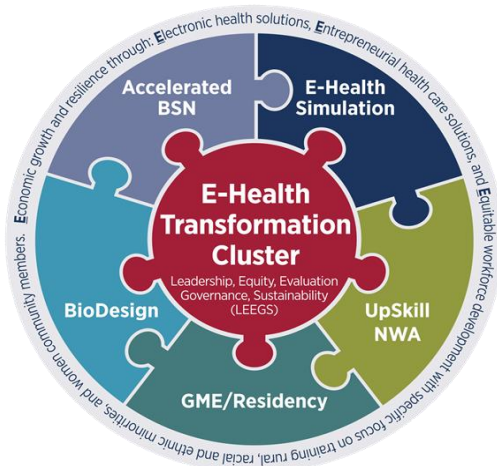We propose an *E-Health Transformation Cluster* that will focus on **E**conomic growth and resilience through: **E**lectronic health solutions, **E**ntrepreneurial health care solutions, and **E**quitable workforce development with specific focus on training racial and ethnic minorities, women, and rural community members. A cluster/ecosystem approach will allow us to achieve maximum economic benefit from highly interrelated projects.

Current Gap. Health care is one of the fastest-growing sectors nationally and world-wide as growth is spurred by an increase in health care services, medical device development, telemedicine, health care software, and E-Health technology development. The health care sector in the US is more than 15% of total GDP, which is more than agriculture, construction, and utilities combined. Our region is rural but has had rapid growth, with the population doubling over the past 20 years. The health care system has not kept pace, and many people have to leave the region for care. While our region has many assets and

Table 1. Challenges/Gaps Faced by the Region

$2 billion in lost economic impact.
~70,000 unemployed and underemployed households.
~1500 technical health care jobs unfilled.
Higher % of lower paid jobs in the retail, warehousing, and transportation sectors.
Severe (~5000) nursing shortage.
Lack of E-Health training and simulation to help workers transition to the new health care economy.
Aging physician workforce; Region ranks 47th out of 50 states in physician shortage; medically underserved region.
~170 medical student graduates leave for GME each year.
Lack of training-focused new health care innovations.
Prior economic development efforts nationally have not benefited minority, women, or rural residents equally.

strengths (see **Table 6**), the region has under-performed in the health care sector, which makes up only 7% of the regional GDP (less than half of the national GDP of 15%), and the region is currently losing $2 billion per year in health care outmigration and lost opportunity costs. In 2019, we completed an economic assessment, and each coalition member contributed to the cost of that assessment. The assessment and subsequent recommendations were codified in a Health Care Transformation Plan. The Health Care Transformation Plan found the following gaps: 70,000 unemployed and underemployed households; ~1500 technical health care jobs unfilled; a severe (~5000) nursing shortage; lack of E-Health training and simulation to help workers transition to the new health care economy; an aging physician workforce; physician shortage with the region ranking 47th out of 50 states; ~170 medical student graduates leave the state for GME/residency each year; lack of training focused health care innovations. See **Table 1** for a summary of the gaps.

Figure 1. E-Heath Transformation Cluster

To fill those gaps/meet those challenges, *E-Health Transformation Cluster* consists of six components interwoven to create a cohesive cluster to promote growth across the health care economy.

Project 1a and 1b: Upskill for Equitable E-Health Employment Growth (Upskill NWA). Targeting non-traditional students from underserved groups (racial/ethnic minorities, rural, women), Upskill NWA will increase the overall success of the *E-Health Transformation*

Cluster by training and placing unemployed and underemployed workers into well-paying, high-demand health care jobs.

    Project 2: Accelerated Bachelors of Nursing focused on E-Health (A-BSN). A-BSN will implement a 15-month curriculum and will aid the success of the *E-Health Transformation Cluster* by addressing the nursing shortage and placing workers in well-paying, high demand jobs to increase economic resiliency.

    Project 3a and 3b: E-Health Simulation for Workforce Training and Resiliency (E-Health Simulation). E-Health Simulation will train students, medical residents, and current health care providers on the newest technology and will include mobile units and virtual simulation to serve rural areas. This will allow for more intensive training in rural areas and enhance rural/urban linkages to reduce outmigration.

    Project 4a and 4b: Physician Graduate Medical Education (GME/Residency) for an E-Health Workforce. We will implement GME/Residency that promotes E-Health, with special training in electronic and telehealth, equity, and new economic models. This component increases the overall success of the *E-Health Transformation Cluster* by addressing the physician shortage, adding jobs, and reducing outmigration to improve the health care economy.

