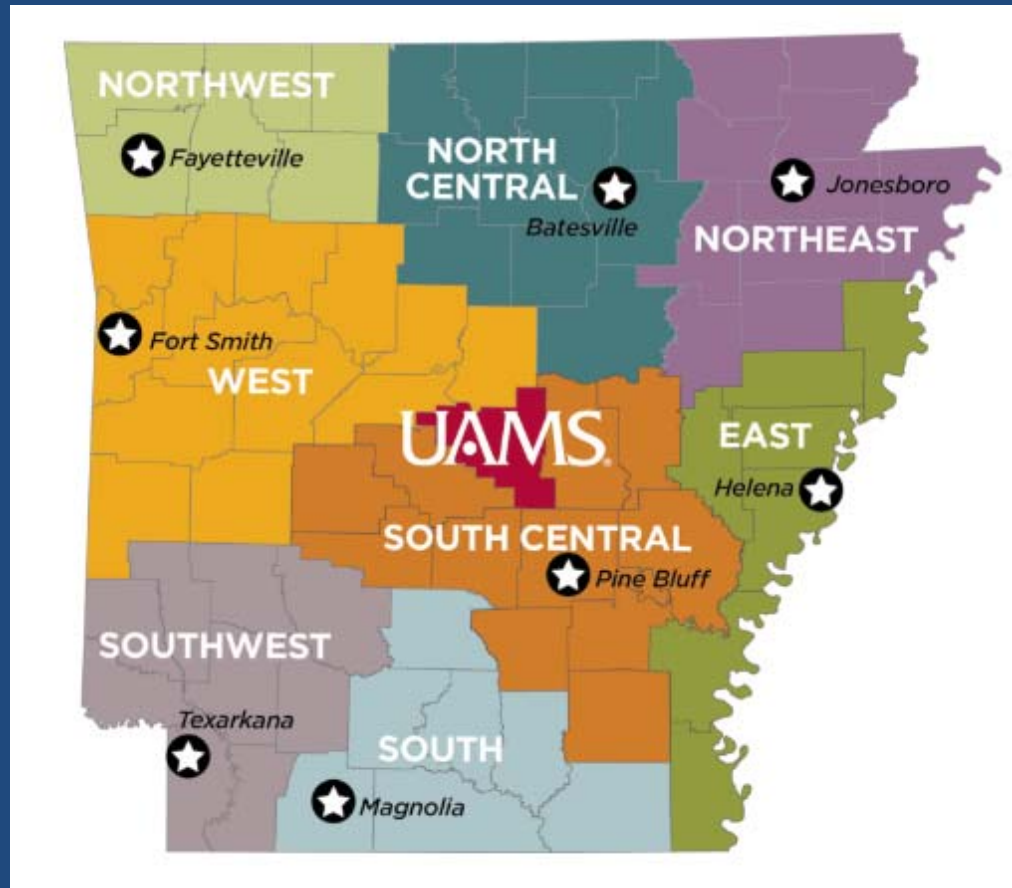


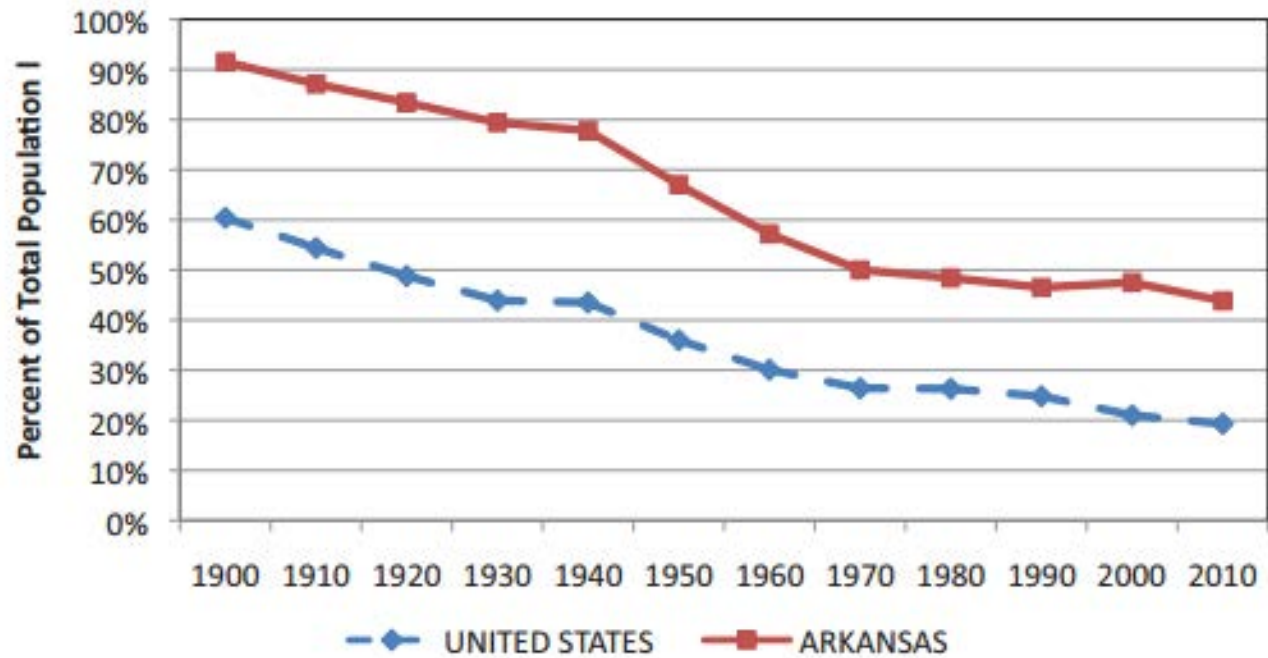
**Milbank Foundation**  
**Dec. 5<sup>th</sup>, 2018**  
**Mark T. Jansen, M.D.**  
**Chief Medical Officer**  
**UAMS Regional Programs**

# UAMS REGIONAL PROGRAMS



# Arkansas is 44% rural

Figure 1. Rural Population, 1900-2010



Source: U.S. Census Bureau

# RURAL PROFILE OF ARKANSAS 2017



**U of A**  
DIVISION OF AGRICULTURE  
RESEARCH & EXTENSION  
*University of Arkansas System*

# Summary Highlights

The rural areas had 69.2 primary care physicians per 100,000 as compared to 166.3 per 100,000 for urban areas, a rate more than double that of the rural areas.

