

UAMS IDHI STROKE PROGRAM

2023 Annual Report



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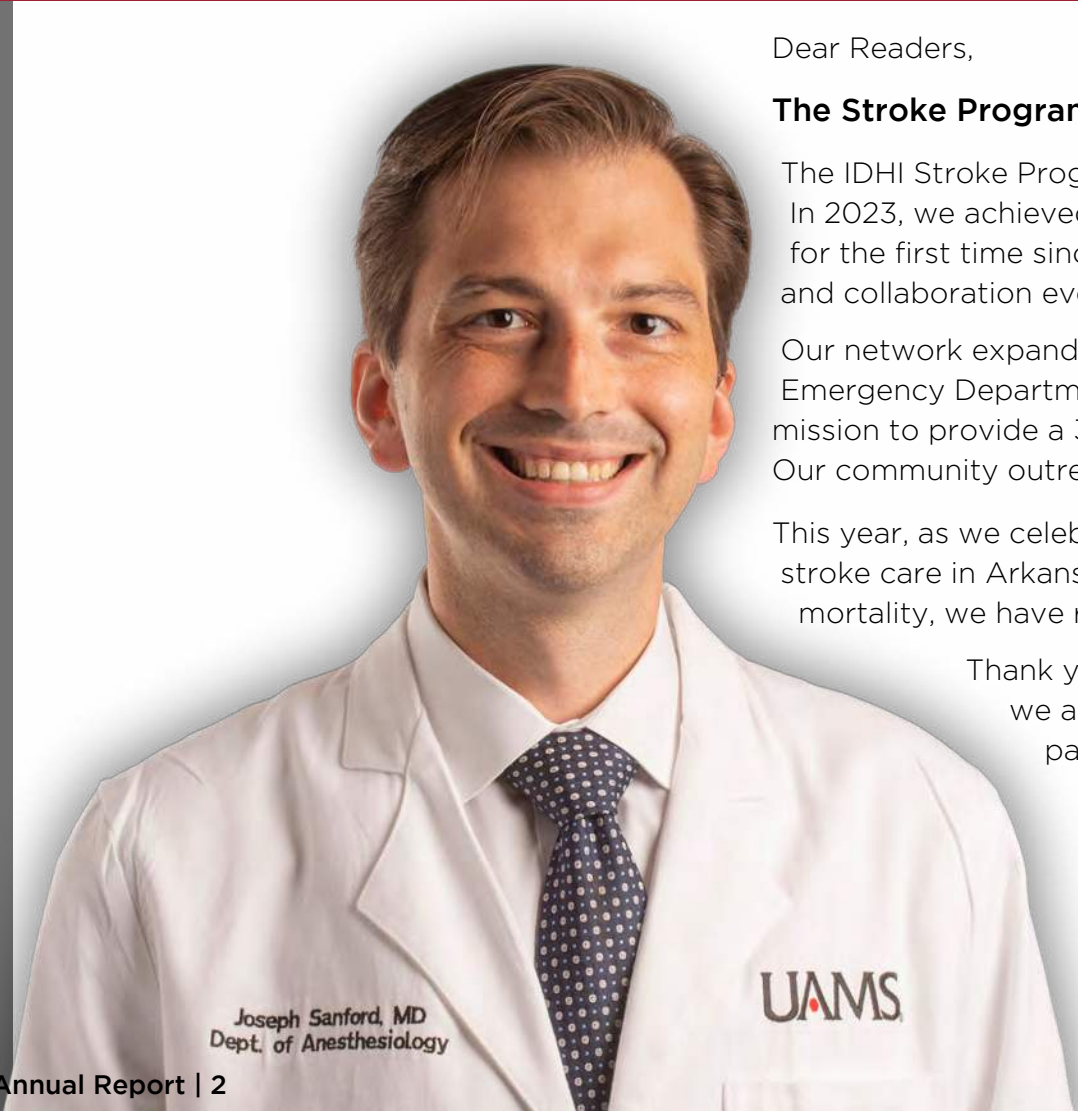


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Dear Readers,

The Stroke Program turns 15!

The IDHI Stroke Program has continuously evolved in response to the changing health care landscape. In 2023, we achieved new milestones, added new partners, and held our Stroke Conference in person for the first time since the pandemic. This milestone reflects our unwavering commitment to education and collaboration even amidst challenging times.