    Project 5: E-Health BioDesign for Entrepreneurial Excellence (BioDesign). BioDesign will increase the success of the *E-Health Transformation Cluster* by developing and connecting health care providers, engineers, entrepreneurs, researchers, and other participants across the region to create business solutions to emerging health care problems. This program will fill a critical gap in the development of new health care innovations to increase economic resiliency.

    Project 6: E-Health Leadership, Equity, Evaluation, Governance, and Sustainability (LEEGS). There are multiple complex organizations involved, and LEEGS will focus on overarching aspects of the *E-Health Transformation Cluster*. LEEGS will increase success by ensuring equity in all programs, providing a structure for strong leadership and governance, and ensuring a strong evaluation and plan for sustained growth.

Table 2. Component Projects

		Applicant	Request	Match
Project 1: Upskill NWA	1a: construction	NWTI	$12,653,103	$3,163,276 (20%)
	1b: non-construction	Excellerate	$7,946,602	$2,900,000 (26.7%)
Project 2: A-BSN	2: non-construction	UAMS	$2,613,899	$2,642,147 (50.3%)
Project 3: E-Health Simulation	3a: construction	UAMS	$3,332,508	$833,127 (20%)
	3b: non-construction	UAMS	$4,645,004	$1,228,506 (20.1%)
Project 4: GME/Residency	4a: construction	WRMC	$1,726,051	$431,513 (20%)
	4b: non-construction	UAMS	$20,048,000	$3,942,347 (16.4%)
Project 5: BioDesign	5: non-construction	UAF	$20,133,516	$4,131,882 (17%)
Project 6: LEEGS	6: non-construction	UAMS	$1,901,317	$789,252 (29.3%)
Total			$75,000,000	$20,062,049 (21.1%)

    Uniqueness, Competitive Advantage, and Necessity of EDA Investment. While many of the needs/gaps outlined for our cluster are present across the US, our region is unique. Given the rural and underserved nature of our region, there are fewer resources to invest in project start-up costs. All projects are sustainable once established, but require significant upfront investment, and would not be possible without EDA start-up funding. Our region also has several assets which provide a competitive advantage described below. Our cluster has robust investment from local and state government and private companies. Our rural but rapidly growing region provides a unique opportunity to implement economic development programs that have primarily benefitted urban areas and documented innovations that can be scaled in other rural regions.

    Alignment with CEDS. Plans align with all national, state, and local plans (see **Table 3**).

Table 3. Alignment with CEDS

Plan	The Plan's Recommendations that Align with *E-Health Transformation*
Northwest Arkansas CEDS	CEDS calls for: 1) development of the health care workforce and economy with focus on urban and rural regions; 2) colleges/universities to collaborate to meet training needs and provide more effective and targeted training, degrees, and research. Aligns with all projects.
Governor's Task Force for Economic Recovery	The Arkansas Governor's plan, "Task Force for Economic Recovery," calls for an increase in GME/Residency programs, telemedicine and E-Health, collaboration, nursing, and equitable workforce development with a focus on training of rural and minority populations. All projects align with the Governor's Task Force for Economic Recovery.
EDA's Investment Priorities	The EDA's priorities focus on: advancing equity; workforce education that results in well-paying, quality jobs; and regional ecosystems that support entrepreneurs and startups, including new technologies. These priorities that underscore advancing full participation in our regional economy from unrepresented populations align with all projects.
Health Care Transformation Plan	Increase GME/Residency; train a diverse workforce including physicians, nurses and paramedical; entrepreneurial health care technology; E-Health startup companies; and equitable economic development. All projects align with the Health Care Transformation plan.

Additional Initiatives. Our plans also align with other state assets and initiatives. Arkansas is the nation's leader in rural telehealth and has a HRSA-funded South Central Telehealth Resource Center and the Governor's Rural Broadband Trust Fund. See **Table 6** and **Letters of Commitment** regarding their support.

Metrics of Success are provided in Table 4. The evidence-base is *EDA Performance Measurement and Program Evaluation Guidance.* See **Impact and Expected Outcomes section** for full information about evaluation.