# Rural Citizens Deserve Good Care



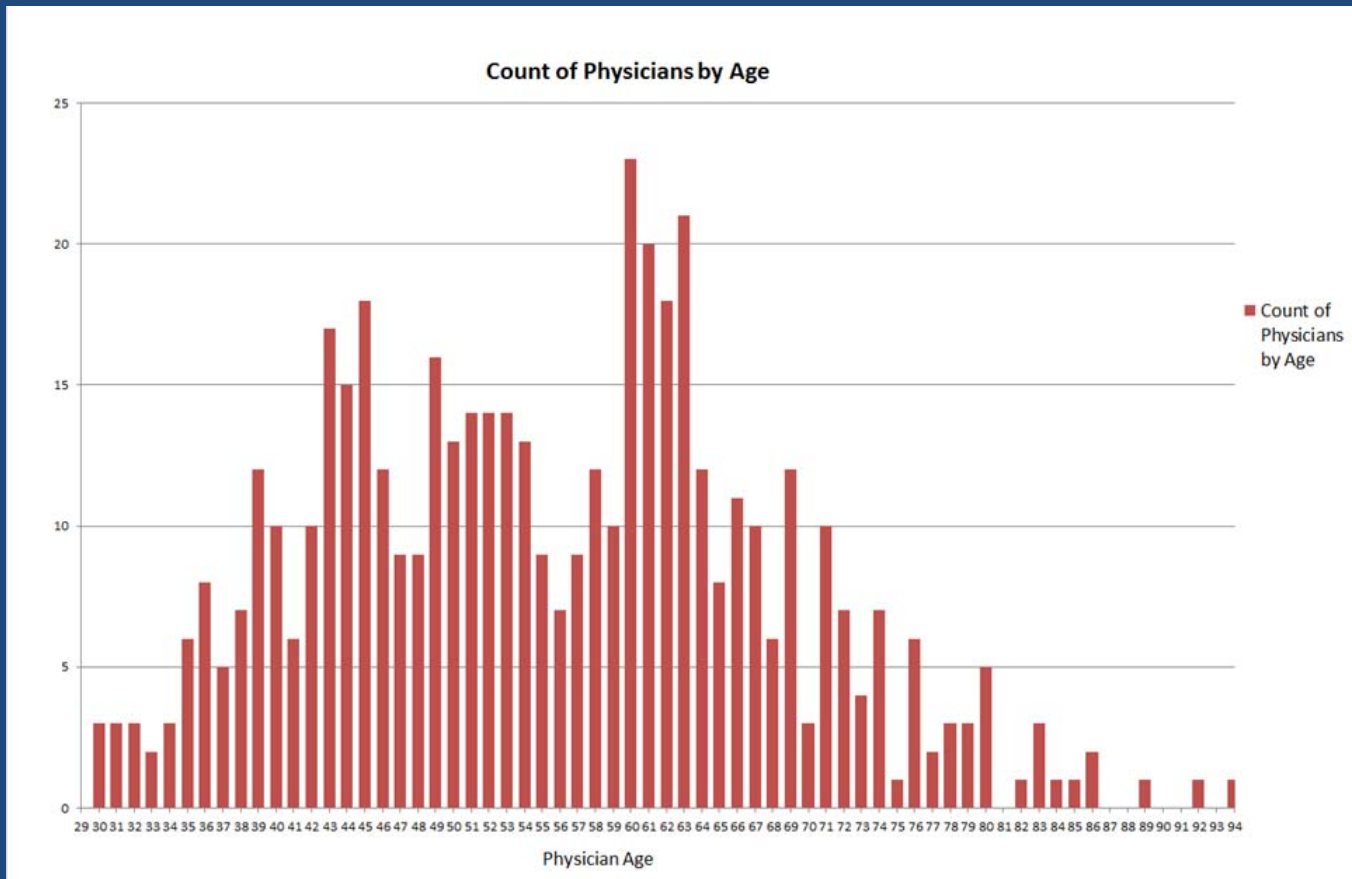








# The Physician Crisis is Already Upon Us



AMS members self-identified as FP, GP or IM by age in Arkansas excluding office locations in the 10 most populous cities. Source: Arkansas Medical Society 2015



## Making Rural Health Better Together

HEALTH · 3/22/2018 · SHANNON FRAZEUR

