

Transforming Healthcare Through the Use of Technology to Build a Distributed Network of Health PC Networks

UAMS
CENTER FOR
DISTANCE HEALTH

UNIVERSITY OF ARKANSAS
FOR MEDICAL SCIENCES

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distribution

[dis"trĭ-bu´shun]

1. the specific location or arrangement of continuing or successive objects or events in space or time.
2. the extent of a ramifying structure such as an artery or nerve and its branches.
3. the geographical range of an organism or disease.

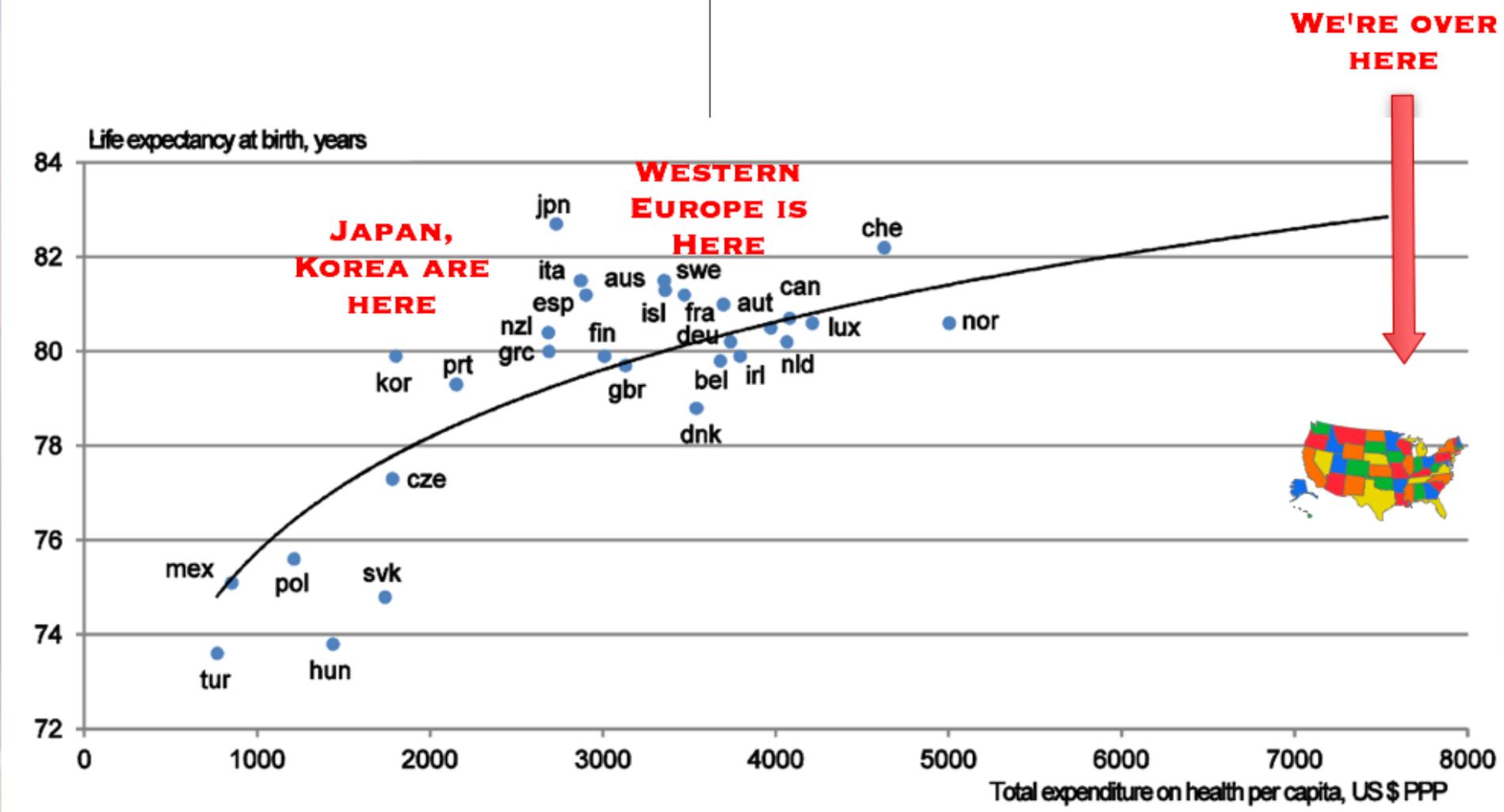
Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition. © 2003 by Saunders, an imprint of Elsevier, Inc.

Evolution

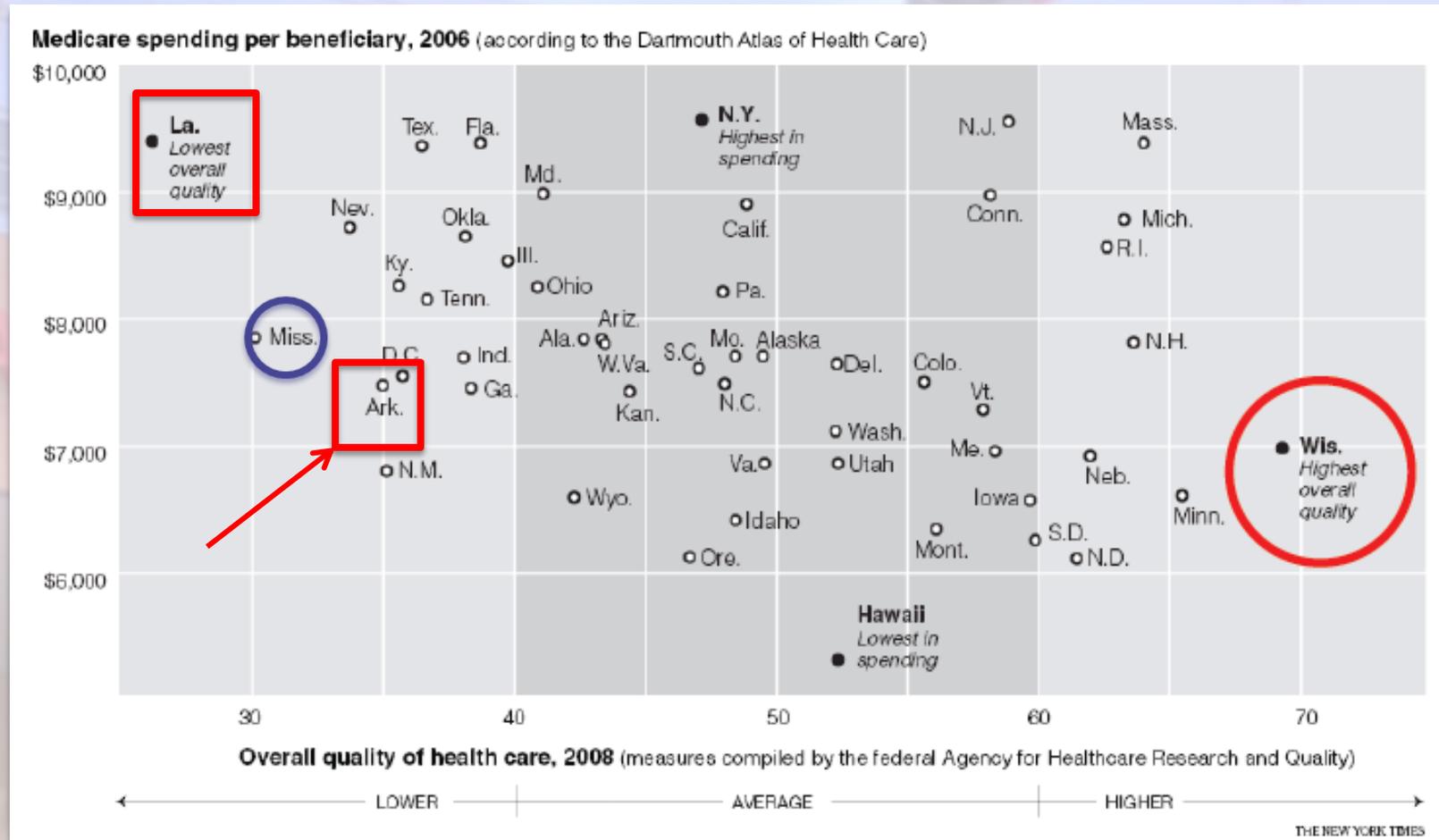
“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.”

