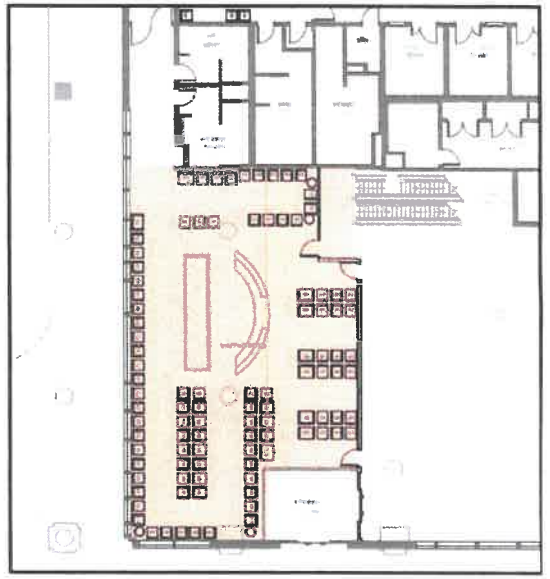


EXHIBIT G

UAB Hospital Service Area

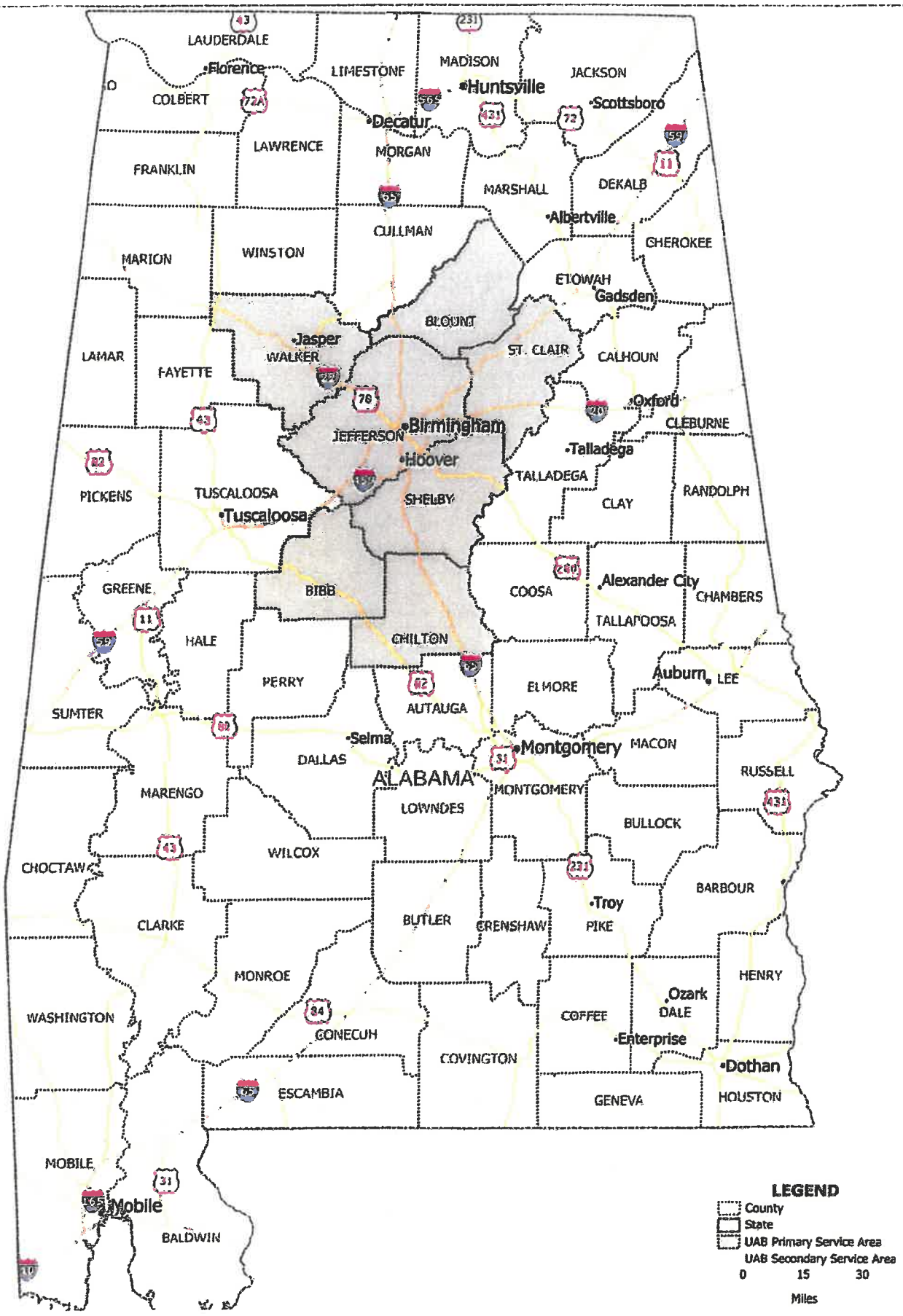


EXHIBIT H

Alabama County Population 2000-2020 and Projections 2025-2040

*Source: CBER, August 2022**

County	Census			Projections				Change 2020-2040	
	2000	2010	2020	2025	2030	2035	2040	Number	Percent
Alabama	*4,447,100*	*4,779,736*	*5,024,279*	*5,165,416*	*5,306,554*	*5,447,691*	*5,588,829*	*564,550*	*11.2%*
Birmingham MSA	*1,052,238*	*1,128,047*	*1,180,631*	*1,212,073*	*1,243,517*	*1,274,957*	*1,306,401*	*125,770*	*10.7%*
Bibb	20,826	22,915	22,293	22,659	23,025	23,390	23,756	1,463	6.6%
Blount	51,024	57,322	59,134	61,109	63,083	65,058	67,033	7,899	13.4%
Chilton	39,593	43,643	45,014	46,338	47,662	48,986	50,310	5,296	11.8%
Jefferson	662,047	658,466	674,721	678,237	681,754	685,270	688,786	14,065	2.1%
Saint Clair	64,742	83,593	91,103	97,447	103,791	110,134	116,478	25,375	27.9%
Shelby	143,293	195,085	223,024	242,172	261,321	280,469	299,618	76,594	34.3%
Walker	70,713	67,023	65,342	64,111	62,881	61,650	60,420	-4,922	-7.5%

Alabama County Population Aged 65 and Over 2000-2010 and Projections 2020-2040 (Middle Series)[1]

*Source: CBER, April 2018**

County	Census		Projections					Change 2010-2040	
	2000	2010	2020	2025	2030	2035	2040	Number	Percent
Alabama	*579,798*	*657,792*	*851,293*	*970,297*	*1,067,787*	*1,114,140*	*1,144,172*	*486,380*	*73.9%*
Birmingham MSA	*134,563*	*146,139*	*191,473*	*218,794*	*239,906*	*249,992*	*257,784*	*111,645*	*76.4%*
Bibb	2,413	2,906	3,673	4,048	4,419	4,658	4,859	1,953	67.2%
Blount	6,558	8,439	10,800	11,922	13,003	13,766	14,275	5,836	69.2%
Chilton	5,097	5,921	7,159	8,016	8,602	8,903	9,231	3,310	55.9%
Jefferson	90,285	86,443	106,631	119,605	127,360	128,036	127,315	40,872	47.3%
Saint Clair	7,578	10,909	15,078	17,612	20,438	22,577	24,651	13,742	126.0%
Shelby	12,179	20,627	34,714	43,182	51,263	57,471	63,447	42,820	207.6%
Walker	10,453	10,894	13,418	14,409	14,821	14,581	14,006	3,112	28.6%

[1] Projections for 65 and over are only available for 2020 - 2040

*Source date is when CBER updated the data set

Data Accessed: 1/10/2023

Alabama County Population 2000-2010 and Projections 2020-2040 (Middle Series)

*Source: CBER, April 2018**

County	Census		Projections					Change 2010-2040	
	2000	2010	2020	2025	2030	2035	2040	Number	Percent
Alabama	*4,447,100*	*4,779,736*	*4,940,253*	*5,030,870*	*5,124,380*	*5,220,527*	*5,319,305*	*539,569*	*11.3%*
Birmingham MSA	*1,052,238*	*1,128,047*	*1,167,297*	*1,188,772*	*1,210,100*	*1,230,577*	*1,251,303*	*123,256*	*10.9%*
Bibb	20,826	22,915	22,354	22,174	22,023	21,932	21,885	-1,030	-4.5%
Blount	51,024	57,322	58,383	59,154	59,995	61,064	62,095	4,773	8.3%
Chilton	39,593	43,643	44,308	44,793	45,388	46,119	46,953	3,310	7.6%
Jefferson	662,047	658,466	662,458	663,999	665,244	666,345	667,433	8,967	1.4%
Saint Clair	64,742	83,593	90,634	94,713	100,206	106,219	113,123	29,530	35.3%
Shelby	143,293	195,085	224,628	239,859	253,485	265,330	276,373	81,288	41.7%
Walker	70,713	67,023	64,532	64,080	63,759	63,568	63,441	-3,582	-5.3%

