Bourbon County Hospital Feasibility Assessment

Final Report **17 May 2022**

Prepared For
Bourbon County Kansas

By
Noble Health Corporation
Access Medical

CONTENTS

1 CONCLUSIONS AND RECOMMENDATIONS

1.1 Topline View

Small rural hospitals are often the sole provider of acute care medical services in their community. As such, they're expected to deliver traditional hospital services such as emergency and inpatient care, diagnostic imaging, and laboratory testing. In many communities, acute-care hospitals are also expected to provide physical and cardiac rehabilitation, long-term post-acute care, women's health, in-home care, psychiatric care for the elderly and the memory impaired, and as well, primary care for both adults and children. The breadth of services required of rural hospitals is often beyond the financial means of the facility to provide. But why?

Why Do Rural Hospitals Struggle For Financial Viability?

Primarily, rural hospitals struggle with two major issues:

1. The proportion of government insured patients in rural communities is generally greater than in urban settings. This is due to generally lower household incomes (more people on Medicaid), out-migration of healthier, young adults who find greater job and career opportunities in urban centers as well as the disproportionate population of boomers unwilling or unable to relocate to urban centers who are now on Medicare.
2. Reimbursements from government payers for services rendered by hospitals are usually much lower than reimbursements from commercial insurances. Commercial insurers will generally reimburse at 150 to 200 percent of the Medicare allowed reimbursement. Medicaid reimbursements are often equal to or, in some cases, less than what is paid by Medicare.

Is There A Solution? If So, What Is It?

While the government experiments with various payment methodologies, the existing (and antiquated) fee-for-service model still dominates the rural hospital landscape. The exception to that are rural hospitals designated as "Critical Access Hospitals." A CAH bills Medicare not for the service it renders, as in the fee-for-service model, but for the "reasonable" cost of delivering that service. On the surface this seems like a sound approach to sustaining care in rural facilities. However, the problem with this "cost-plus" method is that the margin on it is 1 percent. Services provided to commercially insured patients is still paid as fee-for-service. Running any business in a sustainable form on 1 percent margins would be challenging at best.

(Number of Critical Access Hospitals per 100,000 people)

1. South Dakota — 6.6
2. North Dakota — 5.9
3. Montana — 5.5
4. Nebraska — 4.7
5. **Kansas — 4.5**
6. Wyoming — 4.2
7. Iowa — 3.9
8. Mississippi — 3.3

While Kansas can boast about the coverage its large number critical access hospital affords the communities they serve, the quality of care in Kansas has experienced a significant decline for more than a generation. If the community perceives their local hospital is providing sub-standard care, those who are commercially insured will seek care outside of the area or wherever the level of quality meets their expectations. In the southeast Kansas region, 50% of residents in communities with hospitals choose larger hospitals instead of the local hospital for inpatient care and 40% of outpatient care is delivered outside of the local community. Without a minimum level of patient encounters, hospital costs to deliver even a modest level of care exceed the revenues generated. Every hospital in the southeast Kansas region is run at an operating loss. Every hospital. Each year. Every year.

Of all the states in the US, over the past 30 years, Kansas has seen the greatest decline in its health rankings.

- (America's Health Rankings, December 6, 2019)

What Can Be Done Now

This analysis describes available solutions to mitigate the financial struggle of rural hospitals in Kansas now. It starts with a synergistic relationship between the hospital and constituents in the community, i.e. government, commercial businesses, and local citizens. Working together, communities can assume an essential role in supporting their local hospital through favorable tax treatment and financial support. Non-government leaders, who are often the largest employers in the community, can, through direct contracting with the hospital, achieve both price transparency and cost-containment for their employee health benefits plan and help the hospital keep patients local by offering the services these employers and their workforce deem most essential to them. Of course, these services must be high-quality and affordable.

What Gets Done Eventually

In time, government insurance will need to collaborate with their commercial counterparts to determine the most optimal way to maintain local hospital care. If health outcomes are negatively impacted by the absence of local acute-care, insurers are going to have to provide a base-level of funding to keep the essential service lines available and functioning. That funding should be offset by the reduced spending on more complicated conditions that occur when people delay or avoid seeking appropriate care. Improving health outcomes in rural communities is in everyone's interest.

Another option receiving consideration is the use of cost-basis payments like those received by Critical Access Hospitals. For instance, if running and appropriately staffing an emergency room service costs $1.5 million annually, the insurances will have to provide a large portion of that annual spend regardless of the number of patients seen. Expected costs can be covered entirely or in part, leaving room for performance-based improvements that either reduce cost or improve outcomes. For example, if the local community requires heart attacks and stroke services, insurers pick up the cost to provide those services locally. Having those services available should reduce the occurrence of life-long physical debilitation often associated with severe stroke or the untimely congestive heart failure (or death) that often accompanies a heart attack.

Another scenario is where insurers pay rural hospitals an annual amount per resident in the hospital's service area. Rural hospitals might be provided a fixed annual amount based on the number of citizens in the county or communities it serves. One could imagine the variety of services a local community requires and what the average annual spend is for these services. If insurances would fund those annual amounts, local citizens would have the local care they need and insurers can stop paying for patient transfers or poorer outcomes due to lack of the required local service.

The Kansas Hospital Association (KHA) and Center for Healthcare Quality and Payment Reform (CHQPR) have worked over the past decade to determine the causes for hospital financial distress and proposed new payment models for rural hospital sustainability. This work informed recent federal legislation that intended to enable more sustainable operations for rural hospitals. In January 2023, this legislation for a new operating model for rural hospitals, the Rural Emergency Hospital (REH), becomes law. The law is currently in its comment and revision phase. As of now, it is unclear whether the hospital in Bourbon County would qualify for Rural Emergency Hospital status. More detailed explanation of these alternatives are in Chapter 14 of this feasibility report.

Bourbon County Community Hospital Summary to Success with Local Businesses[1]

In assessing the healthcare needs in Bourbon County and Fort Scott and the viability of reopening the hospital, a substantial amount of effort has gone into direct meetings with companies and business owners in the region. These meetings were to surface what service lines locally are required for them to consider keeping healthcare close to home for their employees.

Much of the migration of healthcare service and the related dollars for that service is coming from these employers. The result is a higher cost for providing healthcare and a greater impact of loss productivity with their employees leaving the region for that service.
Some employers even provide transportation for their employees to travel to the Kansas City metro region for their healthcare causing a deeper financial burden to those companies.

The largest 50 companies in Bourbon County excluding two healthcare entities represent 3,291 employees. Population for the county in 2020 was 14,360 showing the significance of this impact to the county even before factoring in the family dynamic that most employees represent.

1 https://www.ruralhealthinfo.org/topics/community-vitality-and-rural-healthcare#impact

The needs of the business community are similar to the rest of the region. Currently underserved with the number of family practice physician's and pediatrics, other needs include lab testing, specialty service lines and orthopedics which are presently unavailable in the county.

Especially in a rural market keeping healthcare dollars close to home only happens if many of those services needed can be provided locally. Meeting those healthcare needs of the business community with competitive pricing is critical for the hospital. If a business can actually forecast with some certainty what the cost could be is significant. Creating direct contracting pricing between the business and healthcare facility helps those businesses budget with a better vision of that cost if a greater range of those services can be provided.

Creating a contractual relationship with the majority of the largest employers in the county is a critical component in the reopening the hospital. Not having that type of local business support will have a direct impact on the viability of the proposed hospital.

The business community understands the value to them and their employees and have been initially receptive to looking into what a contractual rate would mean to them as well as quality healthcare for their employees. This will be a key piece moving forward.

A strategic action item to ensure care close to home will be brought to businesses in the region and their employees is to create a business or Corporate Advisory Council. This is something separate from the hospital board or foundation. This would be a committee made of up large and small businesses in the region. The purpose is to have substantive ongoing communication with the hospital ensuring their concerns are met with regards to quality healthcare, service lines, and direct ongoing input with the hospital on their employee needs. From the six months of meeting with numerous business owners, leaders, managers and staff, communication and input are critical points they felt they have not had and want.

This type of collaboration and communication goes hand in hand with creating a contractual relationship with companies with competitive rates that can prove to be a financial benefit to those companies while providing quality healthcare close to home.

Besides providing quality healthcare additional benefits are realized for the community. The strongest two selling points for any Chamber of Commerce in enticing businesses to relocate or existing businesses to expand are quality education and healthcare. The quality of these two selling points for a community has a strong multiplier in increasing your workforce and a draw to increase the regional workforce.

Community Vitality and Rural Healthcare

In rural communities, healthcare and the overall vitality of the community are intrinsically linked. A robust community supports and sustains quality health and social services for its residents by attracting and retaining well-trained and committed healthcare professionals. Communities with strong economies may be more likely to financially support their healthcare system through philanthropic giving and by investing in infrastructure that can be leveraged by the healthcare system. In return, a high-quality healthcare system can support economic and community development initiatives. Together, strong rural economies and rural healthcare systems can address the five domains of the Social Determinants of

Health: economic stability, education, health and healthcare access, the built environment, and social cohesion.

How can the availability of healthcare services be leveraged in economic and community development efforts?

Healthcare services are important to community and economic development not only in terms of the employment and labor income generated in the local economy, but also to attract and retain business and industry. As remote work and web-based employment become more popular and necessary during public health emergencies like the COVID-19 pandemic, access to healthcare is an important consideration for workers to continue to live in or relocate to rural areas.

Retirees are more likely to move to or stay in rural communities with quality healthcare facilities, and data have demonstrated that retirees can substantially impact the local economy. For example, the 2018 report Evaluating Retiree-Based Economic Development in Georgia: Golden Rules shows that bringing retirees into a community grows and diversifies the local economy, with 55 jobs generated for every 100 new retirees in rural Georgia.

Healthcare leadership should be involved in community and economic development to assure that the healthcare services needed for attracting and retaining businesses, industries, and retirees are provided locally. Rural hospitals can also play a role in the community by working with high schools and community colleges to develop the emerging workforce.

This article from RHI is just one article that highlights the importance of the business community supporting the local hospital and working in partnership with them to achieve the healthcare outcomes they desire for their employees. One of the main economic engines for the Bourbon County region will be a successful and strong community hospital.

1.2 The Core of the Problem

An ongoing lack of coordinated action leaves rural hospitals with a mission they can't accomplish sustainably.

1 Lack of Coordination

Little or no collaboration between hospitals to design and coordinate care. Each hospital seems to make decisions in isolation based on local needs and wants for care rather than make choices about what services should be delivered in each community and where certain services could be delivered more efficiently.

2 Lack of Community Mobilization

Despite task forces and well-articulated problems, few SEK communities have created and sustained effective programs that improve health in their communities.

3 Lack of Personal Responsibility For Health

SEK is the most unhealthy region in Kansas, which is ranked 29th nationally in population health. Individuals have and continue to make choices in diet, exercise, and wellness that contribute to chronic illness.

4 Lack Of New Thinking About Solutions To Long Standing Problems

The creation of an REH alternative is perhaps a significant solution to a decades old problem. While this systemic change may provide more financial sustainability to hospitals, the root of the problem in SEK and Bourbon County remains. An aging, unhealthy population compared to national norms that doesn't use their local hospitals enough and prefers to get care at larger hospitals for more acute treatment.

5 Continued Underinvestment

The state of Kansas ranks 40th in per capita spending on health. With an aging rural population and 36% of the state population in rural communities, continued underinvestment in health likely accelerates the population decline throughout the state.

6 No Long Term Plan To a Well Understood Problem

Hospitals and health systems in the state have not made sustained progress towards ensuring rural community hospitals remain viable wherever feasible. 76 of the 105 rural hospitals in Kansas are at risk of closure, with 46 in severe financial distress.

1.3 Summary of Key Findings

1 Outmigration data supports the need for acute care for Bourbon County residents. The challenge is to provide a level of services that are most needed by residents and build trust in the community to get this care locally rather than out-migrate to larger hospitals.

2 Every hospital in SEK runs an operating loss. The breadth of care that is considered necessary for a community costs more to deliver than hospitals receive in reimbursement. A 2X normal (10%) uncompensated care burden is typical for hospitals in the region and is equivalent to the operating loss at most SEK hospitals.

3 A demographic shift to older population is underway. The percent of 65+ people in Bourbon County and the SEK region is forecast to double in next 20 years – from 19 to 38%.

4 Sustainable economic models exist for thriving communities with a large retiree population. Bourbon County hospital and county health systems can be sustainable with a larger Medicare / Medicaid payer component, but only with hospital, payer and community collaboration.

5 Collaboration with multiple providers to maintain care that exists now in the community and build a sustainable model of care delivery for hospital primary care, specialty care, emergency care, limited acute care (including maternity emergencies), and mental health care is possible.

6 Revenue from operations not directly connected from the community is necessary for sustainable Bourbon County Hospital operations. A behavioral health capability that serves Kansans beyond Bourbon County is a likely solution. Other rural Kansas hospitals that have considered behavioral services were unable to secure the skilled personnel, particularly physicians, to enable sustained operations.

7 A sustainable Bourbon County Hospital would need to mitigate the substantial out-migration of services delivered to county residents in larger hospitals both south and north. The scope of care offered by Bourbon County Hospital would need to capture 75% market share for sustainability. Over $11M in healthcare net revenue is delivered outside the county each year.

8 Bourbon County Hospital sustainability depends Noble ability to attract and retain a workforce that supports our expected operating model. Noble needs to contract with physicians for primary care, specialty care, emergency care and acute care, employ nurses for each planned operation, and technicians, therapists and staff to deliver services and needed support for care.

9 The existing hospital can be retrofit, renovated and remodeled to support planned Bourbon County Hospital operations at a cost that fits within Noble expected capital structure.

10 Primary care access is a top priority for residents in Bourbon County and throughout the Southeast Kansas region.

11 Difficulty in accessing care contributes to the need for more acute care. For example, cardiac data indicates a lack of ongoing cardiac care for Bourbon County residents – both female and male.

12 Southeast Kansas is the least healthy region in Kansas, now 29th in health rankings after 30 years of decline. High rates of obesity, heart conditions, diabetes, and unintended injury.

13 Strong rural economies and rural healthcare systems can address the five domains of the Social Determinants of Health: economic stability, education, health and healthcare access, the built environment, and social cohesion.

14 Creating a contractual relationship with the majority of the largest employers in the county is a critical component in the reopening the hospital. Not having that type of local business support will have a direct impact on the viability of the proposed hospital.

15 Ambulance service currently operate at a deficit. CMS rules prevent usage of EMTs in the hospital when on standby for EMS. Other options to improve the efficiency of ambulance services may not be permissible under current CMS rules.

16 Regional collaboration of hospitals to coordinate and optimize services for the region to provide nearby services could improve services and lower costs for hospitals by reducing redundancies.

17 The hospital could contribute to a solution for child care in Bourbon County by allocating space in the hospital for daycare offered to hospital employees and the greater community. Other hospitals in Kansas have adopted models ranging from ownership to leasing space and providing a baseline usage with guaranteed payment.

18 Past history of hospital – outmigration for services – both inpatient and outpatient - and not enough usage of the hospital. Residents said they wanted a local hospital but chose care at larger hospitals outside the county.

19 Kansas ranks 40th in public health spending and 29th in health outcomes relative to other states.

20 The regional FQHC receives 23% of its yearly revenue - $14.3M from federal, state and foundation grants.

21 If first estimates for REH core operations payments endure through the legislation comment Period, Rural Hospitals of Similar Size To Bourbon County Hospital Would Receive $3M Per Year payment for provision of core medical services, which may not enough to cover all Bourbon County Hospital operating costs.

22 As the county's and region's population ages and younger people move away, the percentage of Medicare covered patients may exceed 40%. Noble must determine if it is financially viable to provide care to this population – either in the PPS or REH payment structures.

23 If the 65+ population can be sustainably served at Medicare payment levels, then their Medicare and Medicare Plus insurance pays for the cost of their care and provides the hospital a foundation of revenue.

24 It may not be possible to secure direct contracts with all large employers as some contracts with insurers may not allow a direct contract structure.

1.4 Recommendations for Sustainable Operations

1. Reopen the hospital with a PPS operating model whereby costs are managed by hospital operators and reimbursement by Medicare/Medicaid is by regional reimbursement amounts published by CMS (Center for Medicare and Medicare Services). Reimbursement by private insurers is by negotiated contract between providers and insurers.

2. Evaluate whether a PPS or REH structure is the better operating model. If Bourbon County Hospital is allowed to operate as an REH (decision within months), determine what services and structure could augment an REH. If Bourbon County Hospital were to continue as a PPS, determine what services the hospital could offer based on past usage, expected usage, ability to attract providers, and skilled staff. Evaluate collaboration models with other health providers or Noble managed services.

3. Maintain current tenancy in the hospital building - Ascension Via Christi as Emergency Department operator, Community Health Center of Southeast Kansas (CHC SEK) as a Federally Qualified Health Center (FQHC) as a primary care provider, Rehab Associates at a physical and other therapy provider. Renew leases with Ascension and Rehab Inc to continue operations in the building. Extend the lease with CHC SEK until their new facility is ready.

4. Secure collaborations where appropriate for health services operators to deliver services from the hospital and offer full care cycle services to Bourbon County residents who require specialty services best delivered at a larger hospital augmented by diagnostic and rehabilitative care provided locally by Bourbon County Hospital operations.

5. Reduce outmigration on services that can be effectively delivered locally at BOURBON COUNTY HOSPITAL. Providers and operators must provide clarity on what services are offered

6. Once renovations are complete, open a Behavioral Health Unit with capacity for up to 45 patients, serving geriatric, SAI, and other psychiatric patients needing short term hospital care. Provide space for Mental Health Services of SEK to operate a mental health clinic that provides outpatient services and 24 hour observation capability.

7. Renovate a portion of the lower floor and surrounding grounds to accommodate a day care, pre-school, and kindergarten. Collaborate with Bourbon County and Fort Scott and the local school district to support daily operations.

8. Leverage the rehab operations and hair salon to enable programs for seniors to pursue fitness and wellness activities. Provide space for social activities and gatherings. Work with the county and city to deliver wellness and health screening programs and enable social engagement activities that attract and engage seniors.

9. Allocate top floor hospital building space to medical services that could include a Rural Health Clinic for primary care, a Specialist Medical Clinic, infusion services, dialysis services, diagnostic services, and pharmacy services. Ready the current medical / surgical space for possible operations in 2023.

10. Work to secure direct contracting with local businesses and Bourbon County with defined pricing for private insurers for the 300 most used services based on an index to Medicare reimbursement.
11. Collaborate with County and City to mitigate uncompensated care by campaigning with residents for Medicare and Medicaid enrollment, counseling for uninsured to find affordable private insurance options, and to lower costs for residents through wellness and preventative health programs.
12. Create a non-profit entity to manage operation of Bourbon County Hospital Create with an independent, community driven board to oversee operations.
13. Create a Chamber of Commerce Health and Wellness Advisory Panel to oversee programs for wellness, preventative care, and health services for the community that is sustainable and effective.
14. Initiate a SEK Regional Task Force to accomplish what has not been done yet in Kansas, despite an urgent need for more than a decade – to coordinate services so that hospitals in the region can deliver an effective level of care to their communities and a referral network where services are delivered most efficiently.
15. Create a business advocacy council and work directly with the business community on reducing outmigration by employing reference-based pricing to help the business community with their cost controls.
16. Create a community coalition around aging and work to address the doubling of the 65+ population over the next 20 years. Address hospital service needs, long term and senior care, transportation, and senior housing. Individuals in this age rate consume more healthcare and become less likely to commute to get basic and ancillary services.
17. Conduct a formal request for a development/real estate partner to assist in development and healthcare specific leasing for non-hospital use space.
18. Conduct a formal request for proposals for a hospital operator to manage and collaborate on creating a right sized (8-12 bed) hospital in the facility.
19. Conduct formal request for a SNF/Behavioral/Senior care operator to operate a 25-45 bed facility within western portion of facility.
20. Employ a financing structure whether traditional debt or taxable/tax exempt bonding that would seek to finance 50%-75% of the appraised value of the structure contingent of securing the appropriate development partner and hospital operator and tenant mix.

2 SOUTHEAST KANSAS AND BOURBON COUNTY LANDSCAPE

2.1 Demographics: Kansas - Southeast Kansas Region - Bourbon County

Summary

Kansas

1 Of 105 Kansas counties, 85 are rural, representing more than 36 percent of the population. [(2)] Bourbon county is classified as a rural county, with 14,435 people over 639 square miles or 22.6 people per square mile in 2020.

2 Seventy-six Kansas counties lost population since 2000. All but one is rural. At the extreme, 23 counties lost more than 10 percent of their population.

3 Over 13% of the Kansas population is over the age of 65. 88 counties are above the state average. 40 counties have higher than 29% over the age of 65.

Southeast Kansas Region

1 As of 2020, 184,000 people live in the Southeast Kansas region.

2 Between 2010 and 2020, the regional population declined 5% - about 11,000 people. Each year, 1,100 people or 265 families leave the region.

3 Age 65+ Population was 19% in 2020. Forecast to be 38% in 2040.

4 Unemployment rate 4.7% vs Kansas state average of 3.6%.

5 30-50% (depending on county) of SEK residents spend >30% of income on rent

6 20% of all SEK households and 30% of 65+ households are single occupant.

7 Affordable childcare is a high priority need in regional community surveys.

Bourbon County

1 Bourbon County has lost 5.85% of its population since 2010.[2] Each year, 100 people or 25 families leave the county.

2 Population data show a 12% decline for 30-39 and 24% decline for 45-55 age groups between 2010 and 2019. It appears these out-migrations are work-related – residents leave for jobs.

3 Bourbon County's over 65 population is currently 19% and grew by 6% over the past decade. In 2040, the 65+ population is projected to be 38% of the county's total population.

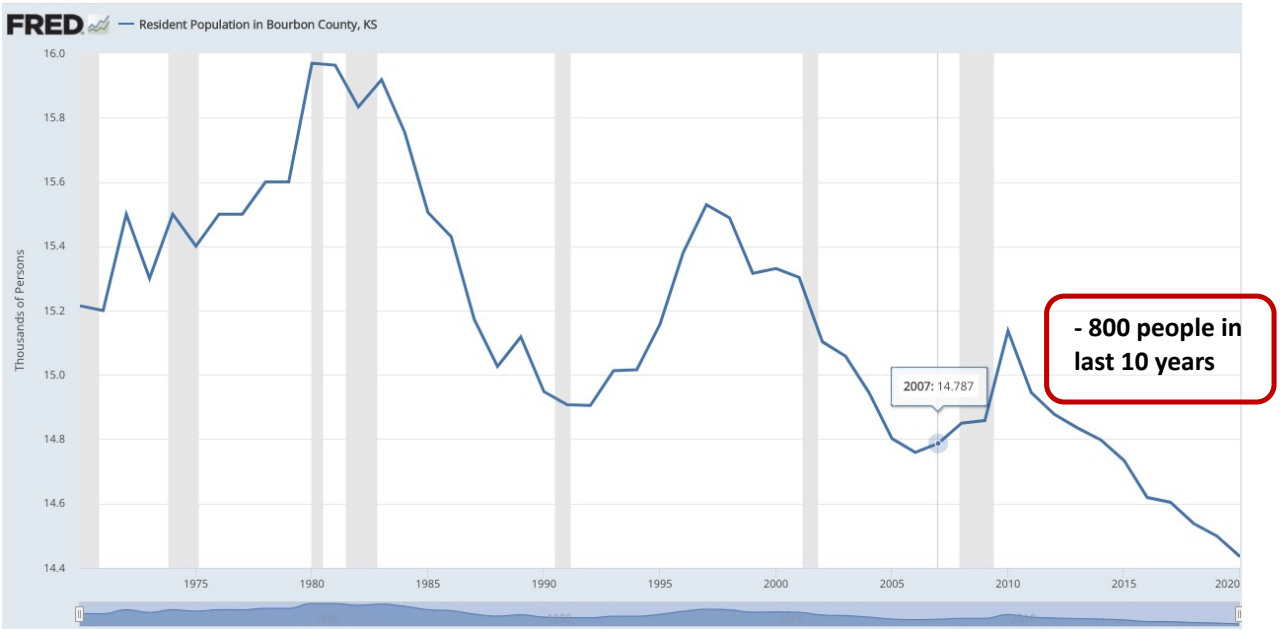
[2] *https://fred.stlouisfed.org/series/KSBOUR1POP*

Southeast Kansas Population

County	Population									Change	
	2010	2017	0-5	6-19	20-34	35-44	45-54	55-64	65+	Pop	%
Allen	13,473	12,752	798	2,572	2,057	1,477	1,570	1,776	2,502	-721	-5.7
Bourbon	15,097	14,757	1,053	3,191	2,543	1,507	1,696	2,019	2,748	-340	-2.3
Chatauqua	3,736	3,425	178	608	513	321	400	548	857	-311	-9.1
Cherokee	21,740	20,501	1,117	4,323	3,273	2,359	2,830	2,904	3,695	-1,239	-6.0
Crawford	38,985	39,099	2,303	7,916	10,249	4,156	4,322	4,319	5,837	-114	0.3
Elk	2,930	2,581	138	460	264	247	324	418	730	-349	-13.5
Labette	21,791	20,553	1,326	4,037	3,544	2,263	2,845	2,908	3,719	-1,238	-6.0
Linn	9,782	9,602	519	1,885	1,293	1,214	1,294	1,365	2,032	-180	-1.9
Montgomery	35,454	33,463	2,212	6,671	5,918	3,560	4,229	4,588	6,285	-1,990	-5.9
Neosho	16,538	16,209	1,107	3,438	2,645	1,715	2,036	2,271	2,997	-329	-2.0
Wilson	9,598	8,858	575	711	1,326	921	1,087	1,424	1,814	-740	-8.4
Woodson	3,352	3,178	181	538	455	307	400	556	741	-174	-5.5
Total	**192,476**	**184,978**	**11,507**	**36,350**	**34,080**	**20,047**	**23,033**	**25,096**	**33,957**	**-7,497**	**-4.1**

SEK CAP 2017

Bourbon County Population Change Over Time



Population changes over time by age group.

No Outmigration Trend for Young Families

Modest increase in seniors and dependency.

Fewer 45-55 year-olds

Stability

Bourbon County Demographic Changes Over Time				
	2010		2019	
Total population	**15097**		**14608**	
AGE				
Under 5 years	1057	7%	1023	7%
5 to 9 years	996	7%	1167	8%
10 to 14 years	1132	8%	930	6%
15 to 19 years	1162	8%	1069	7%
20 to 24 years	906	6%	889	6%
25 to 29 years	830	6%	821	6%
30 to 34 years	936	6%	793	5%
35 to 39 years	815	5%	713	5%
40 to 44 years	710	5%	838	6%
45 to 49 years	981	7%	742	5%
50 to 54 years	1072	7%	825	6%
55 to 59 years	981	7%	1086	7%
60 to 64 years	861	6%	872	6%
65 to 69 years	619	4%	858	6%
70 to 74 years	604	4%	679	5%
75 to 79 years	513	3%	505	4%
80 to 84 years	423	3%	335	2%
85 years and over	513	3%	463	3%

SUMMARY INDICATORS			
Median age (years)	37.8		39.1
Sex ratio (males per 100 females)	98.2		97.1
Age dependency ratio	76.5		82.1
Old-Age dependency ratio	31.3		35.4
Child dependency ratio	45.2		46.7

https://data.census.gov/cedsci/table?q=bourbon%20county%20kansas&tid=ACSST5Y2019.S0101

SEK Region Demographic Characteristics

Living Alone - Total Population

There are 9,589, individuals who **rent** a home that live alone. There are 13,270 individuals who **own** a home that live alone. That's 7.2% of the total region population.

Single Parent Households

Within SEK, 10,811 households, or 13.8% of the total occupied houses, are headed by a single parent. Of those, 4.4% are male parents and 9.4% are female parents.

Older Population

There are currently 33,957 individuals who are 65 years and older living in SEK - 18.3% of the total population. Of those, 10,252 or 30% are living alone.

U.S. Census Bureau, American Community Survey, 2017 cited in SEK CAP[3]

> *"There are not enough opportunities for young people to stay home to live and work. The opportunities that are needed are in the urban areas. Rural areas do not have the skilled workforce that is required for business and industry to thrive in SEK communities.*[4]*"*

Southeast Kansas vs Kansas Social Determinants

[3] *SEK-CAP and Project 17. Southeast Kansas Regional Assessment, April 2015. http://www.sek-cap.com/images/ Community-Assessment/2016_Annual_Update/Southeast_ Kansas_Regional_Assessment_-September_15_2016_ UPDATE.pdf*

[4] *SEK-CAP Community Needs Assessment 2019-2021*

Social Determinants	Southeast Kansas	Kansas
Median Household Income	$36,493 - $46,576	$55,477
Poverty Rate	13.5% - 21.1%	12.80%
Unemployment Rate	4.70%	3.60%
Mortality Rate	8.4-10.1 per 1000	7.6 per 1000
Education – High School	84.4 – 95.4%	87.30%
Education - College	17.1 – 28.6%	31%
Housing >30% income on rent	39 – 59.6%	Lowest 13.8% Highest 59.6%
No Vehicle	2.7% of families	1.2 vehicles per person
One Vehicle	16.9% of families	
U.S. Department of Agriculture Data, 2017, The Center for American Progress, 2017 cited in SEK CAP		

Broadband

Over half of the counties in the region do not have access to high-speed internet, without data caps, at a affordable price. Additionally, many rural citizens have few cost effective options to connect to the internet in their homes. Businesses report they are receiving internet speeds which are not adequate to supporting their operations, and pay prices which are considerably higher than in urban areas. The ability for businesses and citizens to obtain fast, reliable, and affordable internet service without data caps is essential to the region's economic success.[5]

> *"The same issues affect all of us by county. Transportation, low-paying jobs, too many people cannot qualify to work because of addictions, do not have access to the internet, cannot afford livable housing, cannot afford child care or get their children to a child care facility because of the lack of transportation, cannot afford health care, and cannot escape the cycle of poverty."*[6]

Transportation

Southeast Kansas is underserved by four-lane highways, limiting the number and types of industry that would be interested in locating in the region. U.S. Highway 69 from Fort Scott to Pittsburg has always been a two lane highway; however, just this year the state of Kansas announced plans to fund the construction of a four lane system sometime in the foreseeable future. The remainder of Highway 69, from Pittsburg to the border with Oklahoma and connecting to Interstate 44, remain two-lane. The other US highways that transect the region, 54 on the north end of the report area, 169, the north/south connector through the center of the report area, 400, the east/west connector to Wichita, 160 and 166, both of which travel east/west across the bottom of the report area, all remain two lane.

[5] *SEK-CAP*

[6] *SEK-CAP Community Needs Assessment 2019-2021. Focus Group Comment.*

The rail system in Southeast Kansas is fairly robust, and appears to have adequate capacity for the industries located here. The only downfall is the two-lane road system when a four-lane is needed to move freight from rail yards to other locations, which may limit interest in outside entities relocating in the region. There are a total of fifteen airports in the region, home to over 230 based aircrafts. The airports with the most use are located in Chanute, Coffey County, and Pittsburg.

Early Childhood Education/Childcare

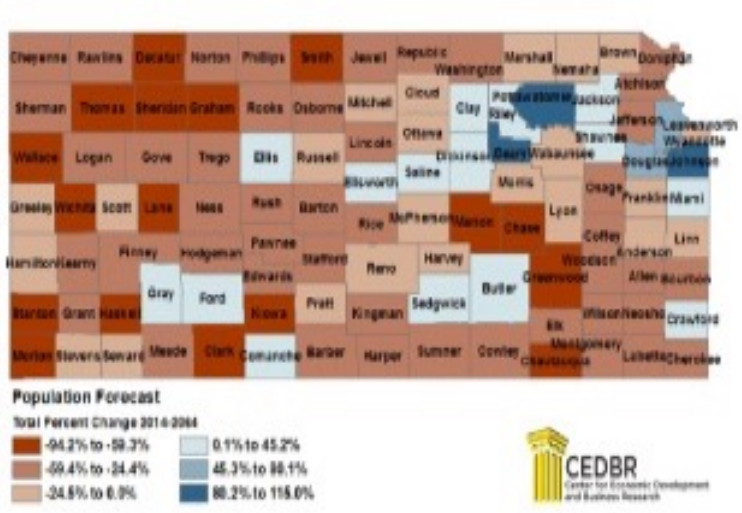
One of the barriers to gaining employment in the region is a family's inability to access reliable, safe, early childhood education and childcare. Quality, private care can be expensive, and low income families often find themselves with limited options. Therefore, they turn to subsidized childcare or early childhood education, such as Head Start and Early Head Start or unlicensed care. Even Head Start and Early Head Start, however, still have their limitations in terms of providing childcare to the workforce. Most of the center-based programs are closed during summer, spring break, and winter break; some of the center-based programs are only part day. If a low-income family qualified for these services, it is likely that they would still need additional childcare options in order to work full time.

Child Poverty

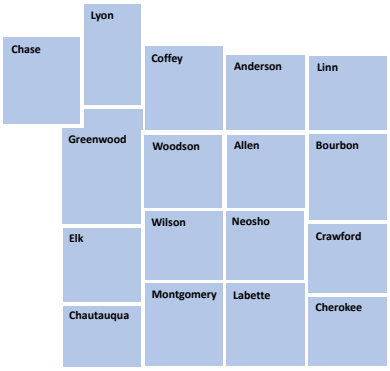
According to the U.S. Census Bureau American Community Survey 5-year data, an average of 25.2% of children ages 0-4 lived in a state of poverty throughout the southeast Kansas report area; this rate is greater than the national average of 24.9% and the state average of 22.3%. The average poverty rate of children ages 0-4 is 27.5% in SEK region.

Population Forecast – Kansas and Southeast Kansas

The Center for Economic Development and Business Research at Wichita State University publishes population and economic forecasts for the state. If these projections prove accurate, the state of Kansas will see growth in current urban centers and current regional centers and steady population decline in most rural areas of the state, including most of the Southeast Kansas region. Note these projections include counties not in the SEK region historical analysis cited in this report.



https://www.cedbr.org/forecast-blog/kansas-population



Southeast Region as Defined by CEDBR

The forecast shows the largest negative growth rates in Kansas are in the Southeast Kansas region with the negative trend accelerating in each 5 year cycle. Growth rate data is a more granular view of the overall trend of population growth in urban areas and population decline in rural areas.

Five Year Growth Rates

	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
Kansas City	6.83%	6.57%	6.35%	5.97%	5.26%	4.44%	3.77%	3.44%	3.62%	3.88%	4.02%
North Central	0.81%	0.28%	-0.28%	-0.90%	-1.57%	-2.26%	-2.70%	-2.70%	-2.78%	-2.44%	-2.20%
Northeast	4.81%	3.10%	3.11%	3.01%	2.63%	2.84%	2.73%	2.34%	2.34%	2.73%	3.29%
Northwest	0.41%	-0.04%	-0.50%	-1.08%	-1.66%	11.91%	-2.00%	-1.86%	-1.43%	-1.24%	-1.15%
South Central	3.94%	3.45%	2.98%	2.44%	1.69%	0.96%	0.41%	0.29%	0.52%	0.67%	0.63%
Southeast	-0.32%	-0.96%	-1.45%	-2.08%	-2.66%	-2.99%	-3.30%	-3.30%	-2.99%	-2.76%	-2.55%
Southwest	1.16%	0.79%	0.41%	0.07%	-0.21%	-0.58%	-0.80%	-0.84%	-0.71%	-0.56%	-0.46%
Total	**4.02%**	**3.41%**	**3.17%**	**2.83%**	**2.29%**	**1.84%**	**1.46%**	**1.29%**	**1.52%**	**1.82%**	**2.04%**

www.cedbr.org/forecast-blog/kansas-population

Population Forecast by Kansas Region

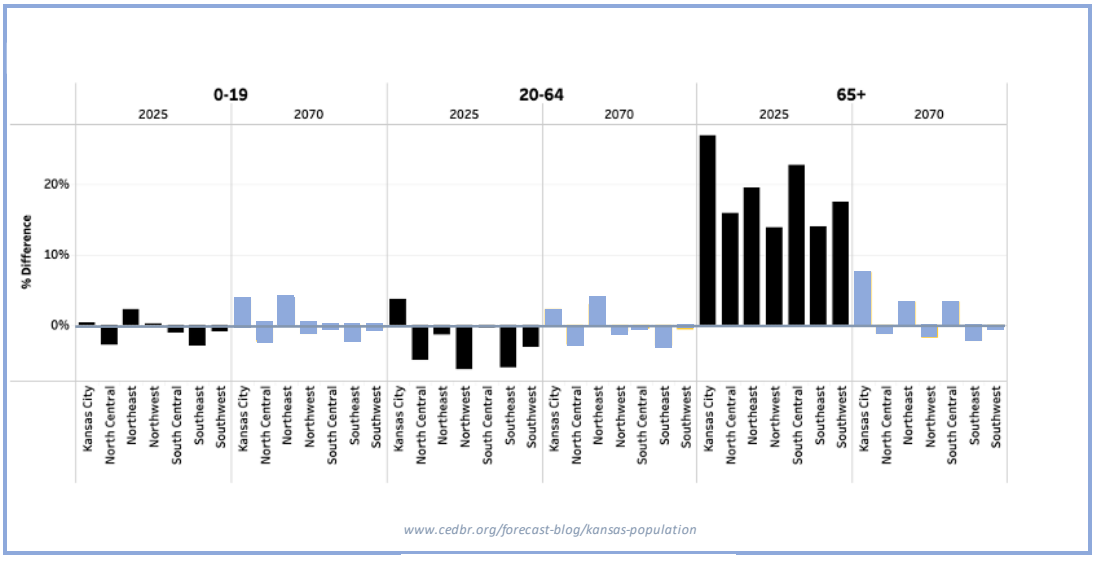
Projections for Southeast Kansas below show a continued decline in regional population. From 2010 to 2020, 1100 people leave the region each year. The forecast below shows the trend continuing for the coming 20+ years.

	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
Kansas City	855,396	913,859	973,919	1,035,788	1,097,653	1,155,343	1,206,602	1,252,082	1,295,119	1,341,948	1,394,054	1,450,075
North Central	233,997	235,884	236,542	235,872	233,751	230,086	224,890	218,816	212,738	207,556	202,942	198,477
Northeast	581,107	609,060	627,966	647,494	666,993	684,565	703,981	723,181	740,106	757,418	778,083	803,700
Northwest	139,983	140,562	140,506	139,806	138,297	136,008	133,404	130,742	128,310	126,471	124,899	123,462
South Central	686,215	713,218	737,794	759,805	778,328	791,495	799,080	802,333	804,685	808,905	814,328	819,450
Southeast	243,610	242,823	240,502	237,005	232,080	225,916	219,165	211,937	204,952	198,817	193,321	188,383
Southwest	171,333	173,319	174,687	175,397	175,514	175,150	174,142	172,749	171,305	170,083	169,125	168,352
Total	**2,911,641**	**3,028,725**	**3,131,916**	**3,231,167**	**3,322,616**	**3,398,563**	**3,461,264**	**3,511,840**	**3,557,215**	**3,611,198**	**3,676,752**	**3,751,899**

www.cedbr.org/forecast-blog/kansas-population

Over the next 20 years, the baby boomer population ages and after a spike, diminishes. The nation, Kansas,and the SEK region face an extraordinary challenge to provide health care services over the next two decades. In the SEK region, providing care and services to prevent illness, mitigate the effects of chronic illness, and treat a growing demand for primary and acute services is part of this challenge.

Age Range – Five Year Growth Rates



www.cedbr.org/forecast-blog/kansas-population

Shift of the population to more urban
Granularity of data showing how it may happen.
The 20-55 age group support both kids and an equivalent number of seniors - ratios of working age adults to seniors. % working age actually working.
Split of families – aging parents not near kids -

Population Forecast by Age Group

Age Range	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
Under 5 Years	197,480	192,161	196,728	199,147	201,630	203,221	204,463	204,681	205,967	209,558	214,522	219,190
5 to 9 Years	202,604	198,718	193,293	197,888	200,472	203,282	205,138	206,448	206,589	207,796	211,485	216,710
10 to 14 Years	199,413	203,120	199,062	193,446	198,064	200,813	203,886	205,886	207,126	207,091	208,166	211,913
15 to 19 Years	201,113	200,921	204,521	200,811	195,308	201,106	204,371	207,152	208,565	209,672	210,019	211,812
20 to 24 Years	223,184	212,251	207,806	212,230	210,377	205,872	215,545	220,510	222,605	222,933	224,824	227,340
25 to 29 Years	190,811	217,821	207,459	205,982	210,924	209,308	204,935	213,845	213,845	222,924	224,260	227,215
30 to 34 Years	196,418	193,190	214,950	206,145	207,810	212,808	210,498	205,554	205,554	218,202	222,723	226,068
35 to 39 Years	179,509	197,666	194,829	215,245	207,131	209,791	214,765	212,163	212,163	214,258	219,416	224,454
40 to 44 Years	166,604	177,372	195,087	192,404	211,865	204,357	207,442	212,255	212,255	204,012	211,181	216,344
45 to 49 Years	168,695	163,877	174,106	191,767	189,063	207,591	200,808	204,038	204,138	205,493	199,844	206,833
50 to 54 Years	132,197	163,344	159,200	169,070	186,133	183,369	200,953	194,733	194,733	202,115	198,855	193,097
55 to 59 Years	194,783	186,901	159,385	154,709	164,244	180,735	177,902	194,690	194,690	191,946	195,924	192,544
60 to 64 Years	172,420	189,102	182,742	154,222	149,806	159,180	175,314	172,616	172,616	183,643	186,686	190,641
65 to 69 Years	138,103	166,551	181,948	174,858	149,242	145,073	154,309	170,104	170,104	183,643	186,686	190,641
70 to 74 Years	97,165	131,051	158,632	173,888	167,718	143,671	140,112	149,491	149,491	163,147	179,069	174,940
75 to 79 Years	71,512	94,166	127,926	155,488	170,988	165,819	142,876	139,915	139,915	166,195	164,424	181,463
80 to 84 Years	55,005	62,406	83,173	114,094	139,613	154,411	150,963	131,181	131,181	139,430	155,468	154,520
85 Years and Older	64,625	78,911	83,053	119,774	162,229	208,156	246,985	266,577	266,577	259,990	271,319	295,177
Total	**2,911,641**	**3,028,726**	**3,131,917**	**3,231,168**	**3,322,617**	**3,398,563**	**34,612,565**	**3,511,840**	**3,511,840**	**3,611,198**	**3,676,753**	**3,751,900**

www.cedbr.org/forecast-blog/kansas-population

65+ Year-Olds in SEK forecast to be 38% of Region Population in 2040
(19% of Region Population in 2020)

Projected Healthcare Spend for 65+ Residents in Southeast Kansas

Southeast Kansas Population

Age	*2020*	*2040*	*% Spend*
	65+@19%	*65+@38%*	
65	13,352	9,643	
70	10,507	9,550	**37%**
75	7,853	11,023	
80	5,003	10,264	
85	6,326	13,898	**12%**
	43,041	**54,378**	

50% of Healthcare Expenditure Occurs after Age 65

www.cedbr.org/forecast-blog/kansas-population

2.2 State of Health: Kansas – Southeast Kansas – Bourbon County[7]

Summary

1. Kansas has experienced the greatest decline of population health of any state in the US over the past 20 years. Now ranked 29th, Kansas spending on health care per capita is 40th among the 50 states.

2. Relative to national norms for rural communities, rural communities in Kansas are less healthy across most every metric for health. The southeast region of Kansas is the least healthy region in Kansas.

3. In 64 of the 105 counties (all rural) fewer than 50 percent of Kansans remain in their county for acute hospital care. All SEK counties have substantial migration to larger hospitals. Bourbon County residents consumed $11M of healthcare services outside the county in 2019.

4. 83 of Kansas hospitals are Critical Access Hospitals with 25 or fewer acute beds. Kansas has 35% more acute beds per 1000 population (3.5) than the national norm (2.6), approximately 2,000 more beds.

5. Kansas has relatively low numbers of admissions per 1000 when compared to the U.S. as a whole (107 to 116). ER visits per 1000 (357 to 411) are also lower, and yet Kansas inpatient days (686 to 613) and outpatient visits (2336 to 2106) are higher.

6. The average inpatient census at many rural hospitals is about 1 per day, an unsustainable level to cover costs for inpatient care. Bourbon County 2021 inpatient census was between 1 and 2 per day on average.

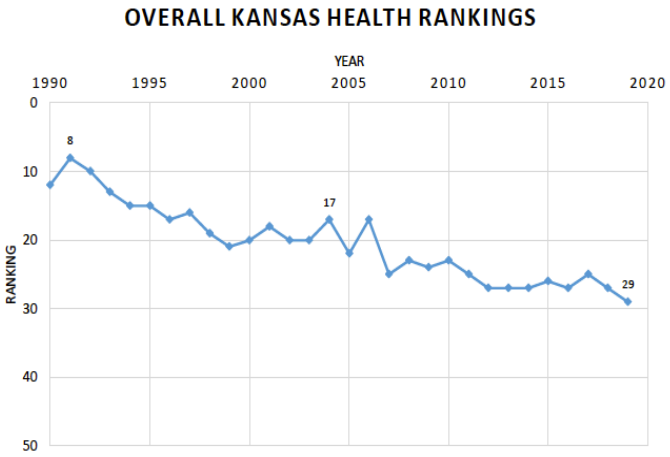
7. Ninety-one percent of Kansas residents believe that every Kansan should have access to medical care when they need it and only 12 percent of residents reported there was at least one time during the past year that someone in their household needed medical care but did not get it.

8. Bourbon County is classified as Health Profession Shortage Areas (HPSA) in primary care and mental health care with not enough providers to adequately serve the population of the county.

[7] *https://www.kha-net.org/CriticalIssues/AccessToCare/RuralIssues/Resources/d116726.aspx?type=view*

Kansas Health Rankings Decline

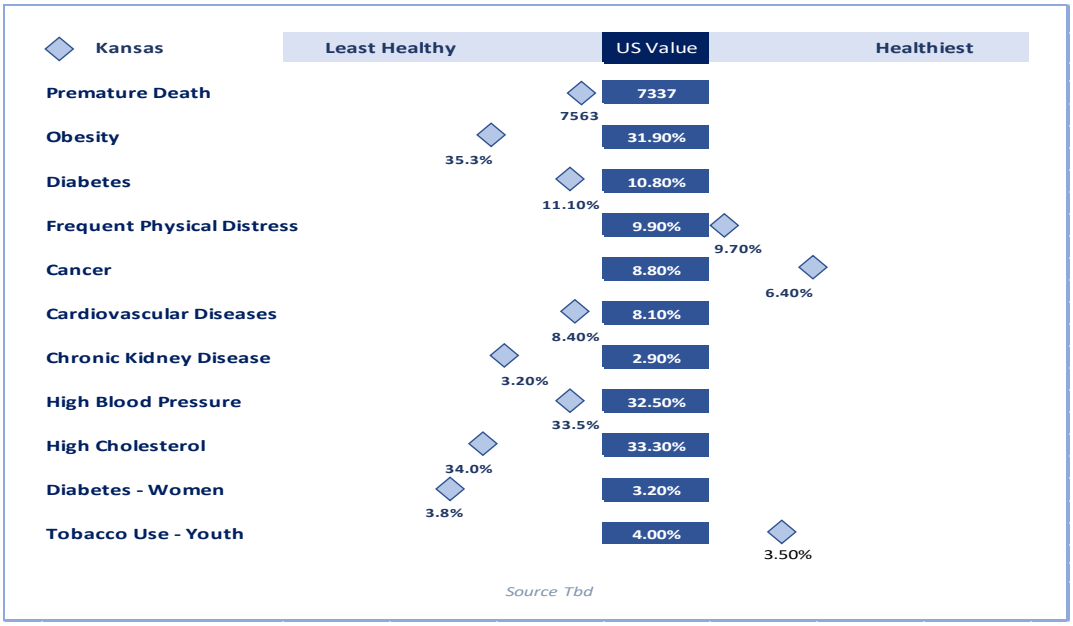
The United Health Foundation rankings take a comprehensive view of health, examining behaviors, environment, health policy and health care. The organization has released health rankings every year for 30 years, which makes the rankings a useful tool for looking at a state's growth over time. Kansas has experienced the single largest decline in health rankings in America, falling from 12th to 29th since 1990. The decrease is attributable to multiple factors: cancer deaths, rates of uninsured Kansans, high school graduation rates and cardiovascular deaths.



Of all the states in the US, over the past 30 years, Kansas has seen the greatest decline in its health rankings.

- (America's Health Rankings, December 6, 2019)

Kansas Relative to USA 2020 Health Metrics by Disease Category



Within Kansas, SEK Region Health Outcomes are the Lowest

Southeast Kansas counties are less healthy than the state of Kansas according to the following indicators: Indicator Regional Value Cancer Diagnosis Kansas Value 8.6% 7.1% Diabetes Diagnosis 13% Age adjusted heart disease mortality rate 156.4. Adult Smoking Rate 23.2% 17.8%

The health outcomes of Southeast Kansas residents are some of the lowest in the state. The supply and accessibility of facilities and physicians, the rate of uninsured, financial hardship, transportation barriers, cultural competency, and insurance coverage limitations make it difficult to access preventative care. Rates of morbidity, mortality, and emergency hospitalizations could be reduced if community residents access preventative services such as health screenings, routine tests, and vaccinations.[8]

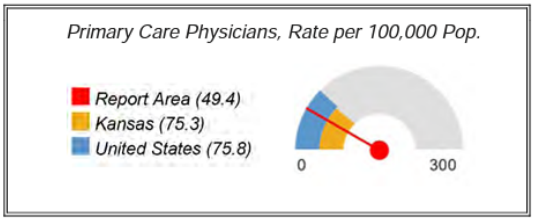
	Health Factors	*Social Economic Factors*	*Physical Environment*
Allen	83	89	50
Bourbon	98	98	52
Chatauqua	96	100	67
Cherokee	91	81	69
Crawford	88	86	100
Elk	93	99	63
Labette	100	95	99
Linn	99	96	102
Montgomery	101	101	94
Neosho	94	94	90
Wilson	95	93	82
Woodson	90	88	76

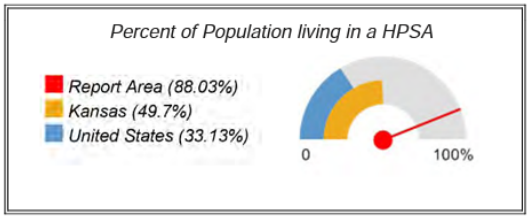
Scale *1 is highest ranked county / 105 lowest ranked county*

[8] *https://www.kansashealthmatters.org/resourcelibrary/index/view?id=129031869338218097*

Primary Care Physicians shortage and HPSA Regions in SEK

There are twenty-one Health Professional Shortage Areas (HPSA) in the SEK region. HPSA's are defined as having shortages of primary medical care, dental or mental health providers. A shortage of health professionals contributes to access and health status issues. A rate of 88.03% is nearly double the state and nearly treble the federal percentage of health professional shortage. A third less primary care physicians practice in SEK compared to regions with similar population nationally and in Kansas.





Impact of Bourbon County Hospital Loss

2018 Prior to Closure

SEK SWM DEMOGRAPHICS	Population	employed pop	<5	5-17	18-34	35-59	60-74	>75	poverty rate	median age	median income	Patients/Clinician	% Uninsured	Employer	Medicaid	Medicare	Non Group	Military
KANSAS COUNTIES																		
Wyandotte	164,831	76,538	13,013	30,121	30348	37038	19157	7437	19.2	33.7	46,881	2,175	18	40	23	9	8	
Douglas	120,290	68190	6053	15755	41573	29178	13881	5256	18.0	29.8	59,435	1,114	7	59	8	9	16	
Johnson	602,401	332024	37091	103756	115030	173315	84719	33814	5.4	37.8	91,771	810	6	65	5	12	11	
Franklin	25,558	12,732	1534	4598	5127	8070	4106	1675	9.8	40.0	56,382	2,330	7	56	11	13	12	
Miami	33,417	16663	1903	6309	5664	11296	5425	2398	6.9	42.1	71,995	2,105	6	60	7	12	13	
Anderson	7,835	3368	478	1559	1304	2338	1348	797	15.0	40.8	50,113	2,626	11	44	11	17	15	
Linn	9,671	4,302	535	1,638	1,504	3,166	1,890	881	16.3	44.4	48,778	4,875	10	42	9	17	20	
		44%	6%	17%	16%	33%	20%	9%										
Allen	12,556	5,873	722	2,113	2,409	3,942	2,171	1,147	17.7	41.9	45,833	1,556	5	50	16	16	12	
		47%	6%	17%	19%	31%	17%	9%										
Bourbon	14,608	6,412	1,023	2,674	2,903	4,118	2,393	1,303	16.1	39.1	43,117	2,091	11	45	18	15	11	
		44%	7%	18%	20%	28%	16%	9%										
Neosho	16,108	7,207	1,030	2,836	3,086	4,812	2,690	1,437	18.8	40.2	46,991	1,595	12	8	13	15	12	
		45%	6%	18%	19%	30%	17%	9%										
Crawford	38,968	18,488	2,316	6,139	10,980	10,029	5,525	2,582	20.3	32.5	41,004	1,301	10	49	15	11	13	
		47%	6%	16%	28%	26%	14%	7%										
Labette	20,119	9,518	1,324	3,458	3,832	6,161	3,607	1,562	18	41.0	47,443	1,664	11	46	17	14	10	
Cherokee	20,179	8,566	1,098	3,592	3,719	6,259	3,656	1,631	13.1	41.3	43,775	4,003	12	44	17	15	11	
www.datausa.io																		
MISSOURI COUNTIES																		
Bates	16,417	7,527	987	2,858	2,954	5,035	2,854	1,413	12.00	41.60	47,625	5,440	9	43	14	15	17	
		46%	6%	17%	18%	31%	17%	9%										
Vernon	20,723	8,861	1,279	3,703	4,047	6,007	3,637	1,692	14.80	40.80	43,276	2,933	15	38	16	16	13	
		43%	6%	18%	20%	29%	18%	8%										
Barton	11,908	5,135	660	2,144	2,054	3,786	1,984	1,085	20.30	41.30	44,116	2,950	11	40	16	16	16	

Compared to National Data

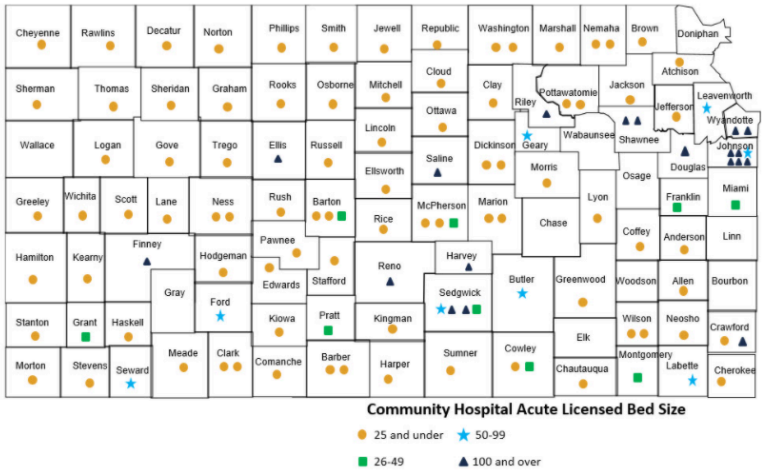
2512 patients/provider = average rural ratio

1876 patients/provider = average urban/suburban ratio

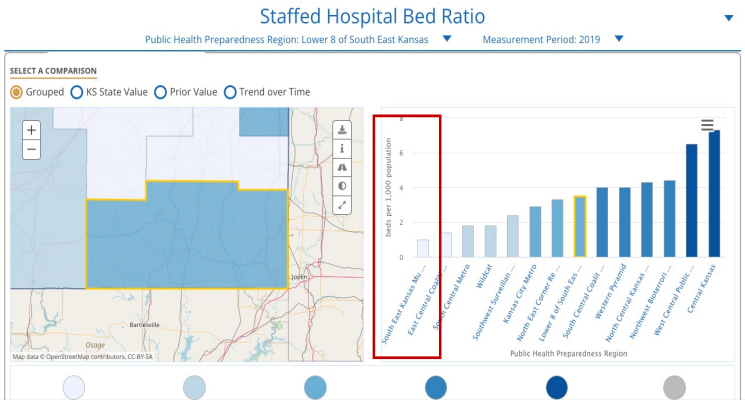
Kansas Hospitals

Data collected after the closure of Mercy Fort Scott Hospital shows one of the lowest number of hospital beds per 1000 people in Kansas.