Charles Darwin

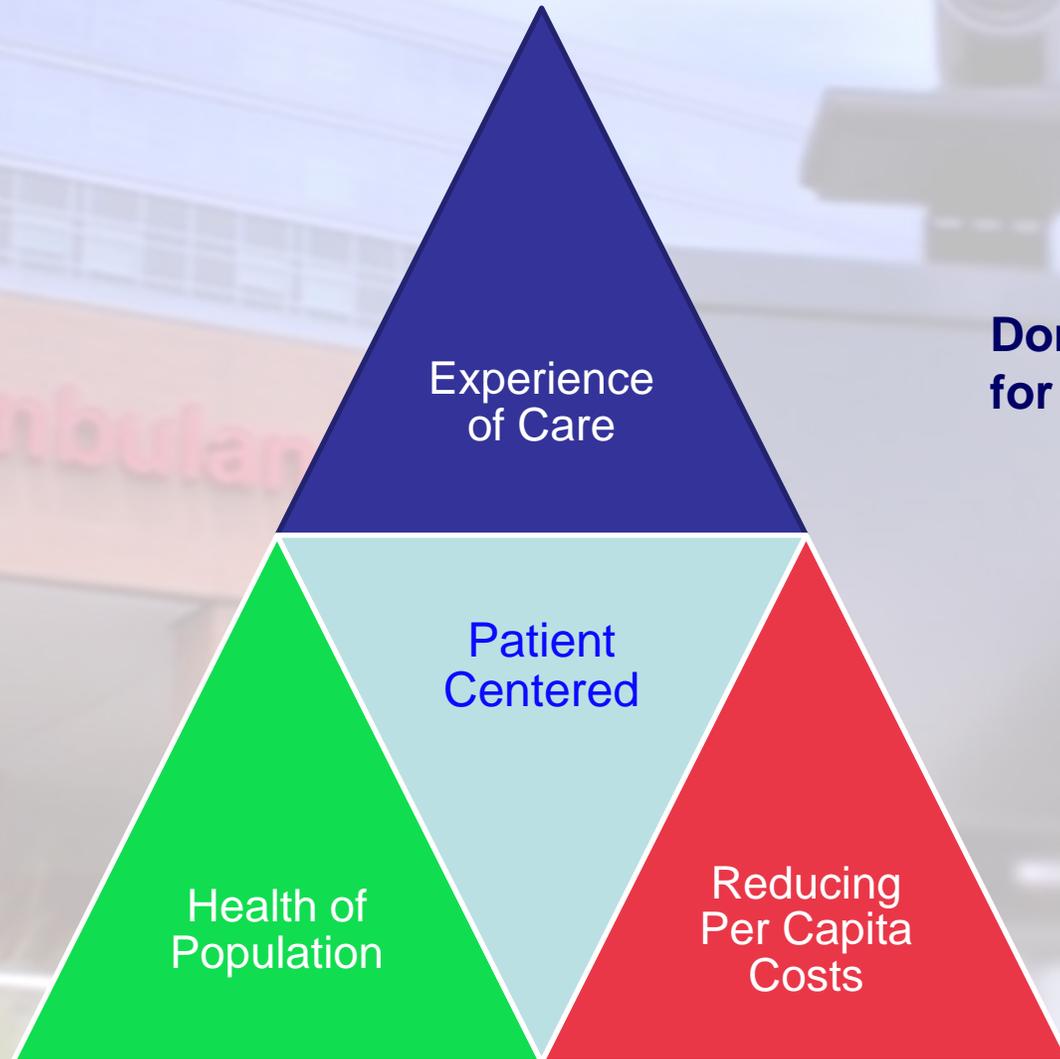
Life Expectancy vs Spending



Medicare Spending v. Quality of Care



Triple Aim

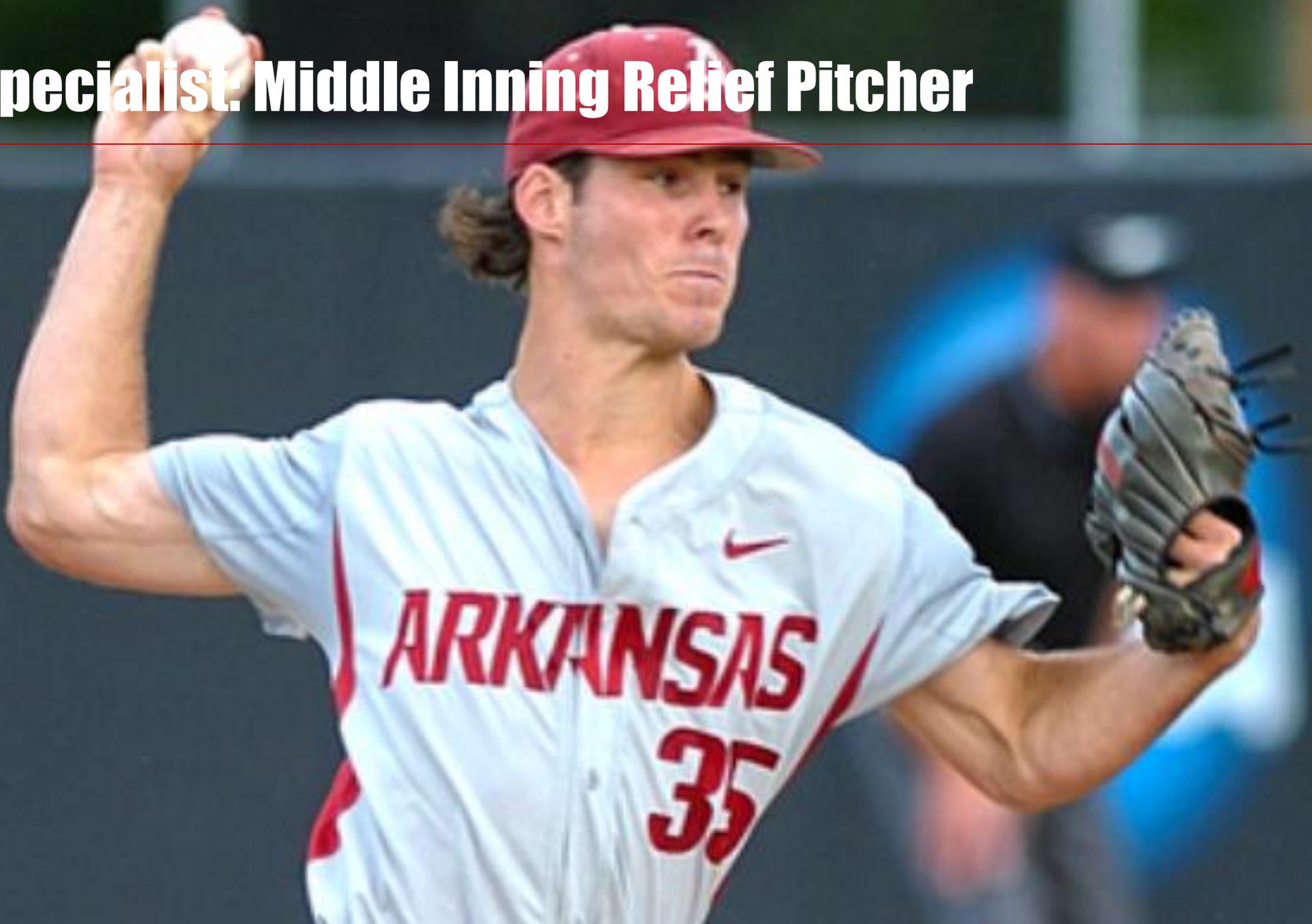


**Donald Berwick at Institute
for Healthcare Improvement**

The One Ring that Binds Them All!



