



nwa Northwest
Arkansas
Council



Heartland
Whole Health
Institute

CONTINUING THE TRANSFORMATION

NORTHWEST ARKANSAS HEALTH CARE

Vision 2030

DATA PREPARED BY

**Tripp
Umbach**
Turning Ideas Into Action

2024

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November 13, 2024

Foreword: Building a Healthier Future Together

The Northwest Arkansas Council's Health Care Transformation Division and Heartland Whole Health Institute are pleased to present this update on the region's health care initiatives.

The past few years have marked significant progress in elevating health care services, education, and research in Northwest Arkansas. Collaboration among health care providers, community organizations, and educational institutions has fueled meaningful advancements, creating a strong foundation for Northwest Arkansas to emerge as a model for health care innovation and delivery.

Since the 2018 report, the region came together during one of the most challenging periods in history—the COVID-19 pandemic—and collectively helped protect the Northwest Arkansas community. The lessons learned and partnerships forged during this crisis continue to guide efforts to build a resilient and responsive health care system for the future.

The launch of Heartland Whole Health Institute and Alice L. Walton School of Medicine are pivotal milestones in the region's efforts to create a holistic and proactive health care model. This work is guided by whole health principles that emphasize a comprehensive approach to well-being, integrating physical, mental, emotional, and social health. These organizations will catalyze new delivery models that drive the region's efforts to lower costs, improve quality, and broaden access to health care in the Heartland.

Additionally, the region is working together to strengthen and expand graduate medical education to build a robust pipeline of locally trained health care providers who are committed to serving Arkansas. With new residency and fellowship programs on the horizon, the goal is to retain talented medical professionals, reducing the need for external recruitment and retaining more health care dollars within the community.

Through these efforts and the ongoing and consistent investments by regional providers, Northwest Arkansas is poised to become a national leader in health care innovation and delivery. Investments in education and research will drive breakthroughs, expand specialty services, and prepare our workforce to meet the needs of our diverse and growing population.

The success of these initiatives is a testament to the spirit of partnership that defines the region. Health care providers, community organizations, educators, and industry leaders are united by a shared vision of excellence, making the region an attractive destination for top medical talent, researchers, and educators—all dedicated to improving health outcomes for our community.

Looking forward, much work remains. To build on our achievements, we must further integrate whole health principles, focus on value-based care, and enhance our health care workforce. Continued innovation and service development are vital to improving the overall health and well-being of our residents. Achieving these goals will necessitate renewed commitment, ongoing collaboration, and strategic investment from all stakeholders.

The roadmap to 2030 outlines a bold vision to create a health care system that is second to none. Together, the region is shaping a future where everyone has access to high-quality care, innovative research, and comprehensive health services that support lifelong well-being.

The Northwest Arkansas Council's Health Care Transformation Division and Heartland Whole Health Institute invite all stakeholders to join this journey in building a healthier, more vibrant Northwest Arkansas—one that stands as a model for health care excellence and collaboration.

Sincerely,

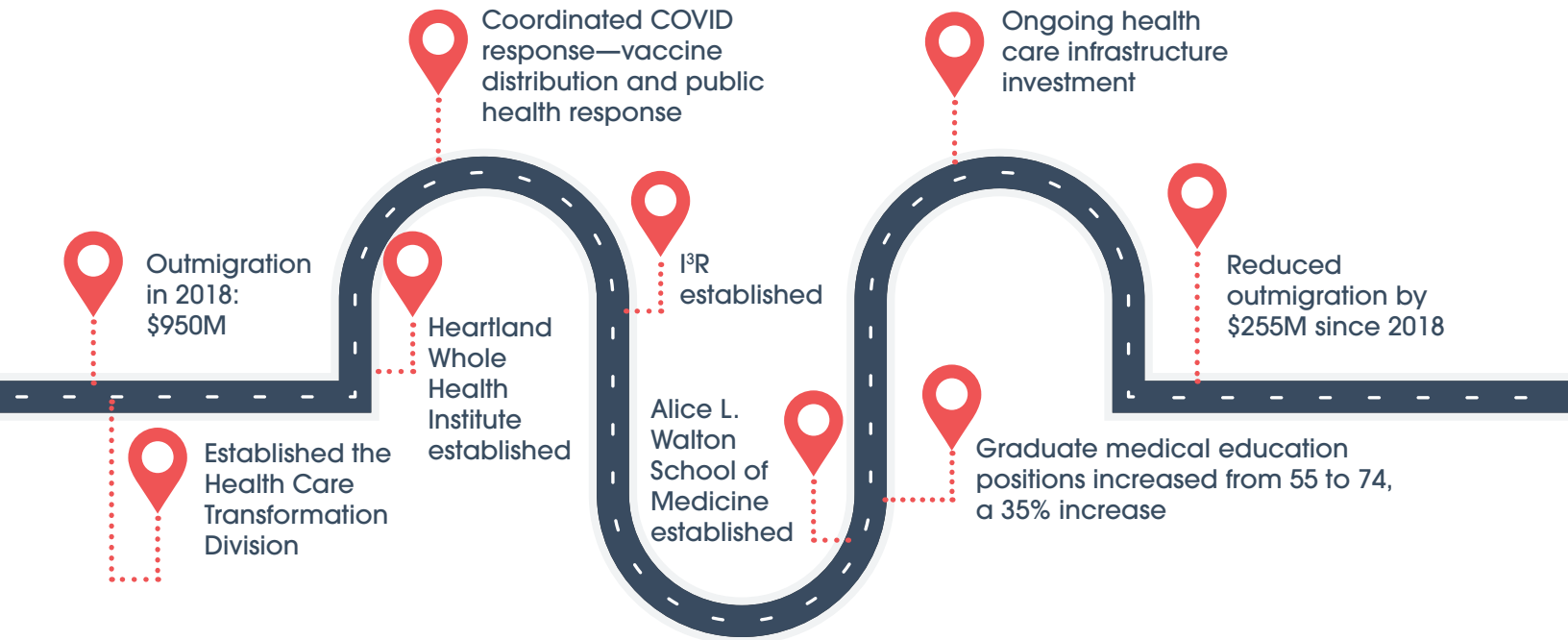


Nelson Peacock, President and CEO, Northwest Arkansas Council

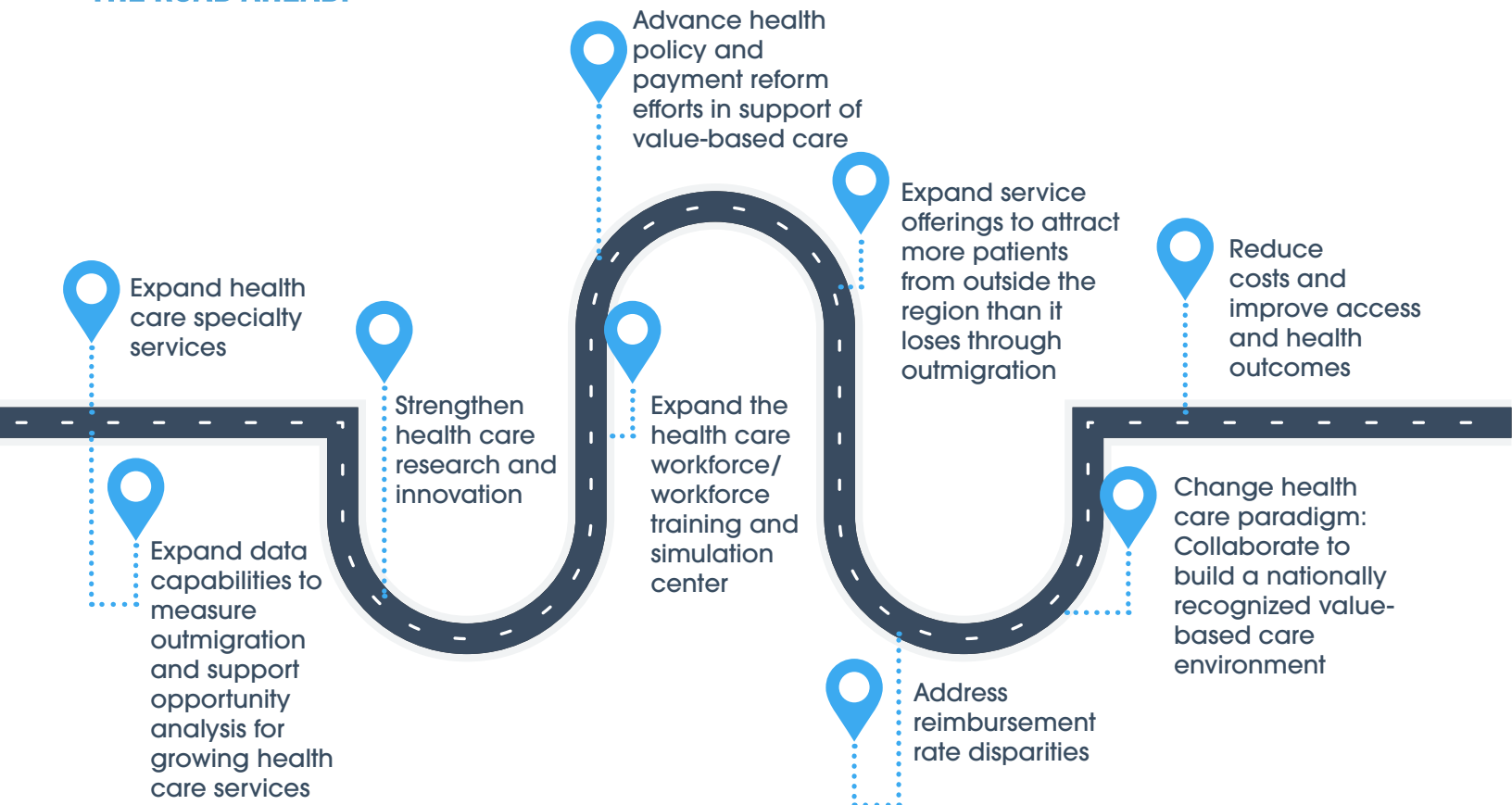


Walter Harris, CEO, Heartland Whole Health Institute

THE ROAD TRAVELED:



THE ROAD AHEAD:



Tripp Umbach was invited by the Northwest Arkansas Council, Heartland Whole Health Institute, and key regional stakeholders to update a landmark report initially completed in 2018. **The original report, “Northwest Arkansas Health Care: Assessment, Economic Impact, and Vision for the Future,” provided strategies to expand the region’s \$2.7 billion health care sector and laid the groundwork for future growth.** The 2024 update focuses on changes in the health care economy from 2018 to 2023 and outlines a vision and roadmap for regional growth by 2030. Building on the 2018 strategies, the updated report emphasizes expanding undergraduate and graduate medical education, increasing collaboration on research and increasing fellowships in needed medical specialties.

The initial vision of creating connected, cohesive communities to support regional health care transformation and community health improvement remains central. The 2018 report, released in 2019, also identified challenges and opportunities, stressing the need for a regional strategy to prevent underperformance in the health care sector, which could otherwise harm future health outcomes, economic development, and population growth.

This report highlights progress over the five years, addresses current challenges, and sets goals for continued growth through 2030. To accomplish this task, the Northwest Arkansas Council’s Health Care Transformation Division and Heartland Whole Health Institute worked closely with Tripp Umbach to steer the report and recommendations over a 10-month process. Tripp Umbach revised data from the original report, including peer benchmarking, and assessed the economic and social impacts outlined in the previous report. This report provides an updated list of regional priorities to leverage the significant accomplishments over the past five years as it sets the stage for actions to be accomplished by 2030.

EXECUTIVE SUMMARY

Northwest Arkansas has made progress in expanding its health care industry from 2018 to 2023, with investments in infrastructure, services, and workforce development fueling economic growth. Northwest Arkansas’ health care economy outpaced overall economic growth during this period, demonstrating its increasing importance to the region. This expansion has resulted in new facilities, greater access to specialized care, and more residency training programs, and is poised to launch a new private medical school. Compared with peer regions, Northwest Arkansas witnessed the most significant positive change in health care employment as a percentage of total regional employment in 2018-2023. However, while the region has achieved milestones, more work is needed to meet the health care demands of a population projected to exceed 1 million by mid-century.

Rapid population growth and shifting demographics are straining the region’s health care capacity. Compounding these challenges, the national health care industry has undergone significant changes, including the impact of the COVID-19 pandemic. This disruption highlights the urgent need for a more coordinated regional care system, as patients with complex medical conditions who see multiple specialists face higher costs and poorer outcomes. Addressing shortages of health care professionals at all levels is critical to ensuring effective care delivery to the growing population.

Furthermore, policy changes in reimbursement must accelerate to shift the focus from sickness to health, emphasizing preventive care and focusing on value-based care. The next five years are crucial, and a clear roadmap for 2030 is essential to ensure continued regional health care growth and economic development.

Tripp Umbach conducted over 20 interviews with regional and statewide stakeholders to better understand the region’s progress and future opportunities (see Appendix D) and facilitated four on-site work sessions in Northwest Arkansas, where steering committee members provided direction and feedback. **Stakeholders recommended the 2024 report focus on the following areas:**



Expand health care specialty service



Establish a best-in-class regional workforce for the health care needs of a growing region



Drive a more collaborative health care research and innovation ecosystem



Advance health policy and payment reform efforts in reimbursement and value-based care

ACCOMPLISHMENTS

Transformation Division Established

As recommended in the 2018 report, the Northwest Arkansas Council formed the Health Care Transformation Division in July 2019, marking a vital first step in aligning the region's economic development efforts toward a cohesive health care strategy. Few communities in the United States have a separate division of an economic development organization dedicated to the health care economy. The new division was pivotal in establishing improved connectivity among employers, community health initiatives, and health care providers, which has been essential in achieving long-term economic and social outcomes for the region. Fortunately, the Transformation Division was already in place to coordinate regional providers during the COVID-19 pandemic. Bringing together hospitals, physician practices, the Department of Health, and the business community helped save lives by encouraging public safety measures and coordinating vaccines. The work of the Health Care Transformation Division during this time demonstrates the importance of continuing to support and expand the Division in the future to ensure the infrastructure for community response is in place for future unexpected events.

DIVISION PARTICIPANTS INCLUDE:

Arkansas Children's Northwest

Community Clinic

Heartland Whole Health Institute

Highlands Oncology

Mercy

Northwest Health

University of Arkansas for Medical Sciences Northwest Regional Campus

University of Arkansas

Washington Regional Medical Center

Institute for Integrative and Innovative Research (I³R)

Since the 2018 report, the University of Arkansas established I³R, an interdisciplinary research institute, to support and promote the excellence and relevance of research to respond to expressed needs and to achieve tangible impacts. The Institute plays a significant role in bolstering the economy of Northwest Arkansas by fostering interdisciplinary research in fields such as biotechnology, nanotechnology, health, and data science. I³R is poised to attract substantial research funding, supporting high-paying jobs in the region. The Institute's cutting-edge work promotes collaborations between academia, industry, and government, fueling the growth of local startups and innovative enterprises. This innovation ecosystem drives economic diversification and strengthens Northwest Arkansas' reputation as a scientific research and technology development hub. The Institute's research initiatives also support workforce development by training highly skilled professionals in critical industries, thus contributing to the region's economic competitiveness. By anchoring a research-driven economy, I³R not only stimulates direct employment but also spurs secondary economic benefits through increased demand for services, housing, and infrastructure, thereby enhancing the overall economic vitality of Northwest Arkansas.



Alice L. Walton School of Medicine; Heartland Whole Health Institute Established

The Alice L. Walton School of Medicine represents a transformational project mentioned first in the 2018 report. **Opening the Alice L. Walton School of Medicine in 2025 provides the region with a transformational springboard to drive the region's physician workforce.** The medical school will grow and attract medical talent and foster research, innovation, and advancements in health care technology. In addition, Heartland Whole Health Institute is poised to drive Northwest Arkansas in the transformation of the delivery of health care by elevating a whole-person model of care that prioritizes the patient experience, supports team-based primary and specialty care models, and incorporates data and analytics.

Graduate Medical Education Expanded

Addressing the identified gap in graduate medical education (GME), the region made progress in adding new residency programs and established a plan to expand physician training programs more significantly by 2030. This expansion has been crucial in supporting the health care sector's growth by attracting and retaining medical professionals in Northwest Arkansas, thereby enhancing the region's capacity to meet the health care needs of its growing population. The expansion of GME has laid the groundwork for further development in medical education, aligning with the long-term goal of establishing a medical school in the region. However, more work is needed to achieve the goal of training 200 residents by 2040.

Washington Regional Medical Center (WRMC) working with the University of Arkansas for Medical Sciences (UAMS) took a significant step forward for the state and region when WRMC elected to undertake a geographic wage reclassification with the Center for Medicare and Medicaid Services that would allow it to adjust its federally subsidized residency cap. The Arkansas Legislative Council approved \$12.5 million in funding in 2020 to support WRMC's effort and has committed to additional funding to expand residencies and fellowships across the state. This effort, once complete, will add 76 new residency positions at WRMC and keep more Arkansas medical graduates in the state for their postgraduate training. However, the state still ranks No. 49 in the nation for active physicians per 100,000 people and No. 37 for active primary care physicians, so much more work is needed.

Health Research and Innovation Expanded

As highlighted in the 2018 report, progress has been made toward expanding biomedical and health improvement research and innovation at the University of Arkansas, UAMS Northwest, Highlands Oncology, Arkansas Children's Northwest, and hospitals. This initiative inspires collaboration across various fields of study, driving innovation and research that can directly contribute to the health care sector's growth. While progress was made, much work remains to position Northwest Arkansas as a hub for health care innovation, improving health care outcomes, and strengthening the local economy. These initiatives have collectively contributed to a more robust health care sector in Northwest Arkansas. The progress has expanded the health care industry's economic impact and enhanced the region's capacity to provide high-quality health care services in response to its changing demographics and population growth. Continuing to grow the health care sector through implementing recommendations outlined in this report is critical to keeping the region on a trajectory to becoming a national leader in health care innovation and delivery, further solidifying its economic and social prosperity.

Transformational Investment in Specialty Care

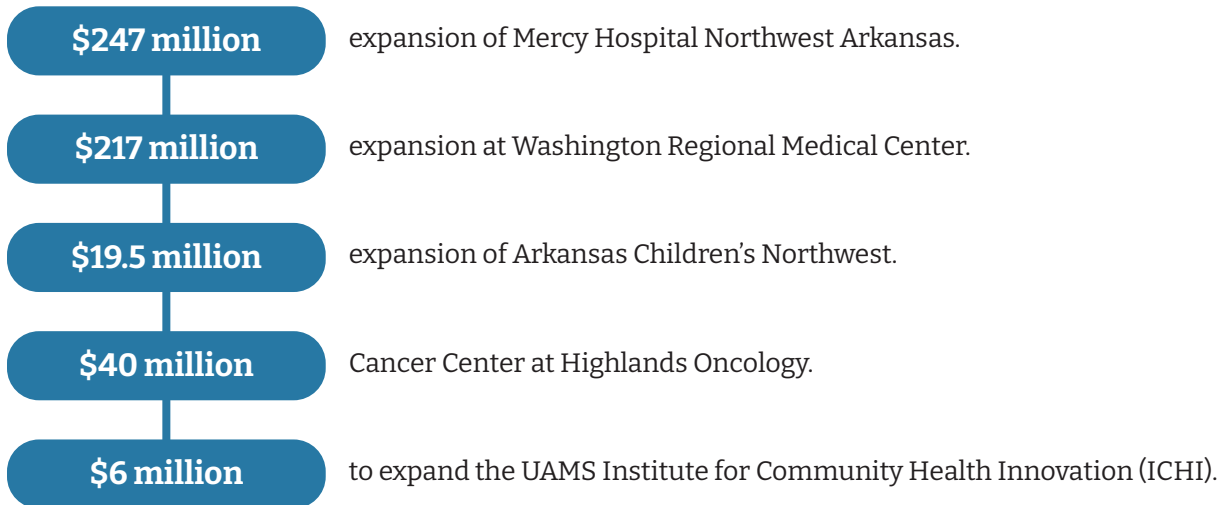
The Alice L. Walton Foundation, Mercy, Heartland Whole Health Institute, and Cleveland Clinic recently announced a transformative 30-year, \$700 million partnership to expand specialty care, improve resident training, and drive economic development in Northwest Arkansas. This initiative will focus on bringing world-class cardiovascular care and comprehensive health services to the region, anchored by a new cardiac care center at Mercy's campus in Rogers and a specialty outpatient center in Bentonville. Mercy's \$350 million investment and the Alice L. Walton Foundation's matching investment will also support physician recruitment and retention, enhancing the region's medical workforce.