Kansas has 122 community hospitals.



Public Health Preparedness Region	Source	Measurement Period	Beds per 1,000 population
South East Kansas Multi County	Kansas Hospital Association	2019	1.0
East Central Coalition	Kansas Hospital Association	2019	1.4
South Central Metro	Kansas Hospital Association	2019	1.8
Wildcat	Kansas Hospital Association	2019	1.8
Southwest Surveillance	Kansas Hospital Association	2019	2.4
Kansas City Metro	Kansas Hospital Association	2019	2.9
North East Corner Regional Initiative	Kansas Hospital Association	2019	3.3
Lower 8 of South East Kansas	**Kansas Hospital Association**	**2019**	**3.5**
South Central Coalition	Kansas Hospital Association	2019	4.0
Western Pyramid	Kansas Hospital Association	2019	4.0
North Central Kansas Public Health Initiative	Kansas Hospital Association	2019	4.3
Northwest Bioterrorism Group	Kansas Hospital Association	2019	4.4
West Central Public Health Initiative	Kansas Hospital Association	2019	6.5
Central Kansas	Kansas Hospital Association	2019	7.3



Federal Qualified Health Centers in SEK

CHC has two locations in Fort Scott and 35 total in the region. Since the closure of the hospital, CHC has grown in number of patients served and employment. About 23% of CHC of Southeast Kansas revenues are grants

Community Health Center of Southeast Kansas

Federally Qualified Health Center (2003)

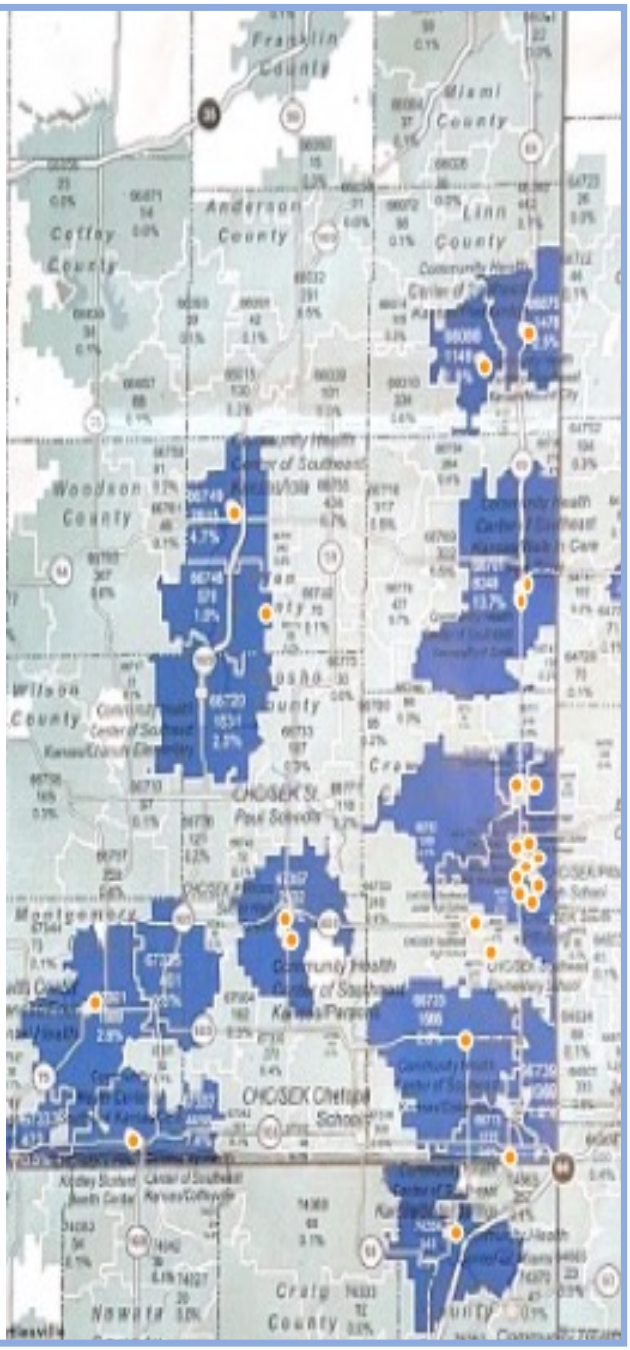
501 C3 Non Profit *35 Sites of Care*

FY 2020	
Operating Revenue	**62,523,000**
Patient Service Revenue	**48,217,000**
Federal Grants	**8,526,000**
State Grants	**1,517,000**
Foundation Grants / Donations	**4,263,000**
Charity Care (20% gross fees)	**9,720,000**
Annual Payroll	**32,500,000**
Avg Compensation	**59,500**

Numbers	*2016*	*2018*	*2020*
Patients	**40,400**	**46,800**	**61,460**
Patient Visits	**149,600**	**156,600**	**222,400**
Budget ($M)	**25**	**31.6**	**59.8**
Federal Grant $/Patient	**116**	**120**	**109**
Cost/Patient	**167.1**	**201.8**	**268.9**
Employees	**264**	**312**	**584**

Patient Age	
0-18	**36%**
19-64	**52%**
65+	**12%**

Payer Mix	
Medicaid	**30%**
Medicare	**14%**
Private	**38%**
Uninsured	**18%**



Kansas State Health Needs 2021 Assessment [9]

Primary Care

Frontier • Higher percentage of low birth weights than other county categorizations than Kansas' total percentage of low birth weights. • Higher rate of primary care providers than other county categorizations. • 73.4% of frontier healthcare respondents indicated having primary care professionals available. • Higher rate of non-physician primary care providers than other county categorizations. • Oncology was the third most requested specialty/service by community and healthcare respondents from frontier counties. • Cardiology was the most needed specialty/service identified by frontier healthcare respondents

Rural (Bourbon County
• Family Practice/Primary Care was the most needed specialty/service identified by rural healthcare respondents. • General Surgery was the second most needed specialty/service identified by rural healthcare respondents. • Oncology was the third most requested specialty/service by community respondents from rural counties.
• Internal Medicine was tied for the third most needed specialty/service identified by rural healthcare respondents. • Cardiology was tied for the third most needed specialty/service identified by rural healthcare respondents. • 75.7% of rural healthcare respondents indicated having primary care professionals available.

Densely-Settled Rural • Neurology was the second most requested specialty/service by community and healthcare respondents from densely-settled rural counties. • Family Practice/Primary Care was tied as the second most needed specialty/service identified by densely-settled rural healthcare respondents. • OB/GYN was the most needed specialty/service identified by densely-settled rural healthcare respondents. • 65.7% (n=23) of densely-settled rural healthcare respondents indicated having primary care professionals available.

Mental Health

Frontier • Higher average HPSA score for mental health than primary care and dental health. • Lower rate of mental health providers than other county categorizations. • Behavioral health was the second most requested specialty/service by community respondents from frontier counties. • 12.5% frontier healthcare respondents indicated having mental health professionals available.

Rural • Higher average HPSA score for mental health than primary care and dental health. • 27.0% rural healthcare respondents indicated having mental health professionals available.

Densely-Settled Rural • Substance misuse services was the most requested specialty/service by community respondents from densely-settled rural counties. • Behavioral Health was the third most requested specialty/service by community respondents from densely-settled rural counties. • 37.1% densely-settled rural healthcare respondents indicated having mental health professionals available.

[9] *Kansas Primary Care Needs Assessment 2021*

High Impact Health Factors – Bourbon County[10]

FINDINGS: OBESITY

Sex	Bourbon County	Kansas	National	National rank	% change 2001-2011
Female	42.7	37.3	36.1	2480	+46.1
Male	38.1	35.8	33.8	1855	+38.2

prevalence (%), age-standardized, 2011

FINDINGS: ISCHEMIC HEART DISEASE

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	142.2	123.8	124.9	1860	-43.0
Male	257.7	194.9	191.5	2514	-49.8

rate per 100,000 population, age-standardized, 2014

FINDINGS: CEREBROVASCULAR DISEASE (STROKE)

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	60.5	56.1	47.4	2449	-26.9
Male	54.0	54.1	48.8	1797	-54.9

rate per 100,000 population, age-standardized, 2014

FINDINGS: BREAST CANCER

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	28.3	25.5	25.9	2306	-9.6
Male	0.3	0.3	0.3	1753	-8.5

rate per 100,000 population, age-standardized, 2014

FINDINGS: TRACHEAL, BRONCHUS, AND LUNG CANCER

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	48.4	46.5	43.8	1663	+76.0
Male	83.4	72.4	67.6	1858	-22.6

rate per 100,000 population, age-standardized, 2014

FINDINGS: DIABETES, UROGENITAL, BLOOD, AND ENDOCRINE DISEASES MORTALITY

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	69.9	50.6	49.6	2523	+118.5
Male	75.2	63.6	63.8	2077	+62.1

rate per 100,000 population, age-standardized, 2014

[10] *Institute for Health Metrics and Evaluation (IHME), US County Profile: Bourbon County, Kansas. Seattle, WA: IHME, 2016.*

FINDINGS: CIRRHOSIS AND OTHER CHRONIC LIVER DISEASES MORTALITY

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	12.2	12.1	11.8	1476	+25.6
Male	29.1	21.9	22.2	2500	+58.9

rate per 100,000 population, age-standardized, 2014

FINDINGS: TRANSPORT INJURIES MORTALITY

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	18.1	10.3	8.1	2452	-14.9
Male	37.0	23.1	19.8	2124	-31.3

rate per 100,000 population, age-standardized, 2014

FINDINGS: SELF-HARM AND INTERPERSONAL VIOLENCE MORTALITY

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	10.9	9.6	9.0	2056	+26.4
Male	36.8	32.3	30.9	2077	+37.1

rate per 100,000 population, age-standardized, 2014

FINDINGS: MENTAL AND SUBSTANCE USE DISORDERS MORTALITY

Sex	Bourbon County	Kansas	National	National rank	% change 1980-2014
Female	8.5	7.9	8.2	1742	+654.9
Male	19.3	15.1	18.7	2136	+382.0

rate per 100,000 population, age-standardized, 2014

FINDINGS: SMOKING

Sex	Bourbon County	Kansas	National	National rank	% change 1996-2012
Female	23.2	19.3	17.9	1999	-1.3
Male	25.9	22.9	22.2	1699	-3.9

prevalence (%), age-standardized, 2012

Obesity

> *"The core profiles indicate that the rate of obese adults in the region is higher than the rate of obese adults in the state with the rates being 40.4 % and 34.2% respectively. Multiple survey participants identified being overweight, poor eating habits and lack of exercise as a concern."* [11]

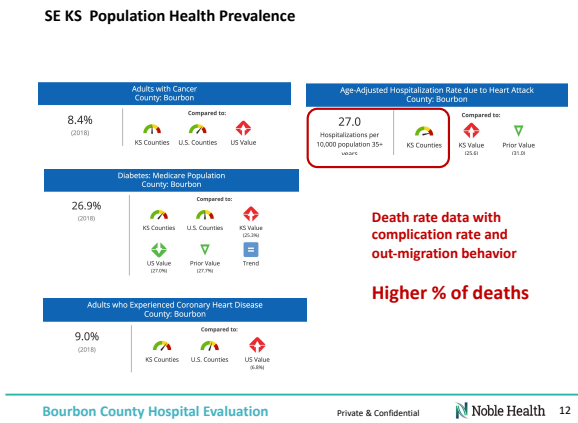
The state obesity rate of 34.2% with county rates ranging from 45.7% to 36.3% making the regional rate 40.4%. The Bourbon County male population has 6.5% greater prevalence obesity that other Kansas counties and 13% greater than the US male average. The prevalence of obesity in Bourbon County females is 15% greater than other rural Kansas counties and 18% greater than the US female average.

- High blood pressure (hypertension)
- High LDL cholesterol, low HDL cholesterol, or high levels of triglycerides (Dyslipidemia)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis
- Sleep apnea and breathing problems
- Many types of cancers
- Mental illness such as clinical depression, anxiety, and other mental disorders
- Body pain and difficulty with physical functioning[12][13]

[11] *Southeast Kansas Health Committee, 2017 Community Health Assessment, Community Health Improvement Plan*
[12] *https://www.cdc.gov/healthyweight/effects/index.htm*
[13] *https://www.cdc.gov/obesity/adult/causes.html*

Cardiovascular Disease

Our review of prevalence data revealed twice the number of cardiac-related deaths in Bourbon County as compared to other counties in Kansas.



BOURBON COUNTY VS KANSAS DISEASE PREVALENCE		2020
Disease	*Kansas*	*Bourbon*
Adults with Cancer	8.2%	8.4%
Cancer Medicare Pop (%)	8.2%	6.9%
Colorectal Cancer (per 100,000)	39.1	54.5
Breast Cancer (per 100,000)	126.0	106.7
Lung Cancer (per 100,000)	55.7	55.2
Prostate Cancer (per 100,000)	108.6	90.4
Diabetes Hospital Admit Rate	16.9	19.9
Diabetes Medicare Pop	25.3%	26.9%
Stroke Hospital Admit Rate (per 100,000)	11.9	10.4
Heart Attack Death Rate (per 100,000)	47.9	98.0
Heart Attack Hospitalization Rate (per 100,000)	256	270
Heart Disease Hosptial Admission Rate (per 100,0(	1171	1319
Depression Medicare Pop	19.8%	16.4%
Mental Health Hospital Admission Rate (per 100,0	708	628

2X the rest of KS

+ 20%

Bourbon County Hospital Evaluation Private & Confidential Noble Health 13

Despite declines in heart disease mortality in the United States since 2000, it remains the leading cause of mortality in both men and women—accounting for about one-third of all deaths in the U.S. Costs related to cardiovascular disease (CVD) place a substantial financial burden on the health care system, accounting for an estimated $320 billion in 2011. In addition,

There is considerable disparity in CVD risk among individuals living in rural settings, particularly medically underserved rural areas and populations. The combination of poverty, environmental factors (such as geographical distances and limited access to healthy foods and physical activity resources), as well as social and cultural attitudes and norms are important contributors to these rural health disparities and collectively compound the problem.

Women living in rural areas tend to be uninsured, older, poorer, less educated, and have higher rates of chronic health conditions, and disabilities than their urban counterparts. Importantly, women are 20 % more likely than men to die of heart disease; despite this, many women are unaware that they are at risk for CVD.

For Bourbon County, the higher incidence of cardiac hospitalizations and heart attack deaths may be connected to causal factors found in national studies where US counties with more social vulnerabilities had higher premature cardiovascular disease mortality, varied by demographic characteristics and rurality.[14]

[14] *https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.121.054516*

Diabetes

Diabetes was the nation's seventh-leading cause of death in 2019, accounting for 87,647 deaths annually. Those with diabetes are twice as likely to have heart disease or a stroke than those without diabetes. There are three types of diabetes: Type 1, Type 2, and gestational (diabetes while pregnant). Type 2 diabetes accounts for 90%-95% of all cases.

Diabetes is the leading cause of kidney failure, nontraumatic lower-limb amputations and blindness among adults. In 2018, 34.1 million adults were estimated to have diabetes, 26.8 million of which were diagnosed and 7.3 million were undiagnosed.

The prevalence of diabetes is associated with socioeconomic factors including income level, education, ethnicity, and geographic location (rural or urban). In Kansas, approximately 11% of adults with an average annual household income of less than $50,000 per year have diabetes, as compared to 6% in households earning more than $50,000 per year.

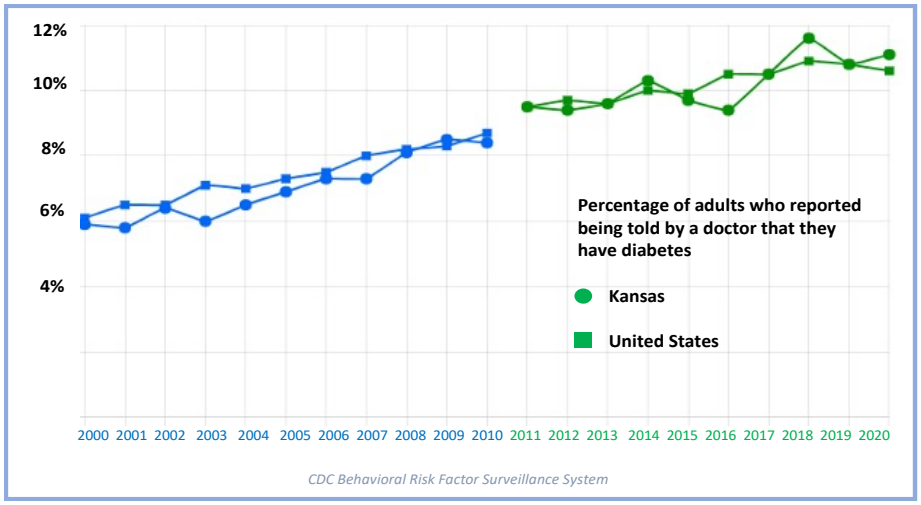
> *When comparing the average cost of care between people with and without diabetes, the cost for total health care spending of people who have diabetes is over twice the cost for a patient without diabetes. The treatment of diabetes in Kansas costs an estimated 2.6 billion dollars in both direct and indirect costs.*

Diabetes cannot be treated in isolation and requires a team approach that includes physicians, nurse practitioners, physician assistants, nurses, diabetes educators, registered dieticians, fitness facilities, weight loss organizations, local agricultural resources, community leaders, local and state government representatives, and resources to help patients understand the disease and develop skills to promote their overall health.

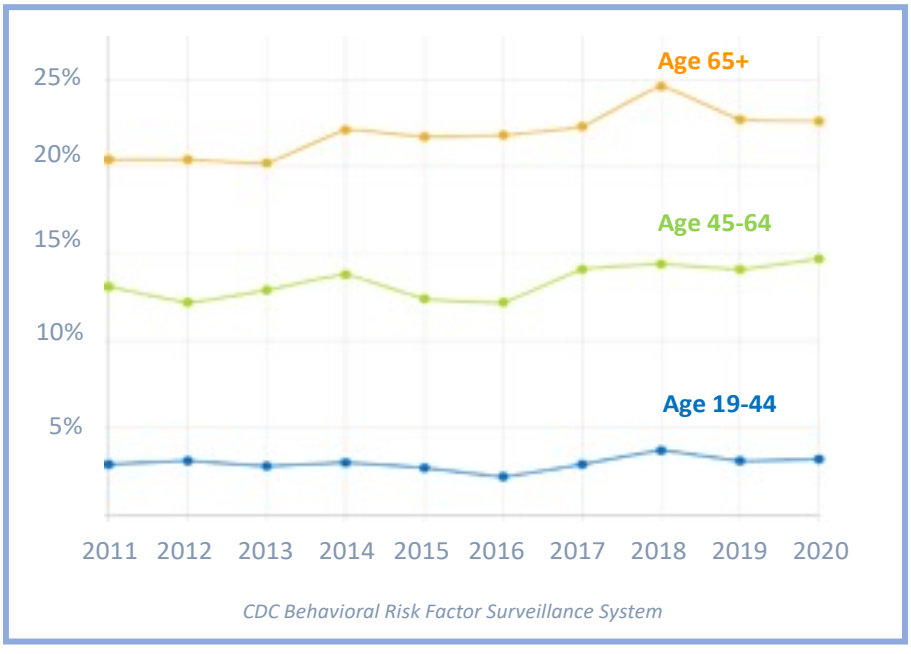
Diabetes doubles the risk of death from any cause, and additionally results in a 2 to 4 fold increase in the risk of death from cardiovascular disease and stroke. The risk of myocardial infarction (MI) in patients with diabetes mellitus is equivalent to the risk in non-diabetic patients with a prior MI, causing it to be considered a coronary artery disease risk equivalent. In 2014, more than 14% of Kansans who have diabetes were diagnosed with a stroke or coronary artery disease, with 14.2% of this population having an MI within that year. This is compared with 3% of the population without diabetes having an acute myocardial infarction.

Diabetic nephropathy is the leading cause of renal failure in the United States. In 2011, approximately 50,000 people began treatment for chronic kidney disease due to diabetes. Population estimates of the prevalence of renal failure due to diabetes indicate that at least 229,000 people in the United States are on dialysis or have a kidney transplant. Statistics from Kansas in 2014 indicated that 9.7% of patients who have diabetes have chronic kidney disease. Diabetes also is the leading cause of blindness and the cause of more than 10,000 new cases of blindness in the United States each year. Diabetic retinopathy affects approximately 16% of Kansans who are diagnosed with diabetes. Approximately 60% of non-traumatic lower extremity amputations are due to diabetes with resultant increases in morbidity and mortality due to infection. [15]

[15] *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5733403/*

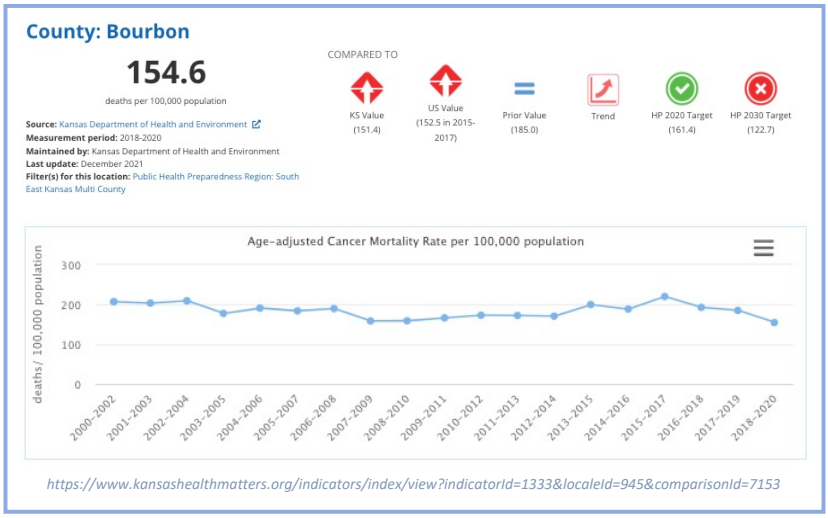


Diabetes has steadily increased in prevalence in the state and SEK over the past 20 years from 6 to 12% of the population. Incidence of diabetes increases with age. As the county population ages, the prevalence of diabetes is likely to grow.



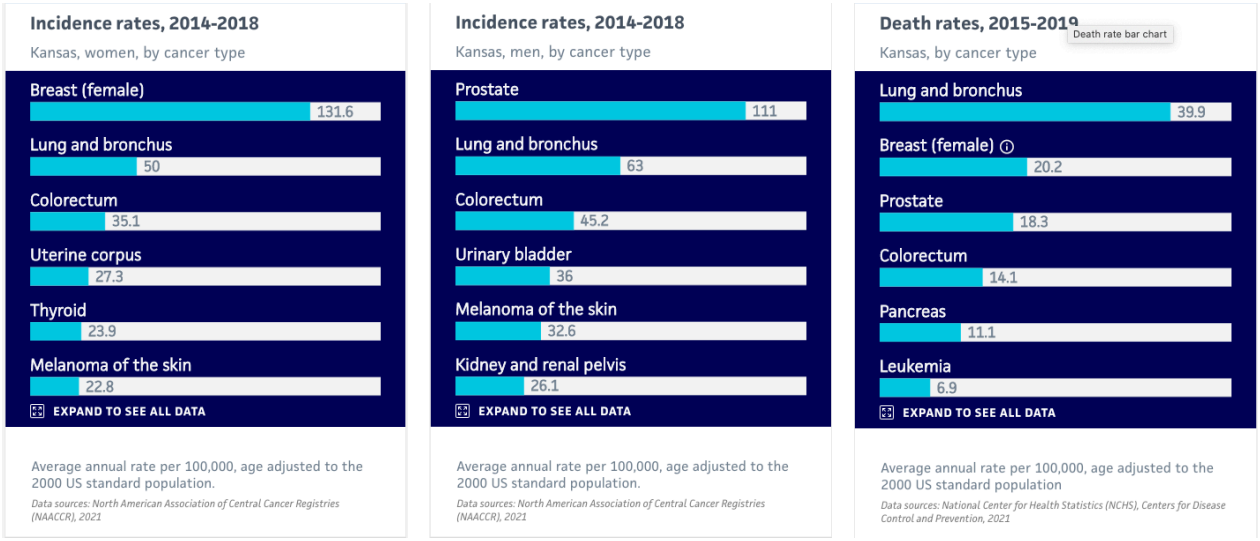
Cancer

The National Cancer Institute (NCI) defines cancer as a term used to describe diseases in which abnormal cells divide without control and are able to invade other tissues. In Kansas each year it accounts for about 5,000 deaths. It is also a leading cause of death nationally. NCI says there are over 100 different types of cancer, but breast, colon, lung, pancreatic, prostate, and rectal cancer lead to the greatest number of annual deaths. Risk factors of cancer include: age, alcohol use, tobacco use, poor diet, certain hormones, and sun exposure.[16]



https://www.kansashealthmatters.org/indicators/index/view?indicatorId=1333&localeId=945&comparisonId=7153

The age adjusted cancer mortality rate for the region is 188.7 per 100,000 with the Kansas rate of 164.1 per 100,000.



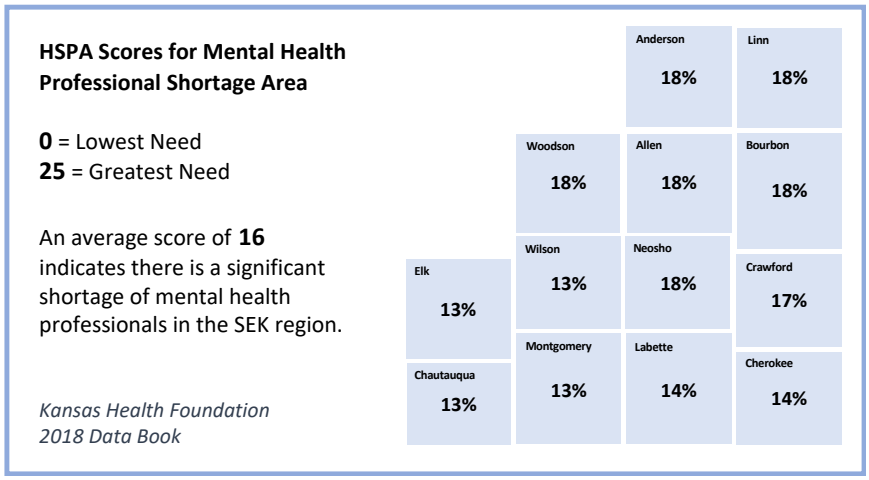
https://cancerstatisticscenter.cancer.org/#!/state/Kansas

[16] *https://www.kansashealthmatters.org/indicators/index/view?indicatorId=1333&localeId=945*

Mental Health

Mental health concerns rate in the top three of the most important health problems in Southeast Kansas according to participating agencies in the Health Assessment Study. Of our survey respondents, 27.1% rated cost of mental health care as a concern, while 17.1% rated access to mental health care a concern. The National Institute of Mental Health, (NIMH) records that approximately one in five adults in the United States experiences mental health illness.[17]

Recent estimates by the CDC show that approximately 25% of adults nationwide have a mental illness or diagnosable mental disorder and close to one-half of all U.S. adults will at some point experience at least one mental illness in their lifetime . Another study indicates that "at least 15 million rural residents struggle with significant substance dependence, mental illness, and medical-psychiatric comorbid conditions.



Currently, approximately 25% of all adult stays in U.S. hospitals are related to mental health and/or substance abuse disorders. Across the country, behavioral health ranks at or near the top of both hospital and public health community health needs assessments. While recent studies indicate that the prevalence of behavioral health problems is similar in rural and urban areas, a notable exception concerns the incidence of suicide. The Department of Health and Human Services (DHHS) estimates that approximately 20% of rural residents aged 55 and older have a mental disorder and rural communities report significantly higher suicide rates than urban areas for both adults and children.[18]

"Nearly forty percent of all region respondents indicated Mental Health as one of the three most important health problems in their community. It was the most prevalent choice by far. According to the National Institute of Mental Health, approximately one in five adults in the United States experiences mental health illness."[19]

[17] *SEK_CAP 2017*
[18] *The Future of Rural Behavioral Health, NHRA, Feb 2015*

Although national data suggests that the prevalence of clinically defined behavioral health problems among the adult population is similar in rural and urban settings, the availability and accessibility of behavioral health services is limited for people living in rural and frontier communities. In particular, psychiatrists are far less likely to practice in a rural area. This can be seen in the marked disparities in the number of practicing psychiatrists between rural and urban areas.

More than 90 percent of all psychologists and psychiatrists and 80 percent of professionals with Masters in Social Work practice exclusively in metropolitan areas. Due to this shortage of behavioral health professionals, primary care caregivers provide a large proportion of behavioral health care in rural America and may lack the training and experience necessary to handle serious behavioral health issues[20].

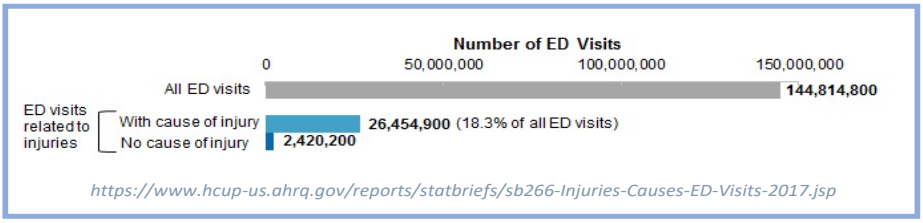
Unintentional Injuries[21]

Unintentional injuries are a leading cause of death for Kansans of all ages, regardless of gender, race, or economic status. Unintentional injuries include motor vehicle collisions, poisonings, and falls. Nationally the rate is approximately 40 deaths per 100,000 population.

The Southeast Kansas region also stood out with hospital admission rate due to unintentional injuries being almost double that of the Kansas hospital admission rate and deaths due to unintentional injuries were significantly higher than the state rate.

Age-Adjusted Unintentional Injuries Mortality Rate per 100K Population

https://www.kansashealthmatters.org/indicators/index/view?indicatorId=1343&localeId=945



https://www.hcup-us.ahrq.gov/reports/statbriefs/sb266-Injuries-Causes-ED-Visits-2017.jsp

[20] *The Future of Rural Behavioral Health, NHRA, Feb 2015*

[21] *https://www.kansashealthmatters.org/indicators/index/view?indicatorId=1343&localeId=945*

Alcohol, Drug Use and Suicide[22]

The mortality rate from stress related conditions—drug overdoses, alcohol poisoning, alcoholic liver disease and suicide—has more than doubled since the late 1990s for White, non-Hispanic, Kansans age 25-64. What are the causes of this concerning trend? The largest relative increase (158 percent) occurred in North Central Kansas. Southeast Kansas, where death rates from all causes were already the highest in the state, experienced the second highest relative increase (147 percent).

A majority of respondents in the community health assessment chose drug abuse as one of the most risky behaviors in their community. Alcohol abuse as one of the most risky behaviors was also chosen by a wide margin. Core profiles coincide with survey findings as the regional rate for adult drinking in 2015 was 15.4 compared to the state rate of 15.6. Drug arrests for the region were 396, and out of those 213 were in Crawford County.[23]

Increases in Deaths Adults Aged 25-64 in Kansas 1995-2014

Data For White Adults Why Are Death Rates Rising In The White Population Of Kansas? The Role of Stress-Related Conditions, Center of Society And Health, University of Pittsburg, 2018

[22] *https://www.khi.org/policy/article/vcu-study*
[23] *SEK Community Health Report 2017*

2.3 Economic Impact of Health Care to Bourbon County [24] [25]

Summary

1. Hospitals/health services are the 5th largest producer of income and sales in Kansas - $23 Billion.
2. Hospital and health services are the 4th largest employer and the 5th largest producer of total income and total sales in Kansas – 348,572 jobs and $23 billion in income/sales. (18)
3. In rural communities with an operating hospital and ambulatory services, the healthcare sector employs between 12-15% of the workforce and provides incomes in the top 20% of the workforce.
4. The loss of the hospital impacted the local Bourbon County economy as a portion of each dollar earned by hospital employees is spent in the community.
5. Hospitals are one pillar of a rural community's economy, contributing directly through wages and consumption, and indirectly by helping to attract residents and businesses.

   Kansas communities that lose their local hospital experience a more difficult, if not impossible path to maintain or increase economic vitality.

6. Retirees have incomes, assets and savings. Healthcare Medicare reimbursements and personal spending on local healthcare is now a significant part of the local economy and will grow with the population of seniors. However, seniors rate the availability of healthcare as a the most important factor in deciding where to locate.

   A focus of economic development for rural communities on attracting seniors can be an effective strategy and has been a successful path for some rural communities. Each successful community offered an adequate level of healthcare.

[24] *The Importance of the Health Care Sector to the Economy of Bourbon County, Kansas State University Dept of Agricultural Economics, 2021*
[25] *Importance of Healthcare to the Bourbon County Economy, Kansas Hospital Association 2021*

Community Vitality and Rural Healthcare

In rural communities, healthcare and the overall vitality of the community are intrinsically linked. A robust community supports and sustains quality health and social services for its residents by attracting and retaining well-trained and committed healthcare professionals. Communities with strong economies may be more likely to financially support their healthcare system through philanthropic giving and by investing in infrastructure that can be leveraged by the healthcare system. In return, a high-quality healthcare system can support economic and community development initiatives. Together, strong rural economies and rural healthcare systems can address the five domains of the Social Determinants of Health: economic stability, education, health and healthcare access, the built environment, and social cohesion.

Leveraging Healthcare Services In Economic and Community Development Efforts

Healthcare services are important to community and economic development not only in terms of the employment and labor income generated in the local economy, but also to attract and retain business and industry. As remote work and web-based employment become more popular and necessary during public health emergencies like the COVID-19 pandemic, access to healthcare is an important consideration for workers to continue to live in or relocate to rural areas.
Retirees are more likely to move to or stay in rural communities with quality healthcare facilities, and data have demonstrated that retirees can substantially impact the local economy. For example, the 2018 report Evaluating Retiree-Based Economic Development in Georgia: Golden Rules shows that bringing retirees into a community grows and diversifies the local economy, with 55 jobs generated for every 100 new retirees in rural Georgia.

Healthcare leadership should be involved in community and economic development to assure that the healthcare services needed for attracting and retaining businesses, industries, and retirees are provided locally. Rural hospitals can also play a role in the community by working with high schools and community colleges to develop the emerging workforce.

This article from RHI[26] is just one that highlights the importance of the business community supporting the local hospital and working in partnership with them to achieve the healthcare outcomes they desire for their employees. One of the main economic engines for the Bourbon County region will be a successful and strong community hospital.

Kansas hospitals annually generate approximately $6.7 billion in direct, total income (employees' salaries). For every $1 of income generated by hospitals, another $0.59 is generated in other businesses and industries in the state's economy. Thus, hospitals have an estimated total impact on income throughout all business and industry of nearly $10.7 billion. The health care sector (which includes hospitals) is the fifth largest producer of total income and total sales in the state.[27]

Southeast Kansas communities have watched their youth mature into young adults and leave the area for better educational and employment opportunities. The community health assessment revealed that community members thought that the schools were one of the most important aspects of their community. The unemployment rate for the region is the same as the state unemployment rate of 3.9%. Despite the fact that the unemployment rate for the region was 3.9% the regional median household income is only $39,442.00 compared to the state of Kansas median income of $52,405.00 - 25% lower than the state median.

> *"Modern industries are discouraged from locating in the region by poor transportation (e.g., lack of four-lane highways) and limited broadband access, and professionals have left local communities in search of better jobs elsewhere.[28]"*

Health Services and Community Industry

Quality of life factors play a significant role in business and industry location decisions. Good health and education services are essential to industrial and business leaders as they select a community for location. Employees and participating management may offer strong resistance if they are asked to move into a community with substandard or inconvenient health services. Secondly, when a business or industry makes a location decision, it wants to ensure that the local labor force will be productive, and a key productivity factor is good health. Thus, investments in health care services can be expected to yield dividends in the form of increased labor productivity. A third factor that business and industry consider in location decisions is cost of health care services. Corporations look carefully at health care costs, and communities with lower cost health care services can received priority. 17 percent of surveyed companies indicated that they used health care costs as a tie breaking factor between comparable sites.[29]

Health Services and Retirees

A strong and convenient health care system is important to retirees, residents whose spending and purchasing provide a significant source of income for the local economy (19% of Bourbon County population were 65+ in 2017). Retirees represent a substantial amount of spending, including the purchasing power associated with pensions, investments, Social Security, Medicare and other transfer payments. Several studies suggest health services may be a critical variable that influences the location decision of retirees. For example, one study found that four items were the best predictors of retirement locations: safety, recreational facilities, dwelling units, and health care. Another study found that nearly 60 percent of potential retirees said health services were in the "must have" category when considering a community for retirement.

---

[27] *Protecting the Foundation of Healthcare in Kansas, KHA 2019*

[28] *SEK-CAP and Project 17. Southeast Kansas Regional Assessment, April 2015. http://www.sek-cap.com/images/ Community-Assessment/2016_Annual_Update/Southeast_ Kansas_Regional_Assessment_-September_15_2016_ UPDATE.pdf*

[29] *ibid*

Health Services and Job Growth

Health care services are typically the second largest sector of employment in rural communities and account for 10 to 15 percent of total employment. Hospitals are often the second largest employer in a rural community. As a nation, we spend much more now on health services than we did 30 years ago. In 1990, Americans spent $1.1 trillion ($2015) on health care, and at the current rate of growth, spending will increased to nearly 20% of GDP - $3.5 trillion in 2028.[30]

Direct Employment, Income and Sales by Economic Sector and Health Services Related Share Compared to State and USA

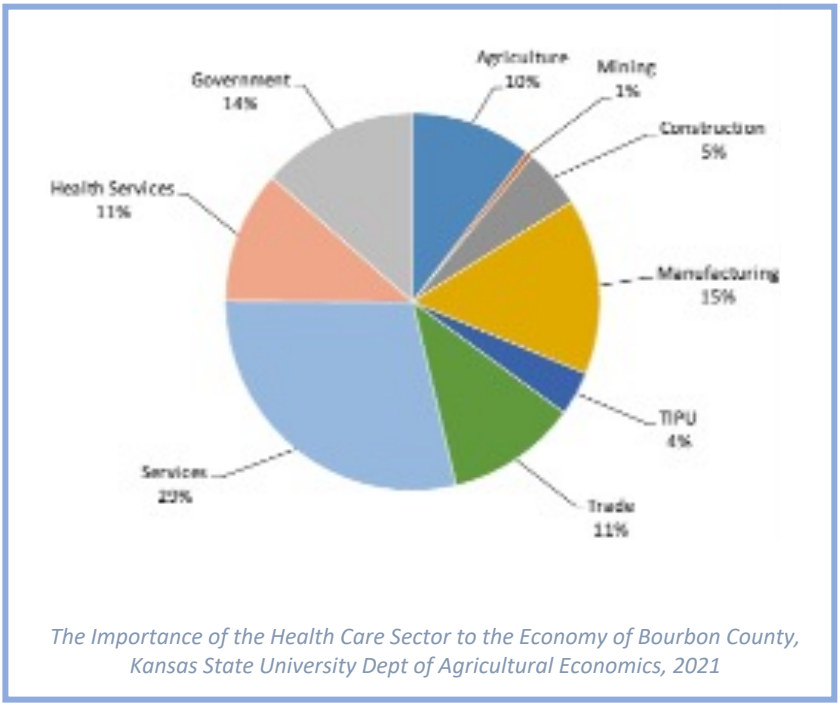
Sector	Employment	Total Sales	Labor Income	Total Income
Agriculture	933	143,983,000	4,274,000	49,662,000
Mining	47	13,957,000	1,979,000	2,086,000
Construction	458	57,021,000	15,429,000	20,198,000
Manufacturing	1348	458,429,000	92,132,000	152,017,000
TIPU	338	49,155,000	11,068,000	22,221,000
Trade	1007	151,330,000	40,904,000	86,160,000
Services	3583	489,109,000	192,833,000	270,088,000
Health Services	1014	104,702,000	43,230,000	50,195,000
Heath and Personal Care Stores	42	3,817,000	1,559,000	2,323,000
Veterinary Service	16	1,127,000	438,000	562,000
Office of Physicians	26	2,608,000	1,019,000	1,018,000
Office of Dentists	32	3,033,000	1,204,000	1,724,000
Office of Other Health Practitioners	105	10,363,000	4,012,000	5,109,000
Outpatient Care Centers	152	15,325,000	5,001,000	5,945,000
Medical and Diagnostic Laboratories	13	2,012,000	1,059,000	1,057,000
Home health Care Services	152	5,601,000	4,105,000	3,516,000
Other Ambulatory Health Care	0	-	-	-
Hospitals	256	46,178,000	18,223,000	21,314,000
Nursing and Community Care	216	14,248,000	6,513,000	7,479,000
Residential Treatment Facilities	0	-	-	-
Fitness Centers	5	389,000	97,000	147,000
Government	1211	69,952,000	58,552,000	68,567,000
Total	**8925**	**$1,432,936,000**	**$417,170,000**	**$670,999,000**

The Importance of the Health Care Sector to the Economy of Bourbon County, Kansas State University Dept of Agricultural Economics, 2021

[30] *Importance of Healthcare to the Bourbon County Economy, Kansas Hospital Association 2021*

Health Services in Bourbon County employed 1,014 people, 11.4 percent of all job holders in the county (2019). Health Services for the state of Kansas employs 9.1 percent of all job holders, while 10.1 percent of all job holders in the United States work in Health Services. Health Services in the county has a number linking in terms of employment.[31]

Bourbon County Employment By Sector



The Importance of the Health Care Sector to the Economy of Bourbon County, Kansas State University Dept of Agricultural Economics, 2021

The full impact of the health care sector in rural communities goes beyond the number of people employed and the wages they receive. The secondary impact or "ripple effect" is from local businesses buying and selling to each other and from area workers spending their income for household goods and services. As dollars are spent locally, they are, in turn, spent for other goods and services. This spending and re-spending occurs over multiple rounds until it is finally exhausted.

In the table below, the hospital employs 256 people and has an employment multiplier of 1.51 - another 0.51 jobs are supported in other businesses and industries in the county's economy. The direct impact of the 256 hospital employees is an indirect impact of 130 jobs (256 x 0.51 = 130) throughout all businesses and industries in the market area. Hospital employment had a total impact on area employment of 386 jobs (256 x 1.51 = 386).

[31] *The Importance of the Health Care Sector to the Economy of Bourbon County, Kansas State University Dept of Agricultural Economics, 2021*

Similarly, multiplier analysis can estimate the total impact of the estimated $18,223,000 direct income for hospital employees shown in Table 4. The hospital sector had an income multiplier of 1.27, which indicates that for every one dollar of income generated in the hospital sector, another $0.27 is generated in other businesses and industries in the county's economy. Thus, the hospital sector had an estimated total impact on income throughout all businesses and industries of $23,156,000 ($18,223,000 x 1.27 = $23,156,000.

Health Sector Impact on Employment 2019

Health Sectors	Direct Employment	Economic Multiplier	Total Empoyment
Health and Personal Care Stores	42	1.29	54
Ceterinary Services	16	1.12	18
Office of Physicians	26	1.35	35
Office of Dentists	32	1.26	40
Office of Other Health Practitioners	105	1.23	130
OutpatientCare Centers	152	1.41	215
Medical and Diagnostic Laboratories	13	1.36	18
Home Health Care Services	152	1.12	170
Other Ambulatory Health Care	0	0	0
Hospitals	256	1.51	386
Nursing and Community Care	216	1.23	266
Residential Treatment Facilities	0	0	0
Fitness Centers	5	1.24	6
Total	**1014**		**1337**

The Importance of the Health Care Sector to the Economy of Bourbon County, Kansas State University Dept of Agricultural Economics, 2021

Health Sector Impact on Retail Sales and County Sales Tax 2019

Health Sectors	Total Impact	Retail Sales	Sales Tax
Health and Personal Care Stores	1,894,000	547,000	5,000
Ceterinary Services	520,000	150,000	2,000
Office of Physicians	1,311,000	378,000	4,000
Office of Dentists	1,450,000	419,000	4,000
Office of Other Health Practitioners	4,765,000	1,376,000	14,000
OutpatientCare Centers	6,613,000	1,909,000	19,000
Medical and Diagnostic Laboratories	1,262,000	365,000	4,000
Home Health Care Services	4,849,000	1,400,000	14,000
Other Ambulatory Health Care	-	-	-
Hospitals	23,156,000	6,686,000	67,000
Nursing and Community Care	8,905,000	2,471,000	26,000
Residential Treatment Facilities	-	-	-
Fitness Centers	116,000	33,000	231
Total	**54,840,000**	**15,734,000**	**159,231**

The Importance of the Health Care Sector to the Economy of Bourbon County, Kansas State University Dept of Agricultural Economics, 2021

In this manner, the total employment and income impacts of all the health services sectors can be estimated. In Table 3, the total employment impact of the health services sector results in an estimated 1,337 jobs in the local economy. In Table 4, the total income impact of health services results in an estimated $54,840,000 for the economy.

Health Sector Impact on Income 2019

Health Sectors	Direct Income	Economic Multiplier	Total Impact
Health and Personal Care Stores	1,559,000	1.21	1,894,000
Ceterinary Services	438,000	1.19	520,000
Office of Physicians	1,019,000	1.29	1,311,000
Office of Dentists	1,204,000	1.20	1,450,000
Office of Other Health Practitioners	4,012,000	1.19	4,765,000
OutpatientCare Centers	5,001,000	1.32	6,613,000
Medical and Diagnostic Laboratories	1,059,000	1.19	1,262,000
Home Health Care Services	4,105,000	1.19	4,849,000
Other Ambulatory Health Care	-	-	-
Hospitals	18,223,000	1.27	23,196,000
Nursing and Community Care	6,513,000	1.37	8,905,000
Residential Treatment Facilities	-	-	-
Fitness Centers	97,000	1.19	116,000
Total	**43,231,014**		**54,881,000**

The Importance of the Health Care Sector to the Economy of Bourbon County, Kansas State University Dept of Agricultural Economics, 2021

The table below shows the retail sales that the health sector helps to generate. In 2019, Bourbon County had retail sales of $170,921,000 and $591,947,000 in total personal income. Thus, the estimated retail sales capture ratio equals 28.9 percent. Using this as the retail sales capture ratio for the county, this says that people spent 28.9 percent of their income on retail goods and services within the market. By taking all the household income associated with health sector activities and multiplying by the retail sales capture ratio, we can estimate the impacts of the health sector on area retail sales.

Thus, the total retail sales generated by the retail sector equals $15,835,000 ($54,840,000 x 28.9% = $15,835,000 without including any local purchases made by the health services businesses. Finally, the last column shows the county sales tax collections associated with the retail sales. This includes only county sales tax collection. It does not include state or other local municipal sales taxes. If the county did not levy a sales tax, the amount is zero. If the county sales tax rate changed in 2019, the rate applied is the rate published by the Kansas Department of Revenue. The Health sector also contributes to the public finances supporting essential public services.

2.4 Survey Results: SEK and Bourbon County

Kansas Rural Hospitals[32]

A survey was conducted in 2018 to better understand the efforts of Kansas hospitals in the area of population health, including strategies utilized, benefits and challenges. The survey was distributed to CEOs of the 124 KHA member hospitals on May 3, 2018. A total of 88 survey responses were received, and 57 sufficiently complete survey responses were retained for analysis.

- Three-quarters (75.5 percent) of respondents who participated in the survey agreed or strongly agreed their hospital should focus on addressing the health of populations beyond patients.
- "Improve health of the community" and "reduce readmissions" were identified by respondents as the strongest incentives for addressing population health.
- "Available funding" was identified by respondents as the main challenge associated with addressing social and economic factors in the community such as housing and transportation.
- A higher proportion of respondents implemented population health efforts in the areas of "access to health care" and "access to physical activity," while a lower proportion of respondents implemented efforts in the areas of "housing" and "environmental quality in the community."
- More hospitals tended to engage in activities focused on providing referrals to community services, and fewer respondents implemented activities that involved advocating for policies.
- To advance population health, respondents indicated that hospitals will need assistance identifying funding sources for covering this work and training on evidence-based strategies.

- The numbers of patients leaving their community for hospital care implies an opportunity for improvement in the health care system.

There is a disconnect between what Kansas rural residents identify as healthcare priorities and what they actually are willing to pay for. Further, rural residents throughout the state seek care outside their communities for more acute conditions, even if capacity to treat these conditions is available locally.

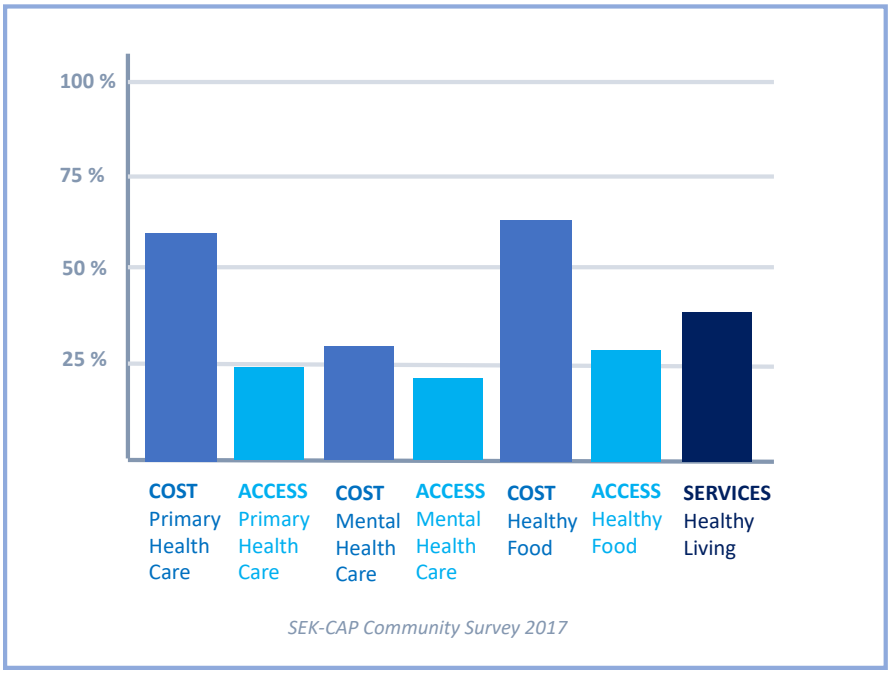
[32] *https://www.khi.org/policy/article/18-22*

SEK Region

Survey Results [33]

A 2017 community survey by Southeast Kansas Community Action Project (SEK-CAP) collected responses from hundreds of residents in focus groups across the SEK region communities. The focus groups were asked about multiple topics, including healthcare. The SEK region is comprised of 9 counties, including frontier, rural, and semi urban (Crawford) counties. With 20% of the population 65+ and average incomes 15% below the $55K household income, cost was cited most often.

Access to clinical and mental health care were cited by about a quarter of respondents, despite the presence of 35 CHC facilities in the region. Access to services that would help respondents combat obesity, substance abuse, tobacco, and smokeless tobacco were cited by nearly a third of respondents.