More than 60 health care providers, professionals and students came together March 8-9 at the Winthrop Rockefeller Institute for the 2018 Rural Health Care Summit.

[MORE](#)

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**ruralhealth**  
A WINTHROP ROCKEFELLER INSTITUTE PROGRAM

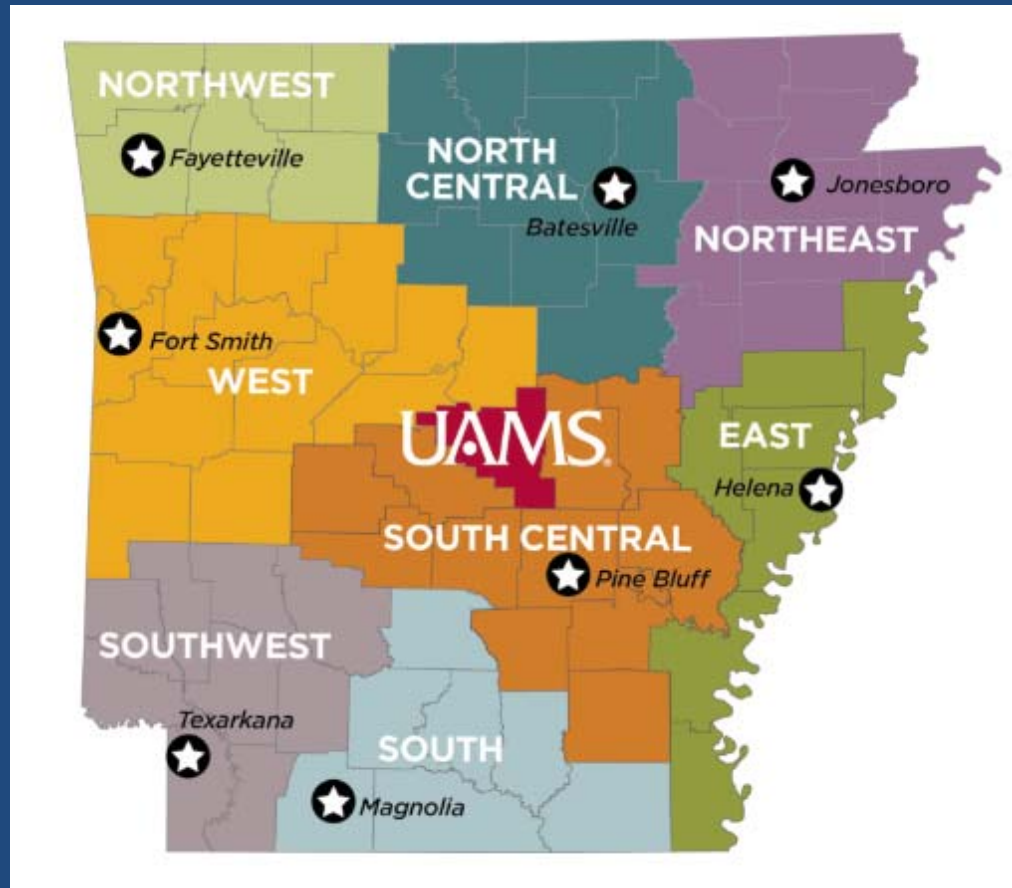
A collaborative plan for a healthier rural Arkansas



