

FORVIS

Audrain County // Market Assessment and Needs Study September 2023

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Process



This independent study is intended to provide a healthcare market assessment and needs analysis of the Audrain County market and is not designed to evaluate or validate any previously conducted or existing analysis, study, or plans.

Service Area / Demographics

Service Area	Population CY	Population 5-Yr	5-Yr Net Growth	5-Yr % Net Growth	CAGR	Median Age CY	Med HH Inc. CY	% Families < Poverty CY
Grand Total	40,185	40,210	25	0.1%	0.0%	42	\$57,774	10.5%

Acute Care Hospitals:

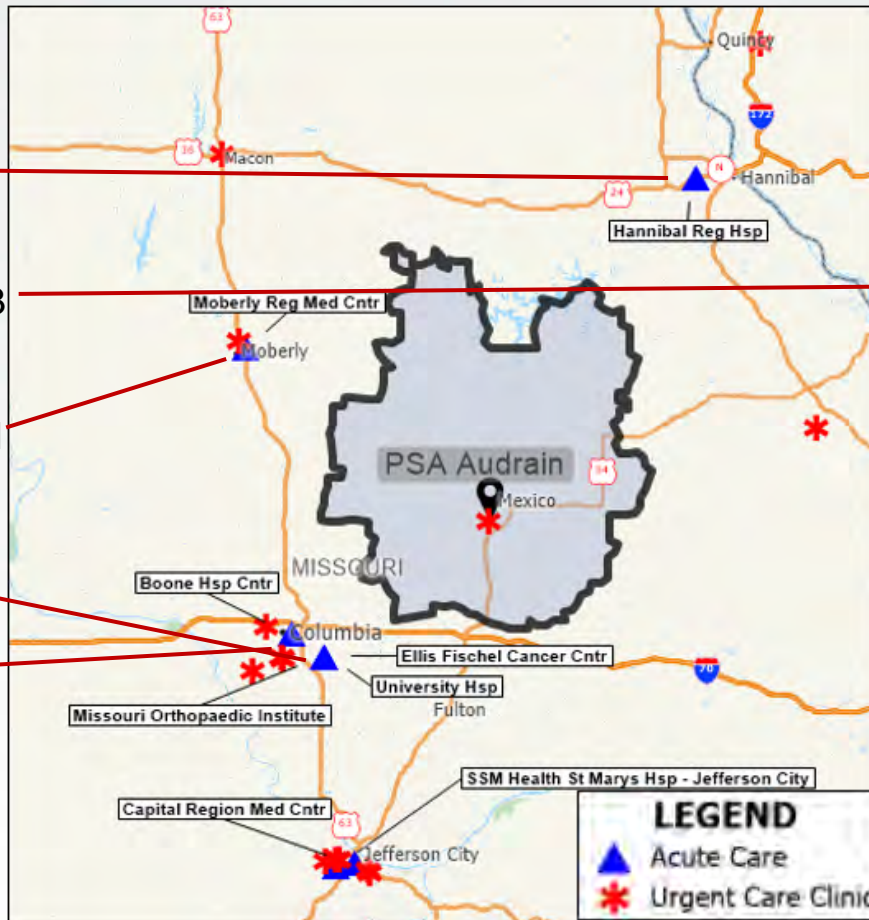
Hannibal Regional Hospital (~56 Miles)

Pike County Hospital (~53 Miles)(off map)

Moberly Regional Medical Center (~39 miles).

