Broadband Connectivity is Transforming Healthcare

NTIA Webinar Series

You must dial in to hear the webinar!
Conference Line: 800-593-7190 Passcode: 984-4951#

November 14, 2018

Participants

Moderator

- Scott Woods, Manager BroadbandUSA Technical Assistance, National Telecommunications and Information Administration (NTIA)

Presenters

- Damon A. Darsey, MD, FACEP, Associate Professor of Emergency Medicine & Pediatrics; Medical Director, Mississippi Center for Emergency Services

- Roy Kitchen, M.S., Arkansas e-Link Network Director; Business Administrator, Center for Distance Health; USAC Project Coordinator; UAMS, College of Medicine

- Curtis Lowery, M.D., Maternal-Fetal Medicine; Professor and Chair; ANGELS Medical Director; (Antenatal & Neonatal Guidelines, Education and Learning System); The Center for Distance Health; Executive Director; SARA Professor and Principal Investigator; (Squid Array for Reproductive Assessment)

Helpful Information

Questions

- Please type questions in the Q&A box on the right hand side of the screen. Questions will be taken after the final presenter.

Presentation

- The presentation along with a transcript and an audio recording will be available on the BroadbandUSA website within 7 days of this webinar under Events/past events.
- https://broadbandusa.ntia.doc.gov/past-event

Technical Assistance

- Guides, products, publications, and other tools are available to assist you with the planning, funding and implementation of your broadband project.
- https://broadbandusa.ntia.doc.gov

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Mobile Broadband and Emergency Medicine

Damon A. Darsey, MD, FACEP

Associate Professor of Emergency Medicine & Pediatrics

Medical Director

Mississippi Center for Emergency Services

The Mississippi Experience

- Mobile Tele-Assist System
- Collaborative Relationship with Regional Cellular Carrier
- Extensive telemedicine system
- The changing healthcare environment
- Pre-hospital challenges and opportunities

The Big Challenge

Population Coverage

Geographic Coverage

Your plan to meet the challenge?

Make Operational Changes to match coverage

OR

Make Coverage match Operational Changes

The Role of Telemedicine

Supportive Oversight
Direct Clinical Care

Damon A. Darsey, MD, FACEP

Associate Professor of Emergency Medicine & Pediatrics

Medical Director, Mississippi Center for Emergency Services

Telemedicine in Arkansas

Roy Kitchen
University of Arkansas for Medical Sciences Center for Distance Health
Arkansas e-Link Network Director

Curtis Lowery, MD
Chair, OB/GYN-MFM
Founder & Director, ANGELS & Center for Distance Health
University of Arkansas for Medical Sciences

What is Arkansas e-Link?

A dedicated high-speed, HIPPA compliant broadband network with video access to 1000+ endpoints.

The University of Arkansas for Medical Sciences (UAMS) applied for $102 million in ARRA broadband economic recovery funds to expand and integrate two existing networks:

▶ Arkansas Telehealth Network

▶ Arkansas Research and Education Optical Network (ARE-ON)
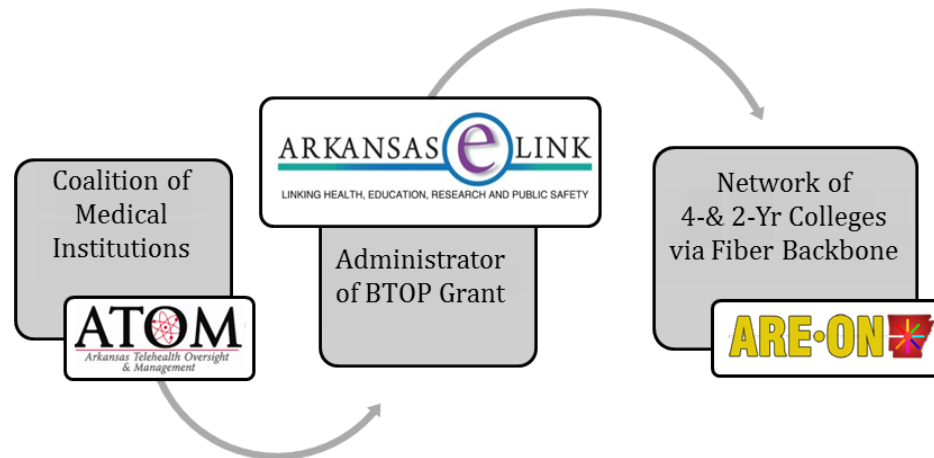
Evolution from FCC Rural Health Care Pilot Program to USAC Health Care Connect Fund (HCF) Consortium Leader

