

**UAMS**<sup>®</sup>

Institute for Digital  
Health & Innovation

Stroke Program

# 2022 ANNUAL REPORT

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

INSTITUTE FOR DIGITAL  
HEALTH & INNOVATION

STROKE PROGRAM

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# Leadership

Dear Readers,

Over the last 12 months, digital health has continued to grow as a valuable resource for healthcare in Arkansas. The Institute for Digital Health & Innovation's (IDHI) Stroke Program met a significant milestone, more than 94 percent of Arkansans now live within a 30-minute drive of a stroke ready hospital. The increase is a result of adding four new spoke sites and we plan to further expand next year.

Our annual nurse facilitator retreat was held in person for the first time since 2019. Over 100 emergency room nurses gathered for education and collaboration on the latest evidence-based stroke guidelines. More than 150 EMTs and Paramedics completed training virtually via our EMS outreach on the Learn on Demand platform. This was in addition to more than 700 trained in person in FY 2022.

The stroke program also hosted "Strike Out Stroke" night at Dickey Stephens Park for the first time since 2018. This was a great opportunity to provide stroke education to over 3,700 baseball fans in attendance.

I am proud of the strides the IDHI Stroke Program has made in 2022 and thankful to our partner organizations across the state who show such commitment to improving care for those in a critical time of need. I know these accomplishments and others highlighted in this report will continue to improve health outcomes for stroke patients for years to come.

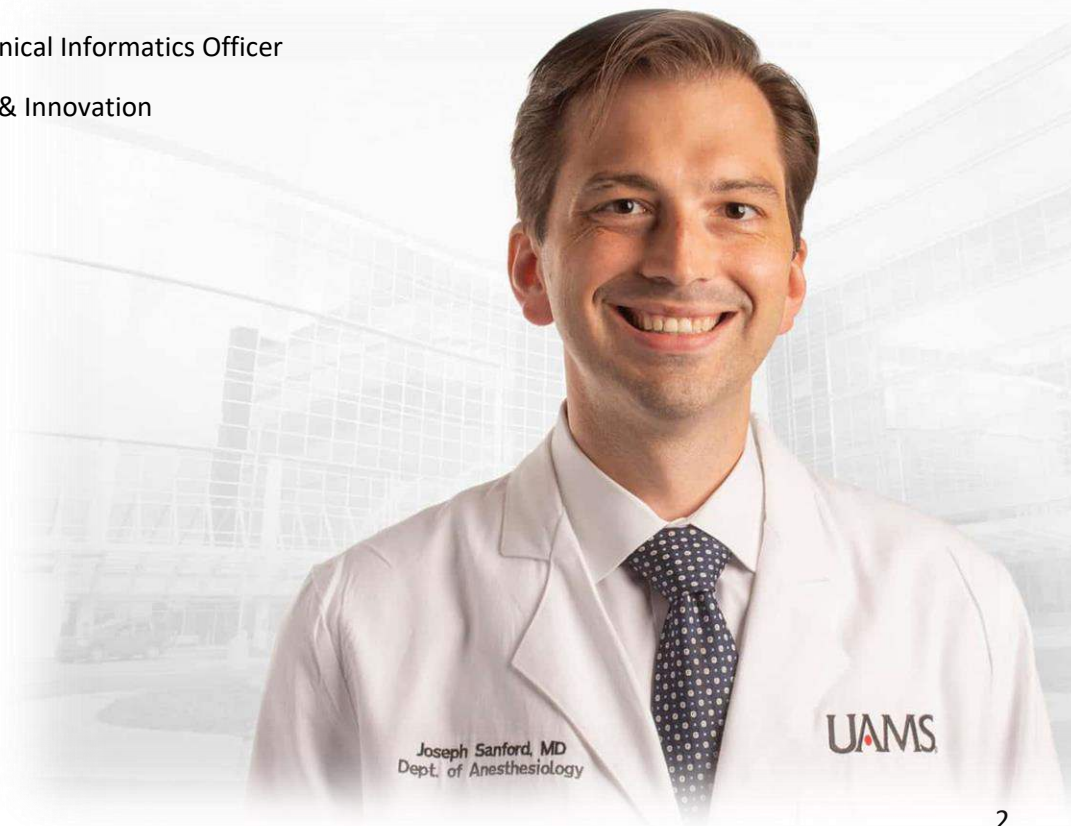
Respectfully,



Joseph A. Sanford Jr. M.D.

Associate Vice Chancellor – Chief Clinical Informatics Officer

Director, Institute for Digital Health & Innovation



# Stroke Survivor Story

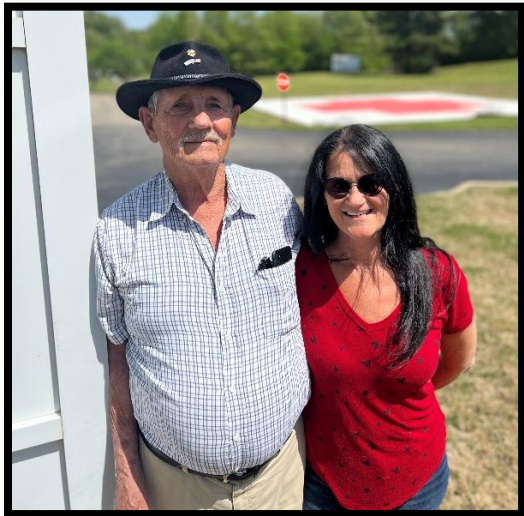
## Piggott Man Remembers “Everything” About His Stroke, Including Caregivers’ Kindness

Freddie Tate, 85, of Piggott, worked around helicopters during his time in the U.S. Air Force, but it wasn’t until March 5, 2021, when he suffered a stroke, that he rode in one for the first time.

“I spent four years in the Air Force and we had all kinds of helicopters, but I’d never been on a helicopter ride before,” Tate said.

That day Tate, a father of four, woke from a nap and knew something was wrong. As a former assistant plant manager of a large factory, he was required to take a course in emergency first aid. Thanks to that course, he learned the signs of stroke: weakness or numbness on one side of the body, difficulty speaking or seeing, movement problems and loss of balance.

“From that [course], I knew when I had the stroke,” Tate said. “I got up, and I put my foot on the floor, and it wouldn’t hold up. Then I felt funny, and I put my hand [on the left side of my face] and I’m all [droopy] on the side of my head. I told my wife, ‘I’m having a stroke, we’ve got to call a doctor.’”



***Stroke Survivor, Freddie Tate stands with his daughter, Lynette Cale outside Piggott Community Hospital***

Just like the brain has two symmetrical lobes, it also has corresponding sets of arteries. The MCAs, or middle cerebral arteries, are by far the largest in the brain. They are also the most common artery involved in acute stroke. Tate’s stroke was in his right MCA.

Daughter Lynette Cale got a call from her mother and immediately drove over. They called the nearby veterans’ hospital and were told to immediately get to any emergency room. At home, they waited on an ambulance to transport Tate to Piggott Community Hospital.

“It’s a phone call you don’t want to get, that’s for sure,” Cale said. “I jumped in my truck and got there in less time than I’ve ever taken to get there. When I got there, [his condition] was more serious than I thought it was. It was pretty scary.”

At the hospital, Tate and his family consulted via live video with the UAMS stroke care team as part of the Institute for Digital Health & Innovation Stroke Program, formerly known as AR SAVES, which partners with 60 hospitals across the state.

“It’s amazing to know the changes, that we have this capability to interact with a neurologist in a bigger facility to get our patient to, versus what we did even 5-10 years ago,” said Tammye Hendrix, RN, EMS supervisor with Piggott Community Hospital. “Our goal is to work on whatever improvement we need to get them out the door to UAMS or another facility as quick as we can. Because we want to save the brain as much as we can.”

Prior to being transported to Little Rock by helicopter, Tate was given the option to receive alteplase, a clot-busting drug. In rare cases, the drug can cause brain bleeds in patients.

Sanjeeva Onteddu, M.D., the stroke program’s medical director, said that 94% of patients who receive alteplase experience no new deficits, and 32% of patients will see improvement. About 6% of patients experience bleeding complications, with 2% experiencing significant bleeding.

“Before they gave it to me they said, now this shot, it can kill you or it can save you — and it’s up to you whether we give it to you,” Tate said. “I said, ‘don’t leave it up to me, leave it up to [my family],’ because I don’t want to be a burden to anybody. And they said ‘give it to him.’”

“I thought that was amazing for him to be able [to be diagnosed] right there, get a diagnosis and be able to get the medication — in time, because we were working on a time limit,” Cale said. “I thought it was awesome. All of the stuff he had to do, and they could see it in real time.”

With the drug beginning to work in his body, Tate was transported to UAMS, where he arrived two and a half hours after having a stroke. UAMS is one of only two comprehensive stroke centers in the state, which allows a level of expertise and care not available at other institutions. There, the stroke team regularly tested and evaluated Tate on his mental and physical readiness before he was discharged.