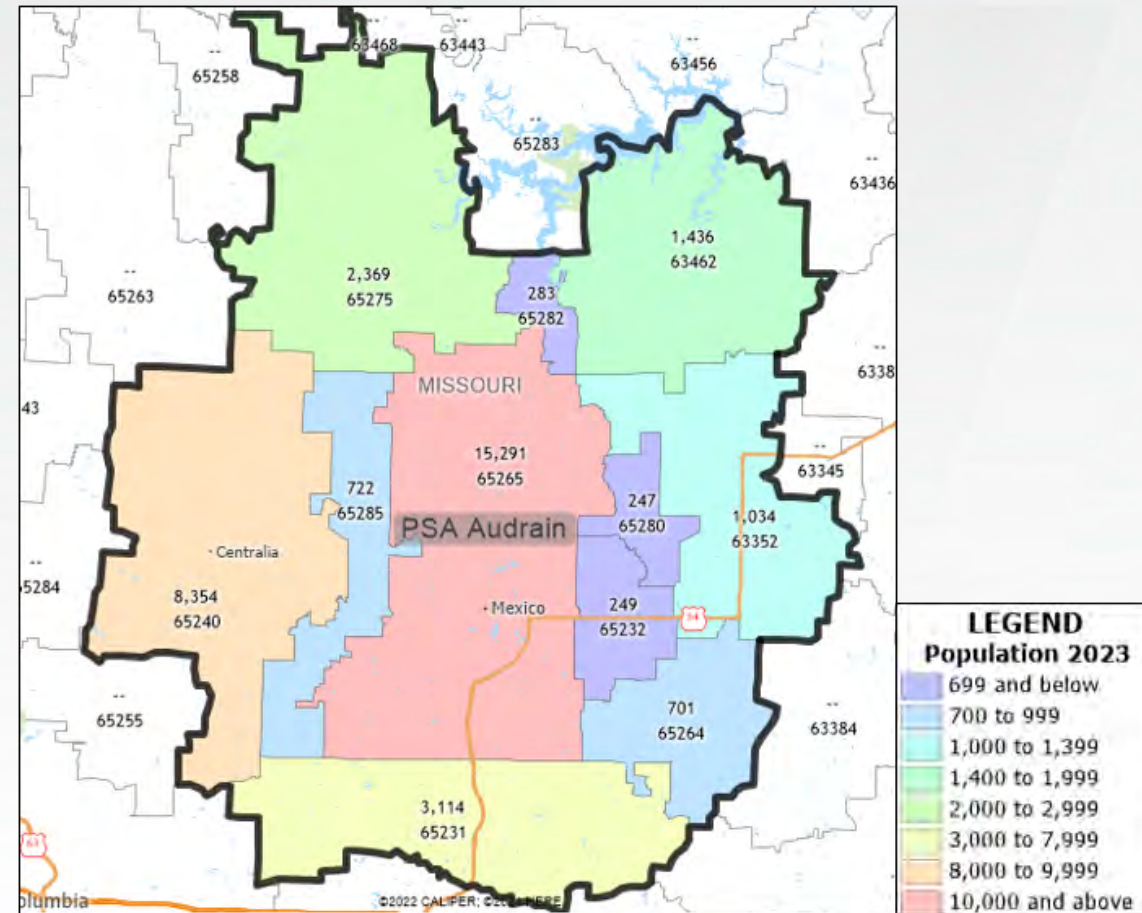
MU Health (~39 Miles)

Boone Health (~36 Miles)



Source: Claritas 2023

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Key Findings

- Current Service Area population is 40,185, and the 2028 population is projected to be 40,210. With a flat population projection, we are able to forecast, with a high level of confidence, estimated needed services.
- Based on 2021 state data provided by DHSS we estimated Boone County (comprised of Missouri University and Boone Health Hospitals) sees roughly 67% of the inpatient visits and approximately 48% of the Emergency visits of patients from Audrain County.
- Based on the community survey of (534 respondents) the following key statistics speak to the desire to have Emergency and Acute Care services in the community and operated by a known entity.
 - The perceived need for emergency services = 4.89 out of 5
 - The perceived need for inpatient beds = 4.43 out of 5
 - The likelihood of supporting a known hospital operator = 4.69
 - The likelihood of supporting an unknown hospital operator = 2.97
- University of Missouri (MU Health) and Boone Hospital (BH) have made investments in Mexico, MO.
 - MU Health opened an Urgent Care with 7 days a week coverage and operates a primary care clinic in Mexico, MO.
 - BH operates an Internal Medicine practice, Family Medicine Clinic, and laboratory services in Mexico, MO.
- Initial provider needs assumptions and observations show gaps in primary care, internal medicine, urology, women's, and behavioral health.