Sub-Specialist: Middle Inning Relief Pitcher



Multidisciplinary Team



Team Effort



Teams are Dependent



Arkansas Solution

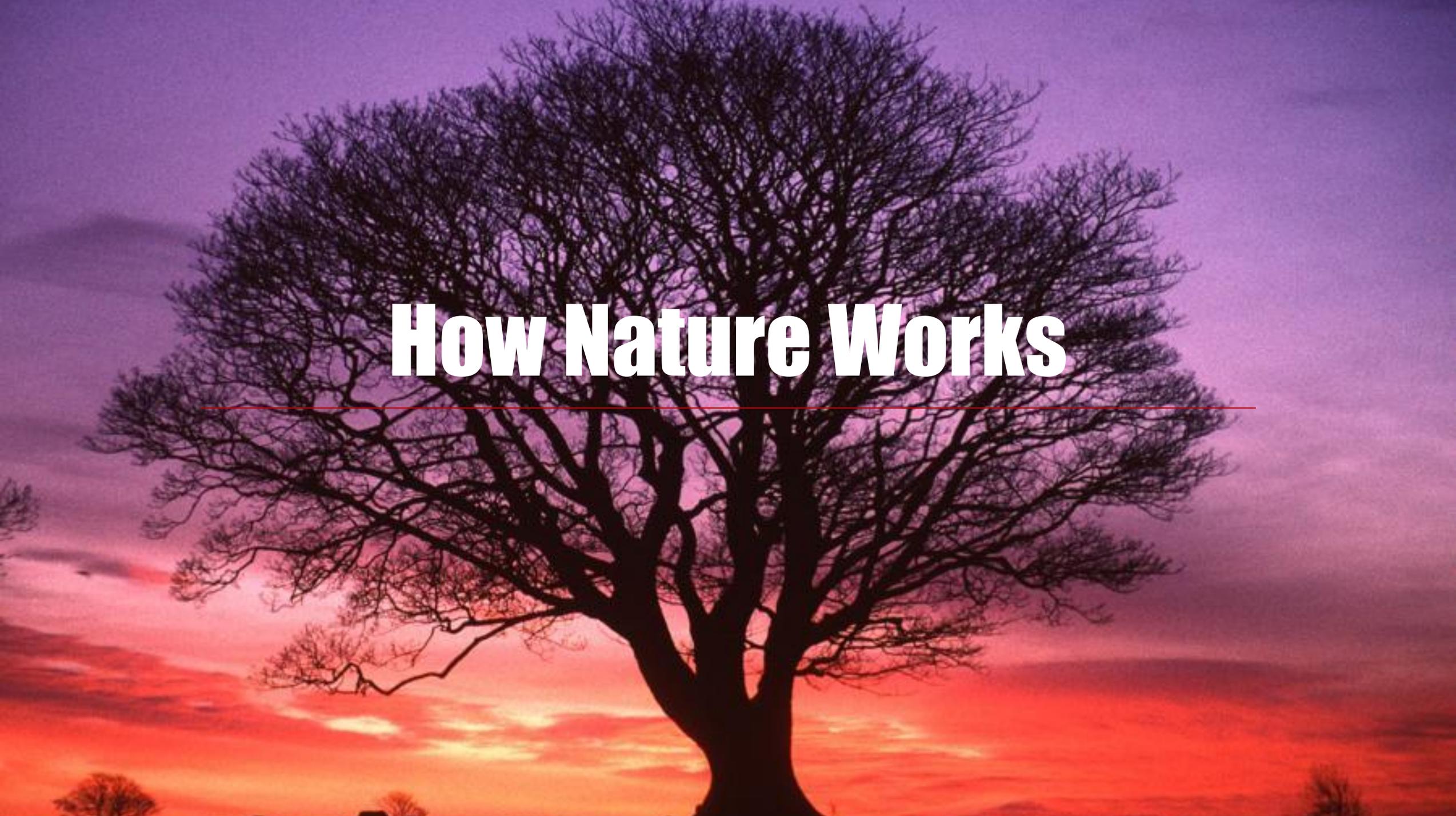
Insanity is doing the same thing over and over again and expecting different results.

-Albert Einstein



Patients First

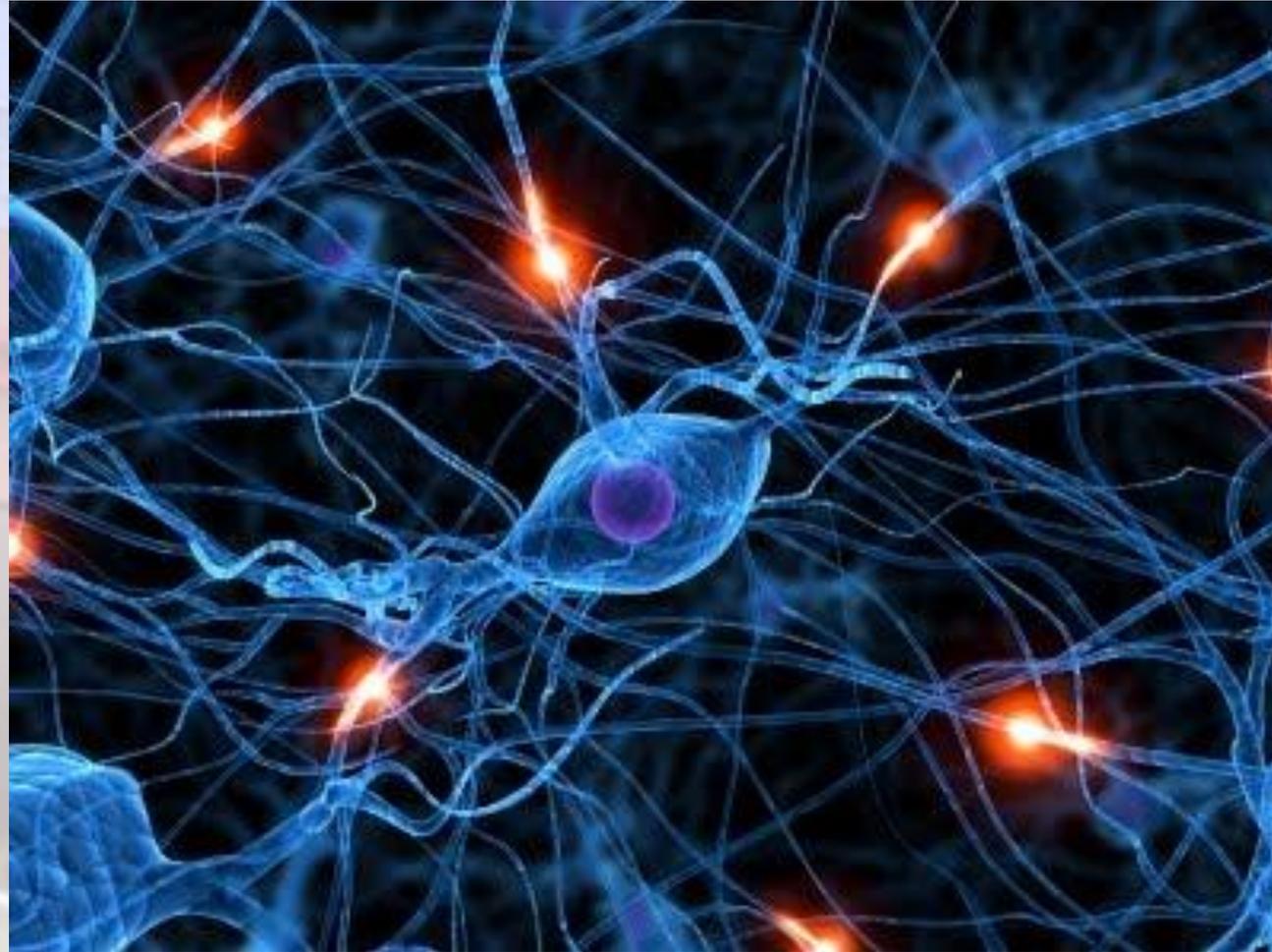
How Nature Works



Network



Network

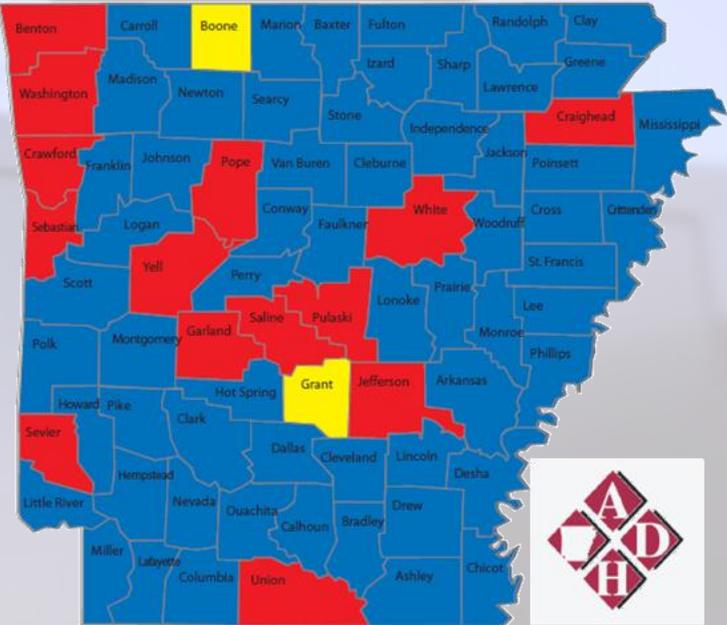


Network



Medically Underserved Areas

In a state where 73 of 75 counties are designated as medically underserved, healthcare access is the most overwhelming reason for Arkansas' poor health standing.