“Success stories like Mr. Tate’s are a wonderful testament to the high level of care and expertise offered by our stroke team,” said Marzella Backus, MNSc., RN, UAMS director of stroke services. “Arkansans have a higher rate of stroke than many states do. UAMS is dedicated to reducing stroke death and disability for Arkansans through the IDHI telestroke program and by maintaining the highest level of stroke care and certification available.”

Tate repeatedly thanked his caregivers in Piggott and at UAMS for saving his life.

“They didn’t quit,” Tate said. “When I got there, they started in on me, and they didn’t quit until I was gone out the door. Bless your hearts, I love you all. I don’t have the words to tell you how well I was treated down there. They just treated me like a king.”

He singled out one UAMS nurse, Caeley Rigdon, RN, BSN, who noticed that he needed a new hearing aid battery and was able to get him one the next day. She also brought him a charger for his phone, which he’d forgotten to bring in the rush. Tate sent a package of batteries to UAMS for patients who might need them.

“They gave me the best care that you could ever think to have,” Tate said. “Best care I’ve ever had in a hospital was with UAMS.”

The stroke damaged part of Tate’s brain, and he still struggles sometimes, he said. He developed neuropathy, a condition resulting from damaged nerves, which caused pain in his knees and made him fall down. It took some time to regain the ability to walk. He also has occasional difficulty remembering things. His overall recovery, however, has been remarkable.

Tate’s advice to anyone experiencing or witnessing a stroke is to be fast.

“Don’t wait a second,” Tate said. “Get yourself to a hospital immediately.”

Tate’s caregivers are just as happy to see him doing well.

“I feel that we are truly blessed because we are a small hospital, a rural hospital, and we’re so many miles away from the bigger facilities,” Hendrix said. “So all of this has just been a blessing to improve the care of these people, and he’s proof.”



***Tate returns to Piggott Community Hospital to thank members of his care team.***

# Stroke Survivor Story

## El Dorado Man Survives Stroke: “I Didn’t Know That I Was Part of a Miracle”

Bob Willett, 71, of El Dorado, enjoys cooking for a crowd. When he hosted 28 people at his home last Christmas, he didn’t expect to be the center of attention. That quickly changed when he suffered a stroke while preparing dinner.

“I had a skillet dish I was working on, shrimp and okra, and I dropped a spoon,” Willett said. “I didn’t think anything about it. I thought, well, pick it up. So I did, and in a minute I dropped it again. I still didn’t think anything about it, but on the third time that I dropped the spoon, the other people in the kitchen started noticing my speech was a little unusual, and that’s when they started yelling for help.”



***Bob Willett (right) pictured with Justin Tolin, Paramedic. Willett’s family was gathered for the holiday festivities and recognized his symptoms as a stroke. They called 911 and met the ambulance on their way to Medical Center of South Arkansas.***

Among the guests and family present were a nurse and an assistant fire chief. They both examined Willett and realized he was having a stroke. After loading him in a truck, they drove to Medical Center of South Arkansas and met the ambulance halfway.

At Medical Center of South Arkansas, hospital staff consulted via live video with Kelly-Ann Patrice, M.D., a vascular neurologist with the UAMS stroke care team. The connection was made possible through the Institute for Digital Health & Innovation Stroke Program, formerly known as AR SAVES, which partners with 60 hospitals across the state.

“In the emergency room, I can remember the screen with the lady’s picture on it,” Willett said. “I didn’t realize what was happening. I could say words but I couldn’t make a sentence or anything.”

Willett had suffered an acute ischemic stroke, deep inside the left subcortical region of his brain, affecting his movement and coordination on the right side of his body. The brain is divided into two hemispheres, or halves, and each one controls the opposite side of the body.

Willett said he had confidence in his caregivers.

“I just felt like I was in good hands everywhere I went,” Willett said. “You wonder how it all played out, and how it all happened so wonderfully. I didn’t know that I was part of a miracle that was taking place. I wasn’t worried about what was going to happen to me; I wasn’t concerned about that.”

Willett was given alteplase, a clot-busting drug, less than an hour after the stroke. Soon after he was airlifted via helicopter to Baptist Health Medical Center in Little Rock. In a relatively short amount of time, he had a remarkable turnaround.

“By the time I got to Baptist, a lot of my normal routine was back and I could talk a little bit,” Willett said. “Everybody that came by just kept talking about, ‘It’s a miracle what’s happened,’ and I was just overjoyed that I was a part of it.”

Now more than half a year from his stroke, Willett continues living life and cooking for others — a proud tradition he inherited from his mother. He said he’s quicker to notice when he feels something is wrong with his body.

“I worry about things a little bit more,” Willett said. “Every unusual feeling you have in your body you worry about and think — ‘is this going to be another one?’ You kind of feel like well, do I need to start making some preparations for the big one? But when people ask me how I feel, I always tell them I feel fine. And I do; I feel great.”

The signs of stroke are usually noticeable: weakness or numbness on one side of the body, difficulty speaking or seeing, movement problems and loss of balance. Above all, Willett said, if someone is having a stroke, they need to act quickly.

“Get to the hospital as quick as you can,” Willett said. “Because if I hadn’t had a house full of company, if I’d been there by myself, I would have probably said oh, I need to go lay down and hopefully this will go away. I wouldn’t have known the timing issue of getting to the hospital. And I was just lucky to have people there that knew.”

“One of the goals of the IDHI Stroke Program is to educate all people on being able to identify the signs and symptoms of a stroke through the acronym BE FAST.” said Olivia Wilson, program manager of community outreach for the IDHI Stroke Program. “We are thankful that Mr. Willett’s family was able to identify the symptoms of his stroke and got him to his local emergency room immediately.”

Willett said he’s never been one to freely share his personal medical history with others, but for his stroke, he makes an exception.

“I feel like, [with] the hospital and God’s help and everything, we made it,” he said.



***Thanks to his family recognizing his symptoms as a potential stroke, Bob Willet was able to return to Medical Center of South Arkansas in El Dorado to share his story.***

# Nurse Facilitator Retreat 2022



***Olivia Wilson, Program Manager of Community Outreach, addresses the crowd of nurses on day two of retreat.***

## **Reunited and it felt so good!**

Joy filled the air as nurse facilitators from IDHI Stroke Program sites gathered in Little Rock for the first in-person Nurse Facilitator Retreat since 2019. The IDHI Stroke Program team planned and worked hard behind the scenes for months to host a wonderful retreat with team-building exercises, discussions and breakout sessions on a variety of topics. The new telemedicine carts were on display and shown during breakouts generating excitement among the hospitals!

Nurses and stroke program staff participated in roundtable discussions about the importance of outreach opportunities, mocks and other deliverables, evidence-based training and so much more. Several great ideas were offered by the facilitators, and there are projects currently underway to bring some of those ideas to life! We are so thankful for everyone that attended and participated in the retreat and look forward to doing it again in 2023!



***A sea of yellow made up of IDHI Stroke Program Staff, Nurse Facilitators, and Back Up Nurse Facilitators.***



# Strike Out Stroke 2022

## Taking stroke out to the ballgame!

The 2022 Strike Out Stroke event was a home run for community outreach! More than 3,760 baseball fans from communities near and far showed up to watch the Arkansas Travelers take on the Northwest Arkansas Naturals, but they left with an increased knowledge of stroke signs and symptoms and the importance of seeking timely medical treatment for stroke. As baseball fans entered the gates of Dickey-Stephens Park, they were greeted with the tempting smells of popcorn, funnel cakes and the colorful sight of the BE FAST t-shirts, which were handed out to the first 1,000 guests to the game that night. Several IDHI Stroke Program survivors were led to the field during the pre-game ceremony where their stroke story was shared with the crowd. Stroke survivor, Ray Robinson III, threw the ceremonial first pitch of the game. Several volunteers ranging from hospital employees to family members young and old threw hundreds of stress balls to the excited crowds during the 7<sup>th</sup> inning stretch. Overall, you could say it was a “big hit!”