Timeline. Table 5 provides a timeline. All components will be complete by May 31, 2027.
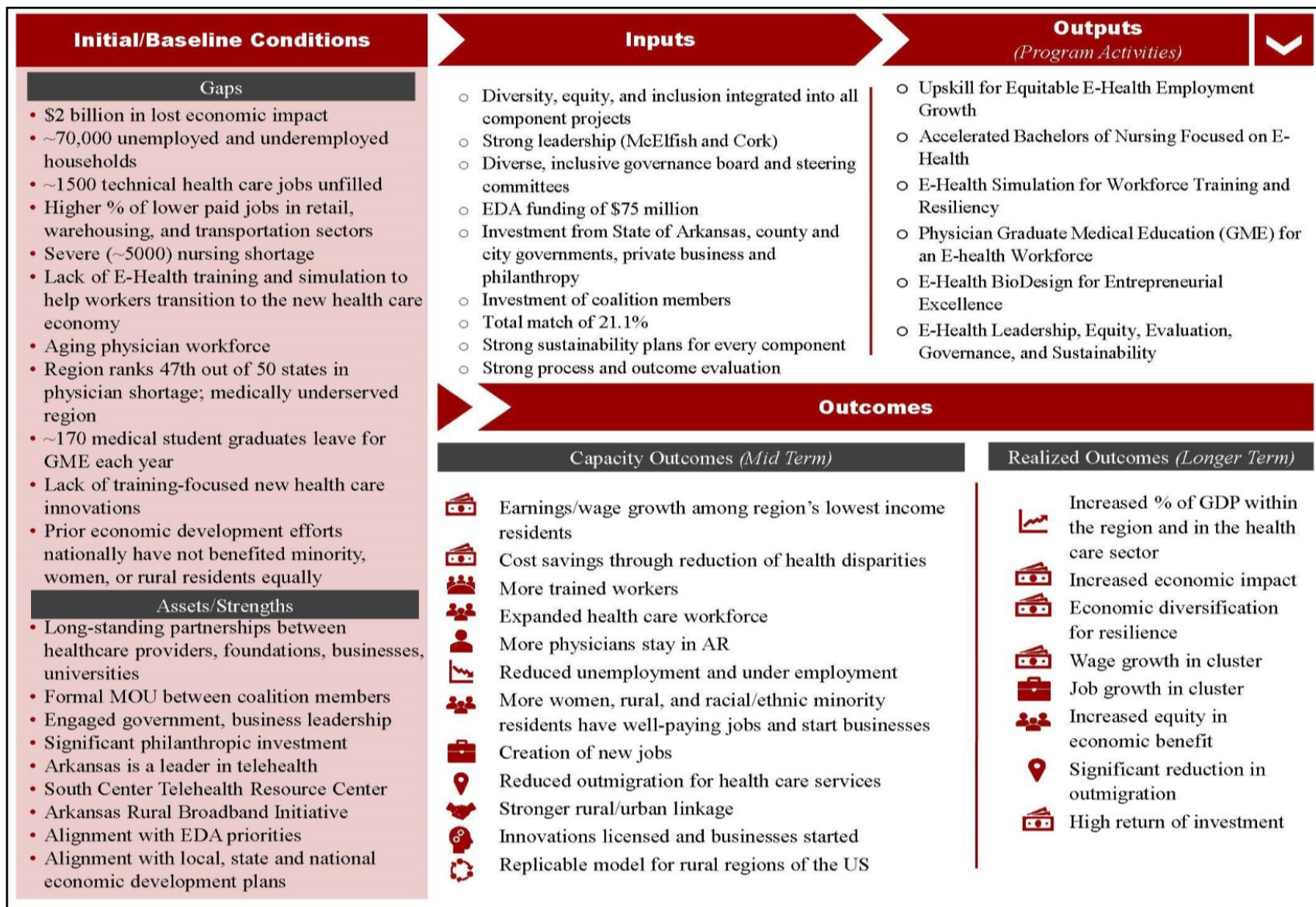
Table 4. Metrics of Success

1. % of GDP in the region
2. Wage growth in cluster
3. Job growth in cluster
4. Decreased outmigration
5. Equity in cluster and region
6. Stronger rural/urban linkage
7. Economic impact
8. Return on investment
9. Cost saving

Table 5. Timeline for Implementation

	22	23	24	25	26	5/2027
Upskill NWA construction of facility	■	■				
Implement Upskill NWA program			■	■	■	■
Implement A-BSN program		■	■	■	■	■
Simulation renovation	■	■				
Implement E-Health Simulation program			■	■	■	■
Renovate space for GME/Residency	■					
Implement GME/Residency	■	■	■	■	■	■
Equip Fabrication Center for BioDesign	■	■				
Implement BioDesign program			■	■	■	■
LEEGS	■	■	■	■	■	■

Feasibility. The overarching feasibility is enhanced by our: 1) long-standing, 10-year collaboration; 2) broad (inclusive) and deep collaboration led by a formal governance board; 3) goals/projects selected based on recent economic assessment and mixed-methods community input; 4) highly experienced Regional Economic Competitiveness Officer, who is a certified community developer and PMP; 5) full-time executive director; 6) extensive public support including matching funds from the Governor, and city and county leaders; 7) extensive private support from several businesses and foundations, 8) match that exceeds the required 20%; 9) projects that build upon regional assets of the Governor's Broadband Initiative and the South Central Telehealth Resource Center; 10) leverages and extends EngageNWA's effort to ensure diversity, equity and inclusion; and 11) extensive preplanning and readiness.