Cleveland Clinic will provide cardiovascular expertise, helping establish a leading cardiovascular center. The collaboration will reduce health care costs through value-based care, leveraging technology and telehealth to improve health outcomes. This effort will transform Northwest Arkansas into a premier health care destination. The initiative will attract hundreds of new physicians, offering advanced training opportunities and positioning the region as a model for preventative, whole-person health care. Additionally, it will support the Alice L. Walton School of Medicine in training future health care professionals, with Mercy serving as a critical educational partner. This strategic collaboration aims to create a sustainable health care model that enhances quality, reduces costs, and improves health outcomes for the Heartland.



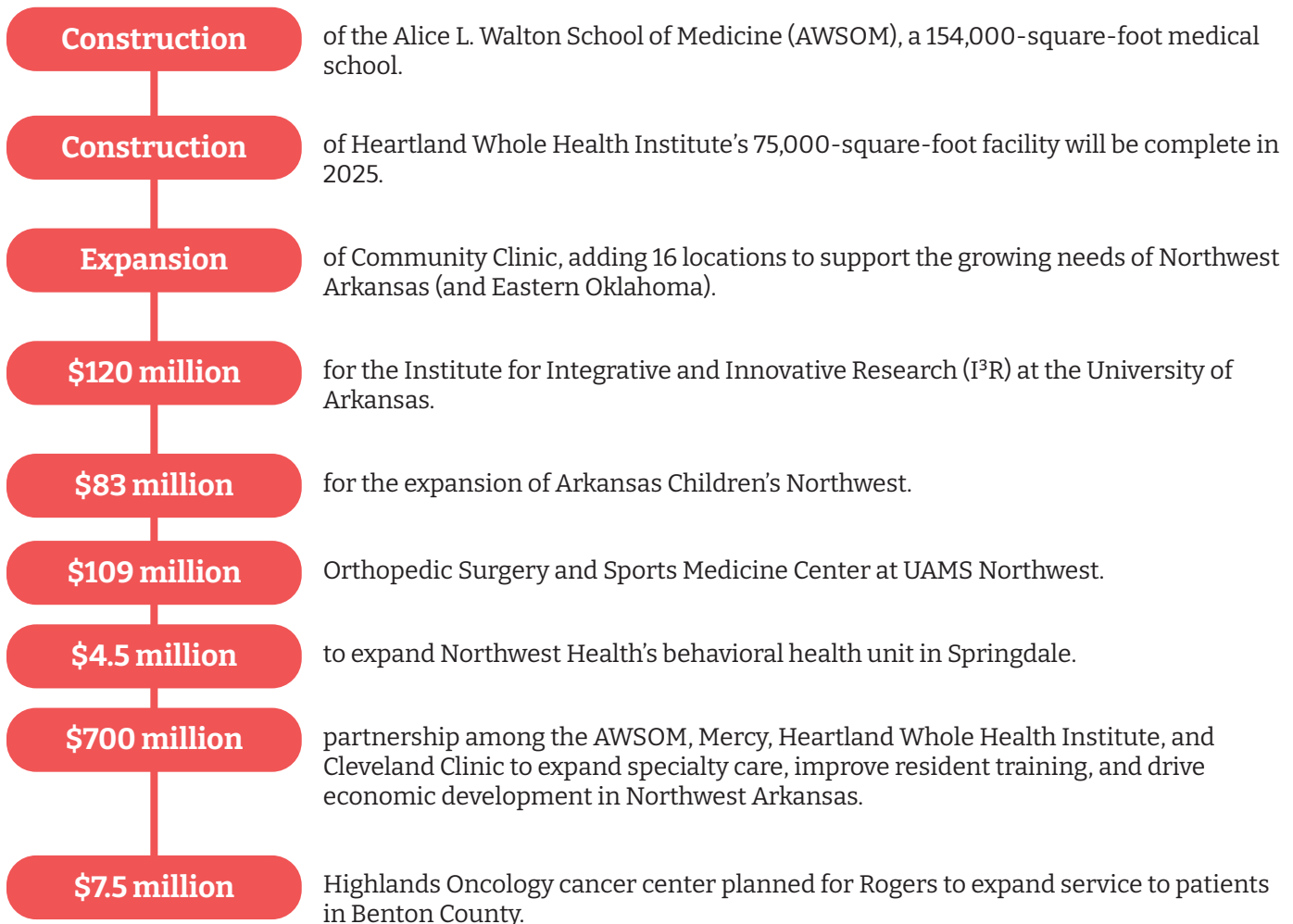
Health Care Infrastructure Investment

Investments in health care-related facilities from 2018-2023 can be seen driving along the I-49 corridor and throughout the region. These investments, **totaling more than \$529.5 million**, include:



Projects Underway

Transformational projects valued at \$1.3 billion are planned by 2030 in Northwest Arkansas. Building on \$529.5 million developed from 2018 to 2024, total health care facility investment is **estimated at nearly \$2 billion** from 2018 through 2030 (See Appendix A).



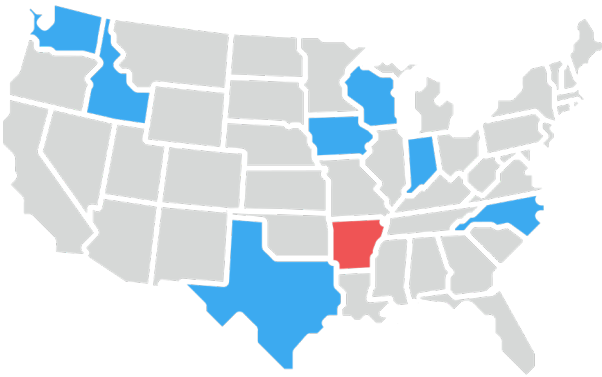
PROGRESS SINCE 2018

FINDING 1: Northwest Arkansas has Expanded its Health Care Industry Since 2018, but Work Remains

Peer Market Comparisons

Aligning with the 2018 report methodology, Tripp Umbach benchmarked Northwest Arkansas with seven peer regions: Austin, TX; Boise, ID; Des Moines, IA; Durham-Chapel Hill, NC; Evansville, IN; Madison, WI; and Spokane, WA (see Figure 1).

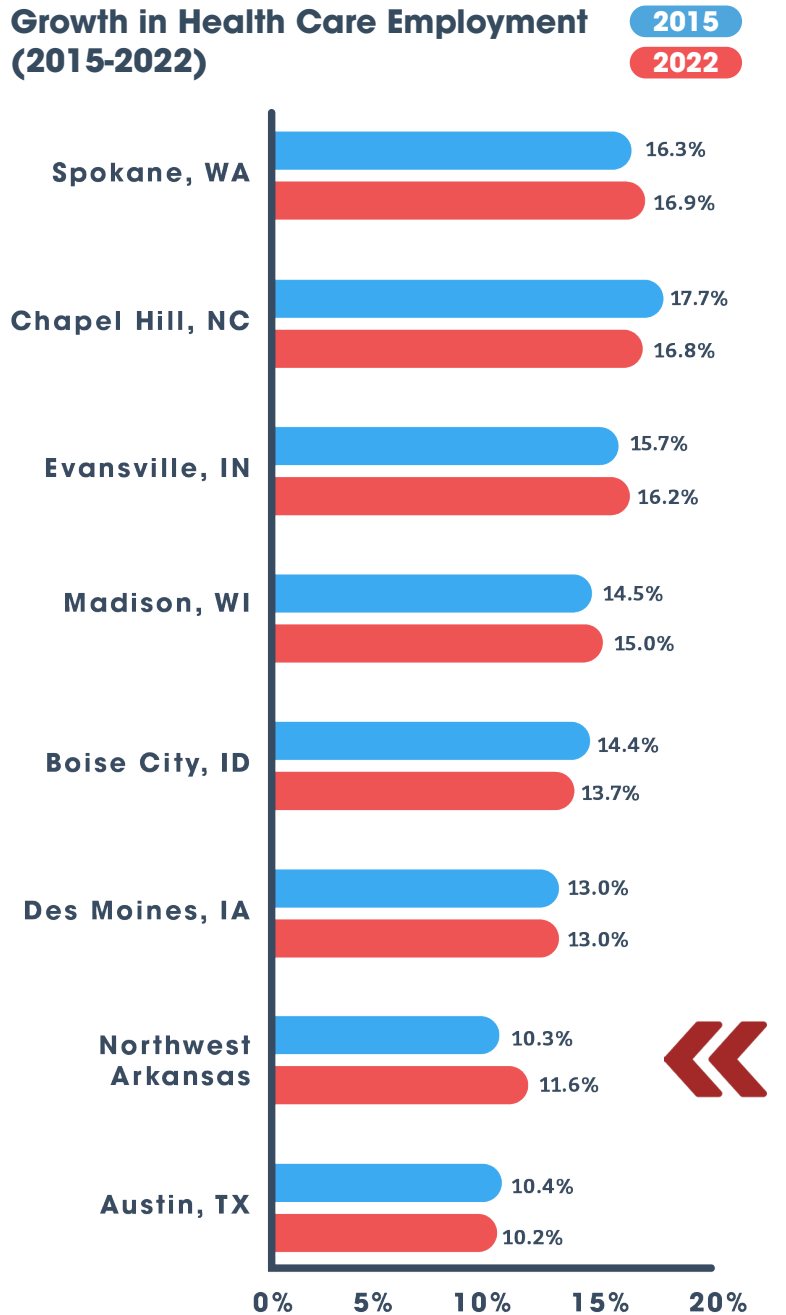
FIGURE 1:
Peer Regions for Benchmarking



Compared with peer regions, Northwest Arkansas witnessed the most significant positive change in health care employment as a percentage of total regional employment from 2015 to 2022.

While health care employment has grown in Northwest Arkansas, only Austin, TX, has fewer jobs per capita in the health care sector. The Spokane, WA, region has 46% more health care employment than Northwest Arkansas (see Figure 2).

FIGURE 2:
Growth in Health Care Employment (2015-2022)



Source: Data USA

Growth in the Northwest Arkansas Health Care Industry Since 2018

Northwest Arkansas' health care economy has outpaced overall regional economic growth, demonstrating its increasing importance to the region. From 2018 to 2023, the total Gross Regional Product (GRP) increased by 37%, from \$27.5 billion to \$37.7 billion. **Importantly, the region's health care sector grew by 80% during the same period, from \$2.5 billion to \$4.5 billion, reflecting a growth rate twice as fast as the overall economy.** Projections indicate that the health care sector could reach \$6.1 billion by 2030, reflecting a 144% growth rate between 2018 and 2030 (see Figure 3).

Additionally, progress has been made in addressing the region's health care employment gap. From 2018 to 2023, Northwest Arkansas added 4,096 health care jobs.²

This means that two-thirds of the 2018 report's goal of creating 6,000 jobs by 2040 has been achieved. This increase in jobs is a significant achievement, showing the region's commitment to expanding its health care services and reducing the economic losses caused by outmigration (see Figure 4).

Health care employment gains in the region accelerated from 2022 to 2023, especially in Benton County, indicating recovery from COVID-19 (see Figure 6).

FIGURE 3:
Health Care Gross Regional Product

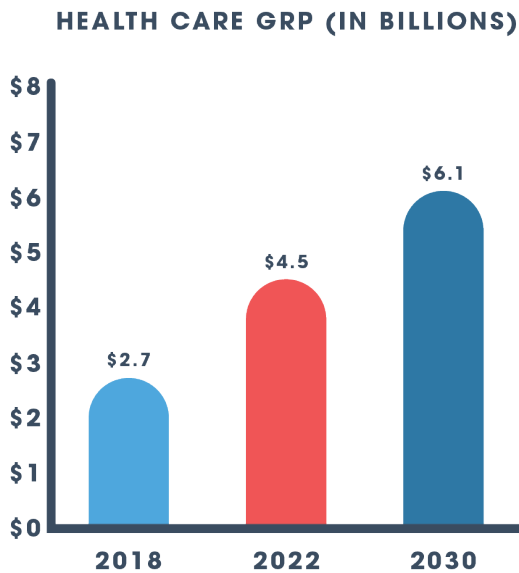


FIGURE 4:
Health Care Employment in 2018 & 2023

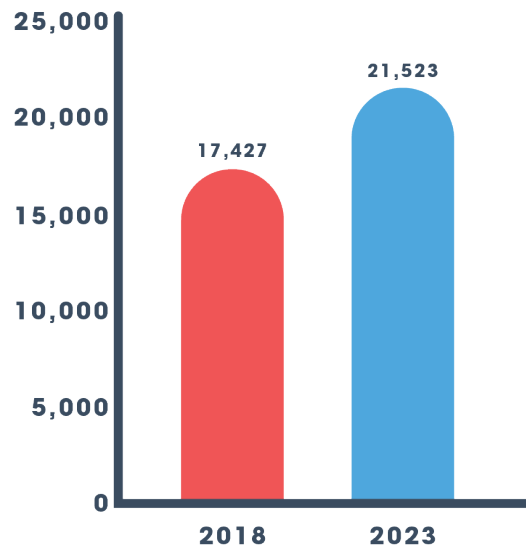


FIGURE 5:
Total Health Care Jobs Created (2018-2023) Compared with Goal for 2030

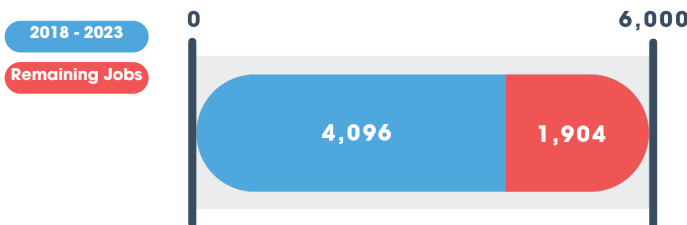
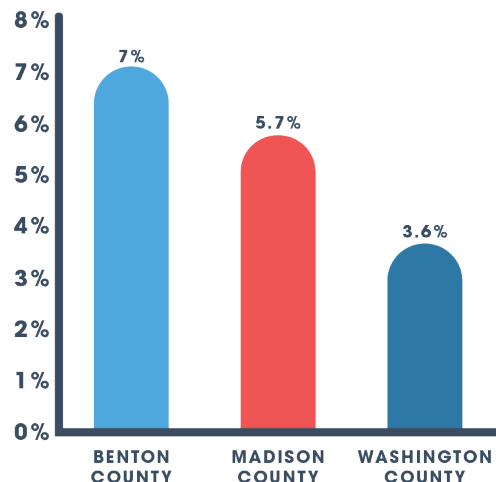


FIGURE 6:
Private Sector Employment - Education & Health

12-MONTH PERCENTAGE CHANGE IN EMPLOYMENT:
PRIVATE SEPTEMBER 2022 - SEPTEMBER 2023



¹ Source: US Bureau of Economic Analysis, fred.stlouisfed.org

² According to the U.S. Bureau of Labor Statistics, the total change from 2018 to 2023 equals 5,462 jobs gained in health care and social services (based on Tripp Umbach's assumption that 75% of employment in this broad sector is health care providers and support staff, the total health care job gain in the period is 4,096).

According to Tripp Umbach’s 2018 report, Northwest Arkansas’ health care economy was \$950 million lower annually than expected based on national standards. This difference is mainly attributable to the high outmigration of patients seeking advanced medical services elsewhere and the region’s inability to attract patients from outside the area. This economic loss was attributed mainly to the region’s underdeveloped subspecialty service lines in advanced cardiology and oncology areas. However, since 2018, Northwest Arkansas has seen improvement in keeping health care spending in the region, with more patients opting to stay within the region to receive care.

Tripp Umbach’s analysis shows that this economic disparity has improved by \$255 million since 2018 as more health care dollars remain in the region. As a result, the economic inequality in the region’s health care industry fell from \$950 million to \$695 million in 2023, reflecting progress toward a goal of attracting more health care dollars than leaks from the economy.

Regarding peer community benchmarks, Northwest Arkansas had the most improvement in health care location quotient score among peer markets, rising from 0.74 in 2018, reflecting \$950 million in economic disparity from the nation, to 0.86 in 2023. This 16% increase in location quotient underscores real growth in the health care industry in Northwest Arkansas compared with the peer markets and the nation. (see Figure 8).

While the region still trails behind peers, such as Durham Chapel Hill, NC, and Spokane, WA, which has location quotients of 1.86 and 1.67, recent progress is a step toward narrowing the gap and retaining more health care dollars within the local economy.

With continued investment in subspecialty services and advanced health care infrastructure, Northwest Arkansas can eliminate the remaining \$695 million in outmigration and capture the full potential of the health care sector by 2040. (see Figure 7).