EXHIBIT I

NORTH PAVILION EMERGENCY DEPARTMENT

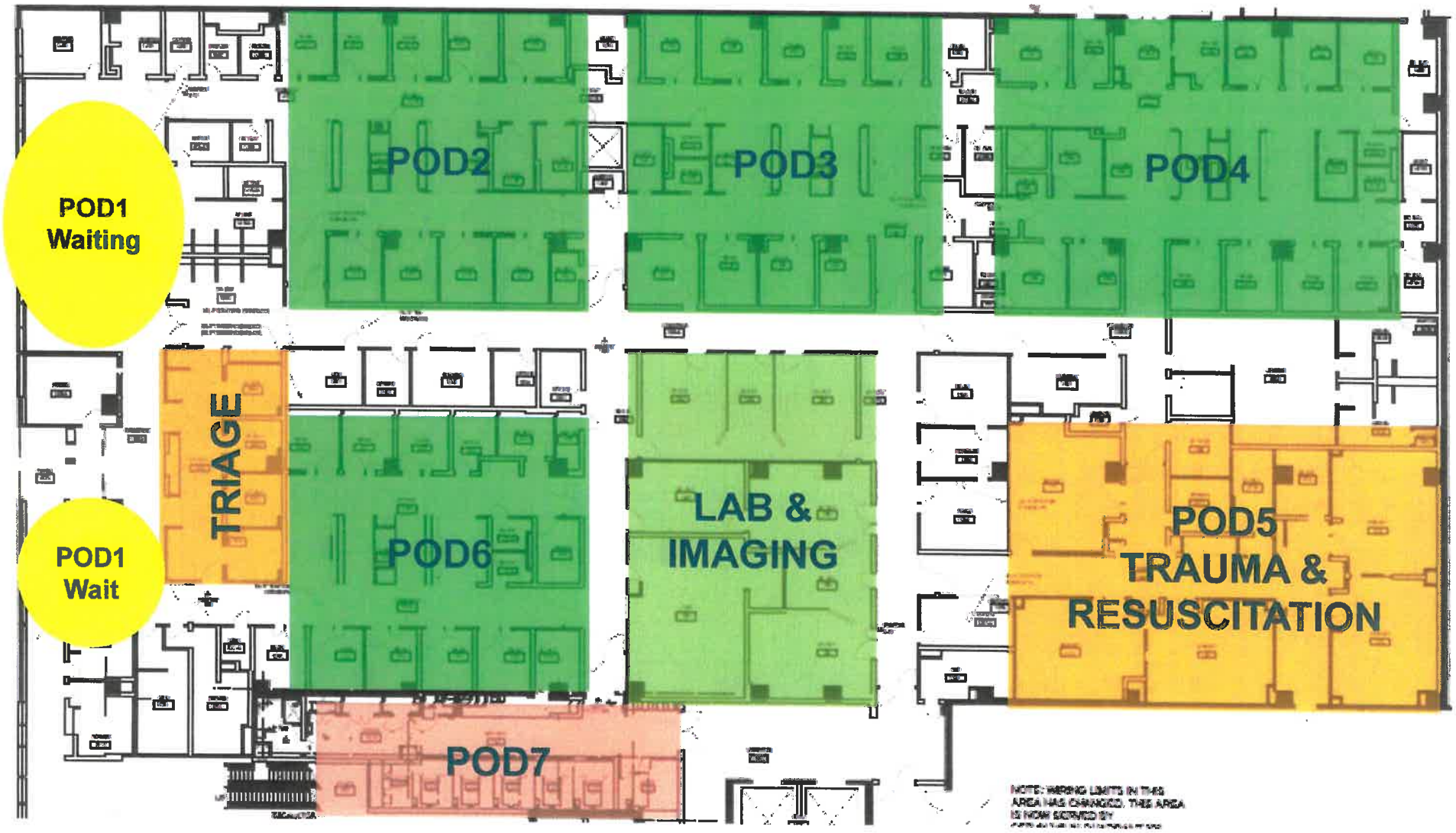
Emergency Department

NP Main Lobby Atrium

Public Drive

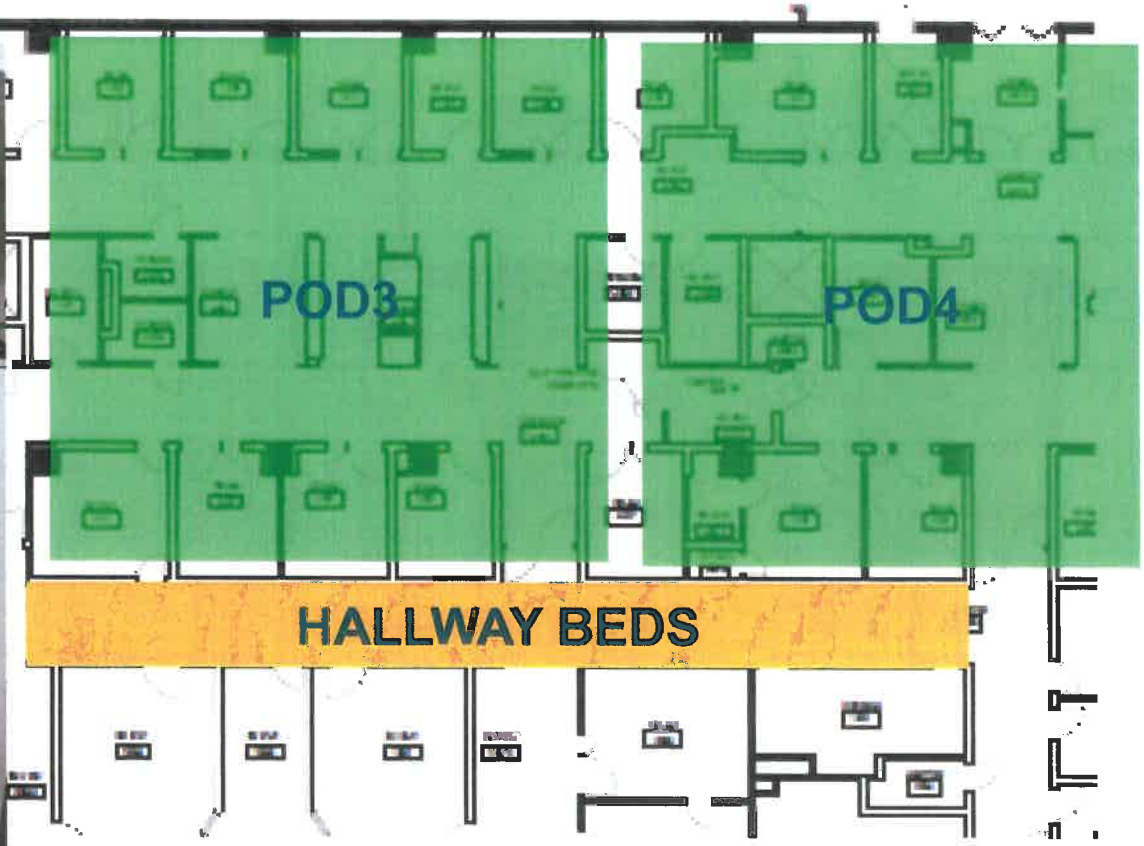
UAB HEALTH SYSTEM

NORTH PAVILION EMERGENCY DEPARTMENT



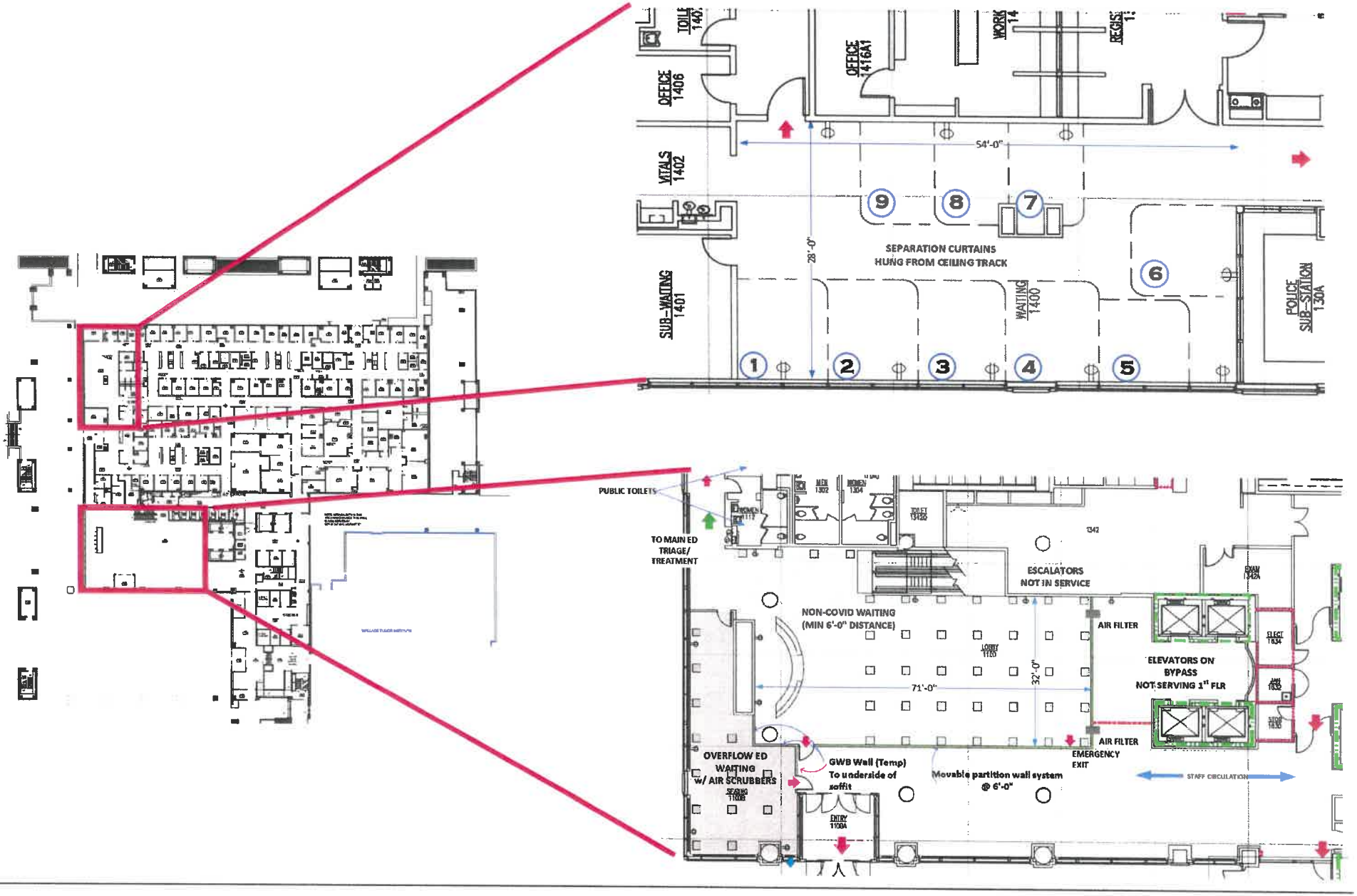
UAB HEALTH SYSTEM

EMERGENT MEASURES TO ADDRESS CAPACITY



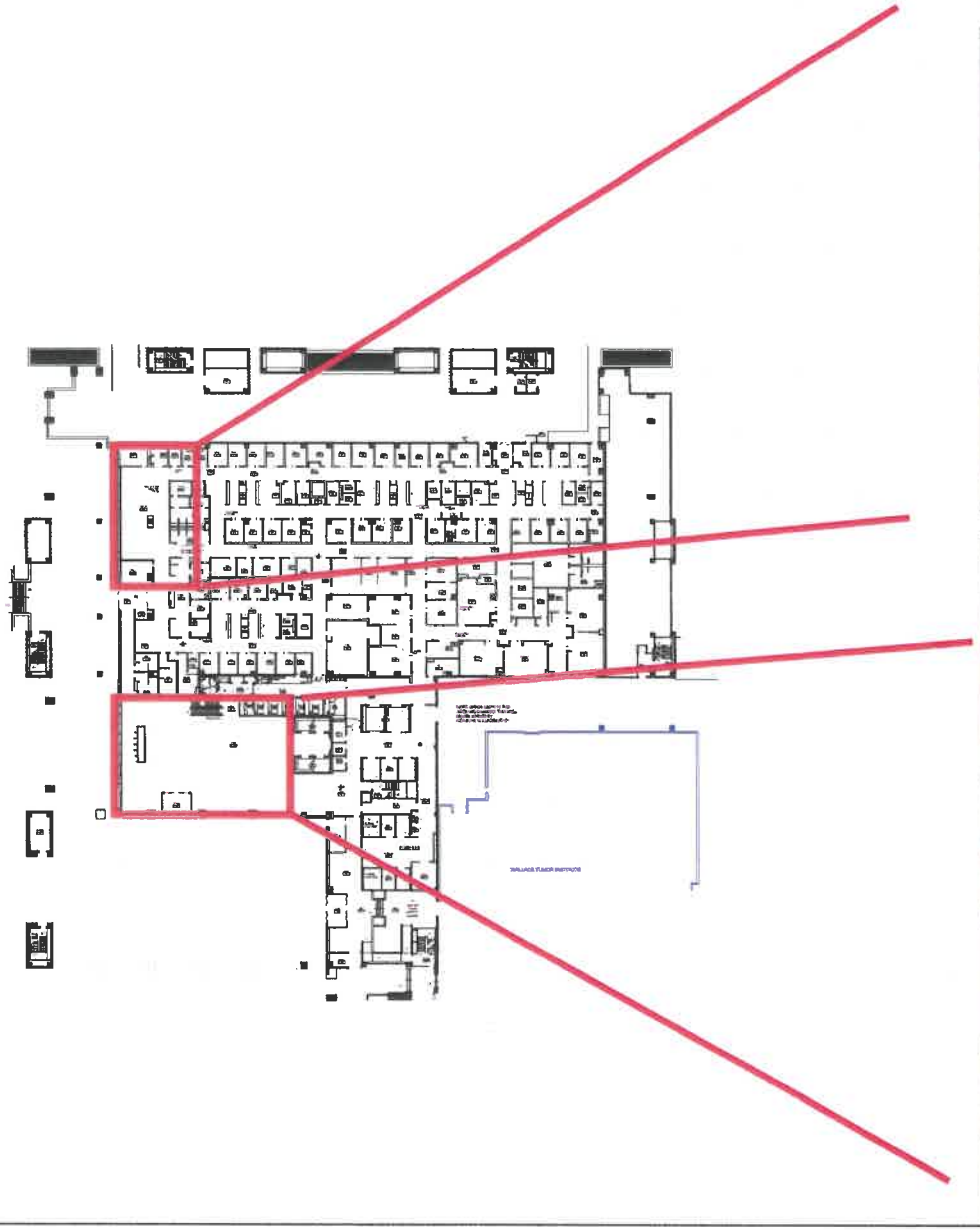
UAB HEALTH SYSTEM

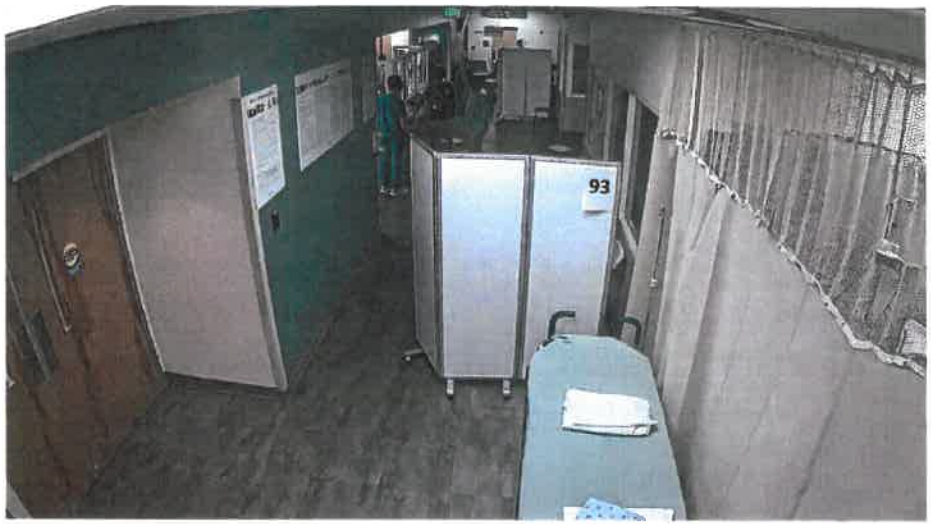
EMERGENT MEASURES TO ADDRESS CAPACITY



UAB HEALTH SYSTEM

EMERGENT MEASURES TO ADDRESS CAPACITY

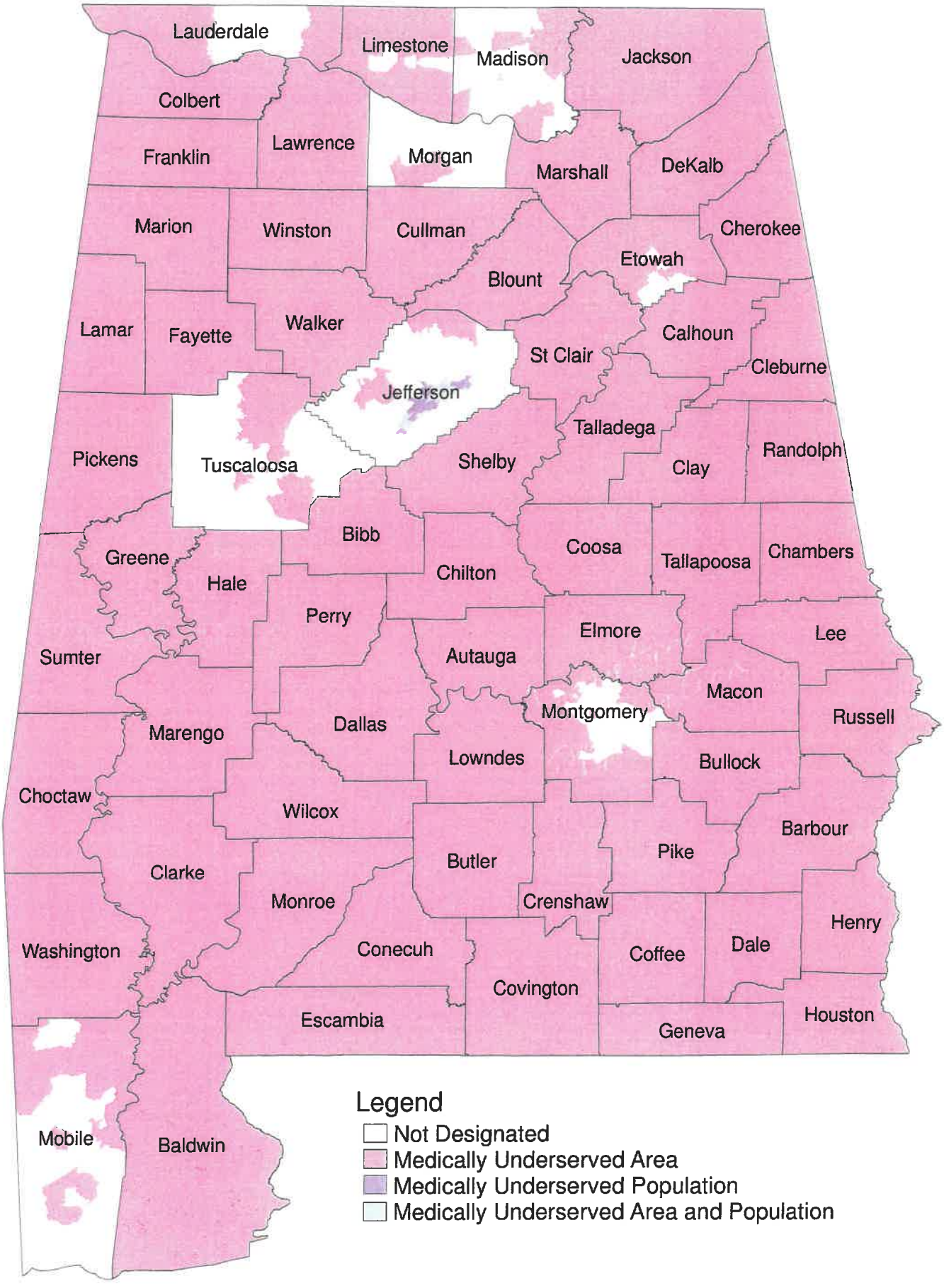




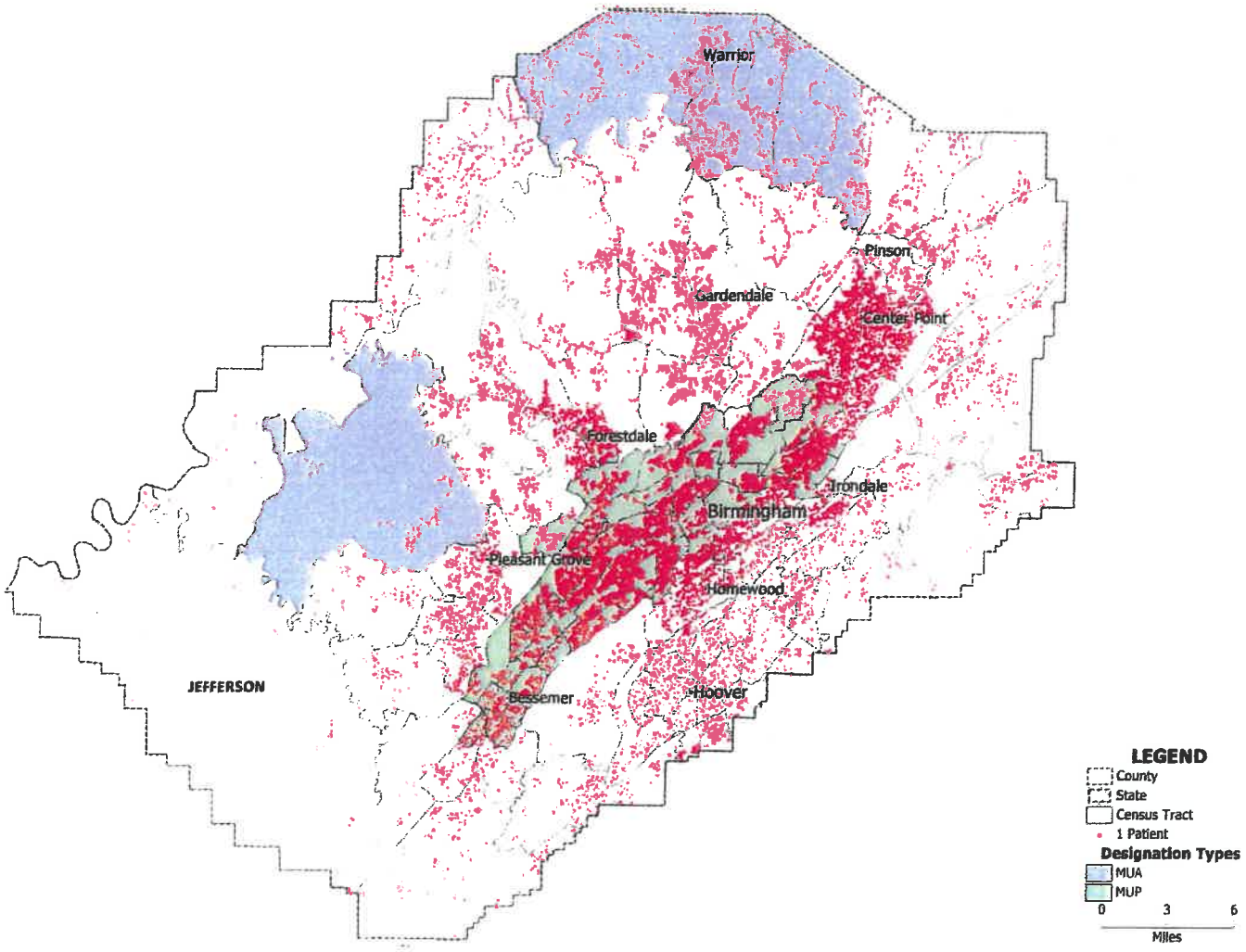
UAB HEALTH SYSTEM

EXHIBIT J

Medically Underserved Areas/Populations (MUA/Ps)



CY22 UAB ED (University, Highlands, and Gardendale) Patient Origin and MUA/P Designation Types in Jefferson County



Map created: 2/28/23

EXHIBIT K

Facility Name	City	County
Ascension St. Vincent's Birmingham	Birmingham	Jefferson
Ascension St. Vincent's Blount	Oneonta	Blount
Ascension St. Vincent's Chilton	Clanton	Chilton
Ascension St. Vincent's East	Birmingham	Jefferson
Ascension St. Vincent's St. Clair	Pell City	St. Clair
Bibb Medical Center	Centreville	Bibb
Birmingham VA Medical Center	Birmingham	Jefferson
Brookwood Baptist Medical Center	Birmingham	Jefferson
Children's of Alabama	Birmingham	Jefferson
Grandview Medical Center	Birmingham	Jefferson
Medical West	Bessemer	Jefferson
Princeton Baptist Medical Center	Birmingham	Jefferson
Shelby Baptist Medical Center	Alabaster	Shelby