Figure 2. Economic Development Logic Model

Initial/Baseline Conditions

Gaps

- $2 billion in lost economic impact
- ~70,000 unemployed and underemployed households
- ~1500 technical health care jobs unfilled
- Higher % of lower paid jobs in retail, warehousing, and transportation sectors
- Severe (~5000) nursing shortage
- Lack of E-Health training and simulation to help workers transition to the new health care economy
- Aging physician workforce
- Region ranks 47th out of 50 states in physician shortage; medically underserved region
- ~170 medical student graduates leave for GME each year
- Lack of training-focused new health care innovations
- Prior economic development efforts nationally have not benefited minority, women, or rural residents equally

Assets/Strengths

- Long-standing partnerships between healthcare providers, foundations, businesses, universities
- Formal MOU between coalition members
- Engaged government, business leadership
- Significant philanthropic investment
- Arkansas is a leader in telehealth
- South Center Telehealth Resource Center
- Arkansas Rural Broadband Initiative
- Alignment with EDA priorities
- Alignment with local, state and national economic development plans

Inputs

- Diversity, equity, and inclusion integrated into all component projects
- Strong leadership (McElfish and Cork)
- Diverse, inclusive governance board and steering committees
- EDA funding of $75 million
- Investment from State of Arkansas, county and city governments, private business and philanthropy
- Investment of coalition members
- Total match of 21.1%
- Strong sustainability plans for every component
- Strong process and outcome evaluation

Outputs
(Program Activities)

- Upskill for Equitable E-Health Employment Growth
- Accelerated Bachelors of Nursing Focused on E-Health
- E-Health Simulation for Workforce Training and Resiliency
- Physician Graduate Medical Education (GME) for an E-health Workforce
- E-Health BioDesign for Entrepreneurial Excellence
- E-Health Leadership, Equity, Evaluation, Governance, and Sustainability

Outcomes

Capacity Outcomes *(Mid Term)*

- Earnings/wage growth among region's lowest income residents
- Cost savings through reduction of health disparities
- More trained workers
- Expanded health care workforce
- More physicians stay in AR
- Reduced unemployment and under employment
- More women, rural, and racial/ethnic minority residents have well-paying jobs and start businesses
- Creation of new jobs
- Reduced outmigration for health care services
- Stronger rural/urban linkage
- Innovations licensed and businesses started
- Replicable model for rural regions of the US

Realized Outcomes *(Longer Term)*

- Increased % of GDP within the region and in the health care sector
- Increased economic impact
- Economic diversification for resilience
- Wage growth in cluster
- Job growth in cluster
- Increased equity in economic benefit
- Significant reduction in outmigration
- High return of investment

Target Region, Regional Impact, and Distress

The Overall Geographic Region includes Benton (05007), Carroll (05015), Madison (05087), Washington (05143), and Union (05139) Counties. Over 50% of the geographic region is rural and economically distressed according to National Economic Resilience Data Explorer.

Distress, Communities Served, Target Populations, and Regional Impact. Arkansas is a primarily rural state, and like many "flyover states," has been systematically denied economic opportunity. The region has been overly dependent on the agricultural and retail sector and has struggled to transition to a more diverse economy. More than 50% of our geographic region is rural and is economically distressed according to National Economic Resilience Data Explorer and Stats America. In Benton County, where unemployment is low, there is an over dependence on lower paid jobs in the retail, warehousing, and transportation sectors of industry, which puts the region at risk. Northwest Arkansas has experienced some of the highest rates of COVID-19 in the US with both health and economic disruption. Unemployment in the state and region rose to 10%. COVID-19 and the economic impact of COVID-19 have been especially hard on rural residents, racial and ethnic minorities, and women. A study published in *Southern Medical Journal* showed that 34.5% of racial and ethnic minorities in Arkansas had disruption in their employment, and 38% had a reduction in income. While the health care sector has been busy during COVID-19, the sector has also been economically strained with severe workforce shortages, cancelation of their most profitable services, delays in research and product development. *E-Health Transformation* is focused on addressing distress through: 1) diversifying the economic base by increasing the health care economy; 2) equitable workforce development with specific programs to train rural, racial/ethnic minorities, and women for well-paying jobs; and 3) rural and urban linkages.