FIGURE 7:
Change in Economic Disparity in Health Care in Northwest Arkansas

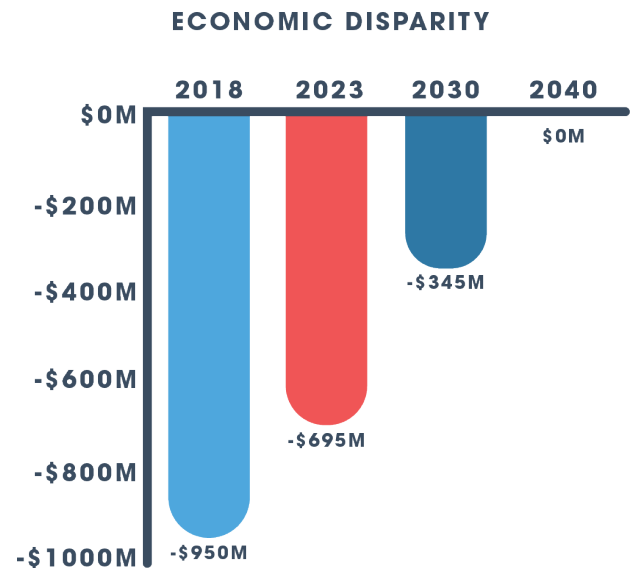
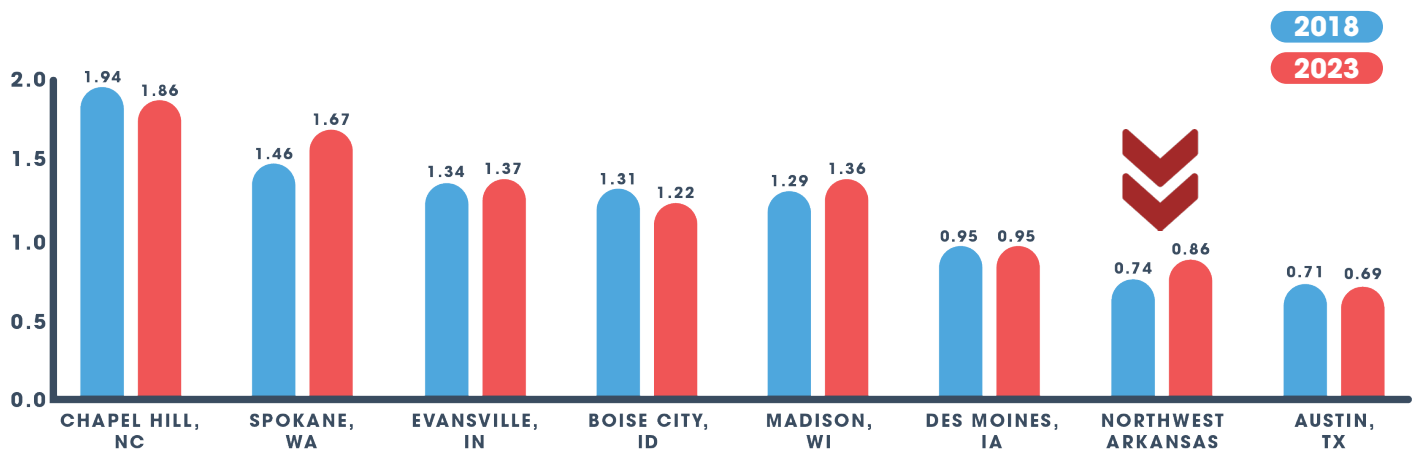


FIGURE 8:
Health Care Location Quotients for Peer Markets, 2018-2023



³This figure represents the difference in the size of the health care economy in Northwest Arkansas compared with the U.S. average of all markets, represented by location quotient analysis. While this number is impacted by outmigration of patients and low levels of immigration of patients, the calculation is broader than the flow of health care spending that leaves or comes into the region.

FINDING 2: More Patients are Staying in Northwest Arkansas for Care

The Arkansas Center for Health Improvement (ACHI) partnered with Tripp Umbach to analyze medical spending on the health care of Northwest Arkansas residents from 2018 to 2023. Data used in the analysis is from the Arkansas Health Care Transparency Initiative, administered by ACHI, and includes the Arkansas All-Payer Claims Database.⁵

Medicare Market

The percentage of Medicare spending for medical services for Northwest Arkansas patients occurring out of state has consistently declined, from 8.2% in 2018 to 6.7% in 2021.

Spending on medical care in Northwest Arkansas for Medicare recipients who remained in the region increased from \$1.37 billion in 2018 to \$1.62 billion in 2021, representing an increase of \$254.8 million. This trend indicates a growing tendency for residents to seek medical care within the region, attributed to health care infrastructure expansion. It must be noted that while the percentage of health care spending leaking out of state declined over the period, out-of-state health care spending resulted in a modest change in actual dollars leaving the region, from \$136 million in 2018 to \$129.9 million in 2021 (see Table 1).



TABLE 1:
Percentage and Dollar Change in Out-of-State Medicare Spending (2018 - 2023) SOURCE: ACHI

| YEAR | TOTAL SPENDING ON NWA RESIDENTS | % OF TOTAL SPENDING OUT-OF-STATE | OUT OF STATE LEAKAGE (\$) FROM NWA |
|------|---------------------------------|----------------------------------|------------------------------------|
| 2018 | \$1.658B | 8.2% | \$136.0M |
| 2019 | \$1.775B | 8.3% | \$147.3M |
| 2020 | \$1.790B | 7.2% | \$128.9M |
| 2021 | \$1.940B | 6.7% | \$129.9M |

TABLE 2:
Commercial Payers Medical-Only Spending SOURCE: ACHI

| YEAR | TOTAL SPENDING ON NWA RESIDENTS | % OF TOTAL SPENDING OUT-OF-STATE | OUT OF STATE LEAKAGE (\$) FROM NWA |
|------|---------------------------------|----------------------------------|------------------------------------|
| 2018 | \$495M | 12.1% | \$59.9M |
| 2019 | \$614M | 11.4% | \$69.9M |
| 2020 | \$607M | 8.2% | \$49.8M |
| 2021 | \$697M | 6.6% | \$46.0M |
| 2022 | \$661M | 6.3% | \$41.6M |

Commercial Insurance Market

Based on the available ACHI data, the percentage of medical-only spending by commercial payers directed out-of-state for Northwest Arkansas residents has also shown a downward trend. However, these data do not include self-insured large companies, which comprise approximately 25 percent of Northwest Arkansas' health insurance market. In 2018, 12.1% of the total spending in the commercial insurance market was out of state, which decreased to 6.3% in 2022. This represents a reduction of \$18.3 million in out-of-state spending from 2018 (\$59.9 million) to 2022 (\$41.6 million) within the commercial market. This decrease suggests an increasing reliance on local health care providers, indicating improvements in the region's availability and quality of medical services (see Table 2).

⁵All data presented do not include large company sponsored health plans; i.e., Walmart, J.B. Hunt, Tyson Foods. Therefore, the Northwest Arkansas Council needs to work with large employers to develop a data-sharing platform where all data on outmigration can be viewed and used for planning purposes.

FINDING 3: Graduate Medical Education has Expanded in the Region

The state of Arkansas faces significant physician shortages, and this problem is likely to grow given that 35% of Arkansas physicians are over 60 years of age. At the same time, many graduates of Arkansas medical schools are forced to work elsewhere due to a shortage of postgraduate medical residencies. The state has become a net exporter of medical talent, and because most physicians practice within 60 miles of their residency, the state will likely lose this talent. Arkansas has an impressive record for retaining medical residents after their training is complete, ranking No. 4 in the nation for retention. However, there are simply not enough positions available to accommodate the number of graduates seeking to complete their residency in Arkansas.



Washington Regional Medical Center (WRMC), acting with the support of University of Arkansas for Medical Sciences and other regional hospitals, helped the region take a significant step forward when it applied for a geographic wage reclassification with the Center for Medicare and Medicaid Services (CMS). This process allows eligible institutions to increase the number of federally subsidized residency positions beyond its current limit or cap. The process is not without risk. Any institution undertaking this process faces significant startup costs and a lower reimbursement period until the process is complete. The State of Arkansas supported Washington Regional effort with a commitment of \$12.5 million in 2020 and has committed to additional funding to help the WRMC - and other similarly situated hospitals - to undertake this process. Once implemented, the wage reclassification process must be completed within five years. To date, WRMC has established 50 residency positions and will apply to the Accreditation Council of Graduate Medical Education once funding is made available for the 26 additional residency slots under federal rules.

While the region is off to a good start, more work is needed to expand residency programs as more Arkansas medical students graduate each year than available residency spots. Increasing the number of residencies will help retain medical graduates in Northwest Arkansas, expand the local health care workforce, and prepare for the region's population growth. Each residency position generates \$715k in economic impact annually. The WRMC program, once fully implemented, will generate over \$54M in annual economic impact to the state. Each new physician in the state will create, on average, 17.1 jobs and add \$2.4 million to the local economy.

Finally, robust residency programs also help foster a culture of research and innovation within the hospitals and the community. Community-based teaching hospitals such as Mercy and WRMC serve as hubs for medical research, attracting grants, contracts, and other external funding sources. This not only contributes to economic growth but also leads to increased quality and positive health outcomes. Expanding graduate medical education (GME) also helps reduce health care costs. By increasing the number of primary care physicians and specialists in the region, patients can receive timely and preventive care, reducing the need for more expensive emergency department visits and hospitalizations. Studies show that areas with greater access to primary care physicians see lower overall health care costs, as early interventions and regular care help prevent chronic conditions from worsening.

Since 2018, Northwest Arkansas has seen growth in GME (physician residency training), beginning with the launch of an internal medicine residency program through the University of Arkansas for Medical Sciences Regional Centers sponsoring institution, based at UAMS Northwest Regional Campus and WRMC. This program, which added eight residency slots per year or 24 positions total, marks the first step in a larger plan to expand residency training in the region by adding approximately 92 more positions by 2030. Internal medicine was chosen as the initial program for this GME expansion because an internal medicine residency program is required to have fellowships in the internal medicine subspecialties like cardiology.

GME grew from 55 residents and fellows in training in the region in 2018 to 74 in 2023, a 35% increase. Plans are underway in the area to significantly increase residency programs, bringing the total number of residents in training to 155, representing an increase of 182% over 12 years (see Table 3).

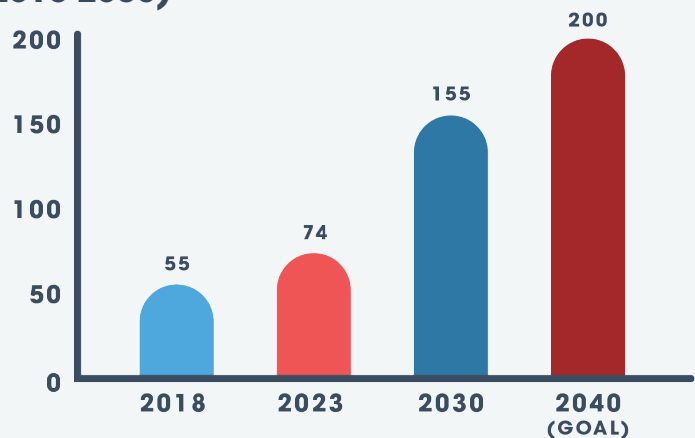
TABLE 3:
Residency Growth in Northwest Arkansas (2018-2030)

SOURCE: UAMS AND WASHINGTON REGIONAL

| PROGRAM | NUMBER OF RESIDENTS IN 2018 | NUMBER OF RESIDENTS IN 2023 | PROJECTED # OF RESIDENTS/ FELLOWS BY 2030 |
|---|-----------------------------|-----------------------------|---|
| Family Medicine Residency (Washington Regional/Northwest) | 30 | 30 | 27 |
| Internal Medicine Residency (Mercy/VA) | 24 | 32 | 30 |
| Sports Medicine Fellowship | 1 | 2 | 4 |
| Internal Medicine Residency (Washington Regional) | 0 | 8 | 24 |
| Emergency Medicine Residency (Washington Regional) | 0 | 0 | 24 |
| Neurology Residency (Washington Regional) | 0 | 0 | 8 |
| Family Medicine Residency - Rural Program (Washington Regional/Mercy Berryville) | 0 | 2 | 12 |
| General Surgery Residency (Washington Regional) | 0 | 0 | 2 |
| Transitional Year Residency (Washington Regional) | 0 | 0 | 10 |
| Cardiovascular Disease Fellowship (Washington Regional) | 0 | 0 | 6 |
| Rheumatology Fellowship (Washington Regional) | 0 | 0 | 4 |
| Endocrinology Fellowship (Washington Regional) | 0 | 0 | 4 |
| TOTAL | 55 | 74 | 155 |

While impressive, more efforts are needed to ensure the region reaches its goal of 200 additional residency positions by 2040. WRMC completed a geographic wage reclassification, allowing fresh federal dollars for residency programs to flow into the hospital over five years. However, since Mercy and Northwest Health Springdale are both currently capped, it will be imperative that a state/regional funding source be identified to continue investing in GME expansion to meet the 200-resident goal. Additional strategies may include resetting low CMS caps, changing rural payment designation, and ensuring that all future hospitals have a unique provider number (see Figure 9).

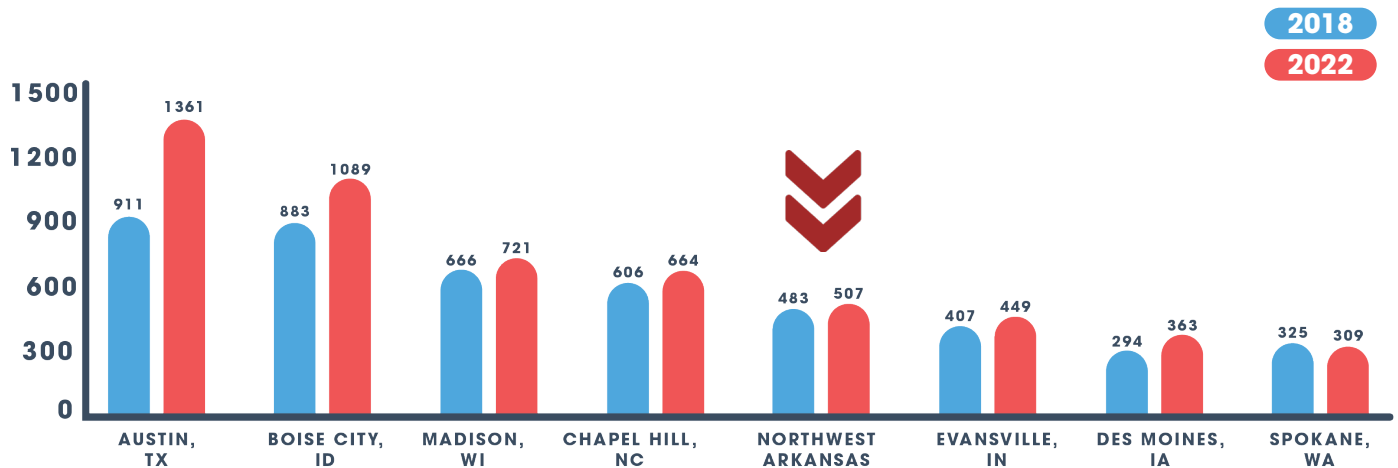
FIGURE 9:
Residency Growth in Northwest Arkansas (2018-2030)



FINDING 4: Medical and Health Science Education Must Expand to Meet Demand

Since 2018, Northwest Arkansas has seen modest growth in medical, nursing, and health science education (see Appendix B for Profiles of Area Medical and Health Science programs). **The region has not kept pace with the need to grow medical and health science employment through transitioning graduates into needed jobs.** For example, the number of health care-related bachelor's degrees awarded grew by only 5%, compared with 50% in Austin (see Figure 10).

FIGURE 10:
Bachelor's Degree Concentration in Nursing & Public Health

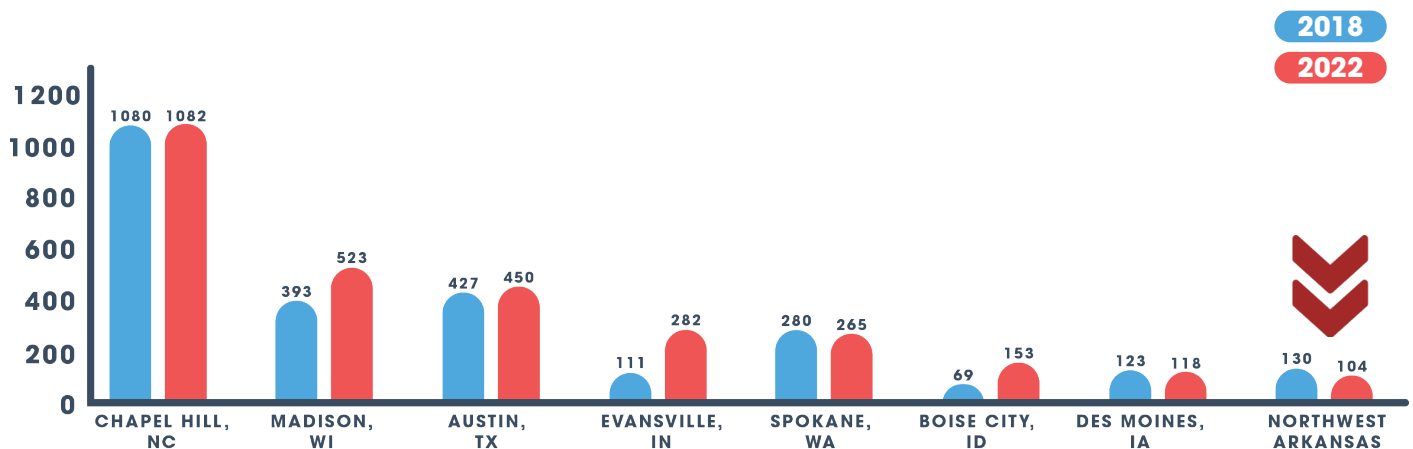


It is important to note that the University of Arkansas awarded 220 degrees in psychology and 52 bachelor's degrees in biomedical engineering over the period and is not included in Figure 10 above⁸.

While bachelor's degree graduation was flat over the period, a more significant concern is the decrease in the number of graduates in health science degrees at the master's level awarded over the period. At just the time when the region needed more health care providers, the number of master's level graduates declined by 20% (see Figure 11).

It is important to note that the University of Arkansas introduced new public health and occupational therapy programs during this period, which are included in these numbers. Also, master's and doctoral-level biomedical degrees awarded by the University of Arkansas are not included in these data.

FIGURE 11:
Master's Degree Concentration in Health



⁸University of Arkansas, Office of Strategic Analytics and Insights

FINDING 5: Biomedical and Health Care Research has Expanded, but More Collaboration is Needed to Accelerate an Innovation-Based Economy

From 2018 to 2023, Northwest Arkansas experienced modest growth in biomedical research, health care innovation, and technology development. The University of Arkansas reached a record \$184 million in total research expenditures in 2023, driven by its 150 Forward Strategic Plan. The creation of the Institute for Integrative and Innovative Research (I³R), among other capital projects, enhances its research capabilities, particularly in health sciences and technology commercialization. I³R provides a regional framework for enhancing health care research through multiple collaborations within the University of Arkansas, with UAMS, Children’s, and support for the research component of the medical education of incoming AWSOM students.

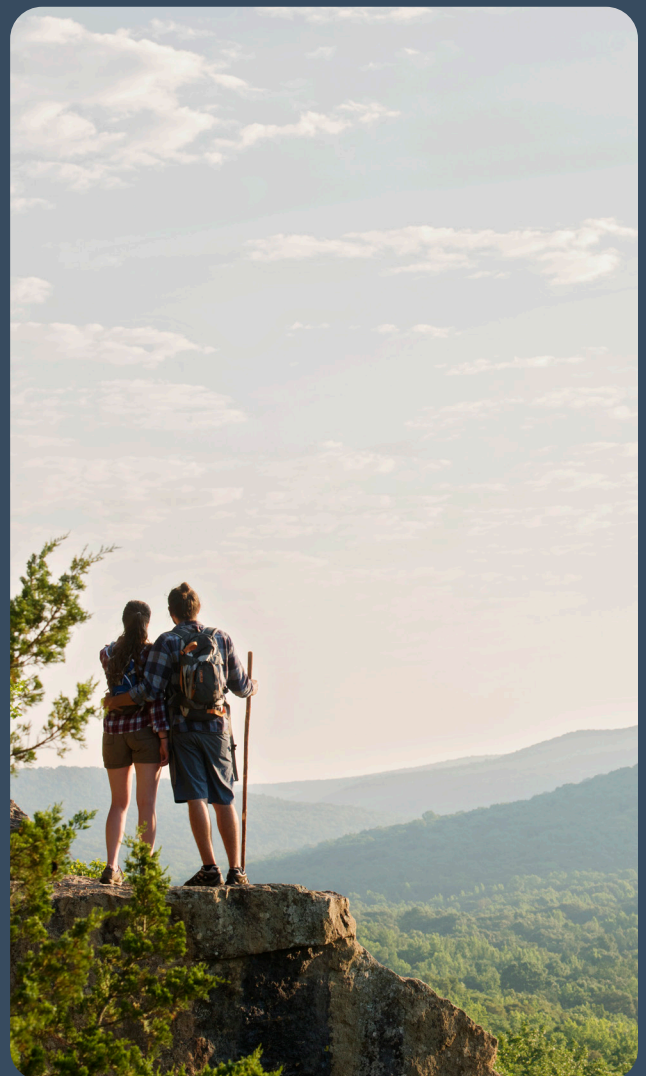
Highlands Oncology advanced cancer treatment through clinical trials, offering innovative therapies, including early-stage experimental medications. The Heartland Whole Health Institute, although not a traditional research entity, influenced patient care models by promoting efforts to reduce the cost of care, improve quality, and expand access to care. Collaborative initiatives, such as the Women’s Health Research Collaboration and the Arkansas Integrative Metabolic Research Center (AIMRC), further strengthened Northwest Arkansas’ position as a growing center for health-related research. These partnerships, supported by funding from federal initiatives and regional foundations, have advanced the commercialization of health care technologies and innovations, positioning the region as an emerging hub for biomedical research and health care solutions. Growing health care markets with robust medical education, research, and advanced clinical practices are magnets for companies to gain advantage from locating near biomedical-based research institutions and hospitals where advances are brought to the bedside [\(see Appendix C\)](#).