*The first 1,000 fans in the gate received a crooked smile shirt with the BE FAST sign and symptoms on the back!*



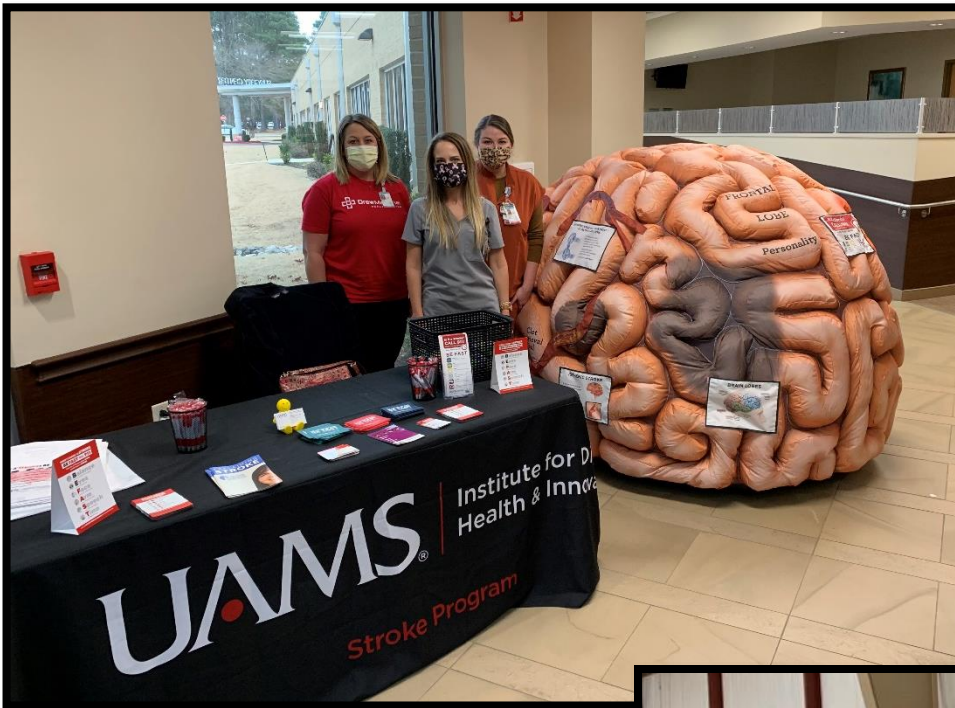
*Stroke Survivors were recognized in a pre-game ceremony. Ray Robinson III (first from right) threw the ceremonial first pitch of the game.*



*Tim Tanner, Nurse Facilitator from Saint Mary's Regional Hospital – Russellville, demonstrates stroke therapy and intervention through the Save the Brain game he created!*

# Community Outreach – Mini Brains

As communities and partner hospitals have returned to in-person outreach, our new Medical Inflatables exhibit, the Mini Brain, has made its way into several cities across the state. The two mini brains became a part of community outreach, and much like their Mega Brain counterpart, they are great for drawing in crowds at events. The mini brains stand about five feet tall when inflated, so everyone – young and old – can “tour” the brain while reading signs that discuss stroke, brain lobes and functions, concussion, injury prevention and more. They are quick to set up and ready to travel! The feedback on the mini brains has been nothing but positive, and their addition to our program has helped further stroke outreach and awareness.



*The Mini Brain made its debut at Drew Memorial Hospital in Monticello. Holly Rosegrant, Audrey Echlin and Heather Wilson set up the brain in the hospital lobby and educated all patients on the signs and symptoms of stroke!*

*Stroke Program Nurse Educators Cynthia West, Jennifer McCurry, and Robin Banks displayed the brain at the Arkansas School Nurse Conference.*

*Several School Nurses inquired about the brain traveling to their respective schools as a result of this outreach!*



# Community Outreach

To keep outreach alive during the COVID-19 pandemic, the IDHI Stroke Program Health Educators began issuing monthly challenges to partnering sites in 2020. These initiatives led our program to reach more Arkansans than ever. Through these innovative challenges and the use of social media, the IDHI Stroke Program and partnering hospitals reached more than 350,000 individuals in fiscal year 2022. Creating monthly hashtags and outreach focuses helped target different groups each month, promoting diversity and inclusion in outreach efforts while challenging everyone to find new ways to reach the communities they serve. These challenges coupled with the creative outreach efforts led by stroke program sites to aid in the programs mission of teaching all Arkansans to BE FAST and seek care immediately for stroke-like symptoms.



*CrossRidge Community Hospital  
Wynne, AR*

## Social Media as a Resource

Ashley County Medical Center in Crossett, AR has used social media as a resource to share stroke awareness within their community. The 3 social media posts below reached over 5,000 people!



# Community Outreach



## Men's Health Month

June is Men's Health Month. We created an online Men's Stroke Risk quiz and gave away crooked smile shirts to those who participated!

## World Stroke Day

World Stroke Day is October 29th! Sites received red stroke awareness ribbons to commemorate the day!



## Spooky Pumpkins!

Each October, sites are challenged to a stroke pumpkin contest! Fulton County Hospital got into the spooky spirit with these creative stroke face pumpkins!

# Community Outreach



Dardanelle Regional Medical Center at the community Christmas Tree lighting ceremony

## #JingleforStroke

Each holiday season, sites are tasked to mix stroke education and holiday spirit by creating a BE FAST Tree!



Bradley County Medical Center



Izard County Medical Center



CHI St. Vincent Hot Springs visited Smith Drug



Chicot Memorial Medical center at Hunter's Pharmacy in Lake Village

## Pharmacy Tool Kits

January 12 is National Pharmacist Day. Pharmacists play a vital role in the health of communities. Sites equipped local pharmacies with BE FAST swag to give away with every prescription picked up!

## Thinking Outside the Icebox

Sites were challenged to head to their local appliance stores to leave BE FAST magnets on refrigerators to help us get a magnet on every fridge in the state!



McGehee, AR



Russellville, AR



# Community Outreach

## Back to the Community

In-person outreach was able to re-commence in 2022. Whether a skills fair, career fair or a local festival, we are so glad to be back out in the communities our sites serve.



Drew Memorial  
Hospital



Izard County  
Medical Center



Bradley County  
Medical Center



Northwest Health Medical  
Center Bentonville



Eureka Springs  
Hospital



Magnolia Regional  
Medical Center



North Arkansas Regional  
Medical Center



Saline Memorial  
Hospital



McGehee Hospital



Saint Mary's Regional  
Medical Center



Medical Center of  
South Arkansas



Baptist Health Medical  
Center Hot Spring County

# Community Outreach



BE FAST Activity books were a hit with this Girl Scouts Troop in Izard County!



Wadley Regional Medical Center in Hope sporting their colorful crooked smile t-shirts!



Student in Batesville learn about stroke through a reading of *Grandpa's Crooked Smile*



Students making their way through The Mega Brain!



MASH Camp students at Chicot Memorial Medical Center learn about the use of telemedicine through the Stroke Program



The Mega Brain at an Earth Day event in Eureka Springs

# 2021 Stroke Program Conference & Awards

It was a tough choice, but the 2021 annual IDHI Stroke Program Conference was canceled out of an abundance of caution due to a new surge of COVID-19 cases in Arkansas. The t-shirts and swag that had been prepared for the in-person meeting were sent to sites in September to be worn at our monthly, virtual all-sites meeting in October. Although the in-person gathering was canceled, we felt it was important to continue with award presentations to recognize the tremendous efforts of sites across the state, especially with the challenges presented by the pandemic.

**Physician Champion Award:** This award is presented to physician(s) with contributions through the use of modern technology and best practices of stroke care in Arkansas.

**EMS Certificate of Excellence Award:** Presented to EMS agencies that have attended stroke training offered by the IDHI Stroke Program, appointed liaisons to work with the nurse facilitator at the stroke site, participate in community outreach and process improvement.

**Certificate of Appreciation:** Awarded to a group or individual that went beyond their normal job duties to enhance and make the stroke program more effective.

**Honorable Mention Award:** Presented to sites that met all contract deliverables and have made improvements with many of their internal processes, training and outreach.

**Site Excellence Award:** Awarded to sites that met and exceeded all contract deliverables, performed multiple mocks each month, excelled in community outreach, and went above and beyond the expectations of a site. This is the highest honor awarded to an IDHI Stroke Program hospital.

**Stroke Hero:** This award recognizes a non-clinical individual who goes above the call of duty to make lasting contributions to stroke care in Arkansas.

**Stroke Champion:** This award recognizes an individual from the clinical setting who exceeds the call of duty to make lasting contributions to Stroke care in Arkansas. Stroke Champions are recognized for their clinical performance, participation, leadership, and collaboration to improve outcomes for stroke patients in their communities.

**Door to Needle Award:** This award is presented to the hospital with the fastest door-to-needle time.

**Directors Choice Award:** This award is presented to an individual for making lasting contributions to the IDHI Stroke Program. Chosen by the IDHI Stroke Program director.

**Community Outreach Award:** This award is presented to the Stroke Spoke Site with the most innovative, creative and consistent community outreach events. Total number of event attendees educated will be considered. This event recognizes the development and execution of events that significantly enhanced the stroke awareness for the community.

**Outstanding Facilitator Award:** This Award is presented to the Nurse Facilitator that educated Arkansans on Stroke Signs & Symptoms while exceeding expectations 1 Outreach Event at a Time.