Industry Leadership and Participation: Coalition Members, Stakeholders/Partners, Private-Sector Engagement, Regional Assets, Regional Investment

Table 6. Regional Assets and Industry Leaders

Industry Leader/Regional Asset Description Health Care Transformation Board (Governance Members)	Commitment/Participation
UAMS (and UAMS-Northwest Campus) is the state's largest medical facility and biomedical researcher. UAMS has more than 2,500 students in five colleges (Medicine, Nursing, Pharmacy, Public Health, and Health Professions) and a graduate school. UAMS employs over 10,000 individuals, including clinical providers. UAMS ranks 7th in the nation for Best Employers for Diversity.	Will serve as lead applicant and fiscal agent for GME/Residency, A-BSN, Simulation, and LEEGS; partner in BioDesign and Upskill NWA; participate in E-Health Simulation and BioDesign programs; serve on the Health Care Transformation Board and component Steering Committees. Committed $7,237,734 in match.
The Northwest Arkansas Council is a private, nonprofit organization working to advance job opportunities, talent recruitment, health care, and quality of life. Most of the Council's more than 100 members are private companies.	Will serve on the Health Care Transformation Board and component Steering Committees; help recruit talent into the region; provide leadership in ensuring equity. Fund the 10 year evaluation.
University of Arkansas is a land-grant institution. The Carnegie Foundation classifies the university as having "the highest possible level of research," placing them among the top 3% of colleges and universities nationwide.	Will lead the BioDesign project; serve on the Health Care Transformation Board and component Steering Committees. Committed $2,503,054 in match.
Mercy has been named "a top five large US health systems" for four consecutive years. Mercy has two partner hospitals: Mercy Northwest (355 beds) and Mercy Berryville (25 beds), a rural critical access hospital.	Will serve as a training site for GME/Residency; hire employees from Upskill NWA, A-BSN, and GME/Residency; participate in E-Health Simulation and BioDesign; serve on the Health Care Transformation Board and component Steering Committees. $862,500 in match.

Washington Regional Medical Center (WRMC) is the only not-for-profit, community-owned, and locally governed health care system in Northwest Arkansas. WRMC is a 425-bed hospital and provides primary care and specialty care clinics throughout Northwest Arkansas.	Will lead the construction component and serve as a training site for GME/Residency; hire employees from Upskill NWA, A-BSN, and GME/Residency; participate in Simulation and BioDesign; serve on the Health Care Transformation Board and component Steering Committees. Committed $1,582,952 in match.
Community Clinic of NWA is a federally qualified health center (FQHC) with 15 clinic sites. They are the largest safety net health care provider in the region. Community Clinic offers services in English, Spanish, and Marshallese to the most diverse patient population in the region.	Will serve as a training site for GME/Residency; hire employees from Upskill NWA, A-BSN, and GME/Residency; participate in Simulation and BioDesign; serve on the Health Care Transformation Board and component Steering committees. Committed $112,500 in match.
Arkansas Children's Hospital Northwest (ACH-NW) is the region's only children's hospital and offers specialized pediatric care, including pediatric trauma care, surgery, infusion services, and inpatient care.	Will serve as a training site for GME/Residency; hire employees from Upskill NWA, A-BSN, and GME/Residency; participate in E-Health Simulation and BioDesign; serve on the Health Care Transformation Board and Steering Committees. Committed $1,155,335 in match.
The **Veterans Health Care System (VHSO)** of the Ozarks includes a 254-bed medical facility, a 90-bed skilled nursing care and rehabilitation facility, and 15 locations in Arkansas, Missouri, and Oklahoma.	Will serve as a training site for GME/Residency, A-BSN; participate in E-Health Simulation and BioDesign; serve on the Health Care Transformation Board and component Steering Committees. Committed $62,500 in match.
Northwest Health provides inpatient, outpatient, surgical, and emergency services. With a combined active medical staff of more than 540 physicians, 2,200 employees, and 487 beds, Northwest Health is one of the largest health networks in Northwest Arkansas with five hospitals.	Will serve as a training site for GME/Residency; hire employees from Upskill NWA, A-BSN, and GME/Residency; participate in E-Health Simulation and BioDesign; serve on the Health Care Transformation Board and component Steering Committees.
Whole Health Institute provides training, research, and innovation to make whole health available to all people.	Will serve on the Health Care Transformation Board and component Steering Committees.
Industry Leader/Regional Asset Description Additional Partners who are not Board Members	**Commitment/Participation**
BioVentures was established to promote a biomedical technology industry for Arkansas and to translate its research into products that benefit human health.	BioVentures will provide support to the BioDesign project, has committed $436,329 in match, and will serve on Steering Committees.
State of Arkansas has provided funding to increase broadband access and has developed a Task Force for Economic Recovery and Women's Commission to focus on women's participation in workforce and business creation.	Invested $12.5 million for GME/Residency programs some of which is match, and pledged assistance from the Economic Recovery Task Force, Broadband, and Women's Commission.
Local **Chambers of Commerce, city and county governments** will work to drive job creation.	Support business development in health care sector and recruit and retain workers. City of Springdale and Washington County have committed match.
EngageNWA is an advocate for diversity, equity, and inclusion.	Will foster diversity and inclusion around all projects and will serve on Steering Committees.
Northwest Technical Institute (NWTI) provides technical education in Northwest Arkansas.	Will lead 1b of Upskill NWA; will serve on the Upskill NWA Steering Committee.
The South Central Telehealth Resource Center (SCTRC) Arkansas is the nation's leader in rural telehealth and has a HRSA-funded Resource Center.	Will provide physical space for trainings and the means to connect securely for interactive video educational sessions.
Medical Associates of Northwest Arkansas (MANA) is the largest private outpatient health care provider in the region.	Will serve as a training site and hire staff from GME/Residency, Upskill NWA, and A-BSN. Will use E-Health Simulation and serve on Steering Committees.