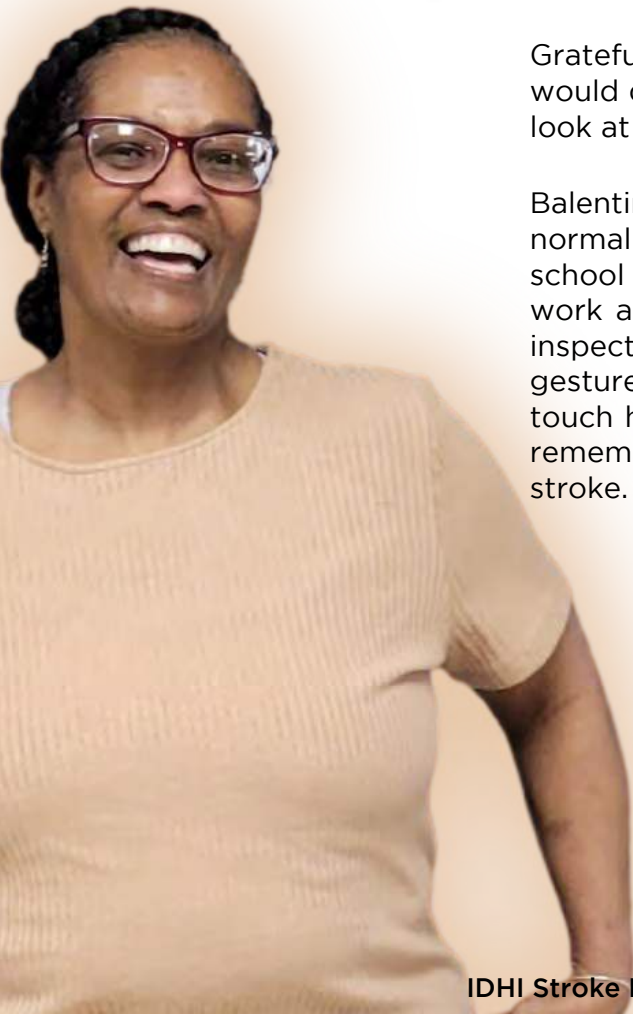
Our network expanded with the addition of three new sites: Unity Health Jacksonville, Northwest Health Emergency Department Bentonville (Centerton), and Sevier County Medical Center. Our steadfast mission to provide a 30-minute drive access to a stroke-ready hospital to all Arkansans remains on track. Our community outreach is going well with more than 2,300 events reaching 405,982 Arkansans in 2023.

This year, as we celebrate our 15th year, we also celebrate our sustained progress in transforming stroke care in Arkansas. From our humble beginnings when Arkansas was at the bottom for stroke mortality, we have risen through the ranks, and every new achievement reaffirms our purpose.

Thank you for your continued support and commitment. As we look forward to the future, we are confident in our mission to continually improve health outcomes for stroke patients in our state.

Respectfully,

Joseph A. Sanford, M.D.
Associate Vice Chancellor-CCIO
Director, UAMS Institute for Digital Health & Innovation



Jonesboro Woman "Grateful" for Everything after Stroke

Grateful, thankful and blessed is how Delisa Balentine of Jonesboro would describe her life almost one year after her stroke. "Everything I look at now is totally different," she told the IDHI Stroke Program.

Balentine's stroke occurred on what she would describe as a fairly normal Thursday, beginning with Grandparent's Day at her daughter's school (complete with donuts and juice). After that, she arrived at work and was back in her car moments later, heading to a housing inspection. In the car, she reached up to adjust her glasses, a simple gesture she does all the time. Only this time, she couldn't reach and touch her glasses with her left hand. That, she recounts, is when she remembered previous medical training and knew she was having a stroke.

Emergency Medical Services professionals from the Jonesboro Fire Department were quickly on scene, followed shortly by Emerson Ambulance Service, which transported Balentine to St. Bernard's Regional Medical Center. There, a Code Stroke was already in progress that allowed her to quickly receive a CT scan and connect with a vascular neurologist for a telemedicine assessment via the UAMS IDHI Stroke Program. The rest is a blur of events, but one thing she remembers is Eric, the nurse who walked her through the exam and cared for her during her time in the Emergency Department. What was a normal, routine work-up and consult for Eric, though, was a kindness that

Balentine will never forget. "It was like I was his sister," she remembers affectionately.

When asked about receiving TNK, or tenecteplase, to dissolve the stroke-causing clot, there was not a question or hesitation: "All I kept thinking about was my babies...I didn't hesitate at all, I have to stay and I have to be here for my kids." After about three hours, she was able to move her left hand to touch her face again. After that, all she could recall was how grateful she was. The whole experience, from start to end, was a time she will never forget. In a time of crisis, she was at peace and felt incredibly blessed to have been able to have the awareness of what had happened to her, receive compassionate care from the team at St. Bernard's Regional Medical Center, and have access to the life-saving medication that restored her function and left her nearly deficit-free.

It may be hard to believe by looking at her infectious smile, but her journey to recovery was not always easy. The motivation and encouragement from her two sons and the courage to push forward for her young daughter helped her find strength on the difficult days. The support from her family made all the difference in her recovery, and now she is working hard every day to become a healthier version of herself for her and her daughter. "I turn everything that's negative into a positive, it's just a totally different look out on life now," adding that she hopes to inspire those who are at risk of a stroke to begin the journey towards a healthier lifestyle.