# 2021 Stroke Program Conference & Awards

## Site Excellence



Ashley County Medical Center

## Door to Needle Award



Saint Mary's Regional Medical Center  
Cortney Watson, Karmen Goodner

22 minutes

## Honorable Mention



North Arkansas Regional Medical Center

## Physician Champion



Bryan Shearer, M.D.  
North Arkansas Regional Medical Center

## EMS Certificate of Appreciation



North Arkansas Regional  
Medical Center EMS

# 2021 Stroke Program Conference & Awards

## Certificate of Appreciation



**Whitney Beard**  
Izard County Medical Center

*not pictured: Jennifer Smith*  
*UAMS IDHI Learn on Demand*

## Director's Choice



**Marzella Backus, MNSc, RN, CEN**  
Director of Stroke Services  
University of Arkansas  
for Medical Sciences

## Outstanding Nurse Facilitator



**Kimberly Slaughter**  
Dallas County  
Medical Center

# 2021 Stroke Program Conference & Awards

## Stroke Champion Awards



**Karmen Goodner**  
Saint Mary's Regional  
Medical Center



**Charity Schaufler**  
White River Health System



**Bridget Jantti**  
Arkansas Methodist  
Medical Center

## Stroke Hero Awards



**Robby Scucchi**  
North Arkansas Regional  
Medical Center



**Jessica Smith**  
Mena Regional  
Medical Center



**Brittany Savage**  
Saint Mary's Regional  
Medical Center

# 2021 Stroke Program Conference & Awards

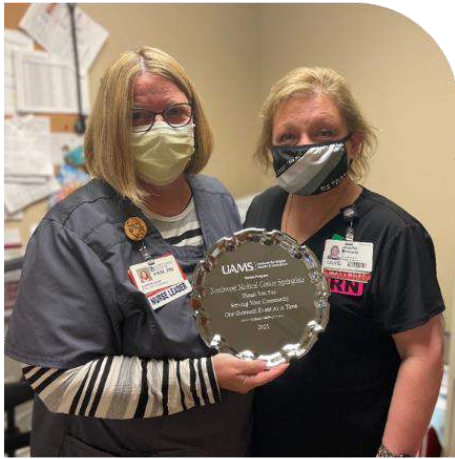
## Community Outreach Awards



Ashley County Medical Center



North Arkansas Regional Medical Center



Northwest Medical Center Springdale



Saline Memorial Hospital

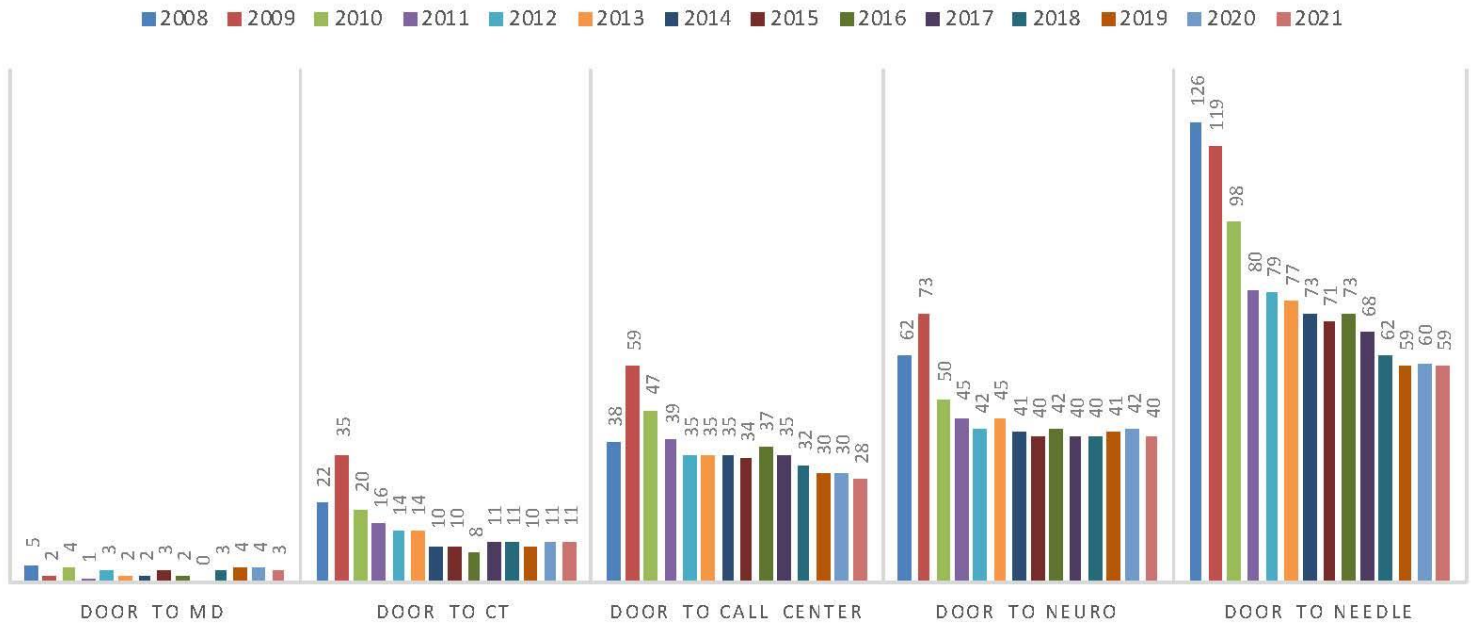


Drew Memorial Hospital



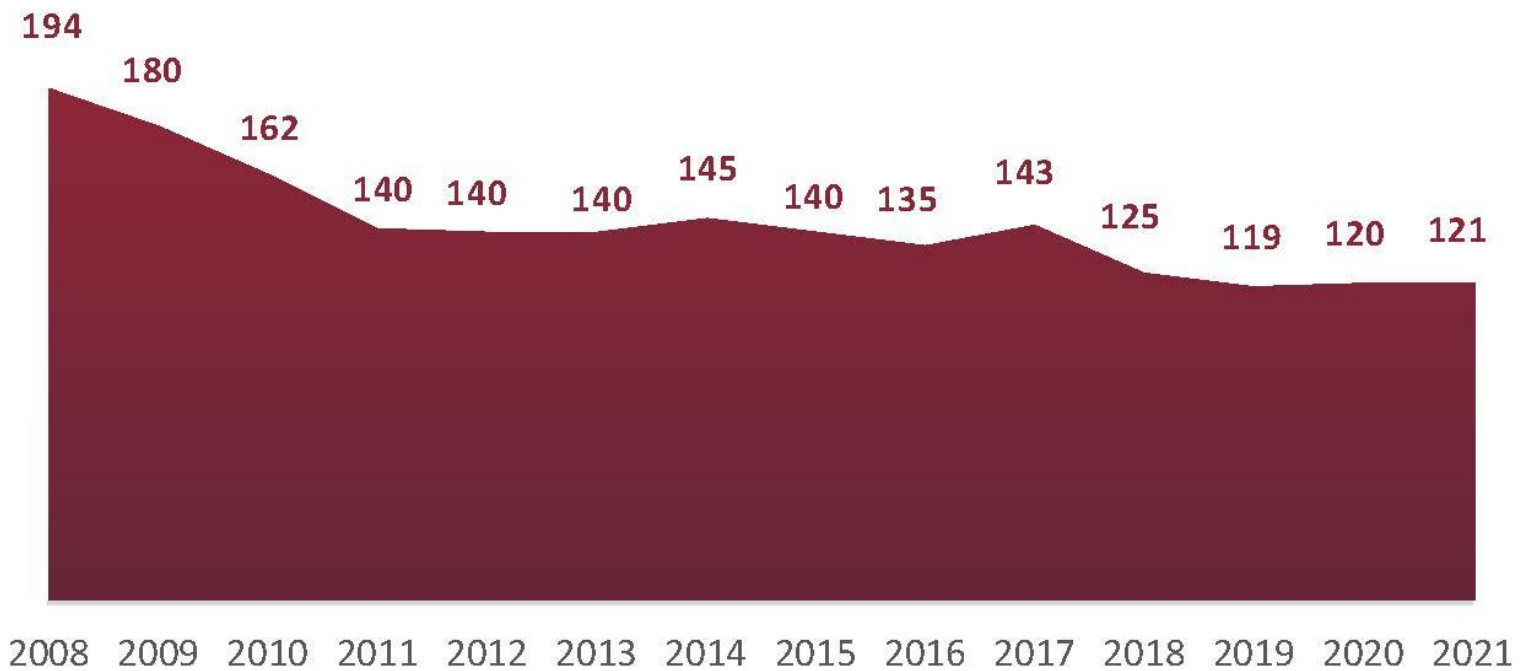
Unity Health Newport

## Median Time Targets CY2021



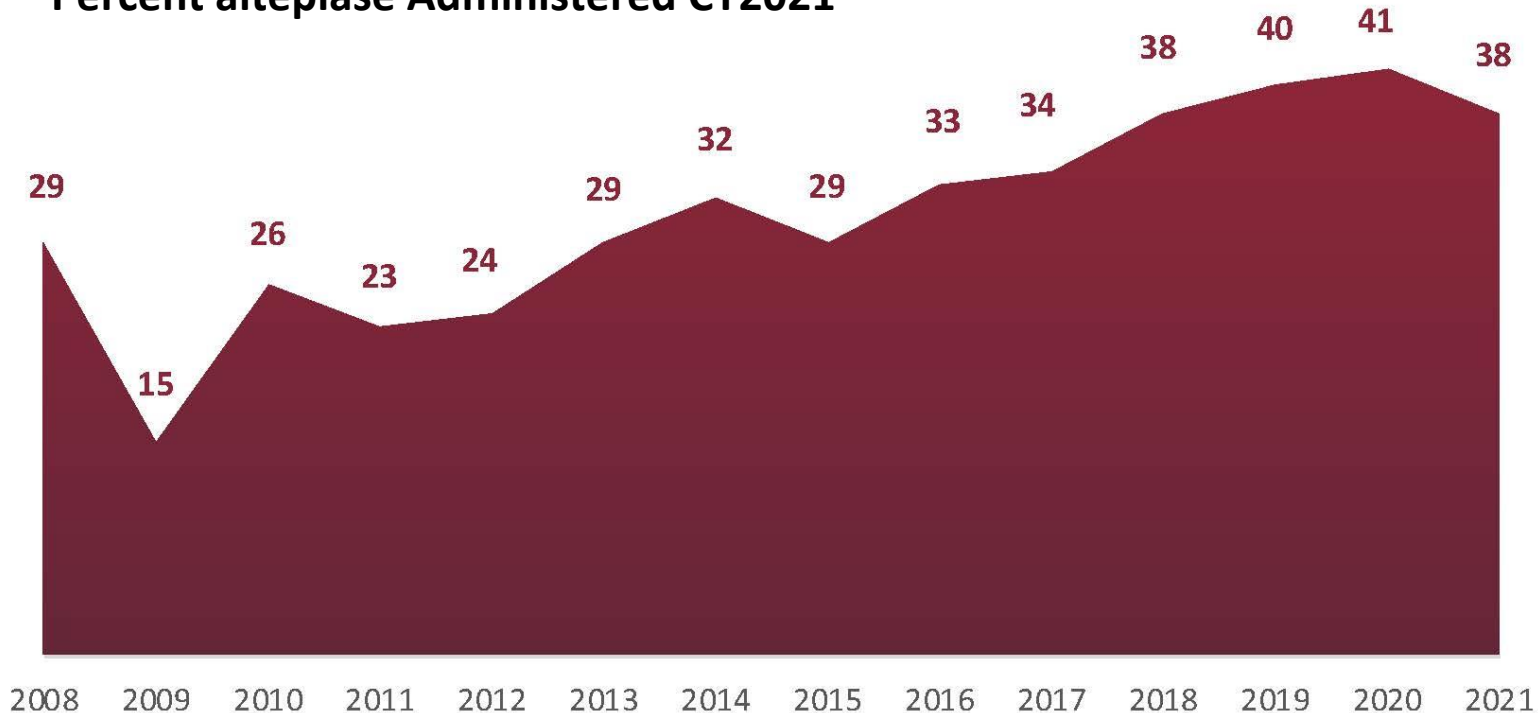
**Door to Needle median times have returned to pre-pandemic medians.**

## Median Onset of Symptoms to alteplase CY2021



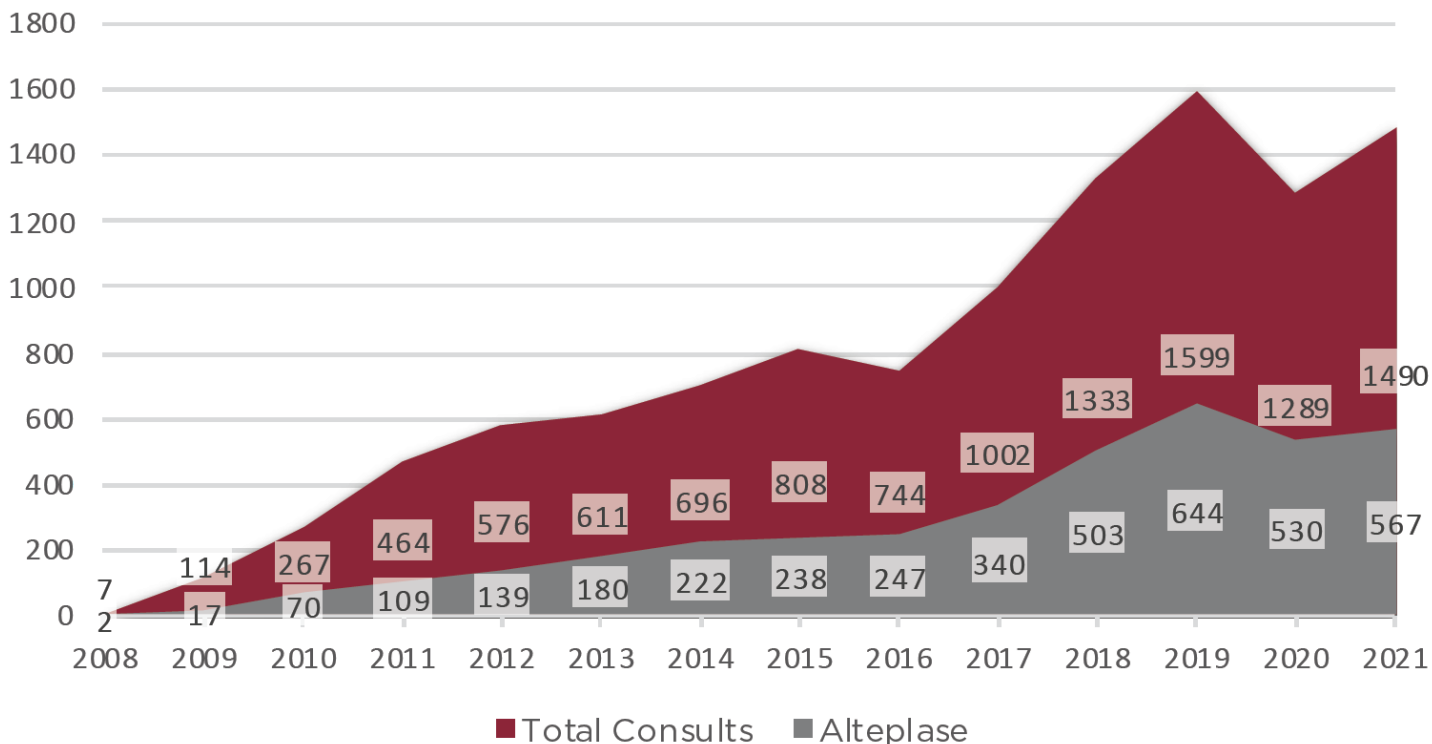
# Program Data

## Percent alteplase Administered CY2021



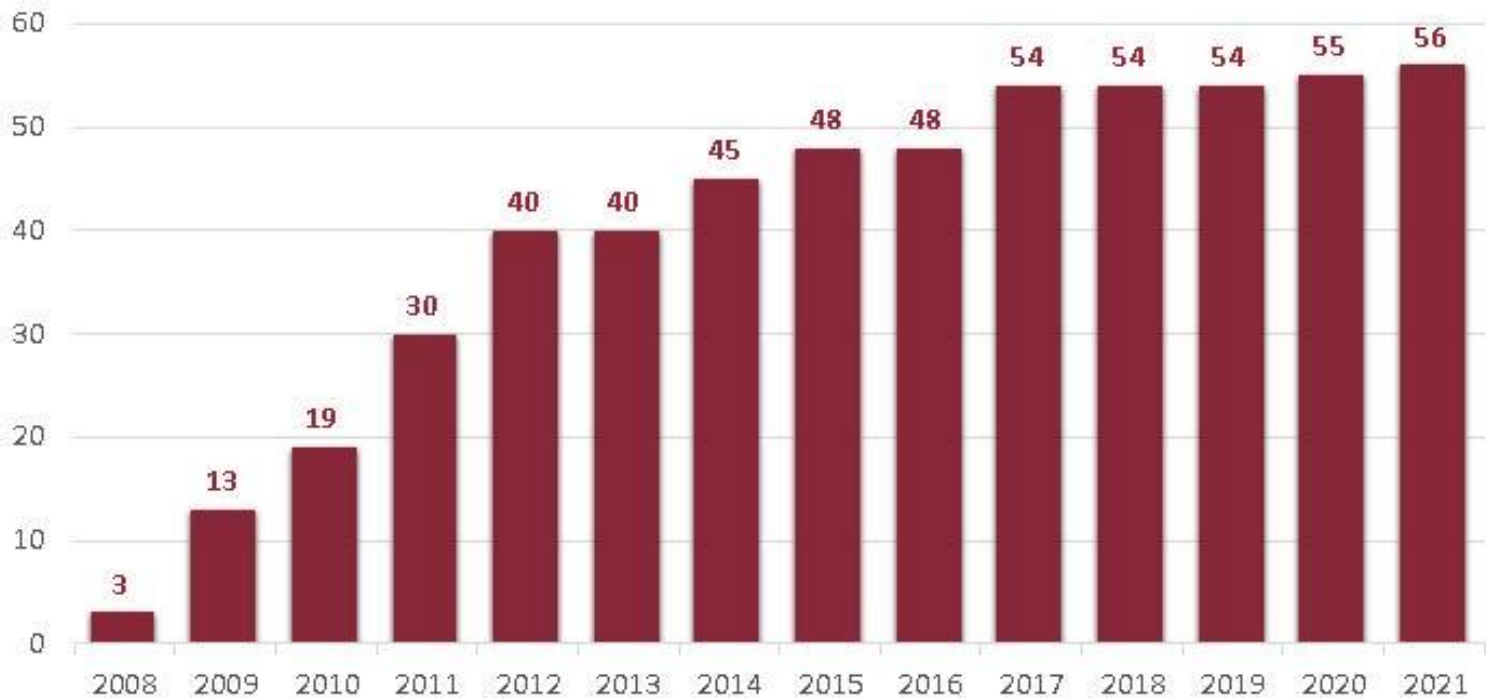
The UAMS IDHI Stroke Program had a 38% treatment rate.