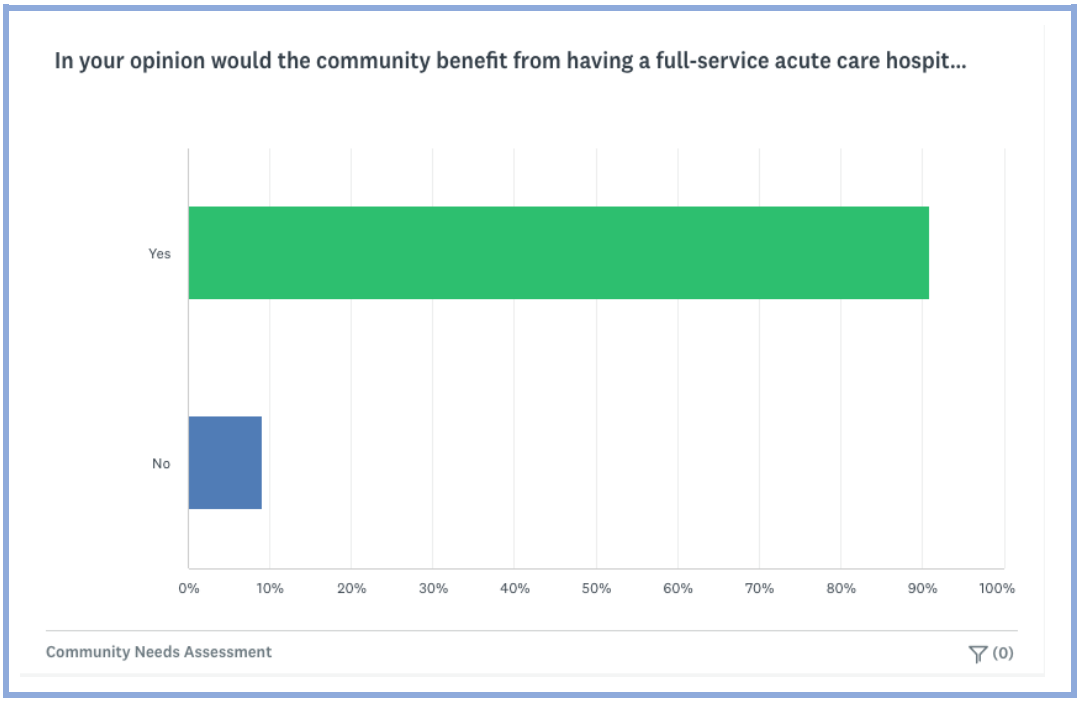
[33] *SEK CAP Community Needs Assessment 2019-2021*

Bourbon County [34]

The county conducted a survey of residents in December 2021, to understand sentiment regarding health care in the county since the closure of the hospital in 2018. The online survey posed 5 questions with results favoring the return of an acute care hospital and expected usage if it were to reopen. The survey also sought to learn where residents traveled for care not offered in the county and how often they sought care. Perhaps most importantly the respondents identified those services they would most want to be offered in Bourbon County.

- Bourbon County residents believe the community would benefit from a full-service acute care hospital.
- Over 40% of residents now travel outside the county to receive healthcare.
- The vast majority of residents receive a comparatively low level of preventative care.
- Primary, pediatric, and women's health care are needed most

Strong opinion among those surveyed favorable to reopening the hospital.

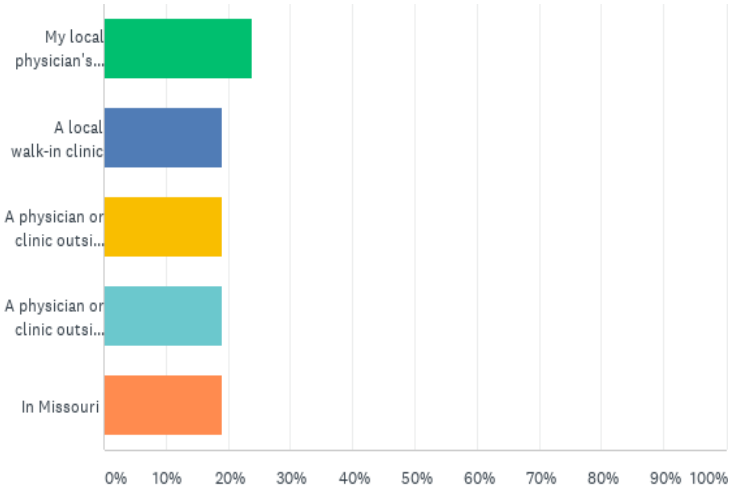


[34] *Bourbon County Health Survey 2021*

40% of residents travel outside the county for primary care.

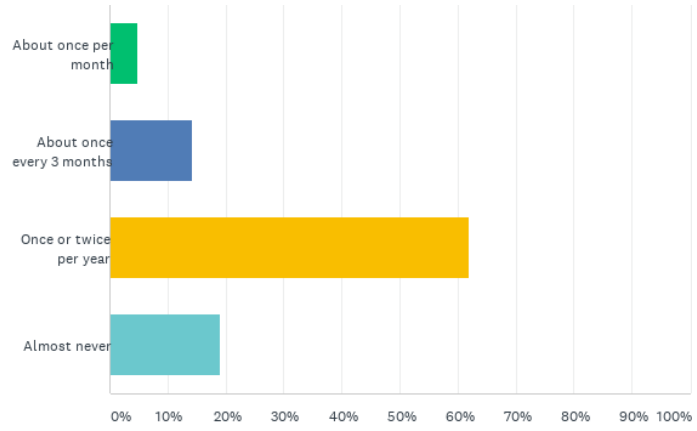
Why?
Perception of quality at other clinic/hospital?
Lack of access?
Lack of trust?

Q2: Right now, where do you go to get the healthcare services you need?



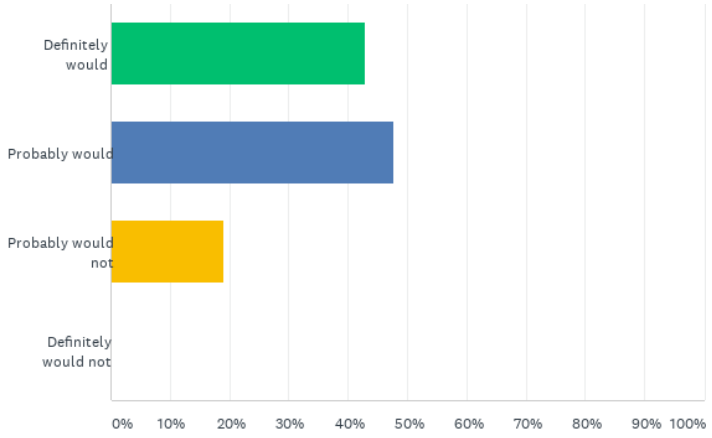
More preventive care programs are needed

Q3: How often do you see a healthcare provider?



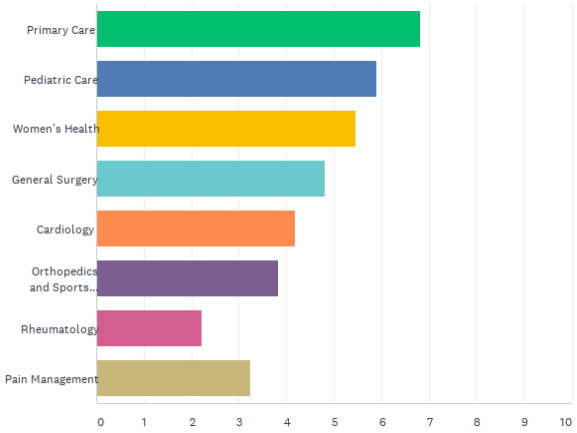
Over 80 % of respondents would likely use a re-opened hospital

Q4: If the hospital in Fort Scott were to reopen would you use it?

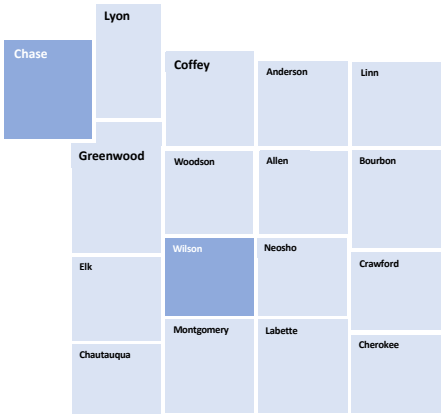


Despite the presence of CHC in the county and the region, the most request services are primary and pediatric care.

Q5: How would you rank the need for what services the hospital should offer if it were to reopen?



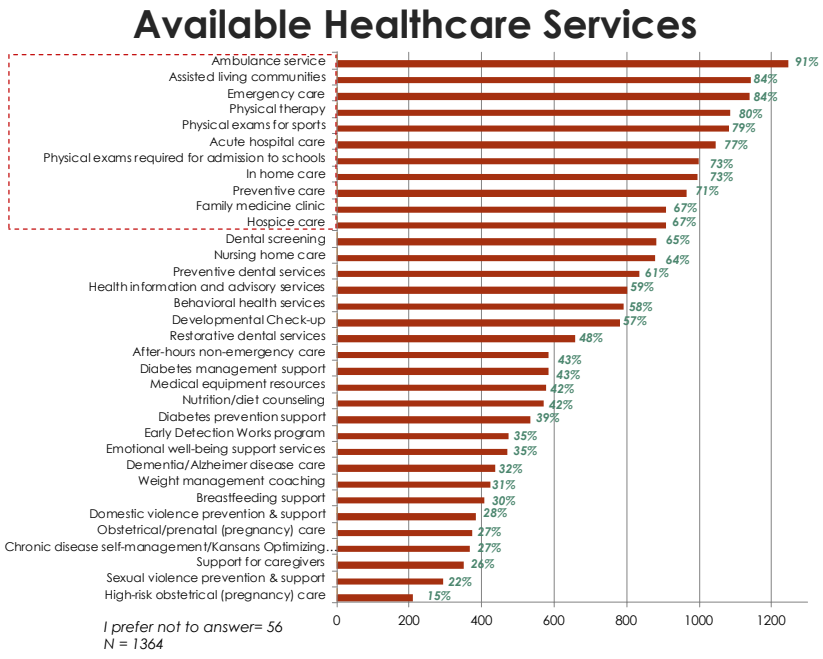
Southeast Kansas Community Assessments



Forthcoming Bourbon County survey results in Q3 2022

Wilson County Survey 2021

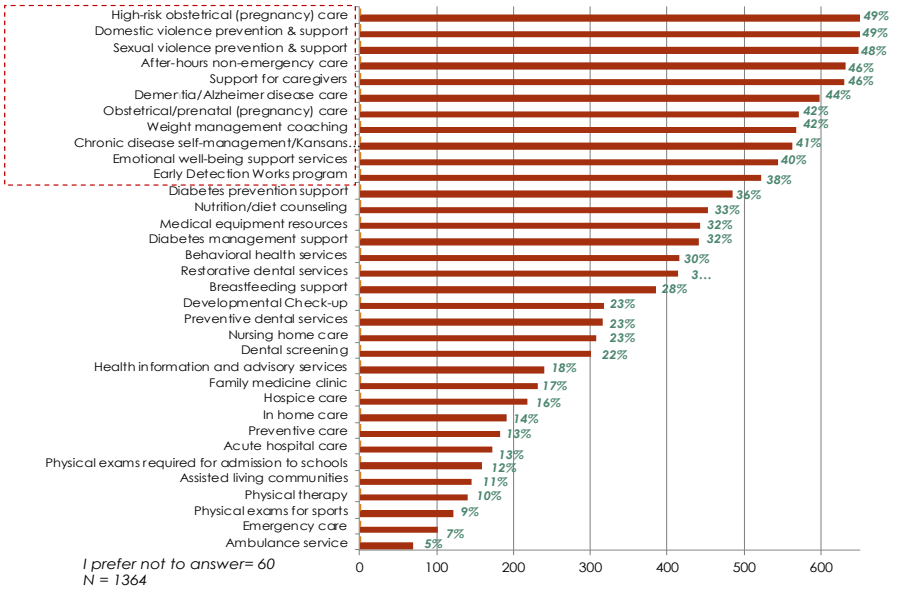
Across the SEK region, the themes regarding health care are consistent over time. Residents perceive available health care services to include family medicine and emergency care with ambulance service when needed. Beyond services most common to hospitals, the understanding of what health services are available locally appears to be not well understood and could be a root cause of out-migration.



Across the state, there is a pattern in community surveys of residents expressing their want for local health services but not using the services locally and instead driving to another community for care. In

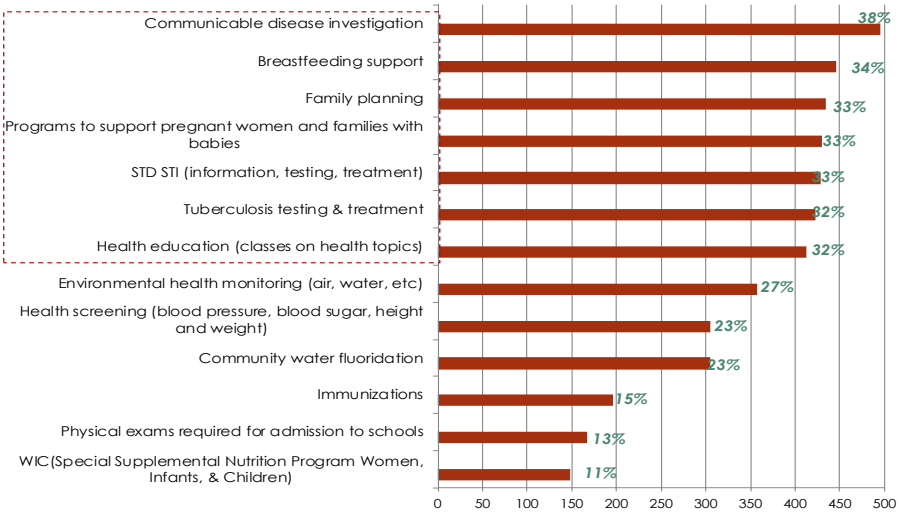
Bourbon County and other counties in SEK, about 40% of residents seek medical outpatient services outside the county. The Wilson County survey shows wanted services that typically are not offered by hospitals and often are not in the scope of even primary care – indicating a gap between what is needed locally and what is provided. Perhaps as many as 50% of wanted services are for assistance in understanding how to manage chronic conditions and pursue better health.

Healthcare Services Wanted



I prefer not to answer= 60
N = 1364

Public Health Services Wanted



I prefer not to answer = 70
N = 1304

2.5 Bourbon County Community Meetings

Summary

1 Out-migration of healthcare service and the related dollars for that service is coming in part from employers. Employers now bear the higher cost for employee healthcare and a greater impact of lost productivity as employees travel outside the region for care, increasing time away from work.

2 Direct contract pricing between local businesses and healthcare facility can reduce the cost of care for the business and ensure a threshold of essential volume of services for the health provider.

3 Kansas hospitals see themselves as advocates for better health in the communities they serve. But there is no dedicated funding source for community programs where hospitals can participate in improving population health.

4 Primary care is the most requested health care service for SEK and Bourbon County residents. Despite the presence of the FQHC in the region, regional and county feedback consistently asks for better and more access to primary care.

5 Mental health care is a high priority but underserved need in the SEK region.

6 Over 42% of all healthcare services are provided to Bourbon County residents outside of Bourbon County.

7 There is a disconnect between what people say they want when surveyed and what they actually do. Throughout Kansas and the SEK region, community health surveys reveal the most pressing healthcare needs, but resident behavior does not match survey results. Residents say they want care locally, but seek care out of town.

Bourbon County Community Hospital Summary to Success with Local Businesses[35]

In assessing the healthcare needs in Bourbon County and Fort Scott and the viability of reopening the hospital, a substantial amount of effort has gone into direct meetings with companies and business owners in the region. These meetings were to surface what service lines locally are required for them to consider keeping healthcare close to home for their employees.

Much of the migration of healthcare service and the related dollars for that service is coming from these employers. The result is a higher cost for providing healthcare and a greater impact of lost productivity with their employees leaving the region for that service.

[35] RHI Rural Health Information Hub
https://www.ruralhealthinfo.org/topics/community-vitality-and-rural-healthcare#impact

Some employers even provide transportation for their employees to travel to the Kansas City metro region for their healthcare causing a deeper financial burden to those companies.

The largest 50 companies in Bourbon County excluding two healthcare entities represent 3,291 employees. Population for the county in 2020 was 14,360 showing the significance of this impact to the county even before factoring in the family dynamic that most employees represent.

The needs of the business community are similar to the rest of the region. Currently underserved with the number of family practice physicians and pediatricians, other needs include lab testing, specialty service lines and orthopedics which are presently unavailable in the county.

Especially in a rural market, keeping healthcare dollars close to home only happens if many of those services needed can be provided locally. Meeting those healthcare needs of the business community with competitive pricing is critical for the hospital. If a business can actually forecast with some certainty what the cost could be is significant. Creating direct contracting pricing between the business and healthcare facility helps those businesses budget with a better vision of that cost if a greater range of those services can be provided.

Direct Contracting Model

Creating a contractual relationship with the majority of the largest employers in the county is a critical component in the reopening the hospital. Not having that type of local business support will have a direct impact on the viability of the proposed hospital.

The business community understands the value to them and their employees and have been initially receptive to looking into what a contractual rate would mean to them as well as quality healthcare for their employees. This will be a key piece moving forward.

Corporate Advisory Council

A strategic action item to ensure care close to home will be brought to businesses in the region and their employees is to create a business or Corporate Advisory Council. This is something separate from the hospital board or foundation. This would be a committee made of up large and small businesses in the region. The purpose is to have substantive ongoing communication with the hospital ensuring their concerns are met with regards to quality healthcare, service lines, and direct ongoing input with the hospital on their employee needs. From the six months of meeting with numerous business owners, leaders, managers and staff, communication and input are critical points they felt they have not had and want.

This type of collaboration and communication goes hand in hand with creating a contractual relationship with companies with competitive rates that can prove to be a financial benefit to those companies while providing quality healthcare close to home.

Besides providing quality healthcare, additional benefits are realized for the community. The strongest two selling points for any Chamber of Commerce in enticing businesses to relocate or existing businesses to expand are quality education and healthcare. The quality of these two selling points for a community has a strong multiplier in increasing your workforce and a draw to increase the regional workforce.

To accomplish the objectives necessary in the assessment of the Fort Scott hospital, it was vital to ensure that the community was apprised of a certain amount of information on the project. In addition, it is vital to evaluate the area to determine if local stakeholders believe that a hospital would be relevant to the community. Over the course of 62 meetings in the last several months, the team at Noble Health has been able to create a presence in the local community and has built trust with the community leaders and developmental bodies in Fort Scott. As such, it has been able to evaluate with accuracy the general perception of a community hospital in Fort Scott.

To be successful in this endeavor it is necessary to have the organizations that will send their customers, employees, and clients to the new medical center for treatment. To accomplish this, meetings were held with major public and private organizations as well as community leaders in the area.

Public Entities

Overall, the public entities are very supportive of the Fort Scott hospital. For the most part, they have felt the lack of a true medical center in the community since the previous hospital closed. The perception is that the lack of a local medical center and appropriate primary care services have compounded health issues within the population of the community and the county, from cardiovascular issues to undiagnosed disease and behavioral health problems.

The consensus of the public entities in the region is that a medical center will provide positive and relevant care to the community and will also drive economic development in a way that is not possible without a medical center available to employees that may come in with any large industry. The commute to a larger medical facility is at least a 30-minute drive from Fort Scott.

If a larger employer were to move into the region, their productivity factors would require medical treatment closer than that. The opinion of the public entities is that a large employer would need their employees and their families to have closer medical care. It is believed that the Fort Scott hospital would solve many of these problems which is the reason for their support.

Entities that have been engaged are listed below.

- Fort Scott Area Community Foundation
- Fort Scott Chamber of Commerce
- Fort Scott Community College
- Bourbon County Commission
- City of Fort Scott
- USD 234
- USD 235
- State and Local Elected Officials
- City of Fulton
- Fulton School Board
- Southeast Mental Health
- State of Kansas Department of Commerce
- State SIA Program
- Bourbon County Economic Development

Private Entities

Private entities are generally supportive and accepting of the need for a Fort Scott hospital. They are less engaged because their existence does not depend upon a medical center. However, their ability to maintain a workforce has been affected by the lack of one. Currently, several private employers are outsourcing their medical needs to other markets like Kansas City or Pittsburg because there is not a local alternative.

The need for workers to travel for medical treatment can take away from productivity at a financially discernible rate. The support from private companies and individuals was tangible, however, many believe their contributions will take place after the facility is opened. Businesses see the value of having a local option for medical care and are willing to support the efforts.

Private Entities Engaged

- Landmark National Bank
- Fort Scott Tribune
- Citizen Bank
- City State Bank
- Ward Kraft
- Union State Bank
- Extrusions Inc.
- LaRoche Group
- Real Estate Firms
- Concerned Citizens for Bourbon County
- Medicine Lodge
- Funeral Home
- Former Hospital Employees
- Law Firms
- Local Daycares
- Gordon Parks Museum
- Thrive Allen County
- Patterson Foundation

Common Community Needs

Many of the topics of need for community members are highlighted above, however, there are many more, as each business or organization has its own needs and desires. Listed below are the major needs of the community in relation to bringing in a Fort Scott hospital.

- Basic and Primary Care Services
- Maintaining a working Emergency Room
- Short Term Care
- Med/Surg and Outpatient procedures
- Commute to current medical facilities
- Enough medical care to service the amount of workforce within the community
- Services for the local school districts
- OBGYN services
- Wound care
- Laboratory Services;
- Workman's Comp Claim services
- Mental Health bed shortage
- Hospice Care
- Opportunities for feeder facility collaboration

Community Concerns

One of the reasons for an evaluation is to determine any and all roadblocks and concerns from the community that can be addressed at the front of the project, leading to a smoother opening and transition for the local community as a whole. Some members of the community, while supportive, if the hospital can get up and running, are skeptical as to its success. They are concerned about the

stereotypes that are already in place due to the former hospital and the community relationship. The concerns are, in some cases, based on rumor or opinion, rather than fact.

Negative Concerns

- A hospital is too expensive for the area it serves.
- The hospital and the community do not have a good enough relationship to succeed.
- A hospital is unnecessary.
- The hospital will not provide the services that the community really needs (i.e. OBGYN).
- The hospital is not going to assist in economic development.

Conclusion

Overall, the community sentiment is very positive. According to the community partners, members and organizations, there appear to be holes within the medical infrastructure of the area that need to be filled. (This report identifies these holes in Sections 5 and 14).

A Fort Scott hospital may present reasonable solutions to the community in cost-efficient ways. In addition to medical services, community organizations are looking at a possible medical facility in the area as a stepping-stone in economic development. The medical facility that can provide most or all of the above services will help bring opportunities for larger employers to look at the Fort Scott area, bringing in jobs and population.

3 FEASIBILITY ANALYSIS

Summary

1. The structural problem of reimbursements not covering the cost of care for rural hospitals exists for every hospital in Southeast Kansas (SEK). Each has an operational loss each year. Hospitals stay solvent with grants and donations, but do not get enough federal or state financial support to cover their losses.

2. Rural hospitals in SEK have, on average, 30% of reimbursement from Medicare and Medicaid, a higher percentage of public payment than most more urban hospitals. All rural hospitals, including SEK hospitals, must find a sustainable balance between cost and reimbursement. As costs rise, reimbursements often do not, so the structural imbalance grows each year.

3. Many rural communities rely upon tax levies where residents of the region they serve pay yearly taxes for the existence of a local hospital. While some Kansas communities have tax levies that support their local hospital, a sustainable tax levy solution for Bourbon County is likely unworkable and too expensive.

4. However, some form of county financial participation in community health could fund needed initiatives and stimulate resident awareness and involvement as the payment incentivizes residents to use community health services and facilities for better health.

5. Operation of a new Bourbon County hospital would likely need a property tax abatement until a threshold of revenue or services of some kind is met.

3.1 The Context for Rural Hospitals

"Rural populations are among the most vulnerable in America. They are poorer, older, and sicker than their counterparts residing in densely-populated areas, and the communities where they live are increasingly losing an already compromised pool of healthcare resources. Convenient access to healthcare services in these small communities was commonplace at one time, but the increasing urbanization and suburbanization of society has taken a severe toll on the viability of rural America, reducing population, the tax base associated with such, and related public and private investment.

High poverty, reduced employment opportunities, and high numbers of uninsured residents further characterize and burden rural communities. These consequences understandably have negatively impacted community infrastructure, notably including the availability of healthcare services, their depth and breadth, and their accessibility to area residents. In recent decades, rural hospitals, the traditional backbone of healthcare delivery in small communities, have been closing at a very concerning rate.

Further, there are strong indications that this crisis will escalate, with an estimated 673 rural hospitals being considered to be vulnerable for closure. This places hardships not only on providers of care and their associated employees, but also and most importantly on those residing in rural communities who face the daunting prospect of diminished or nonexistent healthcare access in these remote areas."[36]

[36] *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5751794/*

The National Rural Hospital Problem[37]

The closure of Mercy Fort Scott Hospital was one of 120 rural hospital closures over the past decade.

Small rural hospitals provide most or all of the health care services in the communities they serve. Small rural hospitals deliver not only traditional hospital services such as emergency care, inpatient care, and laboratory testing, but also rehabilitation, long-term care, maternity care, home health care, and even primary care. The majority of the communities they serve are at least a 25-minute drive from the nearest alternative hospital, and many communities have no alternate sources of health care.[38]

The primary cause of closures is payments from health insurance plans that don't sustain essential services in rural communities. Unlike large urban hospitals, small rural hospitals don't make large profits on patients with private insurance that can be used to offset losses on uninsured patients and patients with Medicaid. In fact, many small rural hospitals are paid less for services by private insurance plans than by Medicare or Medicaid. Hospitals that are losing money year after year can't maintain adequate capacity needed to respond to emergencies.

Current federal proposals won't solve the problems facing small rural hospitals and some would make the problems worse. For example, requiring small rural hospitals to eliminate inpatient services would increase financial losses at most hospitals as well as reduce access to hospital care for community residents.

Rural hospitals need both *adequate payments* and a *better payment system* in order to provide essential healthcare services for their communities. Current fee-for-service and cost-based payment systems don't provide the support rural hospitals need, nor will the "global payments" Medicare and others have proposed.

Current Status[39]

Kansas legislative policies to change the economic environment have had little impact on the viability of rural areas as population, especially young families, have migrated to take advantage of the new opportunities.

State budgets are challenging the legislature as large public needs outweigh the resources. Education, public health, Medicaid and growing welfare costs have all competed for these resources for many years.[40]

A large portion of the public health and education responsibility has been shifted to the local level, making tax subsidy for hospital services impossible. Most communities have reduced or eliminated subsidies for hospitals and emergency medical services, leaving the health system to rely on its own resources.[41]

---

[37] *https://ruralhospitals.chqpr.org/index.html*
[38] *https://ruralhospitals.chqpr.org/Overview.html*
[39] *https://www.kha-net.org/criticalissues/accesstocare/ruralissues/resources/?page=4*
[40] *Kansas Hospital Association, 2013*
[41] *Kansas Hospital Association 2013*

At the federal level, Medicare policy has continually moved in the direction of population health, challenging the traditional processes for hospitals and physicians. Reimbursement has not kept pace with the need for preventive services and care management.[42]

Retaining and attracting physicians and midlevel practitioners to rural communities is increasingly difficult and expensive. Nurse salaries increased in 2021-2022 as a result of shortages induced by COVID. All rural hospitals experienced increased costs that appear likely to continue after COVID.

Why Rural Health is Different[43]

1 Rural residents are less likely to have employer-provided health care coverage or prescription drug coverage, and the rural poor are less likely to be covered by Medicaid benefits than their urban counterparts.

2 Medicare payments to rural hospitals and physicians are dramatically less than those to their urban counterparts for equivalent services.

3 Rural residents tend to be poorer. On average, per capita income is $7,417 lower than in urban areas, and rural Americans are more likely to live below the poverty level. The disparity in incomes is even greater for minorities living in rural areas. Nearly 22% of rural children live in poverty.

4 People who live in rural America rely more heavily on the federal Food Stamp Program. While 22% of Americans lived in rural areas in 2001, 31% of the nation's food stamp beneficiaries are in rural communities. In all, 4.6 million rural residents received food stamp benefits in 2001.[44]

5 Only about ten percent of physicians practice in rural America despite the fact that nearly one-fifth of the population lives in these areas.

6 55% of Mental Health Professional Shortage Areas are in rural areas. 60% of Dental Health Professional Shortage Areas are in rural areas.

7 Hypertension is higher in rural than urban areas (101.3 per 1,000 individuals in MSAs and 128.8 per 1,000 individuals in non-MSAs.)

8 Medicare patients with acute myocardial infarction (AMI) who were treated in rural hospitals were less likely than those treated in urban hospitals to receive recommended treatments and had significantly higher adjusted 30-day post AMI death rates from all causes than those in urban hospitals.

9 Death and serious injury accidents account for 60 percent of total rural accidents versus only 48 percent of urban. Anywhere from 57 to 90 percent of first responders in rural areas are volunteers.

10 Abuse of alcohol and tobacco is a significant problem among rural youth. The rate of DUI arrests is significantly greater in non-urban counties. 40% of rural 12th graders reported using alcohol while driving compared to 25% of their urban counterparts. Rural eighth graders are twice as likely to smoke cigarettes (26.1% versus 12.7% in large metro areas).

11 The suicide rate in rural areas is significantly higher than in urban areas, particularly among adult men and children. The suicide rate among rural women is escalating rapidly and is approaching that of men.

[42] Kansas Hospital Association 2013
[43] *The Future of Rural Health, NRHA 2013*
[44] *The Carsey Institute at the University of New Hampshire*

3.2 The Rural Hospital Problem: National, Kansas, and Bourbon County

Summary

1 Structural operating losses by over half the rural hospitals in the US has been a persistent national problem for 3 decades. Chronic operating losses at Kansas hospitals put 76 of the 104 rural hospitals in Kansas at risk of closure, with 46% at immediate risk.

2 Most rural hospitals are financially unsustainable, including over half the Critical Access Hospitals in Kansas. No one hospital can solve the problem itself as each is dependent on payer reimbursement practices.

Critical Access Hospital (CAH) <25 beds – Medicare reimbursement at cost + 1%. Prospective Payment System (PPS) hospitals >25 beds typically offer more services and are reimbursed by Medicare at defined rates. PPS hospitals must manage their costs to earn profits on their services. The SEK region has on average, about 30% of patients paid by Medicare or Medicaid.

3 Communities with hospitals in severe financial distress typically have less healthy populations with a higher need for healthcare services and less ability to access or afford alternative services out of town.

4 Outmigration is typical for SEK hospitals. Bourbon County outmigration is part of a regional practice that contributes to lower volumes and more financial instability at region hospitals.

5 SEK and Bourbon County hospitals have 2 times (10%) of uncompensated care burden than hospitals at low risk of closure. The smaller the hospital, the greater the impact of uncompensated care.

If hospitals in Southeast Kansas did not have to eat the cost of uncompensated care and were paid for these services, most every hospital would be break even or profitable.

6 If consistent primary care is difficult to access, data show that rural communities experience an 8.7% higher death rate and disproportionately higher costs for high acuity care as people don't receive care until the condition is acute.

When residents of rural communities don't get regular medical care that includes doctor visits, screenings to detect disease, guidance on behavior changes to improve health, and accessible resources to manage and treat chronic conditions, a proportion of residents experience acute conditions that both expensive to treat and that require specialist intervention that is expensive and mainly resident in population centers. Out-migration for treatment is the result. Higher death rates result. Costs escalate dramatically.

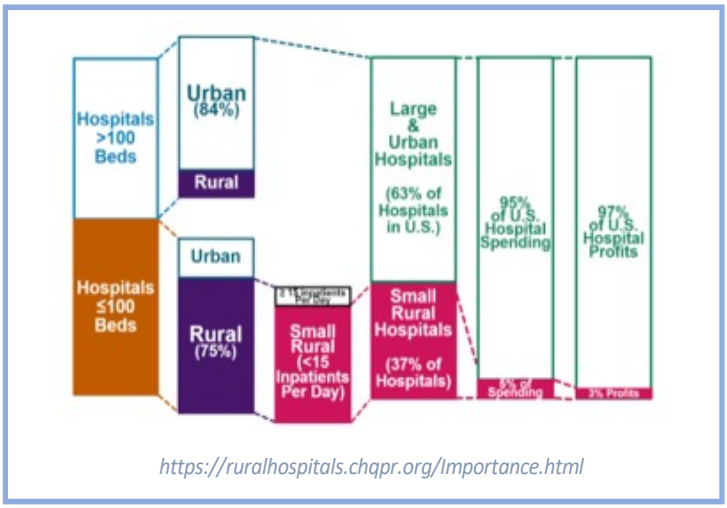
Hospitals in the USA[45]

The United States spends more than $1 trillion per year on hospital services. Hospitals receive 39% of total healthcare spending, more than any other healthcare sector.

In the decade between 2008 and 2018, spending on hospital services increased by 64%, far more than spending increased on either physician services (51%) or prescription drugs (40%), and far more than the 43% growth in national personal income during the same period.

It will be almost impossible to make health care or health insurance more affordable unless methods are found to control and reduce the amount spent on hospital care. .Hospitals save the lives of thousands of individuals every year and they provide many types of services that cannot be safely delivered in any other setting.

American hospitals fall into two very different categories: (1) small rural hospitals, and (2) large or urban hospitals. These two groups of hospitals differ dramatically, not just in size and location, but in terms of spending, prices, and profits



https://ruralhospitals.chqpr.org/Importance.html

The majority of the nation's more than 4,500 short-term general hospitals have fewer than 100 beds, but they only receive about 10% of total national hospital spending. The hospitals with over 100 beds receive almost 90% of total hospital spending and over 90% of total hospital profits.

Three-fourths of the hospitals with under 100 beds are located in rural communities, whereas the vast majority (84%) of the larger hospitals are in urban areas.

Most of the rural hospitals are very small: 76% had fewer than 15 acute inpatients per day on average, whereas only 13% of urban hospitals had so few patients. Almost one-third of urban hospitals had an average daily acute census of more than 150 patients, but less than 1% of rural hospitals had that many patients.

The majority of large hospitals in both urban and rural areas make significant profits (more than 5%) on patient services. In contrast, the majority of small rural hospitals lose money on the services they deliver to the patients in their communities. As a result, the large and urban hospitals receive almost all of the hospital profits in the country.

https://ruralhospitals.chqpr.org/importance.html

The Causes of Rural Hospital Problems[46]

Rural hospitals are being forced to close because they are not paid enough to cover the cost of delivering care to patients in rural areas. More than half of the small rural hospitals that have closed in recent years had losses of 10% or more in the year prior to closure, and over one-fourth had losses greater than 20%.

The primary causes of losses at the hospitals that closed were inadequate payments from both public and private health plans and inability of patients to pay their bills. Most of the hospitals that closed had losses on patients with private health insurance as well as on Medicare, Medicaid, and uninsured charity care patients, and they did not have any other sources of income sufficient to offset these losses.

More than one-third of the small rural hospitals that remain open are also losing money. The losses are concentrated among the smallest rural hospitals: one-half of rural hospitals with annual expenses below $20 million are experiencing losses.

Low payments from private health plans and patient bad debt are the primary causes of losses at the smallest rural hospitals. At the majority of rural hospitals with less than $20 million in annual expenses, losses on patients with private health insurance plans and self-pay patients were greater than losses on Medicare, Medicaid, and uninsured charity care patients combined, although the magnitude of the losses varies significantly across states. Private health plans pay small rural hospitals less than they pay larger hospitals for the same services, and Medicare Advantage plans appear to be among the worst payers at small rural hospitals. Most small rural hospitals operate one or more Rural Health Clinics, and the low payments for primary care services from private payers are a major cause of losses at these hospitals.

The majority of rural hospitals lose money on Medicaid patients. The losses on individual Medicaid patients are generally larger than the losses on patients with private insurance. However, the much smaller proportion of Medicaid patients means that the overall impact on the hospital due to private insurance losses is still larger. In states that expanded Medicaid, hospitals experienced smaller losses on uninsured patients and bad debt, but losses on services to Medicaid patients increased due to low payments for services.

Medicare payments do not cause significant losses at most small rural hospitals. Most small rural hospitals are classified as Critical Access Hospitals and receive cost-based payments from Medicare.

Many small rural hospitals remain open only because they receive significant supplemental funding from local taxes or state grants. Over 70% of the smallest rural hospitals lose money on the delivery of patient services, but one-third of those hospitals receive enough revenue from other sources to maintain a positive overall margin. Small rural hospitals in some states are organized as public hospital districts, and residents of these communities tax themselves to offset underpayments by private health plans and Medicaid.

There is tremendous variation across the country in both the magnitude of losses and the causes of losses at very small rural hospitals. In many states, low payments from private insurance plans are the

[46] *https://ruralhospitals.chqpr.org/Problems.html*

primary cause of financial problems in small rural hospitals, but in other states, low Medicaid payments and low rates of insurance coverage are the largest single cause of losses. In some states, state grants or local taxes reduce or eliminate losses at small rural hospitals, while there is little or no such assistance for hospitals in other states.

Changes in payments from all payers will be needed to eliminate losses at small rural hospitals. No individual payer (Medicare, Medicaid, or a private insurance plan) is the sole cause of financial losses at small rural hospitals, and the relative magnitude of the contributions of each type of payer varies from state to state and hospital to hospital, so multi-payer solutions will be needed to solve the problem of rural hospital closures.

Causes of Hospital Closures[47]

Hundreds of Rural Hospitals Are At Immediate Risk of Closure Over 500 rural hospitals – more than one-fourth of the rural hospitals in the country – are at immediate risk of closure because of continuing financial losses and lack of financial reserves to sustain operations. These hospitals have:

• Persistent Financial Losses. The hospitals had a cumulative negative total margin over the most recent 3-year period for which financial data were available; and

• Low or Non-Existent Financial Reserves. The hospitals either (a) had total liabilities exceeding all assets other than buildings and equipment, or (b) had assets greater than liabilities, but only by enough to sustain continued losses for at most 2 years.

Almost every state has at least one rural hospital at immediate risk of closure, and in 21 states, 25% or more of the rural hospitals are at immediate risk. Hundreds More Rural Hospitals Are At High Risk of Closing in the Near Future Over 300 additional rural hospitals are at high risk of closure in the near future. These hospitals fall into two categories:

• Low Financial Reserves. These are hospitals that have assets greater than liabilities, but the difference is only enough to cover the hospital's average annual losses for at most 5 years.

• High Dependence on Non-Patient Service Revenues. The second group of hospitals have had positive total margins, but only because they receive large amounts of funding from local taxes, state subsidies, or other sources of funds sufficient to offset losses on patient services. Moreover, these hospitals either have liabilities in excess of assets, or their net assets would not be large enough to offset the patient service losses for more than two years. Since it is not clear that these hospitals can continue receiving large amounts of revenue from other sources in the future, they also have to be considered at high risk of closure.

[47] https://ruralhospitals.chqpr.org/Problems.html

RURAL HOSPITALS AT IMMEDIATE OR HIGH RISK OF CLOSING						
State	Total Rural Hospitals	Number at Risk of Closing	Percent at Risk of Closing	Number at Immediate Risk of Closing	Percent at Immediate Risk	Number at High Risk of Closing
Alabama	46	30	65%	27	59%	3
Alaska	13	5	38%	4	31%	1
Arizona	18	5	28%	4	22%	1
Arkansas	49	30	61%	17	35%	13
California	52	17	33%	6	12%	11
Colorado	41	11	27%	5	12%	6
Connecticut	3	3	100%	2	67%	1
Delaware	2	0	0%	0	0%	0
Florida	20	7	35%	6	30%	1
Georgia	61	26	43%	22	36%	4
Hawaii	12	8	67%	3	25%	5
Idaho	29	7	24%	4	14%	3
Illinois	72	20	28%	14	19%	6
Indiana	53	20	38%	14	26%	6
Iowa	90	40	44%	24	27%	16
Kansas	104	76	73%	48	46%	28
Kentucky	69	16	23%	12	17%	4
Louisiana	48	26	54%	14	29%	12
Maine	25	10	40%	9	36%	1
Maryland	4	1	25%	1	25%	0
Massachusetts	5	2	40%	0	0%	2
Michigan	61	19	31%	13	21%	6
Minnesota	90	28	31%	19	21%	9
Mississippi	65	41	63%	35	54%	6
Missouri	58	31	53%	17	29%	14
Montana	51	19	37%	9	18%	10
Nebraska	71	23	32%	10	14%	13
Nevada	13	6	46%	2	15%	4
New Hampshire	17	4	24%	1	6%	3
New Jersey	1	0	0%	0	0%	0
New Mexico	23	5	22%	2	9%	3
New York	50	29	58%	11	22%	18
North Carolina	52	18	35%	9	17%	9
North Dakota	37	16	43%	9	24%	7
Ohio	70	19	27%	14	20%	5
Oklahoma	73	42	58%	28	38%	14
Oregon	32	11	34%	4	13%	7
Pennsylvania	40	16	40%	9	23%	7
Rhode Island	0	0	0%	0	0%	0
South Carolina	25	12	48%	10	40%	2
South Dakota	45	11	24%	9	20%	2
Tennessee	47	26	55%	21	45%	5
Texas	146	81	55%	30	21%	51
Utah	21	3	14%	1	5%	2
Vermont	13	2	15%	1	8%	1
Virginia	27	14	52%	12	44%	2
Washington	40	20	50%	8	20%	12
West Virginia	24	12	50%	6	25%	6
Wisconsin	73	16	22%	10	14%	6
Wyoming	24	8	33%	7	29%	1

Data current as of January 2022

https://ruralhospitals.chqpr.org/Importance.html

Limited Alternative Sources of Health Care[48]

In most counties where small rural hospitals are located, the rural hospital is the only hospital in the entire county. In contrast, in most of the counties where large urban hospitals are located, there is at least one and generally two or more other hospitals located in the same county. Some rural counties have two or more small hospitals simply because the county is so large in terms of land area or so problematic in terms of topography, and each of the hospitals serves as the sole hospital for the subset of the county that it serves. Moreover, in many rural areas, the rural hospital is not just the sole provider of hospital services, but the sole or primary source of all healthcare services in the community. In contrast to urban areas, in many rural areas:

- there is no urgent care center as an alternative to the hospital ED;
- there is no separate clinical laboratory or imaging facility;
- there is no other nursing home or assisted living facility for seniors;
- there is no other home health agency willing or able to provide services to the community because of the difficulty and cost of delivering home health services in sparsely-populated areas; and
- there are few, if any, alternative sources of primary care in the community.

Over 90% of the counties in which small rural hospitals are located are designated by the Health Resources and Services Administration (HRSA) as Primary Care Shortage Areas in part or all of the county.

Distance from Other Sources of Healthcare

The significance of this is even greater when one realizes how remote many rural communities are and how far the residents would have to travel to find alternative sources of care. There are more than 1,100 hospitals in the country that are at least a 30-minute drive from the nearest alternative hospital, and more than 280 of them are at least a 45-minute drive away.[11] The majority of these isolated hospitals are small rural hospitals.

Moreover, the distance between hospitals does not necessarily reflect the distance or time for all of the individuals served by rural hospitals. Although the travel time from the rural hospital to an alternative hospital may be a reasonable estimate of the travel time for the residents of the town where the rural hospital is located, many people who rely on a rural hospital live outside of the town where the hospital is located. If an individual lives 15 minutes away from the rural hospital, an alternative hospital that is 30-45 minutes away from the current rural hospital might then be as much as 45-60 minutes away for that individual.[12]

In the majority of cases, the next closest hospital to these rural communities is not a large hospital but another small rural hospital. In farming and ranching areas with low population densities, people live and work in small communities that are widely separated, and a network of small rural hospitals is needed in order to provide accessible healthcare services for the residents and workers.

[48] *https://ruralhospitals.chqpr.org/Importance.html*

Delays in Receiving Emergency Care

The most obvious benefit of having a hospital close by is when an individual experiences a medical emergency, such as a serious injury or symptoms of a heart attack or stroke, and they need to quickly reach an emergency room. In serious cases, even short delays in treatment can be problematic, and a delay of 30-45 minutes or more in receiving treatment could result in a death or serious disability that could have otherwise been prevented.

Many patients with non-life threatening injuries, chest pain, or other symptoms will not need surgical intervention or other types of treatment that can only be provided at tertiary or quaternary hospitals, and it is much more cost-effective to triage and treat these cases in a local hospital than at a distant hospital that requires air transport to reach.[13]

Failure to Receive Other Forms of Care

Patients who are not experiencing an emergency would also have to travel farther to receive many types of diagnostic and treatment services if there is no nearby hospital. The greater the time, distance, and cost of travel, particularly during the winter or bad weather, the less likely it is that patients would obtain those services in a timely fashion. Delays in diagnosis or treatment could result in more serious health problems and more expensive treatment than if the patient had been able to obtain services more easily and quickly. For example:

- **Primary Care.** As noted earlier, the majority of small rural hospitals operate one or more Rural Health Clinics, and they generally do so because there would otherwise be a shortage of primary care practices in the community. Access to primary care is increasingly recognized as essential for preventive care and early identification and treatment of health problems. However, patients are far less likely to make visits to a primary care provider if they have to travel a long distance to do so, and the resulting delays in diagnosis and treatment can result in higher healthcare costs in the longer-term.
- **Maternity Care.** There is growing concern about the high rates of both maternal death and infant mortality in the country, both of which are significantly higher in rural areas.[14] Successfully addressing these problems requires that women receive regular prenatal care during pregnancy and that both the mother and infant receive high-quality care after birth, but these services are less likely to be available in a community that lacks primary care and obstetric care. It is also important that women with higher-risk pregnancies receive timely, high-quality care during childbirth, and that is less likely if the woman has to travel a long distance to reach a hospital.
- **Laboratory Testing.** The highest-volume service at most hospitals, both urban and rural, is laboratory testing. Many patients with chronic conditions such as diabetes and heart disease need regular testing in order to properly manage their conditions, and failure to do so can lead to serious complications. In addition, many diseases can only be accurately diagnosed through appropriate laboratory testing, and delays in testing can result in delayed or incorrect treatment. This can not only harm the patient, but if the patient has an infectious disease (such as during the coronavirus pandemic in 2020), delayed or inaccurate diagnosis and treatment can harm many others in the community.

Evaluation of Bourbon County Hospital Using the UNC Financial Distress Index Model

The decline of rural hospitals in the US over the past two decades is an ongoing crisis and any evaluation of a community and a specific hospital should be informed by the larger national context of rural health care. Each community has a fundamental need for health care that is in the community and part of the community. A sustainable health care presence is an economic pillar of rural communities, constituting about 15% of total employment and providing a foundation for the community to attract and retain businesses and employment.

The Sheps Center for Rural Health Care at the University of North Carolina tracks the status of rural hospitals nationwide and has built models that assess the financial performance of rural hospitals. Noble Health analysis of rural markets and hospitals applies their models and assessment. The current status of rural hospitals is alarming.

> *"As of January 1, 2020, the rural hospital closure crisis has claimed 120 facilities across the nation. Although the number of rural hospital closures slowed somewhat in 2016 (12) and 2017 (10), there have been 34 closure announcements in 2018 and 2019 with 2019 the single worst year of the closure crisis as 19 rural hospitals closed."*[49]

The decline of healthcare services in rural communities is both a catalyst and outcome of the loss of population and economic vitality in rural communities. While not every rural community is in decline, most face escalating challenges to maintain or restore economic vibrancy and maintain existing and attract new families.

UNC Financial Distress Index Model Applied to Bourbon County Hospital

Noble Health employs the UNC FDI model as the first level of assessment for rural hospitals to establish the position of a specific hospital relative to the entire census of rural hospitals nationally. As the UNC FDI model measures the demographic, socio-economic and health status for each hospital and its served community, it enable comparison and helps us establish areas to conduct deeper analyses.

The Fort Scott Hospital analysis included data from national and state databases to characterize economic vitality, demographic shifts, status of population health, and other factors that impact the viability assessment. Key elements of presentations to the Fort Scott City Council in December 2021 and January 2022 summarize these analyses.

[49] *Rural Hospital Vulnerability, The Chartis Center for Rural Health, 2020*

3.3 Rural Hospital Financial Distress Index Evaluation

The FDI is an algorithm that uses historical data about hospital financial performance, government reimbursement, organizational characteristics, and market characteristics to predict the current risk of financial distress for each hospital. The model assigns every rural hospital to one of four financial risk categories: high, mid-high, mid-low, or low.[50]

The FDI model classified 2,129 rural hospitals: 196 (9.2%) were predicted to be at high risk of financial distress, 361 (17.0%) at mid-high risk of financial distress, 934 (43.9%) at mid-low risk of financial distress, and 638 (30.0%) at low risk of financial distress. Among these rural hospitals predicted to be at high risk of financial distress, 72.9% are located in the South, 17.9% in the Midwest, 5.6% in the West, and 3.6% in the Northeast. Among all rural hospitals, approximately 40% are located in the South, 35% are located in the Midwest, 17% are located in the West, and 8% are located in the Northeast.[51]

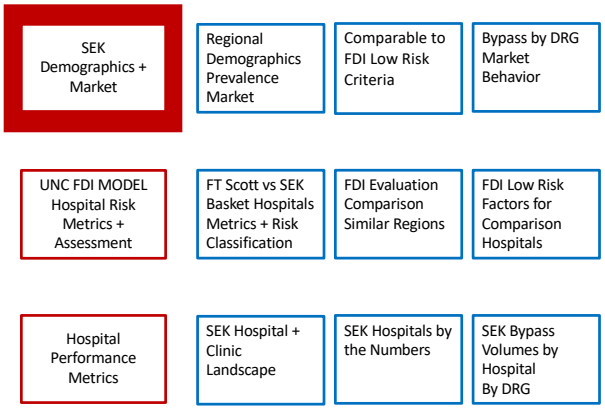
> *"It is well established that rural residents are typically older, poorer, more dependent on public insurance, and in worse health than urban residents. Our results indicate that rural hospitals predicted to be at high risk of financial distress serve a more vulnerable patient population than those predicted to be at either mid-high, mid-low, or low risk. These communities have poorer overall health status in addition to a larger burden of socio-economic challenges than communities served by rural hospitals predicted to not be at high risk of financial distress. As such, the populations being served by rural hospitals predicted to be at high risk of financial distress are likely to have a higher need for health care services and may be disproportionately impacted by hospital financial distress and closure."*[52]

[50] https://www.shepscenter.unc.edu/product/characteristics-communities-served-hospitals-high-risk-financial-distress/

[51] *Holmes GM, Kaufman BG, Pink GH. Predicting financial distress and closure in rural hospitals. The Journal of Rural Health. 2017 Jun;33(3):239-49.*

[52] *Thomas SR, Holmes GM, Pink GH. To what extent do community characteristics explain differences in closure among financially distressed rural hospitals? Journal of health care for the poor and underserved. 2016;27 (4):194-203.*

FDI Model Applied to Bourbon County – Summary of Findings



We first assess town, county and regional demographics to understand population size, distribution by age, and other factors considered by the UNC FDI model.

This analysis includes community health data from multiple sources – CMS (Medicare/Medicaid), state health reports, and other public ad private sources.

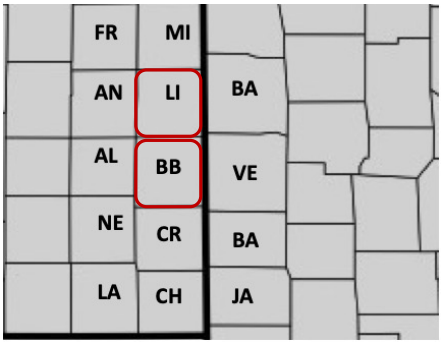
SE KS Population + Demographics

Small populations with high patient to doctor ratios

Substantial out-migration to larger hospitals

No Hospital in Linn and Bourbon counties

FR Franklin
MI Miami
AN Anderson
LI Linn
AL Allen
BB Bourbon
NE Neosho
CR Crawford
LA Labette
CH Cherokee



BA Bates
VE Vernon
BA Barton
JA Jasper

SEK has a comparatively small population relative to other rural regions we have evaluated.

The size of the population influences the health services that can be sustainably provided locally.

What services are local and what services require travel to larger population center is driven by population size in a given town and county and density – how close are other population clusters?

SE KS Population + Demographics

Fewer Doctors than surrounding counties with hospitals

SEK SWM DEMOGRAPHICS	Population	employed pop	<5	5-17	18-34	35-59	60-74	>75	poverty rate	median age	median income	Patients/Clinician	% Uninsured	Employer
KANSAS COUNTIES														
Wyandotte	164,831	76,538	13,013	30,121	30348	37038	19157	7437	19.2	33.7	46,881	2,175	18	40
Douglas	120,290	68190	6053	15755	41573	29178	13881	5256	18.0	29.8	59,435	1,114	7	59
Johnson	602,401	332024	37091	103756	115030	173315	84719	33814	5.4	37.8	91,771	810	6	65
Franklin	25,558	12,732	1534	4598	5127	8070	4106	1675	9.8	40.0	56,582	2,330	7	56
Miami	33,417	16663	1903	6309	5664	11296	5425	2398	6.9	42.1	71,995	2,105	6	60
Anderson	7,835	3368	478	1559	1304	2338	1348	797	15.0	40.8	50,21	2,626	11	44
Linn	9,671	4,302	535	1,638	1,504	3,166	1,890	881	16.3	44.4	48,77	4,875	10	42
		44%	6%	17%	16%	33%	20%	9%						
Allen	12,556	5,873	722	2,113	2,409	3,942	2,171	1,147	17.7	41.9	45,33	1,556	5	50
		47%	6%	17%	19%	31%	17%	9%						
Bourbon	14,608	6,412	1,023	2,674	2,903	4,118	2,393	1,303	16.1	39.1	43,91	2,091	11	45
		44%	7%	18%	20%	28%	16%	9%						
Neosho	16,108	7,207	1,030	2,836	3,086	4,812	2,690	1,437	18.8	40.2	46,29	1,595	12	8
		45%	6%	18%	19%	30%	17%	9%						
Crawford	38,968	18,488	2,316	6,139	10,980	10,029	5,525	2,582	20.3	32.5	41,004	1,301	10	49
		47%	6%	16%	28%	26%	14%	7%						
Labette	20,119	9,518	1,324	3,458	3,832	6,161	3,607	1,562	18	41.0	47,643	1,664	11	46
Cherokee	20,179	8,566	1,098	3,592	3,719	6,259	3,656	1,631	13.1	41.3	43,175	4,003	12	44
www.datausa.io														
MISSOURI COUNTIES														
Bates	16,417	7,527	987	2,858	2,954	5,035	2,854	1,413	12.00	41.60	47,625	5,440	9	43
Vernon	20,723											2,933	15	38
Barton	11,908											2,950	11	40

National

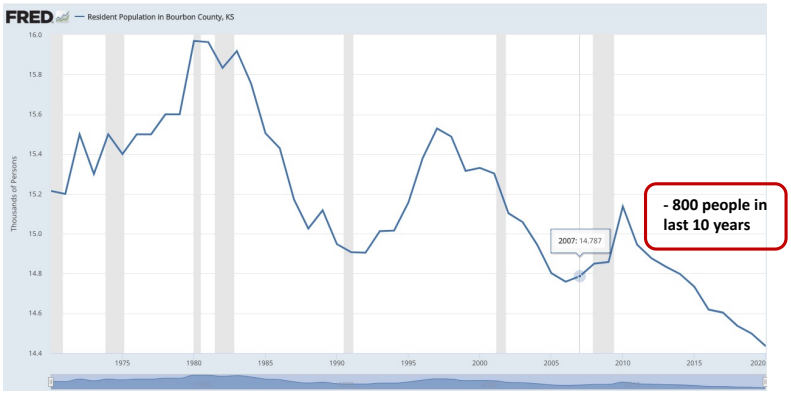
2512 patients/provider = average rural ratio

1876 patients/provider = average urban/suburban ratio

Bourbon county data reflects the hospital closure, but while the region has patient to doctor ratios within national norms, the highlighted counties are above norms.