ARKANSAS e LINK
LINKING HEALTH, EDUCATION, RESEARCH AND PUBLIC SAFETY

BTOP Grant Completion

Federal Communications Commission
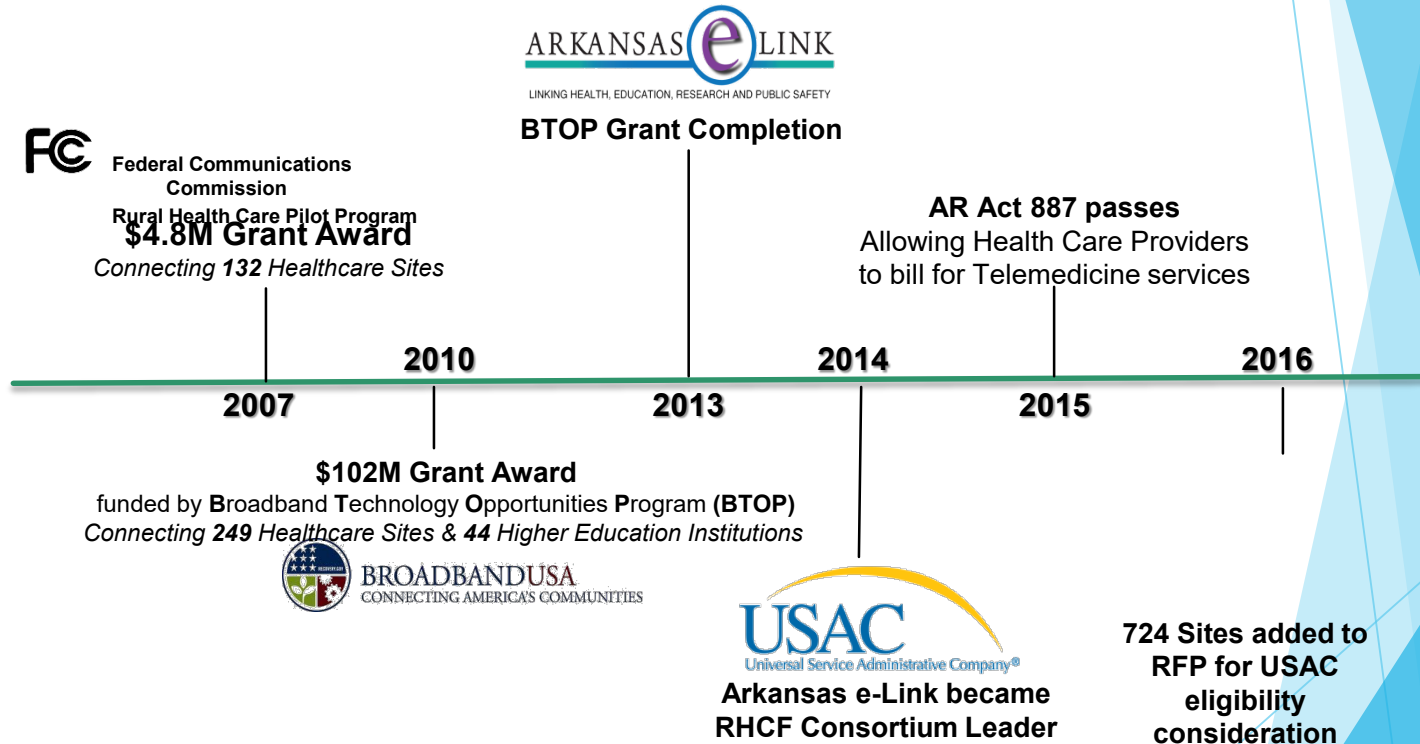**Rural Health Care Pilot Program**
$4.8M Grant Award
Connecting 132 Healthcare Sites

AR Act 887 passes
Allowing Health Care Providers
to bill for Telemedicine services

2010

2014

2016

2007

2013

2015

$102M Grant Award
funded by **B**roadband **T**echnology **O**pportunities **P**rogram **(BTOP)**
Connecting 249 Healthcare Sites & 44 Higher Education Institutions

BROADBANDUSA
CONNECTING AMERICA'S COMMUNITIES

USAC
Universal Service Administrative Company®

Arkansas e-Link became RHCF Consortium Leader

724 Sites added to RFP for USAC eligibility consideration

Arkansas' Connectivity Before & After BTOP

BEFORE
(2010)
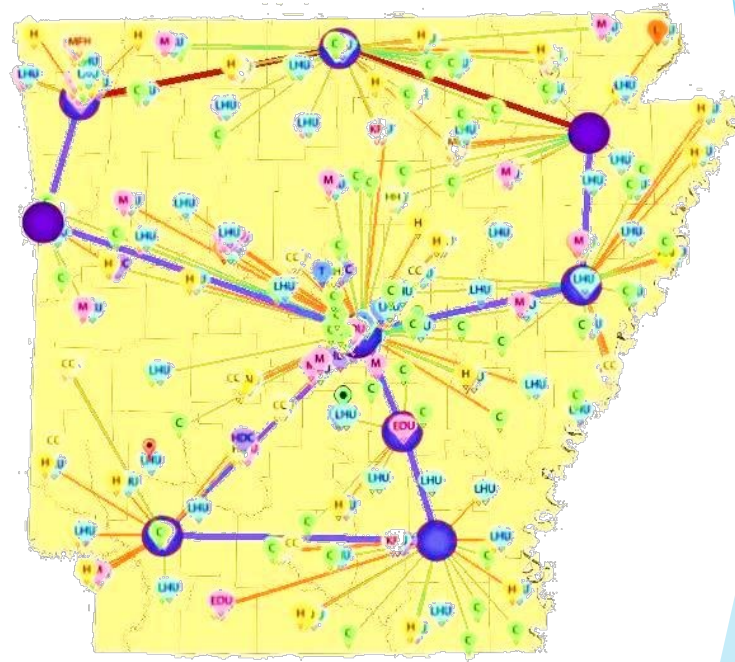
AFTER (2013)