STARTING RECOMMENDATION	10-YEAR GOAL	2-YEAR GOAL
<p>Increase public and professional recognition and utilization of Community Health Workers.</p> <p>Lead: Anna Huff Davis</p>	<p>An adequate number of appropriately trained Community Health Workers employed around the state according to the needs of the population.</p>	<p>In two years we have funded and completed a pilot of the Community Health Worker certificate program and developed and funded a marketing/communications/education plan.</p>
<p>Demonstrate the value of non-emergent transport and care for better patient outcomes and overall cost savings.</p> <p>Lead: Ed Gilbertson</p>	<p>Rural Arkansans have reliable non-emergent medical transport within 24 hours of the initial request.</p>	<p>In two years we have an engaged committee, a completed needs assessment, draft legislation and committed legislative sponsors.</p>
<p>Create a provider and community recruitment and retention resource, including best practices, examples, and available services.</p> <p>Lead: Melanie Meyer</p>	<p>Double the provider to population ratio in rural areas.</p>	<p>In two years we have a consortium of MDs and DOs to facilitate adequate residency slots, identified hospitals without residency programs and quality residency options across specialties.</p>
<p>Create an outreach program to expose rural K-12 students to Arkansas health care professions.</p> <p>Lead: Stephanie Williams</p>	<p>A statewide education program for grades K-12 which delivers comprehensive exposure and opportunity for jobs/careers/certification in health care.</p>	<p>In two years we have stakeholder buy-in, a working group assessing existing programs, a developed curriculum within a health education framework, and identified pilot schools.</p>

[http://rockefellerinstitute.org/uploads/rh-2018-report-interactive\\_1.pdf](http://rockefellerinstitute.org/uploads/rh-2018-report-interactive_1.pdf)

# UAMS REGIONAL PROGRAMS



# UAMS Regional Programs

- **63%** of our total graduates (810/1278) have remained in Arkansas to practice.
  - **51%** of those (415/810) remained in their training region to practice
  - **37%** of those (298/810) practice in rural counties and small towns (15,000 or less)
- **810** Regional Programs-trained physicians currently practice in
  - **132** Arkansas communities
  - **69** of the State's 75 counties

The Pew Charitable Trusts / Research & Analysis / Stateline / To Address Doctor Shortages, Some States Focus on Residencies

# STATELINE

FOLLOW 

## To Address Doctor Shortages, Some States Focus on Residencies

August 11, 2015 | By Rebecca Beitsch

SHARE      



© AP

Fourth-year students at a Tennessee medical school wait for residency letters telling them where they will finish their medical training. Tennessee is one of several states with too few residency positions for the graduates of its medical schools. (AP)

### PLACES

United States

### TAGS

Education, Federal Impact, Health, Labor

### Explore

By Tag

By State

### Stateline Daily Email

Sign up for our daily update—original reporting on state policy, plus the day's five top reads from around the Web.

## **“To Address the Doctor Shortage, Some States Focus on Residencies”**

“Physicians who go to medical school and do their residency in a single state tend to stay. Sixty-eight percent of doctors who complete all their training in one state end up practicing there, according to the Association of American Medical Colleges (AAMC).”