- Entire County Designation
- Partial County Designation
- No Designation

Center of Arkansas



Great Change

Increase production

Cut production costs

Improve safety

Connected Health

Traditional Tele-health consults

Remote care

Apps and Cell Phones

Individual and Population based care management

**Payment Reform Will Force the Market
Forward!**

Connected Health

Maximize healthcare resources

Provide increased opportunities to engage clinicians

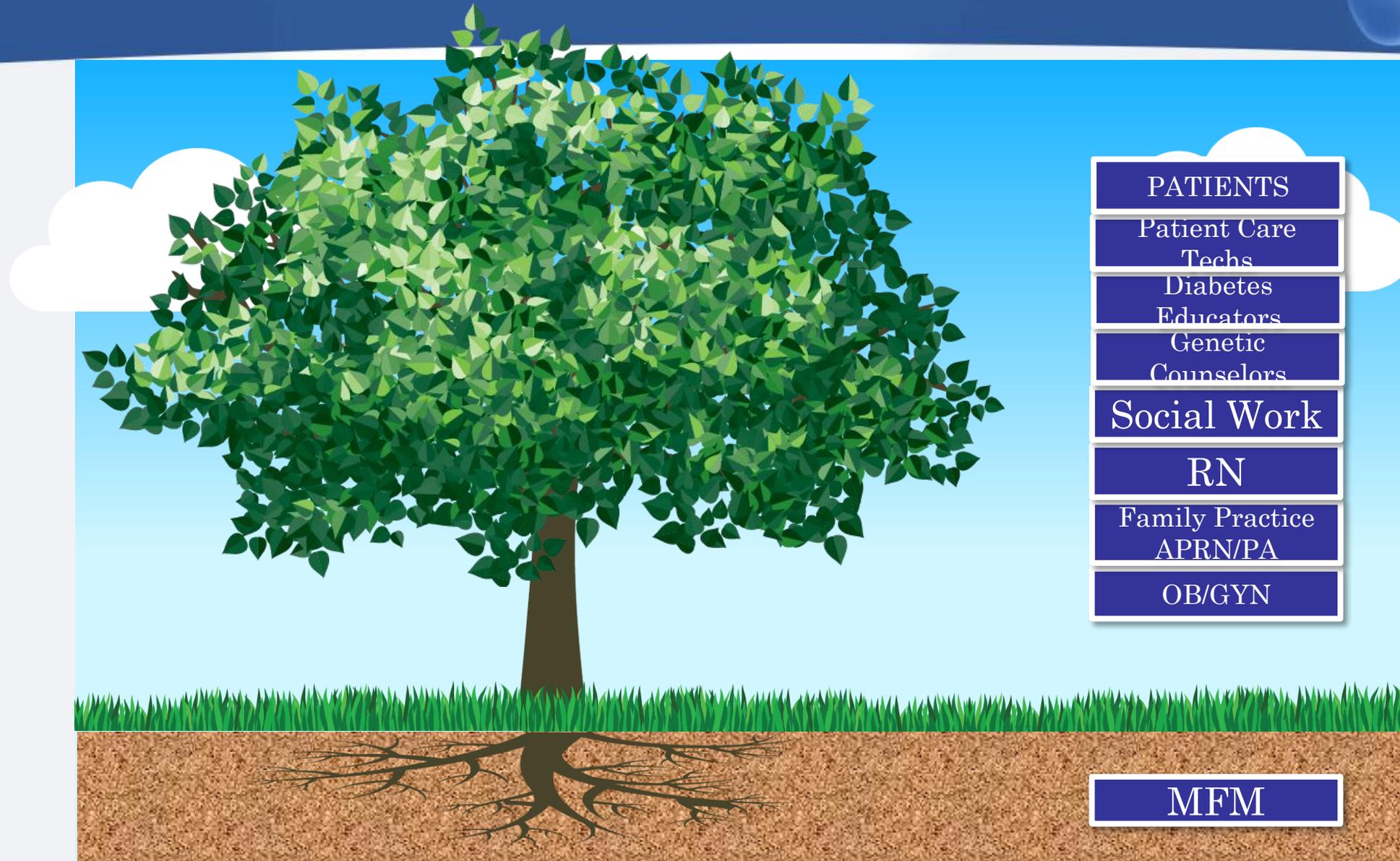
Patients self-manage their care

Uses technology available to consumers to deliver **patient care outside of the hospital or doctor's office.**

Network

Technology Becomes
Our Nervous System

Obstetrical Knowledge Tree

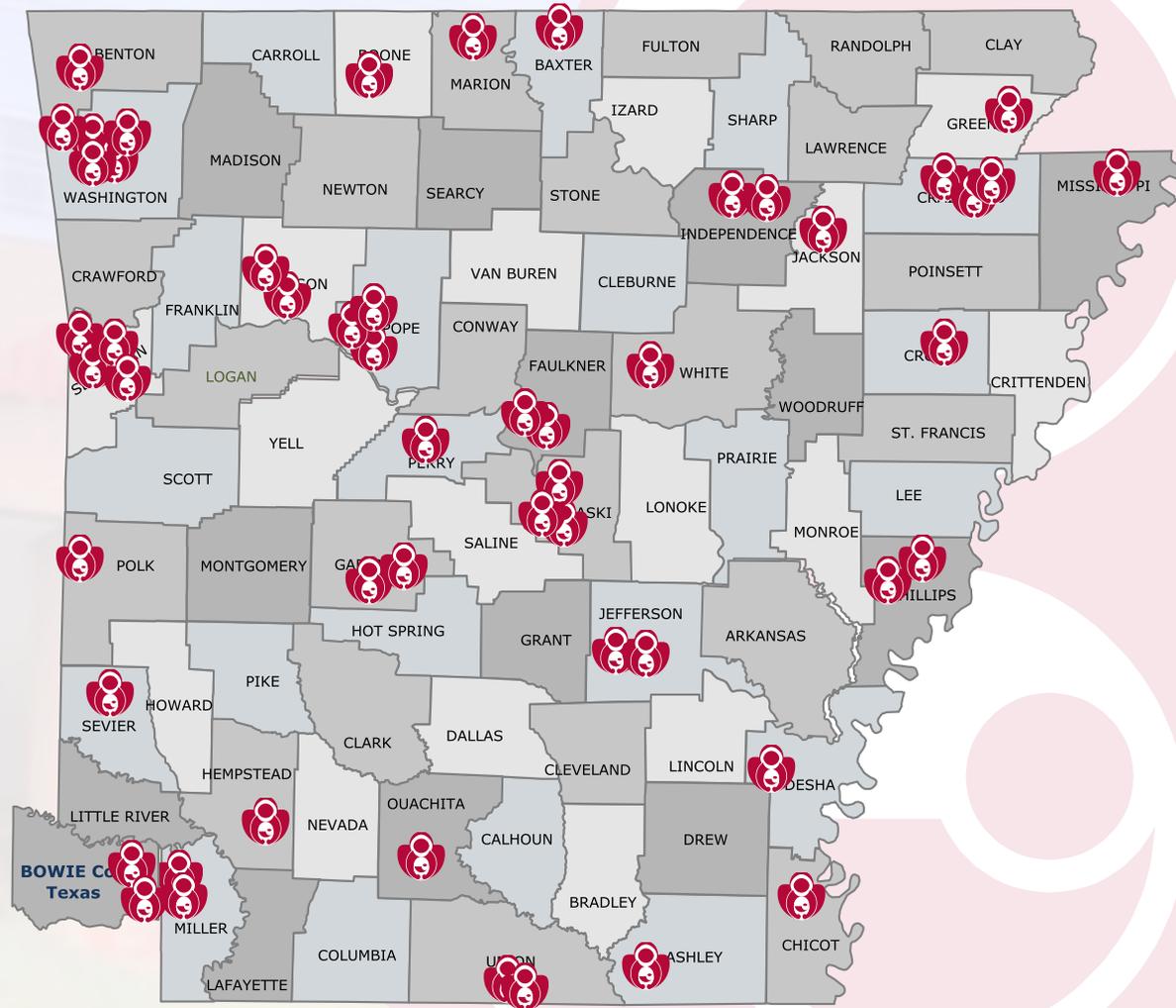




24 Hour Coordination Center



ANGELS Sites



ANGELS Call Center

2014

- Handled **17,829** phone calls
- **611** OB transport requests
- **551** OB transport arrivals
 - **439** OB consults
- **16,288** nurse triage calls