"I remember a song that just kept coming to me and it was called "Grateful" ...and I was just so grateful and blessed that I got here in time."

A CHRISTMAS-TIME MIRACLE

Amidst the normal hustle and bustle of the holiday season, Mr. Irvin McElroy of Watson, Arkansas settled into his recliner to read a piece of mail that would save his life just a few days later. It was an AARP magazine and in it was an article about stroke, and, most importantly, how to recognize stroke when it happens.

Fast forward to Dec. 23, 2022, and McElroy was watching television, his favorite thing to do, when he felt thirsty. Like any other day, he walked to the refrigerator to grab a cold soda-pop, but this time it became an event he will never forget. As soon as he sat back down, he noticed the TV looked different, blurry compared to how it had been just a few minutes earlier. Instinctually, he rubbed his eyes and noted that it did not help. He noted a "funny feeling" and began to recall that AARP article from no more than a week ago.

"I remembered in [the article] they said the easiest and fastest way [to identify stroke] was to use your arms and raise your arms up and see if they stay. Well I raised my arms up, and the right one just fell down. And I could raise it again,

but as soon as I did it would drift down again," he recounted. Home alone, he knew it would be just a few minutes before his wife would return home from work. Upon arriving home and recognizing the severity of his symptoms, she called neighbors and friends to help him get in the car to get to Chicot Memorial Medical Center, where the stroke team quickly stepped into action. By that time, McElroy had lost all function in his right side and could not even wiggle his fingers. Thankfully, nurses Tara Wood and Megan Essex were prepared (thanks to their required practice with stroke mock training) to get him to CT and in a room for the stroke assessment with the IDHI Stroke Program.



Irvin McElroy with his daughter, LaJuan Scales, chief nursing officer at Chicot Memorial Medical Center

Once the exam began, he recalls being on video with the neurologist and hearing his diagnosis: acute stroke.

"THEY ASKED ME IF I WANTED TO TAKE THAT SHOT, AND I CALL IT "MIRACLE JUICE."

And it truly was a holiday miracle. After receiving the alteplase, McElroy was told he would be transferred by ambulance to Baptist Health Medical Center in Little Rock for further treatment, about a two-hour trip. By the time they reached Little Rock, he was already able to wiggle his fingers again. His second miracle came when he got to be home with family on Christmas Eve, something that he states made him "just tickled to death."

Now, McElroy is passionate about helping raise awareness about stroke as well as the "miracle juice" he received that allowed him to fully recover from what would have been an otherwise debilitating stroke.

"I would recommend [alteplase] to anybody in this world. If you need it and have a chance to take it, do whatever you've got to do to get it, because it's a miracle juice to me."



Never Too Young for Stroke

At just 30 years old, Stephanie Kirkendoll of Russellville would never have imagined that she would know anything about the IDHI Stroke Program, let alone become a stroke survivor ambassador. Anytime she talks to co-workers, distant family or even strangers about her experience with stroke, the first thing they ask about is her age, and they nearly always follow up with "You're too young!" But, as Kirkendoll learned May 27, 2022, stroke does not discriminate based on age.

Kirkendoll cannot remember much about her stroke, time in the emergency room or treatment. One of the last things she is able to remember was curling up on the couch after a long workday, reaching for her Dr. Pepper to take a drink and then feeling dizzy, losing her balance and then her vision. Her friend immediately called 911 and Pope County EMS arrived to transport her to Saint Mary's Regional Medical Center. She knew something was wrong, but she never would have imagined that less than an hour later she would be diagnosed with a stroke. By the time she arrived at the hospital, she had total right-sided weakness, slurred speech, and facial droop. Ambar Diaz, RN, recalls that the consult was difficult because there were many things Kirkendoll was unable to do due to the severity of her stroke. "It really helped speed things up when I was going through my exam, and if there was something she couldn't do, [Dr. Hinkle, neurologist] would tell me to do something else instead," Diaz recalls. Less than an hour after arrival, Kirkendoll was given the option to receive alteplase, a clot-busting medication, to which she agreed.



Kirkendoll's journey did not stop there. After receiving alteplase, Kirkendoll was rapidly transported to UAMS via Survival Flight #7 out of Russellville, where she underwent an urgent thrombectomy. Her next 12 days were filled with tests, rehabilitation activities and hardships as she lost time with her daughter, friends and work.

It was an emotional and mental struggle, and still can be even a year later as she tries to navigate life now as a young stroke survivor. "People keep saying that they can't wait until I'm back to who I was before, and I can't do that." Things that were so easy before, like recalling words and processing conversations, can still be a struggle daily. While most of her weakness has resolved, she is still fighting and trying each day to improve physically and mentally, and that courage comes from her daughter.

"My daughter boosts me up. She gives me the strength I need to keep going because I don't want her to see me quit."