## Total Consults / Total Alteplase CY2021



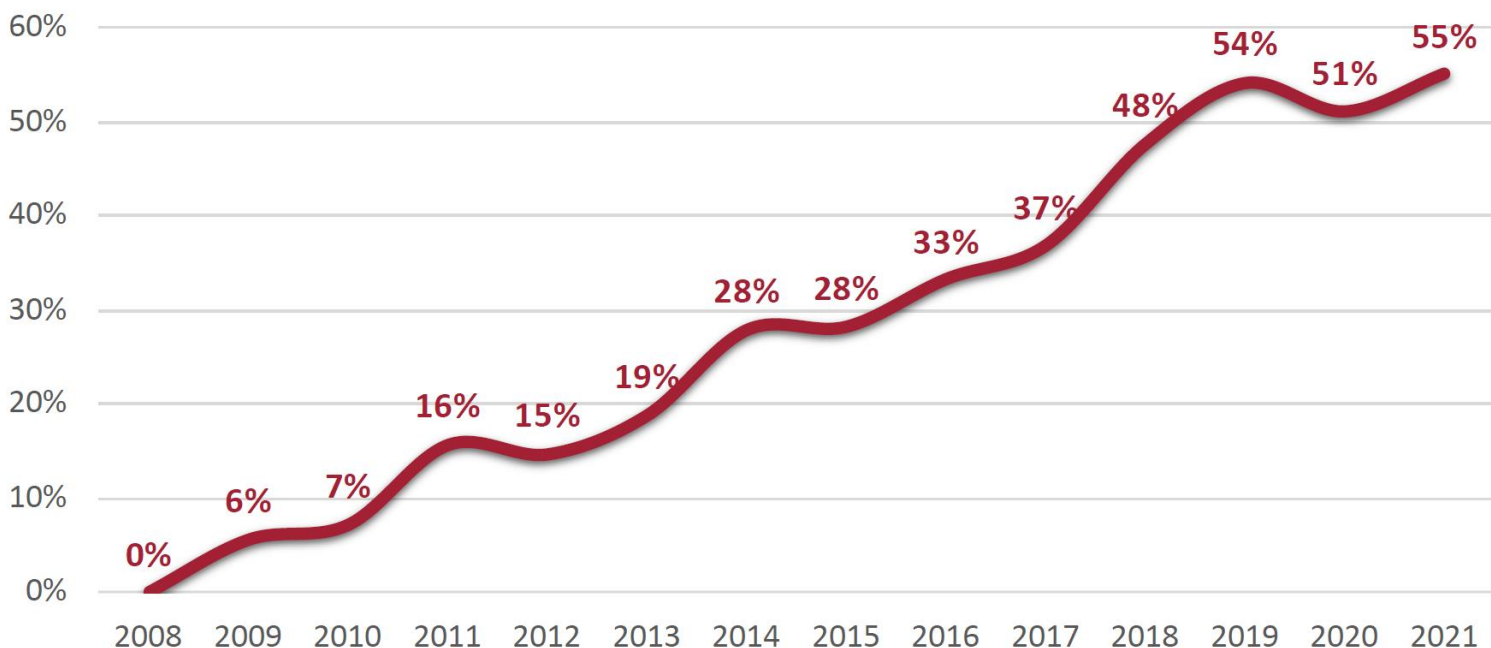
The UAMS IDHI Stroke Program had 1,490 consults and treated 567 patients.

## UAMS IDHI Stroke Program Sites Around Arkansas CY2021



The UAMS IDHI Stroke Program contributed to \$58 million in cost savings for the care of stroke patients in CY 2021

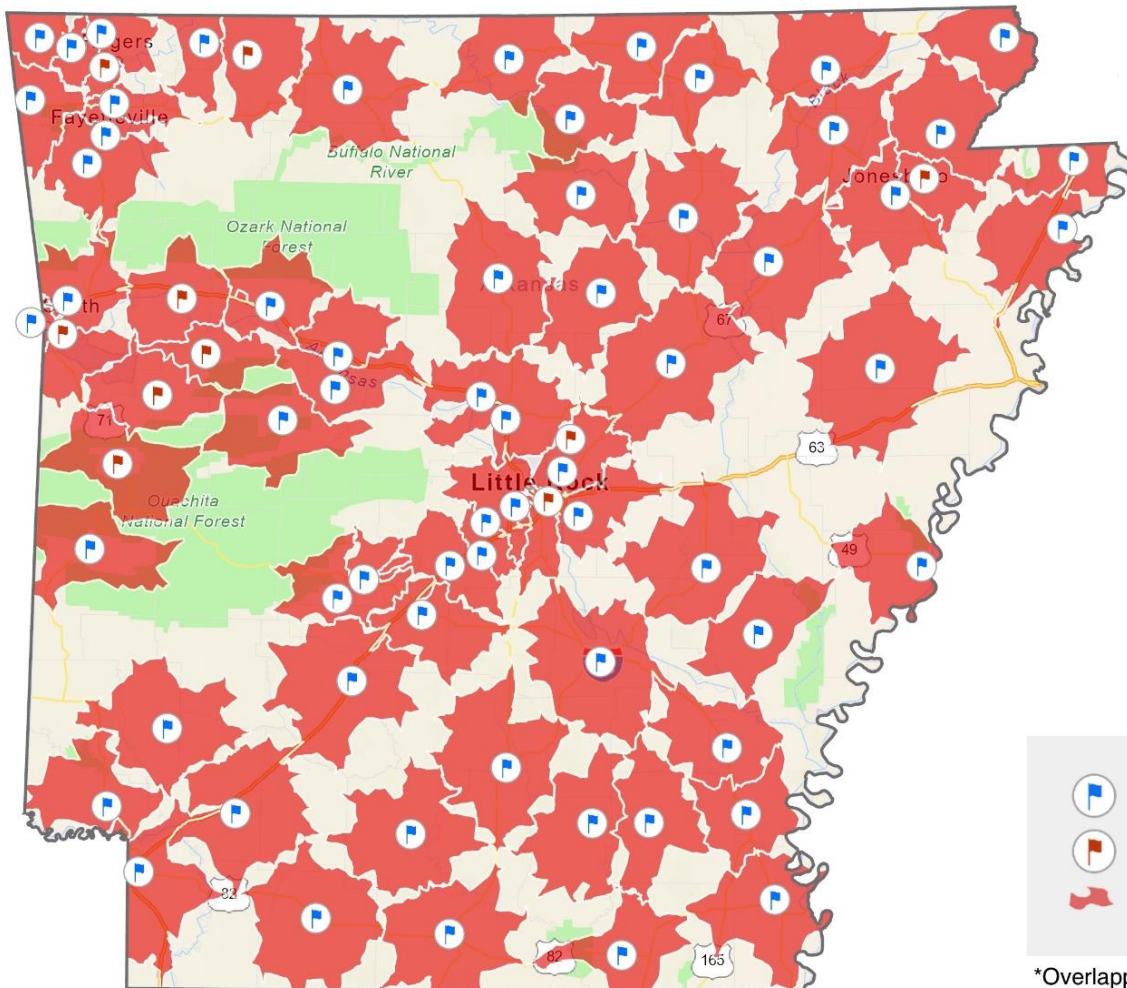
## Golden Hour Target Less Than 60 Minutes CY2021



EMS alerting the receiving hospital with a code stroke significantly decreased Door to CT times by 11 Minutes

# Drive Time Map and Cost Savings

## Drive Time



"Over **94%** of all Arkansans are within a 30 minute drive to a stroke ready hospital.