## **“To Address the Doctor Shortage, Some States Focus on Residencies”**

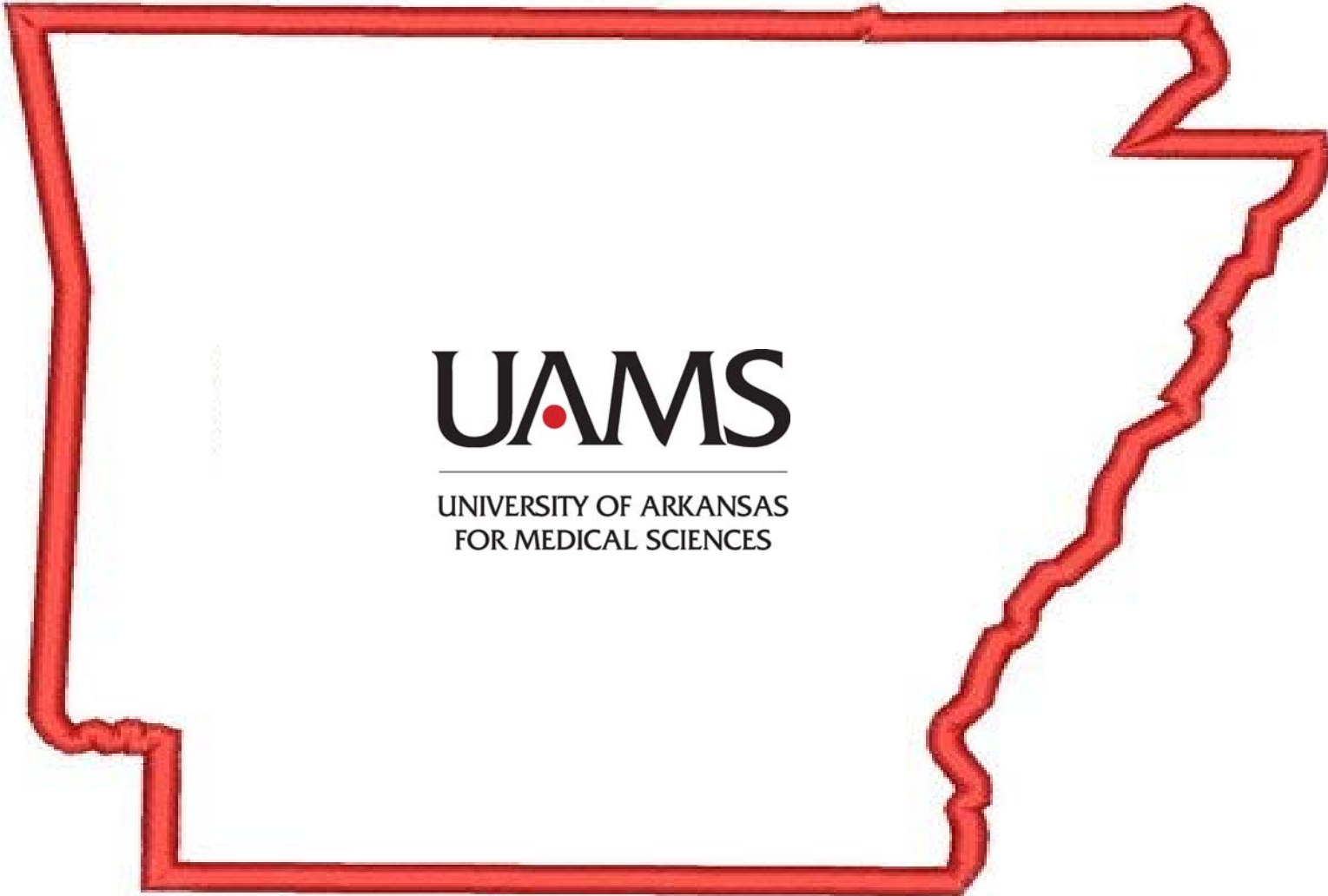
“So while some states spend tens or hundreds of millions of dollars to support medical schools and build new ones, a handful are recognizing that it’s just as important to invest in residency programs—to increase the number of doctors practicing within their borders.”

## **“To Address the Doctor Shortage, Some States Focus on Residencies”**

Iowa – 369 students graduated, 131 left with only 238 residency positions available

Same for Missouri (186 left) and Tennessee (200 left)

States such as New York, California, Massachusetts and Pennsylvania were happy to take them—all four states took in more residents than students they trained.



**UAMS**

UNIVERSITY OF ARKANSAS  
FOR MEDICAL SCIENCES

ARKANSAS COLLEGE OF  
OSTEOPATHIC MEDICINE



**UAMS**  
UNIVERSITY OF ARKANSAS  
FOR MEDICAL SCIENCES



UAMS – 174

DO schools in Fort Smith and Jonesboro – 270 at  
full matriculation

Total – 444



## Current 1<sup>st</sup> year residency positions:

UAMS – 140

UAMS Regional Programs – 44

UAMS Internal Medicine / Mercy Health NW – 8

UAMS / White River Medical Center Internal Medicine, Batesville – 10

Unity Health, Searcy (D.O.) Internal Medicine – 10

St. Bernard's, Jonesboro (D.O.) Internal Medicine - 5

**Total - 217**



Total Medical Graduates – 444 (full matriculation)

Total Residency Positions – 217

Net Export – 227

(This assumes that any graduate would take any residency position available so actual export will be greater!)