Kirkendoll has also found support in online social media support groups for survivors and using "dark humor" to help cope when she is having a hard time. "Stroke will humble anybody that it happens to," but she takes it day by day. Her progress and courage to share her story are a testament to her strength, and she is hopeful that her story will help others understand how devastating stroke can be and how "stroke can happen to pretty much anyone."

QUICK RECOGNITION, QUICK TREATMENT, QUICK RECOVERY

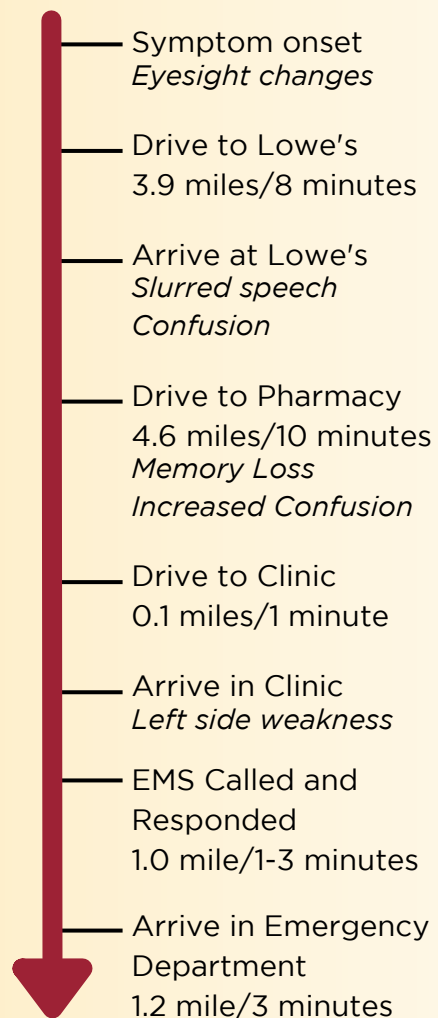


Rob Caldwell of Russellville is no stranger to hospitals or medicine after an accident with a drunk driver several years ago left him severely injured, resulting in the loss of his right lower leg and multiple other surgeries. Because of his medical history, he is very determined to lead a healthy and active lifestyle. He walks every day at Bona Dea Trails and Sanctuary and then heads to the gym for a quick workout before running errands or handling issues with his construction work.

On the morning of Jan. 13, 2023, that routine was upended after a stressful phone call with a contractor while at the gym. Once he walked out of the gym to head to Lowe's for a part to help handle the construction issue, things started to change, starting with his vision going blurry. Attributing it to his blood pressure being raised due to the phone call, he proceeded to get in his truck and head to Lowe's, where his symptoms quickly escalated.

By the time Caldwell got out of his truck, he was suffering from extreme confusion and memory loss. He managed to call his wife who wanted to call an ambulance, but he was certain he could get to his doctor's office, an action he wishes he could redo now understanding the severity of what he was going through.

Left to Right: Jared Patterson (Paramedic), Rob Caldwell, Caleb Albrecht (EMT), and Cortney Watson (RN).



Thankfully, his primary care provider (PCP) was able to quickly assess he was likely having a stroke once he arrived at the clinic, and staff immediately contacted the Russellville Fire Department EMS for transport. The EMS team, thanks to the use of a prehospital communication tool and stroke training, alerted Saint Mary's Regional Medical Center of an incoming Code Stroke.

Within just 23 minutes, emergency department staff and nurse Cortney Watson were able to perform a telemedicine consult with the Stroke Program and administer tenecteplase, or TNK. Shortly after, Caldwell recounts a near immediate resolution of symptoms—so much so that he was requesting a hamburger and discharge paperwork within a couple of hours of receiving the medication. By the time he was admitted to the Intensive Care Unit, he only had a mild slur and very slight droop around his right eye, which resolved within a few hours.

Caldwell is proud to represent the IDHI Stroke Program as a stroke survivor as it is something he believes in and he wants everyone to be able to recognize a stroke and receive treatment as quickly as he was able to for the best outcome. Now, he is back in the gym, enjoying his daily walks and working hard to understand his diagnosis and forge ahead in his healthy lifestyle, sticking to his favorite motto: A.M.O.

A_{DA}PT. **M**ODIFY. **O**VERCOME.

Sept. 21, 2022 | Health care professionals from all regions of Arkansas met for the first in-person IDHI Stroke Program Annual Conference since 2019. Nearly 300 nurses, emergency room doctors, EMS professionals, pharmacists, health care administrators, and more from nearly 60 hospitals across the state joined the stroke program team in Hot Springs for two days. It was an exciting time to see everyone's smiling faces, both old and new!

The conference agenda was packed with guest speakers and expert panels on topics ranging from tenecteplase (TNKase), community outreach, post-acute stroke care, and designation. The annual conference is an excellent time to not only make new professional connections, but also learn the latest evidence-based practices in stroke care. The gathering of diverse backgrounds in stroke care further aids the understanding of stroke care across the entire continuum of the patient's stroke.