SEC. 2

CURRENT CHALLENGES

The health care economy in Northwest Arkansas faces challenges and opportunities over the next five years as it navigates rapid population growth and workforce constraints. With an annual influx of 15,000 new residents, health care providers grapple with the strain of meeting increasing health care demands. Staffing shortages, worsened by pandemic-related burnout, present a critical issue as the region struggles to recruit and retain doctors, nurses, and other health care professionals. Rising labor and supply costs—some increasing as much as 60% since the pandemic—compound these workforce shortages.

The cost of health care insurance also continues to rise. According to the Kaiser Family Foundation’s 2023 Employer Health Benefits Survey, the average premium for single and family coverage has grown 22% since 2018. At \$24,000, the average premium for family coverage in 2023 is 22% higher than in 2018. At the same time, insurer reimbursement rates have remained relatively stagnant, creating financial stress across the health care system. The sustainability of the current health care model is increasingly questioned, with regional stakeholders pushing for collaborative efforts to mitigate these issues.



CHALLENGE 1: Payment Rates for Health Care Services Remain Among the Lowest in the United States

As payments to health care providers move from the volume of care provided to the outcome of such care, the cost of health care in the region will be unsustainable for individuals and employers. The financial burden of an unhealthy population results in massive losses to the overall health care sector. **Northwest Arkansas is caught in the middle of an economic design shift in health care. New payment models have not fully developed to compensate for being behind the curve with chronically low reimbursement.** Additional collaboration is needed to support the shift towards value-based care. Health care providers in peer markets with higher reimbursement are in a stronger financial position to invest in new programs and thereby lowering their financial risk as they move from fee-for-service to value-based care.

Arkansas is at a significant disadvantage as a result of national reimbursement methodologies. Payment formulas for Medicare are based on 60-year-old cost data when the entire state of Arkansas, including Northwest Arkansas, was severely disadvantaged in most all measures compared to the nation. Because commercial insurers base their reimbursement rates on the amount of money providers receive from Medicare, Northwest Arkansas is burdened with the lowest government and private reimbursement rates. This accumulating impact has been a monumental challenge for the growth and development of health care services. Unfortunately, historical payment formulas for government payment levels drive payment formulas for private insurers. Currently, reimbursement methodologies are limited for innovative care models, inhibiting emerging strategies such as growth in virtual care.

FIGURE 12:
Office Visit, Established Patient -
Low Complexity

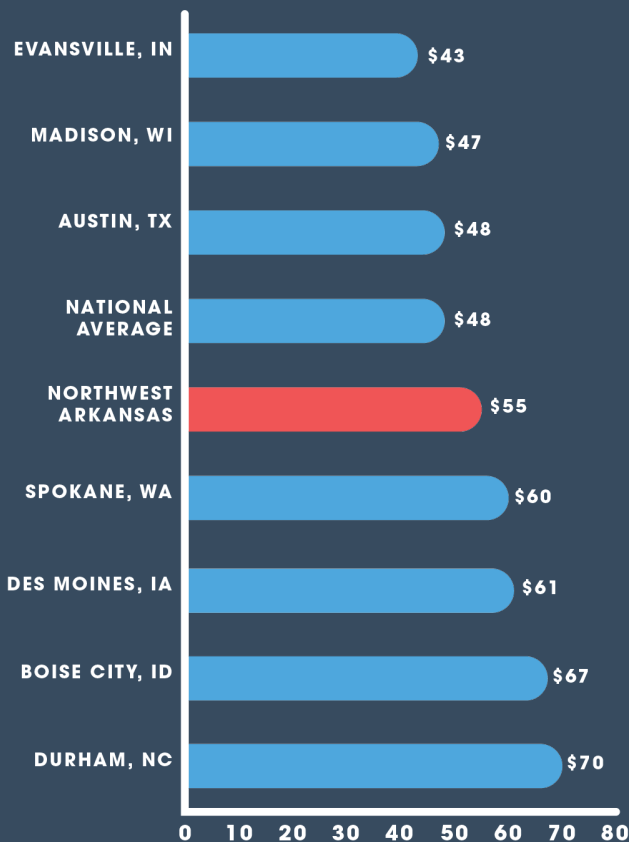
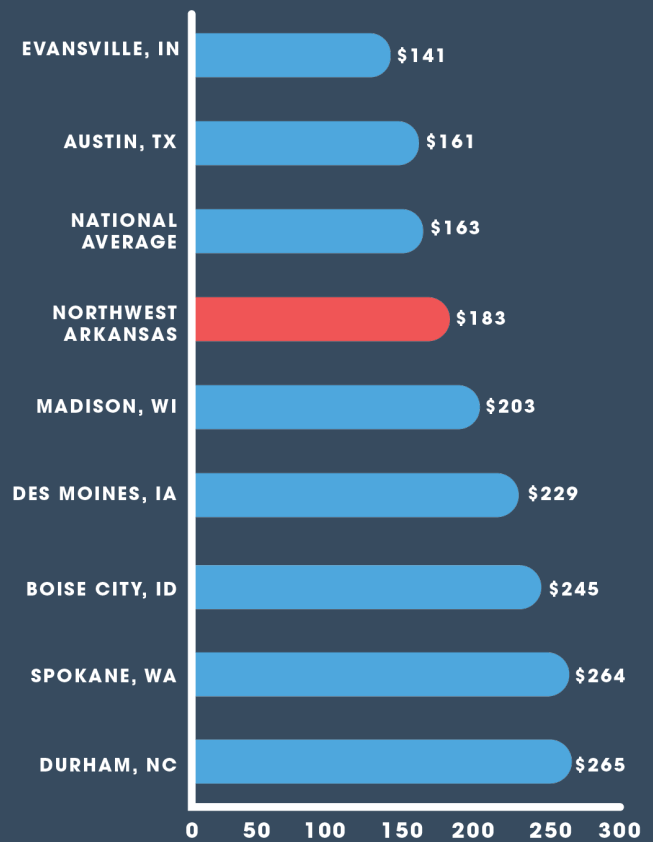


FIGURE 13:
Office Visit, Established Patient -
High Complexity



Source: Health Prices | Price Comparison Tool • Health Care Prices

Medicare Geographic Payment Discrepancies

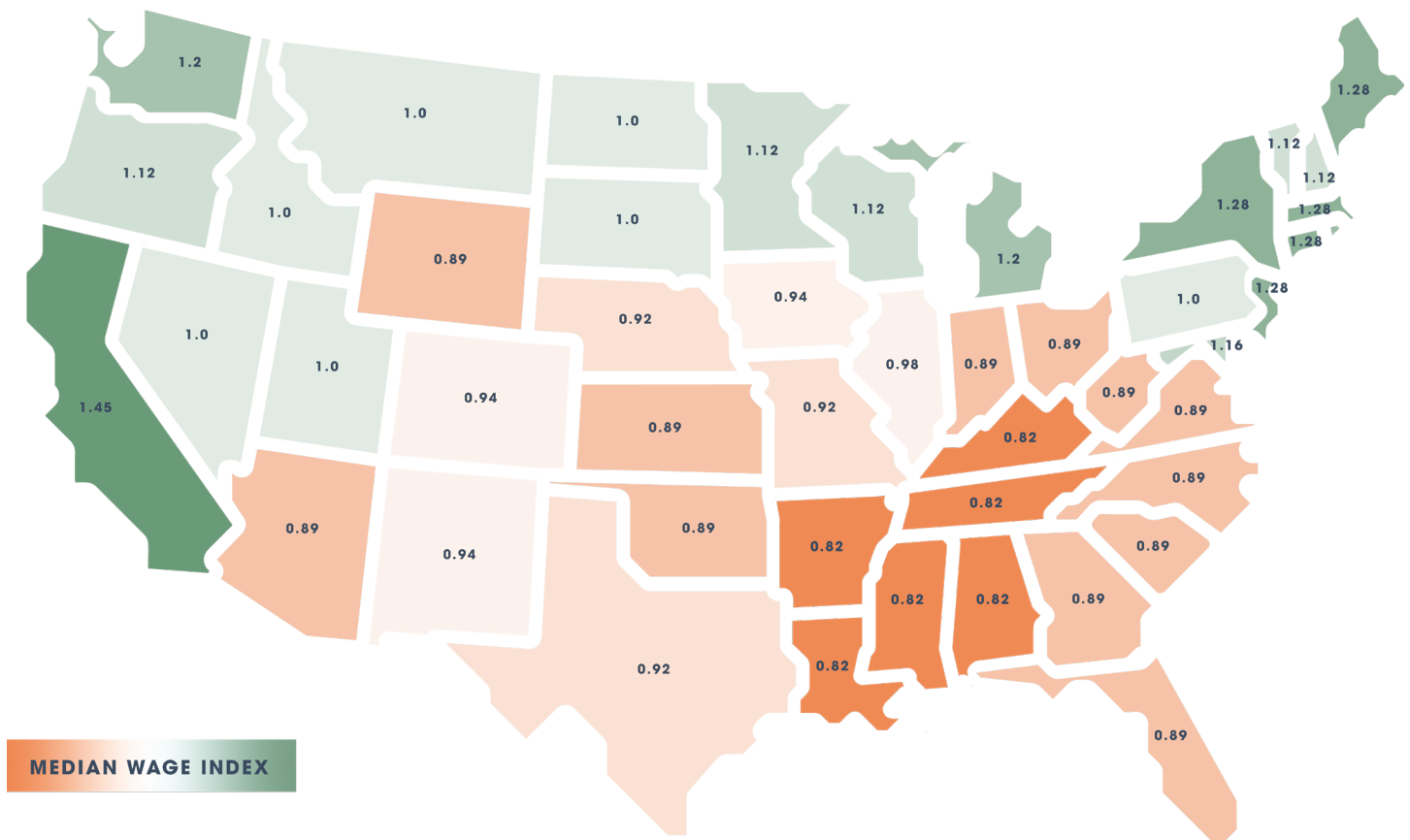
Medicare, the federal health insurance program for persons over 65 years old, exhibits significant geographic variation in spending and reimbursement across the United States. The differences in Medicare spending per beneficiary arise from various factors, including health care utilization patterns, costs, and quality disparities. While some regions in the United States spend more on health care, others offer services at lower costs, raising concerns about fairness and efficiency. Policymakers have debated whether lower-spending regions like Northwest Arkansas are unfairly penalized for their efficient care delivery. At the same time, higher-spending areas, often characterized by inefficient academic medical centers and economically disadvantaged populations, face challenges that drive up their costs.

Within larger MSAs, smaller subdivisions called Metropolitan Divisions account for regional health care costs and wage differences. Wage index payments, the adjusted rates that Medicare pays health care providers, often reflect these geographic distinctions. However, disparities arise when wage indexes fail to account for the actual costs of delivering care, leading to dramatically lower provider payments in places like Northwest Arkansas.

One example of this discrepancy is in the Medicare wage index system, which adjusts payments based on local wage levels. These wage indexes can vary significantly even within the same state or region. For instance, Northwest Arkansas counties may receive a Medicare wage index of 0.83, whereas nearby places such as Oklahoma City (0.87) or Kansas City (0.93) receive higher indexes. **Such discrepancies greatly impact the financial sustainability of health care providers and make it harder for regions like Northwest Arkansas to attract and retain qualified health care professionals.**

Arkansas has among the lowest payment rates, only slightly higher than the neighboring states of Louisiana and Mississippi (see Figure 14).

FIGURE 14:
Median Area Wage Index by State, FY 2022

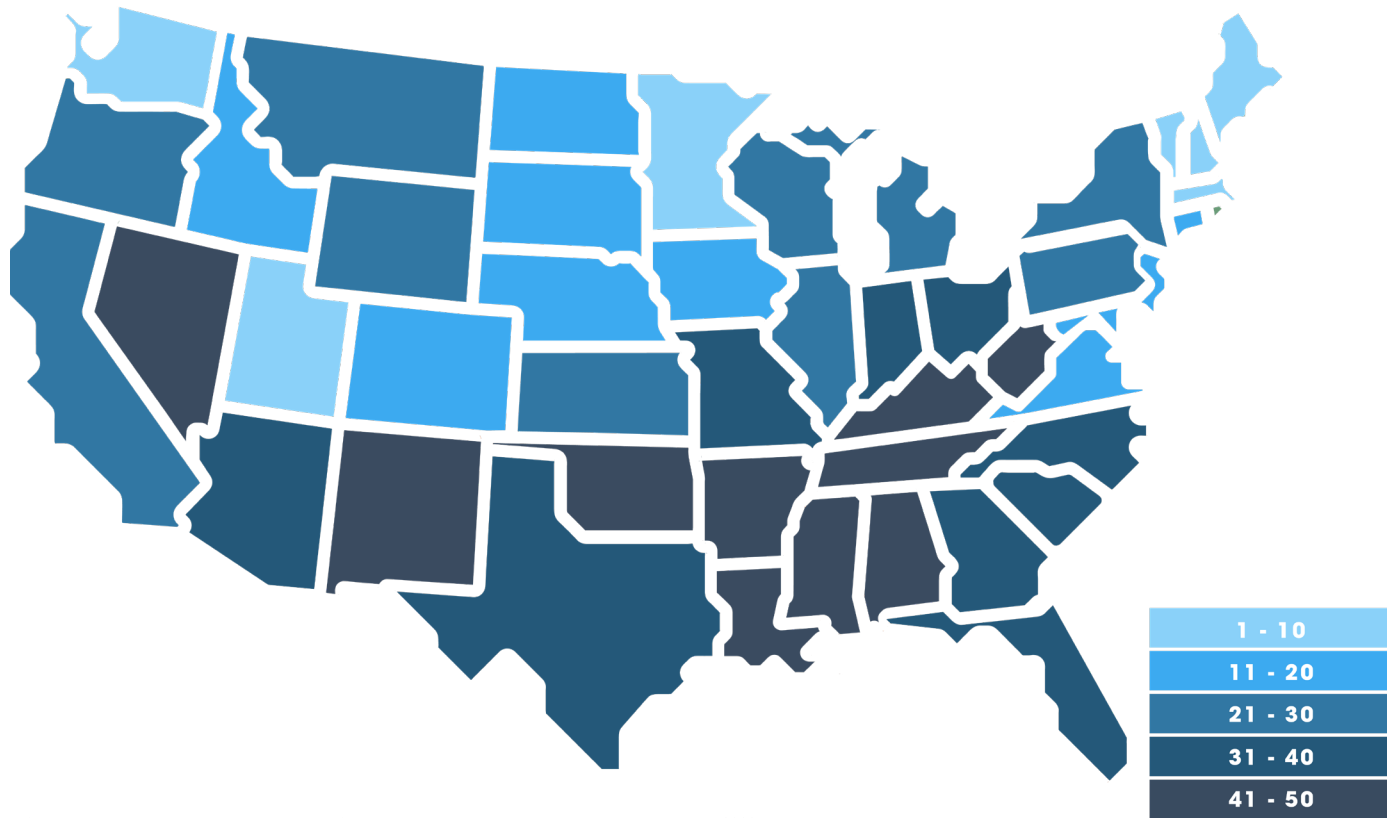


SOURCE: Centers for Medicare and Medicaid Services

Making matters worse, states like Arkansas that receive the lowest level of federal reimbursement also have the poorest health status and sickest patient population. Figure 15 illustrates how states in the lower Mississippi Delta such as Arkansas, Mississippi, and Louisiana have the greatest health needs.

FIGURE 15:
Overall Health Rankings by State

Rank Based On: Sum of weighted z-scores of all Annual Report ranking measures



SOURCE: America's Health Rankings analysis of America's Health Rankings composite measure, 2023, United Health Foundation, AmericasHealthRankings.org, accessed 2024.

As shown in Figure 16 on the right, Arkansas had the lowest payments to providers among all states in 2018 based on Medicare fee-for-service rates. **This results in Arkansas having 31% less reimbursement than the national average.**

As a result, providers in Northwest Arkansas are at a competitive disadvantage compared with neighboring states in terms of the amount of money they receive per patient. For example, a hospital in nearby Oklahoma treating the same patient with the same medical condition would make \$5,725 more. This illustrates how money for reinvestment and growth is unavailable to hospitals in Northwest Arkansas compared to a state only a few miles away (see Figure 17 on the following page).