**99.98%** are within a 60 minute drive."

-  IDHI Stroke Site
-  Other Stroke Site
-  30 Minute Drive Time

\*Overlapping site locations adjusted to improve visibility



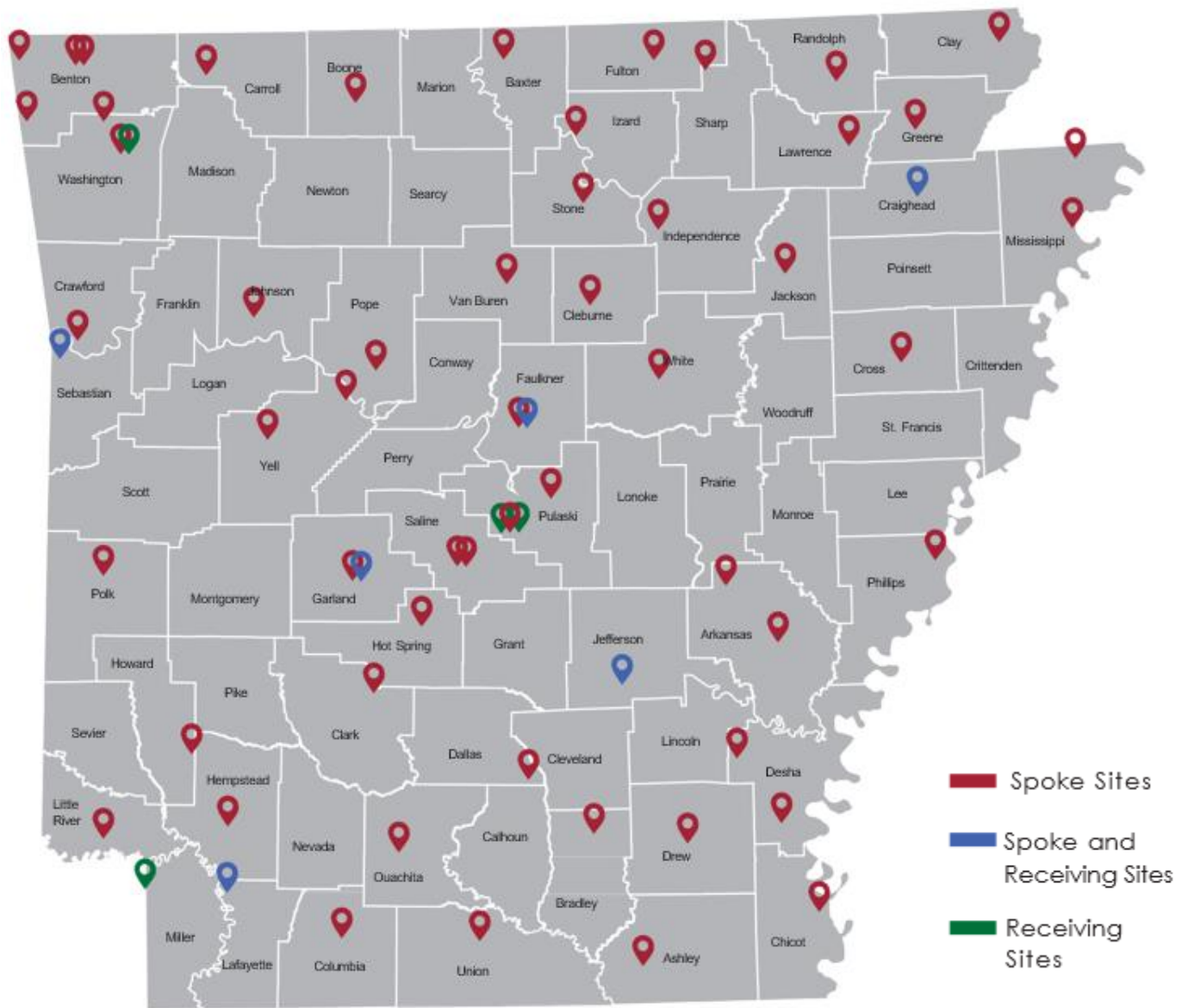
# Program Totals FY2022

Facility / City	Consults	Alteplase Administration	Consults Only	Quality Review	Community Events	Community Attendees
Arkansas Heart Hospital / Little Rock	3	1	2	6	0	0
Arkansas Heart Hospital Encore / Bryant	3	1	2	7	0	0
Arkansas Methodist Medical Center / Paragould	46	17	29	15	35	1519
Ashley County Medical Center / Crossett	19	12	7	39	71	26846
Baptist Health Medical Center / Arkadelphia	20	11	9	14	24	1106
Baptist Health Medical Center / Conway	33	10	23	14	32	7461
Baptist Health / Fort Smith	45	14	31	29	31	19317
Baptist Health / Heber Springs	19	8	11	14	29	14149
Baptist Health Medical Center / Hot Spring County	14	8	6	19	30	2275
Baptist Health Medical Center / North Little Rock	41	11	30	14	34	3873
Baptist Health Medical Center / Stuttgart	12	6	6	13	24	1241
Baptist Health Medical Center / Van Buren	2	1	1	13	5	1328
Baxter Regional Medical Center / Mountain Home	84	46	38	20	31	5533
Bradley County Medical Center / Warren	15	6	9	21	27	4187
CHI St. Vincent Medical Center / Hot Springs	121	46	75	26	39	9585
Chicot Memorial Medical Center / Lake Village	7	5	2	15	36	3035
Conway Regional Health System / Conway	84	37	47	21	29	2797
CrossRidge Community Hospital / Wynne	16	6	10	12	24	2202
Dallas County Medical Center / Fordyce	16	4	12	12	65	6983
Dardanelle Regional Hospital / Dardanelle	10	5	5	11	24	696
Delta Memorial Hospital / Dumas	3	1	2	23	25	2290
DeWitt Hospital / DeWitt	8	2	6	15	46	4553
Drew Memorial Hospital / Dumas	15	5	10	19	75	40751
Eureka Springs Hospital / Eureka Springs	18	7	11	12	52	13440
Five Rivers Medical Center / Pochontas	25	9	16	16	29	1856
Fulton County Hospital / Salem	11	1	10	24	32	2556
Great River Medical Center / Blytheville	30	8	22	31	33	2685
Helena Regional Medical Center / Helena	12	2	10	13	25	1123
Howard Memorial Hospital / Nashville	5	2	3	26	31	2042
Izard County Medical Center / Calico Rock	8	3	5	31	49	1981
Jefferson Regional Medical Center / Pine Bluff	50	25	25	12	31	1458
John Ed. Chambers Memorial Hospital / Danville	9	3	6	27	38	9095

# Program Totals FY2022

Facility / City	Consults	Alteplase Administration	Consults Only	Quality Review	Community Events	Community Attendees
Johnson Regional Medical Center / Clarksville	18	9	9	11	27	1463
Lawrence Memorial Hospital / Walnut Ridge	12	2	10	12	43	7698
Little River Memorial Hospital / Ashdown	8	4	4	16	30	1567
Magnolia Regional Medical Center / Magnolia	14	3	11	15	29	2546
McGehee Hospital / McGehee	10	4	6	33	51	8659
Medical Center of South Arkansas / El Dorado	37	22	15	13	60	4622
Mena Regional Health System / Mena	29	10	19	17	27	5903
National Park Medical Center / Hot Springs	49	17	32	12	52	7994
North Arkansas Regional Medical Center / Harrison	67	19	48	49	42	5047
Northwest Health Emergency Department / Fayetteville	11	0	11	23	26	9390
Northwest Medical Center / Bentonville	2	0	2	15	40	4316
Northwest Medical Center FREE STANDING ER/UC / Bentonville	0	0	0	0	0	0
Northwest Medical Center / Springdale	2	1	1	21	51	6719
Ouachita County Medical Center / Camden	14	8	6	20	41	3652
Ozarks Community Hospital / Gravette	3	0	3	10	30	6228
Ozark Health Medical Center / Clinton	6	3	3	20	27	2806
Piggott Community Hospital / Piggott	3	0	3	22	26	967
Saint Mary's Regional Medical Center / Russellville	83	27	56	20	72	15786
Saline Memorial Hospital / Benton	40	19	21	14	36	28743
Siloam Springs Regional Hospital / Siloam Springs	24	8	16	12	29	12111
South Mississippi County Regional Medical Center / Osceola	8	1	7	33	33	1815
St Bernards Regional Medical Center / Jonesboro	158	38	120	25	47	4755
Stone County Medical Center / Mountain View	20	8	12	14	24	1335
Unity Health / Newport	26	9	17	15	27	1721
Unity Health White County Medical Center / Searcy	67	22	45	12	28	5357
Wadley Regional Medical Center / Hope	7	2	5	22	31	1173
White River Health System / Batesville	51	24	27	22	29	2796
White River Health System / Cherokee Village	13	4	9	21	31	2577
<b>Total 2022</b>	<b>1586</b>	<b>587</b>	<b>999</b>	<b>1103</b>	<b>2045</b>	<b>355709</b>