UAB Callahan Eye Hospital	Birmingham	Jefferson
UAB Hospital	Birmingham	Jefferson
UAB Hospital-Highlands	Birmingham	Jefferson
Walker Baptist Medical Center	Jasper	Walker

Facility Name	City	County
Brookwood Baptist Health Freestanding Emergency Room	Hoover	Jefferson
Medical West Freestanding Emergency Department	Hoover	Jefferson
UAB Medicine Freestanding Emergency Department	Gardendale	Jefferson

[1]

EXHIBIT L

CITY OF BIRMINGHAM

PUTTING PEOPLE FIRST

FIRE & RESCUE SERVICE DEPARTMENT

Randall L. Woodfin
Mayor

Cory D. Moon
Fire Chief

Divisions & Bureaus

EMS Division
(205) 254-2992

Fire Prevention
(205) 250-7540

Training Division
(205) 933-4161

Safety Division
(205) 250-7535

Public Education
(205) 785-1332

Airport Division
(205) 714-2325

Fire Communications
(205) 250-7575

Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

Re: The Board of Trustees of the University of Alabama for the University of Alabama Hospital – Letter of Support - Emergency ED Expansion Project

Ms. Marsal,

Please accept this letter of support for the Emergency Certificate of Need Application filed by The Board of Trustees of the University of Alabama for the University of Alabama Hospital ("University Hospital") to expand the University Hospital Emergency Department ("ED") to include the installation of two (2) mobile emergency facility units as well as renovations to the existing ED waiting room. The emergency project will add 25 additional patient treatment areas to the ED.