FIGURE 16:
Prices for Hospitals' and Physicians' Services, 2018 SOURCE: Congressional Budget Office, January 2022

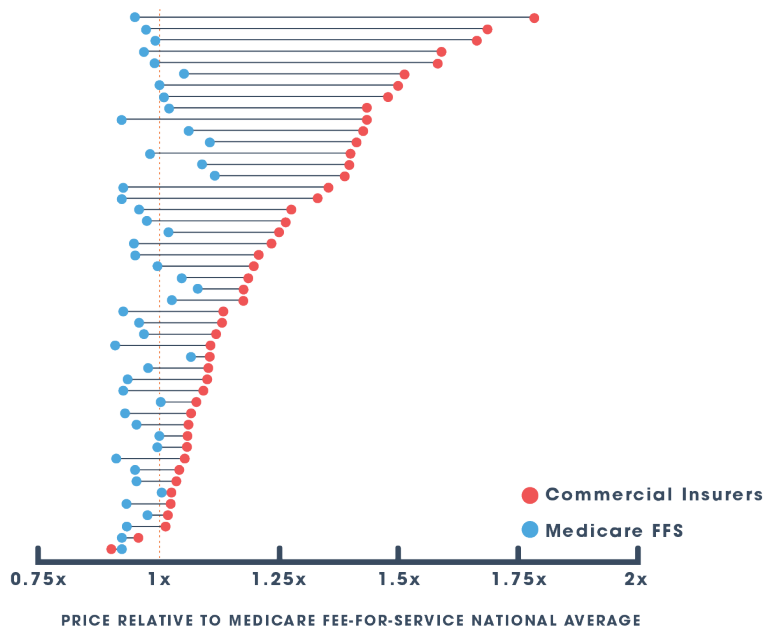
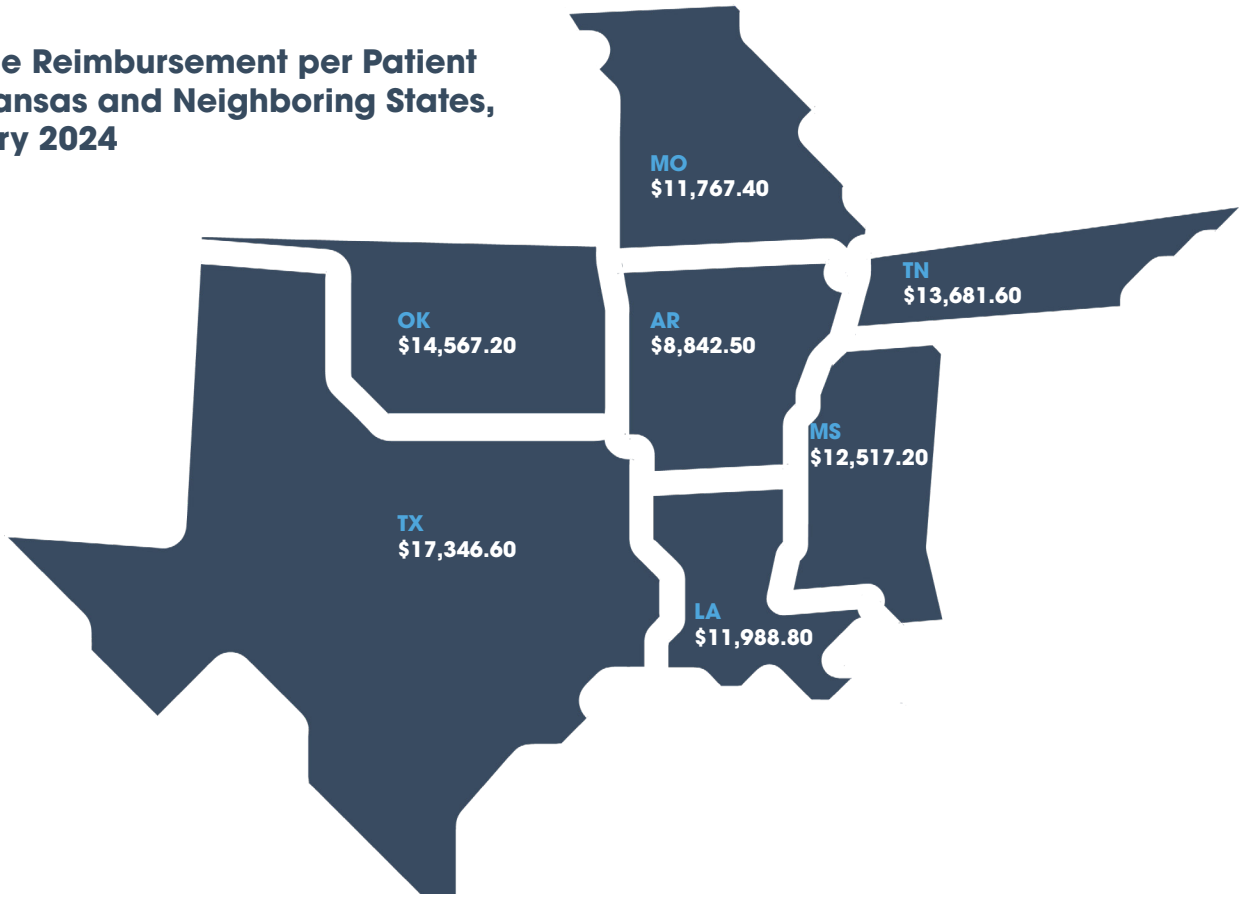


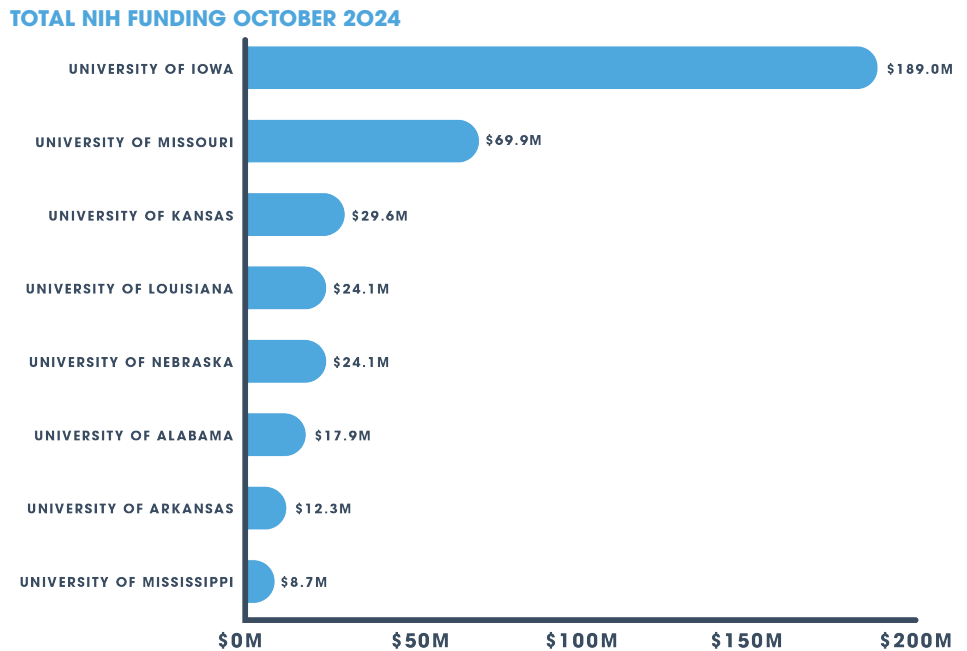
FIGURE 17:
**Average Reimbursement per Patient
for Arkansas and Neighboring States,
February 2024**



CHALLENGE 2: Research Comparisons with Flagship Universities

Northwest Arkansas has historically been disadvantaged in biomedical research compared to peer markets with large academic medical centers. NIH Research funding awarded in 2024 to the University of Arkansas Fayetteville (\$12.3 million) is second lowest among peer flagship universities (see Figure 19a).

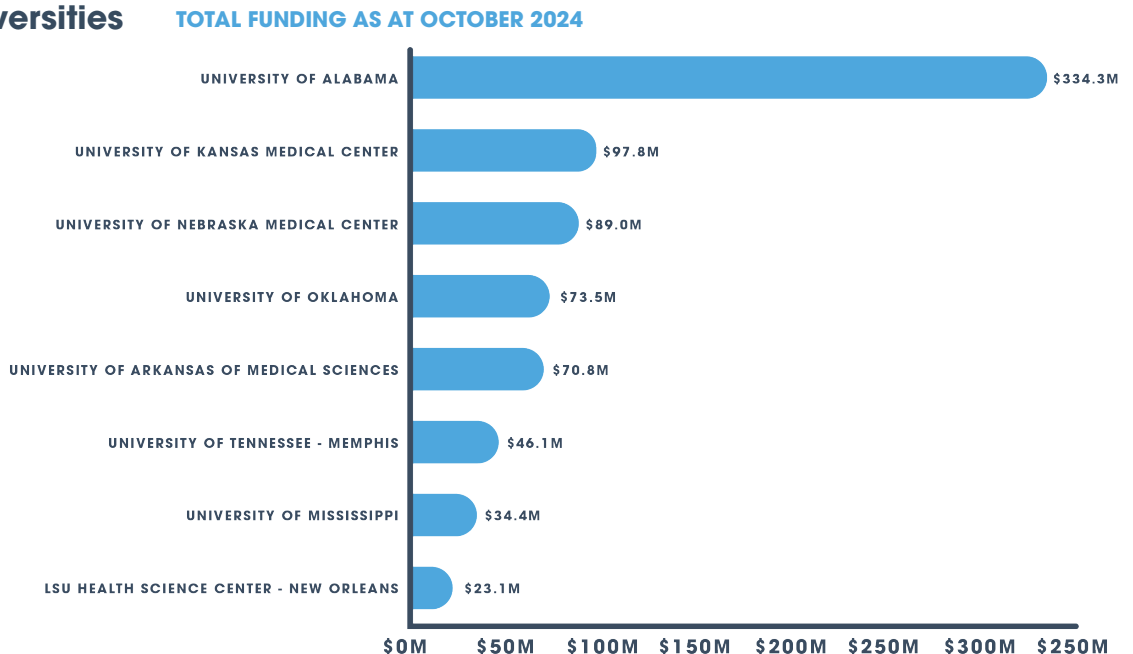
FIGURE 19a:
UAMS Compared with Peer State Health Science Universities



Research Comparisons with Health Science Centers in Neighboring States

NIH Research funding awarded in 2024 to UAMS (\$70.8 million) is comparable with neighboring health science centers but far below UAB (\$334.3) (see Figure 19b).

FIGURE 19b:
UAMS Compared with Peer Health Science Universities



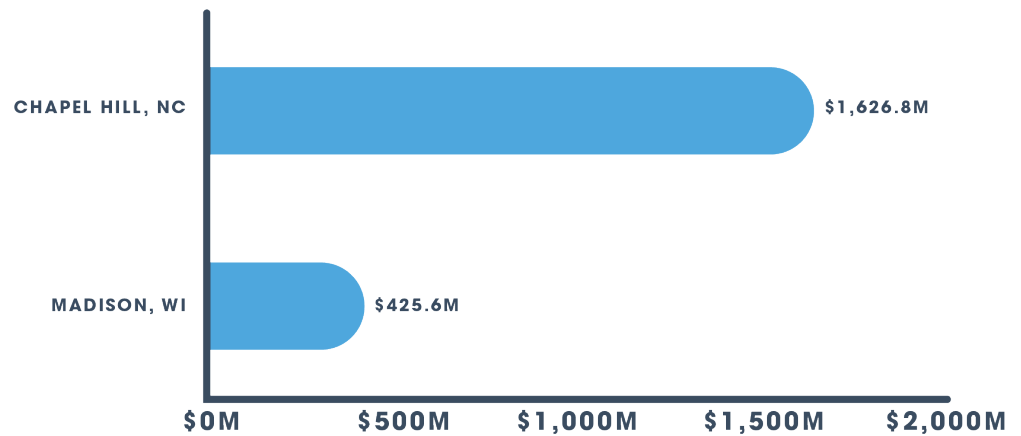
SOURCE: NIH Reporter

In 2024, UAMS secured over \$70 million in grants for precision medicine, rural health care, and telemedicine research. These efforts will focus on reducing regional health disparities and fostering health equity initiatives. For example, the NIH awarded the UAMS Translational Research Institute (TRI) \$31.7 million in federal funding to continue advancing research in Arkansas and across the United States. This funding, part of the prestigious Clinical and Translational Science Award (CTSA), places UAMS among approximately 60 research institutions nationwide. The primary grant, totaling \$26.9 million over seven years, and two additional grants worth \$4.73 million will support critical areas such as clinical trials, researcher training, community engagement, and data analytics. The funding also supports early-career researcher development and collaboration with institutions such as Arkansas Children’s Research Institute and Central Arkansas Veterans Health Care System. The CTSA enhances UAMS’ research capabilities, attracts talent, and expands opportunities for groundbreaking research, benefiting Arkansas and similar states nationwide. For example, only the second person in the world recently received an innovative prosthetic hand developed by researchers at the Institute for Integrative and Innovative Research (I³R), which restores a meaningful sense of touch and grip force following surgery⁹.

NIH Funding in Peer Communities

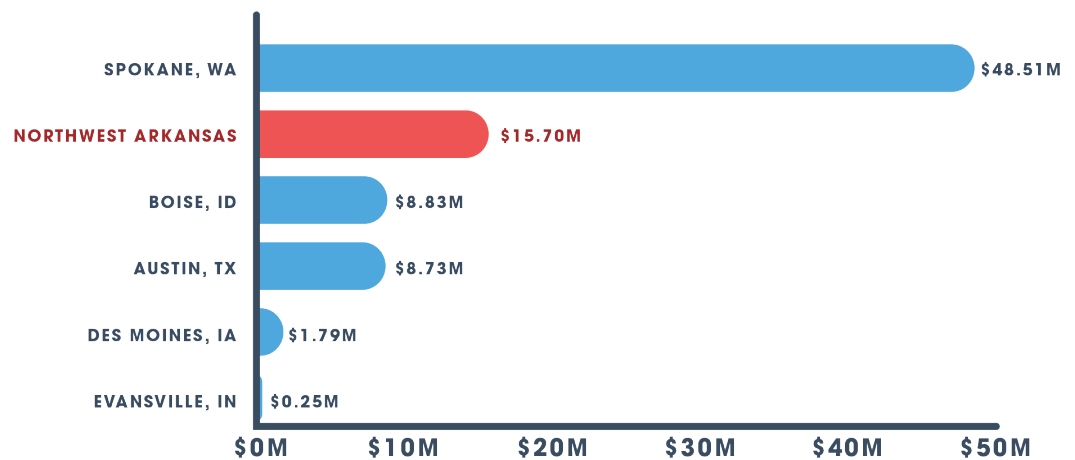
Compared with peer regions, Chapel Hill, NC, and Madison, WI, have nationally recognized academic medical centers that receive significant funding from the NIH. Peer regions with high levels of biomedical research have substantial infrastructure, such as advanced laboratories, research institutes, and clinical trial centers, supported by decades of investment. Regions with a long history of conducting clinical research attract and retain top researchers and institutions. In contrast, Northwest Arkansas, without a legacy of large-scale medical and clinical research, lacks the deep talent pool and established relationships with pharmaceutical companies, research universities, and biotech firms that often drive biomedical innovation in other areas (see Figure 20).

FIGURE 20:
NIH Research Awarded by Regions (2023) - Based on Congressional Districts (2024)



However, Northwest Arkansas has expanded biomedical research and investment in facilities since 2018. It has received more NIH funding in 2024 than Boise, Austin, Des Moines, and Evansville (see Figure 21).

FIGURE 21:
NIH by Region Excluding Chapel Hill, NC, and Madison, WI



⁹University of Arkansas: Innovative Prosthetic Hand System Developed by I³R Researchers Implanted in First Arkansan

Source: NIH Reporter

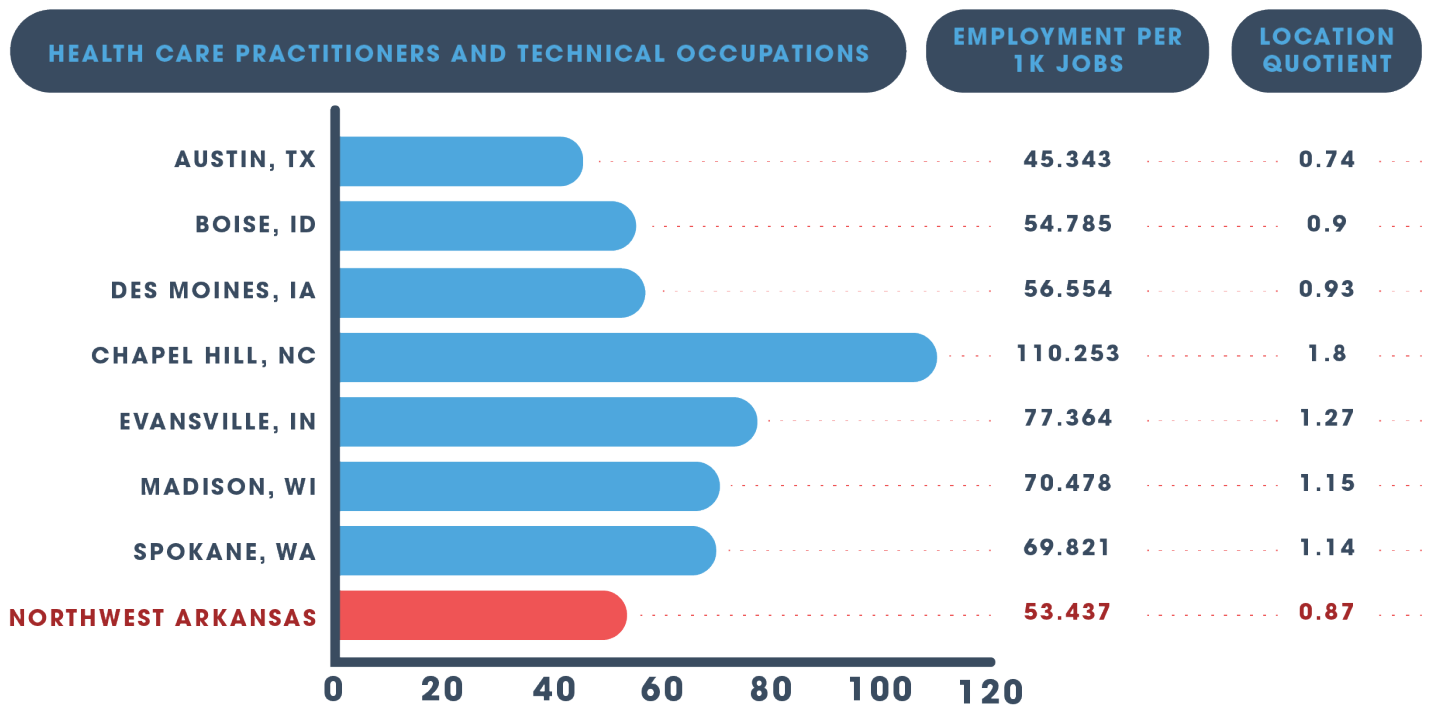
Stronger collaborations among health care institutions such as Highlands Oncology, UAMS Northwest, Alice L. Walton School of Medicine and Heartland Whole Health Institute are still in their early stages. While these institutions are laying the groundwork for future research capacity, developing the critical mass of expertise, funding, and projects needed to become a biomedical research hub will take time.

Research grants are a significant driver of economic development as peer markets with higher funding have significantly stronger health care economies, greater job growth, higher wages, and more outside investment in capital and construction. Therefore, Northwest Arkansas must develop a regional strategy to provide support to research faculty from universities as they develop NIH and other grant applications.

CHALLENGE 3: Need for an Expanded Health Care Workforce

Northwest Arkansas is experiencing rapid population growth, with Washington and Benton counties surpassing 560,000 residents in 2022 and projections suggesting the population could exceed 1 million by 2050. This demand for health care services places considerable pressure on regional providers, including Washington Regional, Mercy, Northwest Health, Highlands Oncology, UAMS and Arkansas Children’s. **Persistent staffing shortages exacerbate health care workforce challenges, with more than 1,200 open positions for health care practitioners—such as physicians, nurses, and technicians—and an additional 1,500 openings in health care support roles.** Particularly acute is the need for nurses, as evidenced by 352 openings for registered nurses and 152 for licensed practical nurses, highlighting the region’s health care workforce shortage in the face of rapid population growth (see Figure 22).

FIGURE 22:
Health Care Practitioners



Source: U.S. Bureau of Labor Statistics, May 2023 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates

Although some initiatives are underway to expand the health care workforce, much more work is required at all levels, with broader collaboration across multiple institutions. For example, Northwest Arkansas Community College (NWACC) and Northwest Technical Institute have expanded nursing and health science programs to accommodate more students annually, addressing a critical gap in health professions education. Likewise, efforts to expand graduate medical education are progressing, with WRMC, UAMS Northwest, and Mercy planning to add up to 92 new residency slots. In partnership with WRMC, the Eleanor Mann School of Nursing at the University of Arkansas recently received a \$1.19 million grant through the Arkansas Linking Industry to Grow Nurses (ALIGN) program to further grow the number of highly skilled nurses in the region. Washington Regional Medical Center provided additional support. The grant will allow 100 RNs at WRMC to earn their Bachelor of Science in Nursing degree at the University of Arkansas, increasing their wage potential and advancement opportunities while improving patient outcomes. However, these initiatives alone are insufficient to meet the region's growing health care needs, and they will take time to produce measurable impacts. It is evident that a more comprehensive approach, including significant growth in medical and health science education, is urgently needed to address current and future demands.