High patient/doctor ratios can mean doctors are stretched thin, travel constantly, and face challenges that impact cost-effective care.

Bourbon County Population Change Over Time



Bourbon county has a relatively stable population with a 5% decline over the last decade. Nationwide, many rural communities have lost larger percentages of their population, so Bourbon county compares favorably.

Bourbon County Population Changes over Time

Modest population changes over time by age group

No outmigration trend for young families

Modest increase in seniors and dependency

Fewer 45–55-year-olds

Stability

SUMMARY INDICATORS	
Median age (years)	37.8
Sex ratio (males per 100 females)	98.2
Age dependency ratio	76.5
Old-Age dependency ratio	31.3
Child dependency ratio	45.2

Bourbon County Demographic Changes Over Time

	2010		2019	
Total population	**15097**		**14608**	
AGE				
Under 5 years	1057	7%	1023	7%
5 to 9 years	996	7%	1167	8%
10 to 14 years	1132	8%	930	6%
15 to 19 years	1162	8%	1069	7%
20 to 24 years	906	6%	889	6%
25 to 29 years	830	6%	821	6%
30 to 34 years	936	6%	793	5%
35 to 39 years	815	5%	713	5%
40 to 44 years	710	5%	838	6%
45 to 49 years	981	7%	742	5%
50 to 54 years	1072	7%	825	6%
55 to 59 years	981	7%	1086	7%
60 to 64 years	861	6%	872	6%
65 to 69 years	619	4%	858	6%
70 to 74 years	604	4%	679	5%
75 to 79 years	513	3%	505	4%
80 to 84 years	423	3%	335	2%
85 years and over	513	3%	463	3%

https://data.census.gov/cedsci/table?q=bourbon%20county%20kansas&tid=ACSST5Y2019.S0101

Bourbon county has a foundation of young families and children.

Out-migration of 40-55 year-olds may be for jobs, yet the 55+ cohort has grown slightly to offset the out-migration.

Bourbon County Economy No Obvious Anomalies

Income

SCORE 52

METRIC	COUNTY	U.S.	PEER GROUP	STATE
Households Receiving Public Assistance Income	1.9%	1.9%	1.7%	1.6%
Median Household Income	$43,917	$51,758	$53,853	$59,597
Medical Debt in Collections	15%	19%	15%	18%
Poverty Rate	16.1%	14.2%	12.0%	11.9%

Educational Achievement

SCORE 42

METRIC	COUNTY	U.S.	PEER GROUP	STATE
Children Meeting Standards in Grade 4 R/LA	33.0%	47.5%	48.8%	47.9%
High School Graduation Rate	86.6%	89.3%	90.8%	87.1%
Population With Advanced Degree	32.4%	29.8%	31.2%	42.1%

Employment

SCORE 43

METRIC	COUNTY	U.S.	PEER GROUP	STATE
Average Weekly Wage	$677	$782	$776	$924
Labor Force Participation	58.5%	58.8%	61.0%	65.9%
Unemployment Rate	4.2%	3.7%	3.2%	3.2%

Community Stability

SCORE 45

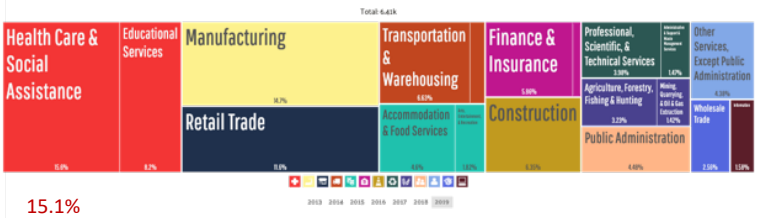
METRIC	COUNTY	U.S.	PEER GROUP	STATE
Homeownership Rate	71.4%	72.9%	75.3%	66.3%
Net Migration Rate	-4.3%	-0.3%	-0.3%	-3.0%

https://www.usnews.com/news/healthiest-communities/kansas/bourbon-county

Bourbon county has no obvious anomalies, with income, education, employment and stability near the median for rural counties.

Employment Drivers of Bourbon County Economy

Growth and decline. What is stable? What has faded? What is emerging? Earnings by sector



15.1%
of employment

14.7%
of employment

Get data from Data USA and U.S. Census ACS

The distribution of employment among sectors is similar to other communities we have evaluated with health care and manufacturing about 30% of the total.

Closure of a hospital impacts perhaps 10% of jobs, with the implication that skilled health professionals either commute or move away.

Bourbon County Health

Health Conditions

SCORE 62

METRIC	COUNTY	U.S.	PEER GROUP	STATE
Cancer Incidence Rate /100k	N/A	456.0	443.1	452.4
Heart Disease Prevalence	6.9%	6.7%	6.3%	6.0%
Preventable Hospital Admissions Among Medicare Beneficiaries /100k	3,287	4,589	3,938	4,120

Access to Care

SCORE 34

METRIC	COUNTY	U.S.	PEER GROUP	STATE
Hospital Bed Availability /1k	0.0	1.9	1.8	4.5
Population With No Health Insurance	10.0%	10.6%	10.1%	10.1%
Primary Care Doctor Availability /1k	0.7	0.9	0.9	1.2

Health Behaviors

SCORE 44

METRIC	COUNTY	U.S.	PEER GROUP	STATE
Adults With No Leisure-Time Physical Activity	25.5%	26.5%	24.7%	22.9%
Adults With Recent Preventive Care Visit	72.5%	74.2%	72.0%	73.7%
Smoking Rate	23.0%	21.1%	20.2%	18.2%

Nutrition

SCORE 35

METRIC	COUNTY	U.S.	PEER GROUP	STATE
Diabetes Prevalence	11.5%	10.5%	9.4%	9.1%
Obesity Prevalence	43.1%	35.5%	35.2%	33.3%
Share of At-Home Food Expenditures on Fruit/Veg	11.8%	11.9%	12.0%	11.8%

https://www.usnews.com/news/healthiest-communities/kansas/bourbon-county

Bourbon county population falls within rural norms for health, but the data show two areas that should have deeper analysis to determine root causes so interventions can be designed and executed.

Bourbon County Hospital Feasibility Assessment

Bourbon County Health

Nutrition

SCORE
35

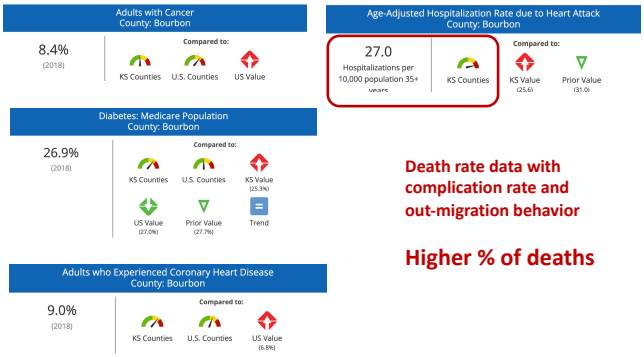
METRIC		COUNTY	U.S.	PEER GROUP	STATE
Diabetes Prevalence		11.5%	10.5%	9.4%	9.1%
Obesity Prevalence	90% tile	43.1%	35.5%	35.2%	33.3%
Share of At-Home Food Expenditures on Fruit/Veg		11.8%	11.9%	12.0%	11.8%

https://www.usnews.com/news/healthiest-communities/kansas/bourbon-county

Bourbon county prevalence of obesity is among the highest in the nation and far above the norms for the state.

As obesity is a causal factor in numerous diseases, including diabetes, some cancers, circulation disorders, osteoarthritis, and more, it should be viewed as a risk factor for the county that requires intervention.

SE KS Population Health Prevalence



Death rate data with complication rate and out-migration behavior

Higher % of deaths

The prevalence of heart disease is above average and the rate of heart attack hospitalizations is among the highest in the state.

The implication is that there is inadequate cardiac diagnosis and care relative to the prevalence of heart disease and incidence of cardiac events – including heart attacks.

BOURBON COUNTY VS KANSAS DISEASE PREVALENCE		2020
Disease	*Kansas*	*Bourbon*
Adults with Cancer	8.2%	8.4%
Cancer Medicare Pop (%)	8.2%	6.9%
Colorectal Cancer (per 100,000)	39.1	54.5
Breast Cancer (per 100,000)	126.0	106.7
Lung Cancer (per 100,000)	55.7	55.2
Prostate Cancer (per 100,000)	108.6	90.4
Diabetes Hospital Admit Rate	16.9	19.9
Diabetes Medicare Pop	25.3%	26.9%
Stroke Hospital Admit Rate (per 100,000)	11.9	10.4
Heart Attack Death Rate (per 100,000)	47.9	98.0
Heart Attack Hospitalization Rate (per 100,000)	256	270
Heart Disease Hosptial Admission Rate (per 100,0	1171	1319
Depression Medicare Pop	19.8%	16.4%
Mental Health Hospital Admission Rate (per 100,0	708	628

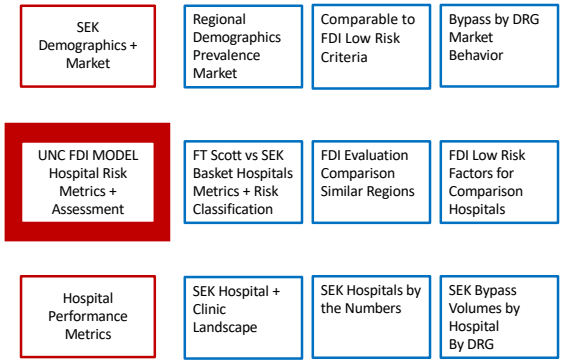
2X the rest of KS

+ 20%

Bourbon County Hospital Evaluation Private & Confidential Noble Health 13

Data show a death rate 2X the rest of Kansas and a hospitalization rate 20% above norms.

These data argue for deeper analysis to determine causal factors and inform potential responses to improve cardiac outcomes that could include wellness checkups and early intervention programs for higher risk residents.

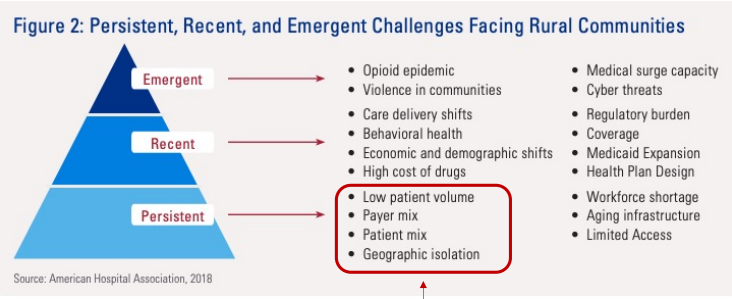


The UNC FDI model (University of North Carolina Sheps Center for Rural Health Care – Financial Distress Index) defines criteria for rural hospital financial performance and ranks each of the rural hospitals based on these criteria.

The UNC FDI model is our starting point for evaluation of a rural hospital.

Bourbon County Hospital Evaluation Private & Confidential Noble Health 14

Rural Hospital Operating Challenges



https://www.aha.org/system/files/2019-02/rural-report-2019.pdf

UNC Financial Distress Index (FDI) criteria

>100 Rural Hospitals Closed 2010-2020

The bottom of the pyramid are the UNC FDI criteria for rural hospital financial performance. The American Hospital Association reports new challenges that rural hospitals must navigate.

Rural hospitals must comply with the same regulatory requirements as larger urban hospitals and manage operations, technology, and reimbursement from CMS and private insurers. Financial instability can lead to a rapid decline and closure as the hospital is unable to execute in operations, tech and payment.

UNC Financial Distress Index (FDI) Bourbon County Comparison

Table 3: Characteristics of Communities in the MIDWEST Served by Rural Hospitals at High Risk and Not at High Risk of Financial Distress in 2019

	At high risk of financial distress, median (n[a])	Not at high risk of financial distress, median (n)	WRS P-value[b]	Bourbon County
DEMOGRAPHICS (MARKET)				
Percent non-White[c]	8.8 (35)	6.4 (810)	<0.05	9.9%
Percent Black[c]	1.4 (35)	1.0 (810)		2.8%
Percent 65 years or older	19.0 (35)	20.0 (810)		19.4%
SOCIO-ECONOMICS (MARKET)				-----
High school graduation[d]	88.0 (35)	89.3 (810)		86.6
Unemployment[d]	6.5 (35)	6.1 (810)		4.4
HEALTH STATUS (COUNTY)				------
Percent in fair or poor health[e]	16.0 (35)	14.0 (810)	<0.05	16
Percent of obese adults	33.0 (35)	32.0 (810)		43.3
Percent tobacco use	18.0 (35)	17.0 (810)	<0.05	23.1 (smoking)
Years of potential life lost per 100,000[f]	7,908 (34)	6,848 (807)	<0.05	---

a. This is the number of hospitals with available county-level or hospital-specific data. County-level data were not available for all hospitals as these variables were not utilized to produce the financial distress results.
b. Wilcoxon rank sum test of medians were used to account for outliers.

Fort Scott Hospital aligns with high risk hospitals in percent of population in poor health with a substantially higher rate of obesity and a significantly higher rate of smoking than other communities with hospitals at financial risk.

The percent of high risk health profiles of Bourbon County is at the same level as hospitals at high risk of closure, with obesity and smoking as two causal factors.

UNC Financial Distress Index (FDI) Elements

Table 1 Prevalence and Distributions of Distress Indicators and Predictors for Hospital-Year Observations 2000-2013

Variable	Model Definition	Median (Interquartile Range) or % with Event
Distress Indicators	*Year t+2*	N = 31,438
Cash flow margin *(Net Income + depreciation + interest expense) / (Net patient revenue + other income)*	1 if <0, 0 otherwise	22%
Equity *(Total assets – total liabilities)*	1 if 20% decline over 2 years, 0 otherwise	12%
Negative Equity	1 if <0, 0 otherwise	9%
Closure	1 if Closed, 0 otherwise	0.31%
Distress Predictors	*Year t*	
Financial performance:		
Percent total margin	(Net income / total revenue)*100	2.54% (-1.92 - 6.87)
Retained earnings	Proportion of total assets	0.59 (0.37 - 0.77)
Percent benchmarks met	(2 year average # of benchmarks met / total # of benchmarks)*100	45.5% (27.27-72.73)
Government Reimbursement:		
CAH status	1= CAH, 0 otherwise	43%
Medicaid to Medicare fee index (KFF)	Proportion	0.76 (0.65-0.82)
Organizational Characteristics:		
For-Profit Status	1=For-Profit, 0 otherwise	8%
Net patient revenue	Ten millions	1.93 (0.94-4.12)
Market Characteristics:		
Miles to nearest hospital with >100 beds	Log form	31.58 (22.53-49.31)
Market share	Spline at 25%	26.06 (18.89-33.57)
Proportion households in poverty	Log form	0.11 (0.08- 0.14)
Market population	Log form	36,506 (17,004-71,333)

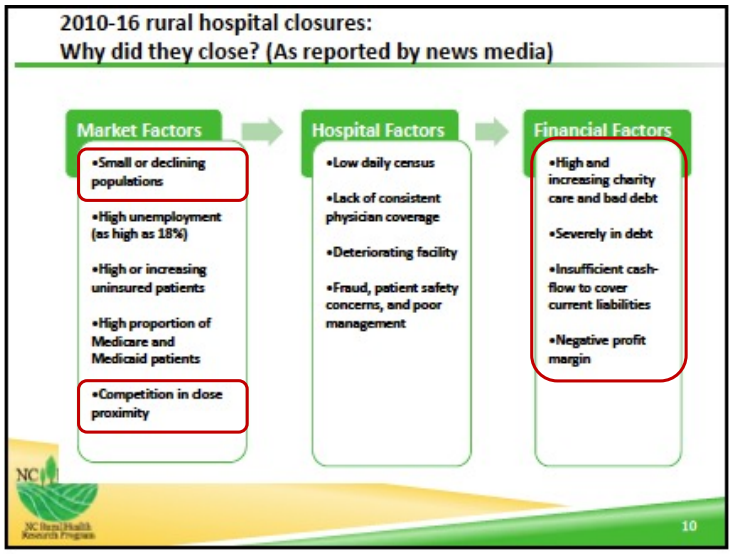
Fort Scott

44.5 miles
~20.0
16.2
14,602

https://datausa.io/profile/geo/bourbon-county-ks

Fort Scott has longer distance to >100 bed hospital (high acuity care) – implies a greater need for the hospital. Higher than average poverty rate implies higher uncompensated care (region average ~10% - twice the normal level).

The most striking market risk factor is population – on average, populations surround a rural hospital are 2.5X the population in Bourbon County. Adjacent counties have similar population – Crawford is larger – but has Ascension Hospital – a Rural Referral Hospital.

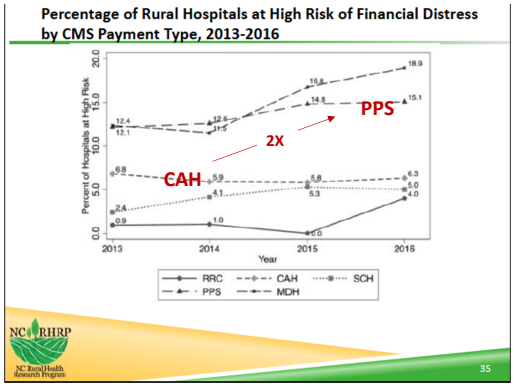


Bourbon County Hospital Evaluation Private & Confidential Noble Health

Hospital closure decisions stem from a combination of structural factors – population, competition, outmigration, poverty. Operational factors – volumes of patients too low, too many uninsured patients who don't pay for the care they receive.

Chronic losses occur when hospitals deliver health care services that the community needs, but cannot achieve reimbursement for these services that cover costs.

UNC Financial Distress Index (FDI) Overview

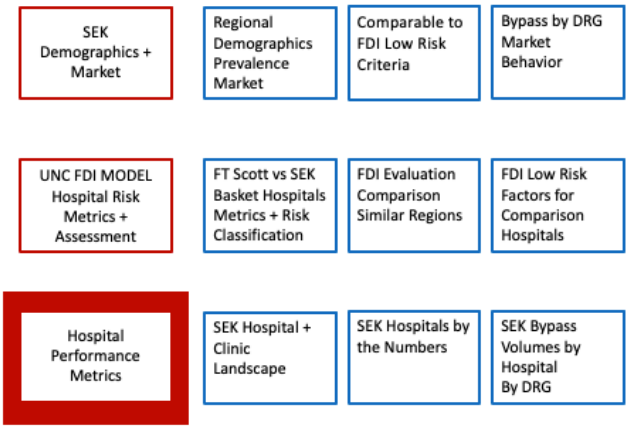


Bourbon County Hospital Evaluation Private & Confidential Noble Health

Critical Access Hospitals (CAH) operate rural communities that meet distance and other criteria set by law. CAH hospitals can operate no more than 25 beds and are reimbursed by CMS (Medicare + Medicaid) at actual cost + 2%.

Prospective Payment System (PPS) hospitals have no restrictions on number of beds or location. These hospitals are reimbursed at defined rates by CMS (and private insurers) and must manage their costs as they cannot bill CMS beyond the set reimbursement for a defined care protocol.

3.4 Bourbon County and SEK Region Hospital Operations



Noble Health applied the UNC FDI criteria to each SEK region hospital as baseline. We then evaluated each hospital in the region to assess lines of service, financial performance, and out-migration. From this analysis, a more complete picture of the state of health care in the region was derived.

SE KS Rural Basket Hospitals

Every SE KS hospital except Ascension Pittsburg has negative operating income

	Gross Patient Revenue	Gross Inpatient Rev	Gross Outpatient Rev	% Outpatient	Net Rev	% of Gross	Operating Income	% Medicare
Allen County Hospital	46,290,773	6,318,606	39,972,167	86%	20,780,092	45%	(2,229,952)	31%
Anderson County Hospital	36,336,167	7,396,286	28,939,881	80%	23,502,868	65%	(4,162,594)	41%
Fredonia Regional Hospital	17,648,453	2,876,676	14,780,777	84%	9,668,410	55%	(2,567,525)	46%
Coffeyville Regional Med Ctr	102,646,921	24,512,604	78,134,317	76%	36,375,823	35%	(8,304,826)	37%
Girard Hospital	32,830,152	8,618,703	24,211,449	74%	17,338,359	53%	(2,361,986)	23%
Labette Health	224,131,453	50,154,182	173,977,271	78%	69,884,359	31%	(9,122,353)	28%
Fort Scott Hospital								
Miami Medical Center	81,472,381	10,282,308	71,190,073	87%	26,124,191	32%	(4,106,909)	91%
Neosho Memorial Med Ctr	142,407,950	27,301,076	115,106,874	81%	50,165,642	35%	(2,275,717)	30%
Ascension Via Christi Pittsburg	347,588,672	95,467,355	252,121,317	73%	105,800,906	30%	1,701,585	32%
Ransom Memorial Hospital	172,609,223	34,217,521	138,391,702	80%	45,605,103	26%	(11,351,853)	31%
South Central KS Med Ctr	51,737,886	17,487,399	34,250,487	66%	19,979,318	39%	(1,994,266)	68%
St John's Norton Hospital	6,005,182	709,806	5,295,376	88%	4,548,647	76%	(702,601)	25%

Building volumes may not result in profitable operations

Even CAH hospitals, which are compensated at their cost + 2% run yearly operating deficits. The 6 CAH hospitals in the SEK region average over $1M per year in operating losses.

SEK hospitals are not alone. 643 rural hospitals nationwide are at financial risk and there is a structural mismatch between meeting the community health needs locally and operating sustainably

SE KS Basket Hospitals Uncompensated Care

	CAH	RRH	PPS	CAH	CAH	PPS	CAH
	Allen	Ascension Pitt	Coffeyville	Fredonia	Girard	Labette	Neosho
Staffed Beds	25	64	47	25	23	49	25
Total Acute Days	1,683	11,463	4,209	1,386	1,548	5,147	4,934
Total Outpatient Visits	11,524	46,719	33,189	11,732	10,811	68,532	31,205
Total Patient Revenue	46,290,773	347,588,672	102,646,921	17,648,453	32,830,152	224,131,453	142,407,950
Total Inpatient Revenue	6,318,606	95,467,355	24,512,604	2,867,676	8,618,703	50,154,182	27,301,076
Total Outpatient Revenue	39,972,167	252,121,317	78,134,317	14,780,777	24,211,449	173,977,271	115,106,874
Patient Allowances and Discounts	25,510,681	241,787,766	66,271,098	7,980,043	15,491,793	154,247,094	92,242,308
Net Patient Revenue	20,780,092	105,800,906	36,375,823	9,668,410	17,338,359	69,884,359	50,165,642
Net Medicare Revenue	4,774,870	25,396,001	9,134,506	3,797,401	3,544,652	16,019,327	11,504,693
Net Medicaid Revenue	1,574,622	25,396,001	4,445,090	699,896	510,844	3,360,569	3,322,265
Medicare	23%	24%	25%	39%	20%	23%	23%
Medicaid	8%	8%	12%	7%	3%	5%	7%
Private / Self	69%	68%	63%	53%	77%	72%	70%
Total Current Liabilities	8,587,827	16,396,886	5,932,045	2,158,770	12,219,380	9,778,901	5,664,651
Long Term Liabilities	950,603	1,251,717	1,433,232	8,673,798	9,677,855	22,235,973	19,048,038
Total Liabilities	9,538,430	17,648,603	7,365,277	10,842,568	21,879,235	32,014,874	24,712,689
General Fund Balance	3,315,204	54,982,676	19,730,724	597,403	4,047,758	43,070,348	32,035,183
Total Liabilities and Fund Balance	12,853,634	72,631,279	27,096,001	10,245,165	25,944,993	75,085,222	56,747,872
Current Ratio	1.40	1.30	1.50	1.10	1.40	2.90	3.90
Quick Ratio	3.80	1.10	1.30	0.90	1.30	2.70	3.80
Liabilities to Fund Balance Ratio	2.90	0.30	0.40	(18.10)	5.40	0.70	0.80
Debt to Equity Ratio	0.29	0.02	0.07	(14.54)	2.39	0.52	0.59
Bad Debt	3,100,813	6,247,595	4,229,286	824,982	1,278,377	9,189,454	7,219,910
Bad Debt to Net Patient Revenue Ratio	15%	6%	12%	9%	7%	13%	14%
Bad Debt to Accounts Receivable Ratio	117%	10%	52%	49%	41%	69%	58%
Unreimbursed Medicaid Costs:	849,841		1,113,466	283,748	1,153,734	3,591,099	2,372,284
Charity Care Charges	331,717	24,794,104	1,107,948	20,897	124,429	1,430,775	2,492,151
Charity Care Costs	166,006	7,781,735	769,664	18,912	69,711	576,288	1,678,387
Non-Medicare and Non-Reimburseable Medicare Bad Debt Costs	1,468,408	1,592,614	1,595,927	488,146	663,950	2,666,514	2,557,696
Cost of Uncompensated Care	1,634,414	9,374,349	2,365,591	507,058	733,661	3,242,802	4,236,083
Total Uncompensated Care or Unreimbursed Costs	2,484,256	9,374,349	3,479,057	790,806	1,887,395	6,833,901	6,608,367
% of Net Patient Revenue	12%	9%	10%	8%	11%	10%	13%
Operating Income	(2,229,952)	1,701,585	(8,404,826)	(2,567,525)	(2,361,986)	(9,122,353)	(2,275,717)
% of Net Patient Revenue	-11%	2%	-23%	-27%	-14%	-13%	-5%

Low Risk Hospital norm is 4-5%

Uncompensated care in SEK is 2X that of more financially stable rural hospitals. For those patients that SEK hospitals do serve, about 10% is uncompensated. This 10% can be the difference between operating loss and profit.

SE KS Rural Basket Hospital Services

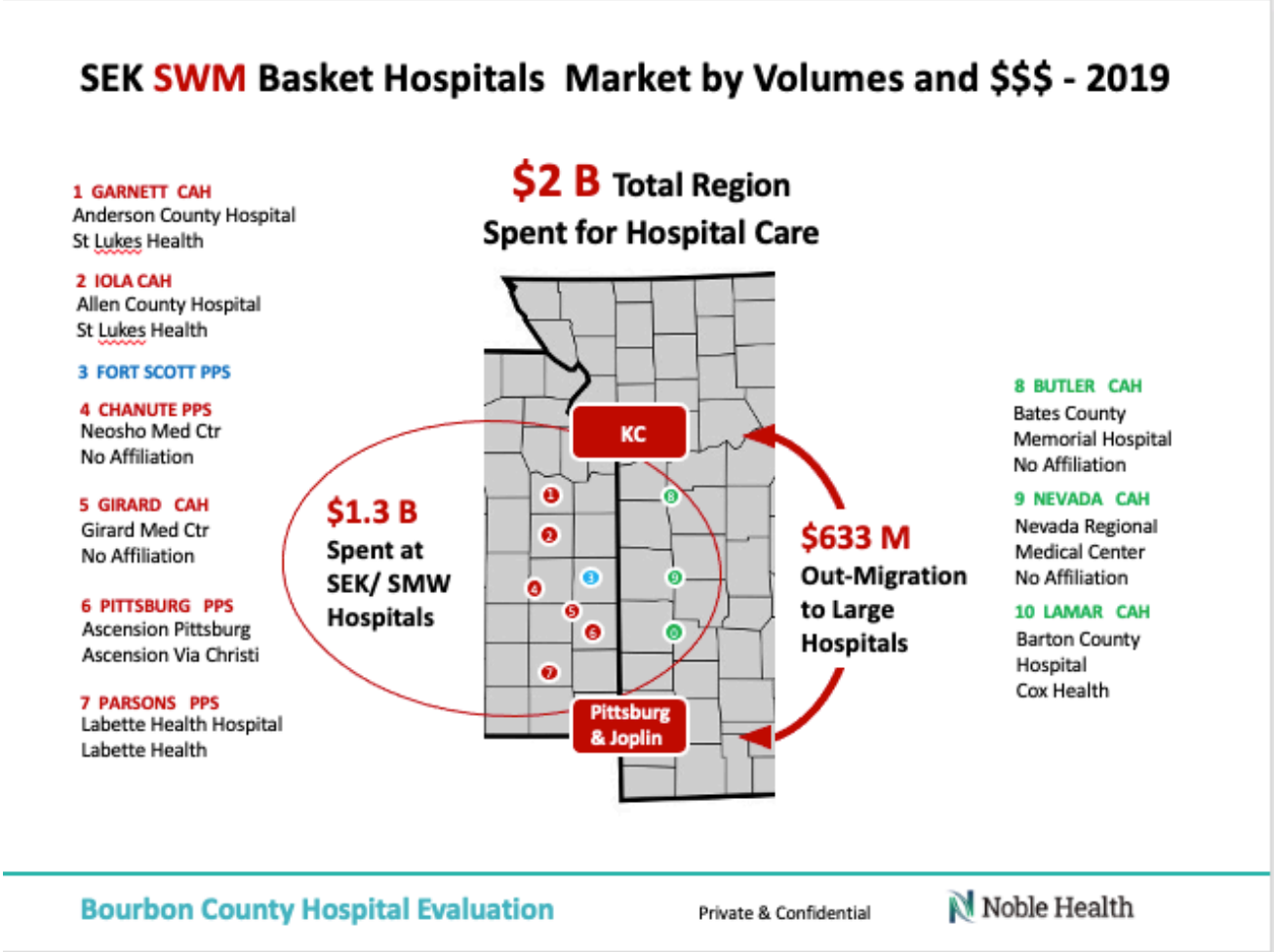
All Basket Hospitals	Some Basket Hospitals	No Basket Hospitals
Computed Tomography (CT) Scanner	Arthroscopy	Bariatric Surgery
Computed Tomography Angiography (CTA) Scanner	Cardiac Cath Lab	Burn Intensive Care (BICU)
Emergency Department	Cardiac Rehab	Coronary Intensive Care (CCU)
Magnetic Resonance Imaging (MRI)	Cardiac Surgery	Coronary Interventions
Orthopedics	Chemotherapy	Detox Intensive Care Unit
Pathology (Laboratory)	Electroencephalography (EEG)	Heart Transplant
Physical Therapy	Electrophysiology	Hemodialysis
Respiratory Therapy	Home Health	Intestinal Transplant
Speech Therapy	Hospice	Kidney Transplant
Ultrasound	Hyperbaric Oxygen	Liver Transplant
Wound Care	Inpatient Surgery	Lung Transplant
X-Ray	Intensity-Modulated Radiation Therapy (IMRT)	Neonatal/Nursery Intensive Care Unit
	Intensive Care Unit	Nursing Facility (NF)
	Joint Replacement	Pancreas Transplant
	Lithrotripsy (ESWL)	Pediatric Intensive Care Unit
	Magnetic Resonance Angiography (MRA)	Premature Intensive Care Unit
	Mammogramphy	Psychiatric
	Obstetrics	Psychiatric Intensive Care Unit
	Oncology	Skilled Nursing (SNF)
	Positron Emission Tomography (PET)	Surgical Intensive Care Unit
	Radiation Therapy	Vascular Intervention
	Rehabilitation	
	Single Photon Emission Computerized Tomography (SP	
	Sleep Studies	
	Spine Surgery	
	Swing Beds - SNF	
	Swing Beds-NF	
	Vascular Surgery	

All hospitals must have a core of services to provide even low acuity care. So all hospitals in the region have lab and radiology capability. All have orthopedic care.

Services in SEK may not be efficiently distributed, as hospitals offer services that are not fully utilized and excess capacity exists in aggregate for the region.

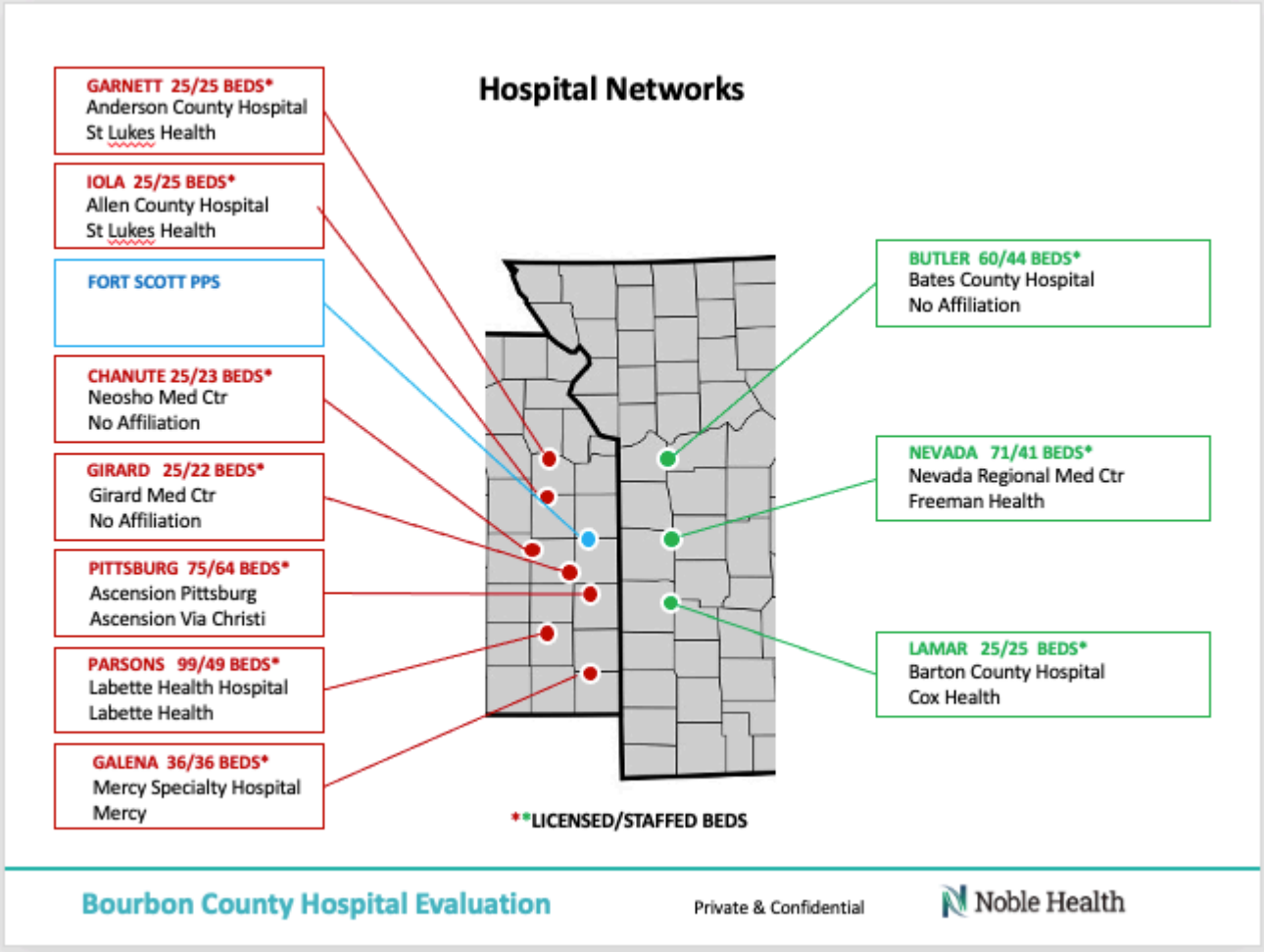
Some services are highly specialized and are typically too expensive to offer locally as they require both specialized doctors, nurses and equipment.

3.5 Out Migration



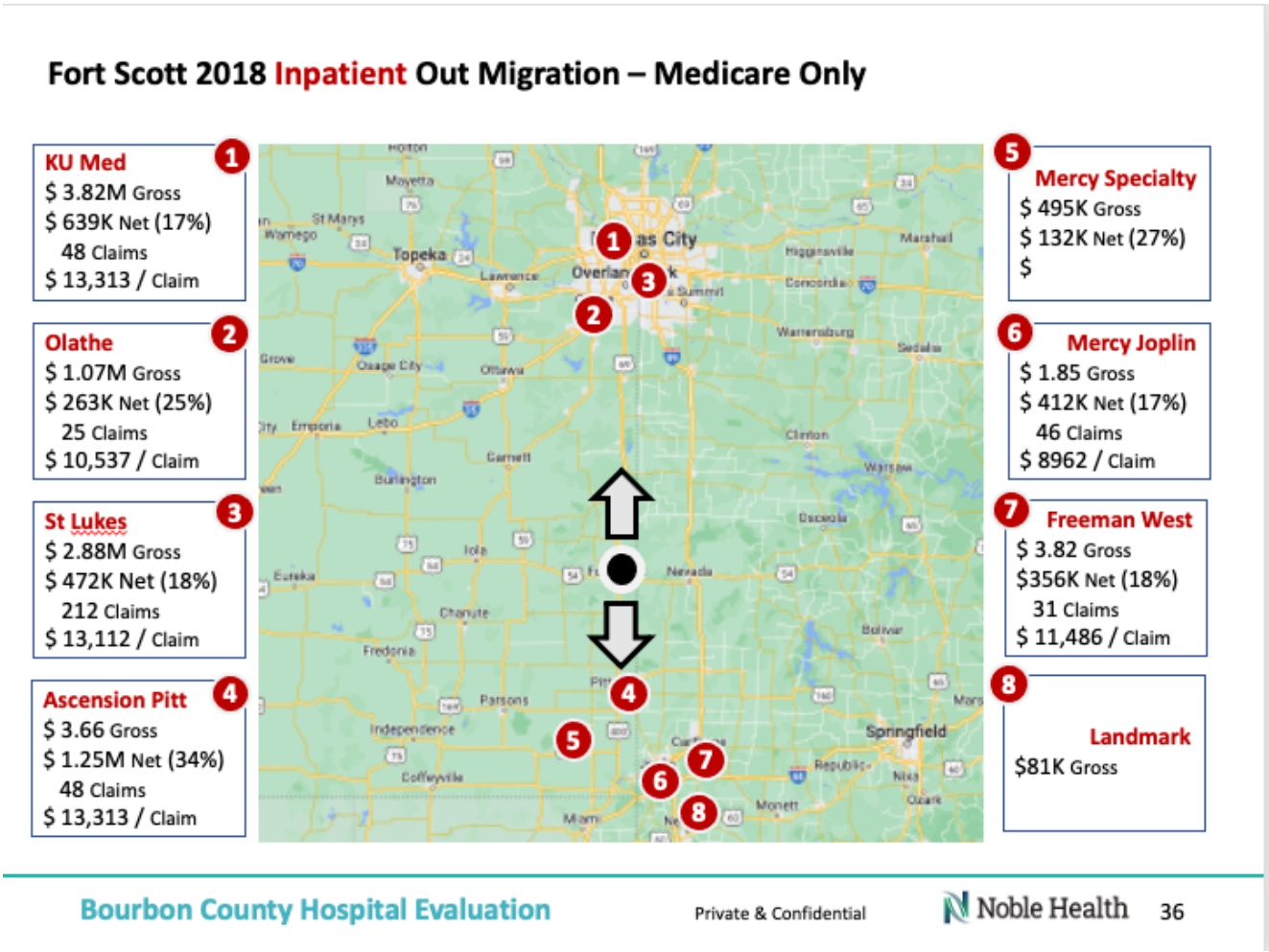
Over $2 billion is spent each year for health care in the region, with about 30% spent outside the communities where patients live, and instead spent at larger hospitals to the north (KC) and south (Pittsburg and Joplin).

Our analysis shows little out-migration to other rural hospitals in the region.



Regional rural hospitals are a mix of CAH (those with 25 licensed beds and PPS. Ascension Via Christi in Pittsburg is designated as a Rural Referral Hospital (RRH) as it offers care services not offered by the smaller surrounding hospitals.

Hospital Corporations that operate larger hospitals are affiliated with rural hospitals in the region, with patients needing higher acuity care than can be delivered locally typically referred to the larger hospitals of the corporation.



Nearly 40% of healthcare services are delivered to Bourbon County residents outside of the county. This out-migration, measured in 2018, is among the highest of the communities we have studied. No significant out-migration to adjacent rural hospitals.

Ascension in Pittsburg, Kansas City hospitals (KU Med, Olathe, St Luke's) and Joplin hospitals (Mercy and Freeman) are the most used hospitals for Bourbon County residents.

Allen County Hospital Out-Migration

With hospital closure in 2018, recent data from Bourbon County is not available. A proxy for the hospital outmigration behavior in Bourbon County is the closest operating hospital in Kansas - Allen County Hospital (2021 data). As a Critical Access Hospital (25 beds maximum) and in a small population market (12,553 people), the hospital provides limited inpatient care with just 4% of patients who have used the hospital in the past (patient universe) getting services at the local hospital. Virtually all inpatient care for residents of Allen County is delivered outside the county. Further, a majority of outpatient care is also delivered outside the county. Residents choose to drive to larger hospitals for outpatient care, either because they perceive the services are not available at the local hospital or because they trust the care at a larger hospital more.

Allen County Hospital Share Of Market

	Metric	*Allen $*	*Patient Universe $*	*% Share*
Outpatient	net	2,783,813	6,847,568	41%
	gross	16,733,152	43,606,586	38%
Inpatient	net	979,124	8,843,815	11%
	gross	1,774,262	43,868,056	4%

ALLEN COUNTY HOSPITAL

OUTMIGRATION BY HOSPITAL

HOSPITAL	NET	GROSS	% GROSS
Total	**7,860,000.00**	**42,090,000.00**	
Advent	161,000.00	587,000.00	1.4%
Ascension	1,050,000.00	4,880,000.00	11.6%
Freeman	80,000.00	433,000.00	1.0%
KS Heart	544,000.00	1,160,000.00	2.8%
Labette	316,000.00	689,000.00	1.6%
Neosho	416,000.00	1,150,000.00	2.7%
Overland Park	885,000.00	7,010,000.00	16.7%
St Luke	1,150,000.00	7,770,000.00	18.5%
Stormont Vail	146,000.00	754,000.00	1.8%
KU	889,000.00	5,670,000.00	13.5%

ALLEN COUNTY HOSPITAL OUTMIGRATION INPATIENT

Hospital Name	*Base DRG Group*	*Total Pmts*	*Total Charges*
AdventHealth Ottawa (FKA Ransom Memorial	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY (469, 470)	$27,576	$42,071
AdventHealth Ottawa (FKA Ransom Memorial	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY (483, 484)	$21,311	$82,682
AdventHealth Ottawa (FKA Ransom Memorial	CHRONIC OBSTRUCTIVE PULMONARY DISEASE (190, 191, 192)	$9,170	$57,465
AdventHealth Shawnee Mission (FKA Shawnee	SEPTICEMIA OR SEVERE SEPSIS W MV 96 OR MORE HOURS (870)	$47,601	$163,042
AdventHealth Shawnee Mission (FKA Shawnee	SPINAL FUSION EXCEPT CERVICAL (459, 460)	$23,643	$85,594
AdventHealth Shawnee Mission (FKA Shawnee	OTHER KIDNEY & URINARY TRACT PROCEDURES (673, 674, 675)	$22,322	$85,692
AdventHealth Shawnee Mission (FKA Shawnee	O.R. PROCEDURES FOR OBESITY (619, 620, 621)	$9,213	$70,028
pital of Kansas City	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT 96 OR MORE HOURS (:	$133,596	$810,909
th Hospital	RENAL FAILURE (682, 683, 684)	$62,753	$478,048
pital of Kansas City	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH (219, 220, 221	$84,027	$423,468
pital of Kansas City	KIDNEY TRANSPLANT (652)	$22,871	$370,159
pital of Kansas City	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <96 HOURS (208)	$33,535	$350,244
Jane Phillips Medical Center (	COAGULATION DISORDERS (813)	$9,021	$13,552
Medical Center (FKA St John M	SEPTICEMIA OR SEVERE SEPSIS W MV 96 OR MORE HOURS (870)	$39,166	$79,189
risti Hospital in Pittsburg	RESPIRATORY INFECTIONS & INFLAMMATIONS (177, 178, 179)	$13,037	$47,289
risti Hospital in Pittsburg	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$10,756	$90,023
risti Hospital in Pittsburg	OTHER CIRCULATORY SYSTEM DIAGNOSES (314, 315, 316)	$5,267	$20,998
risti Hospital in Pittsburg	MISC DISORDERS OF NUTRITION,METABOLISM,FLUIDS/ELECTROLYTES (640, 641)	$3,968	$13,112
risti Hospital in Pittsburg	DEGENERATIVE NERVOUS SYSTEM DISORDERS (056, 057)	$2,973	$4,469
risti Hospital in Pittsburg	OTHER DISORDERS OF NERVOUS SYSTEM (091, 092, 093)	$0	$7,631
risti St Francis	ENDOVASCULAR CARDIAC VALVE REPLACEMENT (266, 267)	$149,815	$669,880
risti St Francis	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE (853, 854, 855)	$119,720	$397,481
risti St Francis	PERC CARDIOVASC PROC W DRUG-ELUTING STENT (246, 247)	$62,562	$419,191
risti St Francis	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$55,325	$304,993
risti St Francis	CORONARY BYPASS W CARDIAC CATH (233, 234)	$50,256	$210,369
risti St Francis	PERMANENT CARDIAC PACEMAKER IMPLANT (242, 243, 244)	$46,235	$271,891
risti St Francis	MAJOR SMALL & LARGE BOWEL PROCEDURES (329, 330, 331)	$44,429	$98,760
Ascension Via Christi St Francis	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY (469, 470)	$36,470	$184,824
Ascension Via Christi St Francis	OTHER CIRCULATORY SYSTEM DIAGNOSES (314, 315, 316)	$26,938	$41,264
Ascension Via Christi St Francis	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS (981, 982, 983)	$26,499	$160,669
Ascension Via Christi St Francis	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES (319, 320)	$24,736	$87,246
Ascension Via Christi St Francis	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION (064, 065, 066)	$24,290	$309,098
Ascension Via Christi St Francis	G.I. HEMORRHAGE (377, 378, 379)	$23,761	$101,252
Ascension Via Christi St Francis	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS (097, 098, 099)	$22,735	$227,970
Ascension Via Christi St Francis	RENAL FAILURE (682, 683, 684)	$21,724	$108,379
Ascension Via Christi St Francis	OTHER VASCULAR PROCEDURES (252, 253, 254)	$21,124	$32,512
Ascension Via Christi St Francis	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (477, 478, 479)	$19,563	$95,858

Out Migration by SEK SWM County Medicare Only

MEDICARE OUT MIGRATION BY COUNTY TO KU MED CTR

COUNTY	POP	MEDICARE TOTAL # OF CLAIMS	MEDICARE TOTAL CHARGES	MEDICARE REIMURSEMENT RATE	MEDICARE TOTAL PMTS	MEDICARE AVG PMT/CLAIM	MEDICARE % OF PMTS WITHIN SEARCH
KANSAS							
Wyandotte	164,831	2,049	$176,210,069	16%	$27,854,326	$13,594	12.30%
Douglas	120,290	380	$38,553,504	18%	$6,877,273	$18,098	3.00%
Johnson	602,401	2,448	$218,632,343	17%	$38,189,261	$15,600	16.90%
~~Franklin~~	~~25,558~~	~~114~~	~~$9,754,018~~	19%	$1,844,947	$16,184	0.80%
Miami	33,417	121	$10,295,689	18%	$1,830,828	$15,131	0.80%
Anderson	7,835	22	$2,011,049	18%	$371,152	$16,871	0.20%
Linn	9,671	43	$3,655,151	15%	$564,094	$13,118	0.20%
Allen	12,556	60	$7,032,573	17%	$1,203,201	$20,053	0.50%
Bourbon	14,608	112	$10,617,104	17%	$1,796,424	$16,039	0.80%
Neosho	16,108	59	$8,222,681	14%	$1,190,999	$20,186	0.50%
Crawford	38,968	151	$17,350,558	16%	$2,751,276	$18,220	1.20%
Labette	20,119						
Cherokee	20,179	45	$5,833,669	16%	$919,616	$20,436	0.40%

Our review of data shows that Bourbon County outmigration was substantially higher than surrounding counties prior to hospital closure.

Nearly twice the number of claims for KU Med Center. Medicare claim dollars 160% per person compared to other SEK counties. More lower acuity care performed outside the county.

These out-migration data align with high risk of closure hospitals in the UNC FDI assessment of all rural hospitals.

Fort Scott 2018 Inpatient Out-Migration

Medicare Only

Medicare Only	KU Med	St Lukes	Olathe	Mercy Spec	Ascension Pitt	Mercy Joplin	Freeman W	TOTAL
Gross	3,820,000	1,040,000	1,070,000	495,000	3,660,000	1,850,000	1,930,000	13,865,000
Net	639,000	157,000	263,000	132,000	1,250,000	412,000	356,000	3,209,000
reimburse %	17%	15%	25%	27%	34%	22%	18%	23%
Claims	48	12	25	14	132	46	31	308
$ per claim	13,313	13,112	10,537	9,429	9,444	8,962	11,486	10,898

Medicare + Privately Insured Patients

Private + Medicare	KU Med	St Lukes	Olathe	Mercy Spec	Ascension Pitt	Mercy Joplin	Freeman W	TOTAL
Gross	11,937,500	3,250,000	3,343,750	1,546,875	11,437,500	5,781,250	6,031,250	43,328,125
Net	2,232,313	536,250	919,531	459,422	4,277,625	1,416,250	1,194,188	11,035,578
reimburse %	19%	17%	28%	30%	37%	24%	20%	25%
Claims	150	38	78	44	413	144	97	963
$ per claim	14,882	14,300	11,770	10,501	10,370	9,852	12,327	12,000

Extrapolating the CMS data, we estimate that both Medicare and private insurance claims for services outside the county exceeded $43M in 2018. At expected reimbursement rates, about $11M of care was not delivered locally in 2018.

If the Fort Scott Hospital could capture a third of this revenue, it could make the difference between chronic losses and sustainable profits.

Fort Scott 2018 Out Migration Drill Down

Medicare Only

Hospital Name	Base DRG Group	Total Pmts	Total Charges
AdventHealth Shawnee Mission (FKA Shawnee Mission Me	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$5,977	$42,769
Ascension Via Christi Hospital in Pittsburg	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$132,782	$261,425
Ascension Via Christi Hospital in Pittsburg	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560,	$78,876	$133,226
Ascension Via Christi Hospital in Pittsburg	HEART FAILURE & SHOCK (291, 292, 293)	$35,644	$108,141
Ascension Via Christi Hospital in Pittsburg	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE (280, 281, 282)	$28,195	$107,845
Ascension Via Christi Hospital in Pittsburg	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$26,394	$91,950
Ascension Via Christi Hospital in Pittsburg	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT (260, 261, 26	$12,153	$11,980
Ascension Via Christi St Teresa	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560,	$4,117	$17,143
Barnes-Jewish Hospital	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH (219,	$116,415	$482,281
Bates County Memorial Hospital	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$4,199	$14,489
Freeman Hospital West	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$32,214	$223,534
Freeman Hospital West	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560,	$11,011	$22,389
Freeman Hospital West	HEART FAILURE & SHOCK (291, 292, 293)	$5,930	$33,963
Freeman Hospital West	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$3,901	$21,888
Girard Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$12,244	$17,780
Mercy Hospital Joplin	HEART FAILURE & SHOCK (291, 292, 293)	$23,390	$54,299
Mercy Hospital Joplin	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$20,168	$87,829
Mercy Hospital Joplin	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$0	$6,752
Miami County Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$4,033	$10,085
Nevada Regional Medical Center	HEART FAILURE & SHOCK (291, 292, 293)	$8,252	$9,896
Olathe Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$29,801	$128,818
Olathe Medical Center	CARDIAC PACEMAKER DEVICE REPLACEMENT (258, 259)	$15,374	$42,200
Olathe Medical Center	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$10,202	$71,280
Olathe Medical Center	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE (280, 281, 282)	$2,851	$16,359
Overland Park Regional Medical Center	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$0	$10,414
Research Medical Center	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560,	$24,787	$157,666
Saint Lukes East Hospital	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$9,226	$65,342
Saint Lukes Hospital of Kansas City	CORONARY BYPASS W CARDIAC CATH (233, 234)	$49,875	$257,188
Saint Lukes Hospital of Kansas City	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$26,046	$117,318
Saint Lukes South Hospital	HEART FAILURE & SHOCK (291, 292, 293)	$6,234	$36,604
Saint Lukes South Hospital	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$3,064	$65,856
St Joseph Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$18,586	$151,726
The University of Kansas Hospital	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$76,560	$614,417
The University of Kansas Hospital	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH (219,	$52,962	$288,104
The University of Kansas Hospital	HEART FAILURE & SHOCK (291, 292, 293)	$37,455	$176,251
		928,918	**3,916,438**

Residents of Bourbon County sought care outside the county at hospitals both north and south.

Noble Health analysis includes the description and total charges for procedures for Bourbon County residents at hospitals outside the county. Analysis includes classification of out-migration by procedure type, including total charges by procedure. From this data we can estimate yearly volumes by procedure. These estimates are used to assess the viability of service lines. If demand is insufficient to perform services locally, then collaboration with a larger hospital is warranted or sharing of provider and nurse services with other communities is an option.