As Fire Chief of Birmingham Fire & Rescue, I have first-hand knowledge of the ED overcrowding and ED boarding at University Hospital. While it is true that the Coronavirus pandemic placed a significant strain on the resources of the entire health care delivery system, the national and public health emergency ("PHE") has eased and, in fact, the PHE will be allowed to expire effective May 11, 2023. University Hospital, however, with its specialized capabilities and its American College of Surgeons-accredited, Level I Adult Trauma Center, remains overwhelmed with ED overcrowding and ED boarding. Vulnerable patients with serious medical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, ED boarding, ambulance or hospital diversion, and the hospital's high occupancy rate, which consistently exceeds 80%.

ED overcrowding and ED boarding has reached a crisis point. In 2022, Birmingham Fire & Rescue Service responded to 73,007 emergency incidents and transported 29,886 EMS patients. 57% of those patients were transported to UAB. There are extended wall times at all Emergency Departments in the city and the volume and acuity of our patient population continues to rise. The hospital's current resources simply cannot meet the demand in the ED, resulting in a strain on the entire emergency system for our medical service area. Diversion, which directs ambulances to other area hospitals, only temporarily addresses what has become a significant problem and most days multiple hospitals are on diversion simultaneously.

The primary objective of the emergency expansion is to alleviate ED overcrowding and ED boarding so that the hospital can timely accommodate patients with urgent and emergency medical conditions. I wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED. I urge you to approve the emergency CON application.

Sincerely,

C. D. M.

Cory D. Moon, Fire Chief
Birmingham Fire & Rescue Service

BREMSS

410 10th Avenue South, Ste B
Birmingham, Alabama 35205
(205) 934-2595

VIA Electronic Filing (shpda.online@shpda.alabama.gov)
Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

Re: ***The Board of Trustees of the University of Alabama for the University of Alabama Hospital – Letter of Support - Emergency ED Expansion Project***

Ms. Marsal,

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As the Medical Director and Executive Director of Birmingham Regional Emergency Medical Services System (BREMSS), we have first-hand knowledge of the ED overcrowding and ED boarding at University Hospital. While it is true that the Coronavirus pandemic placed a significant strain on the resources of the entire health care delivery system, the national and public health emergency ("PHE") has eased and, in fact, the PHE will be allowed to expire effective May 11, 2023. University Hospital, however, with its specialized capabilities and its American College of Surgeons-accredited, Level I Adult Trauma Center, remains overwhelmed with ED overcrowding and ED boarding. Vulnerable patients with serious medical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, ED boarding, ambulance or hospital diversion, and the hospital's high occupancy rate, which consistently exceeds 80%.

ED overcrowding and ED boarding has reached a crisis point. In 2022, the BREMSS region had approximately 220,000 EMS patient transports and due to ED overcrowding or a high inpatient occupancy rate, the University Hospital ED was placed on diversion a total of 7,930 hours. As a result, patients often leave the ED in frustration without being seen, walk out during care, or leave against medical advice only to return to the hospital, often via ambulance, with more severe illness. The hospital's current resources simply cannot meet demand in the ED, resulting in a strain on the entire emergency system for our medical service area. Diversion, which prompts ambulances to transport to other area hospitals, only temporarily addresses what has become a significant problem.

The primary objective of the emergency expansion is to alleviate ED overcrowding and ED boarding so that the hospital can timely accommodate patients with urgent and emergency medical conditions. We wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED. We urge you to approve the emergency CON application.

Sincerely,

Will Ferguson, MD, FACEP, FAEMS
Medical Director

Michael Minor, NRP, BBA
Executive Director

UABMEDICINE

UAB HOSPITAL

March 24, 2023

VIA Electronic Filing (shpda.online@shpda.alabama.gov)
Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

Re: ***The Board of Trustees of the University of Alabama for the University of Alabama Hospital – Letter of Support - Emergency ED Expansion Project***

Ms. Marsal,

Please accept this letter of support for the Emergency Certificate of Need Application filed by The Board of Trustees of the University of Alabama for the University of Alabama Hospital ("University Hospital"). The emergency project involves expanding the University Hospital Emergency Department ("ED") temporarily to include the temporary installation of two (2) mobile emergency facility units adjacent to the ED as well as renovations to the existing ED waiting room. The emergency project will add 25 additional patient treatment areas to the ED.

As CEO, of UAB Hospital, I have first-hand knowledge of the ED overcrowding and ED boarding, which has reached a crisis point at the hospital. ED overcrowding causes significant delays in access to care, placing University Hospital in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice only to return to the ED with more severe illness. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources, while significant, simply cannot meet current ED demand.

University Hospital is a nationally recognized academic medical center and the primary component of the UAB Medicine Enterprise. The hospital operates the only American College of Surgeons-accredited, Level I – Adult Trauma Center in the state. Consequently, the hospital is often the only provider of certain specialized services in the State of Alabama. Vulnerable patients with serious medical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, ED boarding, ambulance or hospital diversion, and the hospital's high occupancy rate, which consistently exceeds 80%.

The emergency ED expansion is Phase I of a multi-phase project aimed at addressing ED overcrowding and ED boarding. Reducing overcrowding allows University Hospital to continue to furnish the high-quality care that is expected from a world-class facility. I wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas and urge you to approve the emergency CON application.

Sincerely,

Brenda Carlisle, MSHA, BSN, RN, CENP| CEO UAB Hospital
Office of Hospital Administration
UAB | The University of Alabama at Birmingham|UAB Hospital
509 Quarterback Tower | 601 19th Street South | Birmingham, AL 35249-6505

UAB MEDICINE

April 6, 2023

VIA Electronic Filing (shpda.online@shpda.alabama.gov)
Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

Re: The Board of Trustees of the University of Alabama for the University of Alabama Hospital – Letter of Support - Emergency ED Expansion Project

Dear Ms. Marsal:

Please accept this letter of support for the Emergency Certificate of Need Application filed by The Board of Trustees of the University of Alabama for the University of Alabama Hospital ("University Hospital"). The emergency project involves expanding the University Hospital Emergency Department ("ED") temporarily to include the temporary installation of two (2) mobile emergency facility units adjacent to the ED as well as renovations to the existing ED waiting room. The emergency project will add 25 additional patient treatment areas to the ED.

As Chief Executive Officer of UAB Medicine Enterprise, I have first-hand knowledge of the ED overcrowding and ED boarding, which has reached a crisis point at the hospital. ED overcrowding causes significant delays in access to care, placing University Hospital in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice only to return to the ED with more severe illness. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources, while significant, simply cannot meet current ED demand.

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The emergency ED expansion is Phase I of a multi-phase project aimed at addressing ED overcrowding and ED boarding. Reducing overcrowding allows University Hospital to continue to furnish the high-

Chief Executive Officer
402 John N. Whitaker Building
205.731.9770

MAILING ADDRESS:
JNWB 402
500 22ND STREET SOUTH
BIRMINGHAM, AL 35249-3110

quality care that is expected from a world-class facility. I wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas and urge you to approve the emergency CON application.

Sincerely,

Reid F. Jones
Chief Executive Officer

UAB HEALTH SYSTEM
EXECUTIVE OFFICES

March 22, 2023

VIA Electronic Filing (shpda.online@shpda.alabama.gov)
Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

Re: ***The Board of Trustees of the University of Alabama for the University of Alabama Hospital – Letter of Support - Emergency ED Expansion Project***

Ms. Marsal,

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As CEO of UAB Health System, I have first-hand knowledge of the ED overcrowding and ED boarding, which has reached a crisis point at the hospital. ED overcrowding causes significant delays in access to care, placing University Hospital in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice only to return to the ED with more severe illness. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources, while significant, simply cannot meet current ED demand.

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The emergency ED expansion is Phase I of a multi-phase project aimed at addressing ED overcrowding and ED boarding. Reducing overcrowding allows University Hospital to continue to furnish the high-quality care that is expected from a world-class facility. I wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas and urge you to approve the emergency CON application.

Sincerely,

Dawn Bulgarella
Chief Executive Officer

Suite 408, John N. Whitaker Building, 500 22nd Street South, Birmingham, AL 35233
Phone: 205.975.5362 • Fax: 205.934.0673 • uabmedicine.org

THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

March 23, 2023
VIA Electronic Filing (shpda.online@shpda.alabama.gov)
Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

Re: ***The Board of Trustees of the University of Alabama for the University of Alabama Hospital – Letter of Support - Emergency ED Expansion Project***

Ms. Marsal:
Please accept this letter of support for the Emergency Certificate of Need Application filed by The Board of Trustees of the University of Alabama for the University of Alabama Hospital ("University Hospital"). The emergency project involves expanding the University Hospital Emergency Department ("ED") temporarily to include the installation of two (2) mobile emergency facility units adjacent to the ED as well as renovations to the existing ED waiting room. The emergency project will add 25 additional patient treatment areas to the ED.

As Emergency Medicine physicians who have practiced at University Hospital for >25 years, our department has first-hand knowledge of the ED crowding and boarding, which has reached a crisis point at the hospital. Moreover, ED crowding has resulted in significant delays in access to care, placing University Hospital in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice only to return to the ED with more severe illness. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources simply cannot meet current ED demand.

University Hospital is a nationally-recognized academic medical center and the primary component of the UAB Medicine Enterprise. The hospital operates the only accredited Level I – Adult Trauma Center in the state, and cares for the most complex patients in the state. Consequently, the hospital is often the only provider of certain specialized services in the State of Alabama. Vulnerable patients with serious medical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, ED boarding, ambulance or hospital diversion, and the hospital's high occupancy rate, which consistently exceeds 85%.

The primary objective of the emergency expansion is to alleviate ED overcrowding and boarding to facilitate timely care of patients with emergent medical conditions. Reducing overcrowding allows University Hospital to continue to furnish the high-quality care that is expected from a world-class facility. We wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas; and respectfully request your approval of this urgent request for the emergency CON application.

Sincerely,

Marie-Carmelle Elie

Marie-Carmelle Elie, MD FACEP FCCM
Chair and Professor, Department of Emergency Medicine

Andrew Edwards

Andrew Edwards, MD FACEP
Executive Vice Chair and Professor

Dag Shapshak

Dag Shapshak, MD FACEP
Interim Vice Chair, Clinical Operations, Associate Professor

Brendhan Buckingham

Brendhan Buckingham, MD FACEP
Medical Director, Associate Professor

HEERSINK
SCHOOL OF MEDICINE
Department of Emergency Medicine
Administration Building, Suite 990 | 701 20th Street South | BIRMINGHAM AL 35233
phone: 205.975.8837 | www.uab.edu/medicine/em/

Signature: Marie-Carmelle Elie
Marie-Carmelle Elie (Mar 23, 2023 10:41 CDT)

Email: melie@uab.edu

Signature:
Andrew Edwards (Mar 23, 2023 10:48 CDT)

Email: aredwards@uabmc.edu

Signature:
Brendan Buckingham (Mar 23, 2023 11:41 CDT)

Email: rbuckingham@uabmc.edu

Signature:
Dag Shapshak (Mar 23, 2023 11:44 CDT)

Email: dshapshak@uabmc.edu

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

March 23, 2023

Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

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I have practiced Emergency Medicine at University Hospital for over 20 years and now serve as a health system administrator. For the last 6 years I have served as the Physician Advisor for UAB's Center for Patient Flow, which manages patient bed assignments from all portals of entry including the emergency departments, transfers, and direct admissions. From my unique vantage-point no one is more qualified to comment on ED overcrowding at UAB hospital. We have truly reached a crisis point and the result is delays in access to care not only for ED patients, but for all patients seeking the unique and specialized resources available at University Hospital.

ED overcrowding causes significant delays in access to care. Simply put, when there is no space to take care of a new ED patient, then the patient has to wait until a space is available. No one wants to or should be put into that circumstance, yet it happens every day to our patients and their loved ones.

In efforts to serve our unique tertiary care mission the hospital is continuously full to maximum capacity, which results in patients backing up in the ED waiting for beds in the hospital. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance and patients transferred to UAB from other facilities. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources simply cannot meet current ED demand. While significant efforts are ongoing to maximize hospital capacity and expedite throughput, the ED is an area we have identified where expansion of capacity would

500 22nd Street South
John N Whitaker Building 408
Birmingham, AL 35233

rapidly alleviate wait times and provide relief to the extensive overcrowding conditions we are experiencing.