Joseph Sanford, M.D., presents an update on IDHI and the future of digital health.

The conference was also a time of celebration and recognition of the amazing work done by the facilitators, physicians, and EMS agencies across the state. The strength of the partnerships among all facets of the stroke program not only sets it apart from other programs, but most importantly benefits Arkansans by providing acute ischemic stroke care closer to home. IDHI Stroke Program awards and winners can be seen starting on page 14.



Community Outreach Award

This award is presented to the stroke program spoke sites with the most innovative, creative and consistent community outreach events in each region. This award recognizes the development and execution of an event that significantly enhanced stroke awareness for the community.

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

This award is 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.

Stroke Champion Award

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.

Stroke Hero Award

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

Door-to-Needle Award

This award is presented to the hospital with the fastest door-to-needle time using the IDHI Stroke Program.

Site Excellence Award

This award is presented 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 spoke site. This is the highest honor awarded to an IDHI Stroke Program hospital.

Certificate of Appreciation

This award is presented to a group or individual that went beyond their normal job duties to enhance and make the stroke program more effective.

Honorable Mention Award

This award is given to sites that met all contract deliverables and have made improvements with many of their internal processes, training and outreach.

Director's Choice Award

This award is presented to an individual for making lasting contributions to the IDHI Stroke Program. The recipient is chosen by the IDHI Stroke Program Director.

Outstanding Facilitator Award

This award is presented to the facilitator with the most innovative, creative and consistent community outreach events. This award honors the nurse that has planned and implemented significant contributions to the stroke program.

Stroke Champion Award Winners

Community Outreach Award Winners



Karly Clifton (left)



Tori Myers



Amorie Smith



Cortney Watson



Drew Memorial Hospital



Ashley County Medical Center



Medical Center of South Arkansas



Shelby Brady (left)



Gwen Brunson (right)



Ashley Shurts



Kara Snider



Dallas County Medical Center



Saint Mary's Regional Medical Center



National Park Medical Center

Stroke Hero Award Winners



Lisa Hyde | Saline Memorial Hospital

Hyde is the diagnostic imaging director at Saline Memorial Hospital. She worked with the stroke team and radiology to develop new order sets for stroke CT scans to ensure they would be seen and read by radiologists first. She also keeps radiology staff involved in the Code Stroke process and has helped with community outreach.

Francisco Porras | Baptist Health Medical Center-Fort Smith

Porras served as a translator at a Cinco de Mayo event, volunteering on his day off to translate and provide stroke education and bridge the communication gap for Hispanic event attendees.



William Hawes | North Arkansas Regional Medical Center

Hawes is the pharmacy director and has been vital in the success of stroke activations in the hospital, responding to the Emergency Department as needed and helping communicate with patients about the thrombolytic.



Physician Champion and EMS Award Winners

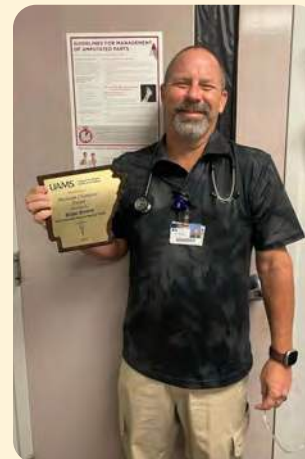
Sydney Neel, M.D. | Unity Health White County Medical Center

Neel has been outstanding in working with the physician group in advocating for the IDHI Stroke Program and utilizing it as a resource for acute ischemic stroke patients. She is always willing to participate in and be available for stroke consults.



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

Shearer goes above and beyond for stroke patients and is a huge advocate for the IDHI Stroke Program. In one case, there was a patient who arrived barely in the window for treatment. Shearer immediately recognized the severity and importance of getting the patient timely care and initiated thrombolytic treatment before initiating a stroke consult. The neurologist praised his initiative and willingness to advocate to get the patient the necessary care quickly.



Richard Nelson, M.D. | Saline Memorial Hospital

Nelson was nominated for his aggressive work on staff education and acute stroke care process improvement. He is one of the primary physicians in the Emergency Department and is involved with training and onboarding new staff and ensuring compliance and understanding of the Code Stroke process.





Representatives from Saint Mary's Regional Medical Center accepted the Honorable Mention award.



North Arkansas Regional Medical Center was well represented as they received the Honorable Mention Award.



Tim Tanner of Saint Mary's Regional Medical Center was awarded the Outstanding Nurse Facilitator Award for his efforts in community outreach, staff education and commitment to excellence for the IDHI Stroke Program.



The Certificate of Appreciation for 2022 was presented to Kathy Aldrich for her hard work and dedication to the IDHI Stroke Program.



The award for best Door to Needle Time for the year was awarded to North Arkansas Regional Medical Center with a time of 24 minutes (twice)!