**Cost be covered by an Arkansas Resident for 4 years of medical school at UAMS, 2018 - \$138,627\***

**Estimated total cost of educating one medical student for 4 years - \$362,500\*\***

**Estimated total cost (\$362,500) minus Arkansas Resident tuition and fees (138,627) = \$223,873**

**So every student leaving for an out of state residency leaves with \$223,873 of Arkansas money!!**

\*UAMS College of Medicine, Estimated Cost of Attendance 2018-19, Arkansas Resident

\*\*Office of the Washington state auditor "Determining costs per student for Washington's medical schools" – 2017  
AAMC estimated cost per student to attend medical school – source Richard Wheeler, Exec. Assoc. Dean for Academic Affairs, UAMS





**Total Medical Graduates – 444 (full matriculation)**

**Total Residency Positions – 217**

**Net Export – 227 X \$223,873 = \$50,819,171 / yr !**



**Will Arkansas choose to retain providers  
or will we export our talent to other  
states with no**

**ROI?**

# Medical Economics for Rural Arkansas 101



ROBERT  
GRAHAM  
CENTER

## Economic Impact of Family Physicians in Arkansas

*Robert Graham Center*

*June 2007*

Do family physicians  
generate economic  
benefits for Arkansas?

# Medical Economics for Rural Arkansas 101



ROBERT  
GRAHAM  
CENTER

## Economic Impact of Family Physicians

*Robert Graham Center*

*January 2015*

Using Medical Group Management Association data, one full time family physician was estimated to create an average of five full-time supporting staff positions.

# Medical Economics for Rural Arkansas 101



Robert Graham Center

## Economic Impact of Family Physicians in Arkansas

June 2007

**Table 1: Economic Impact of Family Physicians in Arkansas**

<i>Impact per family physician per year</i>	\$ 845,862
<i>Total Impact per year</i>	\$ 787,497,279

Source: Robert Graham Center for Policy Studies – [www.graham-center.org](http://www.graham-center.org)

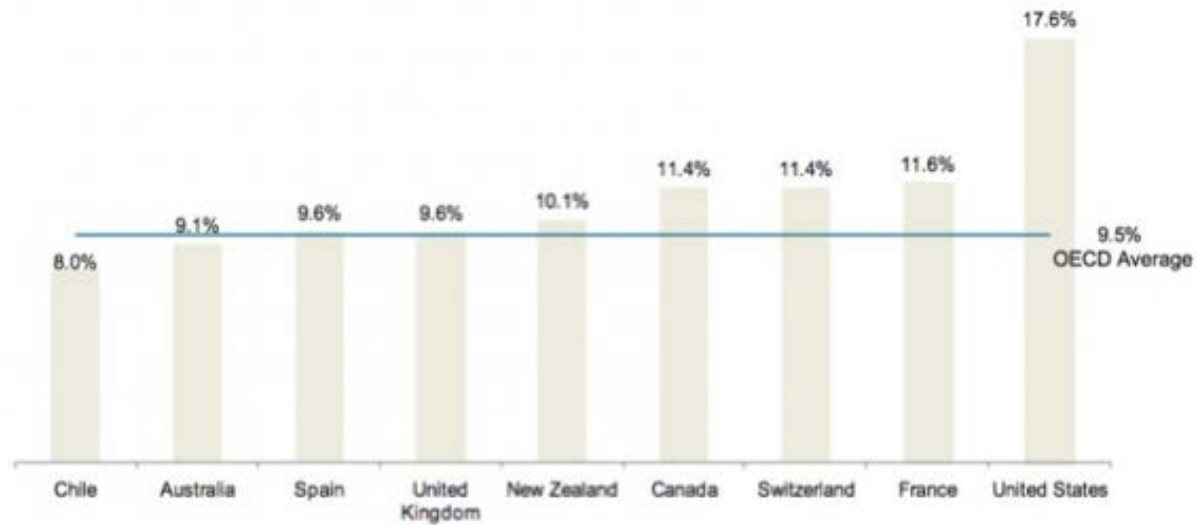
Family physicians have an economic impact of \$845,862 per doctor, per year. The total impact of family physicians in Arkansas is estimated to be \$787,497,279 per year in 2007. With 810 graduates from our program in the state, Regional Programs has contributed **\$685,148,220** of economic impact.