Simmons Foods is a <u>private</u> philanthropic investor.	Investing $25,000 in match.
Tyson is a <u>private</u> philanthropic investor.	Investing $100,000 in match.
Jones Trust is a <u>private</u> philanthropic investor.	Investing $214,000 in match, and an endowment for scholarships.
Walmart is a large retail organization.	Investing $425,000 in match as a gift to Mercy.
Walton Family Foundation is a <u>private</u> foundation.	Investing $1.58 million in match.
Alice L. Walton Foundation is a <u>private</u> foundation	Investing $1.33 million in match.
Arvest Foundation is a <u>private</u> foundation.	Investing $10,000 in match.
Excellerate Foundation is a <u>private</u> foundation.	Investing $1.45 million in match, and will lead 1a. of Upskill NWA
Murphy Foundation is a private foundation.	Investing $280,000 in match.
Windgate Foundation is a <u>private</u> foundation.	Investing $50,000 in match.

Coalition Members and Governance. The Coalition Members include the <u>CEO or top leaders (i.e., chancellor)</u> from University of Arkansas for Medical Sciences (UAMS), Northwest Arkansas Council, Mercy, Northwest Health, Community Clinic, University of Arkansas Fayetteville, Veterans Health Care System, Washington Regional Medical Center (WRMC), and Whole Health Institute. We have collaborated informally for more than 10 years. In 2018, we came together to create a formal Health Care Transformation Board focused growing on the health care economy. The Board serves as the formal governance structure for the *E-Health Transformation Cluster*. <u>The Board is inclusive and diverse (women, minority, underserved), and Steering Committees for each of the component projects provide additional inclusive community input and diversity. All Board members have signed an MOU and commit funds annually to support an Executive Director (Ryan Cork) and the Regional Economic Competitiveness Officer (Dr. Pearl McElfish).</u> **See LEEGS component** for more information about sustainable leadership. Equitable decisions are made using a majority vote, with time for discussion, and every effort to gain consensus among members. The Board has met monthly since 2018 and weekly throughout COVID-19. **Table 6** provides members, regional assets, and industry leaders (many are private sector) that will be leveraged to ensure success. See **Letters of Commitment**.

Plan for Regional Growth and Cluster Sustainability

While initial start-up investment from the EDA is needed, <u>each component project has a specific, concrete, and realistic plan to achieve long-term sustainability</u>. See **Table 7, Table 2**, **Individual Component Narratives**, and **Letters of Commitment.**

Table 7. *E-Health Transformation Cluster* Project's Sustainability Strengths

Component Name	Sustainability Strengths
Upskill NWA	While funding is needed for the start-up costs for building and equipment, <u>Upskill NWA will be sustained through tuition from students, ongoing institutional support from NWTI, reinvestment for health care providers who hire employees, and support from Excellerate and Walton Family Foundation.</u>
A-BSN	While funding is needed for the start-up costs for training and equipment, the <u>A-BSN will be sustained through tuition, scholarships from Jones Trust, and institutional support from UAMS</u>.
E-Health Simulation	While funding is needed for start-up costs for renovation and equipment, <u>E-Health Simulation will be sustained through institutional support from UAMS, ACNW, WRMC, and user fees</u>.
GME/ Residency	While funding is needed for the start-up costs which are not covered through clinical reimbursement, the <u>GME/Residency long-term sustainability will be achieved by clinical reimbursement which has been confirmed by CMS (Centers for Medicare and Medicaid).</u>
BioDesign	While funding is needed for the start-up costs, <u>BioDesign will be sustained through licensing revenue, equity positions, reinvestment from health care providers, and corporate sponsorship.</u>

LEEGS	While funding is needed for the first four years, the Northwest Arkansas Council and all partners will sustain the leadership, equity, evaluation, governance, and sustainability infrastructure.