# Participating Site Map



SPOKE AND RECEIVING SITES		
NAME	CITY	COUNTY
Conway Regional Medical Center	Conway	Faulkner
Baptist Health	Fort Smith	Sebastian
CHI St. Vincent Medical Center	Hot Springs	Garland
St. Bernards Regional Medical Center	Jonesboro	Craighead
Jefferson Regional Medical Center	Pine Bluff	Jefferson

RECEIVING SITES		
NAME	CITY	COUNTY
Washington Regional Medical Center*	Fayetteville	Washington
Baptist Health Medical Center	Little Rock	Pulaski
UAMS Medical Center*	Little Rock	Pulaski
Wadley Regional Medical Center	Texarkana	Bowie, Texas

\*denotes Comprehensive Stroke Center designation

**SPOKE SITES**

<b>NAME</b>	<b>CITY</b>	<b>COUNTY</b>
Baptist Health Medical Center	Arkadelphia	Clark
Little River Memorial Hospital	Ashdown	Little River
White River Health System	Batesville	Independence
Arkansas Heart Hospital Encore	Benton	Saline
Saline Memorial Hospital	Benton	Saline
Northwest Health Emergency & Urgent Care	Bentonville	Benton
Northwest Medical Center	Bentonville	Benton
Great River Medical Center	Blytheville	Mississippi
Izard County Medical Center	Calico Rock	Izard
Ouachita County Medical Center	Camden	Ouachita
White River Health System Medical Complex	Cherokee Village	Sharp
Johnson Regional Medical Center	Clarksville	Johnson
Ozark Health Medical Center	Clinton	Van Buren
Baptist Health Medical Center	Conway	Faulkner
Ashley County Medical Center	Crossett	Ashley
John Ed Chambers Memorial Hospital	Danville	Yell
Dardanelle Regional Hospital	Dardanelle	Yell
Dewitt Hospital and Nursing Home	DeWitt	Arkansas
Delta Memorial Hospital	Dumas	Desha
Medical Center of South Arkansas	El Dorado	Union
Eureka Springs Hospital	Eureka Springs	Carroll
Northwest Health Emergency Department	Fayetteville	Washington
Dallas County Medical Center	Fordyce	Dallas
Ozarks Community Hospital	Gravette	Benton
North Arkansas Regional Medical Center	Harrison	Boone
Baptist Health Medical Center	Heber Springs	Cleburne
Helena Regional Medical Center	Helena	Phillips
Wadley Regional Medical Center at Hope	Hope	Hempstead
National Park Medical Center	Hot Springs	Garland
Chicot Memorial Medical Center	Lake Village	Chicot
Arkansas Heart Hospital	Little Rock	Pulaski
Magnolia Regional Medical Center	Magnolia	Columbia
Baptist Health Medical Center	Malvern	Hot Spring
McGehee Hospital	McGehee	Desha
Mena Regional Health System	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 Newport	Newport	Jackson
Baptist Health Medical Center	North Little Rock	Pulaski
South Mississippi County Regional Medical Center	Osceola	Mississippi
Arkansas Methodist Medical Center	Paragould	Greene
Piggott Community Hospital	Piggott	Clay
St. Bernard's Five Rivers Medical Center	Pocahontas	Randolph
Saint Mary's Regional Medical Center	Russellville	Pope
Fulton County Hospital	Salem	Fulton
Unity Health- White County Medical Center	Searcy	White
Siloam Springs Regional Hospital	Siloam Springs	Benton
Northwest Medical Center	Springdale	Washington
Baptist Health Medical Center	Stuttgart	Arkansas
Baptist Health	Van Buren	Crawford
Lawrence Memorial Hospital	Walnut Ridge	Lawrence
Bradley County Medical Center	Warren	Bradley
CrossRidge Community Hospital	Wynne	Cross

# Program Staff



**Renee Joiner**  
Clinical Program Director



**Lori Berry**  
Director of Operations



**Baylee Field**  
Project Manager



**Denetra Brown**  
Administrative Coordinator



**Olivia Wilson**  
Program Manager  
Community Outreach



**Erin Wells**  
Program Manager  
Data Analytics



**Brittany Savage**  
Health Educator



**Calvin Duncan**  
Quality Improvement  
Coordinator



**Robin Banks**  
Clinical Nurse Educator  
North Central Region



**Trish Maynes**  
Clinical Nurse Educator  
Southwest Region



**Jennifer McCurry**  
Clinical Nurse Educator  
Northwest Region



**Tim Vandiver**  
Clinical Nurse Educator  
EMS Educator  
Southeast Region



**Julia Weatherford**  
Clinical Nurse Educator  
Central Region



**Cynthia West**  
Clinical Nurse Educator  
Arkansas Valley Region



# Message from the Director

## Alone we can do so little; together, we can do so much - Helen Keller



One of the first books I remember reading was the autobiography of Helen Keller. Whenever I meet a challenge, I remember all that she overcame, and it inspires me to keep trying. As we come to the end of another year of pandemic waves we reflect on our challenges and successes as we continued supporting and educating ER nurses and pre-hospital agencies across the state as well as facilitating community outreach to deliver the BE FAST message. All with the goal of treating ischemic stroke quickly and effectively close to home.

We were thrilled to host in-person events again with the Nurse Facilitator Retreat and Strike Out Stroke as well as in-person community events across the state. And, staying true to our mission at the Institute for Digital Health & Innovation, we have continued to engage and educate virtually as well as conduct and share research and evaluation of the program.

We have returned to pre-pandemic outcomes in many of our time targets, in particular the median door-to-needle time within 60 minutes or less. Award winners highlighted in this report illustrate that, even in times of unprecedented stress and uncertainty, sites were able to perform outstanding life-saving measures and educate their communities.

I would like to acknowledge the collaboration between our team, the medics and nurses in the call center, the vascular neurologists, the video support team and the IDHI clinical leadership team. Without them, we could not possibly continue to support our current sites and welcome new sites to the program.

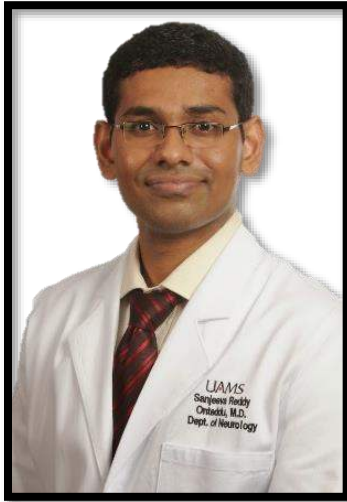
With appreciation,

A handwritten signature in black ink that reads "Lori Berry". The script is fluid and cursive.

**Lori Berry, RN, MNSc, CNOR**

*Director of Operations  
IDHI Stroke Program*

# Message from the Medical Director



We have continued to see the effects of the COVID-19 pandemic in 2021, but there seems to be some semblance of a return to a new normal. The number of patients we have seen in the IDHI Tele-stroke Program has continued to grow after a brief drop during 2020 from the pandemic; similarly, we continue to see an increase in the number of patients we treat with thrombolytics for acute stroke and patients who are transferred for thrombectomies.

Two trends, which have evolved due to the effects of pandemic, are treating stable post-thrombolytic patients at sites and education outreach, which has changed to include social media as compared to pre-pandemic, on-site education. As we transition to this new normal, these hybrid educational efforts should generate significant results.

We are looking at the data to evaluate outcomes for drip and ship patients compared to patients who stay at sites, as well as the effects of outreach. For 2021, our median door to needle stayed at 59 minutes, and we continue to focus on improving our treatment time targets. We continue to review our data and have published several abstracts. The IDHI Tele-stroke program will continue to expand, improve stroke care in Arkansas and reduce stroke mortality.

Sincerely,

A handwritten signature in black ink, appearing to read "Sanjeeva Reddy Onteddu". The signature is fluid and cursive.

**Sanjeeva Reddy Onteddu, M.D.**

*Medical Director  
IDHI Stroke Program*

# 2023 Program Goals

Decrease time between patient arrival and connection to the IDHI Call Center.

Decrease time between patient arrival and CT scan for patients arriving by privately owned vehicle.

Decrease overall door in/door out times.