Health Care Disparity

Where you live should <u>not</u> determine whether you live or die!

ANGELS Telemedicine Program

ANGELS Telemedicine Consults

FY 2018
2,822
Telemedicine patient visits provided across the state

AR SAVES

CoxHealth Springfield, MO

Methodist University Hospital, Memphis TN

Wadley Regional Medical Center Texarkana, TX

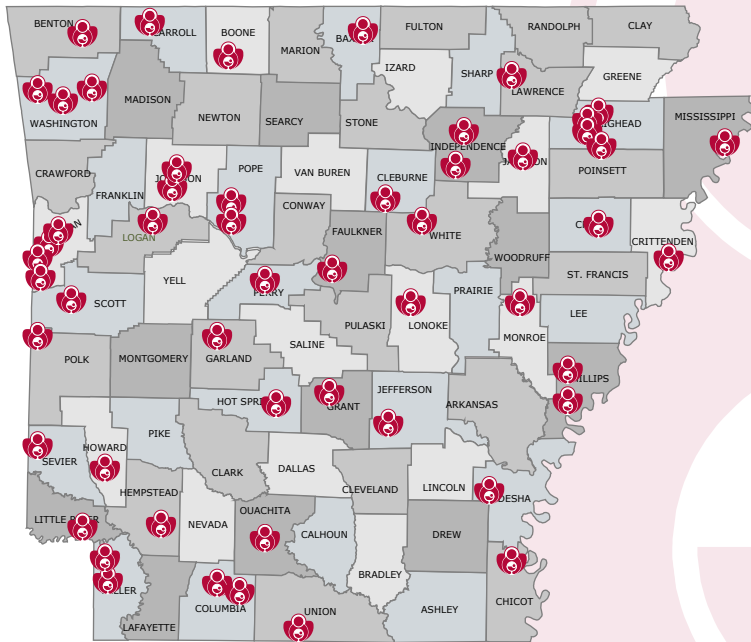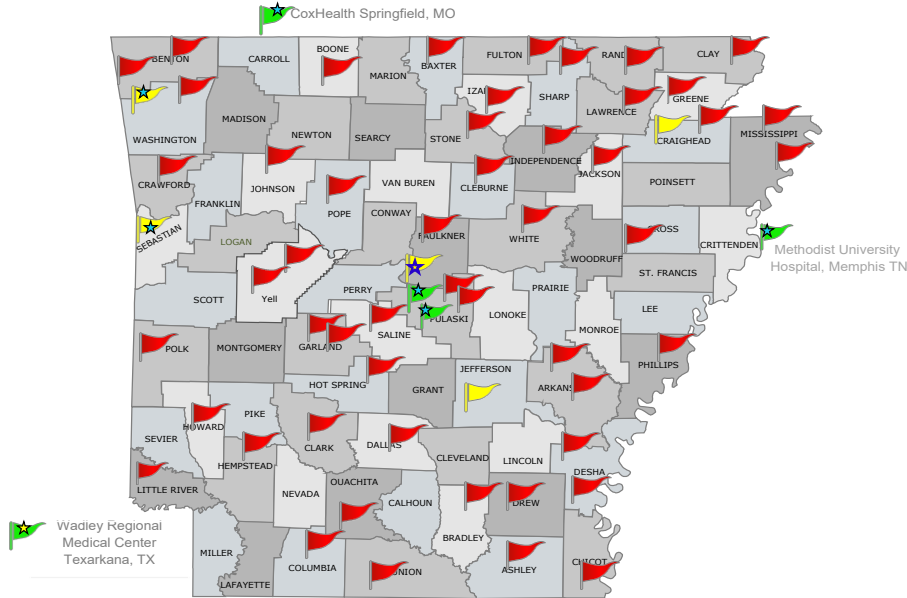Map counties shown: BENTON, CARROLL, BOONE, MARION, BAXTER, FULTON, RANDOLPH, CLAY, MADISON, NEWTON, SEARCY, IZARD, SHARP, LAWRENCE, GREENE, WASHINGTON, STONE, INDEPENDENCE, JACKSON, CRAIGHEAD, MISSISSIPPI, CRAWFORD, FRANKLIN, JOHNSON, VAN BUREN, CLEBURNE, POINSETT, POPE, CONWAY, FAULKNER, WHITE, WOODRUFF, CROSS, CRITTENDEN, SEBASTIAN, LOGAN, PERRY, PULASKI, LONOKE, PRAIRIE, ST. FRANCIS, LEE, SCOTT, Yell, SALINE, MONROE, PHILLIPS, POLK, MONTGOMERY, GARLAND, JEFFERSON, ARKANSAS, HOT SPRING, GRANT, HOWARD, PIKE, CLARK, DALLAS, CLEVELAND, LINCOLN, DESHA, SEVIER, HEMPSTEAD, OUACHITA, CALHOUN, DREW, LITTLE RIVER, NEVADA, BRADLEY, MILLER, COLUMBIA, UNION, ASHLEY, CHICOT, LAFAYETTE