Recruiting physicians and other health care professionals in Northwest Arkansas faces significant challenges, especially in a region without robust health science education programs and pipelines. Historically, the division in higher education between Little Rock-centric UAMS, with a public medical school and a strong focus on health science education, and UA Fayetteville, with limited health science programs, has placed Northwest Arkansas in a lower relative position compared with peer regions. The UAMS Northwest regional campus has managed to grow in recent years, but the historical decisions to concentrate health-related education in Little Rock continue to hold Northwest Arkansas back.

Hospitals and clinics have made progress—such as Mercy Hospital in Rogers, which recently added more than 50 physicians and 75 nurse practitioners—but critical specialties such as neurology and rheumatology remain particularly difficult to staff. This shortage raises concerns about the health care system's capacity to serve a rapidly growing population. The absence of a local, independent medical school currently limits the development of homegrown talent, making the region heavily reliant on external recruitment, which is costly and competitive. This is why the development of Alice L. Walton School of Medicine is a game changer for the region's economic development and health status.

The need for a more comprehensive approach to workforce development is clear. Collaborative efforts, such as those led by the Northwest Arkansas Council and regional health care providers, are critical in addressing these shortages. Strategic initiatives, including the development of Alice L. Walton School of Medicine and Heartland Whole Health Institute, are expected to play a transformative role in attracting top medical talent and fostering innovation in health care education. Establishing such programs is essential for positioning Northwest Arkansas as a health care hub that can effectively meet its residents' growing and evolving needs.



Communities where few undergraduates pursue health care professions often face significant shortages of health care professionals, as this creates a weak workforce development pipeline. Studies have shown that regions with low enrollment in health care-related undergraduate programs, such as nursing, allied health, or pre-medical studies, tend to struggle with filling essential health care positions. The key to addressing this issue lies in strengthening local education opportunities. For instance, areas with limited health care education pathways may have 30-40% fewer practicing physicians, nurses, and technicians compared to regions with strong undergraduate programs. This shortfall is further exacerbated by the fact that health care professionals who train locally are more likely to remain in the region after graduation.

Without a robust pipeline, communities are forced to rely on costly recruitment from other regions, often competing with larger cities and established medical centers, which deepens the health care access gap for local residents.

This cycle of low enrollment and inadequate local training perpetuates long-term shortages and impacts the community’s ability to provide adequate health care services. Compared with peer markets, health care professions are not among the top three degree choices (see Table 4).

TABLE 4:
Most Popular Undergraduate Majors in Peer Markets

SOURCE: DATA USA

| LOCATION | MOST POPULAR MAJOR | SECOND MOST POPULAR MAJOR | THIRD MOST POPULAR MAJOR |
|--------------------|----------------------------------|-------------------------------|-------------------------------|
| AUSTIN, TX | GENERAL STUDIES | GENERAL BUSINESS ADMIN & MGMT | GENERAL PSYCHOLOGY |
| BOISE, ID | GENERAL STUDIES | REGISTERED NURSING | GENERAL BUSINESS ADMIN & MGMT |
| DES MOINES, IA | LIBERAL ARTS & SCIENCES | REGISTERED NURSING | HOMELAND SECURITY |
| CHAPEL HILL, NC | GENERAL BUSINESS ADMIN & MGMT | COMPUTER SCIENCE | GENERAL BIOLOGICAL SCIENCES |
| EVANSVILLE, IN | GENERAL BUSINESS ADMIN & MGMT | REGISTERED NURSING | HEALTH CARE ADMIN & MGMT |
| MADISON, WI | GENERAL COMPUTER & INFO SCIENCES | REGISTERED NURSING | GENERAL ECONOMICS |
| SPOKANE, WA | LIBERAL ARTS & SCIENCES | GENERAL BUSINESS ADMIN & MGMT | GENERAL BIOLOGICAL SCIENCES |
| NORTHWEST ARKANSAS | LIBERAL ARTS & SCIENCES | GENERAL BUSINESS ADMIN & MGMT | ENGINEERING & INDUSTRIAL MGMT |

CHALLENGE 4: Expanding Specialty Care Must Continue

Northwest Arkansas continues to experience a growing need for specialty care services. Heart disease is a particular focus because it is the leading cause of death among Arkansans and because cardiology is one of the most in-demand types of specialty care. For example, Arkansas ranks No. 42 in the nation in terms of the number of cardiologists per capita. Compared with states containing peer regions, Arkansas' location quotient for cardiology (.88) is lower than Wisconsin's (.91) and Iowa's (1.83) Source: US Bureau of Labor Statistics.

The recently announced strategic collaboration between AWSOM, Heartland Whole Health Institute, Mercy, and the Cleveland Clinic is a significant step toward addressing these needs. This partnership is poised to enhance cardiac care by expanding service lines focusing on advanced diagnostics, interventional cardiology, and cardiac surgery. With Cleveland Clinic's expertise in cardiovascular care, ranked top in the nation, Northwest Arkansas will gain access to leading-edge treatment protocols and technology that will benefit the local community directly.

The collaboration emphasizes the development of residencies, especially in cardiology and related subspecialties, to help alleviate the region's shortage of specialized medical professionals. By training the next generation of physicians within Northwest Arkansas, this initiative helps ensure a steady pipeline of heart care specialists familiar with the community's unique needs and challenges.

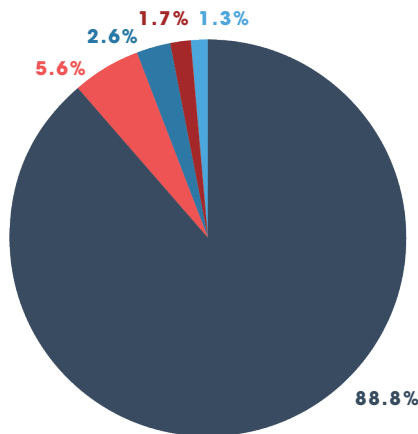
Cardiology Procedures for NWA Medicare Enrollees, 2019

Of the more than 75,000 cardiology procedures performed on Medicare enrollees who lived in Northwest Arkansas in 2019, 11%, or about 9,000, were provided outside the region. The percentages were higher for specific procedures: 14% of coronary artery bypass grafting surgeries and 20% of heart valve replacements were provided outside the area.

FIGURE 26:

Cardiology Procedures for NWA Medicare Enrollees, 2019

SOURCE: ACHI



UNIQUE PATIENTS: 29,849

LOCATION OF SERVICE

| | |
|---------------------------------|--------|
| NORTHWEST ARKANSAS | 71,249 |
| LITTLE ROCK/NORTH LITTLE ROCK | 1,044 |
| ARKANSAS (EXCLUDING NWA/LR/NLR) | 1,391 |
| MISSOURI/OKLAHOMA | 2,085 |
| OTHER OUT-OF-STATE | 4,469 |

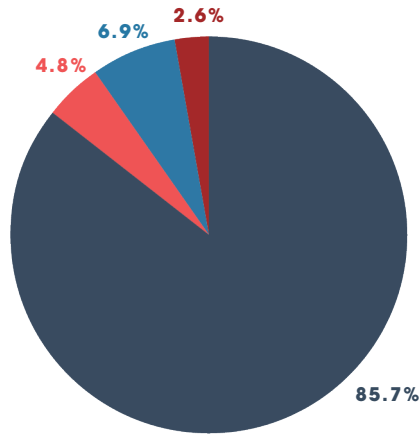
Coronary Artery Bypass Grafting (CABG) Procedure Utilization & Location for NWA Medicare Enrollees, 2019

This graphic displays coronary artery bypass grafting (CABG) procedure utilization and location of service for Northwest Arkansas Medicare enrollees.

FIGURE 27:

Coronary Artery Bypass Grafting (CABG) Procedure Utilization & Location for NWA Medicare Enrollees, 2019

SOURCE: ACHI



UNIQUE PATIENTS: 188

LOCATION OF SERVICE

| | |
|---|-----|
| ■ NORTHWEST ARKANSAS | 162 |
| ■ ARKANSAS (EXCLUDING NWA) | 5 |
| ■ MISSOURI/OKLAHOMA | 13 |
| ■ OTHER OUT-OF-STATE | 9 |

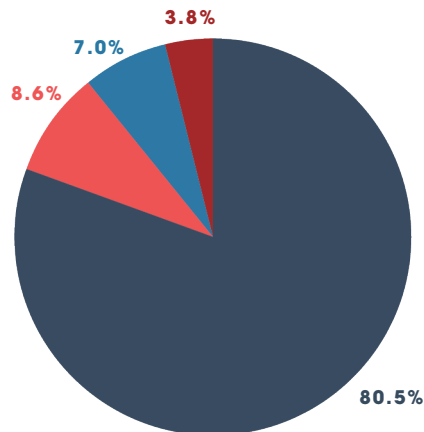
Valve Replacement Procedure Utilization and Location for NWA Medicare Enrollees, 2019

This graphic displays heart valve replacement procedure utilization and location of service for Northwest Arkansas Medicare enrollees.

FIGURE 28:

Valve Replacement Procedure Utilization and Location for NWA Medicare Enrollees, 2019

SOURCE: ACHI



UNIQUE PATIENTS: 178

LOCATION OF SERVICE

| | |
|---|-----|
| ■ NORTHWEST ARKANSAS | 149 |
| ■ ARKANSAS (EXCLUDING NWA) | 7 |
| ■ MISSOURI/OKLAHOMA | 13 |
| ■ OTHER OUT-OF-STATE | 16 |

CHALLENGE 5: Level 1 Trauma Service

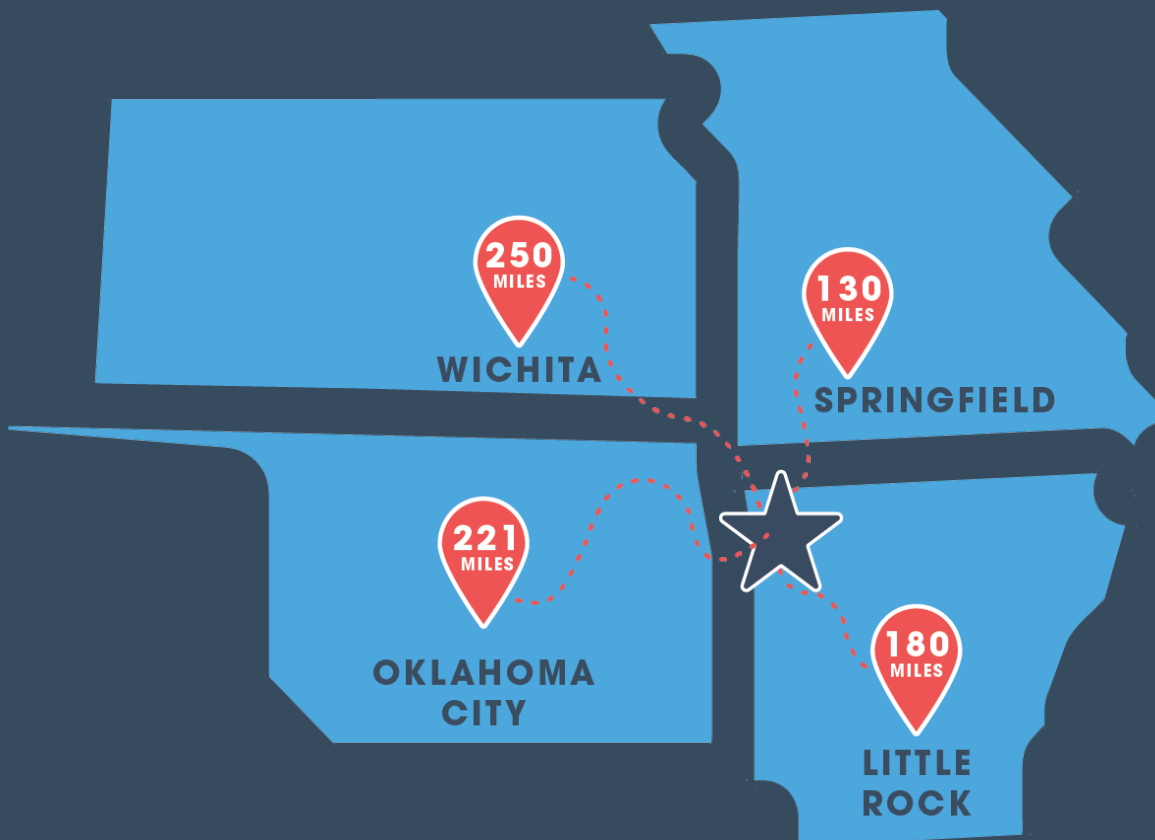
As Northwest Arkansas anticipates a population growth of 1 million residents by 2050, establishing a Level I trauma hospital becomes critical for several reasons. A Level I trauma center is equipped to provide comprehensive emergency care for the most severe and life-threatening injuries, ensuring that residents have immediate access to specialized medical attention when needed. This capability is essential in a rapidly growing region, where increased population density often correlates with higher rates of accidents and emergencies. Moreover, a Level I trauma hospital enhances public safety. It significantly improves health outcomes by offering advanced surgical and critical care services that can save lives and reduce trauma-related complications.

Beyond health benefits to citizens, the presence of a Level I trauma center can stimulate economic development in the region. Such facilities attract top-tier medical professionals, fostering a robust health care workforce and contributing to the local economy. A Level I trauma center will draw patients from neighboring areas and states, generating revenue and supporting local businesses. Furthermore, having a state-of-the-art trauma facility positions Northwest Arkansas as a health care hub, which can attract research and innovation initiatives, leading to further investment in health care technology and education. Ultimately, establishing a Level I trauma hospital will meet the urgent health care needs of a growing population and catalyze economic growth and quality of life in Northwest Arkansas. For example, as Northwest Arkansas becomes a national destination for mountain biking and outdoor recreation, a trauma center for injuries to athletes is critical to continuing to attract events.

Geography also plays a role in receiving Level I trauma designation. Figure 24 shows the location of Level I trauma centers in the multi-state region. The closest Level I trauma center areas are in Oklahoma City, OK (221 miles), Springfield, MO (130 miles); Little Rock, AR (180 miles); and Wichita, KS (250 miles).

FIGURE 23:

Location of Level I Trauma Centers in the Multi-State Region



The vision of regional health care transformation that began in Northwest Arkansas in 2018 must expand to grow subspecialty and trauma care, health science education, and post-graduate physician training in needed subspecialties. At the same time, a collaborative strategy for research and innovation must be in place to fuel continued growth. All these initiatives must be rooted in policy changes focused on increasing health care reimbursement and accelerating the movement from fee-for-service payments to value-based care with employer buy-in. Successfully implementing the four strategies below between 2025-2030 will require greater collaboration and collective effort, as no single institution can accomplish these priorities alone. Through the co-leadership of the Northwest Arkansas Council and Heartland Whole Health Institute, an implementation strategy with these goals will focus on the following areas:



Health Care Specialty Service Expansion

By 2040, the goal is to attract more patients from outside the region than it loses through outmigration. This includes increasing research-based physicians and subspecialty fellowships to enhance quality scores and develop the area as a destination for high-quality health care. Hospital systems and medical schools will invest in centers of excellence, potentially partnering with national health care centers. An important outcome of expanding medical education and specialty care will be the development of a Level I trauma program in the region.



Expanding the Health Care Workforce

By 2030, the region will have Alice L. Walton School of Medicine and additional students at the University of Arkansas and UAMS Northwest, driving physician workforce development, biomedical research, and specialized care. Growth in graduate medical education will be supported by funding for subspecialty programs. The goal is to have the size of the medical and health science programs match the median of peer markets by 2040.



Expanding a More Collaborative Research and Innovation Ecosystem

Increase biomedical research funding, development, and commercialization in Northwest Arkansas to the median of peer markets by 2040. Reaching this goal will require facilities, infrastructure, and faculty to raise the region's biomedical research profile.



Advancing Health Policy and Payment Reform Efforts in Support of Value-Based Care

By 2030, with a single voice, the region will advocate for state and federal policy changes to raise provider reimbursement to the level of peer markets and neighboring states. By 2040, the regional health care ecosystem will be a nationally recognized value-based care model integrating a whole-person system to manage health care costs while improving outcomes. Critical to success will be coordination among company-sponsored health plans to reduce costs, improve quality, and increase access.

HEALTH CARE SPECIALTY SERVICE EXPANSION

To advance subspecialty care and trauma services in Northwest Arkansas, a multi-faceted approach is essential to meet the region’s growing health care needs by training and retaining more physicians in Northwest Arkansas. Key to this effort is the attraction and retention of research-based subspecialty physicians, particularly in surgical fields, which will enhance the quality of care and reduce the number of patients leaving the region for specialized treatments. This will position Northwest Arkansas as a destination for patients outside the region seeking advanced care. By continuing to forge state and national partnerships, Northwest Arkansas can expand subspecialty services, further retaining patients while increasing out-of-state referrals and driving significant economic and health care growth.

Level I Trauma Services

A regional strategy to evaluate and develop Level I trauma services for adults and children should be as highly prioritized within the region as expanding commercial air service and highway construction was in past decades. Establishing comprehensive trauma care will ensure timely and life-saving interventions, reinforcing the region’s capacity to handle complex medical emergencies. To address trauma services, the development of Level I trauma services for adults and children is necessary. A gap analysis of the region’s current trauma infrastructure should be completed within six months, followed by a strategy to secure funding and support within two years.

With secured partnerships and resources, the region will focus on program development and facility renovation to achieve Level I Trauma Center designation by 2030. A robust Level I Trauma Center will also be a magnet for highly specialized clinicians and researchers. Expanding GME is required to achieve Level I trauma status, as surgery and emergency medicine residencies must be in place. To qualify, WRMC, the only Level 2 trauma center in the region, must continue its transformation from a community hospital to an academic medical center to meet the following requirements:

-  **1,200 trauma admissions per year.**
-  **An average of 35 major trauma patients per surgeon.**
-  **Residency training in trauma surgery.**
-  **10 peer-reviewed journal submissions every three years.**



Tripp Umbach recommends that WRMC, the only Level 2 trauma program in the region, and the Northwest Arkansas health care community join forces in early 2025, working through the Northwest Arkansas Council to bring Level I trauma service to Northwest Arkansas by 2030, led by WRMC and UAMS.

Physician Recruitment Strategy

A strategic action plan focusing on physician recruitment, partnership development, trauma services expansion, and patient attraction is essential to growing health care specialty services in Northwest Arkansas over the next six years.

Attracting and retaining research-based subspecialty physicians is a key priority, particularly in neurosurgery, cardiovascular surgery, and pediatric specialties. A targeted recruitment campaign in the region is recommended in 2025 among hospital systems, universities, medical schools, and residency programs to attract top-tier subspecialty physicians. Offering competitive salaries, research opportunities, and academic appointments will further enhance the region's attractiveness to specialists.

Tripp Umbach recommends establishing a regional clinical service expansion task force to serve as a forum for ongoing regional recruitment and retention in areas where appropriate and within legal guidelines. An initial step should involve the development of a detailed updated inventory of all health care services to serve as a baseline for identifying gaps in services and areas where patients are less likely to receive their health care locally.

The success of this initiative can be measured by the increase in subspecialty physicians recruited and retained by 2030. Greater collaboration among regional hospitals is imperative to fill specialty service gaps, especially in areas that do not have high reimbursement, such as oncology or heart service lines.

National Partnership Development

Partnering with national health care providers, such as Cleveland Clinic, to train and retain specialty providers represents an emerging part of the regional strategy. The region's hospitals, health systems, and large physician groups should continue evaluating and engaging in formal service expansion partnerships with regional, state, and national health care systems, universities, and research institutions. These partnerships will enable joint research projects, clinical trials, and referral programs to attract patients from outside the region. Such partnerships are essential to growing the number of persons from the area served by regional health care providers and increasing the degree of patient inflow by 2030.