Engagement of Community-Based Organizations, Governance, Leadership, & Staffing

Our Engagement with the Region (Community, Community-Based Organizations, Public, Private, and Governmental Organizations) is both Broad and Deep. Our deep engagement is demonstrated by a strong, inclusive, and diverse governance structure (see **Table 6**). In addition, each component has a Steering Committee that includes both board members and non-board members. For inclusive engagement of the broader community beyond the Board and Steering Committees, we used a mixed methods approach to collect qualitative interviews and quantitative survey input from more than 4,000 community members regarding health care and economic development. More than 40% of the respondents to the survey and interviews were among minority populations. We also conducted an economic assessment of the health care sector that was codified in a Health Care Transformation Plan. This broad community input directly shaped our *E-Health Transformation Cluster*. As demonstrated in letters of commitment and support, the *E-Health Transformation Cluster* has extensive engagement, support, and commitment from regional stakeholders.

Labor Standards. All organizations involved in the cluster are committed to strong, fair labor standards. As outlined below in the **Engaging Equitably section**, we have implemented several practices to ensure equitable economic benefits for local residents. All organizations agree to offer wages at or above the prevailing wage. See **Letters of Commitment.**

Engaging Equitably

The Need for Equity in Workforce and Economic Development. COVID-19 has affected people of color far more than white residents both in jobs that expose them to the infection and in income disruption. A study published in *Southern Medical Journal* showed 34.5% of racial minorities in Arkansas had disruption in their employment, and 38% had a reduction in income.

Table 8. Structural Inequality

Race/Ethnicity	Unemployment	Income Poverty	Net Worth
White	3.5%	9.9%	$127,390
Black	7.1%	22.9%	$8,050
Hispanic	5.0%	21.3%	$16,610

Historically, workforce development and economic recovery programs have mostly benefited workers who are white, male, and living in urban areas. Women, people of color, and rural residents have benefited only marginally. The wealth gap and poverty rate in the US, shown in **Table 8**, highlights the structural inequality. The US cannot afford another inequitable recovery. Similarly, rural workers and women are more likely to be unemployed or under-employed. Rural workers make ~16% less than their urban counterparts. The gender pay gap widened from 25.2% in 2019 to 28% in 2020. The *E-Health Transformation Cluster* presents an opportunity to redesign a more just, inclusive, and sustainable economy in our region: one built around jobs that actually boost the economy, not just prop it up, and one that values the dignity of all workers so they may achieve their full potential. We will evaluate the equity impact of each component and the collective cluster as outlined in **Table 9** (and the **LEEGS Narrative**) using the National Equity Atlas data.

The *E-Health Transformation* will ensure Equity for Racial/Ethnic Minorities, Women, and Rural Residents. Building upon our successful history with EngageNWA (see **Letter of Commitment**), our nursing and GME/Residency program have recruited diverse faculty members, which has been shown to improve the recruitment and retention of diverse students. Training programs are committed to a holistic admission process, which has been shown to

increase diversity. We will ensure that our recruitment into all projects is culturally and linguistically appropriate. We will ensure career navigators for Upskill NWA include diverse and bilingual workers. All recruitment and navigation materials will be in English, Spanish, and Marshallese. Even for those students who speak and read English well, the multi-language approach makes members feel welcome. The *E-Health Transformation* will ensure equity for rural areas because we are focusing specifically on the health care jobs that are available in rural areas. Rural hospitals and clinics often offer the highest paying positions in rural areas, and our cluster specifically focuses on jobs needed by these industries. Furthermore, our E-Health Simulation program will have mobile units located in the rural regions. The GME/Residency program includes a rural training track and a GME/Residency in rural hospitals. Building upon our successful history with EngageNWA, we will continue to advocate to expand early childhood development opportunities. Upskill NWA specifically includes access to free childcare to allow parents to attend classes while having safe child care. While childcare affects all parents, childcare is often cited as a primary career concern of women.

Each of the Member/Partner Organizations has a Concrete Commitment to Diversity, Equity, and Inclusion as Outlined in their Letters of Commitment. These concrete commitments include: 1) required diversity, equity, and inclusion training for all employees; 2) unconscious bias training for all hiring committees; 3) mentor programs; 4) skills-based hiring and post-employment training; 5) pipeline programs that start in elementary and high school; and 6) strong relationships with historically black colleges and universities and minority serving institutions. UAMS, the Lead Applicant, was underlined ranked seventh nationally on Forbes' list of Best Employers for Diversity.