University Hospital is a nationally-recognized academic medical center and the primary component of the UAB Medicine Enterprise. The hospital functions as an ADPH designated Level 1 Trauma, Stroke, and STEMI system hospital and as a Serious Infectious Diseases Assessment Facility. All of these programs are furthermore accredited by their respective national credentialing bodies, demonstrating our commitment to provide only the best care. Patients come to UAB from all over the state to seek certain specialized services that simply are not available in other facilities. For example, do you know how many hospitals in Alabama have hand surgeons available in the ED? How about neurosurgeons? neurologists? trauma surgeons? cardiovascular surgery? ECMO? orthopedic surgery? urology? facial surgery? plastic surgery? dermatology? toxicologists? psychiatrists? hyperbaric treatment specialists? How many transplant centers are there in Alabama who can be available to care for patients with the unique challenges of organ transplant? The answer is not many, and in some cases only one…University Hospital. Vulnerable patients with serious medical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, ED boarding, ambulance or hospital diversion, and the hospital's high occupancy rate.

The primary objective of the emergency expansion is to alleviate ED overcrowding and ED boarding so that the hospital can accommodate patients with urgent and emergency medical conditions. Reducing overcrowding allows University Hospital to continue to furnish the high-quality care that is expected from a world-class facility. No emergency patient should have to wait for life-saving care when doctors, nurses, and teams of other healthcare professionals are anxiously waiting to care for them but cannot due to lack of space. I wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas. I urge you to approve the emergency CON application.

Sincerely,

Sarah Nafziger, MD

Sarah Nafziger, MD, MSHA, FACEP FAEMS
Professor UAB School of Public Health, Department of Health Policy and Organization
Professor, UAB Heersink School of Medicine, Depts of Emergency Medicine and Neurology
Vice President Clinical Support Services, UAB Medicine

THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

March 23, 2023

VIA Electronic Filing (shpda.online@shpda.alabama.gov)
Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

Re: The Board of Trustees of the University of Alabama for the University of Alabama Hospital – Letter of Support - Emergency ED Expansion Project

Ms. Marsal,

Please accept this letter of support for the Emergency Certificate of Need Application filed by The Board of Trustees of the University of Alabama for the University of Alabama Hospital ("University Hospital"). The emergency project involves expanding the University Hospital Emergency Department ("ED") temporarily to include the installation of two (2) mobile emergency facility units adjacent to the ED as well as renovations to the existing ED waiting room. The emergency project will add 25 additional patient treatment areas to the ED.

As a neurologist, who has practiced at University Hospital for over 15 years, I have first-hand knowledge of the ED overcrowding and ED boarding, which has reached a crisis point at the hospital. ED overcrowding causes significant delays in access to care, placing University Hospital in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice only to return to the ED with more severe illness. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources simply cannot meet current ED demand.

University Hospital is a nationally-recognized academic medical center and the primary component of the UAB Medicine Enterprise. The hospital operates the only American College of Surgeons-accredited, Level I – Adult Trauma Center in the state. Consequently, the hospital is often the only provider of certain specialized services in the State of Alabama. Vulnerable patients with serious medical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, ED boarding, ambulance or hospital diversion, and the hospital's high occupancy rate, which consistently exceeds 80%.

The primary objective of the emergency expansion is to alleviate ED overcrowding and ED boarding so that the hospital can timely accommodate patients with urgent and emergency medical conditions. Reducing overcrowding allows University Hospital to continue to furnish the high-quality care that is expected from a world-class facility. I wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas. I urge you to approve the emergency CON application.

Sincerely,

David G. Standaert, MD, PhD
John N. Whitaker Professor and Chair of Neurology

HEERSINK
SCHOOL OF MEDICINE

Department of Neurology
David G. Standaert, MD, PhD, Chair

516 Civitan International Research Center | 1719 6th Avenue South | BIRMINGHAM AL 35294-0017
phone: 205.996.6329 | fax: 205.996.6580 | www.uab.edu/neurology

UAB HEERSINK SCHOOL OF MEDICINE

The University of Alabama at Birmingham

March 23, 2023

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As psychiatrists who have practiced at University Hospital for decades, our department has first-hand knowledge of the ED crowding and boarding, and its consequent impact on the care of patients seeking behavioral health and psychiatric care. Specifically, behavioral health emergencies comprise up to 5% of the daily census presenting to the ED. Since the COVID pandemic there has been greater than a 28% increase in presentations since 2020 that have persisted to contribute to the volumes in the ED. ED crowding has resulted in significant delays in access to care, diverting resources that would otherwise be available for patients presenting to the ED for treatment.

University Hospital is a nationally-recognized academic medical center and represents one of the few comprehensive psychiatric receiving centers in the area. Consequently, the hospital is often the only provider of certain specialized services in the State of Alabama. Patients with serious medical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, boarding, ambulance or hospital diversion, and the hospital's high occupancy rate, which consistently exceeds 85%.

The primary objective of the emergency expansion is to alleviate ED overcrowding and boarding to facilitate timely world-class care of patients with emergent conditions. We endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas; and request your approval of this urgent request for the emergency CON application.

Sincerely,

Matthew Macaluso DO

Matthew Macaluso, D.O.
Bee McWane Reid Professor
Vice Chair of Clinical Affairs
Clinical Director, Depression and Suicide Center

Department of Psychiatry
9FL Sparks Center
1720 7th Avenue South
205.934.5151
Fax 205.975.9600

Mailing Address:
SC 9FL
1720 2ND AVE S
BIRMINGHAM, AL 35294-0017

UAB HEERSINK SCHOOL OF MEDICINE

The University of Alabama at Birmingham

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As a hospitalist who has practiced at University Hospital for 7 years, I have first-hand knowledge of the ED overcrowding and ED boarding, which has reached a crisis point at the hospital. ED overcrowding causes significant delays in access to care, placing University Hospital in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice only to return to the ED with more severe illness. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources simply cannot meet current ED demand.

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The primary objective of the emergency expansion is to alleviate ED overcrowding and ED boarding so that the hospital can timely accommodate patients with urgent and emergency medical conditions. Reducing overcrowding allows University Hospital to continue to furnish the high-quality care that is expected from a world-class facility. I wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas. I urge you to approve the emergency CON application.

Sincerely,

Tim M. Peters, MD, FHM
Interim Chief of Hospital Medicine
UAB | The University of Alabama at Birmingham
MEB 230L | 619 19th Street South | Birmingham, AL 35249
P: 205.975.0518 | tmpeters@uabmc.edu

THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

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Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency
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Montgomery, Alabama 36104

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As an internist and geriatrician who has practiced at University Hospital for over 10 years, I have first-hand knowledge of the ED overcrowding and ED boarding, which has reached a crisis point at the hospital. ED overcrowding causes significant delays in access to care, placing University Hospital in the upper quartile in the nation for ED patients who leave without being seen, walk out during care, or leave against medical advice only to return to the ED with more severe illness. Patient boarding in the ED diverts resources that would otherwise be available for patients presenting to the ED for treatment, including sick patients presenting by ambulance. The ED may care for these "boarders" for several hours to several days, depending on the availability of an inpatient bed. The hospital's resources simply cannot meet current ED demand.

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HEERSINK
SCHOOL OF MEDICINE
Department of Medicine

1220 Faculty Office Tower | 510 20th Street, South Mailing Address: FOT 1220 | 1720 2ND AVE SOUTH | BIRMINGHAM AL 35294-0110
Phone: 205.934.7700 | Fax: 205.934.1477 | www.uab.edu/medicine/dom

THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

wholeheartedly endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas. I urge you to approve the emergency CON application.

Sincerely,

C. Seth Landefeld, MD, MACP
Chair, Department of Medicine
Physician-in-Chief, UAB Hospital and Health System
Spencer Chair in Medical Science Leadership
University of Alabama at Birmingham

HEERSINK
SCHOOL OF MEDICINE
Department of Medicine

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THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

March 23, 2023

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State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, Alabama 36104

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As surgeons who have practiced at University Hospital for decades, our department has first-hand knowledge of the ED crowding and boarding, and its consequent impact on the care of patients with surgical emergencies and critical traumatic injuries. Specifically, trauma patients comprise up to 8% of the daily census presenting to the ED, and have experienced greater than 25% increase in presentations since 2020. ED crowding has resulted in significant delays in access to care, diverting resources that would otherwise be available for patients presenting to the ED for treatment.

University Hospital is a nationally-recognized academic medical center and the only accredited American College of Surgery Level I verified– Adult Trauma Center in the state. Consequently, the hospital is often the only provider of certain specialized services in the State of Alabama. Patients with serious surgical conditions are placed in jeopardy when access to these services is delayed or unavailable due to ED overcrowding, boarding, ambulance or hospital diversion, and the hospital's high occupancy rate, which consistently exceeds 85%.

HEERSINK
SCHOOL OF MEDICINE

Department of Surgery
Office of the Chair
Boshell Diabetes Building | 1808 Seventh Avenue South | Mailing Address: BDB 505B | 1720 Second Avenue South | Birmingham, AL 35294-0110
phone: 205.934.3333 | fax: 205.934.0135 | herbchen@uab.edu

The primary objective of the emergency expansion is to alleviate ED overcrowding and boarding to facilitate timely world- class care of patients with emergent conditions. We endorse and support University Hospital's emergency plan to expand the existing ED to include 25 new patient treatment areas; and request your approval of this urgent request for the emergency CON application.

Sincerely,

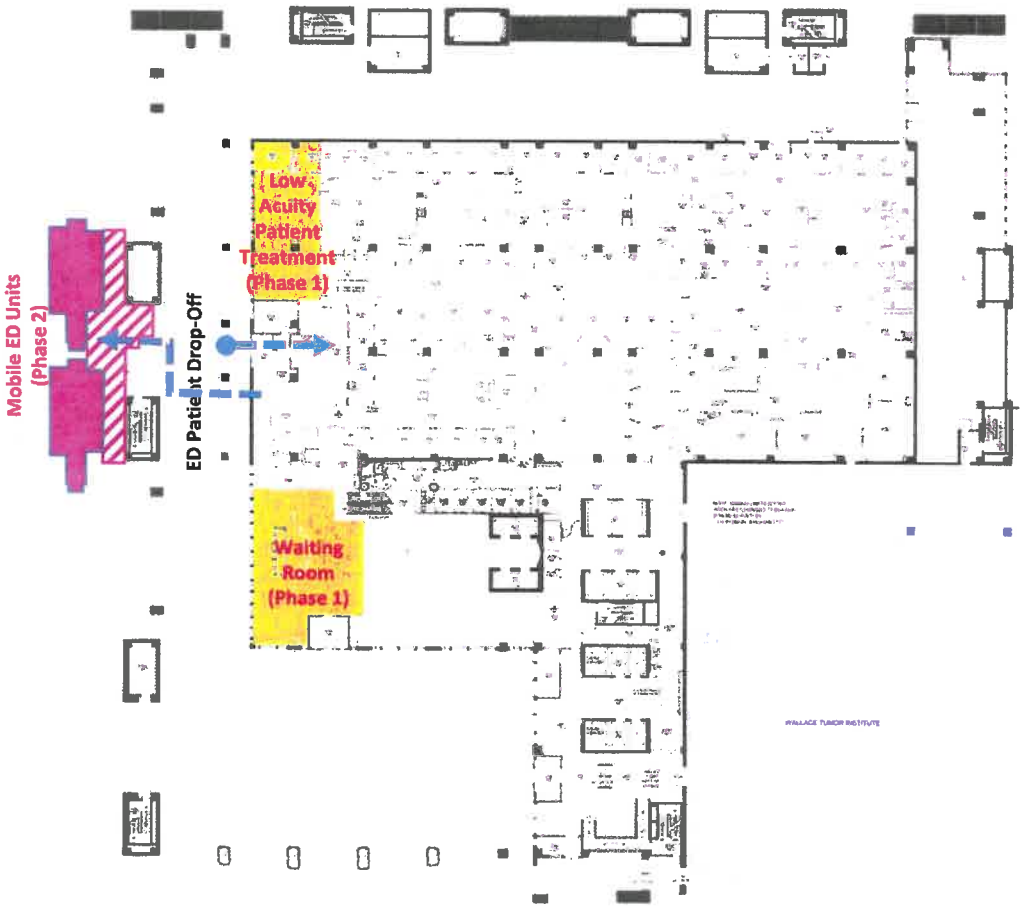
Herbert Chen, MD, FACS
Chair, Department of Surgery
University of Alabama at Birmingham (UAB)
Heersink School of Medicine
Fay Fletcher Kerner Endowed Chair
Professor of Surgery, Pediatrics, and Biomedical Engineering
Surgeon-in-Chief, UAB Hospital and Health System
Senior Advisor, O'Neal Comprehensive Cancer Center at UAB