Expand Data System to Include Private Self-Pay Companies

While the Arkansas Center for Health Improvement (ACHI) provided Medicare, Medicaid, and commercial insurance data to Tripp Umbach during this process, they cannot access claims data from self-insured companies. Data from companies must be shared with an independent data platform managed by ACHI to provide a complete picture for planning. This is not a significant issue in most markets, as self-insured company plans comprise approximately 5% of the health care insurance market. However, because of the high concentration of large companies in Northwest Arkansas, approximately one in every four working adults have employee insurance, leaving a large hole in the data required to accurately measure regional outmigration of health care dollars and opportunity analysis for growing health care services.

Tripp Umbach recommends creating a regional health care data-sharing system to support the expansion of the Northwest Arkansas health care economy. By integrating claims data from the ACHI and data provided by local employers, health care providers can more effectively plan and develop subspecialty services tailored to community needs. This approach will allow Northwest Arkansas to build a comprehensive, cutting-edge health care infrastructure capable of serving residents and attracting patients nationwide.

By creating a HIPAA-compliant data-sharing platform in collaboration with ACHI, health care providers, employers, and technology partners can aggregate real-time data on patient demographics and care gaps. This system should be designed and implemented in partnership with ACHI and fully used to guide subspecialty recruitment by 2027.



EXPAND REGIONAL WORKFORCE TO MEET HEALTH CARE NEEDS OF GROWING REGION

The health care provider workforce in Northwest Arkansas is vital for the region's continued economic growth and for improving the health status of its rapidly expanding population. Unfortunately, the region's health care education ecosystem is not keeping up with workforce demands. The Northwest Arkansas Council's Health Care Transformation Division is ideally positioned to coordinate efforts around health care education, attraction, and retention, helping to ensure the region can meet the rising demand for medical services. One key aspect of this strategy is the ongoing expansion of graduate medical education, including residency programs and subspecialty fellowships, which will bolster the availability of highly trained medical professionals. By attracting and retaining health care providers locally, Northwest Arkansas can meet its health care needs and become a destination for patients from other regions, further enhancing its reputation and health care infrastructure.

In addition to expanding GME, there is a growing need to support existing workforce development efforts and create a robust pipeline for future health care professionals. This can be achieved by exploring the development of a health science high school in close proximity of a regional health care workforce training and simulation center. Such a high school and training facility would provide state-of-the-art education and hands-on training opportunities for physicians, nurses, and other health care professionals. Additionally, the center could serve as a hub for data collection and grant-writing services, supporting health care organizations in securing funding for growth and innovation.

Strategic partnerships with school districts, higher educational institutions, health care systems, and public agencies will be crucial in sustaining these efforts, enabling Northwest Arkansas to cultivate a health care workforce that is highly skilled and deeply embedded in the community. This approach will not only improve patient care but also drive economic development by creating jobs, attracting investment, and improving the overall health outcomes of the region.

To address the growing health care workforce needs in Northwest Arkansas, a multi-faceted strategy can be developed with the following key components:

1 Create a Regional Health Care Workforce Task Force

The first step is to form a Regional Health Care Workforce Task Force led by the Northwest Arkansas Council's Health Care Transformation Division. This task force will include key stakeholders such as health care providers, educational institutions (University of Arkansas, UAMS Northwest, AWSOM), school districts, government agencies, and business leaders. The objective of this group will be to assess regional needs, coordinate efforts, and establish a comprehensive plan for health care workforce growth. The task force will aim to meet within three months of formation, creating short- and long-term goals to guide health care workforce expansion in the region.

2 Continue to Expand Graduate Medical Education Programs

To address critical physician shortages, regional hospitals and medical schools should collaborate to increase residency and fellowship programs, focusing on underrepresented specialties in Northwest Arkansas. Over the next 18 months, at least three new residency or fellowship programs should be developed to train 100 new specialists over the next five years. This will ensure a sustainable pipeline of physicians, which is crucial for meeting the health care demands of a growing population.

3 Develop a Regional Health Science High School and Health Care Workforce Training and Simulation Center

A state-of-the-art simulation center would enhance the skills of current health care professionals and new entrants into the field. This center would offer hands-on training for medical professionals, continuing education opportunities, certifications, and specialized training for nurses, technicians, and allied health professionals. By launching the center within five years and serving health care professionals annually, Northwest Arkansas would create a hub for health care training, improving workforce readiness and patient care. Efforts to develop a health science high school can build from the CHAMPS (Community Health Applied in Medical Public Service) program at UAMS, allowing middle and high school students to learn about health professions and attend workshops that enhance their experience in the health care field.

4 Grant Writing and Data Support

To ensure continued financial support for these initiatives, a grant writing and data services unit should be created within the workforce training center. This unit will help local health care organizations secure federal, state, and private funding for workforce expansion and infrastructure improvements.

EXPAND A MORE COLLABORATIVE HEALTH CARE RESEARCH AND INNOVATION ECOSYSTEM

The Northwest Arkansas Council can leverage collaborative research efforts by aligning regional, state, and federal entities in a unified economic development plan. A central strategy is to identify, and support coordinated research activities that engage key stakeholders, including the University of Arkansas, UAMS Northwest's Institute for Community Health Innovation, Arkansas Children's Research Institute, AWSOM, Heartland Whole Health Institute, and Institute for Integrative and Innovative Research (I³R). The region can strengthen its health care research and innovation ecosystem by fostering collaboration among these institutions, accelerating medical sciences and health care delivery breakthroughs. The Council can play a pivotal role in identifying gaps in the region's research and innovation ecosystem, such as underfunded areas or emerging fields where the region lacks expertise. This will help shape a strategic agenda for future collaborative research projects, focusing on securing federal funding opportunities through NIH, NSF, and other federal grant programs. Ultimately, these efforts can position Northwest Arkansas as a hub for health

care innovation and economic growth, drawing on its rich academic and medical resources to spur new opportunities for jobs, startups, and investment in the health care sector.

Research Ecosystem Assessment and Action Agenda

Establishing a health innovation steering committee with representatives from key institutions such as the University of Arkansas, UAMS Northwest, Highlands Oncology, Arkansas Children's Northwest, the AWSOM, and Heartland Whole Health Institute represents a first step toward the goal of exceeding the amount of research funding of peer communities by 2040. This committee will coordinate efforts, set goals, and ensure alignment across research initiatives. This group will guide an in-depth analysis of the region's existing research capabilities, identifying strengths, gaps, and opportunities for collaboration and using the findings to shape the regional research strategy.

Based on the innovation ecosystem assessment, key research priorities aligning with regional health care needs and national trends will be developed. Such an agenda will focus on interdisciplinary projects that leverage the strengths of multiple institutions. By actively targeting funding from agencies such as NIH, NSF, HRSA, the Department of Defense, and the Veterans Administration, the committee can bring fresh dollars into the region from public and private sources. The committee can establish dedicated grant writing teams to prepare competitive proposals, aiming for significant funding for high-priority projects through expanded public-private partnerships with health care, pharmaceuticals, and biotechnology industry leaders. Finally, the regional research agenda would identify critical infrastructure needs, such as lab space and advanced equipment, to position the region and secure funding for new or upgraded research facilities to support cutting-edge scientific work.

Promote Research Commercialization and Startups

Health-related startups in Northwest Arkansas can benefit from existing university programs that support research and innovation. The University of Arkansas' Office of Tech Ventures and UAMS' Bioventures offer IP protection, tech licensing, and startup support. At the same time, the Office of Entrepreneurship and Innovation Ventures and the Arkansas Small Business and Technology Development Center provide additional resources for entrepreneurs. Leveraging and expanding these collaborations will enhance support for startups, fostering economic development and growth in the region's innovation economy.

ADVANCING HEALTH POLICY AND PAYMENT REFORM EFFORTS IN SUPPORT OF VALUE-BASED CARE

A strategic approach centered on targeted advocacy for state and federal policy reforms is crucial to effectively transform and advance the health care economy in Northwest Arkansas over the next five years. In partnership with Heartland Whole Health Institute, Northwest Arkansas Council's Health Care Transformation Division should co-lead advocating for transformative health policy changes to enhance the region's health care sector.

Increasing Reimbursement Rates

A key policy initiative is to advocate for increased reimbursement of state and federal rates for health care providers and facilities. Competitive reimbursement rates are vital for ensuring that health care providers and facilities are adequately compensated for their services. These funding increases are essential for retaining health care professionals and attracting top talent to the region. By pushing for higher reimbursements at both state and federal levels, Northwest Arkansas can build a more sustainable health care workforce, improve patient outcomes, and reduce provider burnout. Working with the Council and Heartland Whole Health Institute, a coalition of health care providers, local hospitals, and specialty care practices should develop a unified advocacy message and campaigns aimed at legislators and policy makers, emphasizing the urgent need to increase Medicaid and Medicare reimbursement rates.

This coordinated advocacy initiative must develop targeted campaigns directed at state legislators and federal representatives, emphasizing the urgent need to increase Medicaid and Medicare reimbursement

rates. By partnering with professional organizations such as state medical societies, hospital and nursing associations, the Council and Heartland Whole Health Institute can amplify its message regarding the importance of competitive reimbursement rates. Public awareness campaigns can also educate communities about the direct benefits of increased reimbursement rates, such as improved health care access and better patient outcomes.

Transitioning to Value-Based Care

An equally critical step in transforming health care in Northwest Arkansas is transitioning from a fee-for-service model to a value-based care system. This approach emphasizes patient outcomes and the quality of services rather than the volume of procedures performed. To facilitate this shift, Northwest Arkansas Council along with Heartland Whole Health Institute should convene employers, payers, and providers, and facilitate the initiation of pilot programs and alternative payment models to support whole-person care delivery. A regional coalition focused on these models can demonstrate the effectiveness of value-based care, and promote successful case studies and expand their reach to improve patient outcomes and support the financial sustainability of health systems.

Engaging with private insurers and government payers to create new payment structures that incentivize high-quality, cost-effective care will be critical. Legislative advocacy should focus on state policies that support the adoption of value-based care, including bonuses for high-quality outcomes or penalties for unnecessary procedures. Collaborating with the Arkansas Department of Human Services and others to explore state-led initiatives that align with federal models, such as Accountable Care Organizations (ACOs), will further enhance this transition.

Over the next five years, Northwest Arkansas can implement value-based care tools and models that focus on improving primary care, addressing social determinants of health, and fostering innovation. One example of a value-based payment model is Primary Care First (PCF), which empowers providers (PCPs) to innovate care delivery and receive capitation payments, incentivizing improved patient outcomes and reducing emergency department and inpatient hospital use. This model also incorporates behavioral health and social determinants of health, ensuring a holistic approach to patient care.

Programs such as eConsults, introduced by Arkansas BlueCross and BlueShield, allow PCPs to collaborate electronically with specialists, improving care efficiency while easing access to specialist care. The PCF program has shown promising results, with higher compensation for high-performing providers and better utilization of low-cost primary care settings. Arkansas BlueCross and BlueShield also collaborates with health care analytics companies like Embold to measure provider performance and help patients access top-performing physicians, which can reduce care costs and improve outcomes. A Northwest Arkansas value-based health care coalition should be further developed with multiple insurers to leverage these insights to refine provider performance. Innovation is driven through multi-stakeholder groups and summits such as these, which connect health care startups with regional stakeholders to address challenges with emerging technologies and scale innovative solutions for affordable and accessible care in Northwest Arkansas.

Engaging Large Employers

Engaging large employers in Northwest Arkansas is vital for creating a powerful coalition to advocate for health care transformation. Major employers like Walmart, Tyson Foods, University of Arkansas and J.B. Hunt have an interest in reducing health care costs while improving the health and well-being of their workforce. Tripp Umbach recommends organizing a coalition of these employers to build support for and advocate for value-based care. These employers can also grow workplace wellness programs that prioritize preventive care and employee well-being, demonstrating the benefits of a value-based care approach in reducing long-term health care costs.

By developing employer-led initiatives, the region can position these programs as case studies to promote the advantages of health care policy reform. Furthermore, engaging business leaders in direct conversations with policymakers can strengthen advocacy efforts and amplify the coalition's voice in state and national policy discussions.

The key to success is developing a robust data system that includes health care spending and utilization data from employees working at large self-insured companies. As recommended earlier in this report, the facilitation of a working group of large employers is a high priority in early 2025. Tripp Umbach also recommends a data partnership with ACHI, as ACHI already has the data infrastructure and can create a customized product for

Northwest Arkansas institutions to use in their strategic decision-making. By having a complete picture of all medical claims from the region, Northwest Arkansas Council Health Care Transformation Division and Heartland Whole Health Institute will be able to target the growth in specific specialty areas where providers are needed.

Leveraging Federal Funding and Expanding Health Care Access

Northwest Arkansas can explore opportunities to leverage federal funding to support the push for increased regional wage index. Medicaid expansion, demonstration projects, and other federal initiatives can provide states with enhanced matching funds that can be utilized to supplement reimbursement rates for specific services or populations. Addressing challenges related to Medicaid enrollment and eligibility is also crucial for ensuring that more individuals access these benefits, ultimately increasing the volume of services provided and enhancing the financial stability of health care providers.

Expanding access to health care services is another critical strategy. Efforts should focus on increasing the number of health care providers in the region, enhancing transportation infrastructure, and implementing telemedicine initiatives to serve remote and underserved populations. By addressing these barriers, the region can improve health care access and reimbursement rates for providers.

Other states have successfully implemented strategies to increase Medicare and Medicaid reimbursements. Minnesota, for example, has emphasized value-based care models like ACOs and Medicaid managed care programs. These initiatives have improved care coordination, reduced costs, and improved health outcomes. Similarly, Oregon's Coordinated Care Organizations (CCOs) have integrated physical, behavioral, and dental health services to improve patient care and reduce health care costs, leading to higher reimbursement rates.

Massachusetts has also led in payment reform, adopting alternative payment models and value-based purchasing programs. The state has invested in health care workforce development and expanded access to primary care services, which has helped improve care quality and reduce unnecessary health care spending. Other states have implemented similar programs aimed at improving care coordination, chronic disease management, and overall health care delivery. These initiatives have resulted in higher Medicare and Medicaid reimbursements for participating providers and have contributed to better patient outcomes.

Addressing wage index disparities is another critical policy action to ensure that health care providers in Northwest Arkansas receive fair compensation. Policymakers and health care advocates can propose various approaches to align wage index rates with the actual costs of care in rapidly growing regions. For instance, examining successful strategies implemented in states, where local wage indices are adjusted to reflect health care costs better, can provide valuable insights. Tripp Umbach recommends retaining legal and CMS accounting experts nationally to develop and implement a strategy to address wage index disparities.

Building Grassroots Support

Building grassroots support for health care reform is essential. The Northwest Arkansas Council should engage community leaders, health care advocates, and patients in a grassroots effort to promote health care transformation and value-based care. Hosting town halls, public forums, and community discussions will build widespread support for policy changes. Collaborating with patient advocacy organizations can help elevate the voices of those most affected by current reimbursement and payment models.

A multi-pronged action strategy, leveraging regional partnerships and targeted advocacy, should be implemented to advance health care payment reform policy in Northwest Arkansas.



APPENDIX A: PROFILES OF GROWTH IN HEALTH CARE INSTITUTIONS (2018-2023)

WASHINGTON REGIONAL MEDICAL CENTER: From 2018 to 2023, Washington Regional Medical Center experienced significant growth and development, solidifying its position as a leading health care provider in Northwest Arkansas. The hospital expanded its physical infrastructure and medical capabilities during this period to meet the region’s growing health care needs. Washington Regional strengthened its role as the region’s only Comprehensive Stroke Center, treating 663 stroke patients in 2021, many transferred from neighboring states, while excelling in spine care through its J.B. Hunt Neuroscience Institute. The hospital earned the Gold Seal of Approval® for Spine Surgery and introduced advanced technologies such as the robotic ROSA® Hip System for precision hip surgeries.

Washington Regional also addressed critical regional health care needs by adding more than 100 providers from 2018 to 2023, expanding its cardiology, neurology, and other specialties. The opening of a 16-bed Cardiac Progressive Unit further underscored its commitment to advanced cardiovascular care.

Collaborations with the University of Arkansas for Medical Sciences (UAMS) bolstered the hospital’s educational and service capacities. These partnerships led to the creation of an accredited internal medicine residency program, the arrival of new medical residents to the area, and the launch of the Maternal Fetal Medicine Clinic for high-risk pregnancies. Additionally, Washington Regional expanded its support for cancer patients by opening the J.B. Hunt Transport Services Cancer Support Home.

MERCY HEALTH: A significant component of this growth was the expansion of inpatient services. Mercy added new patient rooms and expanded its emergency department to accommodate increasing emergency visits. The upgraded emergency facilities allowed Mercy to offer more efficient, lifesaving care to patients throughout the region, serving thousands of patients annually.

From 2018 to 2023, Mercy Health in Northwest Arkansas significantly grew, enhancing its services, facilities, and workforce to meet the region’s expanding health care demands. The hospital introduced cutting-edge technology, notably in its surgical services, with a significant investment in robotics to offer minimally invasive procedures in areas including orthopedics, general surgery, and urology. These innovations improved patient outcomes, reduced recovery times, and solidified Mercy’s position as a leader in advanced health care.

Mercy Health also expanded its specialty care, recruiting numerous physicians in cardiology, orthopedics, and other critical areas. The hospital bolstered maternity services and pediatric care to meet the growing needs of women’s and children’s health. By opening new clinics and outpatient facilities, Mercy decentralized its services, ensuring broader access to primary and specialized care for patients in surrounding communities.

Workforce development was another key focus for Mercy during this period. Creating new programs to support nursing and medical staff, residency programs, and partnerships with local universities helped attract and retain top medical talent. Mercy’s workforce expansion included recruiting more than 50 physicians and 75 nurse practitioners.

Mercy’s \$247 million expansion plan further enhanced the region’s health care infrastructure, addressing the needs of a rapidly growing population. Despite successes, challenges remain, particularly in recruiting high-demand specialists such as neurologists and rheumatologists. Mercy strives for accessible, high-quality care while reducing outmigration for medical services.

ARKANSAS CHILDREN’S NORTHWEST: Since opening in 2018, Arkansas Children’s Northwest has experienced significant growth, investing more than \$100 million in expansion of facilities. The current expansion underway is a four-story addition that will seamlessly connect to the existing structure and increase the number of available beds from 24 to up to 40. This expansion focuses on critical specialties, including orthopedics, urology, gastroenterology, and ear, nose, and throat services. It allows the hospital to manage more complex surgeries and expand its infusion center for patients with cancer, gastrointestinal disorders, rheumatology concerns, and genetic conditions.

Over the next six years, Arkansas Children’s Northwest will invest considerable resources to grow the number of physicians and staff members, including nurses, to meet the region’s growing health care needs. This investment will further expand the campus’ ability to provide care locally with physicians based in Northwest Arkansas that work collaboratively with the state’s pediatric health system, which is now the leading system in the region and nationally ranked in seven specialties.

The hospital’s growth has also attracted patients from neighboring states, most notably Oklahoma and Missouri, generating a net increase in health care-related economic activity for Northwest Arkansas. The expansion reflects Arkansas Children’s Northwest’s commitment to providing nationally reputable, comprehensive pediatric care locally, benefiting the region’s health care system and economy.