Impact and Expected Outcomes

We will conduct process and outcome/impact evaluations of each component and the *E-Health Transformation Cluster* as a whole. The overall evidence base for the evaluation approach is the *EDA Performance Measurement and Program Evaluation Guidance, WealthWorks, and National Association of Development Associations.* The process evaluation will be conducted by the Center for Community-Engaged Evaluation and will focus on 1) ensuring diversity, equity, and inclusion in the processes of implementation and 2) ensuring each of the components meet their SMART goals. Overall, the process evaluation focuses on providing real-time information about "How are we doing?" and "What can we do better?" See **Individual Components** for SMART goals. See **Letter of Commitment** for information about the Center for Community-Engaged Evaluation. The process evaluation will include a dashboard that demonstrates the progress on component projects. The dashboard will be provided to board members and stakeholders quarterly and posted on our website to ensure public transparency. The outcome/impact evaluation will be conducted by Tripp Umbach, the recognized authority on identifying and measuring metrics within the health care industry. **See Letter of Commitment.** The outcome/impact evaluation will focus on the measures in **Table 9 and the LEEGS component**. The outcome/impact evaluation will be conducted in the fourth year of the project, and the Northwest Arkansas Council is committed to conducting a 10 year impact assessment after the grant period (see **Letter of Commitment**). We are committed to working with the EDA on additional evaluation measures if asked.

Table 9. Outcome/Impact Measures

Outcome/Impact Measure	Method/Data
GDP in the health care sector	Change of the health care sector as percentage of total regional GDP.
Non-EDA funding leveraged	Private sector investment in the region resulting from EDA's investments.
Economic diversification	Diversification of jobs and total diversification of GDP in region.
Wage growth in cluster	Change in wage growth focused on initiatives, data from the Bureau of Labor.
Job growth in cluster	Number of quality jobs as defined by 2021 standards issued by the US Department of Commerce from each program and for the cluster as a whole.
Decreased outmigration	Health care spending and the percentage of outmigration and in-migration pre and post implementation of *E-Health Transformation* program.
Equity in cluster and in region and stronger rural/urban linkage	Number and percent of women, minority, and rural residents who are included or benefit - i.e., Upskill participation, jobs, participation on Board/Steering Committee, start business, and increase income because of the cluster.
Economic impact	Impact of each component and the cluster as a whole using IMPLAN analysis.
Return on investment	Calculated by total economic impact generated in the region as a factor of total dollars invested by EDA and leveraged dollars by the private sector.
Cost saving through reduction of health disparities	Cost saving to the region resulting from reduction of health disparities based on economic and social impact models developed by Tripp Umbach.

Work Conducted between the Phase 1 & Phase 2, Changes to Proposal, and Feasibility

Between Phase 1 and Phase 2, we have continued to work to mitigate risk and increase feasibility and sustainability. Specifically, the Board and Steering Committees met weekly; we raised more philanthropic investment, conducted environmental assessments on construction projects, and engaged in detailed planning to ensure feasibility. We performed 35+ presentations to discuss the *E-Health Transformation Cluster* with the media and in public meetings with city, county, state, community, and corporate stakeholders to gain input and commitment. We also decided to include a 6th project: LEEGS, focused on Leadership Equity, Evaluation, Governance, and Sustainability. No major changes were made to the other projects, and only slight changes in the budget were made. See **Table 10** for details about the work that has happened.

Table 10. Work Conducted between Phase I and II

Component Project	Work between Phase 1 and Phase 2
Upskill NWA Project 1a & 1b	The Steering Committee met weekly to refine the plans for *Upskill NWA*. We continued building concrete plans for student wraparound services. We sought and received $6,063,276 in match. We completed environmental assessment for the NWTI building.
A-BSN Project 2	The Steering Committee met weekly to refine the plans for the A-BSN program. We met with health care partners to establish clinical placements for student experiential learning and continued to plan for the skills/concept-based curriculum. We confirmed $2,642,147 in match.
E-Health Simulation Project 3a & 3b	The Steering Committee continued to meet monthly to refine plans for E-Health Simulation. We sought and received commitment of $2,061,633 in match. We met with health care partners to determine regional needs and design physical spaces as well as determine equipment needs for simulation labs and *in situ* training. We completed an environmental assessment for space renovations.
GME/ Residency Project 4a & 4b	The Steering Committee continued to meet monthly to refine plans for the GME/Residency expansion. We confirmed the $12.5 million in state matching funds, of which $4,373,860 is committed to this project, and executed a joint agreement between UAMS as the sponsoring institution and training sites. We have begun an environmental assessment for space renovations.
BioDesign Project 5	The Steering Committee met weekly to collaborate and refine plans. We sought and received a total commitment of $4.3 million in matching funds. We identified a physical location that can be adapted and equipped for a medical device prototyping center and conducted benchmarking against similar facilities in other regions to develop our equipment needs.
LEEGS Project 6	We decided to include a component project focused on Equity, Leadership, Governance, Evaluation, and Sustainability and confirmed a match of $789,252.