Jeffrey D. Kerby, MD, PhD, FACS
Brigham Family Endowed Professor/Director
Division of Trauma and Acute Care Surgery
Department of Surgery
University of Alabama at Birmingham
Chair, Committee on Trauma
American College of Surgeons

EXHIBIT M

UAB North Pavilion

Emergency Department Expansion



UAB North Pavilion

Emergency Department Expansion

ED Interim Solution

- NP ED is currently operating under an Emergency Declaration allowing the use of the existing Waiting Room as a Patient Treatment Area and the lower level of the Atrium as the ED Waiting Room.
- The Interim Solution will make revisions to these spaces allowing them to be reviewed and approved by the AHJ's

UAB North Pavilion

Emergency Department Expansion

ED Interim Solution

- Design Utility Package for 2 Mobile Units
- Purchase 2 Mobile Unit
- Install 2 Mobile units adjacent to public entrance to Emergency Department

- 2 Mobile Units
- 10 Exam Rooms
- Covered Ramp to bring patients to the unit
- Likely to require sidewalk closure
- Will add controlled entrance to the units
- Anticipate that patients would go through existing triage and then be placed in units
- Need to provide utilities to mobile Units

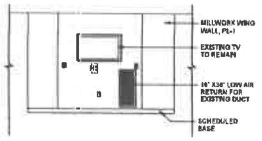
UAB North Pavilion

Emergency Department Expansion

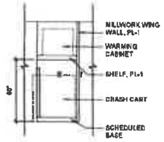
ED Interim Solution

Interim Waiting North Option

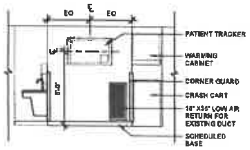
- Construct Interim Waiting Room adjacent to the ED at the north end of the ED Patient Drop-Off, allowing the lower level of the atrium to be vacated



2 LOW ACUITY UNIT
1/4" = 1'-0"



3 LOW ACUITY UNIT
1/4" = 1'-0"



4 LOW ACUITY UNIT
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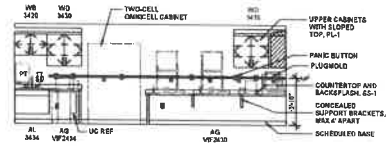
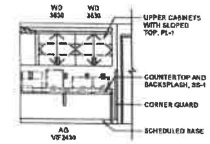
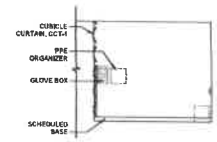


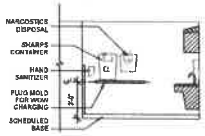
5 LOW ACUITY UNIT
1/4" = 1'-0"



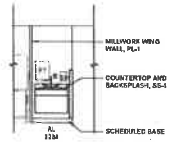
6 LOW ACUITY UNIT
1/4" = 1'-0"



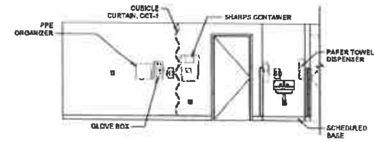
7 LOW ACUITY UNIT
1/4" = 1'-0"



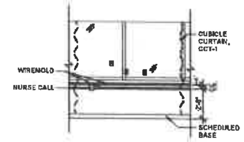
8 LOW ACUITY UNIT
1/4" = 1'-0"



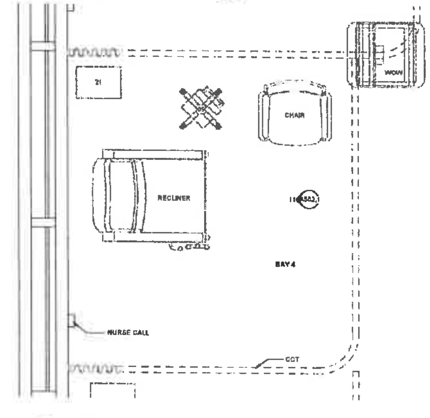
9 LOW ACUITY UNIT
1/4" = 1'-0"



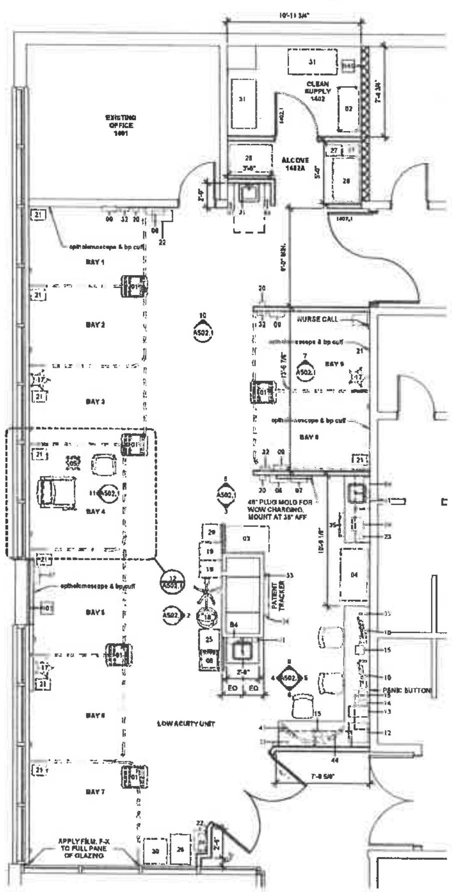
10 LOW ACUITY UNIT
1/4" = 1'-0"



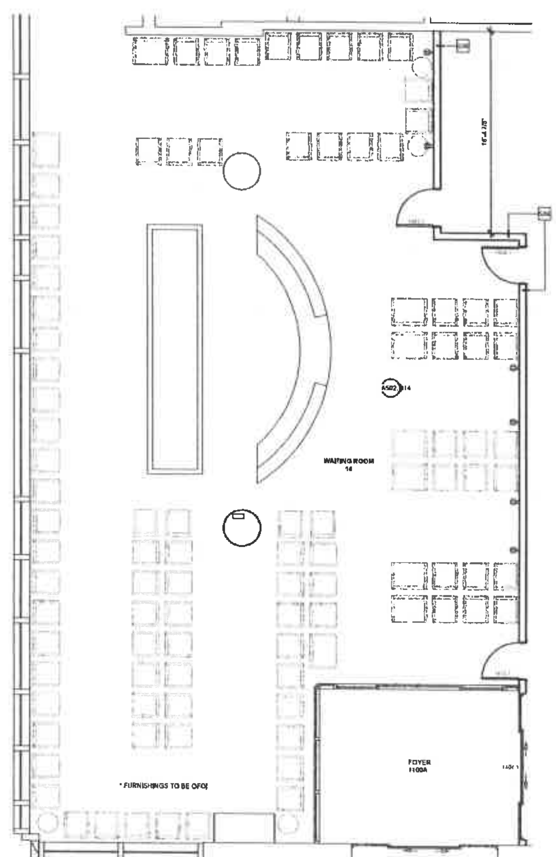
11 LOW ACUITY BAY
1/4" = 1'-0"



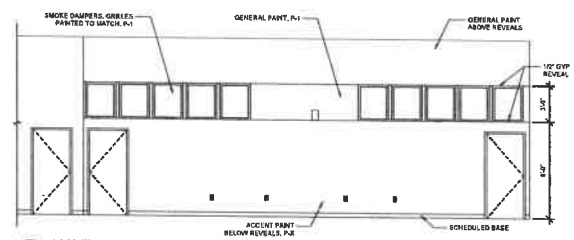
12 LOW ACUITY BAY
3/4" = 1'-0"



1 LOW ACUITY UNIT ENLARGED PLAN
1/4" = 1'-0"



13 WAITING ROOM ENLARGED PLAN
1/4" = 1'-0"



14 WAITING ROOM
1/4" = 1'-0"

OWNER FURNISHED EQUIPMENT LEGEND - LOW ACUITY	
Mark	Type
01	WOW (GLOVE DISPENSER, PPE, PHYSIOLOGIC MONITOR, SPHYGMOMETER, THERMOMETER)
02	NEW LINEN CART
03	CRASH CART / CG
04	2-CELL OMNICELL AT CABINET
05	In111 - Monitor, Vital Signs, On Mobile Stand
06	WALL MOUNTED SHARPS DISPOSAL
07	WALL MOUNTED NARCOTICS DISPOSAL
08	LINEN HAMPER
09	PPE ORGANIZER
10	24" STACKED MONITORS AND CPU
11	[illegible] Printer
13	LARGE ZEBRA PRINTER
14	SMALL ZEBRA PRINTER
15	PHONE
16	WARMING CABINET
17	IV STAND
18	PORTABLE EXAM LIGHT
19	MAYO STAND
20	HAND SANITIZER
21	TRASH CAN, SMALL
22	TRASH CAN, TALL
23	GLUCOSE METER
24	BLADDER SCANNER
25	ACCUVEIN
26	ECG CART
27	CYLINDER CART
28	PROCEDURE CART
29	OTO_OPTHOLMOSCOPE SET STAND
30	Portable Ultrasound
31	NEW WIRE SHELVING
32	GLOVE BOX 3 SPACE
33	HP THIN CLIENT
34	55" PATIENT TRACKER BOARD
35	Medical Grade Refrigerator Relay
36	MOBILE SUPPLY CART
37	3-CELL OMNICELL AT CABINET
38	PHYSIOLOGICAL MONITOR
39	OTO, OPTHOLOMOSCOPE, SPHYG, THERMOMETER
40	STOOL
41	Workstation Wall Mounted Computer
42	NURSE CALL DESKTOP UNIT
43	DUAL MONITORS WITH CPU
44	CENTRAL STATION (SINGLE MONITOR)
45	18" X 36" CART FOR LINEN
46	PAPER TOWEL DISPENSER
47	SOAP DISPENSER

LEGEND FOR INTERIOR ELEVATIONS

CCT	CUBICLE CURTAIN
CG	CORNER GUARD (SEE INTERIOR DESIGN DRAWINGS)
EG	END WALL GUARDS
FEC	FIRE EXTINGUISHER (SURFACE MOUNTED)
HS	HAND SANITIZER
IWP	IMPACT WALL PANEL (SEE INTERIOR DESIGN DRAWINGS)
PT	PAPER TOWEL DISPENSER
SD	SOAP DISPENSER

SHEET SCALE: 0' 2' 4' 8' 12'

Gresham Smith
GreshamSmith.com

3595 Grandview Parkway
Suite 300
Birmingham, AL 35243
205.298.9200

Consultant Space

UAB MEDICINE

UAB ED INTERIM SOLUTIONS
ED WAITING TO LOW ACUITY PATIENT TREATMENT AREA
UNIVERSITY OF ALABAMA HOSPITAL NORTH PAVILION
1802 6TH AVE S, BIRMINGHAM, AL 35233
UAB Project No.: H225027
ADPH Project Submission No.:

NOT FOR CONSTRUCTION

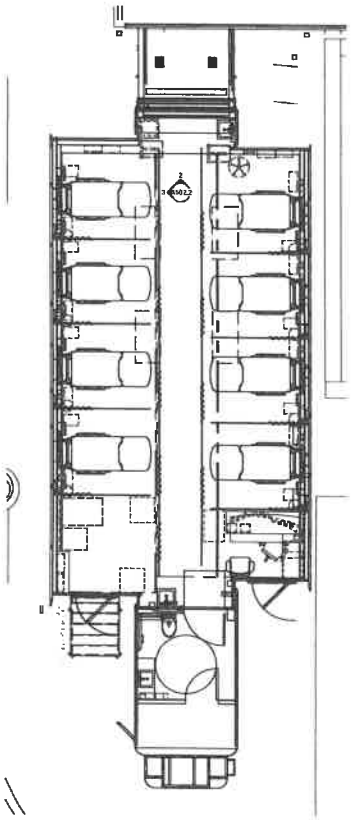
Revision

No.	Date	Description

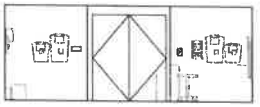
ENLARGED PLANS AND INTERIOR ELEVATIONS

A502.1

46230.01
3/28/2023



1 MOBILE ED UNITS - ENLARGED UNIT PLAN
1/4" = 1'-0"



2 MOBILE UNIT ELEVATION 1
1/4" = 1'-0"

3 MOBILE UNIT ELEVATION 2
1/4" = 1'-0"

LEGEND FOR INTERIOR ELEVATIONS

CCT	CUBICLE CURTAIN
CG	CORNER GUARD (SEE INTERIOR DESIGN DRAWINGS)
EG	END WALL GUARDS
FEC	FIRE EXTINGUISHER (SURFACE MOUNTED)
HS	HAND SANITIZER
IWP	IMPACT WALL PANEL (SEE INTERIOR DESIGN DRAWINGS)
PT	PAPER TOWEL DISPENSER
SD	SOAP DISPENSER

SHEET SCALE 0' 2' 4' 8' 12'

Gresham Smith
GreshamSmith.com
3595 Grandview Parkway
Suite 300
Birmingham, AL 35243
205.298.9200

Consultant Space

UAB MEDICINE

UAB ED INTERIM SOLUTIONS

UNIVERSITY OF ALABAMA
HOSPITAL NORTH PAVILION
1802 6TH AVE S, BIRMINGHAM, AL 35233
UAB Project No.: H225027
ADPH Project Submission No.:

Revision

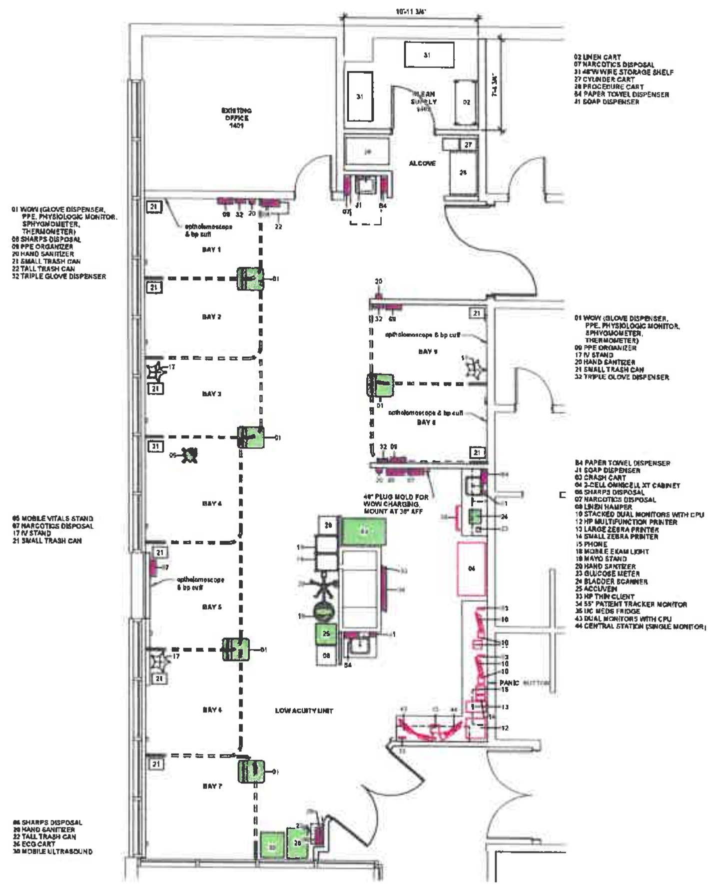
No.	Date	Description

ENLARGED MOBILE UNIT PLAN

A502.2

46230.08
03/28/23

FOR REFERENCE ONLY.
REFER TO OWNER'S EQUIPMENT MANUAL FOR PRODUCT INFORMATION.
CONTRACTOR SHALL REFER TO THE FINAL VENDOR SHOP DRAWINGS, PROVIDED BY THE OWNER, TO ENSURE PROPER INSTALLATION.



1 LOW ACUITY UNIT - EQUIPMENT PLAN
1/4" = 1'-0"

Equipment Legend

- MOBILE EQUIPMENT
- MOBILE EQUIPMENT WITH POWER REQUIREMENTS
- WALL MOUNTED ACCESSORIES/ EQUIPMENT
- STATIONARY EQUIPMENT WITH POWER REQUIREMENTS
- STATIONARY EQUIPMENT

OWNER FURNISHED EQUIPMENT LEGEND - LOW ACUITY

Mark	Type
01	WOW (GLOVE DISPENSER, PPE, [illegible] MONITOR, SPHYGMOMETER, THERMOMETER)
02	NEW LINEN CART
03	TRASH CART [illegible]
04	[illegible] CELL OMNICELL XT CABINET
05	M4118 - Monitor [illegible]
06	WALL MOUNTED SHARPS DISPOSAL
07	WALL MOUNTED NARCOTICS DISPOSAL
08	LINEN HAMPER
09	PPE ORGANIZER
10	24" STACKED MONITORS AND CPU
12	Hp M1 [illegible] Multifunction Printer
13	LARGE ZEBRA PRINTER
14	SMALL ZEBRA PRINTER
15	PHONE
16	[illegible] CABINET
17	IV STAND
18	PORTABLE EXAM LIGHT
19	MAYO STAND
20	HAND SANITIZER
21	TRASH CAN, SMALL
22	TRASH CAN, TALL
23	GLUCOSE METER
24	BLADDER SCANNER
25	ACCUVEIN
26	ECG CART
27	CYLINDER CART
28	PROCEDURE CART
29	OTO [illegible] OMOSCOPE SET STAND
30	Sonosite [illegible] Ultrasound
31	48"W WIRE SHELVING
32	GLOVE BOX 3 SPACE
33	HP Thin CLIENT
34	55" PATIENT TRACKER BOARD
35	Medical Grade Refrigerator [illegible]
36	MOBILE SUPPLY CART
37	1-CELL OMNICELL XT CABINET
38	PHYSIOLOGICAL MONITOR
39	[illegible] OPTHALOMOSCOPE, SPHYG, THERMOMETER
40	STOOL
41	[illegible] Wall Mounted Computer
42	NURSE CALL DESKTOP UNIT
43	DUAL MONITORS WITH CPU
44	CENTRAL STATION (SINGLE MONITOR)
45	24" X 24" CART FOR LINEN
84	PAPER TOWEL DISPENSER
41	SOAP DISPENSER

Gresham Smith
GreshamSmith.com
3595 Grandview Parkway
Suite 300
Birmingham, AL 35243
205.298.9200

Consultant Space

UAB MEDICINE

UAB ED INTERIM SOLUTIONS
ED WAITING TO LOW ACUITY PATIENT TREATMENT AREA
UNIVERSITY OF ALABAMA HOSPITAL NORTH PAVILION
1802 6TH AVE S, BIRMINGHAM, AL 35233
UAB Project No.: H225027
ADPH Project Submission No.:

NOT FOR CONSTRUCTION

Revision

No.	Date	Description

FIRST FLOOR PART A - EQUIPMENT PLAN

Q201.1

46230.01
03/17/23

EXHIBIT N

Charge Description Master - Emergency Room
University of Alabama Hopsital
As of February 16, 2023

CDM CODE	DESCRIPTION	DEPT	DEPARTMENT DESCRIPTION	PRICE
25800056	DRESSING FOAM MEPILEX BORDER SACRUM	3258	EMERGENCY DEPARTMENT	$ 24.00
25800113	THERAPEUTIC/PROPH/DIAG INJ SQ/IM	3258	EMERGENCY DEPARTMENT	$ 354.00
25800116	INJECTION IV PUSH	3258	EMERGENCY DEPARTMENT	$ 499.00
25800122	IV INFS HYDRAT INIT 31-60	3258	EMERGENCY DEPARTMENT	$ 719.00
25800222	IV INJECTION BEBTELOVIMAB	3258	EMERGENCY DEPARTMENT	$ 1,711.00
25800243	IV INFUSION/SQ INJ CASIRVIMAB/IMDEVIMAB	3258	EMERGENCY DEPARTMENT	$ 1,005.00
25800244	IV INFUS/SQ INJ CASIRIV/IMAB/IMDEVIMAB	3258	EMERGENCY DEPARTMENT	$ 1,623.00
25800615	ADMIN IM SARSCOV2 VACC 30MCG 1ST DOSE	3258	EMERGENCY DEPARTMENT	$ 49.00
25800616	ADMIN IM SARSCOV2 VACC 30MCG 2ND DOSE	3258	EMERGENCY DEPARTMENT	$ 77.00
25800619	ADMIN IM SARSCOV2 VACC 30MCG 3RD DOSE	3258	EMERGENCY DEPARTMENT	$ 77.00
25800621	US BUTTOCK	3258	EMERGENCY DEPARTMENT	$ 1,211.00
25800624	ADMIN IM SARSCOV2 VACC 30MCG BOOSTER	3258	EMERGENCY DEPARTMENT	$ 77.00
25800625	ABDOMINAL BINDER	3258	EMERGENCY DEPARTMENT	$ 20.00
25800626	SURGICEL	3258	EMERGENCY DEPARTMENT	$ 164.00
25800628	ADM SARSCV2 30MCG TRS-SUCR 1ST DOSE	3258	EMERGENCY DEPARTMENT	$ 49.00
25800629	ADM SARSCV2 30MCG TRS-SUCR 2ND DOSE	3258	EMERGENCY DEPARTMENT	$ 49.00
25800630	ADM SARSCV2 30MCG TRS-SUCR 3RD DOSE	3258	EMERGENCY DEPARTMENT	$ 49.00
25800631	ADM SARSCV2 30MCG TRS-SUCR BOOSTER	3258	EMERGENCY DEPARTMENT	$ 49.00
25800776	INJ IV PUSH SEQ SAME DRUG	3258	EMERGENCY DEPARTMENT	$ 354.00
25802065	INJECT IV PUSH SEQ NEW DRUG	3258	EMERGENCY DEPARTMENT	$ 368.00
25806642	US BREAST UNILATERAL LIMITED W/DOC	3258	EMERGENCY DEPARTMENT	$ 929.00
25810004	ER LEVEL 1 VISIT BRIEF W/MODIFIER	3258	EMERGENCY DEPARTMENT	$ 536.00
25810005	ER LEVEL 2 VISIT LIMITED W/MODIFIER	3258	EMERGENCY DEPARTMENT	$ 618.00
25810006	ER LEVEL 3 VISIT INTERMEDIATE W/MODIFIER	3258	EMERGENCY DEPARTMENT	$ 1,092.00
25810007	ER LEVEL 4 VISIT EXTENDED W/MOD	3258	EMERGENCY DEPARTMENT	$ 1,694.00
25810008	ER LEVEL 5 VISIT COMPREHENSIVE W/PROC	3258	EMERGENCY DEPARTMENT	$ 2,622.00
25810111	VENIPUNCTURE	3258	EMERGENCY DEPARTMENT	$ 42.00
25810113	THERAPEUTIC/PROPH/DIAG INJ SQ/IM	3258	EMERGENCY DEPARTMENT	$ 354.00
25810115	IMMUN ADMIN 1 VACC PERC/IM/SUB-Q/ID	3258	EMERGENCY DEPARTMENT	$ 189.00
25810116	INJECTION IV PUSH	3258	EMERGENCY DEPARTMENT	$ 499.00
25810119	PULSE OXIMETRY MULTIPLE	3258	EMERGENCY DEPARTMENT	$ 323.00
25810120	FOLEY CATH INSERT SIMPLE	3258	EMERGENCY DEPARTMENT	$ 359.00
25810122	IV INFS HYDRAT INIT 31-60 MIN	3258	EMERGENCY DEPARTMENT	$ 719.00
25810123	IV HYDRAT EA ADDL HR	3258	EMERGENCY DEPARTMENT	$ 344.00
25810124	IV INFUSION ADD'L SEQUENT 1 HR	3258	EMERGENCY DEPARTMENT	$ 439.00
25810125	IV INFUSION CONCURRENT	3258	EMERGENCY DEPARTMENT	$ 459.00
25810126	PROCEDURE LEVEL I	3258	EMERGENCY DEPARTMENT	$ 959.00
25810127	PROCEDURE LEVEL II	3258	EMERGENCY DEPARTMENT	$ 1,439.00
25810128	PROCEDURE LEVEL III	3258	EMERGENCY DEPARTMENT	$ 2,276.00
25810129	PROCEDURE LEVEL IV	3258	EMERGENCY DEPARTMENT	$ 3,117.00
25810130	PROCEDURE LEVEL V	3258	EMERGENCY DEPARTMENT	$ 4,076.00
25810131	PROCEDURE LEVEL VI	3258	EMERGENCY DEPARTMENT	$ 6,472.00
25810132	PROCEDURE PRICE OVERRIDE	3258	EMERGENCY DEPARTMENT	$ 0.01
25810776	INJ IV PUSH SEQ SAME DRUG	3258	EMERGENCY DEPARTMENT	$ 354.00
25811960	Z*PAD DEFIBRILLATOR LIFEPAK ADULT	3258	EMERGENCY DEPARTMENT	$ 103.00
25812065	INJ IV PUSH SEQ NEW DRUG	3258	EMERGENCY DEPARTMENT	$ 368.00
25816020	DRESS/DEBRIDE BURN <5% INIT OR SQ SM	3258	EMERGENCY DEPARTMENT	$ 518.00
25816025	DRESS/DEBRIDE BURN 5-10% TOTAL MEDIUM	3258	EMERGENCY DEPARTMENT	$ 709.00
25816815	US OB PREGNANCY LIMITED	3258	EMERGENCY DEPARTMENT	$ 864.00