Receiving Sites (INTERVENTION & ICU CAPABLE)

UAMS Medical Center	Little Rock	Pulaski
Baptist Health Medical Center	Little Rock	Pulaski
Cox Health	Springfield	Missouri
Methodist University Hospital	Memphis	Tennessee
Sparks	Forth Smith	Sebastian
Washington Regional Medical Center	Fayetteville	Washington

Receiving Facilities (ICU CAPABLE)

Jefferson Regional Medical Center	Pine Bluff	Jefferson
Conway Regional Medical Center	Conway	Faulkner
Wadley Regional Medical Center	Texarkana	Texas
St. Bernard's Regional Medical Center	Jonesboro	Craighead

| Name	City	County
Spoke Sites		
Spoke & Receiving Site		
Receiving Site		
Baptist Health Medical Center	Arkadelphia	Clark
Little River Memorial Hospital	Ashdown	Little River
White River Medical Center	Batesville	Independence
Saline Memorial Hospital	Benton	Saline
Northwest Medical Center	Bentonville	Benton
Siloam Springs Regional Hospital	Siloam Springs	Benton
Great River Medical Center	Blytheville	Mississippi
Community Medical Center of Izard County	Calico Rock	Izard
Ouachita County Medical Center	Camden	Ouachita
White River Medical Complex	Cherokee Village	Sharp
Johnson Regional Medical Center	Clarksville	Johnson
Ozark Health Medical Center	Clinton	Van Buren
Baptist Health Medical Center	Conway	Faulkner
Conway Regional Medical Center	Conway	Faulkner
Ashley County Medical Center	Crossett	Ashley
Chambers Memorial Hospital	Danville	Yell
River Valley Medical Center	Dardanelle	Yell
Dewitt Hospital and Nursing Home	DeWitt	Arkansas
Delta Memorial Hospital	Dumas	Desha
Medical Center of South Arkansas	El Dorado	Union
Washington Regional Medical Center	Fayetteville	Washington
Dallas County Medical Center	Fordyce	Dallas
Sparks	Fort Smith	Sebastian
North Arkansas Regional Medical Center	Harrison	Boone
Baptist Health Medical Center – Heber Springs	Heber Springs	Cleburne
Helena Regional Medical Center	Helena	Phillips
National Park Medical Center	Hot Springs	Garland
CHI St. Vincent	Hot Springs	Garland
Wadley Regional Medical Center at Hope	Hope	Hempstead
North Metro Medical Center	Jacksonville	Pulaski
NEA Jonesboro	Jonesboro	Craighead
St. Bernard's Hospital	Jonesboro	Craighead
Chicot Memorial Medical Center	Lake Village	Chicot
Baptist Health Medical Center – Hot Spring County	Malvern	Hot Spring
Magnolia Regional Medical Center	Magnolia	Columbia
McGehee Desha County Hospital	McGehee	Desha
Mena Regional Medical Center	Mena	Polk
Drew Memorial Hospital	Monticello	Drew
Baxter Regional Medical Center	Mountain Home	Baxter
Stone County Medical Center	Mountain View	Stone
Howard Memorial Hospital	Nashville	Howard
Unity Health- Harris Hospital	Newport	Jackson
Baptist Health North Little Rock	North Little Rock	Pulaski
South Mississippi County Regional Hospital	Osceola	Mississippi
Arkansas Methodist Medical Center	Paragould	Greene
Piggott Community Hospital	Piggott	Clay
Jefferson Regional Medical Center	Pine Bluff	Jefferson
Five Rivers Medical Center	Pocahontas	Randolph
St. Mary's Regional Medical Center	Russellville	Pope
Fulton County Hospital	Salem	Fulton
Unity Health- White County Medical Center	Searcy	White
Northwest Medical Center	Springdale	Washington
Baptist Health Medical Center – Stuttgart	Stuttgart	Arkansas
Lawrence Memorial Hospital	Walnut Ridge	Lawrence
Bradley County Medical Center	Warren	Bradley
CrossRidge Community Hospital	Wynne	Cross