ED Analysis // Treatment Rooms

Scenario Modeling

Facility Sizing Element	Current State (YE 2019 Q4)	Estimated 2028	III: Est "Right Sizing"
Audrain Hospital ED Visits	11,257	11,257	11,257
Audrain Hospital ED Visits with IP Admits	953	953	953
In-Migration	225	225	225
Total Visits	12,435	12,435	12,435
Treatment Rooms	8	8	8
Patient Visits / Rm / Yr.	1,554	1,554	1,554

Additional considerations included:

- Urgent Care utilization in the market, as well as other low-acuity points of access
- MU Health and Boone Health investments in the market including Primary and Specialty care alignment.
- Patient migration habits and trends
- Like-sized communities with Free Standing Emergency Departments or Critical Access Hospitals
- Drive times for access to care

Audrain County // Bed Need Analysis

	%	Mexico, MO Primary Service Area (PSA)									In-Migration^^	Total Acute Bed Need	
		PSA Population	PSA Acute Use Rate	ALOS Acute per Admit	Acute Care PSA Days of Care	Average Daily Census	Estimated Occupancy Rate Acute	PSA Bed Need	Estimated Acute Mkt.	PSA Acute Bed Need	to Audrain 2.0%		M/S Bed Need
		<u>Change</u>	<u>Estimate</u>	<u>per 1000</u>	<u>Admit</u>	<u>of Care</u>	<u>Census</u>	<u>Rate Acute</u>	<u>Need</u>		<u>Bed Need</u>		<u>M/S Bed Need</u>

Data FYE 2019 Q4		40,185	79.1	4.98	15,829	43	72.3%	60	50.0%	30	1	31
National Avg. Assumption		40,185	80.0	4.50	14,467	40	65.0%	61	25.0%	15	0	16

FORVIS also looked at multiple scenarios considering increased/decreased: ALOS, Occupancy rate, Market share, In-Migration, Use Rate and Population and created a reasonable estimate scenario based on recommended assumptions.

Reasonable Est. Scenario		40,185	80.0	3.50	11,252	31	65.0%	47	36.0%	17	0	17
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FORVIS created a reasonable Est. Scenario that considered all above factors and projected an estimated need of 16-18 Inpatient beds based on a projected estimated 36% Market Share capture.

Recommendations

- ED services are an immediate need in Mexico and Audrain County. Est. need of 8 treatment rooms.
- FORVIS identified a need for approximately 16-18 IP beds (Est. 36% MS).
- The longer the Mexico community goes without a hospital, the more likely the provider alignment within the community becomes an issue with outmigration.
- Boone Hospital and Missouri University have made significant investments in the market's primary care and urgent care spaces. However, the addition of ED and IP beds would not be duplicative to those investments.
- Purchase, renovation and reopening current facility as a 17 inpatient bed acute care hospital estimated to cost approximately \$24.7 million.
- Constructing a new 17 inpatient bed acute care hospital estimated to cost approximately \$53 million.
- Converting or constructing a new Hospital to a critical access hospital (“CAH”) Medicare designation allows for cost-based reimbursement for Medicare (less 2% sequestration) and capital improvement costs included in allowable costs for determining Medicare reimbursement.

Key Assumptions – Renovation

Hospital with Full-Service Emergency Department

- 17 Total IP Beds
- Excludes OB Services
- 2-3 Operating Rooms
- 3-4 Observation Rooms
- 8-9 Pre/Post Op Beds
- Imaging requirements (Xray, Ultrasound)
- Lab Capabilities

Additional Key Assumptions

- Total Project Cost \$24,700,000
 - Hard cost and soft cost of Hospital \$6,500,000
 - Working capital \$17,500,000
 - Debt payments \$700,000
- Utilization in Stable Year 48%
- Payor Mix: Commercial 25.4%, Medicare 50.6%, Medicaid 17.3%, and 7% Other
- Operating Income and EBITDA Both Positive at Year 5
- Reimbursement rates increase 2% YOY
- Volumes increase 1% YOY
- Expenses increase 3% YOY

Key Assumptions – Greenfield

Hospital with Full-Service Emergency Department

- 17 Total IP Beds
 - Excludes OB Services
 - 2-3 Operating Rooms
 - 3-4 Observation Rooms
 - 8-9 Pre/Post Op Beds
 - Imaging requirements (Xray, Ultrasound)
 - Lab Capabilities
 - 40,000 sq. ft.

Additional Key Assumptions

- Total Project Cost \$53,000,000
 - Hard cost and soft cost of Hospital \$34,000,000 (includes approx. \$7,000,000 for equipment)
 - Working capital \$17,500,000
 - Debt payments \$1,500,000
- Utilization in Stable Year 48%
- Payor Mix: Commercial 25.4%, Medicare 50.6%, Medicaid 17.3%, and 7% Other
- Operating Income and EBITDA Both Positive at Year 5
- Reimbursement rates increase 2% YOY
- Volumes increase 1% YOY
- Expenses increase 3% YOY

Thank You

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