Revenue Out-Migration by Medical Procedure - Sepsis / Infections

Mercy Ft Scott Bypass by Hospital by DRG - Inpatient		Medicare Only	
Hospital Name	Base DRG Group	Total Pmts	Total Charges
AdventHealth Shawnee Mission (FKA Shawnee Mission Me	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$5,977	$42,769
Allen County Regional Hospital	KIDNEY & URINARY TRACT INFECTIONS (689, 690)	$5,989	$6,362
Ascension Via Christi Hospital in Pittsburg	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$132,782	$261,425
Ascension Via Christi Hospital in Pittsburg	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE (853, 854, 855)	$62,922	$229,308
Ascension Via Christi Hospital in Pittsburg	RESPIRATORY INFECTIONS & INFLAMMATIONS (177, 178, 179)	$35,326	$229,923
Ascension Via Christi Hospital in Pittsburg	PULMONARY EDEMA & RESPIRATORY FAILURE (189)	$22,859	$50,824
Ascension Via Christi Hospital in Pittsburg	KIDNEY & URINARY TRACT INFECTIONS (689, 690)	$8,590	$35,624
Ascension Via Christi Hospital in Pittsburg	OTHER RESP SYSTEM O.R. PROCEDURES (166, 167, 168)	$7,157	$34,619
CHRISTUS Health Shreveport-Bossier	KIDNEY & URINARY TRACT INFECTIONS (689, 690)	$6,633	$33,824
Freeman Hospital West	SEPTICEMIA OR SEVERE SEPSIS W MV 96 OR MORE HOURS (870)	$35,340	$158,205
Freeman Hospital West	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$32,214	$223,534
Freeman Hospital West	KIDNEY & URINARY TRACT INFECTIONS (689, 690)	$12,855	$39,761
Freeman Hospital West	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE (853, 854, 855)	$11,526	$29,622
Girard Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$12,244	$17,780
Mercy Hospital Joplin	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$20,168	$87,829
Mercy Hospital Joplin	RESPIRATORY INFECTIONS & INFLAMMATIONS (177, 178, 179)	$9,333	$42,375
Mercy Hospital Joplin	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM (727, 728)	$8,193	$19,693
Miami County Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$4,033	$10,085
Nevada Regional Medical Center	KIDNEY & URINARY TRACT INFECTIONS (689, 690)	$18,530	$26,458
Olathe Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$29,801	$128,818
Olathe Medical Center	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE (853, 854, 855)	$28,274	$71,014
Saint Lukes East Hospital	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$9,226	$65,342
Saint Lukes Hospital of Kansas City	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$26,046	$117,318
Saint Lukes South Hospital	KIDNEY & URINARY TRACT INFECTIONS (689, 690)	$4,919	$19,561
St Joseph Medical Center	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$18,586	$151,726
The University of Kansas Hospital	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96 OR MORE HOURS (871, 872)	$76,560	$614,417
The University of Kansas Hospital	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC (856, 857,	$13,388	$86,415
		659,471	**2,791,862**

Revenue Out Migration by Medical Procedure - Cardiac

Mercy Ft Scott Bypass by Hospital by DRG - Inpatient		Medicare Only	
Hospital Name	Base DRG Group	Total Pmts	Total Charges
Ascension Via Christi Hospital in Pittsburg	PERC CARDIOVASC PROC W DRUG-ELUTING STENT (246, 247)	$54,876	$215,723
Ascension Via Christi Hospital in Pittsburg	HEART FAILURE & SHOCK (291, 292, 293)	$35,644	$108,141
Ascension Via Christi Hospital in Pittsburg	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE (280, 281, 282)	$28,195	$107,845
Ascension Via Christi Hospital in Pittsburg	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$26,394	$91,950
Ascension Via Christi Hospital in Pittsburg	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT (260, 261, 26	$12,153	$11,980
Ascension Via Christi Hospital in Pittsburg	PERMANENT CARDIAC PACEMAKER IMPLANT (242, 243, 244)	$11,683	$33,577
Ascension Via Christi Hospital in Pittsburg	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS (862, 863)	$9,937	$28,845
Barnes-Jewish Hospital	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH (219,	$116,415	$482,281
Bates County Memorial Hospital	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$4,199	$14,489
Freeman Hospital West	PERC CARDIOVASC PROC W DRUG-ELUTING STENT (246, 247)	$18,501	$117,458
Freeman Hospital West	HEART FAILURE & SHOCK (291, 292, 293)	$5,930	$33,963
Freeman Hospital West	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$3,901	$21,888
Mercy Hospital Joplin	PERC CARDIOVASC PROC W DRUG-ELUTING STENT (246, 247)	$27,284	$146,039
Mercy Hospital Joplin	HEART FAILURE & SHOCK (291, 292, 293)	$23,390	$54,299
Mercy Hospital Joplin	PERMANENT CARDIAC PACEMAKER IMPLANT (242, 243, 244)	$13,102	$51,107
Mercy Hospital Joplin	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$0	$6,752
Nevada Regional Medical Center	HEART FAILURE & SHOCK (291, 292, 293)	$8,252	$9,896
Olathe Medical Center	PERC CARDIOVASC PROC W DRUG-ELUTING STENT (246, 247)	$18,197	$86,586
Olathe Medical Center	CARDIAC PACEMAKER DEVICE REPLACEMENT (258, 259)	$15,374	$42,200
Olathe Medical Center	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$10,202	$71,280
Olathe Medical Center	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE (280, 281, 282)	$2,851	$16,359
Overland Park Regional Medical Center	PERC CARDIOVASC PROC W DRUG-ELUTING STENT (246, 247)	$12,046	$92,084
Overland Park Regional Medical Center	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$0	$10,414
Providence Medical Center	CHEST PAIN (313)	$4,419	$30,419
Saint Lukes Hospital of Kansas City	CORONARY BYPASS W CARDIAC CATH (233, 234)	$49,875	$257,188
Saint Lukes Hospital of Kansas City	PERMANENT CARDIAC PACEMAKER IMPLANT (242, 243, 244)	$13,537	$58,752
Saint Lukes South Hospital	PERC CARDIOVASC PROC W DRUG-ELUTING STENT (246, 247)	$10,352	$91,862
Saint Lukes South Hospital	HEART FAILURE & SHOCK (291, 292, 293)	$6,234	$36,604
Saint Lukes South Hospital	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS (308, 309, 310)	$3,064	$65,856
The University of Kansas Hospital	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH (219,	$52,962	$288,104
The University of Kansas Hospital	HEART FAILURE & SHOCK (291, 292, 293)	$37,455	$176,251
		636,424	**2,860,192**

Revenue Out-Migration by Medical Procedure – GI Inpatient

Mercy Ft Scott Bypass by Hospital by DRG - Inpatient		Medicare Only	
Hospital Name	Base DRG Group	Total Pmts	Total Charges
Allen County Regional Hospital	MAJOR SMALL & LARGE BOWEL PROCEDURES (329, 330, 331)	$34,137	$102,889
Ascension Via Christi Hospital in Pittsburg	G.I. OBSTRUCTION (388, 389, 390)	$24,000	$58,137
Ascension Via Christi Hospital in Pittsburg	G.I. HEMORRHAGE (377, 378, 379)	$9,327	$20,977
Ascension Via Christi Hospital in Pittsburg	RECTAL RESECTION (332, 333, 334)	$6,720	$27,649
Ascension Via Christi Hospital in Pittsburg	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS (371, 3	$5,069	$8,088
Freeman Hospital West	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS (391, 392)	$5,028	$62,646
Girard Medical Center	G.I. HEMORRHAGE (377, 378, 379)	$7,459	$11,196
Hillcrest Medical Center	MAJOR SMALL & LARGE BOWEL PROCEDURES (329, 330, 331)	$15,649	$69,717
Hillcrest Medical Center	G.I. OBSTRUCTION (388, 389, 390)	$10,900	$27,008
Landmark Hospital of Joplin	OTHER DIGESTIVE SYSTEM DIAGNOSES (393, 394, 395)	$3,952	$19,533
Menorah Medical Center	OTHER DIGESTIVE SYSTEM DIAGNOSES (393, 394, 395)	$9,318	$65,530
Menorah Medical Center	MINOR SMALL & LARGE BOWEL PROCEDURES (344, 345, 346)	$9,163	$97,381
Mercy Hospital Joplin	G.I. HEMORRHAGE (377, 378, 379)	$80,981	$284,030
Mercy Hospital Joplin	MAJOR SMALL & LARGE BOWEL PROCEDURES (329, 330, 331)	$24,034	$127,082
Mercy Hospital Joplin	OTHER DIGESTIVE SYSTEM DIAGNOSES (393, 394, 395)	$9,567	$17,498
Mercy Hospital Joplin	G.I. OBSTRUCTION (388, 389, 390)	$4,051	$17,519
Neosho Memorial Regional Medical Center	STOMACH, ESOPHAGEAL & DUODENAL PROC (326, 327, 328)	$14,318	$65,914
Olathe Medical Center	STOMACH, ESOPHAGEAL & DUODENAL PROC (326, 327, 328)	$44,711	$234,010
Olathe Medical Center	G.I. HEMORRHAGE (377, 378, 379)	$14,201	$65,333
Olathe Medical Center	G.I. OBSTRUCTION (388, 389, 390)	$8,558	$47,980
Saint Lukes Hospital of Kansas City	OTHER DIGESTIVE SYSTEM DIAGNOSES (393, 394, 395)	$10,466	$132,724
Saint Lukes South Hospital	OTHER DIGESTIVE SYSTEM DIAGNOSES (393, 394, 395)	$5,296	$23,423
The University of Kansas Hospital	G.I. HEMORRHAGE (377, 378, 379)	$19,390	$136,665
The University of Kansas Hospital	STOMACH, ESOPHAGEAL & DUODENAL PROC (326, 327, 328)	$17,556	$128,191
The University of Kansas Hospital	MAJOR SMALL & LARGE BOWEL PROCEDURES (329, 330, 331)	$16,812	$48,523
The University of Kansas Hospital	OTHER DIGESTIVE SYSTEM DIAGNOSES (393, 394, 395)	$9,578	$63,835
The University of Kansas Hospital	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS (371, 3	$7,984	$34,871
The University of Kansas Hospital	INFLAMMATORY BOWEL DISEASE (385, 386, 387)	$6,323	$27,476
The University of Kansas Hospital	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS (391, 392)	$6,138	$44,227
		440,686	**2,070,052**

Revenue Out-Migration by Medical Procedure - Orthopedics

Mercy Ft Scott Bypass by Hospital by DRG - Inpatient		Medicare Only	
Hospital Name	Base DRG Group	Total Pmts	Total Charges
AdventHealth Ottawa (FKA Ransom Memorial Hospital)	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY (461,	$27,173	$36,475
Ascension St John Medical Center (FKA St John Medical Cen	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9 OR MORE FUS (4	$37,499	$168,662
Ascension Via Christi Hospital in Pittsburg	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560, 5	$78,876	$133,226
Ascension Via Christi Hospital in Pittsburg	SPINAL FUSION EXCEPT CERVICAL (459, 460)	$23,568	$44,352
Ascension Via Christi Hospital in Pittsburg	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY (4	$22,173	$85,812
Ascension Via Christi Hospital in Pittsburg	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT (480, 481, 482)	$11,349	$49,190
Ascension Via Christi Hospital in Pittsburg	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC (515, 516, 517)	$9,040	$37,972
Ascension Via Christi Hospital in Pittsburg	FRACTURES OF HIP & PELVIS (535, 536)	$6,403	$11,504
Ascension Via Christi Hospital in Pittsburg	MEDICAL BACK PROBLEMS (551, 552)	$4,221	$10,543
Ascension Via Christi St Francis	REVISION OF HIP OR KNEE REPLACEMENT (466, 467, 468)	$22,028	$106,531
Ascension Via Christi St Francis	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT (480, 481, 482)	$13,265	$76,475
Ascension Via Christi St Teresa	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560, 5	$4,117	$17,143
Freeman Hospital West	SPINAL FUSION EXCEPT CERVICAL (459, 460)	$43,584	$363,788
Freeman Hospital West	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION (453, 454, 455)	$26,770	$130,430
Freeman Hospital West	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560, 5	$11,011	$22,389
Freeman Hospital West	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT (480, 481, 482)	$10,770	$49,795
Freeman Hospital West	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY (4	$10,599	$68,712
Freeman Hospital West	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC (515, 516, 517)	$7,064	$40,531
Girard Medical Center	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT (480, 481, 482)	$11,095	$26,165
Menorah Medical Center	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY (483, 48	$12,621	$78,095
Mercy Hospital Joplin	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR (492, 493, 494)	$39,051	$233,771
Mercy Hospital Joplin	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY (4	$13,296	$62,546
Mercy Hospital Joplin	MEDICAL BACK PROBLEMS (551, 552)	$4,364	$39,266
Mercy Specialty Hospital - Southeast Kansas (AKA Premier S	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY (4	$36,647	$201,107
Mercy Specialty Hospital - Southeast Kansas (AKA Premier S	CERVICAL SPINAL FUSION (471, 472, 473)	$36,249	$124,958
Mercy Specialty Hospital - Southeast Kansas (AKA Premier S	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION (453, 454, 455)	$31,827	$58,656
Mercy Specialty Hospital - Southeast Kansas (AKA Premier S	REVISION OF HIP OR KNEE REPLACEMENT (466, 467, 468)	$16,826	$53,122
Mercy Specialty Hospital - Southeast Kansas (AKA Premier S	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY (483, 48	$11,137	$57,890
Olathe Medical Center	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC (515, 516, 517)	$11,318	$38,998
Overland Park Regional Medical Center	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG (542, 5	$9,967	$26,985
Research Medical Center	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (559, 560, 5	$24,787	$157,666
Research Medical Center	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT (480, 481, 482)	$13,099	$175,017
Saint Lukes Hospital of Kansas City	KIDNEY & URINARY TRACT INFECTIONS (689, 690)	$6,765	$38,961
The University of Kansas Hospital	SPINAL FUSION EXCEPT CERVICAL (459, 460)	$26,517	$108,474
The University of Kansas Hospital	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRA	$24,426	$75,495
The University of Kansas Hospital	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT (480, 481, 482)	$15,162	$104,013
The University of Kansas Hospital	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY (4	$14,350	$129,725
The University of Kansas Hospital	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC (515, 516, 517)	$12,254	$77,408
The University of Kansas Hospital	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS (474, 475, 4	$11,468	$54,443
		725,563	**3,339,816**

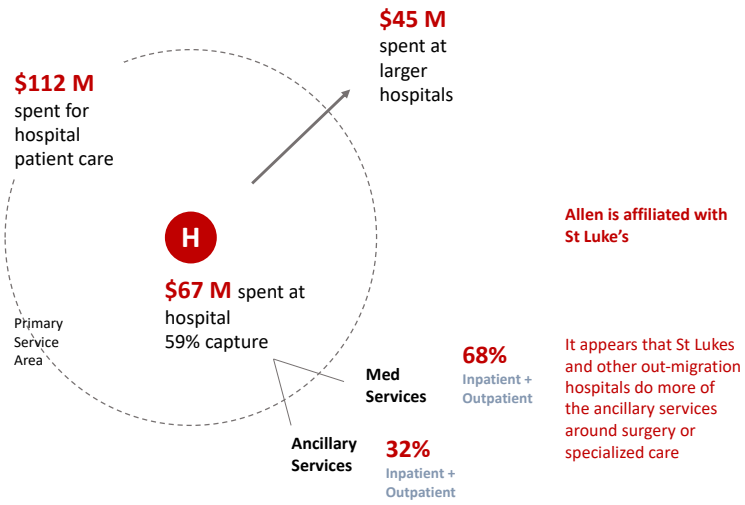
3.6 Ancillary Service Outmigration

Fort Scott – Ancillary as % Total Revenue

FORT SCOTT REVENUE BY CATEGORY 2018							
Revenue Center Category	*Medicare Total Pmts*	*Medicare Avg Pmt/Rev Center Charged*	*Medicare % of Total Pmts*	*Medicare National % of Total Pmts*	*Medicare State % of Total Pmts*	*Medicare Total Charges*	*Medicare # of Rev Centers Charged*
Semi-Private Room	$482,040	$1,898	30.90%	14.30%	11.50%	$1,397,388	254
Laboratory	$225,940	$200	14.50%	10.60%	10.50%	$644,738	1,131
Pharmacy	$201,610	$436	12.90%	9.60%	11.70%	$592,078	462
Radiology (Diagnostic and Therapeutic)	$152,242	$423	9.80%	6.20%	6.70%	$456,963	360
Medical Surgical Supplies	$113,473	$232	7.30%	11.10%	12.90%	$321,836	490
Emergency Room	$94,499	$487	6.10%	3.90%	2.90%	$252,986	194
Operating Room	$63,234	$2,108	4.10%	9.70%	10.90%	$211,119	30
Inhalation Therapy	$54,491	$436	3.50%	3.80%	4.20%	$158,233	125
Cardiology	$33,724	$213	2.20%	4.30%	4.80%	$93,876	158
Other Therapeutic Services	$31,712	$172	2.00%	0.10%	0.00%	$89,663	184
Observation Room	$30,341	$427	1.90%	0.80%	0.70%	$84,408	71
IV Therapy	$25,910	$199	1.70%	0.50%	0.10%	$73,098	130
Blood Admin. (Storing processing & transp	$16,144	$504	1.00%	0.80%	0.50%	$59,136	32
Physical Therapy	$9,347	$57	0.60%	1.80%	2.10%	$28,037	164
Anesthesia	$8,836	$295	0.60%	1.60%	0.80%	$29,958	30
Recovery Room	$5,861	$225	0.40%	1.00%	0.90%	$17,745	26
Diagnostic Services	$5,067	$298	0.30%	0.50%	0.40%	$14,574	17
MRI	$2,059		0.10%	0.80%	0.70%	$8,583	
Occupational Therapy	$1,928	$55	0.10%	1.30%	1.70%	$5,340	35
Speech Pathology	$1,014		0.10%	0.50%	0.60%	$2,920	

Fort Scott Hospital ancillary service revenue was typical for region hospitals, with lab, pharma, and imaging services the largest components of hospital revenue.

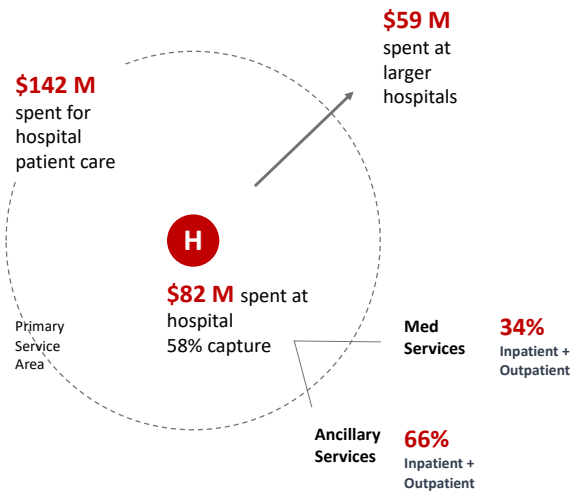
Hospital Care Demand at CAH - Allen County (Iola) Hospital



Allen County Hospital is a CAH designated facility with affiliation to St Luke's Health system. 40% of patients receive medical services at St Lukes or other hospitals – with a high percentage of ancillary services (Lab, Radiology, Therapy) delivered outside the county at the larger hospitals.

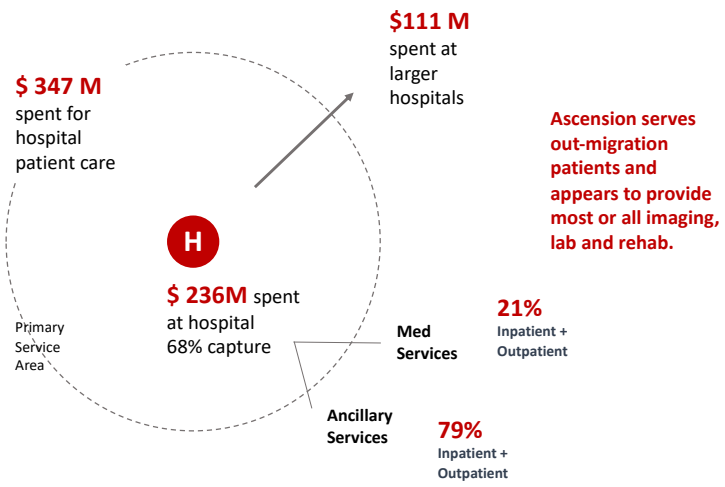
Bourbon County Hospital Evaluation Private & Confidential

Hospital Care Demand at CAH - Neosho County Hospital



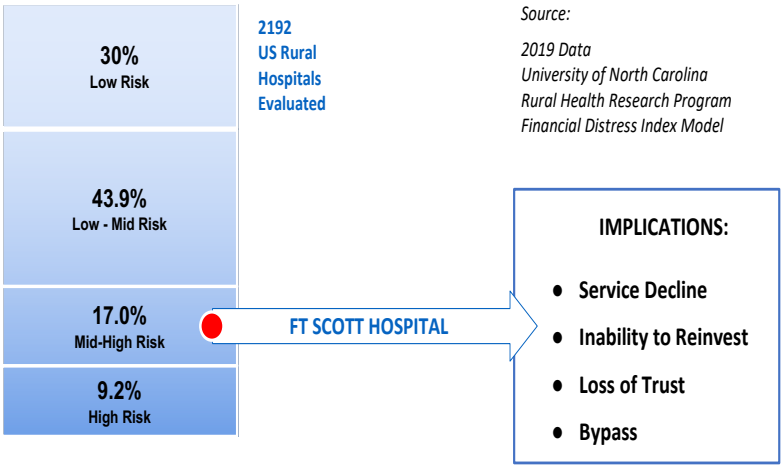
Neosho County Hospital, with no affiliation to larger hospitals, has a similar percentage of patient out migration, but has double the ancillary revenues. More patients have lab, radiology, and rehab therapy services locally than in Allen County.

Hospital Care Demand at RRH - Ascension Via Christi Pittsburg



Ascension Via Christi Hospital in Pittsburg operates as a RRH that provides care for more high acuity patients. It captures 10% more share of total spend on care and a high percentage of ancillary services spend – patients that receive care at the hospital also utilize the hospital for lab, radiology imaging, therapy and rehab services.

Rural Hospital Risk Model

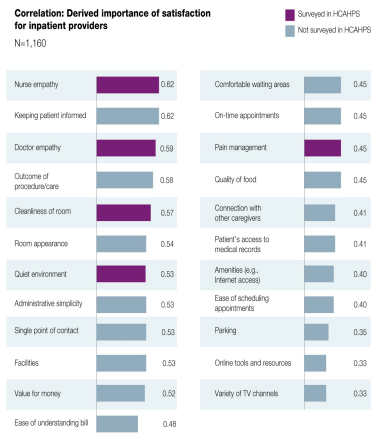


As hospitals fall into Mid-High Risk and High Risk UNC FDI criteria rankings, the operations become less and less sustainable.

Without investment in services and skilled doctors and nurses, hospitals can't offer high quality care. As services are curtailed, the trust afforded the hospital by the community declines and people choose to travel outside the community for care.

Low cost, high impact practices that drive satisfaction

Many factors matter to patients



Note: Population includes all respondents with an inpatient visit in the past three years.
Consumer Health Insights Survey, 2013.

https://healthcare.mckinsey.com/measuring-patient-experience-lessons-other-industries/

With out-migration a determining factor in the sustainability of health care in rural markets, understanding why residents of rural communities don't use local health care is a necessary first step.

For local health services the determinants of satisfaction are more about how people are treated and less about the procedure itself. Fully 8 out 12 criteria are about the quality of the interaction – to doctor, to nurse, to front desk, to follow-up, to billing.

4 RURAL REIMBURSEMENT STRUCTURE

Summary

1 Data shows that 30 percent of Kansas Community Hospitals had negative Medicare margins. That number more than doubles in rural areas to 69 percent. The average rural Medicare margin was -9.3 percent. [53]

2 Over the next 10 years, sequestration and other planned payment cuts will reduce Medicare reimbursement to Kansas' rural hospitals by $196 million. Another set of Medicare payment reductions have proposed $430 million over 10 years.

3 SEK hospitals have a larger proportion of Medicare and Medicaid patients than most hospitals in more urban locations. On average, SEK hospitals have about and Bourbon County has 32% 30-35% combined Medicare and Medicare patients.

4 Over half, 74 of the state's 127 community hospitals, receive some form of direct tax support totaling $40 million in subsidies. All but 2 of these are rural hospitals.

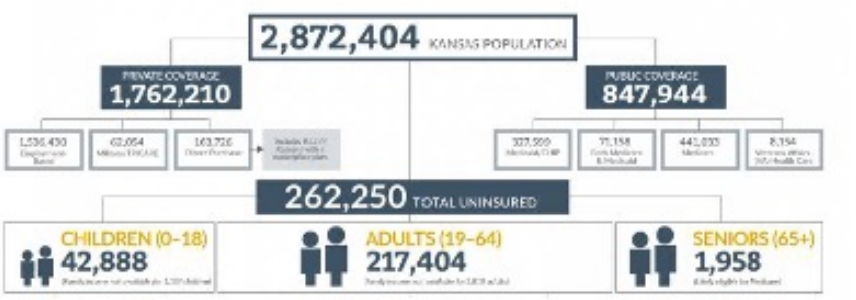
5 Private Insurer reimbursement rates for SEK region hospitals are negotiated with insurers holding most of the leverage. Reimbursement rates by private insurers vary between regions and hospitals, with rural hospitals often reimbursed at lower rates for the same care than urban hospitals.

6 With a 184K regional population, even if SEK hospitals collaborated as a group to negotiate reimbursement rates with private insurers, the collective group would have comparatively lower relative market power compared to large urban hospitals and hospital groups.

7 There remains an ongoing opportunity in rural markets to apply a local price where services provided locally are less expensive to employers and residents than alternative sites of care yet structure operations to be sustainable at these revenue levels.

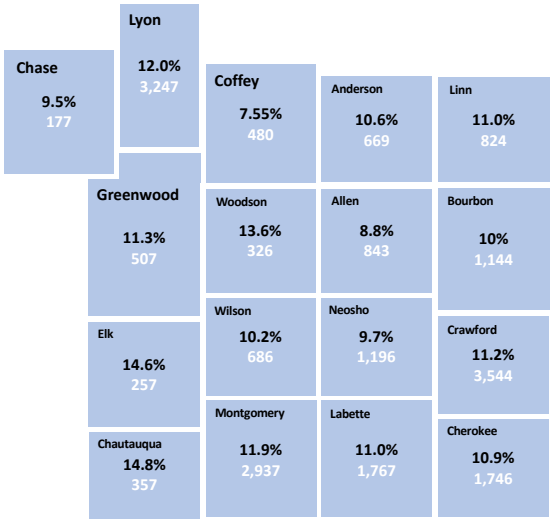
[53] *https://www.kha-net.org/CriticalIssues/AccessToCare/RuralIssues/Resources/d116726.aspx?type=view*

4.1 The Uninsured Burden for SEK Hospitals



Tbd

Uninsured	SEK Region	KS Avg	USA Avg
17,566	13.5%	10.1%	8.5%



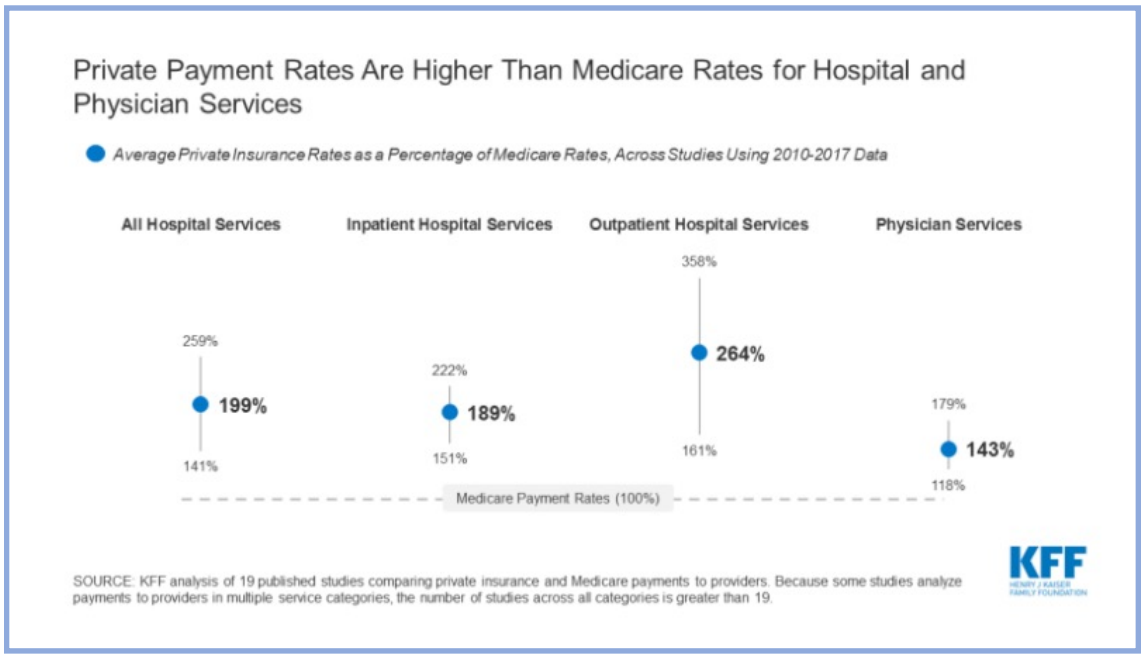
https://www.khi.org/policy/article/20-39

4.2 Public and Private Insurer Reimbursement Comparison[54]

Private insurers currently play a dominant role in the U.S. In 2018, private insurance accounted for more than 40% of expenditures on both hospital care and physician services. In comparison, Medicare accounted for about one quarter of these expenditures in the same year. Consequently, adjustments to private insurers' provider payment rates could have a profound impact on providers' revenues, employers' and privately insured Americans' health spending, and national health spending overall. Medicare has adopted a number of payment systems to manage Medicare spending and encourage providers to operate more efficiently, which in turn has helped slow the growth in premiums and other costs for beneficiaries.

For example, Medicare adopted its prospective payment system which sets payment rates for hospitals in advance based on categories of hospital services known as diagnosis-related groups (DRGs). These payments are updated periodically to account for changes in providers' operating costs, and are adjusted for factors such as direct and indirect expenses and whether a disproportionate share of a hospitals' patients are Medicare beneficiaries. Medicare has also adopted a number of specific payment systems for virtually every type of health care provider, building in incentives for providers to become more financially efficient.

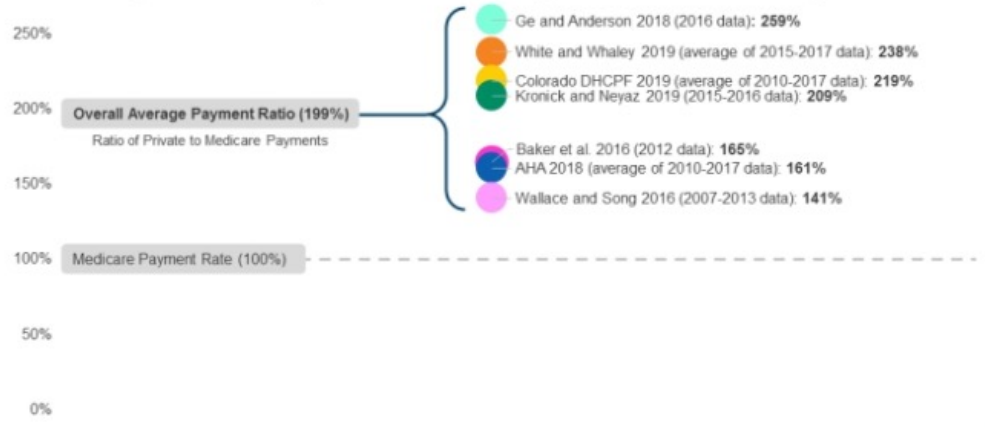
Private insurers' payment rates are typically determined through negotiations with providers, and so vary depending on market conditions, such as the bargaining power of individual providers relative to insurers in a community. Accordingly, Medicare has been able to limit growth in expenditures per enrollee more effectively than private insurers at several points in recent decades.



[54] *https://www.kff.org/medicare/issue-brief/how-much-more-than-medicare-do-private-insurers-pay-a-review-of-the-literature/*

Private Payment Rates for All Hospital Services Are About Double Medicare Rates, On Average

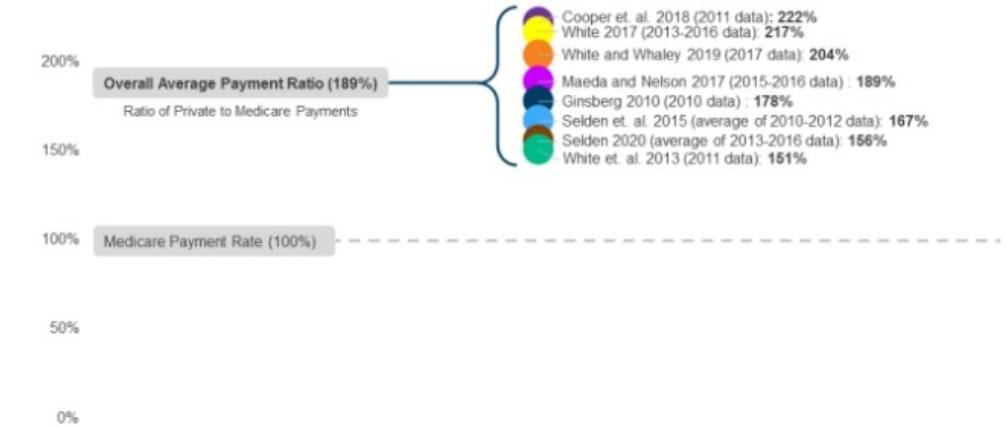
Private Insurance Payment Rates for All Hospital Services as a Percentage of Medicare Rates, Studies Using 2010-2017 Data



NOTE: All hospital services are a composite of inpatient and outpatient services.
SOURCE: KFF analysis of seven published studies of private-to-Medicare payment rates for hospital services with data from the period 2010-2017.

Private Payment Rates for Inpatient Services Are 189% of Medicare Rates, On Average

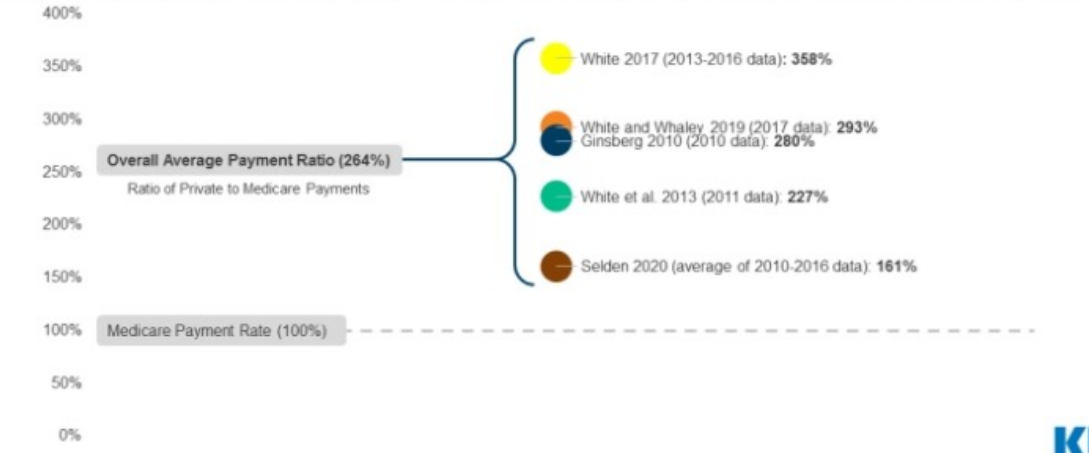
Private Insurance Payment Rates for Inpatient Hospital Services as a Percentage of Medicare Rates, Studies Using 2010-2017 Data



SOURCE: KFF analysis of eight published studies of private-to-Medicare payment rates for inpatient hospital services with data from the period 2010-2017.

Private Payment Rates for Outpatient Services Are 264% of Medicare Rates, On Average

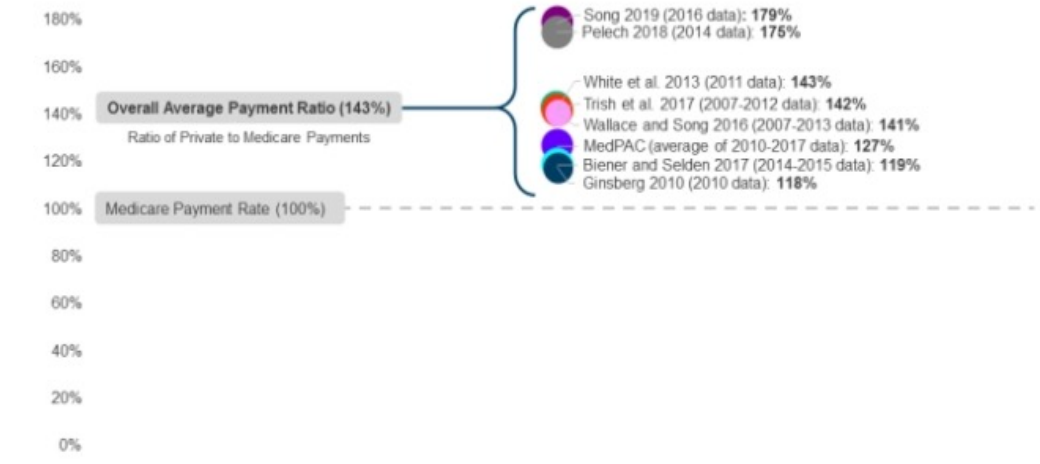
Private Insurance Payment Rates for Outpatient Hospital Services as a Percentage of Medicare Rates, Studies Using 2010-2017 Data



SOURCE: KFF analysis of five published studies of private-to-Medicare payment rates for outpatient hospital services with data from the period 2010-2017.

Private Payment Rates for Physician Services Are 143% of Medicare Rates, On Average

Private Insurance Payment Rates for Physician Services as a Percentage of Medicare Rates, Studies Using 2010-2017 Data



SOURCE: KFF analysis of eight published studies of private-to-Medicare payment rates for physician services with data from the period 2010-2017.

4.3 Medicare / Medicaid Reimbursement by Hospital Operating Model

Payment Mechanism	*Acute Care Services*	*Post Acute Services in Swing Beds*	*Outpatient Services*
Critical Access Hospital (CAH)	99% of Reasonable Costs	99% of Reasonable Costs	99% of Reasonable Costs
Rural Community Hospital Demonstration (RCHD)	Lesser of reasonable costs or target amounts based on base-year costs updated to current year, case mix, and volume	Lesser of reasonable costs or target amounts based on base-year costs updated to current year, case mix, and volume	
Sole Community Hospital SCH	Greater of federal IPPS rate or base-year costs updated to current year, case mix, and volume	Federal skilled nursing facility (SNF) PPS rate	Federal OPPS rate plus 7.1% for services other than drugs & biolgicals if SCH
Medicare Dependent Hospital MDH	IPPS rates plus 75% of the amount by which updates hospital-specific base-year cost exceeds the PPS rate	Federal SNF PPS rate	Federal PPS rate
Low Voume Payment Adjustment	Up to 125% of IPPS, MDH or SCH payment		
Prospective Payment System PPS	Federal IPPS rate	Federal SNF PPS rate	Federal OPPS rate

5 NEW MODELS FOR SUSTAINABLE RURAL HOSPITALS

Summary

1 There is a well-recognized need for a solution for rural hospital financial stability while maintaining the mission of care that rural communities need. This study includes analysis and proposed solutions by the Center for Health Quality and Payment Reform (CHQPR) and the Kansas Hospital Association (KHA) that explain the problem in some detail. Advocacy by these and other organizations resulted in 2021 federal legislation to create a new hospital model, the Rural Emergency Hospital (REH).

2 Congress authorized new operating model for rural hospitals, the REH model is potentially a good solution for many rural hospitals, as it provides a baseline payment to the hospital to maintain a core set of services and improved reimbursement rates for these services. Hospitals can begin operating as Rural Emergency Hospitals on January 1, 2023.

3 The REH legislation does include core provisions of the CHQPR and KHA proposals, including a yearly payment to qualifying rural hospitals to provide a core set of services, including emergency care. A typical rural hospital would receive federal money that supports hospital operations.

4 The REH model may not be possible for Bourbon County as the legislation as currently drafted appears to exclude those hospitals that had previously closed. As the legislation progresses through the comment and revision process advocacy to include closed hospitals could be included.

5 The REH model could be one option for Bourbon County Hospital going forward. The hospital could reopen with the same PPS model as it operated before closure. Reopening as a PPS hospital would enable the provision of acute care with overnight stays, whereas the REH model allows emergency services and 24 hour observation before transfer to an acute care hospital.

6 Programs to engage rural community residents to proactively manage their health have been trialed in rural communities, but without a funding provision, these programs are not sustainable. With funding, these programs could be deployed in Bourbon County and the SEK region.

7 There is a strong case for Bourbon County and the SEK region to collaborate on health care for the region where the provision of services is better matched to consumption. Hospitals may collaborate to ensure needed services are available, but not duplicated and that each hospital could operate more efficiently with better financial results.

5.1 Necessary Components for Rural Hospital Sustainability[55]

1. Primary Care
2. Psychiatric and substance use treatment
3. ED, EMS and observation care
4. Maternal care
5. Transportation
6. Diagnostics
7. Home Care
8. Dental
9. Robust Referral System
10. Telehealth

5.2 Sustainable Care Model Framework

Focus On Primary Care To Improve The Health Of The Population Served

- prevention
- primary care
- chronic disease management
- emergency services
- and other essential services

Provide Access To Essential Health Services

- within a reasonable distance
- Within a reasonable timeframe

Encourage Collaborative Solutions

- local and regional
- service provision and governance
- Promote cost and operational efficiencies and provide value in the provision of local and regional services

Embrace The Use of Technology

- to expand access
- to encourage patient participation in his/her care

Be Reimbursed and Financed Fairly By

- federal government M
- state government
- local governments
- private payors
- patients

[55] American Hospital Association 2020

5.3 Implementing Collaboration Models

Collaboration in Bourbon County

The shift from a volume-based, fee-for-service payment system to one based on value has prompted exploration of new service delivery and reimbursement models that focus attention on health outcomes and population health. At the same time, there is growing interest in patient-centered approaches to care and in encouraging patients to take a more active role in their health and their care. These transformations reward organizations that can demonstrate improved outcomes by coordinating care and treating patients holistically, taking into account not only their immediate medical needs but also their physical environment and social and economic situations (often referred to collectively as "social determinants of health").

Collaboration and coordination can offer solutions to problems that commonly affect rural areas:

Financial Viability. Pursuing collaboration and coordination with other organizations in their service areas can strengthen the financial position of rural providers by allowing them to participate in value-based payment models and creating opportunities to share resources.

Health Workforce. Health workforce shortages in rural areas can limit access, hitting primary care and mental health services hardest. Collaboration and coordination among providers can lead to more effective and efficient service delivery implementation, which can assist in recruitment and retention of health care professionals.

Health Care Access. Some rural hospitals are at risk for closure or for closing service lines (e.g. obstetrics units) due to financial viability challenges, jeopardizing access to emergency and other important services. Collaboration and coordination can help maintain and enhance health care access through reducing duplication of services.

Social Determinants of Health. A variety of non-medical factors influence how patients interact with the health care system and how well they are able to manage their health. These include education level, income, employment, housing quality and stability, the strength or weakness of social relationships, access to transportation, and availability of nutritious and affordable food. Problems in any of these areas can contribute to increased chronic conditions, substance abuse disorders, and shorter life expectancy in rural areas. Working with other community-based organizations allows health care providers to address the social determinants of health.

5.4 Center for Hospital Quality and Payment Reform Model

The primary cause of closures is payments from health insurance plans that don't sustain essential services in rural communities. Unlike large urban hospitals, small rural hospitals don't make large profits on patients with private insurance that can be used to offset losses on uninsured patients and patients with Medicaid. In fact, many small rural hospitals are paid less for services by private insurance plans than by Medicare or Medicaid. Hospitals that are losing money year after year can't maintain adequate capacity needed to respond to emergencies.

Current federal proposals won't solve the problems facing small rural hospitals and some would make the problems worse. For example, requiring small rural hospitals to eliminate inpatient services would increase financial losses at most hospitals as well as reduce access to hospital care for community residents. The most recent federal proposal — the CMS Community Health Access and Rural Transformation (CHART) model — would increase financial losses at rural hospitals by cutting their Medicare payments. Short-term financial assistance, while essential during the pandemic, won't solve the long-term problems rural hospitals face.

Rural hospitals need both *adequate payments* and a *better payment system* in order to provide essential healthcare services for their communities. Current fee-for-service and cost-based payment systems don't provide the support rural hospitals need, nor will the "global payments" Medicare and others have proposed. Instead, Medicare, Medicaid, and private health insurance plans need to use a *Patient-Centered Payment System* to pay rural hospitals. This would include using "standby capacity payments" in addition to service-based fees to ensure the hospitals have adequate funds to sustain emergency care and other essential services regardless of how many services patients receive, and paying for primary care based on patient needs rather than the number of clinic visits they make.

Alternative Approaches to Rural Hospital Payment

GOAL		EFFECTIVENESS IN ACHIEVING GOALS				
		Fee for Service	Cost-Based Payment	Global Budget	Shared Savings	Patient-Centered Payment
Ensure Availability of Essential Services in the Community		Ineffective	Effective	Mixed	Ineffective	Effective
Enable Safe, Timely, and Efficient Delivery of Needed Services	Safety/Quality	Mixed	Mixed	Ineffective	Harmful	Effective
	Timeliness	Effective	Limited	Harmful	Harmful	Effective
	Efficiency	Mixed	Harmful	Mixed	Limited	Effective
	Appropriateness	Mixed	Limited	Mixed	Mixed	Effective
Encourage Better Health and More Affordable Care	Better Health	Limited	Limited	Harmful	Harmful	Effective
	Lower Spending	Harmful	Harmful	Mixed	Limited	Effective

Saving rural hospitals will cost less than allowing them to close. Paying rural hospitals adequately would increase national healthcare spending, but only by a minuscule amount — 1/10 of 1%. Spending would likely increase even more if the hospitals are allowed to close, because of the greater health problems rural residents will experience if they lose access to adequate preventive care and prompt treatment.[56]

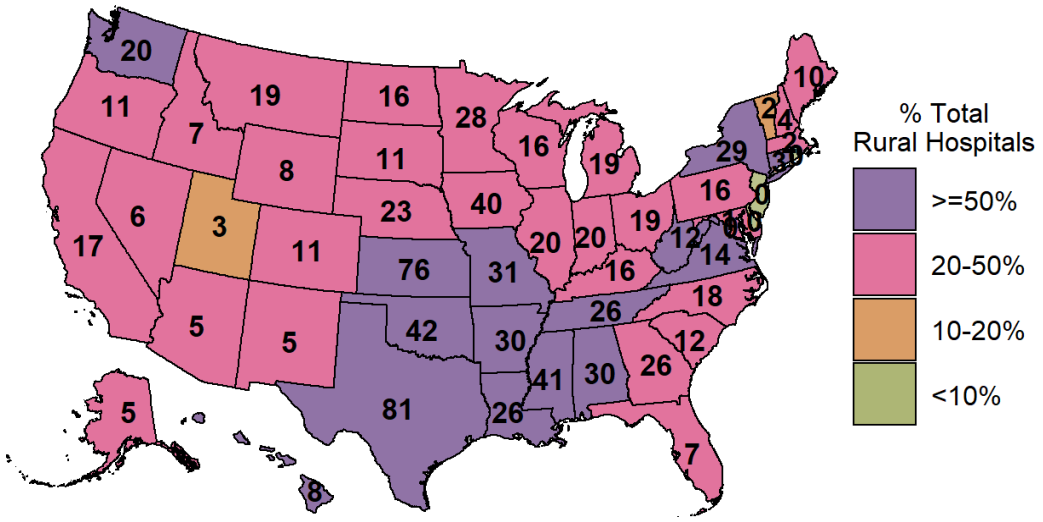
[56] https://ruralhospitals.chqpr.org/Overview.html

The Crisis Facing Rural Healthcare

Small rural hospitals are struggling to survive. The majority of small rural hospitals are losing money delivering patient services. More than 130 rural hospitals have closed in the past decade, and most of these were small rural hospitals. In most cases, the closure of the hospital resulted in the loss of both the emergency department and other outpatient services, and residents of the community must now travel much farther when they have an emergency or need other healthcare services. This increases the risk of death or disability when accidents or serious medical conditions occur, but it also increases the risk of health problems going undiagnosed or inadequately treated due to lack of access to care.

Nearly 900 rural hospitals — over 40% of all rural hospitals in the country —- are at risk of closing in the near future. Most of these are small rural hospitals that provide not only emergency care, inpatient care, and outpatient services, but also primary care, rehabilitation, and long-term care services for their communities. Moreover, most of the hospitals are located in isolated communities where loss of the hospital could severely limit access to health care services. More than 30 million people could be directly harmed if these hospitals close, and people in all parts of the country could be affected through the impacts on workers in agriculture and other industries.

Rural Hospitals at Immediate or High Risk of Closure

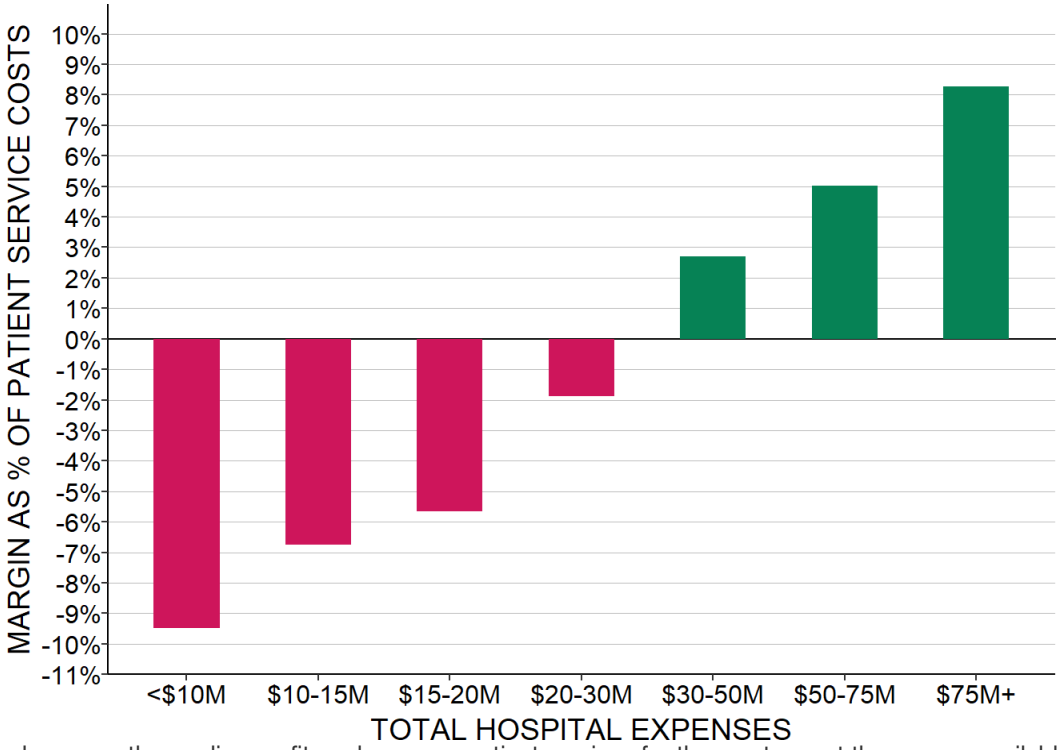


Immediate risk of closure is defined as persistent financial losses and insufficient financial reserves to allow continued operation. High risk of closure means the hospital has had persistent losses on patient services and has only been able to maintain positive margins through significant revenues from grants, local taxes, or other revenues not derived from services to patients.

The Causes of the Financial Problems at Small Rural Hospitals

The smallest rural hospitals are facing closure because the payments they receive for services are less than the cost of delivering care to patients in rural communities. Most of the smallest rural hospitals lose significant amounts of money delivering patient services, while the majority of larger rural hospitals make profits delivering services to patients.

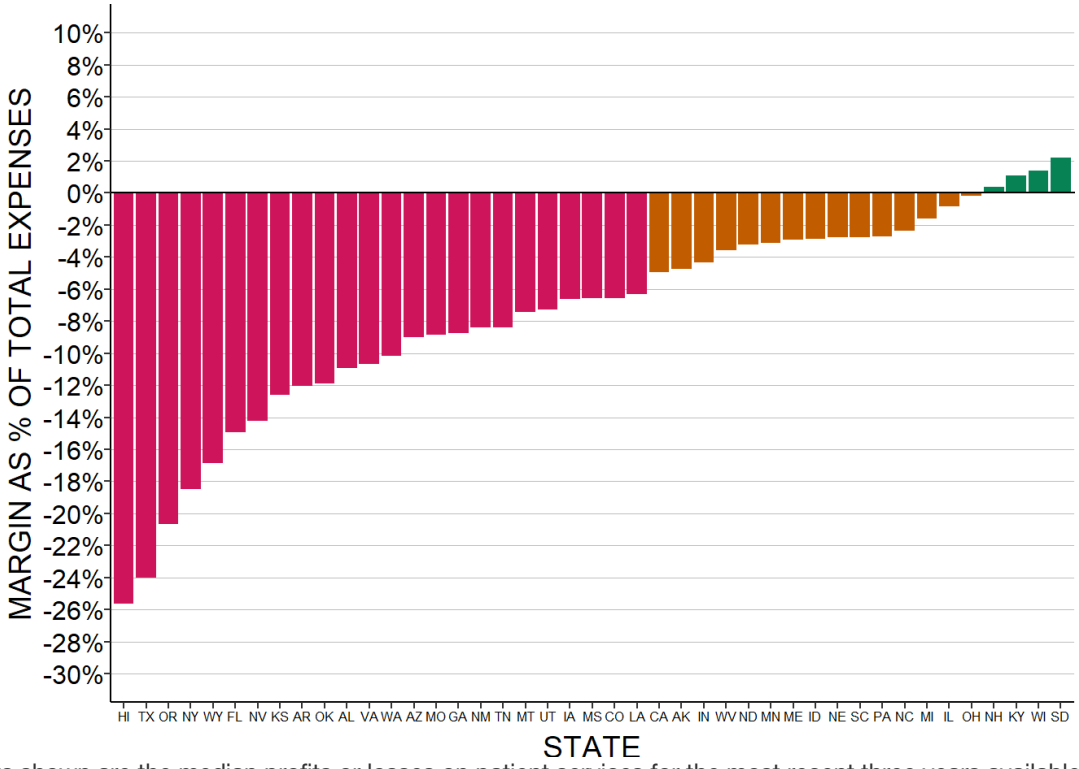
Median Margins on Patient Services at Rural Hospitals by Size of Hospital



Amounts shown are the median profits or losses on patient services for the most recent three years available at rural hospitals in each size category.