25816942	US GUIDED NEEDLE PLACEMENT S&I	3258	EMERGENCY DEPARTMENT	$ 1,748.00
25820004	ER LEVEL 1 VISIT BRIEF	3258	EMERGENCY DEPARTMENT	$ 536.00
25820005	ER LEVEL 2 VISIT LIMITED	3258	EMERGENCY DEPARTMENT	$ 618.00
25820006	ER LEVEL 3 VISIT INTERMEDIATE	3258	EMERGENCY DEPARTMENT	$ 1,092.00
25820007	ER LEVEL 4 VISIT EXTENDED	3258	EMERGENCY DEPARTMENT	$ 1,694.00
25820008	ER LEVEL 5 VISIT COMPREHENSIVE	3258	EMERGENCY DEPARTMENT	$ 2,622.00
25820020	ER LEVEL 6 VISIT CRITICAL CARE 30-74 MIN	3258	EMERGENCY DEPARTMENT	$ 3,482.00
25820022	ER LEVEL 6 VISIT CRITICAL CARE W/MOD	3258	EMERGENCY DEPARTMENT	$ 3,482.00
25820035	EKG ROUTINE TRACING ONLY	3258	EMERGENCY DEPARTMENT	$ 361.00
25820045	NG TUBE WITH LAVAGE	3258	EMERGENCY DEPARTMENT	$ 800.00
25828750	DRESSING MEPILEX 8X20	3258	EMERGENCY DEPARTMENT	$ 234.00
25830015	ADHESIVE TISSUE HISTOACRYL (DERMABOND)	3258	EMERGENCY DEPARTMENT	$ 87.00
25830017	Z*KIT ARTERIAL LINE	3258	EMERGENCY DEPARTMENT	$ 57.00
25830018	ARTERIAL PUNCTURE DIAGNOSTIC	3258	EMERGENCY DEPARTMENT	$ 214.00
25830019	Z*BLOOD WARMER RAPID INFUSIO	3258	EMERGENCY DEPARTMENT	$ 146.00
25830023	CAST SHOE	3258	EMERGENCY DEPARTMENT	$ 142.00
25830027	CATHETER/COUDE SUPPLY	3258	EMERGENCY DEPARTMENT	$ 53.00
25830028	CATHETER/FOLEY SUPPLY	3258	EMERGENCY DEPARTMENT	$ 42.00
25830035	SPLINT ANKLE PNEUMATIC AIRCAST	3258	EMERGENCY DEPARTMENT	$ 80.00
25830037	CERVICAL COLLAR PHILADELPHIA	3258	EMERGENCY DEPARTMENT	$ 237.00
25830041	SPLINT WRIST EXT COCK-UP PREFAB	3258	EMERGENCY DEPARTMENT	$ 31.00
25830042	ER CRITICAL CARE ADDL30 MIN	3258	EMERGENCY DEPARTMENT	$ 1,218.00
25830218	KNEE IMMOBILIZER	3258	EMERGENCY DEPARTMENT	$ 287.00
25830223	SHLDR IMMOBILIZER SLING/SWATH	3258	EMERGENCY DEPARTMENT	$ 211.00
25830228	AUTOTRANSFUSION KIT	3258	EMERGENCY DEPARTMENT	$ 343.00
25830326	CENTRAL VENOUS LINE KIT	3258	EMERGENCY DEPARTMENT	$ 269.00
25836430	TRANSFUSION BLOOD/BLOOD COMPONENTS	3258	EMERGENCY DEPARTMENT	$ 1,262.00
25839569	DRESSING MEPILEX 6X8	3258	EMERGENCY DEPARTMENT	$ 105.00
25840015	CATHETER/STRAIGHT SUPPLY	3258	EMERGENCY DEPARTMENT	$ 42.00
25840202	CATH FOLEY BARDEX SILICONE TRAY 16F 5CC	3258	EMERGENCY DEPARTMENT	$ 469.00
25840207	SUPPLY-CHEST TRAY	3258	EMERGENCY DEPARTMENT	$ 1,633.00
25840210	STIENMAN PIN TRAY	3258	EMERGENCY DEPARTMENT	$ 730.00
25846014	NASAL PACKING	3258	EMERGENCY DEPARTMENT	$ 417.00
25846015	DRESSING PACKING SINUS MEROCEL	3258	EMERGENCY DEPARTMENT	$ 105.00
25846017	MORGAN LENS IRRIGATION SUPPLY	3258	EMERGENCY DEPARTMENT	$ 496.00
25846031	SUPPLY-LUMBAR PUNCTURE	3258	EMERGENCY DEPARTMENT	$ 1,026.00
25846034	Z*PELVIC EXAM SUPPLIES	3258	EMERGENCY DEPARTMENT	$ 150.00
25846037	SUPPLY-PERICARDIOCENTESIS	3258	EMERGENCY DEPARTMENT	$ 2,809.00
25846038	SUPPLY-PERITONEAL	3258	EMERGENCY DEPARTMENT	$ 822.00
25846041	SUPPLY-THORACENTESIS	3258	EMERGENCY DEPARTMENT	$ 768.00
25846043	TRACHEOSTOMY TRAY	3258	EMERGENCY DEPARTMENT	$ 1,109.00
25846049	SUPPLY-THORACOTOMY	3258	EMERGENCY DEPARTMENT	$ 272.00
25846051	PAD GEL ARCTIC SUN MED/LG	3258	EMERGENCY DEPARTMENT	$ 3,494.00
25846052	SUTURE	3258	EMERGENCY DEPARTMENT	$ 38.00
25846100	IV MED INITIAL HR 1ST SITE	3258	EMERGENCY DEPARTMENT	$ 726.00
25846101	IV MED EA ADD'L HR	3258	EMERGENCY DEPARTMENT	$ 385.00
25846106	IV MED INITIAL HR 2ND SITE	3258	EMERGENCY DEPARTMENT	$ 726.00
25846108	IV MED INITIAL HR 1ST SITE	3258	EMERGENCY DEPARTMENT	$ 726.00
25846705	ECHO ABDOMEN LTD	3258	EMERGENCY DEPARTMENT	$ 600.00
25851705	CHANGE TUBE CYSTOSTOMY SIMPLE	3258	EMERGENCY DEPARTMENT	$ 941.00
25851710	CHANGE TUBE CYSTOSTOMY COMPLICATED	3258	EMERGENCY DEPARTMENT	$ 2,817.00
25869209	CERUMEN REMOVAL BY IRRIGATION	3258	EMERGENCY DEPARTMENT	$ 839.00
25870373	TRAUMA ACTIVATION	3258	EMERGENCY DEPARTMENT	$ 19,010.00
25870374	TRAUMA ACTIVATION W/CRITICAL CARE	3258	EMERGENCY DEPARTMENT	$ 19,010.00
25872023	DRSG ABSORB WOUND EXU-DRY LEG	3258	EMERGENCY DEPARTMENT	$ 60.00
25876511	US EYE QUANTITIVE A-SCAN	3258	EMERGENCY DEPARTMENT	$ 675.00

25876512	US EYE B-SCAN	3258	EMERGENCY DEPARTMENT	$ 658.00
25876536	US SOFT TISSUE HEAD/NECK	3258	EMERGENCY DEPARTMENT	$ 1,171.00
25876640	US CHEST	3258	EMERGENCY DEPARTMENT	$ 877.00
25876775	US RETROPERITIONEAL LIMITED	3258	EMERGENCY DEPARTMENT	$ 728.00
25876882	US EXTREMITY NON VASCULAR LIMITED	3258	EMERGENCY DEPARTMENT	$ 1,228.00
25876937	US GUIDED VASCULAR ACCESS	3258	EMERGENCY DEPARTMENT	$ 1,427.00
25884864	Z*KIT BURN PAD W/TOWELS DISP	3258	EMERGENCY DEPARTMENT	$ 158.00
25890225	POD/PELVIC ORTHO DEVICE	3258	EMERGENCY DEPARTMENT	$ 576.00
25890226	BLADDER IRRIGATION(NURSE)	3258	EMERGENCY DEPARTMENT	$ 817.00
25890227	FOLEY CATH INSERT COMPLEX	3258	EMERGENCY DEPARTMENT	$ 666.00
25890228	NEBULIZER TREATMENT INITIAL	3258	EMERGENCY DEPARTMENT	$ 258.00
25890230	OCCULT BLD FECE QL OTHER SGL	3258	EMERGENCY DEPARTMENT	$ 75.00
25890231	OCCULT BLOOD QL OTHER SOURCES	3258	EMERGENCY DEPARTMENT	$ 101.00
25890236	L & D PACK	3258	EMERGENCY DEPARTMENT	$ 297.00
25890245	SEPSIS CATHETER KIT	3258	EMERGENCY DEPARTMENT	$ 367.00
25890246	CATHETER INSERTION STRAIGHT	3258	EMERGENCY DEPARTMENT	$ 180.00
25890248	CRICO TRAY	3258	EMERGENCY DEPARTMENT	$ 680.00
25890472	IMMUN ADMIN EA ADD VACC PERC/IM/SUB-Q/ID	3258	EMERGENCY DEPARTMENT	$ 132.00
25891026	CATH BALLOON OCCLUSION ER-REBOA	3258	EMERGENCY DEPARTMENT	$ 4,242.00
25891027	CATH CONVENIENCE KIT ER-REBOA	3258	EMERGENCY DEPARTMENT	$ 389.00
25891300	SARSCOV2 VACC DIL RECON 30MCG 0.3ML IM	3258	EMERGENCY DEPARTMENT	$ 0.01
25891305	VAC SARSCOV2 30MCG TRS-SUCR	3258	EMERGENCY DEPARTMENT	$ 0.01
25893308	ECHO 2D W/ OR W/O M-MODE LIMITED	3258	EMERGENCY DEPARTMENT	$ 1,411.00
25899401	PREVENTIVE MED COUNSELING 15 MIN	3258	EMERGENCY DEPARTMENT	$ 245.00