Impact on Arkansas



More high-risk mothers diagnosed earlier in pregnancy



More preterm infants born in hospitals with neonatologists



Neonatal mortality rates have declined



Mothers from rural areas more likely to deliver high-risk LBW babies at UAMS



AHRQ named ANGELS the OB/GYN TM model for the nation



July 2011 through June 2015

81 Hospitals

16,595 Patient Transfers

5,892,596 Images captured in the TIR

Hand Trauma Telemedicine Consults

July 2014 - June 2015

71 ED's with TM equipment

354 Video hand consults



UAMS Adult Sickle Cell Clinical Program

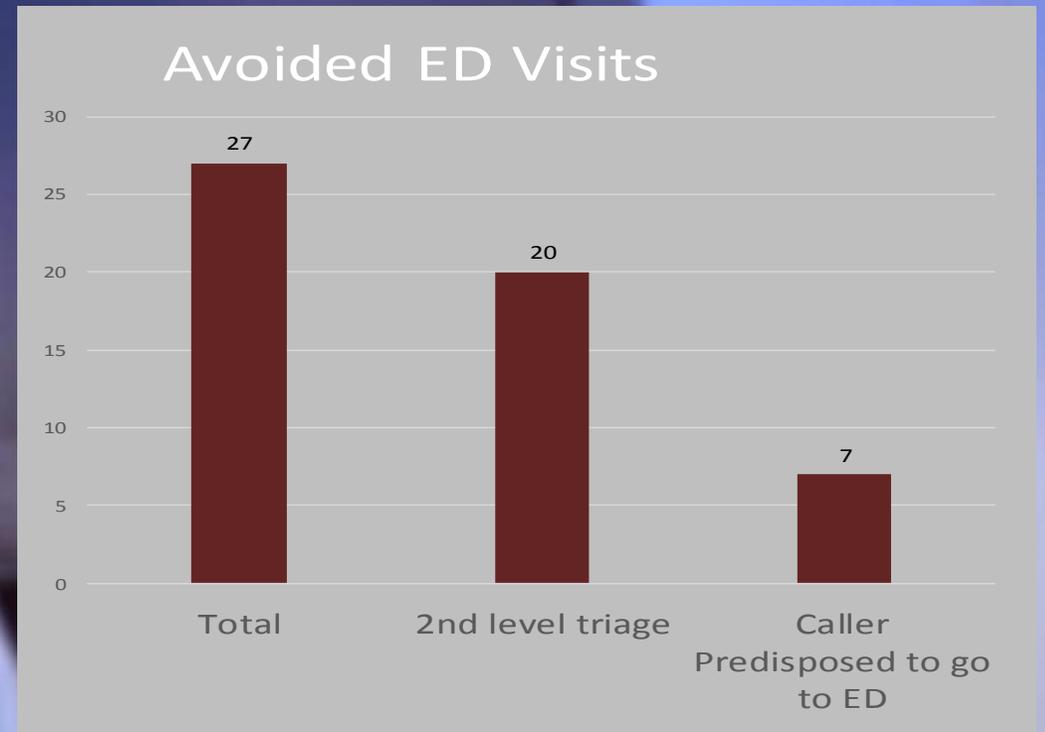
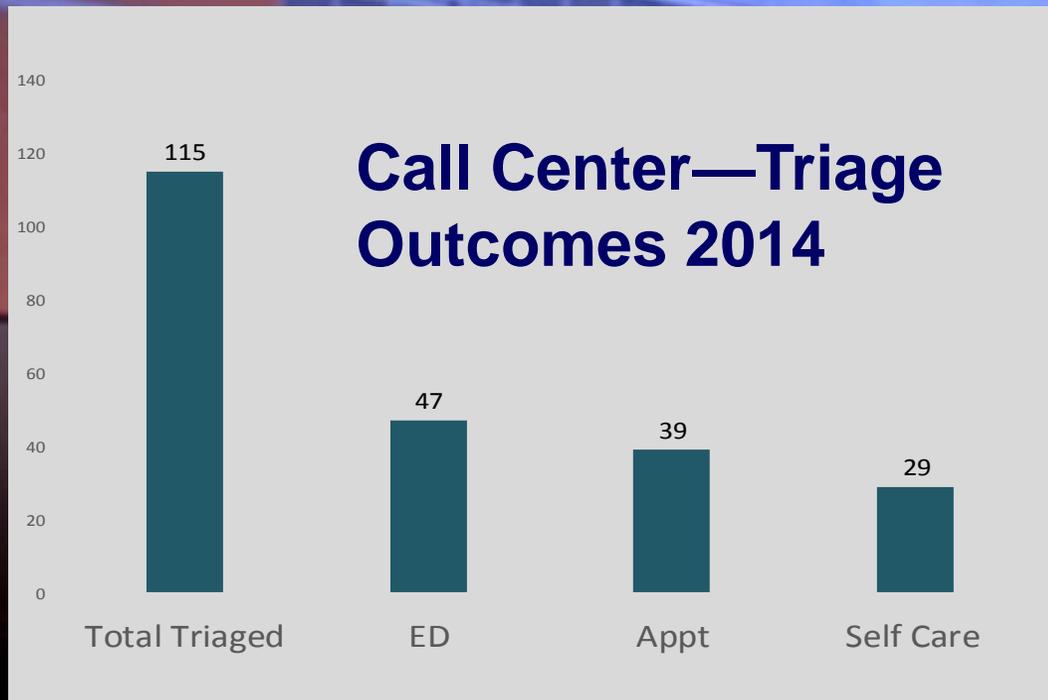
Telehealth Support

24/7 Call Center with Sickle Cell hotline:

Staffed by experienced RNs that can offer:

- Telephone triage for patients with immediate health concerns
 - Emotional Support
 - Assistance with medication refills
 - Home Care instructions
 - Second level triage (calling Sickle Cell Team Member) Doc to Doc consults—supporting PCPs and ED physicians