NORTHWEST HEALTH: Northwest Health improved access to medical services, reporting more than 565,000 patient encounters in 2023 alone. Its network of hospitals and outpatient clinics has expanded considerably, handling more than 86,000 annual emergency department visits and providing more than \$181 million in uncompensated care. This reflects Northwest Health's commitment to supporting the community's most vulnerable members while continuously advancing its medical services. Investments in cutting-edge technologies, such as minimally invasive lung biopsy equipment and advanced MRI systems, have enhanced diagnostic and surgical capabilities. Workforce development remains a key focus, with initiatives such as an RN residency program and partnerships with local nursing schools helping to strengthen the region's health care labor force.

Besides these advancements, Northwest Health has prioritized the development of specialized care programs, including cardiology, orthopedics, and behavioral health services, to address the community's diverse needs. The introduction of telehealth services has also broadened access, enabling patients to receive care from the comfort of their homes. Moreover, community engagement initiatives, such as health fairs and educational workshops, promote wellness and preventive care. This comprehensive approach not only elevates the standard of health care in the region but also fosters a culture of health awareness among residents, paving the way for a healthier Northwest Arkansas.

HIGHLANDS ONCOLOGY: Highlands Oncology has significantly expanded its role in specialized cancer treatment, becoming a key contributor to the health care infrastructure in Northwest Arkansas. Over recent years, its growth has enabled the region's residents to access advanced cancer care close to home, reducing the need for patients to travel out of state for treatment. This expansion has improved patient convenience and ensured that local cancer patients receive cutting-edge therapies and treatments without leaving their community.

Highlands Oncology's investment in advanced oncology research and services, including state-of-the-art radiation therapy, chemotherapy, and immunotherapy, positions it as a leader in cancer care. By offering access to highly specialized oncologists and multidisciplinary care teams, the facility has become a trusted center for comprehensive cancer care, addressing a range of needs from diagnostics to long-term treatment plans. Highlands Oncology's expansion has bolstered the local health care economy by attracting top medical talent to the region, enhancing the workforce, and establishing Northwest Arkansas as a destination for high-quality research-based cancer treatment.

The combined efforts of these health care institutions have transformed the region into a burgeoning health care hub. As the population is expected to approach one million by 2050, continued investment in facilities, workforce development, and advanced medical technologies will be critical to ensuring that the health care system can meet the needs of Northwest Arkansas' rapidly expanding population.

COMMUNITY CLINIC: For more than a quarter of a century, Community Clinic has been dedicated to delivering high-quality and easily accessible health care services to the residents of Washington and Benton counties. It offers multilingual services in English, Spanish, Marshallese and more. It accepts most commercial insurance as well as Medicare and Medicaid. Through the years, Community Clinic has grown to become Northwest Arkansas' largest safety-net health care provider, serving more than 41,000 patients in 2022.

As a Community Health Center, it operates under the highest standards of accountability in the medical field and regularly assess outcomes to enhance patient experience and improve health outcomes.

Dedicated clinical teams tirelessly address a wide range of medical conditions. In cases where a specialist outside of our network is needed, they guide patients through the referral process and collaborate closely with the referred specialist to ensure treatment is well-coordinated and tailored to meet each patient's needs. Specialty referrals enable the organization to enhance the expertise of its clinical teams when it's in the patient's best interest. Community Clinic is also recognized as a Patient-Centered Medical Home (PCMH).

VA MEDICAL CENTER: The Veterans Health Care System of the Ozarks (VHSO) in Fayetteville, Arkansas, is a key health care provider for veterans in northwest Arkansas, southwest Missouri, and eastern Oklahoma. It offers a wide range of medical services to a predominantly rural veteran population. In addition to its main campus in Fayetteville, the VHSO operates several outpatient clinics and community-based outreach centers in areas such as Fort Smith, Harrison, and Branson, Missouri.

The hospital provides comprehensive healthcare services, including primary care, mental health services, rehabilitation, specialty medical care, women's health, and long-term care. Its mental health programs focus on PTSD and substance abuse treatment, while rehabilitation services offer physical and occupational therapy. Specialty services cover a broad spectrum, including cardiology, oncology, and orthopedics. For female veterans, the hospital offers reproductive health services, breast cancer screenings, and specialized mental health care.

VHSO has partnerships with the University of Arkansas for Medical Sciences (UAMS) and the University of Arkansas, making it a training site for healthcare professionals. The hospital is also engaged in clinical research, particularly in veterans' mental health, PTSD, and chronic disease management.

The facility actively reaches out to veterans through mobile clinics and community programs, including services for homeless veterans. Modernization efforts have expanded telehealth infrastructure and improved healthcare delivery, ensuring the hospital remains a vital resource for the region's veterans.

APPENDIX B: PROFILES OF GROWTH IN EDUCATION INSTITUTIONS (2018-2023)

UAMS NORTHWEST: Established in 2007 UAMS Northwest, plays a pivotal role in addressing the growing demand for health care professionals and enhancing the economic landscape of Northwest Arkansas. Serving over 330 students, more than 82 residents and fellows, and employing over 500 staff members, UAMS Northwest is integral to the region's health and economic growth, evidenced by its 64,000+ annual patient visits. UAMS Northwest's clinics have notably alleviated pressure on local emergency departments, resulting in an annual cost avoidance of \$27 million. Additionally, managing chronic diseases through these clinics yields more than \$100 million in cost savings, further emphasizing the economic benefits of preventive health care services. In the fiscal year 2022, the research activities undertaken by UAMS Northwest contributed an economic impact of \$25.4 million, sustaining 218 jobs within the region.

UAMS Northwest is strengthening the health care workforce, with the education of 93 residents and fellows in FY25 projected to generate an economic impact of \$46.5 million. Each graduating class of physicians from UAMS Northwest is estimated to bring about \$114.4 million in economic impact and \$63.3 million in annual cost savings, primarily through their roles as primary care providers. Collectively, these contributions position UAMS Northwest as a cornerstone of economic stability and growth in the Northwest Arkansas health care economy, fostering improved health outcomes and robust economic development.

UNIVERSITY OF ARKANSAS: Over the past five years, the University of Arkansas Fayetteville has experienced significant growth in its health-related programs, driven by new educational offerings and expanded partnerships. A key development is introducing a new Master of Public Health (MPH) degree, reflecting the university's commitment to addressing public health needs. The occupational health program has also grown, particularly in its communication disorders and occupational therapy departments, which have gained strong leadership and enhanced academic offerings. Additionally, the RN to BSN program has expanded through a partnership with Washington Regional Medical Center (Washington Regional) in addition to a \$1.19 million ALIGN grant from the State of Arkansas aimed at improving nursing education. The nationally ranked Office of Entrepreneurship and Innovation has further contributed to this growth by successfully running the BioDesign Sprints program, which fosters innovation in health-related startups. The program, coordinated with the College of Education and Health Professions (COEHP), has led to three provisional patents, highlighting its success. These efforts have positioned the University of Arkansas Fayetteville as a leader in advancing health education, research, and innovation, contributing to the state's health care workforce and economic development.

ALICE L. WALTON SCHOOL OF MEDICINE: Founded in 2021, AWSOM will welcome its first class of 48 students in July 2025 into a four-year MD program that will enhance traditional medical education with the arts, humanities, and whole health principles. The School's unique curriculum, ARCHES, features six elements longitudinally integrated into courses, clerkships, and electives throughout four years of instruction to proactively support a patient's whole health. The evidence-based curriculum takes inclusive and collaborative approaches to care designed to promote resilience, prevent disease, and restore health. AWSOM has secured preliminary accreditation status by the Liaison Committee on Medical Education, its program accrediting body.

The 154,000 square-foot School of Medicine building on the Crystal Bridges campus will foster a culture of student well-being, empowering future physicians to care for their patients and themselves. It features four stories and will include learning halls, a public gallery, library, clinical teaching spaces, administrative offices, a student lounge, covered bicycle parking, and recreation and wellness areas. Designed by Polk Stanley Wilcox Architects with rooftop park and landscape design by NYC-based design studio Office of Strategy + Design, the building is scheduled for completion in summer 2025 by Crossland Construction, Inc. Additionally, the architects designed a campus housing complex on an 11-acre site adjacent to the School. Construction will begin in early 2025 and will include student apartments in a park-like setting with nature trails and easy access to the downtown Bentonville community.

The Alice L. Walton School of Medicine will play a crucial role in addressing the region's shortage of physicians by producing the next generation of physician leaders. AWSOM will work with Mercy as a primary education partner in a new affiliation announced recently between the Alice L. Walton Foundation, Heartland Whole Health Institute, and Mercy. Together, they have committed to a 30-year, \$700 million affiliation agreement to expand access to health care, reduce costs, and improve health outcomes in the region. This investment includes a collaboration with Cleveland Clinic to enhance cardiovascular care in the Heartland.

HEARTLAND WHOLE HEALTH INSTITUTE : Heartland Whole Health Institute’s purpose is to lower costs, improve quality, and broaden access to health care in the Heartland by catalyzing new delivery models, using whole health principles, that can be replicated to disrupt the national health care system.

Founded in 2019 by philanthropist Alice Walton, Heartland Whole Health Institute puts a whole health approach at the center of the broader health care system to address the current health care crisis. The Institute was driven by its founder’s health care experience, and furthered by research revealing that the United States has one of the highest levels of health care spending worldwide yet relatively low rankings in overall health. In conjunction with Alice L. Walton School of Medicine, the Institute will transform health care by improving outcomes, reducing costs, and expanding access, beginning in the Heartland and scaling nationally.

Collaborations with renowned institutions like the Cleveland Clinic will help bring much-needed specialty care to the area, reducing the economic loss from residents seeking care outside the region. Through research, commercialization, and value-based care models, the Heartland Whole Health Institute and Alice L. Walton School of Medicine are poised to improve the health and well-being of the population, train more physicians, and significantly boost the economy, setting Northwest Arkansas on a path to becoming a national leader in health care, research, and innovation.

Economically, these initiatives are projected to have a profound impact on Northwest Arkansas, potentially generating \$2 billion in economic gains by 2040. This growth stems from the expansion of specialty services, innovative health care delivery models, and the establishment of the region as a health care hub.

APPENDIX C: PROFILES OF GROWTH IN RESEARCH AND INNOVATION (2018-2023)

UNIVERSITY OF ARKANSAS: In 2023, the University of Arkansas achieved record-high research expenditures of \$184 million, guided by the university’s 150 Forward Strategic Plan, which emphasizes research excellence. Since 2021, the university has directed more than \$136 million toward applied research facilities. Three new key capital projects—the Institute for Integrative and Innovative Research (I³R), the Multi-User Silicon Carbide Research and Fabrication Facility (MUSiC), and the Anthony Timberlands Center for Design and Materials Innovation—are expected to transform the U of A’s research capabilities.

The University of Arkansas has played a critical role in advancing biomedical research by investing in life sciences and health-related research programs. The university’s Institute for Integrative and Innovative Research (I³R) fosters interdisciplinary collaboration to address health challenges, with a particular focus on developing technologies and health solutions that can be commercialized and deployed. Medical devices, virtual reality applications, nanotechnology, biosensing, and data-driven health interventions are being researched for their potential applications in medicine, device and drug development, rehabilitation services and diagnostic tools. The university’s tech commercialization office also helps bridge the gap between academic research and the private sector by supporting startups and intellectual property development.

UAMS NORTHWEST: The University of Arkansas for Medical Sciences (UAMS) Northwest Regional Campus has been a driving force in expanding the region’s research-driven economy. UAMS collaborates with local hospitals and research institutions to conduct translational research on improving patient outcomes. This includes studies in precision medicine, telemedicine, and rural health care innovations. UAMS Northwest has developed partnerships to help bring these innovations to market, leveraging its connections with larger medical systems and industry partners.

UAMS Northwest has made a significant economic and social impact on Northwest Arkansas through its research programs. Since 2012, UAMS Northwest secured more than \$70 million in grant funding from the NIH, CDC, and private foundations including Walton Family Foundation and Walmart. These funds have fueled more than 75 projects aimed at reducing health disparities locally and globally, making the office a leader in health equity research. With a team of more than 150 multidisciplinary faculty and staff, the office brings together diverse cultural and academic perspectives to address complex health challenges. Additionally, the office has conducted more than 20 program evaluations to ensure effectiveness and guide future initiatives. Over the next five years, the UAMS Office of Community Health and Research aims to strengthen its role as a leader in community-engaged research, expanding its influence on regional, national, and global health outcomes. Its ongoing efforts are poised to continue driving economic growth in the region while improving population health.

HIGHLANDS ONCOLOGY: Highlands Oncology has been pivotal in advancing cancer treatment through its extensive expansion in clinical trials over the past five years. The center conducts trials in oncology and hematology, focusing on experimental medications and innovative uses of existing therapies. Highlands Oncology is unique as the only community-based Phase I oncology clinical trial center in Arkansas. These early-stage trials assess the safety and appropriate dosing of novel medications, offering patients access to cutting-edge treatments before they are widely available. Highlands Oncology is at the forefront of oncology

advancements through its commitment to research, benefiting the regional population and the broader cancer treatment landscape.

E-HEALTH TRANSFORMATION CLUSTER (UAMS LEAD INITIATIVE): This initiative, funded by the Build Back Better Regional Challenge, aims to grow an e-health cluster focusing on health care technology, workforce development, and job creation in underserved communities. Major projects include accelerated Bachelor of Nursing degrees in e-health, simulations for workforce training, and advancing BioDesign for health care entrepreneurship.

WOMEN'S HEALTH RESEARCH COLLABORATION: A partnership among the University of Arkansas for Medical Sciences (UAMS), the University of Arkansas (U of A), and the Arkansas Children's Research Institute (ACRI) led to a \$310,000 grant from the NIH to digitize and enhance a comprehensive maternal health data set. This project uses AI and machine learning tools to improve maternal and child health, making this data more accessible to researchers and clinicians.

NORTHWEST ARKANSAS BIODESIGN SPRINTS (NABS): Inspired by Stanford Mussallem Center for BioDesign, this program, launched by the U of A in collaboration with major regional health care systems, focuses on addressing health care challenges by harnessing innovation and entrepreneurship. Funded by a \$685,330 grant from the Walton Family Foundation, it empowers clinicians and engineers to develop health care solutions, resulting in market-ready innovations and intellectual property.

ARKANSAS INTEGRATIVE METABOLIC RESEARCH CENTER (AIMRC): Established as a COBRE at the U of A, AIMRC advances research in cell and tissue metabolism using AI-driven data science approaches. This center supports collaborations among UAMS, Arkansas Children's, and other regional institutions to improve health care outcomes, particularly in areas such as precision health, nutrition, and metabolic diseases.

Biomedical research and innovation in Northwest Arkansas have experienced significant growth in recent years, driven by collaborations among key institutions such as the University of Arkansas, UAMS Northwest, hospitals, medical practices, the Whole Health Institute, and the Alice L. Walton School of Medicine. These efforts are positioning the region as a hub for translating research into commercial products, particularly in health sciences, biotechnology, and patient-centered care.

CENTER FOR PUBLIC HEALTH AND TECHNOLOGY: The Center for Public Health and Technology at the University of Arkansas was established in 2020 as an interdisciplinary health research hub to support public health surveillance, intervention, and evaluation and advance health literacy, communication, and outcomes. The NIH-funded research in the Center spans from studying the use of gabapentin for non-medical reasons to inform treatment practices for opioid use disorder and aid in the development of prevention and intervention strategies to examining policy loopholes, key challenges related to enforcement, and tobacco industry interference among emerging youth access laws (e.g., Tobacco 21, Flavor restriction policies, a maximum nicotine level law).

EXERCISE SCIENCE RESEARCH CENTER: The Exercise Science Research Center has significantly expanded its externally funded research capacity with the addition of top muscle physiologists. Multiple NIH funded projects are currently underway in the Center focused on examining and preventing muscle mass decline across the lifespan. These projects focus on uncovering fundamental information on what keeps skeletal muscle molecular youthful by exploring the extent to which exercise plays a central role during aging and can be leveraged to improve muscle health throughout the lifespan; developing new techniques to isolate skeletal muscle nuclei to determine the role of muscle-specific miRNA in the context of exercise and aging to provide foundational insight for combatting age-mediated skeletal muscle mass loss and dysfunction; providing cutting-edge insights into preventing cancer cachexia, a wasting syndrome that largely affects the muscles, along with other body tissues, and is present in up to 80% of cancer patients; and developing a nonsurgical strategy of restoring the muscle function from volumetric muscle loss occurring from significant traumas, including battlefield injuries, car accidents, and some tumor removals.

INSTITUTE FOR INTEGRATIVE AND INNOVATIVE RESEARCH (I3R) AT UNIVERSITY OF ARKANSAS (UA): The Institute for Integrative and Innovative Research (I3R) at University of Arkansas has been established to advance research at UA that will not only contribute to the health and well-being of Arkansans, but also contribute to economic development in the region. I3R is pursuing this mission by pioneering solutions to grand challenges through convergence research across academic, industry, government, and nonprofit sectors to make a positive societal impact by creating and deploying innovations at scale. The Institute has embraced Integrative Health as a human-centered design model that seeks to improve human health by influencing a broad set of physiological, societal, and structural factors. Current projects support development and deployment of implantable medical devices to address neurotrauma through first-in-human clinical trials, wearable technologies to support rehabilitation of sensorimotor function in at-home settings, augmented reality systems to enable advanced medical care, brain imaging to develop and evaluate clinical interventions, medical robotics to enhance surgical and clinical capabilities, and AI driven platforms to support access to health care and nutritious food.

APPENDIX D: STAKEHOLDERS

| NAME | INSTITUTION |
|---------------------------------------|---|
| Alicia Berkemeyer | Arkansas BlueCross and BlueShield |
| Chancellor Charles F. Robinson | University of Arkansas |
| Eileen Hyde | Walmart Foundation |
| Eric Pianalto | Mercy |
| Jeff Hunnicutt | Highlands Oncology |
| Joe Thompson | Arkansas Center for Health Improvement |
| Judd Semingson | Community Clinic NWA |
| Kate Mamiseishvili | University of Arkansas, College of Education & Health Professions |
| Larry Shackelford | Washington Regional Medical System |
| Laura Jacobs | University of Arkansas |
| Marcy Doderer | Arkansas Children's |
| Marshall Saviers | Cushman & Wakefield Sage Partners |
| Martine Pollard | Arkansas BlueCross and BlueShield |
| Mike Malone | University of Arkansas |
| Nelson Peacock | Northwest Arkansas Council |
| Pete Kohler | OurPharma |
| Ranu Jung | University of Arkansas |
| Rick George | J.B. Hunt |
| Stefanie Pawluk | Heartland Whole Health Institute |
| Todd Simmons | Simmons Foods |
| Walter Harris | Heartland Whole Health Institute, Alice L. Walton School of Medicine |
| Yee-Lin Lai | Walton Family Foundation |

APPENDIX E: TRIPP UMBACH EXPERIENCE



Tripp Umbach is among the most established and respected private consulting firms in the United States. Tripp Umbach is a force in economic and community development, working with our health care, education, government, and corporate clients to improve communities' economic, social, and physical well-being worldwide. Founded in 1990 in Pittsburgh, PA and presently headquartered in Kansas City, MO, Tripp Umbach has a rich history of working with more than 1,000 organizations providing community assessment, economic impact assessment, and economic development. Tripp Umbach has completed health science education and bioscience economic development strategies in more than 50 other metro regions throughout the United States.





CONTINUING THE TRANSFORMATION: NORTHWEST ARKANSAS HEALTH CARE VISION 2030

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