**The Business of Medicine:  
Changes in Reimbursement Models**

# The High Cost of Healthcare in the US

2010 Health Spending as Percent of GDP

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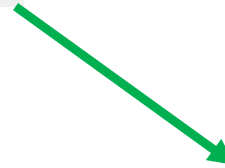
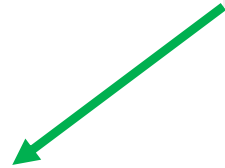


**BANG!**





# Health Care



Health

Wellness

Prevention

Care

Illness

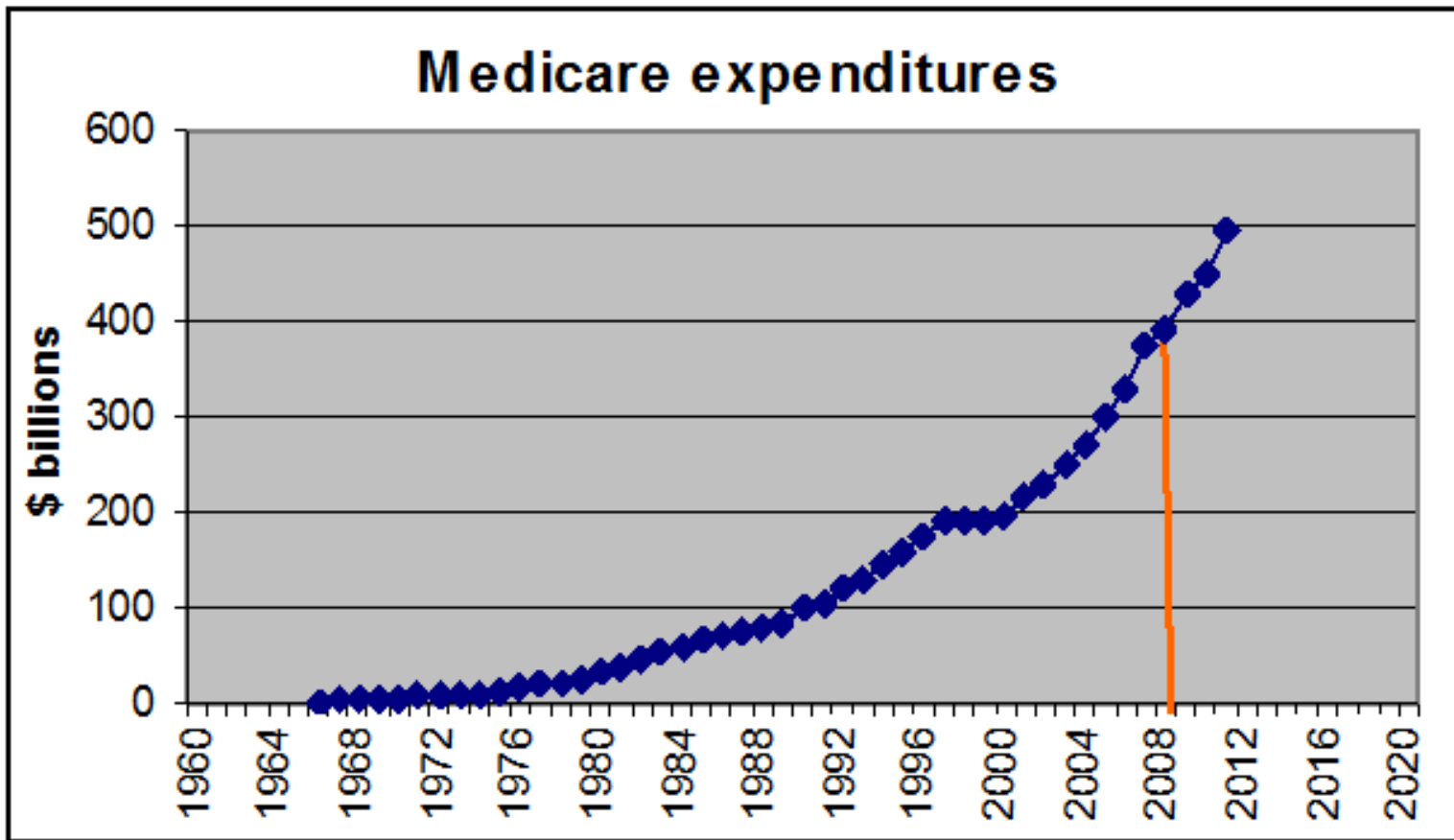
Disease Management

# Eat What You Kill



**Fee For Service**





# Care vs. Cost?



# Transition from Volume to Value



Fee for Service



Fee for Value

$$\text{Value} = \frac{\text{Clinical Outcomes} \times \text{Patient Experience}}{\text{Cost}}$$