EMS Certificate of Excellence Award Winners (Left to Right): Fulton County EMS, Ouachita County EMS, and North Arkansas Regional Medical Center EMS

Nurse Facilitator Retreat

April 19, 2023 | After three long years, the annual Nurse Facilitator Retreat finally made its way to the Red Wolf Convention Center in Jonesboro for two days of networking, learning and some fun along the way. For the first time, sites were able to invite a stroke champion to join the event, and a record of nearly 130 attendees was set.

Between the games and fun, the site representatives and stroke program team had many opportunities to discuss the challenges faced with outreach, door in/door out times, staff resiliency and burnout. Stroke survivor Delisa Balentine, whose story is featured on page 4, made a special guest appearance as well. Focus groups were created based on feedback from attendees, and those groups are still working diligently to review process improvement and determine best practices to face those challenges. We look forward to the progress our program will make as a result of these groups and are thankful for the opportunity to hear from our sites!

We were also blessed with the opportunity to give back in a big way this year by initiating a food drive. The attendees showed up and donated several wagons and cartloads of non perishable food items and toiletries that were donated to a local Jonesboro food pantry and also the Wynne community (CrossRidge Community Hospital) after heavy storms and tornadoes devastated their town. We are looking forward to gathering again and are always thankful for the chance to visit with our partners around the state!

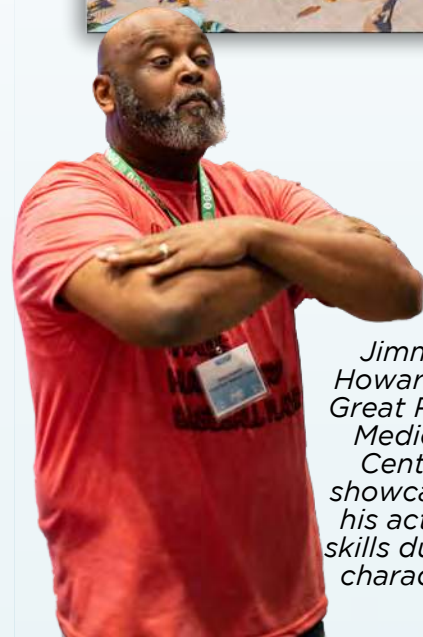
Ray Staggs with Sevier County Medical Center, a new spoke site onboarded in 2023, was able to see the Mega Brain for the first time at the retreat.



Stroke survivor Delisa Balentine shares her story with retreat attendees.



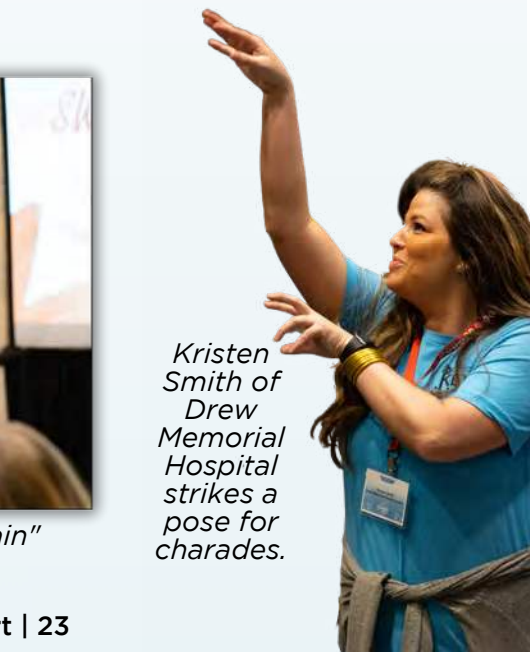
Food Drive collections were donated to the Wynne and Jonesboro communities.



Jimmy Howard of Great River Medical Center showcased his acting skills during charades.



Robin Banks shows off "Save the Brain" during a breakout session.



Kristen Smith of Drew Memorial Hospital strikes a pose for charades.

Community Outreach: The Heartbeat of the Stroke Program

At the center of all the amazing things the IDHI Stroke Program does to enhance and improve stroke care is the stroke patient; and community education is the vital link between the stroke patient and treatment. From July 2022 through June 2023, partnering sites used community events, social media and other interactions to raise stroke awareness among nearly 406,000 event attendees at over 2,300 events statewide.

Monthly challenges and themes were continued throughout the year, and the popular holiday-themed contests continued to amaze! The Mega Brain made the rounds at 25 events around the four corners of Arkansas while the Mini Brains were found at over 30 events. It was an amazing year for outreach as communities continue to reopen, and events, health fairs and other activities start fresh after the pandemic. We look forward to finding new ways to reach our minority and rural populations in the coming year, and we are seeking new opportunities to reach, educate and raise awareness on stroke recognition in the Natural State.

Above: Kara Snider of North Arkansas Regional Medical Center provides stress brains to the Blood Mobile for donors to use during the blood donation process.

Left: Team members from the Stroke Program and Eureka Springs Hospital hosted an educational event during Earth Day at the Eureka Springs School District.