Trauma Image Repository

Trauma Hand and Burn Telemedicine
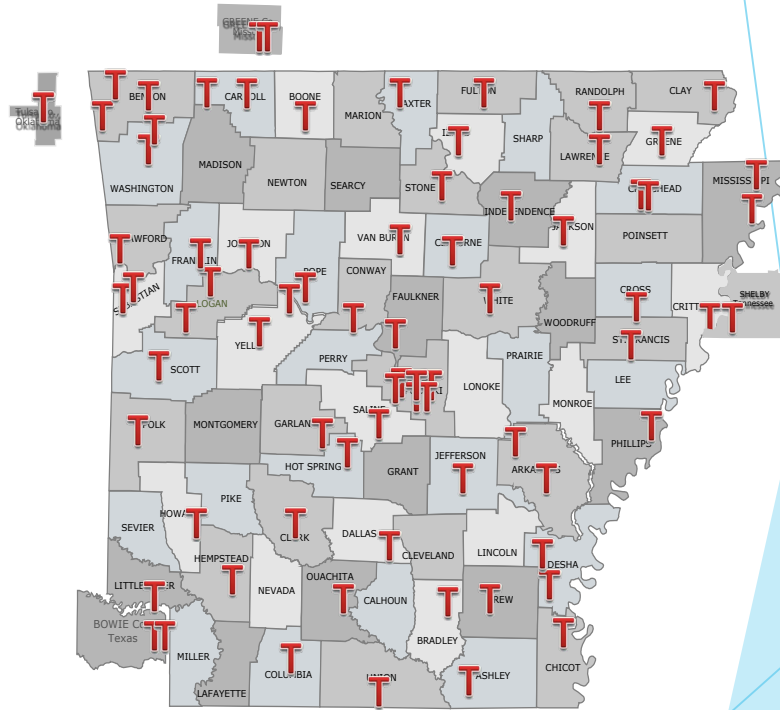
Additional Statewide Telemedicine Programs

- Cardiology Clinic – Baptist, St. Bernard's and UAMS
- Chronic Care management- Baptist
- Neurology Clinic
- Emergency Medicine Consults
- DM Retinal Screening
- Geriatrics
- Traumatic Brain Injury
- Baptist eICU
- Pre and post operative visits
- School based health clinics
- Primary care to patients home
- Prisons and Jails
- Direct to Consumer
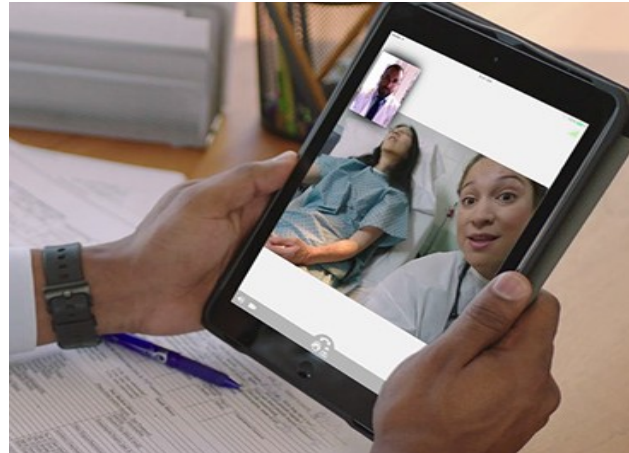
Telemedicine Reimbursement

▶ Parity provisions for reimbursement of telemedicine-provided physician services

- ▶ Patients stay local
- ▶ Rural community retains revenue
- ▶ Reimbursement by
  - ▶ Private health insurance carriers
  - ▶ Medicare
  - ▶ Medicaid

Evolution of UAMS Telehealth Programs (2003-2018)