# Health Care Payment Reform Alphabet

PMPM

P4P

HMO

ACO

PPO

MSSP



FFS

# Comorbid Conditions Raise Costs

- ▶ National Alliance on Mental Illness estimates untreated mental illness costs the U.S. economy over \$100 billion a year.
- ▶ Average costs for Medicaid beneficiaries with common chronic conditions increased by 3 ½ times, and hospitalization rates 4 times.
- ▶ Milliman Research Report looked at 10 chronic conditions and found:
  - ▶ Comorbid depression resulted in an average PMPM increase of \$505. Majority of the increase was medical costs - \$400.
  - ▶ Comorbid anxiety data analysis found total cost increase for this patient population was \$651 PMPM with \$538 attributed to medical care.





# Behavioral Health

Upon recognizing the value of behavioral health in supporting patient outcomes, Regional Programs created a Director of Behavioral Health position in 2017. **Kathy Emans, LCSW**, the Director of Behavioral Health was tasked to analyze, develop and support an enhanced level of behavioral health integration within their state-wide system of primary care clinics, which also function as Family Medicine Residency sites.



# Behavioral Health

- Develop a tele-behavioral health network, to ensure all 8 Regional Program sites can access behavioral health services to support patient needs
- Organize and implement state-wide behavioral health training curriculum as part of the ACGME Residency Curriculum
- Expand Substance Use Disorder screening, referral and treatment thru implementation of the SBIRT model in all clinics  
(SBIRT- Screening, Brief Intervention, and Referral to Treatment)
- Increase number of clinic patients screened for dementia through implementing two tier cognitive screening protocols

# Behavioral Health

- Support implementation of best practice guidelines for Complex Care Teams, Huddles which enhance patient outcomes
- Provide training and support to physicians related to prescribing of Opioid medications, as related to diagnosis, treatment options and referrals
- Create a trauma informed culture, which recognizes the impact of trauma on patient health and treatment outcomes

# Telemedicine in Arkansas

# **B T O P**

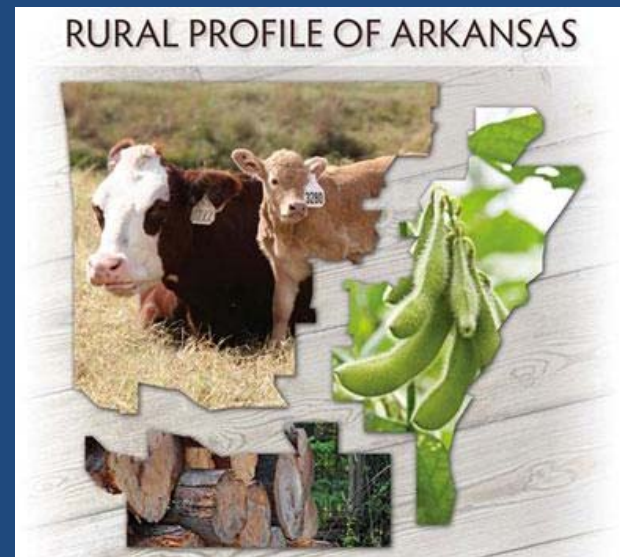
## **Broadband Technology Opportunities Program**

- **102 million dollar grant (2010)**
- **450 plus links in the network**
- **Arkansas SAVES tele-stroke program**
- **High Risk Maternal Fetal Health (Dr. Lowery)**

# Diabetes Retinal Screening



# Specialty Care Delivery in Rural Arkansas



# Tele-Pediatric Urology



Stephen Canon, MD



**PEDIATRIC UROLOGIST** Stephen Canon, MD, uses telemedicine as an adjunct to care in three areas: postoperative care, specialty care when he can't reach patients in remote locations, and some prenatal consultations. (Photo courtesy of Arkansas Children's Hospital.)



# Tele-Hand Trauma



Theresa Wyrick, MD



# Burn Consultation Telemedicine Program



Esther Teo, MD



# Neurosurgical Spine Telemedicine Program



T. Glenn Pait, MD