Most of the smallest rural hospitals in the country lose money delivering services to patients. In almost every state, the majority of very small rural hospitals do not receive payments that are high enough to cover the cost of delivering services to patients.

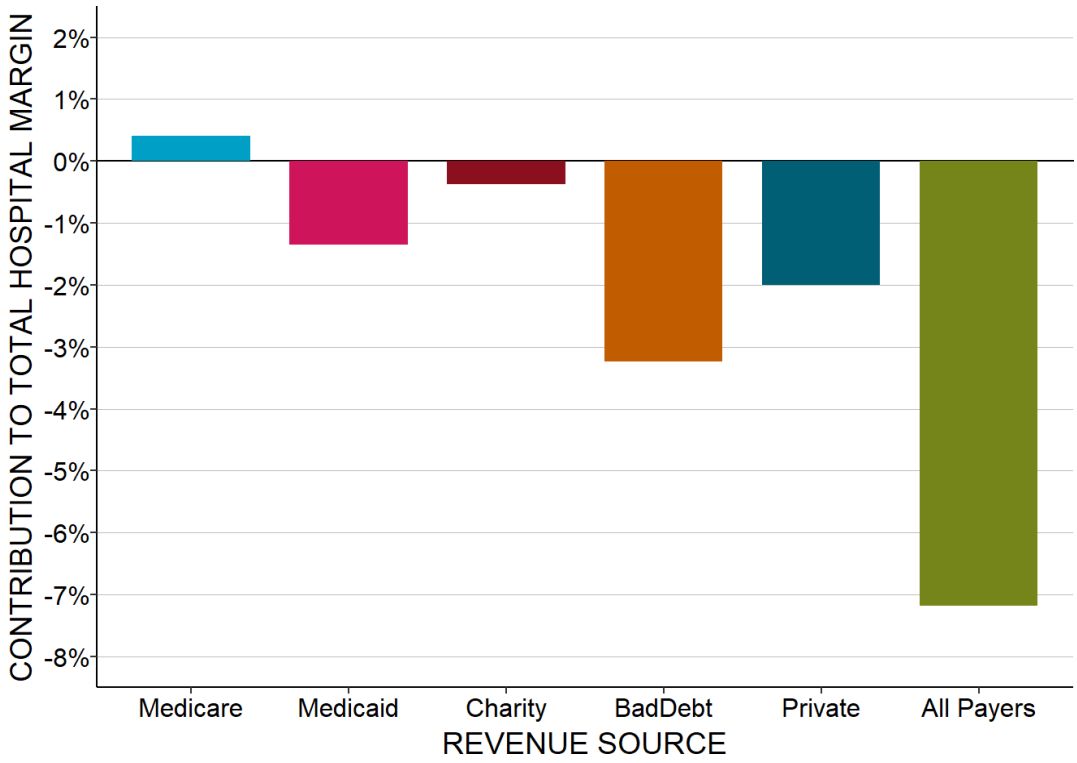
Patient Service Margin at Small Rural Hospitals



Amounts shown are the median profits or losses on patient services for the most recent three years available at rural hospitals with less than $20 million in total expenses.

The largest causes of losses at the smallest rural hospitals are low payments by private health insurance plans and patient bad debt. Private insurance plans pay small hospitals less than it costs to deliver essential services such as emergency care and primary care, whereas the payments from private plans to most large hospitals are significantly higher than the costs of delivering services. Although the majority of very small hospitals also lose money on Medicaid and charity care patients, losses or low payments on patients with private insurance (including Medicare Advantage) plans have a bigger impact on the hospitals' total margins because there are far more patients who have private insurance. The smallest rural hospitals also lose a significant amount on bad debt, i.e., insured patients who cannot pay required amounts of cost-sharing and patients who cannot afford insurance but do not qualify for charity care. Large hospitals can offset bad debt losses using the profits they make on patients with private insurance, but most small rural hospitals cannot do that because they don't make profits on private-pay patients. Medicare payments are not the biggest problem because most small rural hospitals are classified as Critical Access Hospitals and receive cost-based payments from Medicare.

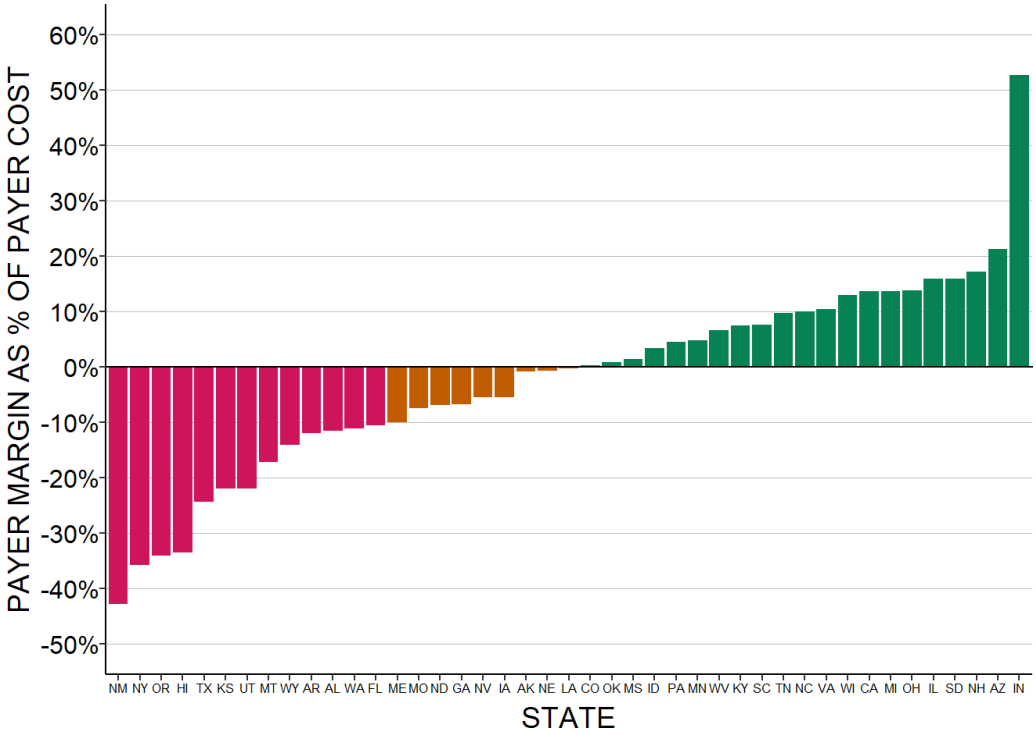
Payer Contributions to Margins at the Smallest Rural Hospitals



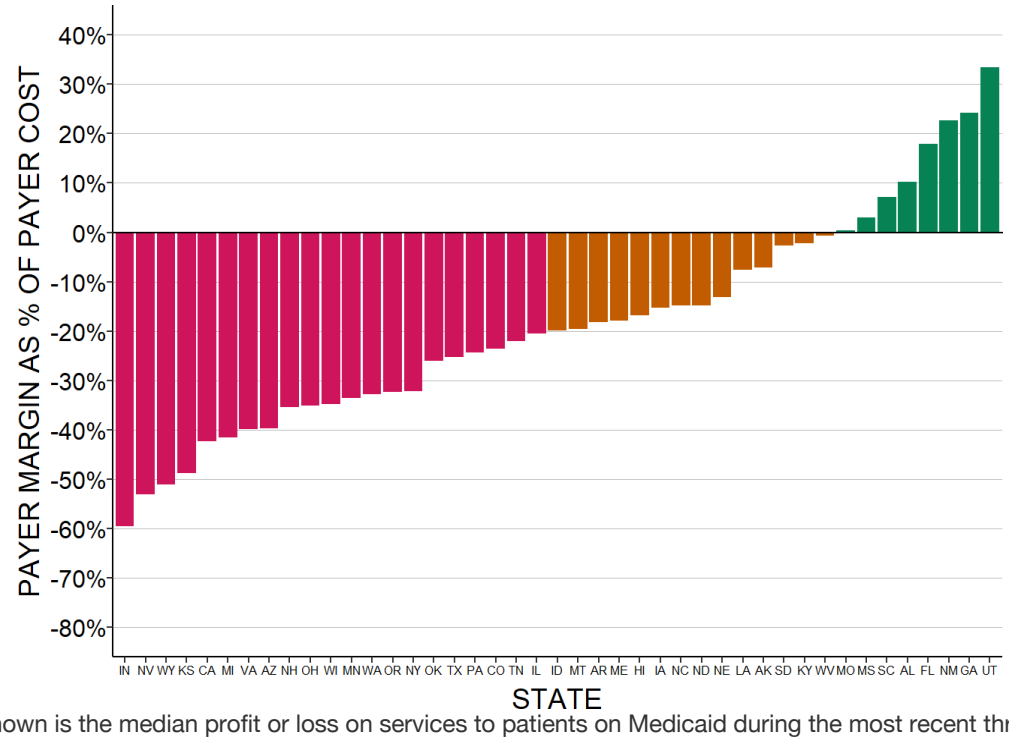
Amount shown for each payer is how much the hospital's overall margin on patient services increased or decreased due to profits or losses on services to patients insured by that payer. Amounts are the medians of the most recent 3 years available for rural hospitals with less than $20 million in total expenses.

There is tremendous variation across the country in both the magnitude of losses and the causes of losses at very small rural hospitals. In many states, low payments from private insurance plans are the primary cause of financial problems in small rural hospitals, but in other states, low Medicaid payments and low rates of insurance coverage are the largest causes of losses.

Margin on Private Payer Patients



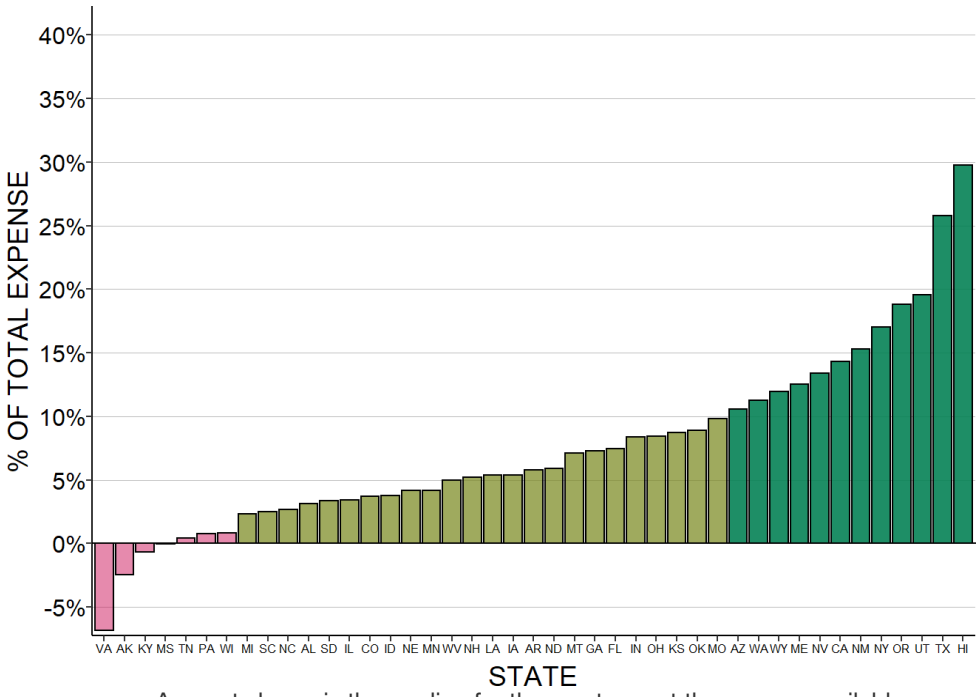
Margin on Medicaid Patients



Amount shown is the median profit or loss on services to patients on Medicaid during the most recent three years available at rural hospitals with less than $20 million in total expenses located in each state.

Many small rural hospitals remain open only because they receive significant supplemental funding from state grants or local taxes. In some states, state governments provide grants that reduce or eliminate losses at small rural hospitals, while there is little or no such assistance in other states. Some small rural hospitals are organized as public hospital districts, and residents of these communities tax themselves to offset underpayments by private health plans and Medicaid. It is not clear that these hospitals can continue receiving these large amounts of revenue in the future, and without them, the hospitals would likely be forced to close.

Proportion of Total Margin Due to Other Income



Amount shown is the median for the most recent three years available.

The Problems With Current Payment Methods

Standard payments for hospital services are not large enough to cover the higher cost of delivering services in small rural communities. The average cost of an emergency room visit, inpatient day, laboratory test, imaging study, and primary care visit is inherently higher in small rural hospitals and clinics than at larger hospitals because there is a minimum level of staffing and equipment required to deliver each of these services regardless of how many patients need to use them. For example, a hospital Emergency Department has to have at least one physician available around the clock in order to respond to injuries and medical emergencies quickly and effectively, regardless of how many patients actually visit the ED. A smaller community will have fewer ED visits, but the cost of the ED will be the same, so the average cost per visit will be higher. Consequently, fees that are high enough to cover the average cost per service at larger hospitals will fail to cover the costs of the same services at small hospitals. Many private health plans pay small rural hospitals *less* than they pay larger hospitals for the same services, even though the cost per service at the smaller hospitals is inherently *higher*.

Critical Access Hospital status reduces the hospital's losses only on services to Original Medicare beneficiaries, and it makes services less affordable for the patients. Most small rural hospitals are classified as Critical Access Hospitals, which enabled them to receive cost-based payment for patients with Original Medicare and some Medicaid programs. Although this results in higher payments for Medicare patients than the hospital would receive otherwise, it does nothing to reduce losses on uninsured patients and those with other types of insurance. Moreover, Medicare rules require patients to pay higher cost-sharing amounts in order to receive services at Critical Access Hospitals than at other hospitals, so the higher payments for the hospital can harm its patients.

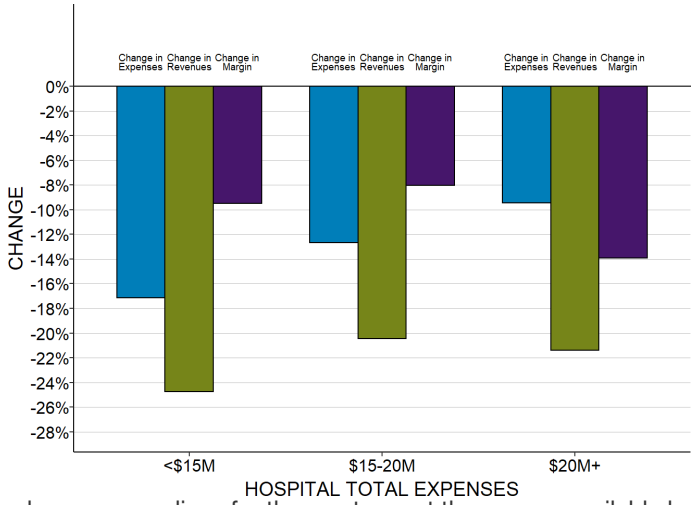
Current methods of payment penalize hospitals for efforts to improve the health of rural residents. If community residents are healthier and need fewer ED visits and other services, the hospital's revenues will decrease, but the cost of maintaining the essential services will not change, thereby increasing financial losses at the hospital. The same problem occurs under Medicare's cost-based payment system for Critical Access Hospitals and Rural Health Clinics because Medicare's share of the hospital's costs decreases if Medicare beneficiaries need fewer services.

The Serious Problems With Commonly Proposed Solutions

Four policies are commonly proposed to help rural hospitals are: (1) paying a rural hospital more if it eliminates inpatient services; (2) creating a "global budget" for the hospital; (3) paying a hospital "shared savings" bonuses if it reduces total healthcare spending for its patients; and (4) expanding Medicaid eligibility. None of these proposals will solve the problems facing rural hospitals.

Requiring rural hospitals to eliminate inpatient services would increase their financial losses while reducing access to inpatient care for local residents. In most cases, the revenues generated by inpatient care at a small rural hospital exceed the direct costs of delivering that care, so even though eliminating the inpatient unit would reduce the hospital's costs, its revenues would decrease even more, making it worse off financially. Moreover, residents who have a medical condition that requires a short hospital admission would have to be transferred to another city, and local residents who currently receive inpatient rehabilitation and/or long-term nursing care in the hospital's swing beds could no longer receive those services close to home.

Impacts of Elimination of Inpatient Services



Amounts shown are medians for the most recent three years available based on estimated reduction in costs and revenues for inpatient care at rural hospitals.

Giving the hospital a global budget would increase losses when patients need more services or the hospital's costs increase. Most global budget programs have been created in order to limit or reduce payments to hospitals, not to address shortfalls in payment or prevent closure of small rural hospitals. Although hospitals in communities that are experience ng significant population losses or that deliver unnecessary services could benefit from a global budget program in the short run, hospitals that experience higher costs or higher volumes of services due to circumstances beyond their control would likely be harmed, since their revenues would no longer increase to help cover the additional costs.

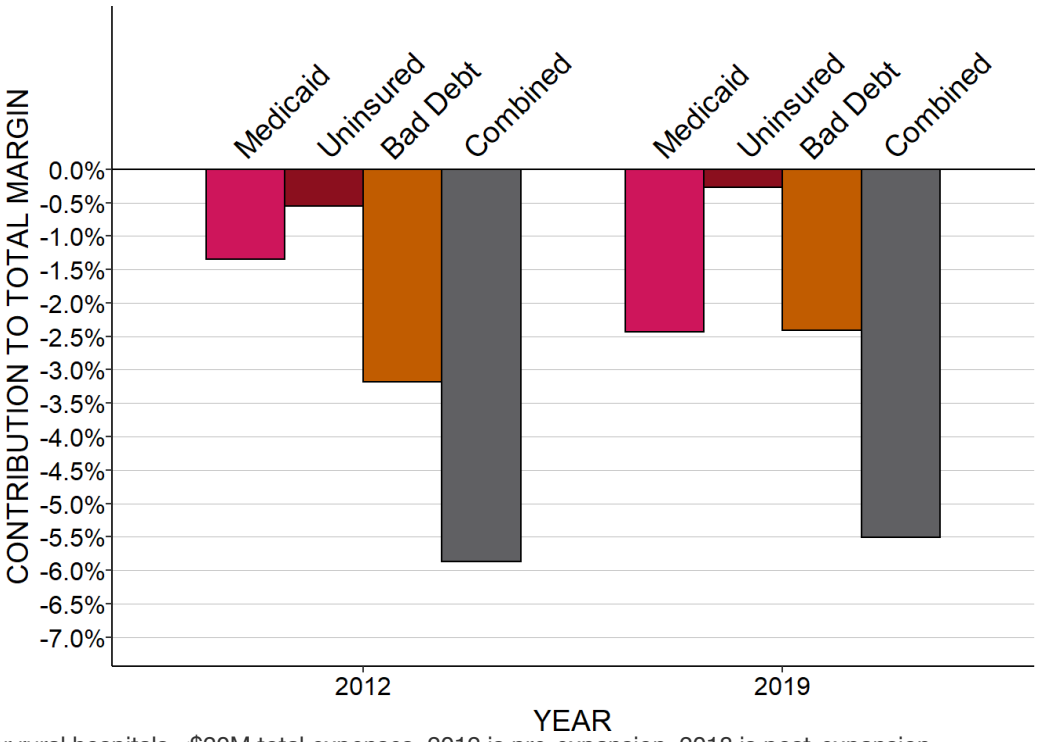
- Although Maryland's global budget program has been cited as an example of how rural hospitals can benefit from this approach, the smallest rural hospital in Maryland closed in 2020 despite operating under the global budget system.
- Under the Pennsylvania Rural Health Model that was created by CMS, hospitals receive global budgets that are based on the amount of revenues they received in the past, with no assurance the budgets will be adequate to support the current cost of delivering essential services.
- Under the CMS Community Health Access and Rural Transformation (CHART) Model, the "capitated payments" to rural hospitals would be reduced below the inadequate amounts they currently receive in order to reduce for Medicare spending.

Access to care for patients can be harmed if budgets are not large enough to support the costs of services, which has led many other countries to modify or replace their global budget systems.

Small rural hospitals would be unlikely to benefit from "shared savings" programs, and most would be harmed by taking on downside risk for total healthcare spending. Most small rural hospitals are unlikely to benefit from forming an Accountable Care Organization (ACO) in order to participate in shared savings programs. The majority of ACOs in the Medicare Shared Savings Program have been unable to qualify for shared savings bonuses, and it is particularly difficult for small rural ACOs to do so because the minimum savings threshold is higher and there are fewer opportunities to generate savings. "Downside risk" is especially problematic for small rural hospitals, because they do not deliver and cannot control many of the most expensive services their residents may need, and a requirement that the rural hospital pay penalties when community residents need expensive services at urban hospitals would worsen the rural hospitals' financial problems.

Expansion of eligibility for Medicaid would reduce hospitals' losses on uninsured patients and bad debt, but it will not reduce the losses on services delivered to Medicaid patients due to low payment amounts. In states that have expanded Medicaid, losses on uninsured charity cases and bad debt decreased, but losses on services to Medicaid patients nearly doubled, resulting in relatively little net benefit for the small hospitals.

Contributions to Total Margin by Medicaid, Uninsured, and Bad Debt in States That Expanded Medicaid



Median for rural hospitals <$20M total expenses. 2012 is pre-expansion, 2018 is post-expansion.

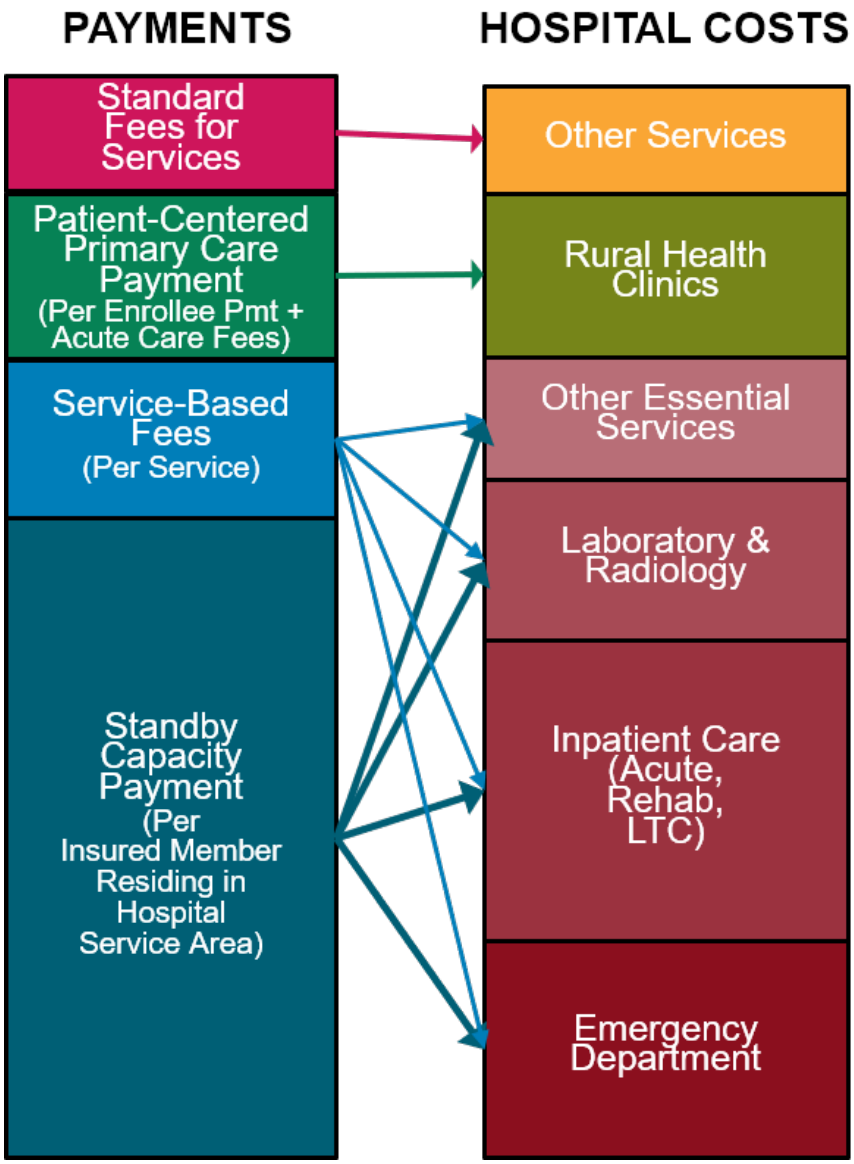
A Better Way to Pay Rural Hospitals and Clinics

A good payment system for rural hospitals and clinics must achieve three key goals:

1. Ensure availability of essential services in the community;
2. Enable safe and timely delivery of the services patients need at prices they can afford; and
3. Encourage better health and lower healthcare spending.

A Patient-Centered Payment System for rural hospitals and primary care clinics can achieve all three goals using the following five components:

Patient-Centered Payments



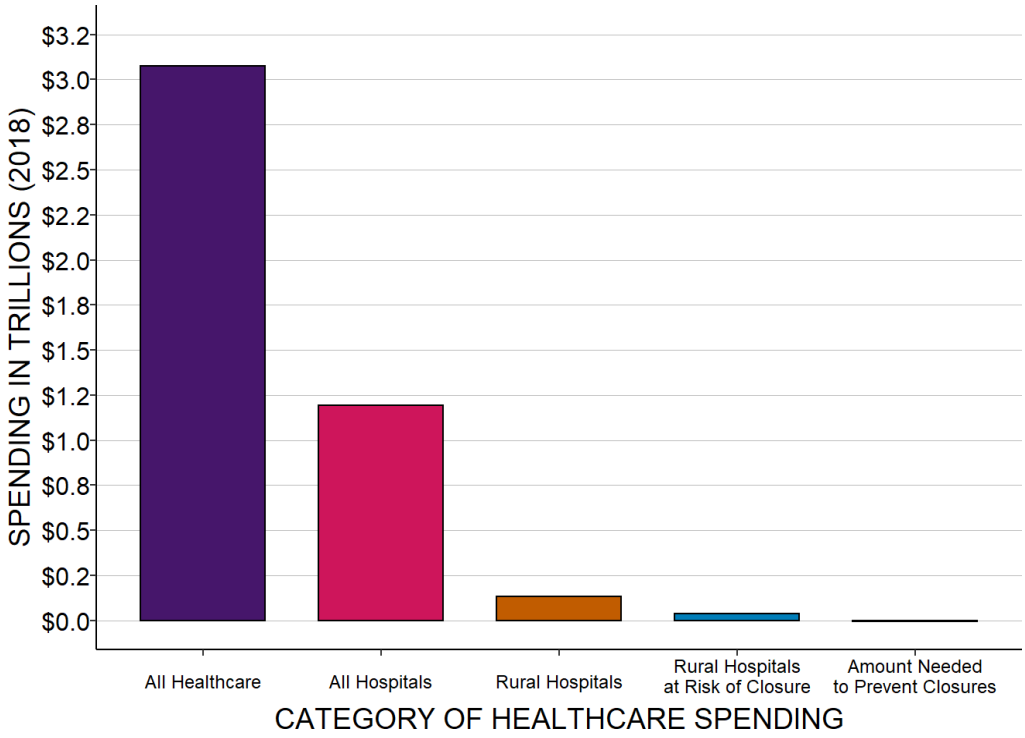
- ***Standby Capacity Payments* to support the fixed costs of essential services.** Each health insurance plan (Medicare, Medicaid, Medicare Advantage, and commercial insurance) should pay a Standby Capacity Payment to the rural hospital based on the number of members of that plan who live in the community (regardless of the number of services the patients receive). This ensures that the hospital has adequate revenues to support the minimum standby costs of essential services such as the emergency department, inpatient unit, and laboratory.
- ***Service-Based Fees* for diagnostic and treatment services based on the marginal costs of each service.** Rural hospitals would continue to receive payment from health plans for delivering individual services, but the Service-Based Fees will be much lower than current payments. Since the hospital would receive Standby Capacity Payments to support the fixed costs of essential services, the Service-Based Fees would only need to cover the small amount of additional costs incurred when additional services are delivered. This means that if patients stay healthy and need fewer services, the hospital's revenues and costs will decrease by similar amounts, and the hospital's margin will not be harmed.
- ***Patient-Centered Primary Care Payment* for primary care.** Rural Health Clinics and primary care practices in the community should receive monthly Wellness Care Payments and Chronic Condition Management Payments to support proactive preventive care and chronic disease care delivered by primary care teams, rather than being paid only for office visits with physicians/clinicians. The payments should provide the clinic/practice with adequate resources and flexibility to help patients stay as healthy as possible and to deliver timely, evidence-based care when the patients experience health problems. (More information about Patient-Centered Payment for primary care and other services is available at www.patientcenteredpayment.org.)
- ***Accountability for quality and spending.*** In return for receiving adequate, predictable, flexible payments to support essential services, rural hospitals and primary care clinics would take accountability for delivering appropriate evidence-based services in a high-quality manner.
- ***Value-based cost-sharing* for patients.** Instead of the high deductibles, co-payments, and co-insurance used in most health insurance plans today, rural hospitals and primary care clinics should have the flexibility to set lower cost-sharing rates for high-value services and to help pay for transportation or provide other assistance that would help patients to adhere to their care plans.

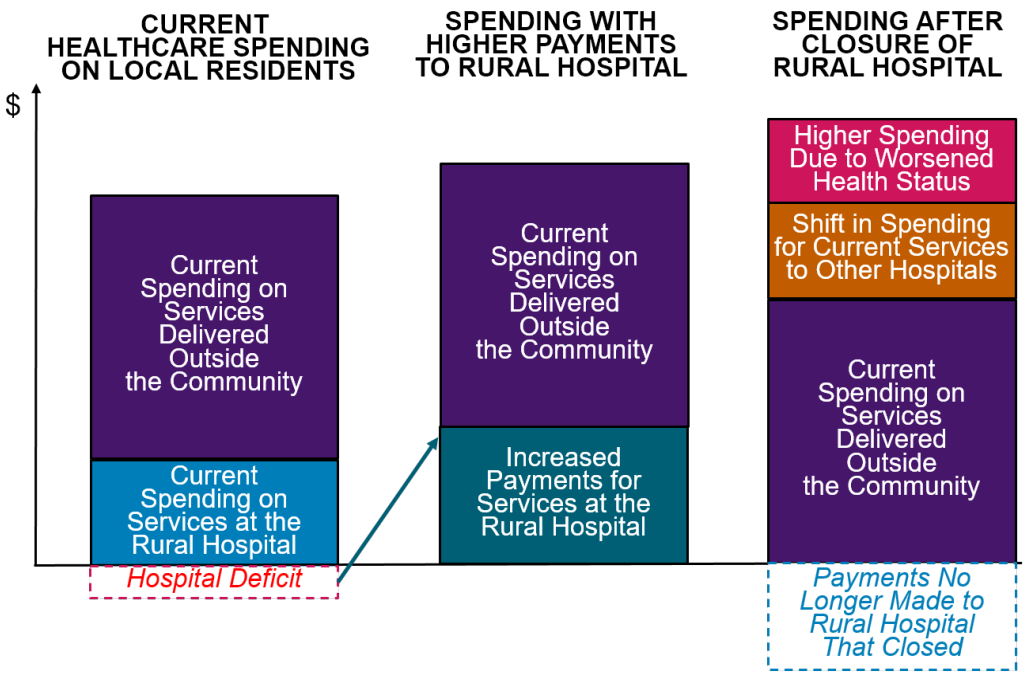
A Patient-Centered Payment System structured in this way would provide adequate funding to support the costs of essential services in small rural communities, without the kinds of problematic incentives to deliver unnecessary services or to stint on care that exist in other payment systems.

How to Save Rural Hospitals and Strengthen Rural Healthcare

It will cost about $3.4 billion per year to prevent closures of the at-risk hospitals and preserve access to rural healthcare services, an increase of only 1/10 of 1% in total national healthcare spending. No payment system will sustain rural hospitals and clinics unless the amounts of payment are large enough to cover the cost of delivering high-quality care in small rural communities. Because current payments are below the costs of delivering services, an increase in spending will be needed to keep rural hospitals solvent, but $3.4 *billion* is a tiny amount in comparison to the more than $3 *trillion* currently spent on healthcare and the more than $1 trillion spent on all hospital services. Moreover, most of the increase in spending will support primary care and emergency care, since these are the services where the biggest shortfalls in current payments exist.

Cost of Eliminating Rural Hospital Deficits Compared to National Healthcare Spend





Spending would likely increase even if the hospitals close. The reduced access to preventive care and prompt treatment resulting from a rural hospital closure will cause residents of the community to need even more services in the future. Paying more now to preserve local healthcare services is a better way to invest resources.

Citizens, businesses, local governments, state government, and the federal government must all take action to ensure that every payer provides adequate and appropriate payments for small rural hospitals and clinics:

- **Businesses, state and local governments, and rural residents must demand that private health insurance companies change the way they pay small rural hospitals.** The biggest cause of negative margins in most small rural hospitals in most states is low payments from private insurance plans and Medicare Advantage plans. Private insurance plans are unlikely to increase or change their payments unless businesses, state and local governments, and residents choose health plans based on whether they pay the local hospital adequately and appropriately.
- **State Medicaid programs and managed care organizations need to pay small rural hospitals adequately and appropriately for their services.** Expanded eligibility for Medicaid will help more rural residents afford healthcare services, but small rural hospitals cannot deliver the services if Medicaid payments are too low. CMS should authorize states to require Medicaid MCOs to use Patient-Centered Payments and to pay adequately for services at small rural hospitals.
- **Congress should create a Patient-Centered Payment program in Medicare for small rural hospitals.** Although Medicare is not the primary cause of deficits at small rural hospitals, Medicare needs to pay rural hospitals and clinics in a way that will better sustain services in the long run.

Rural hospitals need to be transparent about their costs, efficiency, and quality, and they should do what they can to control healthcare spending for local residents. In order to support higher and better payments for hospitals, purchasers and patients in rural communities need to have confidence that the hospitals will use the payments to deliver high-quality services at the lowest possible cost, and that the hospitals will proactively identify and pursue opportunities to control healthcare costs for community residents. Small rural hospitals should estimate the minimum feasible costs for delivering essential services using an objective methodology, they should proactively work to improve the efficiency of their services, and they should publicly report on the quality of their care.

5.5 Kansas Hospital Association Model

The Center for Healthcare Quality and Payment Reform is a national policy center that facilitates improvements in healthcare payment and delivery systems. Founded in 2008, CHQPR is an internationally-recognized source of unbiased information and assistance on payment and delivery reform. CHQPR's publications are among the most widely used and highly regarded resources on payment reform in the world. CHQPR has provided information and technical assistance to Congress, federal agencies, national organizations, and to physicians, hospitals, employers, health plans, and government agencies in nearly every state in the U.S. and several other countries to help them design and implement successful payment and delivery system reforms.

Overview of the Primary Health Center Model This model seeks to both change the service bundle and the payment mechanism to preserve access to care and incentivize community health. The PHC model intends to fill the gap between a rural health clinic or FQHC and a full service Critical Access or PPS Hospital. It provides services focused on Emergency and Outpatient needs. Core Services would be common among all sites.

CORE SERVICES Primary health care, including prenatal care Urgent care Emergency care Emergent and non-emergent transportation Observation (Part of Transitional Care) Outpatient and ambulatory services Minor procedures Ancillary services to support primary care and basic diagnostic Care coordination, chronic disease management and other approaches to population health Active telemedicine (All emergency care patients – may include access to specialist for emergency purposes)

OPTIONAL SERVICES If unavailable locally, may be included in the payment model: Rehabilitative services Subacute care (Transitional Care) Behavioral health Oral health Specialty care (via telemedicine or visiting specialists on site) Other services needed within a reasonable distance (Must be consistent with community need and documented in data)

Core Services The PHC will provide services critical to any rural community including primary care; urgent, emergency care and transportation (EMS); observation, outpatient and ambulatory services including basic ancillary services and minor procedures. In addition, critical population health approaches, including chronic disease management and care coordination, would be required of the entities piloting the model. Other optional services could be provided if they are not available locally. For example, patients who do not need acute care could be treated and receive skilled nursing and/or rehabilitation services, behavioral health, oral health or home health services. Decisions regarding the provision and payment for these services would be data driven. Non-core services would not be required, but may be included in the payment approach if true need is demonstrated.

This new provider type would require a strong relationship with an inpatient facility or partner organization, as well as a plan to assure emergent and non-emergent transportation in the area between the partner and the smaller entities as well as others service providers in the area.

Payment Approach The proposed payment approach is a combination of fixed and variable payments based on a budget submitted and negotiated with CMS and Medicaid. This approach incentivizes efficiencies not currently present in cost-based approaches. Accountability would be required via

reporting of operational and quality measures consistent with the services and volumes. Value incentives and risks (penalties) would be phased in and paid based on the meeting of the measures. The payment model incentivizes clinical integration between primary care, emergency transportation and emergency and outpatient services. Community engagement is reflected by a local contribution. Finally, an annual grant from CMS or another federal agency supports the cost of preserving access and the infrastructure that must be maintained even in times of fluctuating volume. Current CAHs or small rural PPS hospitals would be eligible to pilot the model. Recently closed facilities could be considered.

Components of Payment Model[57]

Integrated budget incorporating all services provided, upon which two types of payments would be based

- Monthly fixed payment for majority of financial needs
- Variable encounter payment to support surges in volume

Support in form of annual grant from federal agency as well as local annual financial commitment to assure availability of emergency care and transportation

Encounter payments from non-participating payers, co-pays and deductibles

Value based incentives/penalties based on measures aligned with services and volume

Benefits of a New Approach The model will provide high quality, cost savings, preserved and improved access for rural areas and provide financial stability to those communities that are currently struggling to keep their hospitals open.

Quality Improvement • Accountability for quality and operational efficiencies • Measures = Services/Size • Value Incentive – Risk and Reward • Regional Care Coordination • Common Protocols with Partner • Embedded community and pop health

Cost Savings • Up front budget expectations • Fixed payments during low volume • Patient co-pay tied to encounter • Budget based Transitional Care payments • Reduced administrative burden related to regulatory requirements • Eliminate or repurpose unused acute beds • Better aligned physician and facility incentives

Preserve and Improve Access • Core services for less mobile populations • Transitional/sub-acute care • Community health and care coordination • Preserved access to emergency transportation and care • Added local services to provide transportation for care coordination • Potential for improved access to oral and mental health services

Financial Sustainability • Cash flow addressed through fixed costs • Reduction in acute services and costs • Simplification of payment program • Regional operational efficiencies • Engaged commercial payers • Federal grant support for emergency transportation and care • Local support for emergency transportation and care.

[57] *RHV TAG November 2016*

KHA New Rural Model: Primary Health Center Test Findings

A comprehensive operational and financial assessment of the PHC model using five CAH hospital operations as test models. Highlighted here because of its thorough analysis. An important and necessary read.

> New Rural Model: Primary Health Center Test Findings, Kansas Hospital Association Rural Health Visioning Technical Advisory Group May 2016.

Financing a Primary Health Center[58]

KHA Rural Health Visioning TAG Conclusions
After the Primary Health Center Model was designed and tested, the TAG turned to the concept of how the new model or a model like it should be financed. These discussions were particularly challenging as TAG members were asked to consider non-traditional approaches.
While the PHC model had been loosely defined, consensus had not identified the set of specific services that would be included in the payment method. There had been consensus that all CAHs or rural PPS facilities < 50 beds would be eligible to transition to PHC; however even with a set of essential services, it was understood that the services would not be completely the same in each community.
The TAG took previous discussions, augmented by the AHA Task Force on Vulnerable Communities' materials, to develop the following hierarchical list of essential services:

Services considered core or essential that must be provided by a PHC:

- Primary health care including prenatal care (AHA, RHV)
- Urgent care (RHV)
- Emergency care (AHA, RHV)
- Emergent and non-emergent transportation (AHA, RHV)
- Observation (AHA, RHV)

Outpatient and ambulatory services (AHA, RHV)

- Minor procedures
- Ancillary services to support primary care and basic diagnostic (AHA, RHV)

Care coordination, chronic disease management (RHV)
Active telemedicine (RHV)

Services that should be available in the community and may be provided by a PHC based on com and local sustainability and may be included in the payment model:

- Behavioral health (AHA essential)
- Dentistry (AHA essential)
- Transitional care (RHV essential)

Services that could be available in the community and may be provided by a PHC based on community need and local sustainability, but would not be included in the payment model:

- A mechanism to include unique local/regional services would need to be established.

[58] Financing the PHC Final, KHC 2016

As articulated above, payment model must include funding for five service lines not always provided in CAH's. EMS/Ambulance, Primary Care, Care Management, telemedicine, and capital allowances should all be built into or allowed as budget line items in any PHC financing approach. Depending on size, service area and projected volumes, the actual amount will vary. The test process along with the experience of the CPAs who conducted the tests concluded that these five areas would cost a minimum of $1.9 million for all levels of staffing and expenses. It was recognized that the cost of new or replacement ambulances was not included in this amount. These costs should be incorporated whether or not the PHC "owns" the service as costs will be incurred for assuring access to these services through contracted services as well. Adopted by RHV TAG November 8, 2016.

Much discussion was held on the basic principles that should be present in any payment method that met the larger initial RHV TAG principle that any model "be reimbursed and financed fairly by federal, state and local resources, private payers and patients such that the health of the population can be improved." Further consensus was reached in the following areas:

- To preserve access and improve health, low volume facilities like the PHC model must be supported with additional financial resources.
  - – Federal grants or support along with commitment from the local community to assist in supporting the continued access to services
  - – One time grant or transitional funding will be required to bridge the difficulties as CMS makes payment process changes and to fund the local costs of transition
- Some form of reporting consistent with the nature of the facility should be required both on quality and operational efficiency measures and expense. These measures should be consistent with the scope of services provided by the facility.
  - – Components of a value incentive should be included to support the triple aim
  - – A few key measures should be identified that relate to the scope of operations and services that are actually provided in a PHC and used to set targets for value incentives
- Consideration should be given to utilizing an inclusive budget or financial proposal which encompasses all services to incentivize flexible use of limited staff and resources.
  - – All essential services should be included in the payment method to allow the most flexibility to adjust to day-to-day changes in volume and service needs
  - – Multi-year agreements will help to assure stability
- Ideally, all payers should participate in a demonstration to determine exactly how the model can balance the support of access and optimal health for a community as well as incentives for efficiency and high quality.

Based on these consensus points and the service set to be included, the TAG considered a number of approaches to financing the Primary Health Center. As it is not an FQHC nor a full service CAH, components of each of these models were considered along with principles embodied in the movement from volume based payment models to value based models. Five options and their pros and cons were identified, but no single model of payment was recommended.

The TAG believes that some form of value incentive should be included in any payment method while some models proposed nationally do not have this component. However, the TAG is concerned that a value incentive could be difficult to develop as the general low volumes of this type of facility will make measures a challenge to identify. Measures tied to emergency room processes, primary care measures and operational measures such as meeting budget and volume projections should be considered.
The TAG also believes that communities must make a commitment to sustain their local health care access point. Any payment model will have challenges as the Primary Health Center is new to the community, so estimating volumes will depend on community acceptance and confidence in the medical care provided. Payments are also generally dependent on historical experience of costs and usage, which will change based on the services provided and the medical staff available. Adopted by RHV TAG November 8, 2016

Five Options: Their General Benefits and Challenges

1. Global budget based fixed payments – This option provides monthly equal Medicare payments based on a negotiated multi-year budget for all services provided by the PHC. The negotiated budget would include federal support for the emergency infrastructure in the form of a grant or additional budget amount along with local support. This option would also require local financial support and carry a value incentive for meeting designated measures.

Discussion of benefits and challenges: This approach has the opportunity to stabilize payments and assure continued ER coverage regardless of volume fluctuations. It promotes planning and efficiency as budgets are developed and followed. Assuming that all services are included, this approach would allow for the flexibility to move resources between services as the need arises. Establishing a budget will present challenges as CAHs historically have had inpatient and longer stay swing bed patients. Community acceptance of the new model may take time to establish. Other challenges would include new processes for reporting along with treatment of deductibles and coinsurance. Fixed payments also may not cover the variable costs of large upward swings in volume. Identifying what the value incentive was tied to with a fixed budget would also be challenging.

2. FQHC-like payment method with extended encounter/visit payments – This option would combine the process of the FQHC payment approach setting visit or encounter payments based on a budget incorporating all services. Extended or add-on payments would have to be established for patients who remain in the facility for longer term or overnight services. Additional federal support for the emergency infrastructure would be provided in the form of a grant from Medicare at the same level as current FQHCs, a maximum of $650,000 per year. This option would also require local financial support and carry a value incentive for meeting designated measures.

Discussion of benefits and challenges: Utilizing this approach provides a familiar and existing payment framework. It has the opportunity to stabilize payments and assure continued ER coverage regardless of volume fluctuations and promotes planning and efficiency as budgets are developed and followed. The grant approach identifies federal support for the emergency infrastructure and assure coverage. It also provides for variable payment tied to volume so that larger increases in volume are covered. On the downside, the majority of payments are still tied to volume so that low volume periods may be challenging. While this is a known process to CMS, it is a new process for former CAHs. Establishing a budget will present challenges as CAHs historically have had inpatient and longer stay swing bed patients. Community acceptance of the new model may take time to establish. In addition, extended

encounter payments will need to be developed. Learning from the Alaska FESC Model will be important. There will be differences as this model uses the infrastructure from a 24/7 operation rather than taking a clinic and converting it to a 24/7 operation.

3. Blending fixed payment and encounter payments – This option would have components of the fixed payment combined with the encounter method. The federal grant, local support requirement and value incentive would be the same as above.

Discussion of benefits and challenges: Utilizing this approach provides the best of both options above. It has the opportunity to stabilize payments and assure continued ER coverage regardless of volume Adopted by RHV TAG November 8, 2016

fluctuations and promotes planning and efficiency as budgets are developed and followed. The encounter payments account for changes in volume which have an impact on the variable costs of staff and supplies. The grant approach identifies federal support for the emergency infrastructure and assure coverage. This is however, a complicated approach. Which has more moving parts than either of the above options. Some of the payments will still be tied to volume so that low volume periods may be challenging. This would be an entirely new approach and may take significant time to develop the correct balance between the fixed payments and the proportion of volume based payments. Volume based payments, or encounter fee schedules would need to be developed to take into consideration the funding provided by the fixed payments.

4. Global cost based approach – This approach retains the traditional cost-based system of payment currently used for CAHs with several modifications. The intent is to avoid current carve-outs as all services in the PHC would be included in the cost base. Modifications to the definitions of “allowable costs” would be needed to assure that the emergency infrastructure is supported. The Grassley proposal suggests 110% of costs. The TAG would suggest that the local support and value incentive be included as well.

Discussion of benefits and challenges: Without question, a cost based approach is the most well-known and accepted approach for CAHs transitioning to a new model. A cost based model is proposed in the Grassley bill at 110% of costs. The inclusive approach would eliminate the complex carve out processes as well. Federal support for the infrastructure is provided in the percentage over 100% of costs. Local commitment would assist in retaining access to services as well. On the other hand, major changes would be required both to be inclusive of all services and to minimize, wherever possible, the complexities of the process. Vulnerability to efforts such as sequestration still exist that could reduce the percentage of reimbursement. Other challenges in the current cost based approach such as the wide variation in costs will still exist. Even with a value incentive, there is no real incentives to control costs. This approach, while it may be the most appropriate for a low volume rural facility, also fails to provide incentives for communities to engage in the move from volume to value.

5. Grant + fee schedule – This approach is suggested by MedPAC in their recent release of Improving Efficiency and Maintaining Access to Emergency Services in Rural Areas (June 2016). The report suggests a grant of $500,000 with services paid according to the PPS fee schedule. Local support is also suggested.

Discussion of benefits and challenges: This is a simple approach that ties payment to a fee schedule already in existence with a minimal grant to support access to emergency care. The TAG is concerned that the PPS fee schedule proposed is based on economies of scale that will not exist in the low volume rural communities and the grant proposed is less than that provided to FQHCs which are not required to accept all patients and do not have the emergency services that are so costly to staff and support. While it is similar to the FQHC like proposal proposed above, it fails to recognize a budget based approach. It also is limited in its services, especially those so necessary in rural communities such as observation and "transitional care" as proposed in the Primary Health Center model. Payments are entirely tied to volume and impact the co-pay amounts currently allowed in CAHs which will greatly impact cash flow and the ability to cover fixed costs in times of low volume. Adopted by RHV TAG November 8, 2016

Regardless of the payment method used, the TAG developed a number of conclusions. First, any effort to preserve access and improve health through low volume facilities like the PHC model must be supported with additional financial resources in the form of federal grants and local tax or other support. Volumes are simply not sufficient to sustain an emergency infrastructure in these instances. Classic fee based reimbursement will not be sufficient to cover expenses in low volume facilities.

Second, reporting requirements as stated earlier, especially quality measures should be consistent with the scope of services and operations. Recognition that these facilities will be limited in their staffing and services, reporting requirements should be identified that truly show the value of the services and operations, but should not be burdensome.

Third, payment models should incentivize integration of all essential services and the flexibility needed to apply staff and financial resources flexibly as service volumes fluctuate. Efforts are underway in Kansas and other parts of the country to integrate public health and behavioral health with primary care as examples. Integration of EMS is also critically important. Methods that carve out services or allocate space and staff will limit the effectiveness of these facilities.
Finally, while Medicare is the predominant payer for Kansas facilities, success will depend on the participation of Medicaid and private payers. A common payment model from key payers would maximize the success of the model and simplify new processes. It will be important for a new payment method to cover necessary costs, provide stability and at the same time provide incentives for collaboration, efficiency, clinical alignment and accountability.

5.5 Rural Emergency Hospital - 2023[59]

The Consolidated Appropriations Act that was passed in December 2020 included the creation of a new payment/delivery model for rural hospitals…the "Rural Emergency Hospital". The REH is very similar to the Primary Health Center (PHC) model developed by the Kansas Hospital Association (KHA) and includes many provisions proposed by the Center for Health Quality and Payment Reform (CHQPR) . The REH is a permanent solution for rural communities and the payment approach is much more rational. The bill states that REHs can start operating in January 2023. Currently, the bill is in a comment period and may undergo revision prior to the planned effective date. As the bill is currently written, hospitals that have closed would not be eligible for REH status upon reopening and it is unclear if a Bourbon County Hospital that opens in 2022 as a PPS hospital would be eligible for REH status.

Rural Emergency Hospital (REH) Model Summary[60]

Rural hospital closures are at crisis levels with over 135 rural hospitals closing since 2010 and more than 450 identified as vulnerable to closure based on performance levels.3, 4 When a rural hospital closes, the mortality rate in that community increases 8.7%, the local economy declines, and disinvestment in the community ensues.[61] Rural closures increase travel times for patients and lead to outmigration of health care professionals' post-closure, which severely dismembers patients' access to care and exacerbates health disparities. Despite insufficient patient volumes and resources to support inpatient services, access to emergency services and higher-level outpatient services remains necessary.

Section 125 of the Consolidated Appropriations Act of 2021 (CAA) created the Rural Emergency Hospital (REH) model as a new Medicare provider type. The designation is effective as of January 1, 2023. The REH model will offer the opportunity for current Critical Access Hospitals (CAHs) and rural Prospective Payment System (PPS) hospitals with fewer than 50 beds to convert to REH status to furnish certain outpatient hospital services in rural areas, including emergency department and observation services.

Noble is monitoring the implementation process, including the Centers for Medicare and Medicaid Services (CMS) development of the Conditions of Participation (COPs) and calculations of payment methodologies.

Significant Components of the REH

1. No provision of acute care inpatient services
2. An average per patient length of stay not to exceed 24 hours
3. Have a transfer agreement in place with a Level I or II trauma center
4. Maintain a staffed emergency department, including staffing 24 hours a day, seven days a week by a physician, nurse practitioner, clinical nurse specialist or physician assistant

[59] *https://www.kha-net.org/CriticalIssues/AccessToCare/RuralIssues/*
[60] *www.RuralHealthWeb.org*
[61] *Gujral, K., & Basu, A. (2020, June). Impact of Rural and Urban Hospital Closures on Inpatient Mortality. National Bureau of Economic Research. https://doi.org/10.3386/w26182*

5. Meet CAH-equivalent Conditions of Participation (CoPs) for emergency services Meet applicable state licensing requirements, to be developed
6. Be permitted to operate a distinct part skilled nursing facility (SNF) or off-campus provider-based departments, however neither are eligible for the enhanced payments available to REHs Develop an implementation plan for conversion to REH status
7. For those facilities that maintain a SNF, the REH must comply with CoPs applicable to SNFs May convert back to a CAH or PPS hospital
8. Must meet quality reporting standards as determined by the Secretary
9. May be an originating site (where the patient is) for telehealth services

Payment Analysis

The CAA creates a new category of Rural Emergency Hospital Services (REHS). REHS will be paid by Medicare at a rate higher than the otherwise applicable payment under the Medicare Outpatient Prospective Payment System (OPPS). Payments to the REH will be Based on the following methodology:

1. REHS: The legislation defines the payment for REHS beginning January 1, 2023 as the amount that would otherwise apply to covered outpatient services under the OPPS. The OPPS amount will be increased by 5% to reflect the higher costs of the REH. Beneficiary coinsurance will be computed based on the OPPS methodology.