UAMS Adult Sickle Cell Clinical Program



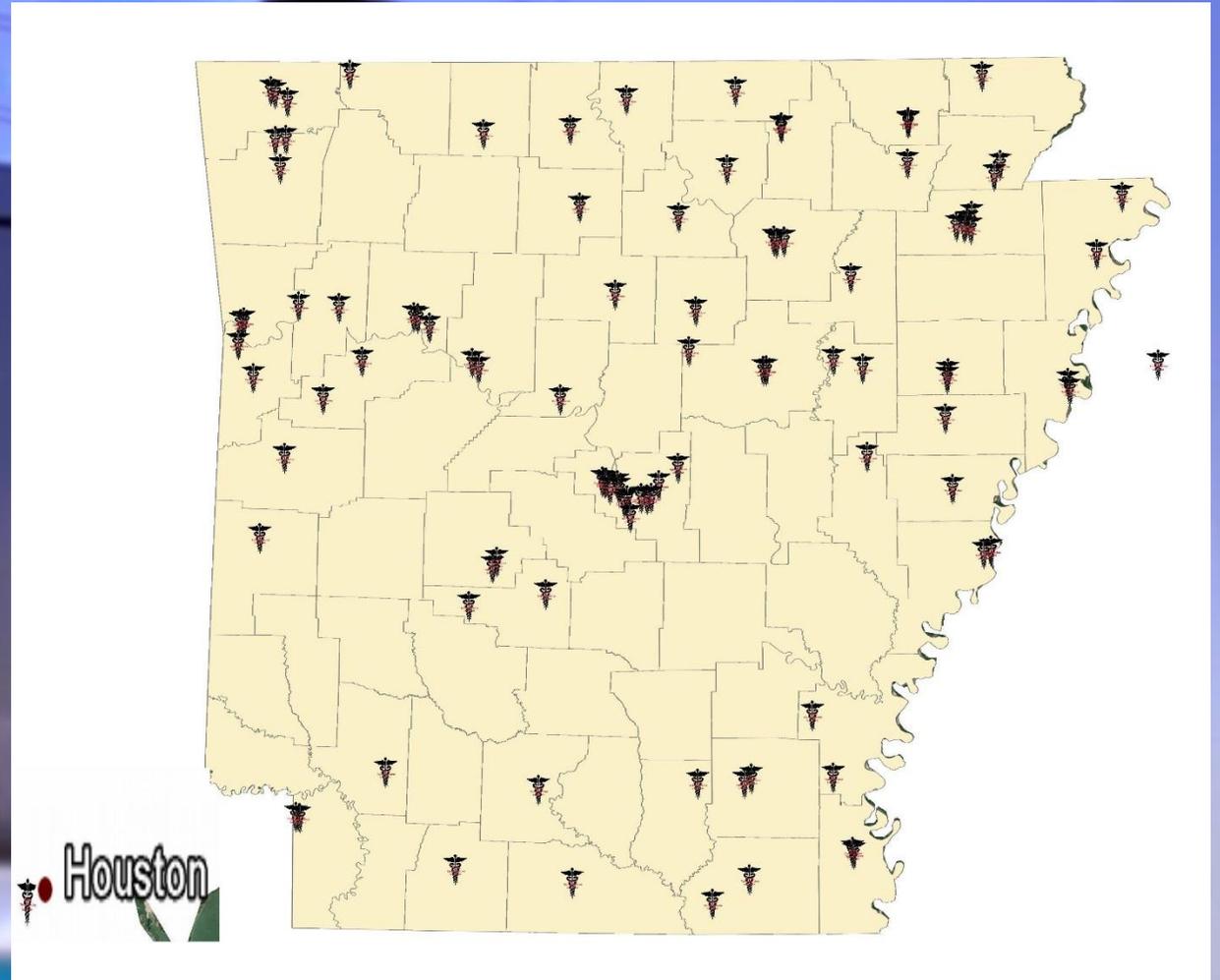
Telemedicine Programs in development

- Cardiology Clinic
- Neurology Clinic
- Emergency Medicine Consults
- DM Retinal Screening
- Geriatric Clinic
- Prison/Jail
 - New sites with 24/7 Nurse Triage via Interactive Video
- Palliative Care Teleconferences

- ,

Rehabilitative Services for Persons with Mental Illness (RSPMI) 2015

- 166 Locations Certified for Telemental Health
- 23 Organizations Participating
- Estimated 5,937 Monthly Patient Encounters
- Over 2,000 more than 2015 Estimates



Jefferson Regional Detention Facilities 2015

ADULT

- 1/1/2015 – 8/26/2015
- 226 Video Calls
- 119 Hours Of Patient Consultations
- Eliminated Most Transports for Mental Health

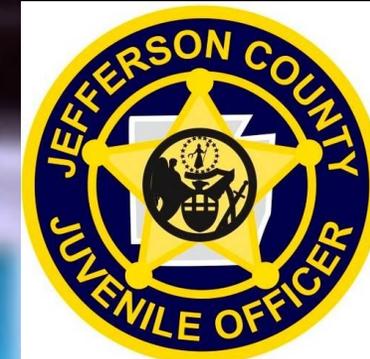
JUVENILE

- Expanded to Jefferson Juvenile Detention in Mar.
- 420 Hours of Video Calls 4/8/15 – 8/26/15
- 346 Individual Calls 4/8/15 – 8/26/15