ANGELS

UAMS Center for Distance Health

peds((•))PLACE
Physician Learning and Collaborative Education

UAMS
CME for MDs

(ONE) Team
CE for Nurses
Obstetrical
Neonatal
Exchange

ARKANSAS TRAUMA SYSTEM
Image Repository

Fetal Echo
Clinic

ARKANSAS e-LINK
LINKING HEALTH, EDUCATION, RESEARCH AND PUBLIC SAFETY

South Central Telehealth Resource Center
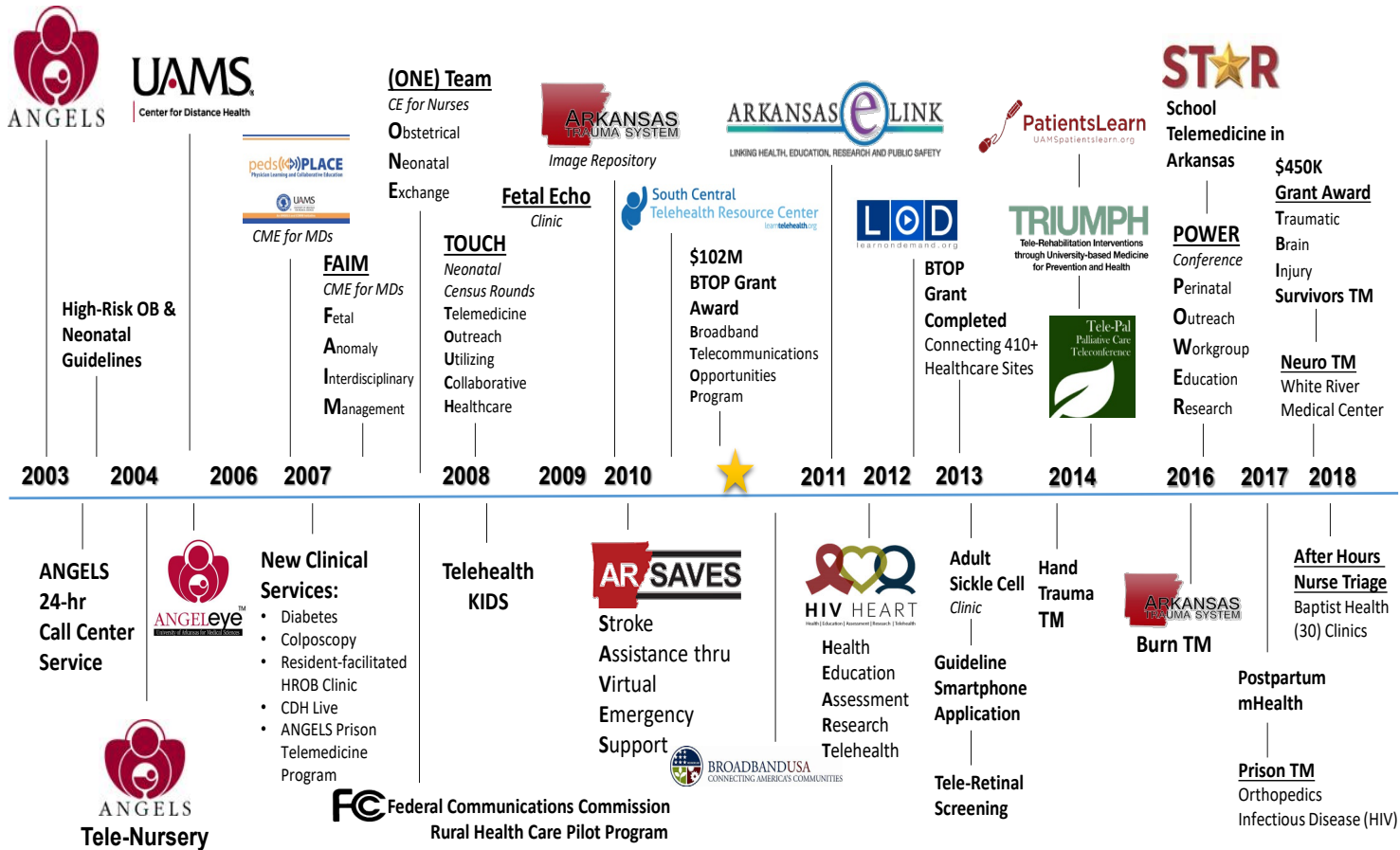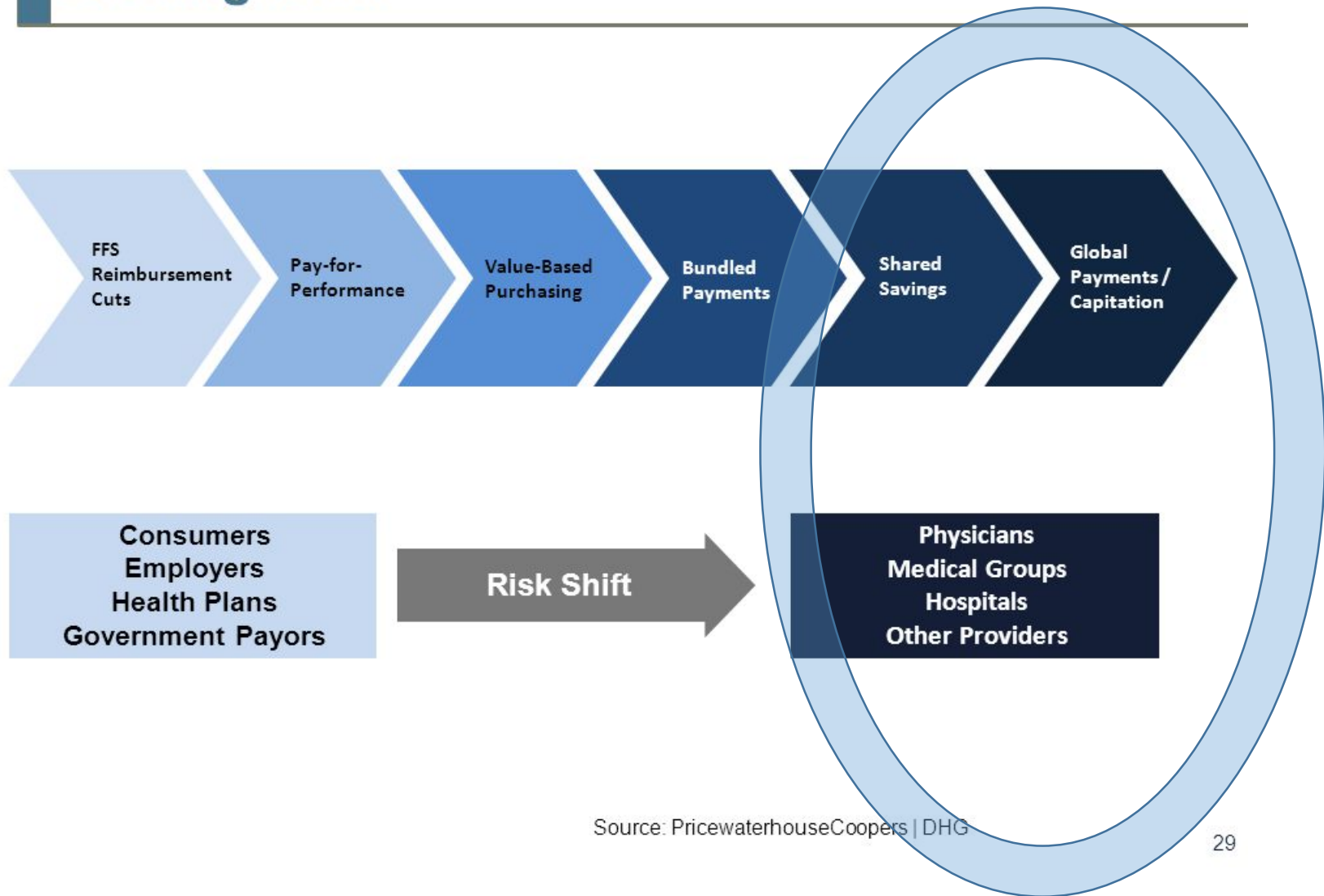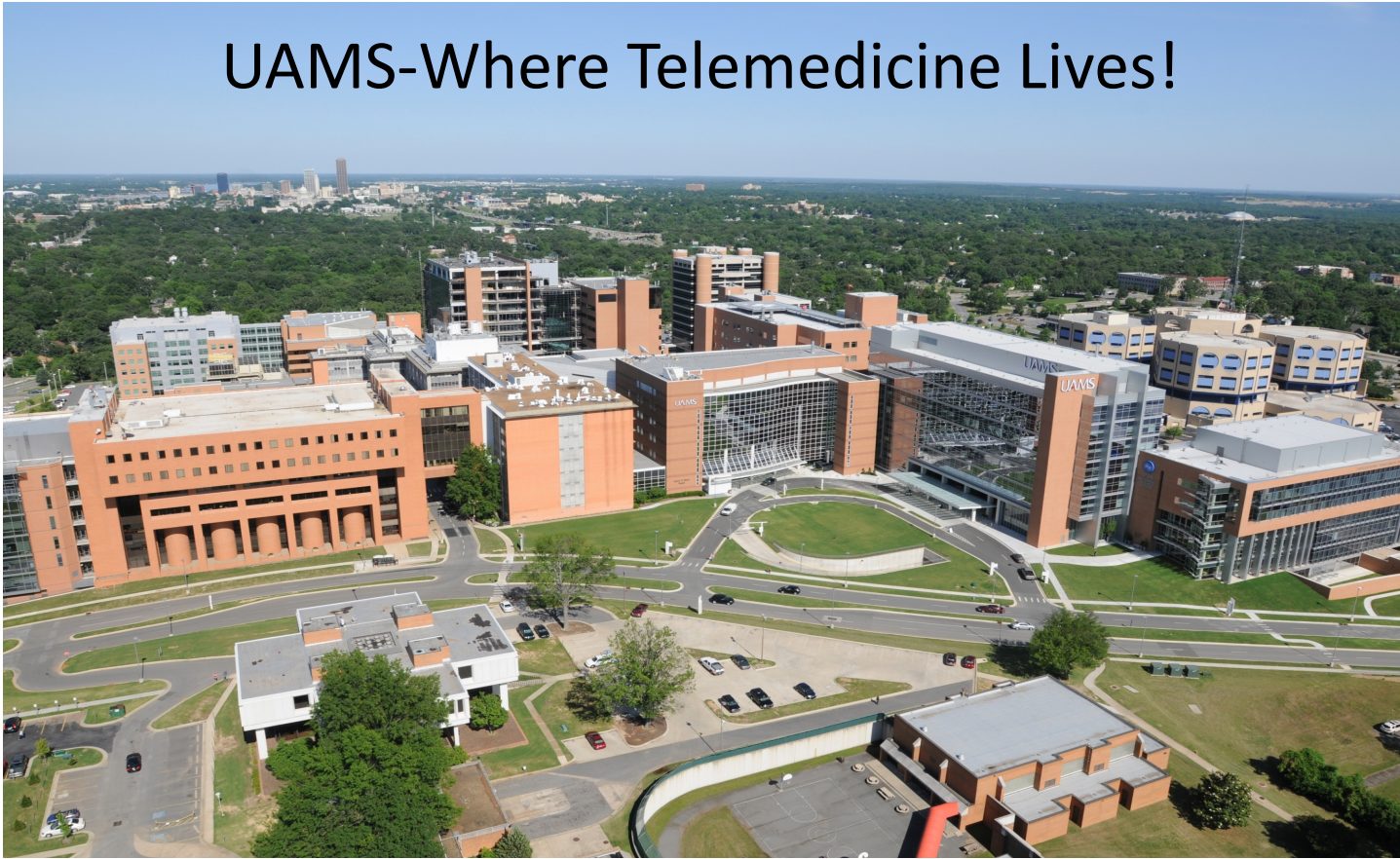learntelehealth.org