186 Events
28,226 Attendees



Sites were given multiple social media pushes for the month, including the BE FAST PSA and posting a badge indicating they are a stroke-ready hospital. Pictured are posts from Izard Regional Hospital (left) and Mena Regional Health System (above).

Right: Ashley County Medical Center used the Mini Brain at their local library summer reading program and handed out activity books to the kids



July #BESocialBEFAST



Holly Lawrenz with Drew Memorial Hospital provided activity books to a Monticello classroom

North Arkansas Regional Medical Center attended a school resource fair in their community



Darcee Rogers of Saint Mary's Regional Medical Center used the Save the Brain game to educate kids at a local business expo.

August #BEFASTForKids

Back to School! Sites were challenged to educate students during the back-to-school season using activity books, bookmarks, Grandpa's Crooked Smile and the Kid's Stroke PSA on social media.

195 Events
33,667 Attendees

Community Outreach

189 Events
37,417 Attendees



Left: DeWitt Hospital and Nursing Home set up a booth and provided education at their local fair.

Right: Mark Holden at St. Bernard's Regional Medical Center helps a young man Save the Brain at the Craighead County Fair.



Nancy Yang of Baptist Health Medical Center Conway reads "Grandpa's Crooked Smile" to a local elementary class.

181 Events
25,524 Attendees

November was a busy month as sites participated in the appliance store and home health challenges. Baptist Health-Conway was able to provide 700 magnets to appliance stores and White River Medical Center reached 150 people through their local home health agencies!

John Ed Chambers Memorial Hospital
30 November at 10:04

Did you know? As of 2018, 7.8 million adults have had a stroke: <https://www.cdc.gov/nchs/fastats/stroke.htm>

Did you know? About 75% of strokes occur in people 65 or older: https://muschealth.org/_/geriatric/_/healthy-aging/stroke

Preview and download the Seniors and Stroke PSAs here: <https://app.box.com/s/lgl10ok2c5p073yok9dz7a210ruvkr77>

#BEFASTforSeniors

If you or someone you know is having signs of a stroke,

B E F A S T

- B** Balance: Loss of coordination
- E** Eyes: Trouble seeing out of one or both eyes
- F** Facial: Facial weakness
- A** Arm: Arm Weakness
- S** Speech: Speech difficulty
- T** Time: Time to call 911

If you are having signs of a stroke, CALL 911

Chambers Memorial Hospital

Left: John Ed Chambers Memorial Hospital shares BE FAST information and stroke statistics among the elderly on their Facebook page.

Right: Rachel Moore of Dardanelle Regional Medical Center educated at Turkey Day at the Dardanelle School District.



September
#BEFASTForMinorities



Arkansas Heart Hospital's winning pumpkin utilized crafts and engineering to wheel Barbie into the "CT Scanner" for stroke!

Jefferson Regional Medical Center's World Stroke Day Collage



October
#BEFASTWorldStrokeDay

In honor of World Stroke Day, sites were tasked with creating a collage with hospital employees to help raise awareness of stroke on social media.

The annual Spooky Stroke Pumpkin contest also made it's return with Arkansas Heart Hospital taking the prize!

212 Events
51,300 Attendees

November
#BEFASTForGrandparents



Stone County Medical Center



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Left: Ouachita County Medical Center's tree

Below: Dallas County Medical Center's wreath



In honor of the holidays, a special holiday-themed BE FAST PSA was created in both English and Spanish for sites to post on social media.

The annual Holiday Tree decorating contest returned with a twist—a wreath decorating competition was added as well! Ouachita County Medical Center once again earned bragging rights for the year with their holiday tree, and Dallas County Medical Center won the inaugural wreath contest!

153 Events
23,180 Attendees

Community Outreach

201 Events
21,536 Attendees

The new year started off with outreach geared towards pharmacists for Pharmacist Appreciation Day and blood drives for Blood Donor Appreciation Day.



Erika Sneed with Fulton County Hospital provided swag at Salem Drug.

Ozarks Community Hospital



Conway Regional Medical Center provided education at an AR Minority Health Commission screening event in Perryville.

188 Events
28,701 Attendees

Spring was in full swing and so were community events! The outreach theme for the month honored International Women's Health Day and Cheerleader Day! Some sites were able to educate local cheer teams and work with them to create exciting BE FAST cheers and chants!



McGehee Hospital at the Dermott Health Fair.

Tim Tanner of Saint Mary's Regional Medical Center proves you can at least teach an old bear new tricks.



The Mega Brain traveled to Fort Smith for the Butterfield Trail Middle School Health Expo with Baptist Health-Fort Smith.

January
#BEFASTForPharmacists

February
#BEFASTForMinorities

March
#BEFASTForWomen

April
#BEFASTForSeniors



Above: Chicot Memorial Medical Center made BE FAST posters and set up a table with stroke information and a healthy snack!



Right: White River Medical Center delivered swag and stroke information to the Independence County Health Unit.