JEFFERSON COUNTY
SHERIFF'S OFFICE
870-541-5351

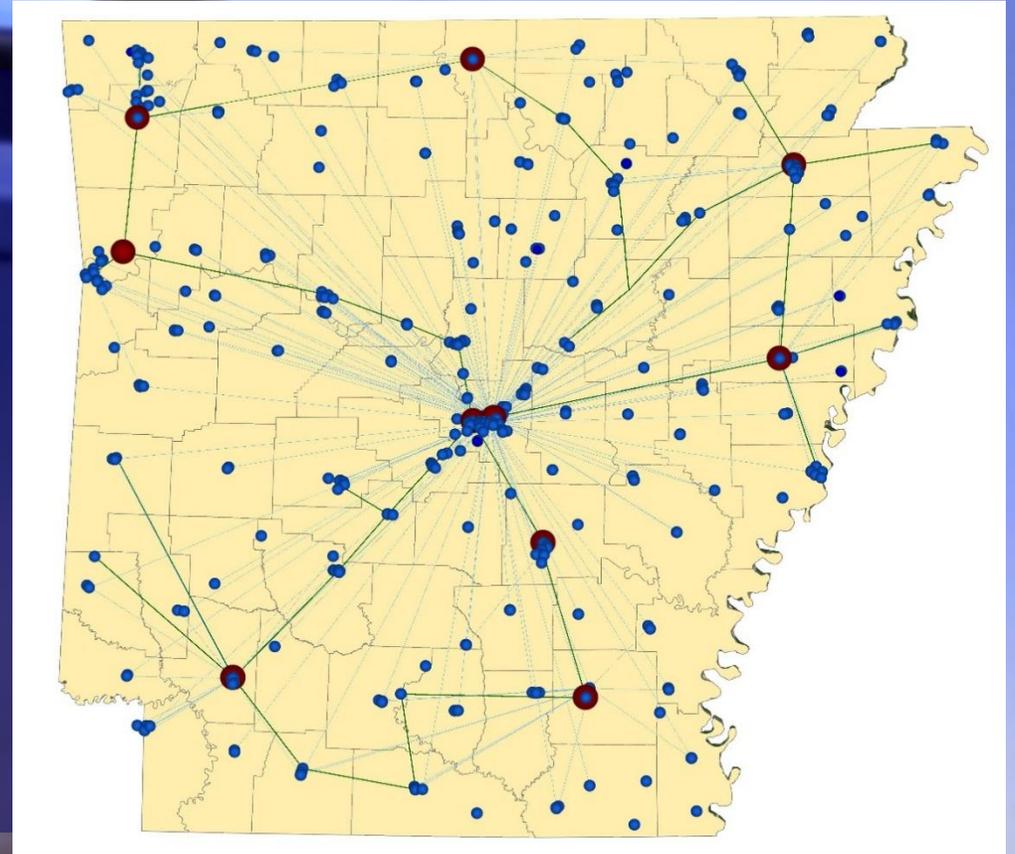


Southeast
Arkansas
Behavioral
Healthcare System

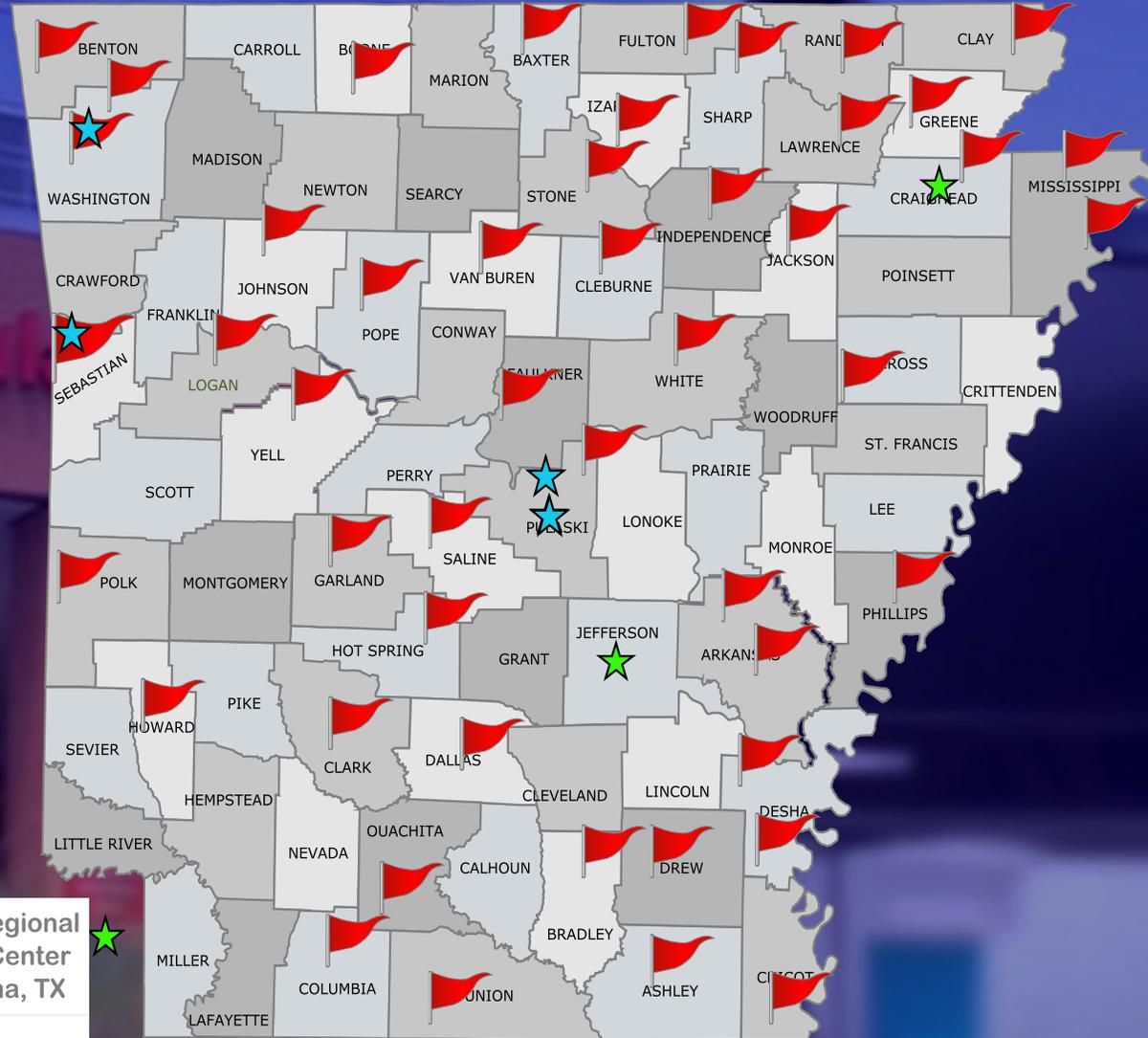


Arkansas e-Link 2015

- 414 Sites Connected 8/26/2015
- Arkansas e-Link Consortium Seeking New Connectivity Bids
1/1/2015 – 8/26/2015
- 55,595 Individual Calls
- 43,627 Hours of Calls

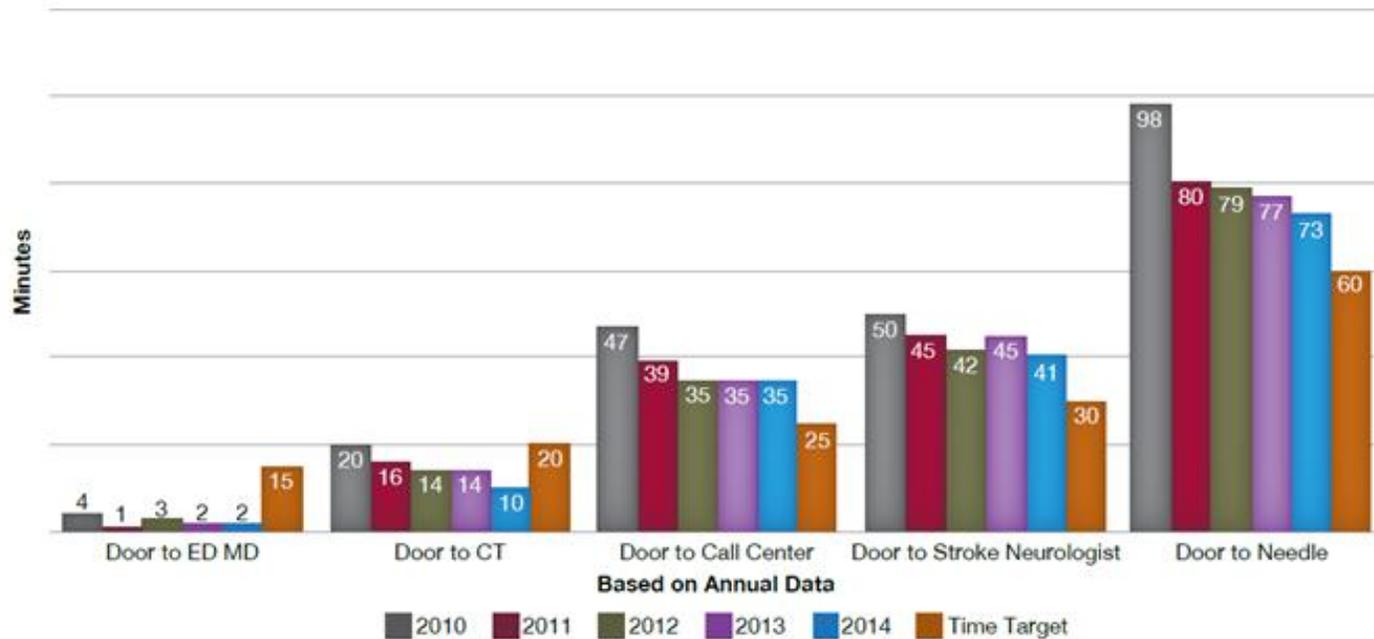


AR SAVES



Wadley Regional
Medical Center
Texarkana, TX

Golden Hour Core Measures



Nationally, the median time from ED arrival to thrombolysis initiation was 88 minutes.
In Arkansas, with AR SAVES

23 percent of our t-PA cases had door-to-needle times within **60** minutes

Overall it's down to **73** minutes, which is **15** minutes faster than the national average

Telemedicine is a Mechanism

The means by
which healthcare
is delivered

Examination

Legally recognize an examination through telemedicine technology that provides the practitioner with information equal or superior to an in person examination.

Physician-Patient Relationship

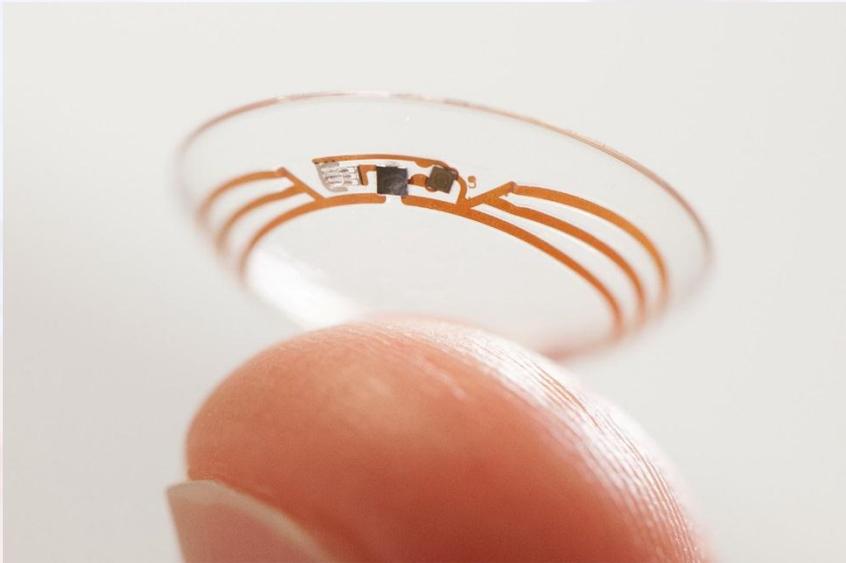
- Equivalent to an in-person exam
- Conforms to the standard of care expected of in-person care
- If necessary, incorporates peripherals and diagnostic tests sufficient to provide an accurate diagnosis

On-Call

Language may not be used by a physician to prescribe for a patient never seen by the physician unless there is an established agreement between the patient's personal physician and covering physician, compliant with state law governing on call relationships between practitioners.