2. (Additional facility payment: The legislation provides for an additional facility payment (AFP) which will be made monthly to the REH (1/12th of the annual amount as determined by the Secretary). The computation of the AFP, called the Medicare subsidy, is described in the law as follows:
    - In 2023: an amount equal to the difference of all payments to CAHs in 2019 and what is estimated those CAHs would have been paid if the payments would have been made under inpatient prospective payments (IPPS), OPPS and skilled nursing facility (SNF-PPS) payment systems. The difference is divided by the total number of CAHs in 2019.
    - In 2024 and subsequently: the 2023 “base” amount will be increased by the hospital market basket percentage increase.

An Example

Assume total Medicare cost-based payments to all CAHs in 2019 was $14 billion. Assume the estimated PPS payments for the CAH services would have been $10B. There were 1,350 CAHs on July 19, 2019. Assume all are included in the above payments. AFP for each REH in 2023 will be $2,962,962 ($14B - $10B = $4B/1,350).

Policy and Advocacy Considerations and Recommendations

While the CAA provided broad parameters for the REH model, CMS will need to establish CoPs for REHs through rulemaking and guidance. The following are questions consideration in REH implementation:

1. Will hospitals that close before January 1, 2023 be eligible to reopen as REHs?
2. What will be the complete scope of services eligible for payment at enhanced REH rates?
3. What are the steps and timing considerations for conversion to an REH?
4. What conditions of participation will be imposed on REHs?
5. What quality and data reporting will be required of REHs?
6. What supports and timelines are in place for States to establish licensing rules?
7. Will REHs have access to federal and state resources through the Medicare Rural Hospital Flexibility (Flex) Program?
8. Will provider-based rural health clinics of the converting hospital maintain grandfathering provisions regarding Medicare upper payment cost limits?
9. Will the REH be able to elect Method II payment (115% of physician fee schedule) for outpatient provider-based physician services?
10. How will state Medicaid programs pay for REH services?

6 HOSPITAL OPERATIONS AND REVENUE POTENTIAL

6.1 Hospital Service Line Pro-Formas

Services that could be provided at the hospital were identified from the survey data and community discussion around healthcare needs and gaps in the county. Lines of service that could generate sustained revenues for the hospital were evaluated and modeled in Excel to evaluate their financial potential. The objective is to define a set of services that can be delivered from the hospital to both serve community healthcare needs and enable a financially sustainable hospital.

Healthcare operation financial models were created to evaluate potential service lines at the hospital. These models are part of the Feasibility Study deliverables and submitted as a digital file. Service lines evaluated include:

- Rural Health Clinic
- Multi-Specialty Clinic
- Urgent Care
- Ancillary Services
- Infusion Services
- Dialysis Services
- Lease Revenue – Contracted Services

Rural Health Clinics (RHC) are a class of primary care whereby Medicare reimburses for services at a higher level than non-rural primary care. The intent is to enable services in rural communities where primary care could not be sustainably delivered. If a clinic can qualify as an RHC, it is financially beneficial.

The financial model created for this study is built so assumptions about operations can be changed and the model reflects the change. In other rural communities, Rural Health Clinics often are break even operations, sustainable only if patient volume reaches a threshold. The model snapshot below depicts full utilization of the clinic capacity, which is not achievable in actual operations. Sustaining high utilization levels is necessary for a sustainable clinic. With out-migration in the region nearing 40% for outpatient services, the challenge for an RHC in Bourbon County is to attract residents to get primary care locally at an RHC. If an RHC serves just 10 fewer patients a day – 30 instead of 40 – it is a loss making operation. Both a Multi-Specialty Clinic and Urgent Care Clinic operate with similar fundamentals – a threshold volume of patients is necessary for sustainability.

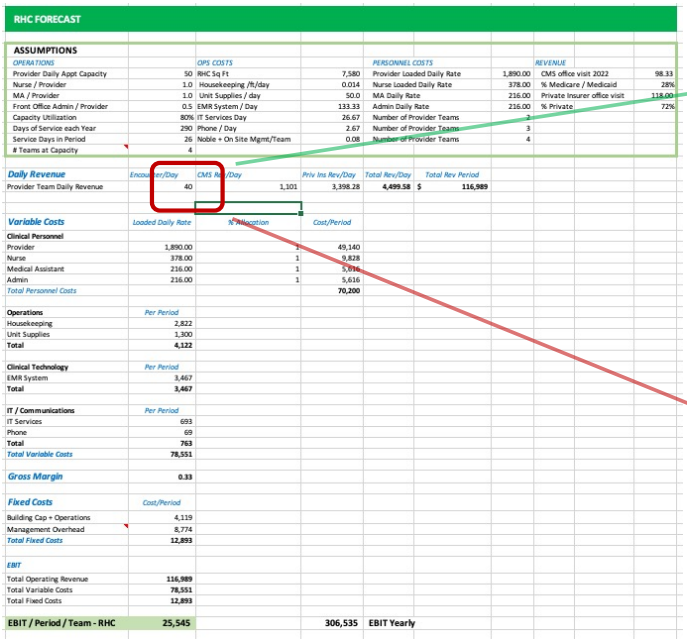
Rural Health Clinic

ASSUMPTIONS					
Clinical Staff		*Costs*		*Revenue*	
Provider Daily Appt Capacity	40	Provider Daily Rate	1,500.00	CMS office visit 2022	$ 98.33
Nurse / Provider	1.0	Nurse Loaded Daily Rate	350.00	% Medicare / Medicaid	28%
MA / Provider	1.0	MA Daily Rate	210.00	Private Insurer office visit	$ 118.00
Front Office Admin / Provider	0.5	Admin Daily Rate	210.00	% Private	72%
Capacity Utilization	80%	Number of Provider Teams	2		
Days of Service each Year	290	Number of Provider Teams	3		
		Number of Provider Teams	4		
		% of Total Fixed Costs	16%		

Revenue					
Provider Team Daily Revenue	$ 3,599.66		*40 Patient Daily Capacity / Provider*		
Total Daily RHC Revenue/Team	**$ 3,599.66**		*80% Capacity Utilization (25.6 Patients)*		
Variable Cost			*Open 6 Days / Week*		
Providers	1,500.00		*2 or 3 or 4 Providers Working Each Day*		
Nurses	350.00				
MAs	210.00				
Admins	105.00				
Total Personnel Cost	**2,165.00**				
Fixed Costs	*Total Fixed*	*% Share of Total*	*Total Cost/Period*	*Periods/Year*	*RHC Share Year*
Building/Equipment Cap Cost	1,017,834	16%	6,264	26	162,853.36
Building / Grounds Operations	551,868	16%	3,396	26	88,298.88
Maintenance	295,051	16%	1,816	26	47,208.16
Housekeeping	152,913	16%	941	26	24,466.00
Laundry	40,681	16%	250	26	6,508.96
Food	380,612	-	-	26	-
Supplies	69,137	16%	425	26	11,061.92
Communications	69,587	16%	428	26	11,133.84
Adminstration	412,741	16%	2,540	26	66,038.48
Total Yearly Fixed Costs					**417,569.60**
Fixed Cost Daily					1,439.90

2 Provider Teams		*Days/Period*	*EBIT/Period*	*Periods/Year*	*Year Totals*
Revenue	$ 7,199.33	12	$ 86,391.95	26	$ 2,246,190.74
Variable Cost	4,330.00		$ 51,960.00		$ 1,350,960.00
Fixed Cost Allocation	719.95		$ 8,639.37		$ 224,623.65
EBIT @ 2	**$ 2,149.38**		**$ 25,792.58**		**$ 670,607.09**
3 Provider Teams		*Days/Period*	*EBIT/Period*	*Periods/Year*	*Year Totals*
Revenue	$ 10,798.99	12	$ 129,587.93	26	$ 3,369,286.10
Variable Cost	6,495.00		$ 77,940.00		$ 2,026,440.00
Fixed Cost Allocation	479.97		$ 5,759.58		$ 149,749.10
EBIT @ 3	**$ 3,824.03**		**$ 45,888.35**		**$ 1,193,097.01**
4 Provider Teams		*Days/Period*	*EBIT/Period*	*Periods/Year*	*Year Totals*
Revenue	$ 14,398.66	12	$ 172,783.90	26	$ 4,492,381.47
Variable Cost	8,660.00		$ 103,920.00		$ 2,701,920.00
Fixed Cost Allocation	359.97		$ 4,319.69		$ 112,311.82
EBIT @ 4	**$ 5,378.68**		**$ 64,544.22**		**$ 1,678,149.65**

Sustainability – Rural Health Clinic



40 Patients Per Day
Every Day
6 Days Per Week

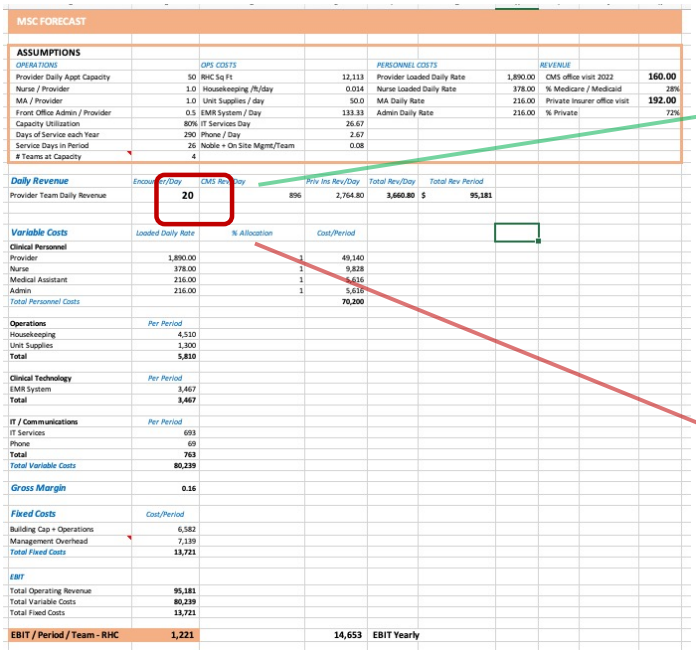
+ $16,000 / month

Operate Flawlessly
100% Reimbursement
No Doctor or Nurse Shortage

30 Patients Per Day
Every Day
6 Days Per Week

- $1600 / month

Sustainability – Specialist Clinic



MSC FORECAST

ASSUMPTIONS

OPERATIONS		OPS COSTS		PERSONNEL COSTS		REVENUE	
Provider Daily Appt Capacity	50	RHC Sq Ft	12,113	Provider Loaded Daily Rate	1,890.00	CMS office visit 2022	160.00
Nurse / Provider	1.0	Housekeeping /ft/day	0.014	Nurse Loaded Daily Rate	378.00	% Medicare / Medicaid	28%
MA / Provider	1.0	Unit Supplies / day	50.0	MA Daily Rate	216.00	Private Insurer office visit	192.00
Front Office Admin / Provider	0.5	EMR System / Day	133.33	Admin Daily Rate	216.00	% Private	72%
Capacity Utilization	80%	IT Services Day	26.67				
Days of Service each Year	290	Phone / Day	2.67				
Service Days in Period	26	Noble + On Site Mgmt/Team	0.08				
# Teams at Capacity	4						

Daily Revenue	Encounters/Day	CMS Rev/Day	Priv Ins Rev/Day	Total Rev/Day	Total Rev Period
Provider Team Daily Revenue	20	896	2,764.80	3,660.80	$ 95,181

Variable Costs	Loaded Daily Rate	% Allocation	Cost/Period
Clinical Personnel			
Provider	1,890.00	1	49,140
Nurse	378.00	1	9,828
Medical Assistant	216.00	1	5,616
Admin	216.00	1	5,616
Total Personnel Costs			**70,200**
Operations	*Per Period*		
Housekeeping	4,510		
Unit Supplies	1,300		
Total	**5,810**		
Clinical Technology	*Per Period*		
EMR System	3,467		
Total	**3,467**		
IT / Communications	*Per Period*		
IT Services	693		
Phone	69		
Total	**763**		
Total Variable Costs	**80,239**		
Gross Margin	**0.16**		

Fixed Costs	Cost/Period
Building Cap + Operations	6,582
Management Overhead	7,139
Total Fixed Costs	**13,721**

EBIT	
Total Operating Revenue	**95,181**
Total Variable Costs	**80,239**
Total Fixed Costs	**13,721**
EBIT / Period / Team - RHC	**1,221**
	14,653 EBIT Yearly

20 Patients Per Day
Every Day
5 Days Per Week

+ $1200 / month

Operate Flawlessly
100% Reimbursement
No Doctor or Nurse Shortage

15 Patients Per Day
Every Day
5 Days Per Week

- $20,000 / month

Behavioral health services are needed in Kansas. Currently, not enough capacity exists state-wide to serve the population needing treatment. There is opportunity to use a portion of the hospital building for behavioral health services and the financial models below depict two specific services lines, geriatric and SIA, a state program, that can deliver sustained revenue to hospital operations and provide the State of Kansas a much-needed resource for care.

The model below shows operations at near capacity, with normal vacancies that occur when a flow of patients occurs over time. These behavioral health models depict sustained high utilization that can be achieved given the demand that appears to exist in the region. However, the depiction of operations below include the assumption that a workforce can be assembled and sustained to support 24/7 operations. Other operational constraints are likely to impact revenues and profits, so the models below should be viewed as a state of high performance that may not be consistently achievable. EBIT is earnings before interest and taxes and is a common measure of operational profit.

Geriatric Behavioral Health

Revenue Assumptions								
Unit Capacity	25	Daily Revenue Geri Psych	1,100	Provider Daily Loaded Rate	2,917	Provider / Shift	0.63
Avg Capacity Utilization	80%	Meds Per Day Avg	10	Nurse Daily Loaded Rate	588	Max Patients for 1 Nurse	5.00
GP MaxTreatment Days	14	Avg Med Reimbursement	20	MA Daily Loaded Rate	336	Nursing Hours per Day Shift	48.00
Operating Hours Daily	24	Meds Wholesale Price	60%			Nursing Hours per Night Shift	48.00
Working Shifts per Day	2	GP BHU % of Hospital Fixed Costs	16%			Max Patients for 1 MA	8.00
						MA Hours per Day Shift	30.00
						MA Hours per Night Shift	30.00

Revenue	*Capacity*	*Daily Revenue*	*Treatment Days*	*% Utilization*	*Revenue/Period*	*Periods/Year*	*Total*
Patients	25	1,100	14	80%	308,000	26	8,008,000
Medication	25	200	14	80%	56,000	26	1,456,000
Total Operations Revenue					**364,000**		**9,464,000**
Variable Costs	*# Personnel*	*aily Loaded Cost*	*Treatment Days*		*Total Cost/Perio*	*Periods/Year*	*Total*
Provider Hours Day Shift	0.63	2,917	14		25,521	26	663,542
Provider Shift Night	0.63	2,917	14		25,521	26	663,542
Nurse Day Shift	4.00	588	14		32,928	26	856,128
Nurse Night Shift	4.00	588	14		32,928	26	856,128
MA Day Shift	2.50	336	14		11,760	26	305,760
MA Night Shift	2.50	336	14		11,760	26	305,760
Total Personnel Costs							**3,650,859**
Medication Cost					*Total Cost/Perio*	*Periods/Year*	*Total*
Basket Medications	*estimated cost*				**33,600**	26	**873,600**
Total Variable Costs							**4,524,459**
Allocated Fixed Costs	*@ $41 M Rev*	*eri Psych @16%*			*Total Cost/Perio*	*Periods/Year*	*Total*
Building/Equipment Cap Costs	1,017,834	162,853			6,264	26	162,853
Building / Grounds Operations	551,868	88,299			3,396	26	88,299
Maintenance	295,051	47,208			1,816	26	47,208
Housekeeping	152,913	24,466			941	26	24,466
Laundry	40,681	6,509			250	26	6,509
Food	380,612	60,898			2,342	26	60,898
Supplies	69,137	11,062			425	26	11,062
Communications	69,587	11,134			428	26	11,134
Adminstration	412,741	66,038			2,540	26	66,038
Total Fixed Costs							**478,467**

Total Operating Revenue	**9,464,000**
Total Variable Costs	**4,524,459**
Total Fixed Costs	**478,467**
EBIT Geri Psych	**4,461,073**

Behavioral Health SIA

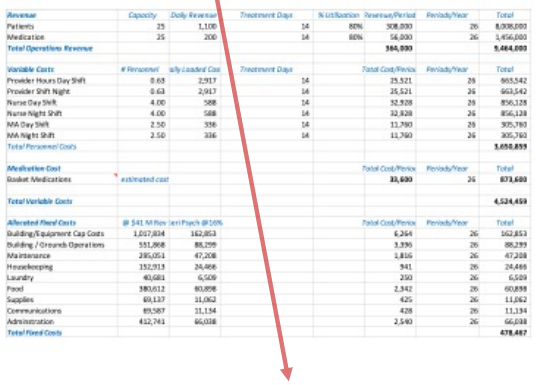
Revenue Assumptions								
Unit Capacity	10	Daily Revenue KS Institutional Alt	960	Provider Daily 12 Hour Rate	2,333	Provider / Shift	0.25
Avg Capacity Utilization	80%	Meds Per Day Avg	7	Nurse Daily Loaded Rate	588	Max Patients for 1 Nurse	5.00
GP MaxTreatment Days	10	Avg Med Reimbursement	20	MA Daily Loaded Rate	336	Nursing Hours per Day Shift	24.00
Operating Hours Daily	24	Meds Wholesale Price	60%			Nursing Hours per Night Shift	24.00
Working Shifts per Day	2	Psych BHU % of Hospital Fixed Costs	6.4%			Max Patients for 1 MA	8.00
						MA Hours per Day Shift	15.00
						MA Hours per Night Shift	15.00

Revenue	*Capacity*	*Daily Revenue*	*Treatment Days*	*% Utilization*	*Revenue/Period*	*Periods/Year*	*Total*
Patients	10	960	10	80%	76,800	26	1,996,800
Medication	10	140	10	80%	11,200	26	291,200
Total Operations Revenue					**88,000**		**2,288,000**
Variable Costs	*# Personnel*	*Daily Loaded Cost*	*Treatment Days*		*Total Cost/Period*	*Periods/Year*	*Total*
Provider Day Shift	0.25	2,333	10		5,833	26	151,667
Provider Night Shift	0.25	2,333	10		5,833	26	151,667
Nurse Day Shift	2.00	588	10		5,880	26	152,880
Nurse Night Shift	2.00	588	10		5,880	26	152,880
MA Day Shift	1.25	336	10		3,360	26	87,360
MA Night Shift	1.25	336	10		3,360	26	87,360
Total Personnel Costs							**783,813**
Medication	*estimated cost*				*Total Cost/Period*	*Periods/Year*	*Total*
Basket Medications					**6,720**	26	**174,720**
Total Variable Costs							**958,533**
Allocated Fixed Costs	*@ $41 M Rev*	*Psych @ 6.4%*			*Total Cost/Period*	*Periods/Year*	*Total*
Building/Equipment Cap Costs	1,017,834	65,141			2,505	26	65,141
Building / Grounds Operations	551,868	35,320			1,358	26	35,320
Maintenance	295,051	18,883			726	26	18,883
Housekeeping	152,913	9,786			376	26	9,786
Laundry	40,681	2,604			100	26	2,604
Food	380,612	24,359			937	26	24,359
Supplies	69,137	4,425			170	26	4,425
Communications	69,587	4,454			171	26	4,454
Adminstration	412,741	26,415			1,016	26	26,415
Total Fixed Costs							**191,387**

Total Operating Revenue	**2,288,000**
Total Variable Costs	**958,533**
Total Fixed Costs	**191,387**
EBIT KS Alt	**1,138,080**

Sustainability

Revenue Assumptions							
Unit Capacity	25	Daily Revenue Geri Psych	1,100	Provider Daily Loaded Rate	2,917	Provider / Shift	0.63
Avg Capacity Utilization	80%	Meds Per Day Avg	10	Nurse Daily Loaded Rate	588	Max Patients for 1 Nurse	5.00
GP MaxTreatment Days	14	Avg Med Reimbursement	20	MA Daily Loaded Rate	336	Nursing Hours per Day Shift	48.00
Operating Hours Daily	24	Meds Wholesale Price	60%			Nursing Hours per Night Shift	48.00
Working Shifts per Day	2	GP BHU % of Hospital Fixed Costs	16%			Max Patients for 1 MA	8.00
						MA Hours per Day Shift	30.00
						MA Hours per Night Shift	30.00



YEARLY BHU TOTALS	
Total BHU Revenue	22,049,000
Total Variable Cost	17,134,649
Total Fixed Cost	1,629,300
EBIT Yearly	**3,285,051**

100% Utilization
All 3 BHU Offerings
Always full
Always enough staff

6.2 State of Kansas Collaboration Models

Work Force Development

When looking at any rural community, there are several key factors to consider when embarking on a major development/redevelopment of anything of significant size. In addition, anytime that you have specialized programming and skilled positions it is important to understand what kind of partnerships/support that you can receive from governmental programming. Understanding the impact of how this could help or maintain a project for generations is vital to the longevity of a rural community.

Below is an example of a program that Kansas has produced to help with training and wage compensation for employers:

KansasWorks On-The- Job Training Program (OJT)

The **KANSAS**WORKS On-the-Job Training program (OJT) supports local businesses needing to train and retrain skilled, productive workers.

Companies train promising candidates with the necessary skills for the position. For qualifying positions, OJT contracts can reimburse up to 50% of the wages to compensate employers for the cost associated with training and loss of production for newly hired employees.

The OJT program also gives unemployed workers valuable skills and permanent, full-time employment. Job seekers earn while they learn and begin a path toward a new career.

State of Kansas Economic Development

In addition to understanding the current labor market and retention of employees, we've identified one major state economic development incentive that would be instrumental to reopening the hospital. This program is designed to help add jobs to the Kansas economy and help ensure that companies are able to make a distinguishable economic impact in a community. The program is called Promoting Employment Across Kansas (PEAK).

Below is a synopsis of this program:

PEAK

Promoting Employment Across Kansas program, known as PEAK, is designed to help recruit companies and jobs to Kansas by allowing them to retain up to 95% of the withholding taxes generated by new employees. This is the main incentive the state offers in business recruitment and is a vital tool to the Department.

The PEAK benefit and term are based on the number of PEAK jobs/employees to be hired, their wage levels, and other economic impact variables of a project. During the benefit term, participating PEAK companies may retain or be refunded 95% of the state withholding tax of PEAK-eligible employees that are paid at or above the county median wage where the PEAK business facility is or will be located.

Qualified companies must create within a two-year period and maintain thereafter, a minimum of five new PEAK jobs in non-metropolitan counties or 10 new PEAK jobs in the metropolitan counties of Shawnee, Douglas, Wyandotte, Johnson, Leavenworth and Sedgwick to receive “Basic” program benefits. Qualified companies must create within a two-year period and maintain thereafter, a minimum of 100 new PEAK jobs regardless of location to receive “High Impact” program benefits. Aggregate wages of the PEAK jobs must meet or exceed the county median wage or North American Industry Classification System (NAICS) average wage for their industry.

Applicants meeting program requirements may include for-profit companies and not-for-profit headquarters. Qualified applicants also must: PROMOTING EMPLOYMENT ACROSS KANSAS (PEAK) Offer an adequate health insurance policy to its full-time employees within 180 days of hire that provides coverage for basic hospital and procedures care, physician care, mental health care, substance abuse treatment, prenatal and postnatal care and prescription drugs, and pay at least 50% of the employee’s health insurance premium cost. Not owe undisputed federal, state or local taxes.

Workforce Development

The Kansas Department of Commerce administers two training programs designed to assist businesses with training new and existing employees. The Kansas Industrial Training Program (KIT) and the Kansas Industrial Retraining Program (KIR). KANSAS INDUSTRIAL TRAINING The Kansas Industrial Training (KIT) program is designed to assist firms involved in “net new job” creation.

• Firms must show they are creating at least one net new job in the State of Kansas. For new companies, any job that is created in Kansas is a “net new job.” For expanding companies, a “net new job” is any job that is created over and above the employee base, which is determined by calculating the average number of permanent full- and part-time employees over the preceding 12months.

• Firms that are creating new jobs that do not satisfy the “net new job” requirement may qualify for assistance, subject to approval from the Secretary of the Kansas Department of Commerce. KANSAS INDUSTRIAL RETRAINING The Kansas Industrial Retraining (KIR) program is designed to assist companies who are restructuring or retraining their workforce. • Firms must show they are restructuring their business operations or retraining their workforce due to one or more of the following: - Incorporation of existing technology (unable to pay for training associated with upgrades to existing technology) - Development and incorporation of new technology (unable to pay for training associated with upgrades to existing technology) - Diversification of production - Development and implementation of new production

• A company must show that employees to be trained are likely to be displaced because of obsolete or inadequate job skills and knowledge.

• A company must retrain at least one existing position.

• Training plan must be concurrent with project start date. OTHER WORKFORCE DEVELOPMENT ASSISTANCE A wide variety of services are available to businesses through the Kansas Workforce Centers located throughout the state. Services include but are not limited to: statewide and national job listings; applicant pre-screening and application acceptance; space to conduct interviews as well as staff to assist in scheduling; space for job fairs; applicant assessment services and testing; Veteran services; and current labor market information. These services are available to all Kansas employers at no cost and may be accessed through www.kansasworks.com.

• Companies submit a Reimbursement Cover Sheet and related documentation, as defined, at the end of the project for actual training expenses.

• The Trainee Roster must include the names of the trainees.

• Reimbursements will be based on the proportion of company matching funds, actual expenses incurred, and on the actual number of positions trained in accordance with the company’s approved training plan.

• Companies may elect to be reimbursed through electronic funds transfer.

Mental Health

Over the past several months, we have identified several State of Kansas programs that would help provide an opportunity for partnership with the project to aid in the development of mental health services. Below is the description of a State program called the State Institution Alternatives (SIA). Over the past several years, the State of Kansas has had a moratorium on the number of beds in their mental health facilities. Their response to the growing concern of the mental health crisis in the State of Kansas was the creation of the SIA program.

State Institutional Alternative (SIA) Program

Kansas Department of Aging and Disability Services (KDADS) worked in cooperation with the Mental Health Task Force, the Governor's Behavioral Health Planning Council, Community Mental Health Centers (CMHCs) and other stakeholders to develop a plan to lift the moratorium on voluntary admissions. The plan has two primary goals. The first is to ensure there are high-quality, therapeutic spaces to provide treatment to individuals with serious mental illness in an inpatient setting. The second is to use existing resources and facilities as effectively as possible to meet the therapeutic needs while incorporating appropriate community-based services and private facilities.

The plan to lift the moratorium included a mix of bed capacity at Osawatomie State Hospital (OSH) and increasing community- based capacity for inpatient treatment. The approved FY 2021 Budget for KDADS includes funds to expand the number of regional psychiatric hospital beds to serve individuals with mental illness meeting the criteria for state hospital admission.

KDADS contracts with providers to provide hospital bed space for adults and children. These "regional" beds would be financed using a combination of state dollars, Medicaid or other private insurance when patients have insurance coverage available. During 2020, KDADS worked with the Kansas Department of Health and Environment (KDHE) on a new provider classification, called State Institutional Alternative (SIA). These are private psychiatric hospitals or community hospitals that agree to accept patients with mental illness who have been screened for admission to a state hospital. These SIA hospitals are paid a per diem rate for each patient day instead of the regular Medicaid rate. SIAs submit an application to the state to be able to enroll in Medicaid and be reimbursed on a per diem rate for any patients successfully screened for State Mental Health Hospital (SMHH) admission and receive state funds for the care of the uninsured.

- SIAs will provide regional hospital alternatives to Larned State Hospital (LSH) and OSH, allowing for care closer to home for patients and reducing demand on SMHHs, as well as reducing wait times for admissions.
- SIA is the only program that serves youth population approved for the state hospital level of care
- When Kansans in crisis are triaged and recommended for the state hospital admission, SIA hospitals will be the first option for new patient admissions.
- SIAs define patient population they are able to serve
- The program is designed around the daily capacity and capably of each of the SIAs on a daily basis.

KDADS implemented the SIA Medicaid policy and State Plan Amendment in 2020 and has worked with existing hospitals that accepted diversion placements from the state hospitals to enroll as SIA providers. SIA hospitals will replace the existing diversion beds that currently supplement the OSH capacity to meet immediate needs with the same focus on short in-patient stays, initiating treatment and smoothly transitioning patients into community-based treatment.

Last two months of state bed activity for the SIA program:

State Institution Alternative (SIA) Commissioner's Report
01/07/2022

State Hospital Wait List

- OSH – 5 of as 8:00am on 01/07/22
- LSH – 9 as of 8:00am on 01/07/22

Total SIA Clients served

- 163 adults
- 333 children

SIA Adult Bed Census

Cottonwood Springs

****1 open SIA bed as of 4:53pm 01/06/22*

New Admits 12/31/21 to 01/06/22

- 10 new SIA admits
  - 6 paid by HIS
  - 4 Private Insurance
- 1 Admitted and discharged
- 8 OSH Catchment Area
- 2 LSH Catchment Area

Current Clients Receiving Services
12/31/21 to 01/06/22

- 17 SIA admits
  - 11 paid by HIS
  - 6 Private Insurance
- 12 OSH Catchment Area
- 7 LSH Catchment Area

Cumulative Totals 8/30/21 – 01/06/22

- 80 Total discharges
- **97 Total SIA client served**
  - 80 OSH catchment area
  - 17 LSH catchment area

Prairie View

****0 open SIA bed as of 2:02pm 01/07/22*

New Admits 12/31/21 to 01/06/22

- 1 new SIA admits
  - 1 paid by HIS
  - 0 Private Insurance
- 0 Admitted and discharged
- 1 OSH Catchment Area
- 0 LSH Catchment Area

Current Clients Receiving Services
12/31/21 to 01/06/22

- 3 SIA admits
  - 3 paid by HIS
  - 0 Private Insurance
- 2 OSH Catchment Area
- 1 LSH Catchment Area

Cumulative Totals 8/30/21 – 01/06/22

- 37 total discharges
- **40 Total SIA clients served**
  - 13 OSH catchment area
  - 27 LSH catchment area

Newton Medical Center

****0 open SIA bed as of 12:22pm 01/07/22*

New Admits 12/31/21 to 01/06/22

- 0 new SIA admits
  - 0 paid by HIS

South Central MC

****1 open SIA bed as of 3:16pm 01/05/22*

New Admits 12/31/21 to 01/06/22

- 1 new SIA admits
  - 0 paid by HIS

- 0 Private Insurance
- 0 Admitted and discharged
- 0 OSH Catchment Area
- 0 LSH Catchment Area

Current Clients Receiving Services
12/31/21 to 01/06/22

- 0 SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 OSH Catchment Area
- 0 LSH Catchment Area

Cumulative Totals 9/27/21 – 01/06/22

- 0 Total discharges
- **0 Total SIA client served**
  - 0 OSH catchment area
  - 0 LSH catchment area

1 Private Insurance
0 Admitted and discharged
1 OSH Catchment Area
0 LSH Catchment Area

Current Clients Receiving Services
12/31/21 to 01/06/22

- 5 SIA admits
  - 0 paid by HIS
  - 5 Private Insurance
- 4 OSH Catchment Area
- 1 LSH Catchment Area

Cumulative Totals 9/27/21 – 01/06/22

- 12 total discharges
- **17 Total SIA clients served**
  - 10 OSH catchment area
  - 7 LSH catchment area

Via Christi (adult)

****0 open SIA bed as of 2:35pm 01/07/22*

New Admits 12/31/21 to 01/06/22

- 1 new SIA admits
  - 0 paid by HIS
  - 1 Private Insurance
- 0 Admitted and discharged
- 1 OSH Catchment Area
- 0 LSH Catchment Area

Current Clients Receiving Services
12/31/21 to 01/06/22

- 2 SIA admits
  - 0 paid by HIS
  - 2 Private Insurance
- 2 OSH Catchment Area
- 0 LSH Catchment Area

Cumulative Totals 09/27/21 – 01/06/22

- 7 total discharges
- **9 Total SIA clients served**
  7 OSH Catchment area
  2 LSH Catchment area

SIA Child Bed Census

KVC Kansas City

****3 SIA bed as of 1:30pm 01/07/22*

New Admits 12/31/21 to 01/06/22

KVC Wichita

****10 SIA bed as of 1:30pm 01/07/22*

New Admits 12/31/21 to 01/06/22

- 0 new SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 Admitted and discharged

Current Clients Receiving Services
12/31/21 to 01/06/22
- 0 SIA admits
  - 0 paid by HIS
  - 0 Private Insurance

Cumulative Totals 8/30/21 – 01/06/22
- 99 Total discharges
- **99 Total SIA client served**

- 9 new SIA admits
  - 0 paid by HIS
  - 9 Private Insurance
- 1 Admitted and discharged

Current Clients Receiving Services
12/31/21 to 01/06/22
- 8 SIA admits
  - 0 paid by HIS
  - 8 Private Insurance

Cumulative Totals 8/30/21 – 01/06/22
- 222 total discharges
- **230 Total SIA clients served**

Via Christi (children)

****0 SIA bed as of 2:35pm 01/07/22*

New Admits 12/31/21 to 01/06/22
- 0 new SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 Admitted and discharged

Current Clients Receiving Services
12/31/21 to 01/06/22
- 0 SIA admits
  - 0 paid by HIS
  - 0 Private Insurance

Cumulative Totals 09/27/21 – 01/06/22
- 4 Total discharges
- **4 Total SIA client served**

State Institution Alternative (SIA) Commissioner's Report
12/31/2021

State Hospital Wait List
- OSH – 4 of as 9:08pm on 12/30/21
- LSH – 3 as of 8:00am on 12/30/21

Total SIA Clients served
- 150 adults
- 324 childre

SIA Adult Bed Census

Cottonwood Springs

Prairie View

****8 open SIA bed as of 10:14am 12/30/21*

New Admits 12/24/21 to 12/30/21
- 5 new SIA admits
  - 2 paid by HIS
  - 3 Private Insurance
- 0 Admitted and discharged
- 3 OSH Catchment Area
- 2 LSH Catchment Area

Current Clients Receiving Services 12/24/21 to 12/30/21
- 10 SIA admits
  - 6 paid by HIS
  - 4 Private Insurance
- 6 OSH Catchment Area
- 4 LSH Catchment Area

Cumulative Totals 8/30/21 – 12/30/21
- 77 Total discharges
- **87 Total SIA client served**
  - 72 OSH catchment area
  - 15 LSH catchment area

****1 open SIA bed as of 6:10pm 12/30/21*

New Admits 12/24/21 to 12/30/21
- 2 new SIA admits
  - 1 paid by HIS
  - 1 Private Insurance
- 1 Admitted and discharged
- 1 OSH Catchment Area
- 1 LSH Catchment Area

Current Clients Receiving Services 12/24/21 to 12/30/21
- 3 SIA admits
  - 3 paid by HIS
  - 0 Private Insurance
- 2 OSH Catchment Area
- 1 LSH Catchment Area

Cumulative Totals 8/30/21 – 12/30/21
- 36 total discharges
- **39 Total SIA clients served**
  - 12 OSH catchment area
  - 27 LSH catchment area

Newton Medical Center

****0 open SIA bed as of 10:51am 12/31/21*

New Admits 12/24/21 to 12/30/21
- 0 new SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 Admitted and discharged
- 0 OSH Catchment Area
- 0 LSH Catchment Area

Current Clients Receiving Services 12/24/21 to 12/30/21
- 0 SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 OSH Catchment Area
- 0 LSH Catchment Area

Cumulative Totals 9/27/21 – 12/30/21
- 0 Total discharges

South Central MC

****2 open SIA bed as of 8:30am 12/22/21*

New Admits 12/24/21 to 12/30/21
- 1 new SIA admits
  - 0 paid by HIS
  - 1 Private Insurance
- 0 Admitted and discharged
- 0 OSH Catchment Area
- 1 LSH Catchment Area

Current Clients Receiving Services 12/24/21 to 12/30/21
- 5 SIA admits
  - 0 paid by HIS
  - 5 Private Insurance
- 4 OSH Catchment Area
- 1 LSH Catchment Area

Cumulative Totals 9/27/21 – 12/30/21
- 11 total discharges

- **0 Total SIA client served**
  - 0 OSH catchment area
  - 0 LSH catchment area

- **16 Total SIA clients served**
  - 9 OSH catchment area
  - 7 LSH catchment area

Via Christi (adult)

****0 open SIA bed as of 12:41pm 12/31/21*

New Admits 12/24/21 to 12/30/21
- 0 new SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 Admitted and discharged
- 0 OSH Catchment Area
- 0 LSH Catchment Area

Current Clients Receiving Services
12/24/21 to 12/30/21
- 1 SIA admits
  - 0 paid by HIS
  - 1 Private Insurance
- 1 OSH Catchment Area
- 0 LSH Catchment Area

Cumulative Totals 09/27/21 – 12/30/21
- 7 total discharges
- **8 Total SIA clients served**
  6 OSH Catchment area
  2 LSH Catchment area

SIA Child Bed Census

KVC Kansas City

****12 SIA bed as of 2:47pm 12/23/21*

New Admits 12/24/21 to 12/30/21
- 0 new SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 Admitted and discharged

Current Clients Receiving Services
12/24/21 to 12/30/21
- 0 SIA admits
  - 0 paid by HIS
  - 0 Private Insurance

Cumulative Totals 8/30/21 – 12/30/21
- 99 Total discharges
- **99 Total SIA client served**

KVC Wichita

****12 SIA bed as of 2:47pm 12/23/21*

New Admits 12/24/21 to 12/30/21
- 2 new SIA admits
  - 0 paid by HIS
  2 Private Insurance

0 Admitted and discharged

Current Clients Receiving Services
12/24/21 to 12/30/21
- 2 SIA admits
  - 0 paid by HIS
  2 Private Insurance

Cumulative Totals 8/30/21 – 12/30/21
219 total discharges
- **221 Total SIA clients served**

Via Christi (children)

****0 SIA bed as of 12:41pm 12/31/21*

New Admits 12/24/21 to 12/30/21

- 0 new SIA admits
  - 0 paid by HIS
  - 0 Private Insurance
- 0 Admitted and discharged

Current Clients Receiving Services
12/24/21 to 12/30/21

- 0 SIA admits
  - 0 paid by HIS
  - 0 Private Insurance

Cumulative Totals 09/27/21 – 12/30/21

- 4 Total discharges
- **4 Total SIA client served**

6.3 Grant Opportunities For The Hospital

Prevent Cancer Foundation Community Grants	KS/Mo	Yes	25,000	We will provide $25,000 one-year grants for organizations that will develop new or implement existing community projects/programs in cancer prevention and early detection in rural or urban areas.
Hall Family Foundation Grants	MO/KC	No	up to 2.2 million	With a goal of better overall health in our community, grants in this category intend to help those with limited resources achieve equitable access to quality health care, including physical and mental health services; expand the community's capacity to provide the highest quality health services; and increase residents' knowledge and ability to achieve positive health outcomes for themselves.
Rural Communities Opioid Response Program-Technical Assistance	HHS/ National	Yes	up to 10million	HRSA 2022 Rural Communities opioid Response program-behavioral health
Rural Public Health Workforce Training Network Program	HHS/ National	Yes	Unspecified Amount	This notice announces the opportunity to apply for funding under the Rural Public Health Workforce Training Network Program (RPHWTN). The purpose of this program is to expand public health capacity by supporting health care job development, training and placement in rural and tribal communities. The expected impact of this program is to enhance clinical and operational capacity in order to adequately address the population health needs of rural communities affected by COVID-19, including those dealing with the effects of long COVID1. The RPHWTN program addresses the ongoing critical need in health care facilities for trained public health professionals serving rural communities. This is done through the establishment of networks to develop formal training/certification programs in order to help professionals in the following workforce training tracks:
Rural Health and Safety Education Competitive Grants Program	USDA/ National	Yes	Up to $350,000	The RHSE program proposals are expected to be community-based outreach education programs, such as those conducted through Human Science extension outreach that provide individuals and families with: information as to the value of good health at any age; information to increase individual or family's motivation to take more responsibility for their own health; information regarding rural environmental health issues that directly impact human health; information about and access to health promotion and educational activities; and training for volunteers and health services providers concerning health promotion and health care services for individuals and families in cooperation with state, local, and community partners.
Early Childhood Developmental Health System (ECDHS) Program	HHS/ National	Yes	Up to 4,750,000	This notice announces the opportunity to apply for funding under the Early Childhood Developmental Health Systems (ECDHS): Evidence to Impact program. The purpose of this program is to advance statewide systems of comprehensive early childhood developmental promotion, screenings, and interventions that improve outcomes and reduce disparities in early developmental health and family well-being for communities with high levels of childhood poverty. These statewide systems will be referred to as early childhood development (ECD) systems throughout this notice of funding opportunity (NOFO).
Foundation Defined Grants: Safety Net Grants	Health Forward Foundation	No	Up to 4,500,000	Health Forward's safety net funding supports the implementation of service delivery models for physical and oral health that hold the promise of delivering better health, better health care, and contained costs through improved quality.
FY 2021 American Rescue Plan Act (ARPA) Statewide Planning, Research, and Networks	s Department of Commerc	Yes	$200,000-6,000,000	The ARPA Statewide Planning, Research, and Networks NOFO is part of EDA's multi-phase effort to respond to the coronavirus pandemic as directed by the American Rescue Plan Act of 2021.
Ford Motor Company Fund's Community Grants Program	ord Motor Company Fund	Maybe	up to 9,100,000	Ford Motor Company Fund (Ford Fund) supports not-for-profit organizations in three major areas: Education, Auto-Related Safety Education and Community Development.
Anthem Foundation: Program Grants	Anthem Foundation	Yes	Unspecified Amount	We invest in traditional and nontraditional problem-solving approaches. These include programs that provide services directly to people and those that change systems to transform healthcare. Although we fund some research and policy requests, such proposals are by invitation only.
Michael & Susan Dell Foundation Grants	Michael & Susan Dell FoundatION	Yes	Unspecified Amount	Childhood health sectors in select countries where we work, namely

7 HEALTHCARE WORKFORCE

Summary

1 The ability for a hospital and health services operator to recruit and maintain a team of highly trained professionals to provide services to rural residents is a necessary fundamental to operations in Bourbon County. The operational cost for recruitment and retention will be substantially higher this year and going forward.

2 A national shortage of 52,000 primary care physicians is projected by 2025. Numbers of available physicians and skilled professionals will not increase. Aging of the workforce and pending retirements will outpace new entrants into the clinical workforce.

3 Both rural and urban hospitals in Kansas experience vacancies and turnover in key positions. LPN, CNA and primary care physician assistant positions have the highest vacancies and turnover along with many of the therapist positions.

4 Physicians and skilled professionals will continue to look for communities that can provide minimum on call responsibilities and better quality of life for their families.

5 Increasing the number of practitioners by allowing mid-level providers to practice autonomously is an approach taken by a majority of states in the US. Kansas legislature may not enact law to enable mid-level practitioners to practice autonomously. Without autonomy, the availability of mid-level practitioners to rural clinics and hospitals may be constrained by the availability of supervising physicians.

6 Rural hospitals are facing increased competition for nurses and technicians from employers in more urban centers – both north towards Kansas City, south towards Joplin and even west towards Wichita. Pay rates, escalating during COVID, are so attractive that a significant number of nurses choose to commute from their SEK homes to jobs in these more urban areas.

7 Telemedicine solutions are now, 2years into COVID, effective and well tested. Continued use and proliferation of telemedicine and other technology solutions that can enhance provider productivity is dependent on continued payments from CMS (Medicare/Medicaid) and private insurers. CMS temporary COVID rules enabling payments would need to be made permanent for hospital operators to invest in the technology.

8 While the Irene Ransom Bradley School of Nursing at Pittsburg State University is valuable regional resource for nursing education, much more could be done to assist students with training paths towards health care qualifications that would increase the number of new nurses in SEK communities. Regional opportunity exists to build stronger pathways for people who want to start or transition to healthcare careers.

7.1 Kansas Practice Regulations

Nurse Practitioner Practice Regulations in Kansas[62]

Practice Authority

Collaborative practice and written protocol for a medical plan of care are required with a responsible physician. The physician is not responsible for care to be given. Kan. Admin. Regs. 60-11-101

Prescriptive Authority

A written protocol must include a detailed medical plan of care for each classification of drugs the NP may prescribe. Before prescribing controlled substances, the NP must register with the US Drug Enforcement Administration and notify the State Board of Nursing of the name and address of the responsible physician. Kan. Stat. Ann. 65-1130(d). Kan. Admin. Regs. 60-11-104(a)

Nurse Practitioner as Primary Care Provider

NPs are not recognized in state policy as primary care providers.

Physician Assistant Practice Regulations in Kansas

Supervision Requirements

The state medical board determines the supervision responsibilities of a physician over a PA. The State Medical Board takes into consideration the amount of training and capabilities of PAs, the different practice settings in which Pas and supervising physicians practice, the needs of the geographic area of the state in which the PA and the supervising physicians practice, and the differing degrees of direction and supervision by a supervising physician appropriate for such settings and areas. Kan. Stat. Ann. 65-28a08

Prescriptive Authority

A written agreement between the physician and the PA outlining the prescriptive authority is required. Physician determines the types of medication a PA may prescribe. Kan. Stat. Ann. 65-28a08

Scope of Practice Determination

A PA may perform medical services within the education, training, and experience of the supervising physician and as delegated by the physician. Authority may be given through a written agreement. Services may be performed in any setting authorized by the supervising physician. Kan. Stat. Ann. 65-28a08

[62] *https://scopeofpracticepolicy.org/states/ks/*

Kansas Nurse Practitioners Want An End to Doctor Contracts, But Hit Statehouse Roadblocks Again

KCUR | By Celia Llopis-Jepsen

Published March 17, 2021 at 11:00 AM CDT

A proposal to let nurse practitioners do their jobs — without contracts that can require them to pay thousands of dollars a year to doctors — got stymied again in the Kansas Legislature this session. The bill died in the House this month without a vote. A technical maneuver in the Senate keeps the legislation alive, but it remains in committee with no vote scheduled.

To free advanced practice nurses to open more clinics, half of states no longer make them ink contracts with doctors. The Department of Veterans Affairs made a similar switch in 2016.

But the trend comes over loud objections from physicians, who say that the contractual requirements protect people by ensuring oversight of advanced practice registered nurses, or APRNs.

"I want APRNs as part of a medical team," Vicki Whitaker, executive director of the Kansas Association of Osteopathic Medicine, told lawmakers at a hearing last month. "I just don't want APRNs out (there) with no one to at least look at what they're doing and say, 'Are you sure this is what's going on?'"

But nurse practitioners and other advanced practice nurses counter that the contracts often are little more than sources of money for doctors who live far away or never actually review care.

In other cases, they say, the physician-oversight rules help doctors keep advanced nurses out of their markets.

During the COVID-19 crisis, Kansas passed a law temporarily letting advanced practice nurses work without physician oversight to help with pandemic response. That rule expires at the end of this month.

Under the proposed permanent law that has stalled in the Kansas Legislature, advanced practice nurses would need 4,000 hours of work under their belts before they could ditch their contracts with physicians. Such transition rules exist in some of the other states that have granted advanced nurses full authority to work without doctor permission.

A similar bill in 2019 made it out of committee, but lost out on the floor in the wrangling for an ultimately unsuccessful attempt to expand Medicaid coverage to more Kansans. This year, it's unclear whether the bill will make it that far.

The Kansas Advanced Practice Nurse Association says Rep. Brenda Landwehr, chairwoman of the House health committee, told its lobbyist her committee would vote on the bill but later reneged her statement and let the bill die.

https://www.kcur.org/news/2021-03-17/kansas-nurse-practitioners-want-an-end-to-doctor-contracts-but-hit-statehouse-roadblocks-again

7.2 Recruiting Challenges and Strategies for Rural Hospitals

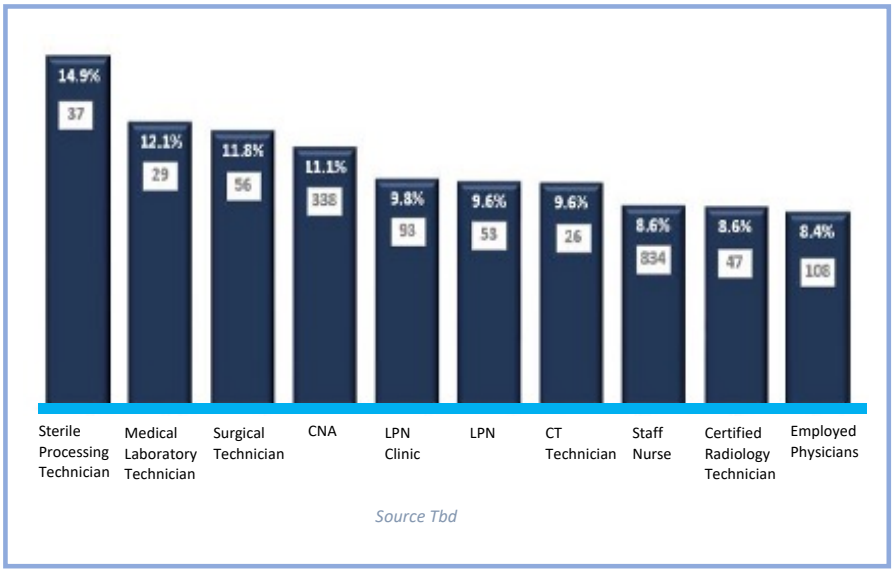
According to the National Rural Health Association, there are only 39.8 physicians per 100,000 people in rural areas. This compares to 53.3 physicians per 100,000 people in urban areas. Rural communities are also susceptible to higher levels of poverty, traditionally have higher tobacco use, and are less likely to use primary care. This disparity between availability of care and community need for healthcare services can result in negative outcomes for patients.

However, it can be difficult for rural facilities to recruit new healthcare professionals to address this problem. Many physicians don't want to live in small towns, and they may think that facilities are out of date or the work isn't exciting. The workload may also be higher in rural facilities, where they don't often have access to specialists who would take on specific cases in an urban setting.[63]

> *"Keeping access to health care in rural America is simply a challenge no matter how you look at it, but this shortage of rural health care professionals just is an unfortunate driving issue towards more hospital closures[64]."*

The number of physicians practicing in America's rural areas is on the decline. From 2013 to 2015, the overall supply of physicians in the United States grew by 16,000, but the number of rural physicians declined by 1,400. While 20 percent of the U.S. population is rural, only 12 percent of the primary care physicians work in a rural area.[65]

Workforce Challenges –Kansas Rural Vacancy Rates and Vacancies for High Demand Positions



[63] *https://weatherbyhealthcare.com/blog/recruiting-physicians-rural-healthcare-facilities*

[64] *Alan Morgan, CEO of the National Rural Health Association*

[65] *https://www.jacksonphysiciansearch.com/white-paper-rural-recruitment/*

Impact of Recruiting Challenges

Quality of care is harder to maintain when the facility is understaffed. Staff may be working with fewer people to cover the same number of patients and/or working longer hours. In addition, using temporary staff may impact quality and coordination of care and can be expensive. In some cases, vacancies can even result in some services being suspended until the position is filled.

Impacts associated with vacancies may include:

- Limited healthcare services to residents throughout the community as well as the surrounding area
- Increased costs due to overtime pay for other staff
- Increased costs of coverage through locum tenens physicians (short-term physician staffing assignments) or other traveling personnel
- Costs of recruitment and training of new personnel

Possible Recruitment Strategies[66]

Rural hospitals do employ strategies to recruit physicians and nurses. The National Rural Health Association recommends the following approach:

1. **Use incentives and reimbursement programs:** Both federal and locally funded programs are options for encouraging a physician to work in a rural location. Programs like the National Health Service Corp will pay off part or all of a physician's student loan debt and is a great way to bring them into your community. Paying out signing bonuses is another way to bring in a physician who may no longer have loan debt.
2. **Find mission-minded physicians:** Many physicians like the idea of caring for medically underserved populations, and they are willing to travel around the world to offer that care. Working in rural areas can offer the same satisfaction to physicians looking to give back to a community.
3. **Hire** J-1 visa **physicians:** Very often, physicians from foreign countries have training on par with their U.S. counterparts (and in many cases were trained in the U.S.), but they may be more willing to move to a rural part of the country for the work experience.
4. **Appeal to the spouse:** Rural communities are great for raising a family. A physician may be more apt to come to your facility if their family is looking for a small-town experience.
5. **Go local:** Plan for the future by finding kids interested in going into medicine and encourage them through community outreach programs. They are more likely to come back home after medical school and residency.
6. **Bring in locum tenens:** Locums physicians offer a lot of benefits to rural facilities. They can provide continuity of care during a gap between permanent physicians or allow a facility to bring

[66] *https://www.ruralhealth.us/*

in a needed specialty for the short-term. The other benefit is finding a locums who likes your town and offering them a permanent job.

A component of these strategies is connection back to the region or town where the doctor or nurse grew up or has relatives. With smaller population towns, the number of trained people can be quite small and recruiting those with hometown ties is likely only a partial solution.

A Kansas Perspective

Rural hospitals in rural Kansas communities have found recruitment strategies that attract physicians and nurses. Benjamin Anderson's approach at Kearny County Hospital in the southwestern Kansas town of Lakin.