PatientsLearn
UAMSpatientslearn.org

L●**D**
learnondemand.org

TRIUMPH
Tele-Rehabilitation Interventions through University-based Medicine for Prevention and Health

ST★R
School Telemedicine in Arkansas

FAIM
CME for MDs
Fetal
Anomaly
Interdisciplinary
Management

TOUCH
Neonatal Census Rounds
Telemedicine
Outreach
Utilizing
Collaborative
Healthcare

$102M BTOP Grant Award
Broadband
Telecommunications
Opportunities
Program

BTOP Grant Completed
Connecting 410+ Healthcare Sites

Tele-Pal Palliative Care Teleconference

POWER
Conference
Perinatal
Outreach
Workgroup
Education
Research

$450K Grant Award
Traumatic
Brain
Injury
Survivors TM

Neuro TM
White River Medical Center

High-Risk OB & Neonatal Guidelines

2003	2004	2006	2007	2008	2009	2010	★	2011	2012	2013	2014	2016	2017	2018

ANGELS 24-hr Call Center Service

ANGELeye™
University of Arkansas for Medical Services

New Clinical Services:
- Diabetes
- Colposcopy
- Resident-facilitated HROB Clinic
- CDH Live
- ANGELS Prison Telemedicine Program

Telehealth KIDS

AR SAVES
Stroke
Assistance thru
Virtual
Emergency
Support

HIV HEART
Health | Education | Assessment | Research | Telehealth
Health
Education
Assessment
Research
Telehealth

Adult Sickle Cell
Clinic

Guideline Smartphone Application

Tele-Retinal Screening

Hand Trauma TM

ARKANSAS TRAUMA SYSTEM
Burn TM

After Hours Nurse Triage
Baptist Health (30) Clinics

Postpartum mHealth

Prison TM
Orthopedics
Infectious Disease (HIV)

ANGELS
Tele-Nursery

FC Federal Communications Commission
Rural Health Care Pilot Program

BROADBANDUSA
CONNECTING AMERICA'S COMMUNITIES

Great Change

Increase production

Cut production costs

Improve safety

Shifting Risk

| FFS Reimbursement Cuts | Pay-for-Performance | Value-Based Purchasing | Bundled Payments | Shared Savings | Global Payments / Capitation |

| Consumers
Employers
Health Plans
Government Payors | → Risk Shift → | Physicians
Medical Groups
Hospitals
Other Providers |

Source: PricewaterhouseCoopers | DHG

29

UAMS-Where Telemedicine Lives!

To learn more about the UAMS programs and telehealth, please go to the following link, click on Request Information, fill out the form and submit.

Arkansas eLink

Roy Kitchen
UAMS Center for Distance Health
Arkansas e-Link Network Director

Curtis Lowery, MD
Chair, OB/GYN-MFM
Founder & Director, ANGELS & Center for Distance Health
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BroadbandUSA

Thank you for attending.

Tune in for the next Practical Conversations Webinar

Measuring the Digital Divide:

Review of Recent Surveys and Data

January 16, 2019

2:00 pm EST

Registration is required for each webinar:

https://broadbandusa.ntia.doc.gov/event

BroadbandUSA is available to help communities with their broadband access and digital inclusion efforts

For General Information:

202-482-2048

broadbandusa@ntia.doc.gov

https:broadbandusa.ntia.doc.gov/resources

To Request Technical Assistance (TA):

Broadband TA Request Form - https://broadbandusa.ntia.doc.gov/ntia-common-content/how-we-can-help

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BBUSA Resources

- Implementing a Broadband Network Vision: A Toolkit for Local and Tribal Governments

- Community Broadband Roadmap Toolkit

- Guide to Federal Funding of Broadband Projects

- Using Partnerships to Power Smart Cities