A MUCH More Diversified Market Than Investors Realize





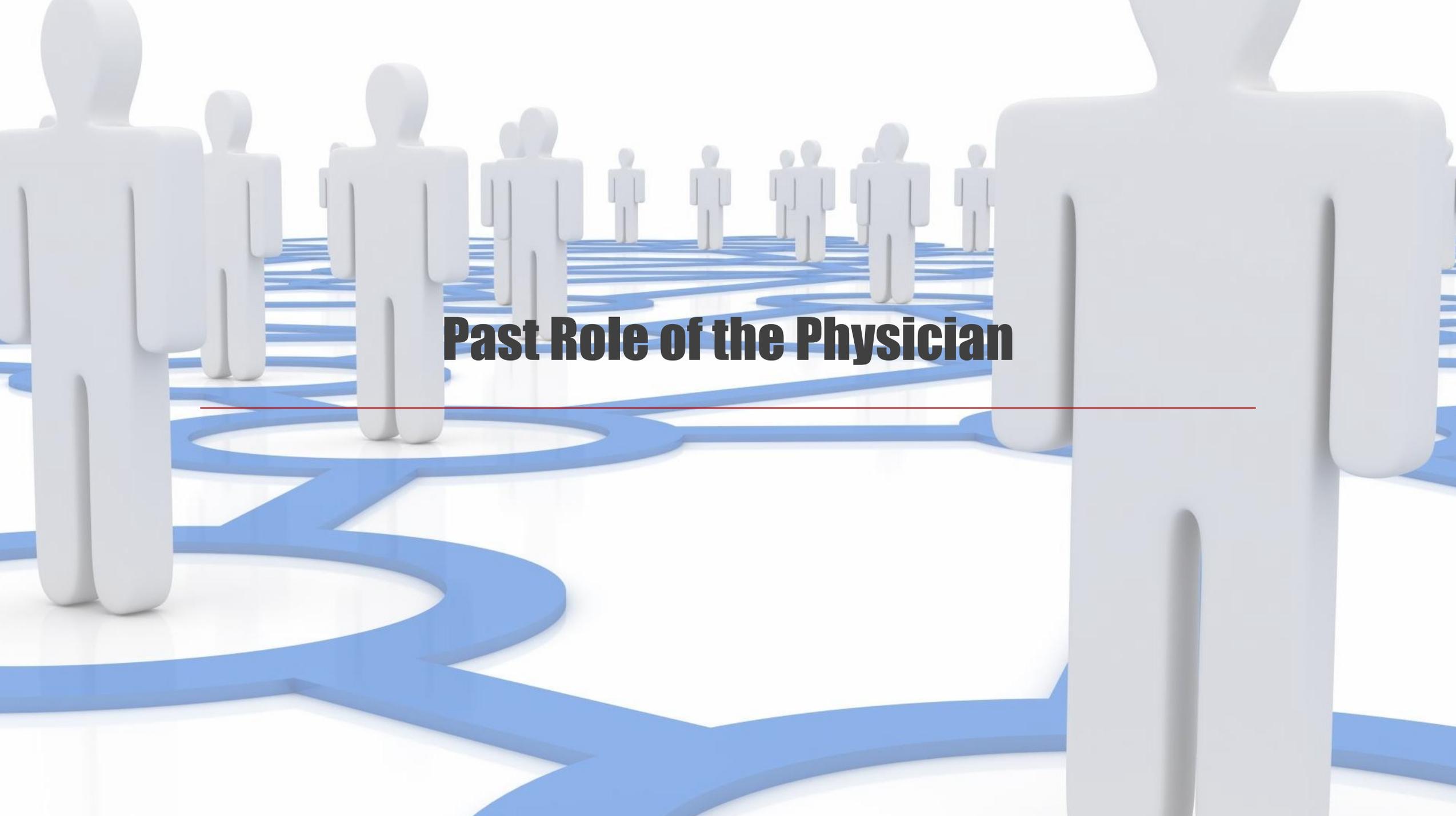
Cost Efficiencies

Better management of chronic diseases

Shared health professional staffing

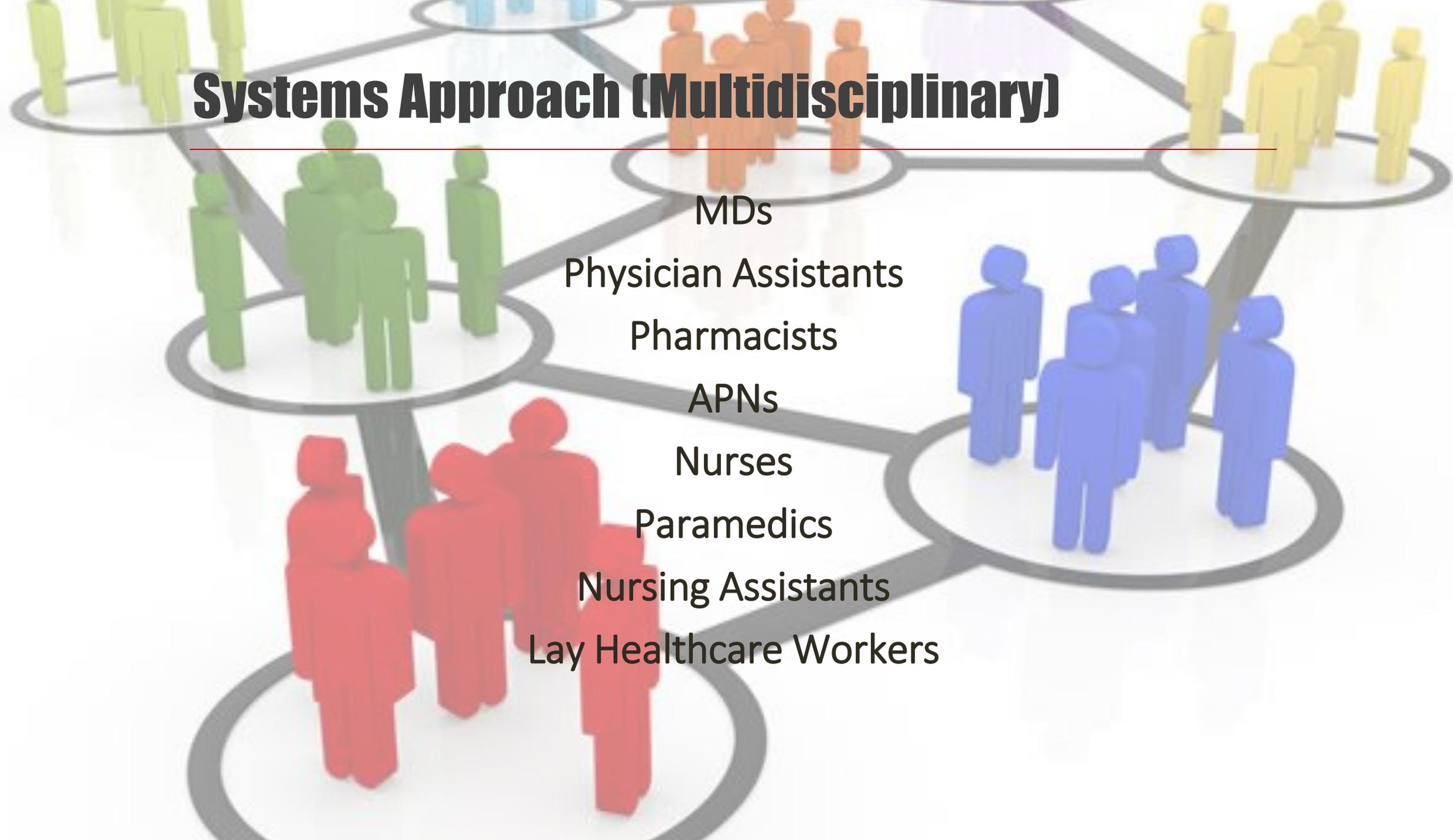
Reduced travel times

Fewer or shorter hospital stays

A 3D rendering of several white, stylized human figures standing on a white surface. A thick, blue, wavy line winds across the surface, resembling a path or a network. The figures are scattered along this path, with some in the foreground and others receding into the distance. The overall scene is clean and modern, with a white background.

Past Role of the Physician

Systems Approach (Multidisciplinary)



MDs

Physician Assistants

Pharmacists

APNs

Nurses

Paramedics

Nursing Assistants

Lay Healthcare Workers

Connections



Toronto Blue Jays Farm League