> *Anderson says he's found success targeting people motivated by mission over money: "A person that is driven toward the relief of human suffering and the pursuit of justice and equity."*
> *It's not that the hospital ignores practical concerns. Hospital staff often house-hunt for recruits, or manage home renovations for incoming workers. Anderson, who isn't a doctor, also personally babysits the children of his staff, because Lakin lacks nanny services.*
>
> *"I mean as a CEO I do a lot of different things, but that's among the most important, because it communicates we love you," Anderson says. "We're gonna live in a remote area but we're gonna live here and support each other."*
>
> *But the cornerstone of the hospital's recruitment pitch is 10 weeks of paid sabbatical a year, which allows time for doctors to serve on medical missions overseas.*
>
> *Anderson says he came to appreciate the draw of that after a mentor told him, "Go with them and see what motivates them; see why they would want to go there." Anderson did. It not only changed his life, he says, "I realized that in rural Kansas we have more in common with rural Zimbabwe than we do with Boston, Mass."*
>
> *It's a compelling enough draw that every couple of weeks, Anderson gets a call from physicians saying they want to work in Lakin, despite its remoteness.*
>
> *One of those callers was Dr. Daniel Linville. He'd read about Kearny County Hospital and its sabbaticals in a magazine article during medical school. Last fall, Linville joined the hospital, having done mission work since childhood in Ecuador, Kenya and Belize.*
>
> *He says he and his physician wife were also drawn to the surprisingly diverse population Kearny County Hospital serves, including immigrants from Somalia, Vietnam, Laos and Guatemala. In that sense, says Linville, every day feels like an international medical mission, requiring everything from delivering babies to treating dementia.*[67]

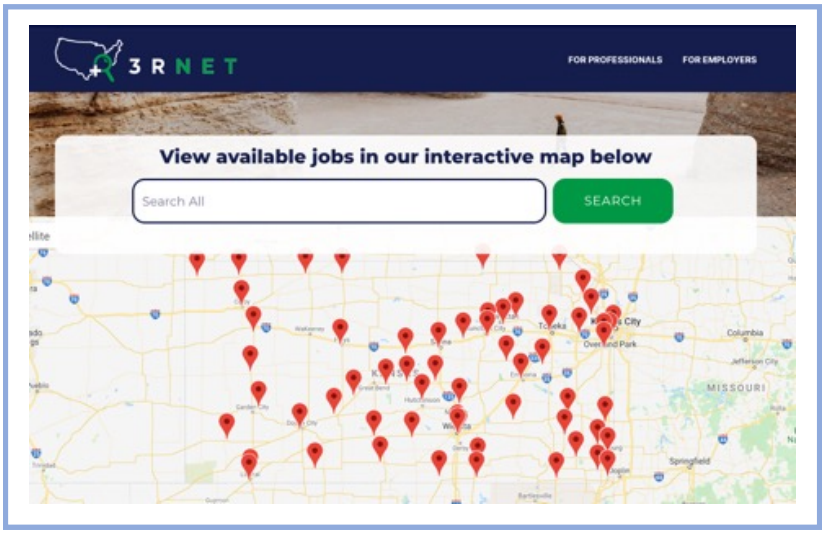
[67] *https://www.npr.org/sections/health-shots/2019/08/15/747023263/creative-recruiting-helps-rural-hospitals-overcome-doctor-shortages*

National Rural Recruitment and Retention Network

3RNET (National Rural Recruitment and Retention Network) is a nonprofit network funded by the Federal Office of Rural Health Policy and member dues. More than 2,000 medical professional placements are achieved annually through 3RNET's recruitment tools, with 90% of these in designated shortage areas. The main focus of 3RNET's efforts is to connect people seeking healthcare-related jobs in rural or underserved communities with health-care employers known as "safety net providers." These include:

- Critical Access Hospitals
- Rural Health Clinics
- Rural hospitals
- Federally Qualified Health Centers/Community health centers
- Public health agencies
- Free clinics
- State prisons
- Community mental health centers
- Substance use disorder treatment facilities

In Kansas, 3RNET posted nearly 500 open positions in rural communities in Q1 2022



Rural Physician Recruitment

The white paper Rural Physician Recruitment: Results from our Rural Physician and Administration Survey notes that administrators who recruit physicians with the intention of having them stay in place long term will need to "do more homework" in terms of understanding the physician's background, and should be creative when creating an offer. According to a survey referenced in this paper, the two most compelling incentives for physicians to remain in one position for five or more years are increased compensation for clinical or leadership duties and reduced hours or a more flexible work schedule.[68]

Candidate Concerns – Jobs in Rural Communities

Healthcare professionals who are considering a job opportunity in a rural community may have a range of concerns such as:

- A heavy workload, with a large number of patients to see and patients who require more care
- Difficulty taking time off
- Call frequency
- Professional isolation
- Challenges in maintaining professional boundaries

A healthcare professional's family may also bring concerns to the table when considering a rural job offer. Family concerns may include:

- Limited job opportunities for spouses
- Travel distances to attend school
- Availability of afterschool programs and daycare
- Lack of groups and other support for special interests and needs

Rural healthcare facilities and communities can help job seekers consider some of the rewards that balance out the challenges of a rural position. Positive aspects of rural practice can include:

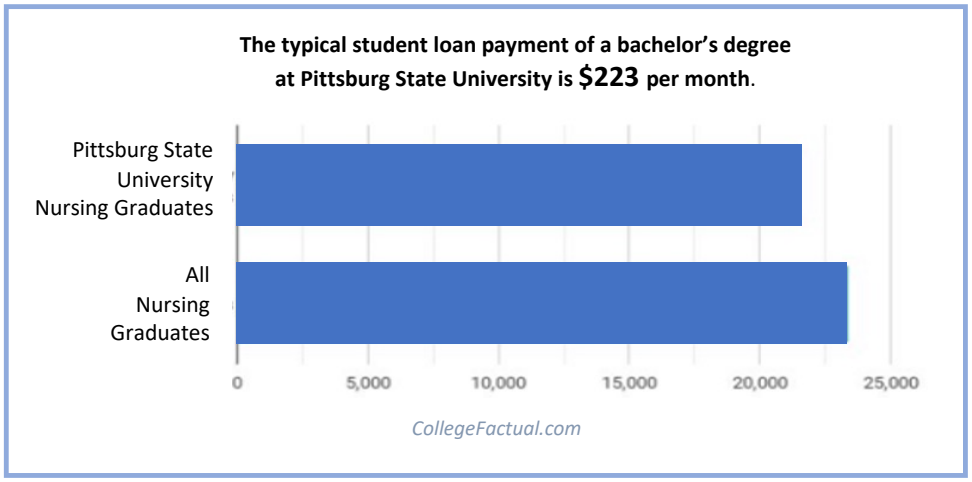
- Rural practitioners can experience a greater sense of mission and accomplishment because they serve in an area of need.
- They may also find they can develop stronger relationships with patients whom they come to know in many other contexts in the community.
- There are also personal rewards for both providers and their families: a lifestyle that has a slower pace, greater access to the outdoors, and other factors that make rural life an appealing choice.
- A greater sense of practice autonomy
- Opportunities for leadership or preceptorship
- Opportunities for incentive programs such as loan repayment programs

[68] *https://www.jacksonphysiciansearch.com/white-paper-rural-recruitment/*

Irene Ransom Bradley School of Nursing at Pittsburg State University

During the 2019-2020 academic year, Pittsburg State University handed out 120 bachelor's degrees in nursing. 3 students received master's degree, and 13 students received doctoral degrees. The average debt upon graduation is over $**21,500** per student.[69]

Student Debt for Nursing Majors with Bachelor's Degree



Workforce Recruitment and Retention Programs[70]

Kansas State Conrad 30 J-1 Visa Waiver Program

Kansas participates in the State Conrad 30 J-1 Visa Waiver Program, which assists in the recruitment of physicians to practice in communities that lack adequate access to primary health care. Section 214-(1) of the federal Immigration and Nationality Act [8 USC Section 1184(l)] allows each state to annually recommend up to 30 international medical graduates to be granted a waiver of the J-1 visa two-year home-country residency requirement, in return for practicing medicine full-time for a minimum of three years in a medically underserved area. This allows Kansas to have 90 physicians working in the state to provide care in our underserved areas. Selection of these physicians is competitive and is based on HPSA score, primary care (prioritized) vs. specialty care, rural (prioritized) vs. urban location, percentage of Medicaid and other low-income patients served, need of facility, number of recent waivers approved by the health facility, and number of recent waivers approved for the geographic location. As of February 2021, 22 physicians had been recommended for the program year.

[69] *https://www.collegefactual.com/colleges/pittsburg-state-university/academic-life/academic-majors/health-care-professions/nursing/#diversity*

[70] *Kansas Dept Health and Environment, Health Professional Underserved Areas Report, 2020*

Kansas State Loan Repayment Program
Success Stories The State Loan Repayment Program (SLRP) provides loan repayment assistance for qualifying educational loans to health care professionals working in approved practice sites within a HPSA. The SLRP program provides loan repayment assistance to eligible professionals in areas not covered by the NHSC LRP. After the initial two-year SLRP service commitment, continuation contracts may be granted, in one-year increments, for up to three additional years of service. The health care professional must commit to provide direct patient care services at an eligible practice site and must be licensed in Kansas in one of the approved disciplines listed in Table 5.

National Health Service Corps Loan Repayment Program
The National Health Service Corps (NHSC), part of the Health Resources and Services Administration (HRSA), offers several different options for scholarships and loan repayment. In 2020, the NHSC had 116 participants at 64 practice sites in Kansas.

Nurse Corps Loan Repayment Program
The Nurse Corps Loan Repayment Program (NC) LRP, also offered by HRSA, is available to provide loan repayment assistance to registered nurses (RNs), including advanced practice registered nurses (APRNs), in return for a commitment to work at eligible health care facilities with a critical shortage of nurses or serve as nurse faculty in eligible schools of nursing. In 2020, the NC LRP had 10 participants at 10 practice sites in Kansas.

NHSC Loan Repayment Program
The NHSC Loan Repayment Program (NHSC LRP) aids primary care medical, dental, and mental/behavioral health care professionals. The LRP offers levels of loan repayment awards up to $50,000 in exchange for a health professional's two year full-time, or four-year part-time, service commitment in a federally designated HPSA. NHSC Rural Community Loan Repayment Program The Rural Community (RC) LRP provides up to $100,000 to qualified health professionals working to combat the opioid epidemic in rural communities.

NHSC Scholarship Program
The NHSC Scholarship Program (SP) awards scholarships to students pursuing a career in primary health care professions training. Scholars are eligible to receive funding for their education in exchange for practicing in rural, urban, and tribal communities with limited access to care, upon graduation and licensure. NHSC Students-to-Service Loan Repayment Program The Students to Service (S2S) LRP provides up to $120,000 to students pursuing degrees in primary care who are in their final year of medical, dental, or nursing school. In return, awardees provide at least three years of service at an NHSC-approved site in a designated HPSA.

NHSC Substance User Disorder Workforce Loan Repayment Program
In response to the nation's growing opioid crisis, the NHSC has added the Substance Use Disorder (SUD) Workforce LRP. An award of up to $75,000 is offered in exchange for a three-year commitment from substance abuse professionals working in underserved areas to expand access to SUD treatment and prevent overdose deaths.

7.3 Workforce Compensation Trends

NURSE COMPENSATION

Mean hourly wages and salaries for nurses in all 50 states, based on May 2020 BLS data.

	Median Household Income	Nurse Hourly	Nurse Annual Wage 2022
Alabama	51,734.00	28.96	60,230.00
Alaska	75,463.00	45.81	95,270.00
Arizona	62,055.00	38.64	80,380.00
Arkansas	48,952.00	30.60	63,640.00
California	80,440.00	57.96	120,560.00
Colorado	77,127.00	37.43	77,860.00
Connecticut	78,833.00	$40.79	84,850.00
Delaware	70,176.00	35.74	74,330.00
Florida	59,227.00	33.42	69,510.00
Georgia	61,980.00	$34.38	71,510.00
Hawaii	83,102.00	50.40	104,830.00
Idaho	60,999.00	34.44	71,640.00
Illinois	69,187.00	35.85	74,560.00
Indiana	57,603.00	$32.45	67,490.00
Iowa	61,691.00	30.08	62,570.00
Kansas	62,087.00	30.87	64,200.00
Kentucky	52,295.00	31.12	64,730.00
Louisiana	51,073.00	$32.70	$68,010
Maine	58,924.00	$34.16	$71,040
Maryland	86,738.00	39.23	81,590.00
Massachusetts	85,843.00	46.27	$96,250
Michigan	59,584.00	35.57	73,980.00
Minnesota	74,593.00	38.92	80,960.00
Mississippi	45,792.00	29.45	61,250.00
Missouri	57,409.00	$31.68	65,900.00
Montana	57,153.00	33.91	70,530.00
Nebraska	63,229.00	33.41	69,480.00
Nevada	63,276.00	43.15	89,750.00
New Hampshire	77,933.00	36.52	75,970.00
New Jersey	85,751.00	41.21	85,720.00
New Mexico	51,945.00	36.40	75,700.00
New York	72,108.00	43.16	89,760.00
North Carolina	57,341.00	33.15	68,950.00
North Dakota	64,577.00	33.47	69,630.00
Ohio	58,642.00	33.53	69,750.00
Oklahoma	54,449.00	$32.02	66,600.00
Oregon	67,058.00	$46.27	96,230.00
Pennsylvania	63,463.00	35.66	74,170.00
Rhode Island	71,169.00	$39.81	82,790.00
South Carolina	56,227.00	$32.28	$67,140
South Dakota	59,533.00	29.31	$60,960
Tennessee	56,071.00	30.83	$64,120
Texas	64,034.00	$36.92	76,800.00
Utah	75,780.00	33.83	70,370.00
Vermont	63,001.00	$34.68	$72,140
Virginia	76,456.00	35.76	74,380.00
Washington	78,687.00	43.90	91,310.00
West Virginia	48,850.00	31.31	$65,130
Wisconsin	64,168.00	35.94	$74,760
Wyoming	65,003.00	34.90	72,600.00

https://www.beckershospitalreview.com/compensation-issues/rn-average-hourly-wage-salary-for-all-50-states-calif-tops-list-at-120k.html

Median annual household income data is based on the U.S. Census Bureau 2019 Current Population Survey, Annual Social and Economic Supplements Data Tables and reported by the Henry J. Kaiser Family Foundation.

8 HOSPITAL AND OPERATIONAL LICENSURE REQUIREMENTS

8.1 Available Hospital License Types

POLSINELLI

TO: Drew Solomon

FROM: Stephen Angelette
Mary Canavan

SUBJECT: Overview of Medicare Hospital Types DATE:

January 14, 2022

I. Executive Summary

Noble Health Real Estate ("Noble") requested Polsinelli to summarize different types of Medicare classifications and designations for hospitals for a new hospital project based in Fort Scott, Kansas. Specifically, Noble requested an overview of the following: short-term acute care hospitals, sole community hospitals ("SCH"), and critical access hospitals ("CAH").[1] This memorandum provides a high-level overview of each designation along with a summary of the requirements. Should Noble want more detailed information about any of the designations following its initial review, Polsinelli is able to provide additional information.

Please note: This memorandum is a general overview and does not assess whether the hospital project in Fort Scott, Kansas will meet the requirements for any of the classifications or designation summarized in this memorandum. Additionally, this memorandum only addresses the requirements from a Medicare perspective as outlined by the Centers for Medicare and Medicaid Services ("CMS").[2]

II. Overview of Medicare Hospital Types

In summary, a short-term acute care hospital is a traditional hospital institution which does not have a rural requirement enforced such as the requirements for a SCH or CAH. A SCH is similar to a short-term acute care hospital because both hospitals are required to comply with the same set of conditions of participation ("CoPs"). However, a CAH requires a different set of CoPs be met which makes it operationally different from a short-term acute care hospital and a SCH. Below is a more detailed description of the requirements for each type of hospital.

a. Short-Term Acute Care Hospital

"A hospital is an institution primarily engaged in providing, by or under the supervision of physicians, inpatient diagnostic and therapeutic services or rehabilitation services."[3] Any hospital

that enrolls in Medicare as an acute care hospital and does not request a specific classification or designation is considered

[1] There are types of classifications that a hospital may obtain such as Rural Referral Center and Medicare Dependent Hospital, which we determined were not relevant to summarize in this memo. However, if Noble would like an overview of those classifications, Polsinelli is happy to provide it.
[2] Polsinelli is happy to summarize state hospital licensing requirements upon request.
[3] CMS, State Operations Manual Chapter 2 – Certification Section 2020, https://www.cms.gov/Regulations-and- Guidance/Guidance/Manuals/Downloads/som107c02.pdf (Last Revised March 12, 2021); *See* Social Security Act §1861(e).

a short-term acute care hospital and is required to comply with the CoPs for a hospital.[4] Short-term acute care hospitals are reimbursed under the Inpatient Prospective Payment System ("IPPS").[5]

b. Sole Community Hospital

A short-term acute care hospital may be classified as a sole community hospital ("SCH") for reimbursement purposes based on its location. The hospital will continue to be required to meet the CoPs for a short-term acute care hospital but will be reimbursed at a higher rate than the general IPPS reimbursement rate due to its classification as a SCH.[6] The hospital must meet one of the two location requirements below to be classified as a SCH:

- The hospital is located more than 35 miles from other like hospitals (a "like hospital" is another short-term, acute care hospital)[7];[8] Or
- The hospital is located in a rural area and meets one of the following conditions:
  - The hospital is located between 25 and 35 miles from other like hospitals and is:
    - No more than 25% of hospitalized inpatient residents, or no more than 25% of hospitalized inpatient Medicare patients in the hospital's service area, are admitted to other like hospitals within a 35-mile radius of the hospital or, if larger, within its service area;
    - The hospital has fewer than 50 beds and would meet the 25% criterion except some patients were forced to seek specialized care outside of the service area since the specialty services were not available at the hospital; or
    - Because of local topography or periods of prolonged severe weather conditions, the other like hospitals are not accessible for at least 30 days in each of 2 out of 3 years.[9]

- The hospital is located 15 and 25 miles from other like hospitals, but because of local topography or periods of prolonged severe weather conditions, the other like hospitals are not accessible for at least 30 days in each of 2 out of 3 years.[10]

[4] *See* 42 C.F.R. § 482.
[5] *See* 42 C.F.R. § 412.
[6] CMS, MLN Educational Tool: Medicare Payment Systems Sole Community Hospitals, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/html/medicare- payment-systems.html#Acute (Last Revised Dec. 2021).
[7] 42 C.F.R. § 412.92(c)(2).
[8] 42 C.F.R. § 412.92(a).
[9] 42 C.F.R. § 412.92(a)(1).
[10] 42 C.F.R. § 412.92(a)(2).
81508856.

January 25, 2022 Page 3

- The hospital is rural and because of distance, posted speed limits, and predictable weather conditions, travel time between the hospital and the nearest like hospital is at least 45 minutes.[11]

- For hospitals with remote locations under a single provider agreement, the hospital and remote location(s)'s data is combined to determine the 25% criteria mentioned above. However, for the mileage and rural location requirements, each location must independently satisfy those requirements.[12]

For purposes of determining if a hospital meets the requirements to be considered a SCH, "rural" means any area that is outside an urban area.[13]

A hospital that can demonstrate the requirements described above may then request SCH classification from CMS to receive increased reimbursement.[14] The classification remains in effect without requiring periodic approvals until circumstances change that may impact the hospital's SCH classification.[15] The hospital is required to notify CMS if an event occurs that affects its SCH classification.[16]

c. Critical Access Hospitals

Unlike other classifications described above that require the same CoPs, a critical access hospital ("CAH") requires the hospital to meet a completely different set of CoPs to be designated as a CAH. A hospital may be designated as a CAH if it is a hospital that is currently participating in Medicare and meet the CAH CoPs,[17] which include eligibility requirements such as location, bed count, and average length of stay ("ALOS").[18] According to CMS, a hospital must meet the following criteria to be designated as a CAH:[19]

- *Location:* The CAH must be located in a state that has established a Medicare Rural Hospital Flex Program and the state designates the hospital as CAH.[20] Additionally, the CAH must be located in a rural area or treated as a rural hospital.[21] Lastly, the CAH is located more than a 35-mile drive from another hospital or CAH.[22]

[11] 42 C.F.R. § 412.92(a)(3).
[12] 42 C.F.R. § 412.92(a)(4).
[13] 42 C.F.R. § 412.64(b)(1)(ii)(C).
[14] 42 C.F.R. § 412.92(b)(1).
[15] 42 C.F.R. § 412.92(b)(3)(i).
[16] 42 C.F.R. § 412.92(b)(3)(ii)-(iv).
[17] 42 C.F.R. § 485.610(a)(1).
[18] *See* 42 C.F.R. § 485 Subpart F.
[19] CMS, *Critical Access Hospitals,* https://www.cms.gov/Medicare/Provider-Enrollment-and- Certification/CertificationandComplianc/CAHs (Last Revised Dec. 1, 2021).
[20] 42 C.F.R. § 485.606(a); The states that do not meet this requirement are currently Connecticut, Delaware, Maryland, New Jersey, and Rhode Island. CMS, MLN Booklet: *Critical Access Hospitals*, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network- MLN/MLNProducts/Downloads/CritAccessHospfctsht.pdf (Last revised March 2021).
[21] 42 C.F.R. § 485.610(b).
[22] 42 C.F.R. § 485.610(c); The regulation permits reduction of this distance requirement to more than a 15-mile drive in the case of mountainous terrain or in areas with only secondary roads available. The determination of
81508856.2

January 25, 2022 Page 4

- *Bed Count:* The CAH maintains no more than 25 inpatient beds that can be used for inpatient services or swing-bed services.[23]
- *Average Length of Stay:* The CAH maintains an annual ALOS of 96 hours or less per patient.[24]
- *Emergency Services:* The CAH must furnish emergency care 24/7.[25]
- *Compliance:* The CAH must meet the specific CAH CoPs outlined in the regulations.[26]

To determine whether the hospital is in a rural area or being treated as a rural hospital, the hospital must be in an area outside of an urban area or the hospital has not been classified as an urban hospital.[27] Alternatively, the hospital could also be located within a Metropolitan Statistical Area but being treated as though it is in a rural area to meet the location requirement.[28]

Once a hospital meets the requirements and receives the required approvals to be designated as a CAH, the hospital will also be reimbursed under a different payment methodology than the IPPS.

whether or not a CAH applicant has met the requirements of § 485.610(c) will be made by the Regional CMS Office ("RO").

[23] 42 C.F.R. § 485.620(a); This requirement has been waived during the Public Health Emergency. CMS, MLN Booklet: *Critical Access Hospitals*, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network- MLN/MLNProducts/Downloads/CritAccessHospfctsht.pdf (Last revised March 2021).

24 42 C.F.R. § 485.620(b); This requirement has been waived during the Public Health Emergency. CMS, MLN Booklet: *Critical Access Hospitals*, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network- MLN/MLNProducts/Downloads/CritAccessHospfctsht.pdf (Last revised March 2021).

[25] 42 C.F.R. § 485.618(a).

[26] *See* 42 C.F.R. § 485 Subpart F.

[27] 42 C.F.R. § 485.610(b)(1)(i).

[28] 42 C.F.R. § 485.610(b)(1)(ii).

81508856.2

POLSINELLI Memorandum

TO: Drew Solomon

FROM: Stephen Angelette
Mary Canavan

SUBJECT: Overview of Medicare Hospital Types

DATE: January 14, 2022

I. Executive Summary

Noble Health Real Estate ("Noble") requested Polsinelli to summarize different types of Medicare classifications and designations for hospitals for a new hospital project based in Fort Scott, Kansas. Specifically, Noble requested an overview of the following: short-term acute care hospitals, sole community hospitals ("SCH"), and critical access hospitals ("CAH").[1] This memorandum provides a high-level overview of each designation along with a summary of the requirements. Should Noble want more detailed information about any of the designations following its initial review, Polsinelli is able to provide additional information.

Please note: This memorandum is a general overview and does not assess whether the hospital project in Fort Scott, Kansas will meet the requirements for any of the classifications or designation summarized in this memorandum. Additionally, this memorandum only addresses the requirements from a Medicare perspective as outlined by the Centers for Medicare and Medicaid Services ("CMS").[2]

II. Overview of Medicare Hospital Types

In summary, a short-term acute care hospital is a traditional hospital institution which does not have a rural requirement enforced such as the requirements for a SCH or CAH. A SCH is similar to a short-term acute care hospital because both hospitals are required to comply with the same set of conditions of participation ("CoPs"). However, a CAH requires a different set of CoPs be met which makes it operationally different from a short-term acute care hospital and a SCH. Below is a more detailed description of the requirements for each type of hospital.

a. Short-Term Acute Care Hospital

"A hospital is an institution primarily engaged in providing, by or under the supervision of physicians, inpatient diagnostic and therapeutic services or rehabilitation services."[3] Any hospital that enrolls in Medicare as an acute care hospital and does not request a specific classification or designation is considered

[1] There are types of classifications that a hospital may obtain such as Rural Referral Center and Medicare Dependent Hospital, which we determined were not relevant to summarize in this memo. However, if Noble would like an overview of those classifications, Polsinelli is happy to provide it.
[2] Polsinelli is happy to summarize state hospital licensing requirements upon request.
[3] CMS, State Operations Manual Chapter 2 – Certification Section 2020, https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/som107c02.pdf (Last Revised March 12, 2021); *See* Social Security Act §1861(e).

a short-term acute care hospital and is required to comply with the CoPs for a hospital.[4] Short-term acute care hospitals are reimbursed under the Inpatient Prospective Payment System ("IPPS").[5]

b. Sole Community Hospital

A short-term acute care hospital may be classified as a sole community hospital ("SCH") for reimbursement purposes based on its location. The hospital will continue to be required to meet the CoPs for a short-term acute care hospital but will be reimbursed at a higher rate than the general IPPS reimbursement rate due to its classification as a SCH.[6] The hospital must meet one of the two location requirements below to be classified as a SCH:

- The hospital is located more than 35 miles from other like hospitals (a "like hospital" is another short-term, acute care hospital)[7];[8] Or
- The hospital is located in a rural area and meets one of the following conditions:
  - The hospital is located between 25 and 35 miles from other like hospitals and is:
    - No more than 25% of hospitalized inpatient residents, or no more than 25% of hospitalized inpatient Medicare patients in the hospital's service area, are admitted to other like hospitals within a 35-mile radius of the hospital or, if larger, within its service area;
    - The hospital has fewer than 50 beds and would meet the 25% criterion except some patients were forced to seek specialized care outside of the service area since the specialty services were not available at the hospital; or
    - Because of local topography or periods of prolonged severe weather conditions, the other like hospitals are not accessible for at least 30 days in each of 2 out of 3 years.[9]
  - The hospital is located 15 and 25 miles from other like hospitals, but because of local topography or periods of prolonged severe weather conditions, the other like hospitals are not accessible for at least 30 days in each of 2 out of 3 years.[10]

[4] *See* 42 C.F.R. § 482.
[5] *See* 42 C.F.R. § 412.
[6] CMS, MLN Educational Tool: Medicare Payment Systems Sole Community Hospitals, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/html/medicare-payment-systems.html#Acute (Last Revised Dec. 2021).
[7] 42 C.F.R. § 412.92(c)(2).
[8] 42 C.F.R. § 412.92(a).
[9] 42 C.F.R. § 412.92(a)(1).
[10] 42 C.F.R. § 412.92(a)(2).

- The hospital is rural and because of distance, posted speed limits, and predictable weather conditions, travel time between the hospital and the nearest like hospital is at least 45 minutes.[11]

- For hospitals with remote locations under a single provider agreement, the hospital and remote location(s)'s data is combined to determine the 25% criteria mentioned above. However, for the mileage and rural location requirements, each location must independently satisfy those requirements.[12]

For purposes of determining if a hospital meets the requirements to be considered a SCH, "rural" means any area that is outside an urban area.[13]

A hospital that can demonstrate the requirements described above may then request SCH classification from CMS to receive increased reimbursement.[14] The classification remains in effect without requiring periodic approvals until circumstances change that may impact the hospital's SCH classification.[15] The hospital is required to notify CMS if an event occurs that affects its SCH classification.[16]

c. Critical Access Hospitals

Unlike other classifications described above that require the same CoPs, a critical access hospital ("CAH") requires the hospital to meet a completely different set of CoPs to be designated as a CAH. A hospital may be designated as a CAH if it is a hospital that is currently participating in Medicare and meet the CAH CoPs,[17] which include eligibility requirements such as location, bed count, and average length of stay ("ALOS").[18] According to CMS, a hospital must meet the following criteria to be designated as a CAH:[19]

- *Location:* The CAH must be located in a state that has established a Medicare Rural Hospital Flex Program and the state designates the hospital as CAH.[20] Additionally, the CAH must be located in a rural area or treated as a rural hospital.[21] Lastly, the CAH is located more than a 35-mile drive from another hospital or CAH.[22]

---

[11] 42 C.F.R. § 412.92(a)(3).
[12] 42 C.F.R. § 412.92(a)(4).
[13] 42 C.F.R. § 412.64(b)(1)(ii)(C).
[14] 42 C.F.R. § 412.92(b)(1).
[15] 42 C.F.R. § 412.92(b)(3)(i).
[16] 42 C.F.R. § 412.92(b)(3)(ii)-(iv).
[17] 42 C.F.R. § 485.610(a)(1).
[18] *See* 42 C.F.R. § 485 Subpart F.
[19] CMS, *Critical Access Hospitals,* https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/CAHs (Last Revised Dec. 1, 2021).
[20] 42 C.F.R. § 485.606(a); The states that do not meet this requirement are currently Connecticut, Delaware, Maryland, New Jersey, and Rhode Island. CMS, MLN Booklet: *Critical Access Hospitals*, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/CritAccessHospfctsht.pdf (Last revised March 2021).
[21] 42 C.F.R. § 485.610(b).
[22] 42 C.F.R. § 485.610(c); The regulation permits reduction of this distance requirement to more than a 15-mile drive in the case of mountainous terrain or in areas with only secondary roads available. The determination of

- *Bed Count:* The CAH maintains no more than 25 inpatient beds that can be used for inpatient services or swing-bed services.[23]
- *Average Length of Stay:* The CAH maintains an annual ALOS of 96 hours or less per patient.[24]
- *Emergency Services:* The CAH must furnish emergency care 24/7.[25]
- *Compliance:* The CAH must meet the specific CAH CoPs outlined in the regulations.[26]

To determine whether the hospital is in a rural area or being treated as a rural hospital, the hospital must be in an area outside of an urban area or the hospital has not been classified as an urban hospital.[27] Alternatively, the hospital could also be located within a Metropolitan Statistical Area but being treated as though it is in a rural area to meet the location requirement.[28]

Once a hospital meets the requirements and receives the required approvals to be designated as a CAH, the hospital will also be reimbursed under a different payment methodology than the IPPS.

---

whether or not a CAH applicant has met the requirements of § 485.610(c) will be made by the Regional CMS Office ("RO").

[23] 42 C.F.R. § 485.620(a); This requirement has been waived during the Public Health Emergency. CMS, MLN Booklet: *Critical Access Hospitals*, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/CritAccessHospfctsht.pdf (Last revised March 2021).

24 42 C.F.R. § 485.620(b); This requirement has been waived during the Public Health Emergency. CMS, MLN Booklet: *Critical Access Hospitals*, https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/CritAccessHospfctsht.pdf (Last revised March 2021).

[25] 42 C.F.R. § 485.618(a).

[26] *See* 42 C.F.R. § 485 Subpart F.

[27] 42 C.F.R. § 485.610(b)(1)(i).

[28] 42 C.F.R. § 485.610(b)(1)(ii).

9 BUILDING ASSESSMENT

9.1 Appraisal

The appraisal contained conducted by HealthTrust as a part of the feasibility analysis provide a summary of the facility condition, assumptions and expected value of the property. The contemplated use of a minimum med surg beds and significant use of the facility square footage for use on behavioral health/Senior Care is to identify complimentary service use that can help best utilize and collaborate with a small community hospital regardless of license type in the facility.

The shuttered property value is listed at $6,900,000 and the real property value in the appraisal less any FF&E is $ 18,350,000. This asset value presents the potential for a borrowing basis and equity source to help conservatively improve the facility condition, attract the right collaborative partner for a small community hospital and complimentary tenants that can maximize the use, sustainability, and benefit to the community.

The Structure has 171,508 sf with roughly 60 % of that SF being of the main level. Given the current occupied space, the most sustainable strategy for the structure is to work to the initial goal of 60% space utilization at a fair market value rent with a long-term goal of 75-80% occupancy.

9.2 Environmental Evaluation and Building Inspection

Noble Health Corp. hired UES Consulting Services to perform a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of the aforementioned subject property.

The study recognized environmental conditions, controlled recognized environmental conditions, historical recognized environmental conditions, and/or de minimis conditions associated with the subject property. The assessment reviewed the 12,000 gallon diesel underground storage tank and the two emergency backup generators. There were no items of environmental concern noted in connection with the diesel UST, emergency backup generators, and exposed piping connections during the site inspection, and there are no reported releases. Although the UST represents a recognized environmental condition (REC) due to the threat of a future release to the environment, based on its age, compliance status, and good regulatory standing, no further action is recommended at this time in connection with the diesel UST.

This assessment has determined there are no historical recognized environmental conditions associated with the subject property.

Conditions determined to be de minimis are not recognized environmental conditions nor controlled recognized environmental conditions. This assessment has determined there are no de minimis conditions associated with the subject property.

RECOMMENDATION: No further environmental studies are recommended at this time.

The Building Inspection Report is included in the building appendix documents and digital hard drive.

9.3 Architectural Review + Concepts

Architectural Review document in Building Appendix documents and digital hard drive.

9.4 Construction Bids

Construction proposals submitted by McCown Gordon Construction, Murray Construction, and Nabholz Construction. These proposals are separately bound documents. Digital copies of these documents are included in the Feasibility Study Digital Hard Drive.

9.5 Operational Readiness – Siemens Report

The Siemens report assesses the readiness of existing building systems to support hospital operation and estimates scope and cost to replace these systems. Appendix C.

9.6 Financing Options

Given the appraisal of the property and the age of the property, there are several financing options that could be pursued. Taxable or Tax-exempt bonds depending on entity applicant qualification for bond type, as well as traditional lender debt. A 50-75 % LTV on the real property portion of the appraisal would create a debt working capital range of $9,175,000 to 13,762,500. Based on a 20-year Amortization at a 5% interest rate the range of monthly payment on that debt would be $ 60,551 at 50% LTV and $90,826 at 75% LTV. Given a conservative approach to reserves, rents and facility improvements, the 50% LTV amount of $9,175,000 should provide sufficient capital to execute on thoughtful facility upgrades to support the inclusion of the community hospital and attract and partner with the right tenant for behavioral/Senior Care services to support the overall stability of the facility. If a public or tax-exempt entity engaged in procuring Tax Exempt bond financing the likely interest rate would be significantly lower given current market conditions, which would lower the monthly payments on the debt by that corresponding reduction. Extending the term to a 25- or 30-year amortization would also have a similar effect of reducing the monthly cost of the capital.

Regardless of structure, achieving a target 1.3 -1.4 DSCR for the will likely be the target for a bank or bond investor to want to achieve with lease coverage above the cost of capital. This should be achievable by reviewing the fair market value of leases and finding the right strategic partners/tenant mix. The focus should be finding collaborative service tenants that have mutual benefit with being in a facility where hospital services are located. Redeveloping at a pace that occupancy grows will help capital efficiency and keep the capital in reserve to make the necessary investments to adequately achieve additional leased square footage in the building that produces a financial return as well as the needed service.

The control of the structure and its value for Bourbon County presents a significant asset by which strategy on how to achieve the goals of returning an efficiently sized community hospital and a well leased structure can be achieved. Many communities of similar size and situation lack the asset to readily structure a financing to achieve a goal. Bourbon County would be well served to consider a reserve-based approach where portions of the structure would be developed based on use and necessity to maintain a sizeable capital reserve from the proceeds of the debt to serve the long-term

sustainability of the development for the purpose of sustaining a small community hospital and collaborative tenants.

Additional sources of financing should be considered for the project utilizing New Market Tax Credits by identifying a CDFI to apply for and structure the financing. Based on the project type and the census track data for the site, it would present a strong application for consideration. PACE financing should also be reviewed in order invest in energy improvements and efficiencies in the building to support long term sustainability.

9.7 Pro-Forma Financials

Appraisal Financials XLS – printed pages are Appendix D and a digital copy of these financials is in the Feasibility Report Digital Hard Drive..

10 SOURCE AND REFERENCE DOCUMENTS

1 CONCLUSIONS AND RECOMMENDATIONS

no citations

2 SEK AND BOURBON COUNTY LANDSCAPE

2.1 Demographics: Kansas - Southeastern Kansas - Bourbon County

SEK-CAP and Project 17. Southeast Kansas Regional Assessment, April 2015. http://www.sek-cap.com/images/ Community-Assessment/2016_Annual_Update/Southeast_ Kansas_Regional_Assessment_-September_15_2016_ UPDATE.pdf

[1]https://fred.stlouisfed.org/series/KSBOUR1POP

https://www.census.gov/library/stories/state-by-state/kansas-population-change-between-census-decade.html

Kansas Population Projections, Center for Economic Development and Business Research CEDBR, Wichita State University. https://www.cedbr.org/forecast-blog/kansas-population

Southeast Kansas Regional Assessment, SEK-CAP and Project 17, 2017.

The Lifetime Distribution of Health Care Costs, Health Services Research, Alemayehu and Warner 2004. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1361028/

2.2 State of Health: Kansas – Southeastern Kansas – Bourbon County

https://www.khanetnet.org/CriticalIssues/AccessToCare/RuralIssues/Resources/d116726.aspx?type=view

https://www.kansashealthmatters.org/resourcelibrary/index/view?id=129031869338218097

Kansas Primary Care Needs Assessment 2021

Institute for Health Metrics and Evaluation (IHME), US County Profile: Bourbon County, Kansas. Seattle, WA: IHME, 2016.

Southeast Kansas Health Committee, 2017 Community Health Assessment, Community Health Improvement Plan

https://www.cdc.gov/healthyweight/effects/index.htm

https://www.cdc.gov/obesity/adult/causes.html

https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.121.054516

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5733403/

https://www.kansashealthmatters.org/indicators/index/view?indicatorId=1333&localeId=945

SEK_CAP 2017

The Future of Rural Behavioral Health, NHRA, Feb 2015

https://www.kansashealthmatters.org/indicators/index/view?indicatorId=1343&localeId=945S

Southeast Kansas Community Action Program (SEK-CAP) Community Needs Assessment 2019-2021

Southeast Kansas Community Health Assessment, Southeast Kansas Health Committee 2017.

https://www.kansashealthmatters.org/resourcelibrary/index/view?id=129031869338218097

HRSA Data Warehouse Locator – CHC Locations in SEK

Southeast Kansas Regional Assessment, SEK-CAP and Project 17, Published 2015 Updated 2016.

Burden of Coronary Heart Disease and Stroke in Kansas, Kansas Dept of health and Environment, July 2010

Kansas Mental Health Task Force, Report to the Kansas Legislature, January 2019.

Social Vulnerability and Premature CVD Mortality https://www.acc.org/latest-in-cardiology/journal-scans/2021/10/20/17/04/social-vulnerability-and-premature

https://www.kha-net.org/CriticalIssues/AccessToCare/RuralIssues/

https://www.communityconversationsks.com/

National Diabetes statistics Report – Estimates of Diabetes and its Burden in the US 2020 https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf#page=5

Deaths Due to Injury by Firearms per 100,000 population, KFF, 2019. https://www.kff.org/other/state-indicator/firearms-death-rate-per-100000/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

Uninsured Rates Across Kansas Counties, Kansas Health Institute, 2020. https://www.khi.org/policy/article/20-39

Age Adjusted Unintentional Injuries Mortality Rate per 100,000 Population 2018-2020. https://www.kansashealthmatters.org/indicators/index/view?indicatorId=1343&localeId=945

Overview of Emergency Department Visits Related to Injuries, by Cause of Injury, 2017. Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project Brief #266 Nov 2020. https://www.hcup-us.ahrq.gov/reports/statbriefs/sb266-Injuries-Causes-ED-Visits-2017.jsp

Why are Death Rates Rising in the White Population in Kansas? The Role of Stress Related Conditions, Kansas Health Institute, May 2018. https://www.khi.org/policy/article/vcu-study

How Can Kansas Hospitals and Health Systems Engage in Population Health? Kansas Health Institute, Oct 2018. https://www.khi.org/policy/article/18-22

2.3 Economic Impact of Health Care to Bourbon County

https://www.ruralhealthinfo.org/topics/community-vitality-and-rural-healthcare

Protecting the Foundation of Healthcare in Kansas, KHA 2019

SEK-CAP and Project 17. Southeast Kansas Regional Assessment, April 2015. http://www.sek-cap.com/images/ Community-

Assessment/2016_Annual_Update/Southeast_ Kansas_Regional_Assessment_-September_15_2016_ UPDATE.pdf

The Importance of the Healthcare Sector to the Kansas Economy, Kansas Hospital Association, John Leatherman and Becatien Yao, Kansas State University Dept of Agricultural Economics January 2021.

Kansas Hospital Economic Impact, KHA. https://www.kha-net.org/CriticalIssues/EconomicImpact/

2.4 Survey Results: Kansas – Southeast Kansas – Bourbon County

https://www.khi.org/policy/article/18-22

SEK CAP Community Needs Assessment 2019-2021

Bourbon County Health Survey 2021

Bourbon County Resident Survey, Dec 2020.

SEK Community Needs Assessment, SEK-CAP 2019-2021

Chase County Needs Assessment, KU Medical Center, Population Health Department, July 2020.

Wilson County Needs Assessment, KU Medical Center, Population Health Department, May 2019.

https://www.kumc.edu/community-engagement/our-divisions/rural-health.html?=redirect

Community Hospital Utilization and Finance Trends KHA, 2020. https://www.kha-net.org/DataProductsandServices/STAT/HospitalUtilization/UtilizationTrends/

Inpatient and Outpatient Data. KHA. https://www.kha-net.org/DataProductsandServices/STAT/HospitalUtilization/UtilizationTrends/

Rural Community Hospital Demonstration, Centers for Medicare and Medicaid Services, 2021. https://innovation.cms.gov/innovation-models/rural-community-hospital

The Rural Community Hospital Demonstration 2005-2017 Findings at a Glance, Center for Medicare and Medicaid Innovation, https://innovation.cms.gov/innovation-models/rural-community-hospital/

https://innovation.cms.gov/innovation-models/gpdc-model

Accountable Care Organization, Realizing Equity , Access, and Community Health (REACH model), CMS, 2022. https://www.cms.gov/newsroom/fact-sheets/accountable-care-organization-aco-realizing-equity-access-and-community-health-reach-model

2.5 Bourbon County Community Meetings

no citations

3 FEASIBILITY ANALYSIS

3.1 The Context for Rural Hospitals

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5751794/

https://ruralhospitals.chqpr.org/index.html

https://ruralhospitals.chqpr.org/Overview.html

https://www.kha-net.org/criticalissues/accesstocare/ruralissues/resources/?page=4

Kansas Hospital Association, 2013

Principles for a Sustainable Rural Health Delivery System, KHA Rural Health Visioning Technical Advisory Group, Nov 2013

Kansas Hospital Association 2013

The Future of Rural Health, NRHA 2013

The Carsey Institute at the University of New Hampshire

3.2 The Rural Hospital Problem: National, Kansas, and Bourbon County

https://ruralhospitals.chqpr.org/Problems.html

https://ruralhospitals.chqpr.org/Importance.html

Rural Hospital Vulnerability, The Chartis Center for Rural Health, 2020

https://www.shepscenter.unc.edu/product/characteristics-communities-served-hospitals-high-risk-financial-distres[1] Holmes GM, Kaufman BG, Pink GH. Predicting financial distress and closure in rural hospitals. The Journal of Rural Health. 2017 Jun;33(3):239-49.

Thomas SR, Holmes GM, Pink GH. To what extent do community characteristics explain differences in closure among financially distressed rural hospitals? Journal of health care for the poor and underserved. 2016;27 (4):194-203.

The Rural Health Safety Net Under Pressure, Rural Hospital Vulnerability, Chartis Center for Rural Health, Feb 2020.

Safety Net Clinics Serving the Elderly in Rural Areas: Rural Health Clinic Patients Compared to Federally Qualified Health Center Patients, NC Rural Health Research Program, April 2019

Characteristics of Communities Served by Rural Hospitals Predicted to be at High Risk of Financial Distress in 2019, NC Rural Health Research Program, April 2019.

How Have Healthcare Prices Grown in the US Over Time, Peterson-KFF Health System Tracker. https://www.healthsystemtracker.org/chart-collection/how-have-healthcare-prices-grown-in-the-u-s-over-time/

3.3 Rural Hospital Financial Distress Index Evaluation – no citations

3.4 Bourbon County & SEK Hospital Operational Analysis – no citations

3.5 Outmigration – no citations

3.6 Ancillary Services – no citations

4 RURAL REIMBURSEMENT STRUCTURE

4.1 SEK Hospital Reimbursement Context – no citations

4.2 Public and Private Insurer Reimbursement Comparison – no citations

4.3 Medicare / Medicaid Reimbursement by Hospital Operating Model – no citations

5 NEW MODELS FOR SUSTAINABLE RURAL HOSPITALS

5.1 Necessary Components for Rural Hospital Operations

The Future of Rural Healthcare Task Force – Final Recommendations, May 2021.

Emerging strategies to Ensure Access to Healthcare Services, AHA Task Force on Ensuring Access in Vulnerable Communities AHA, July 2018.

A Guide for Rural Healthcare Collaboration and Coordination, US Dept of Health and Human Services, HRSA, Aug 2019.

Safety Net Clinics Serving the Elderly in Rural Areas: Rural Health Clinic Patients Compared to Federally Qualified Health Center Patients, NC Rural Health Research Program, May 2014

Financing the Rural Health Center. KHA Rural Health Visioning, TAG Conclusions, Nov 2016.

Transforming Rural Healthcare – The Primary Health Center Model, Kansas Hospital Association 2016.

5.2 Sustainable Care Model Framework

Direct Contracting Model, RHI Hub, 2020, https://www.ruralhealthinfo.org/funding/4833

HRSA-Rural-Collaboration-Guide Aug 2019

2018-rural-clinical-integration American Hospital Association | July 2018

Future of Rural Health Care Task Force May 2021 AHA

The hub-and-spoke organization design revisited: a lifeline for rural hospitals

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5751794/

Issues in Rural Health: Access, Hospitals, and Reform https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4193574/

The Rural Health Safety Net Under Pressure: Rural Hospital Vulnerability https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7185050/

https://revcycleintelligence.com/news/cms-lays-out-new-strategy-for-advancing-value-based-care-apms

Value Based Healthcare https://www.ncbi.nlm.nih.gov/books/NBK338758/

Seeking Models for Sustaining Access to Health Care in Rural Communities. Rural Hospital Conference, Nov 2017.

5.3 Implementing Collaboration Models – no citations

5.4 Center for Hospital Quality and Payment Model Reform

Saving Rural Hospitals. Center for Healthcare Quality and Payment Reform, 2022. https://ruralhospitals.chqpr.org/Overview.html

Rural Hospitals at Risk of Closing, CHQPR 2022.

5.5 Kansas Hospital Association Model

Rural Issue Resources – Document Library, KHA website. https://www.kha-net.org/criticalissues/accesstocare/ruralissues/resources/?page=4

Thinking about the Future, Board Questions, KHA / KHERF

Rural Health Visioning Presentation, KHA 2916

New Rural Model: Primary Health Center Test Findings, Kansas Hospital Association Rural Health Visioning Technical Advisory Group May 2016.

Sustaining Rural Health Care In Kansas: The Development of Alternative Models (White Paper), Kansas Hospital Association Rural Health Visioning Technical Advisory Group, 2015

5.6 The REH Model for 2023

Rural Emergency Hospital Model Summary, National Rural Health Association, April 2021.

The Consolidated Appropriations Act of 2021, H.R. 133, 116th Cong. (2020). https://www.congress.gov/116/bills/hr133/BILLS-116hr133enr.pdf

Cook, E.J., et. All. “Congress Establishes New Medicare Provider Category and Reimbursement for Rural Emergency Hospitals.” January 5, 2021. Retrieved from https://www.mwe.com/insights/congressestablishes-new-medicare-provider-category-and-reimbursement-for-rural-emergency-hospitals/

Gujral, K., & Basu, A. (2020, June). Impact of Rural and Urban Hospital Closures on Inpatient Mortality. National Bureau of Economic Research. https://doi.org/10.3386/w26182

6 HOSPITAL OPERATIONS AND REVENUE POTENTIAL

6.1 Hospital Service Lines – Pro-Forma Financials - no citations

6.2 State of Kansas Collaboration Models – no citations

6.3 Grant Opportunities for the Hospital – no citations

7 HEALTHCARE WORKFORCE

7.1 Kansas Practice Regulations

Kansas Practice Regulations, Online Journal of Rural Nursing & Health Care. 2021, Vol. 21 Issue 2, p14-43. 30p.

7.2 Recruiting Challenges and Strategies for Rural Hospitals

https://web.p.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15393399&AN=154409354&h=FOrJ7F%2bI6wthcFnTanM7x3zf8KJjaW9H62bptHWNoTF25R8FkR%2bPEuDmhUuBDipC%2f7osywX5AkF9mXHYTpLpBA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15393399%26AN%3d154409354

https://journals.lww.com/jonajournal/Abstract/2010/01000/Job_Embeddedness_as_a_Nurse_Retention_Strategy_for.7.aspx

https://scholar.google.com/scholar?q=recruitment+challenges+faced+by+rural+hospitals&hl=en&as_sdt=0&as_vis=1&oi=scholart

The challenges of recruiting physicians to rural healthcare facilities — and how to overcome them Recruitment and Retention for Rural Health Facilities https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention

Rural Physician Recruiting Challenges and Solutions Merritt Hawkins 2016

The COVID 19 Pandemic's Impact on Rural Hospital Staffing, The Chartis Group, 2021.

https://www.3rnet.org/Locations/Kansas

[White Paper] Rural Recruitment: Results from our Rural Physician and Administration Survey

https://www.jacksonphysiciansearch.com/white-paper-rural-recruitment/

Pitt State Nursing https://www.pittstate.edu/nursing/#undefined2

https://www.collegefactual.com/colleges/pittsburg-state-university/academic-life/academic-majors/health-care-professions/nursing/#diversity

Recruitment and Retention for Rural Health Facilities

https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention#impacts

The challenges of recruiting physicians to rural healthcare facilities — and how to overcome them

https://weatherbyhealthcare.com/blog/recruiting-physicians-rural-healthcare-facilities

Creative Recruiting Helps Rural Hospitals Overcome Doctor Shortage https://www.npr.org/sections/health-shots/2019/08/15/747023263/creative-recruiting-helps-rural-hospitals-overcome-doctor-shortages

https://www.jacksonphysiciansearch.com/white-paper-rural-recruitment/

https://www.3rnet.org/Locations/Kansas

https://www.3rnet.org/Network-Coordinators

https://www.pittstate.edu/nursing/#undefined2

https://www.npr.org/sections/health-shots/2019/08/15/747023263/creative-recruiting-helps-rural-hospitals-overcome-doctor-shortages

https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention#international

https://weatherbyhealthcare.com/blog/recruiting-physicians-rural-healthcare-facilities

https://journals.lww.com/jonajournal/Abstract/2010/01000/Job_Embeddedness_as_a_Nurse_Retention_Strategy_for.7.aspx

https://web.p.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15393399&AN=154409354&h=FOrJ7F%2bI6wthcFnTanM7x3zf8KJjaW9H62bptHWNoTF25R8FkR%2bPEuDmhUuBDipC%2f7osywX5AkF9mXHYTpLpBA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15393399%26AN%3d154409354

https://journals.lww.com/jonajournal/Abstract/2010/01000/Job_Embeddedness_as_a_Nurse_Retention_Strategy_for.7.aspx

https://scholar.google.com/scholar?q=recruitment+challenges+faced+by+rural+hospitals&hl=en&as_sdt=0&as_vis=1&oi=scholart

The challenges of recruiting physicians to rural healthcare facilities — and how to overcome them Recruitment and Retention for Rural Health Facilities
https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention

Rural Physician Recruiting Challenges and Solutions Merritt Hawkins 2016

The COVID 19 Pandemic's Impact on Rural Hospital Staffing, The Chartis Group, 2021.

https://www.3rnet.org/Locations/Kansas

[White Paper] Rural Recruitment: Results from our Rural Physician and Administration Survey

https://www.jacksonphysiciansearch.com/white-paper-rural-recruitment/

Pitt State Nursing https://www.pittstate.edu/nursing/#undefined2

https://www.collegefactual.com/colleges/pittsburg-state-university/academic-life/academic-majors/health-care-professions/nursing/#diversity

Recruitment and Retention for Rural Health Facilities

https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention#impacts

The challenges of recruiting physicians to rural healthcare facilities — and how to overcome them

https://weatherbyhealthcare.com/blog/recruiting-physicians-rural-healthcare-facilities

Creative Recruiting Helps Rural Hospitals Overcome Doctor Shortage
https://www.npr.org/sections/health-shots/2019/08/15/747023263/creative-recruiting-helps-rural-hospitals-overcome-doctor-shortages

https://www.jacksonphysiciansearch.com/white-paper-rural-recruitment/

https://www.3rnet.org/Locations/Kansas

https://www.3rnet.org/Network-Coordinators

https://www.pittstate.edu/nursing/#undefined2

https://www.npr.org/sections/health-shots/2019/08/15/747023263/creative-recruiting-helps-rural-hospitals-overcome-doctor-shortages

https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention#international

https://weatherbyhealthcare.com/blog/recruiting-physicians-rural-healthcare-facilities

https://journals.lww.com/jonajournal/Abstract/2010/01000/Job_Embeddedness_as_a_Nurse_Retention_Strategy_for.7.aspx

RN Average Hourly Wage, Salary Becker's Healthcare 2022.

https://www.beckershospitalreview.com/compensation-issues/rn-average-hourly-wage-salary-for-all-50-states-calif-tops-list-at-

120k.html?origin=BHRSUN&utm_source=BHRSUN&utm_medium=email&utm_content=newsletter&oly_enc_id=1650A3912823I4V

Chartis Group **T**he COVID-19 Pandemic's Impact on Rural Hospital Staffing

7.3 Workforce Compensation Changes and Challenges – no citations

8 HOSPITAL OPERATIONAL LICENSURE REQUIREMENTS

8.1 Hospital Licensure Review – no citations

9 BUILDING ASSESSMENT

9.1 Appraisal - – no citations

9.2 Environmental Report and Building Inspection – no citations

9.3 Architectural Review + Concepts – no citations

9.4 Construction Bids – no citations

9.5 Operational Readiness (Siemens Report) – no citations

9.6 Financing Options – no citations

9.7 Pro Forma Financials– no citations

11 APPENDIX DOCUMENTS

- Bourbon County Commission Presentations
  - Assess Phase
  - Plan Phase
  - Execute Phase
- Summary of Key Findings Presentation
- Summary of Key Recommendations Presentation
- Municipal Bond Overview – Hilltop Securities
- The Future of Rural Healthcare in Kansas
- Project SEK Process
- Project SEK Success Criteria
- Community Survey – Chase County KS
- Community Survey – Wilson County KS