Lawrence Memorial Hospital partnered with their local health unit to provide swag with stroke information.

February's theme was centered around stroke education for minorities. Each site was challenged to provide swag kits to their local AR Department of Health Clinics.

195 Events
28,841 Attendees



Howard Memorial Hospital shared the Stroke and Seniors PSA.

Northwest Medical Center Bentonville utilized a BE FAST poster on their ED bulletin board along with facts on seniors and stroke.



Cynthia West uses the Mega Brain to educate students at Eureka Springs Elementary School about stroke.

204 Events
33,745 Attendees

214 Events
68,846 Attendees

For World Stroke Awareness Month, sites were sent a collage to create for social media pushes educating on stroke. Sites also received a BE FAST digital poster to include in social media posts.



Left: Little River Memorial Hospital staff and ED Physician celebrate a great stroke consult and door-to-needle time using the BE FAST chains and posting stroke information on social media!



Right: Arkansas Methodist Medical Center at a community event in Paragould.

May #BEFASTStrokeAwarenessMonth

Bradley County Medical Center at the AHF Products Health Fair.



Baptist Health Medical Center Heber Springs at Lake Fest.

Ouachita County Medical Center at First Friday in Camden.



Social media pushes for June were geared towards stroke and men, while in-person events ramped up for early summer!

June #BEFASTForMen

186 Events
24,999 Attendees

Education among prehospital providers is vital for successful stroke outcomes and is a critical component of the stroke patient's care. In fact, prehospital activation of Code Stroke by EMS reduced the door-to-CT time for acute stroke patients by 11 minutes in fiscal year 2023.



Above: Training for Fulton County EMS

Tim Vandiver, EMS educator and outreach nurse for the IDHI Stroke Program, traveled around Arkansas to provide EMS training to prehospital providers regarding the care of the stroke patient. Overall, 448 prehospital personnel in 31 different EMS agencies received education during the 2023 fiscal year. Education was also provided at the Arkansas EMT Association Conference for 523 attendees!



Right: Southeast EMS in Monticello

| Facility City | Consults | Alteplase Administration | Consults Only | Quality Review | Community Events | Community Attendees |
|---|----------|--------------------------|---------------|----------------|------------------|---------------------|
| Arkansas Heart Hospital Little Rock | 14 | 3 | 11 | 17 | 12 | 5536 |
| Arkansas Heart Hospital-Encore Bryant | 10 | 5 | 5 | 14 | 12 | 5536 |
| Arkansas Methodist Medical Center Paragould | 48 | 18 | 30 | 23 | 37 | 3572 |
| Ashley County Medical Center Crossett | 14 | 6 | 8 | 40 | 66 | 15328 |
| Baptist Health Medical Center Arkadelphia | 17 | 4 | 13 | 12 | 26 | 1873 |
| Baptist Health Medical Center Conway | 33 | 12 | 21 | 17 | 46 | 21352 |
| Baptist Health Medical Center Fort Smith | 74 | 33 | 41 | 22 | 40 | 18361 |
| Baptist Health Medical Center Heber Springs | 14 | 2 | 12 | 13 | 32 | 5023 |
| Baptist Health Medical Center Malvern | 24 | 10 | 14 | 19 | 29 | 1781 |
| Baptist Health Medical Center North Little Rock | 42 | 21 | 21 | 16 | 35 | 1768 |
| Baptist Health Medical Center Stuttgart | 4 | 2 | 2 | 12 | 26 | 1104 |

| Facility City | Consults | Alteplase Administration | Consults Only | Quality Review | Community Events | Community Attendees |
|---|----------|--------------------------|---------------|----------------|------------------|---------------------|
| Baptist Health Medical Center Van Buren | 12 | 5 | 7 | 16 | 36 | 6172 |
| Baxter Regional Medical Center Mountain Home | 111 | 44 | 67 | 29 | 34 | 5930 |
| Bradley County Medical Center Warren | 7 | 2 | 5 | 16 | 29 | 7120 |
| CHI St. Vincent Hot Springs | 137 | 54 | 83 | 28 | 52 | 43937 |
| Chicot Memorial Medical Center Lake Village | 16 | 6 | 10 | 14 | 35 | 17218 |
| Conway Regional Medical Center Conway | 98 | 34 | 64 | 30 | 48 | 9253 |
| CrossRidge Community Hospital Wynne | 26 | 9 | 17 | 20 | 28 | 5291 |
| Dallas County Medical Center Fordyce | 13 | 6 | 7 | 13 | 25 | 2797 |
| Dardanelle Regional Medical Center Dardanelle | 8 | 5 | 3 | 19 | 26 | 1580 |
| Delta Memorial Hospital Dumas | 4 | 2 | 2 | 21 | 24 | 1586 |
| DeWitt Hospital and Nursing Home DeWitt | 6 | 2 | 4 | 15 | 36 | 3992 |

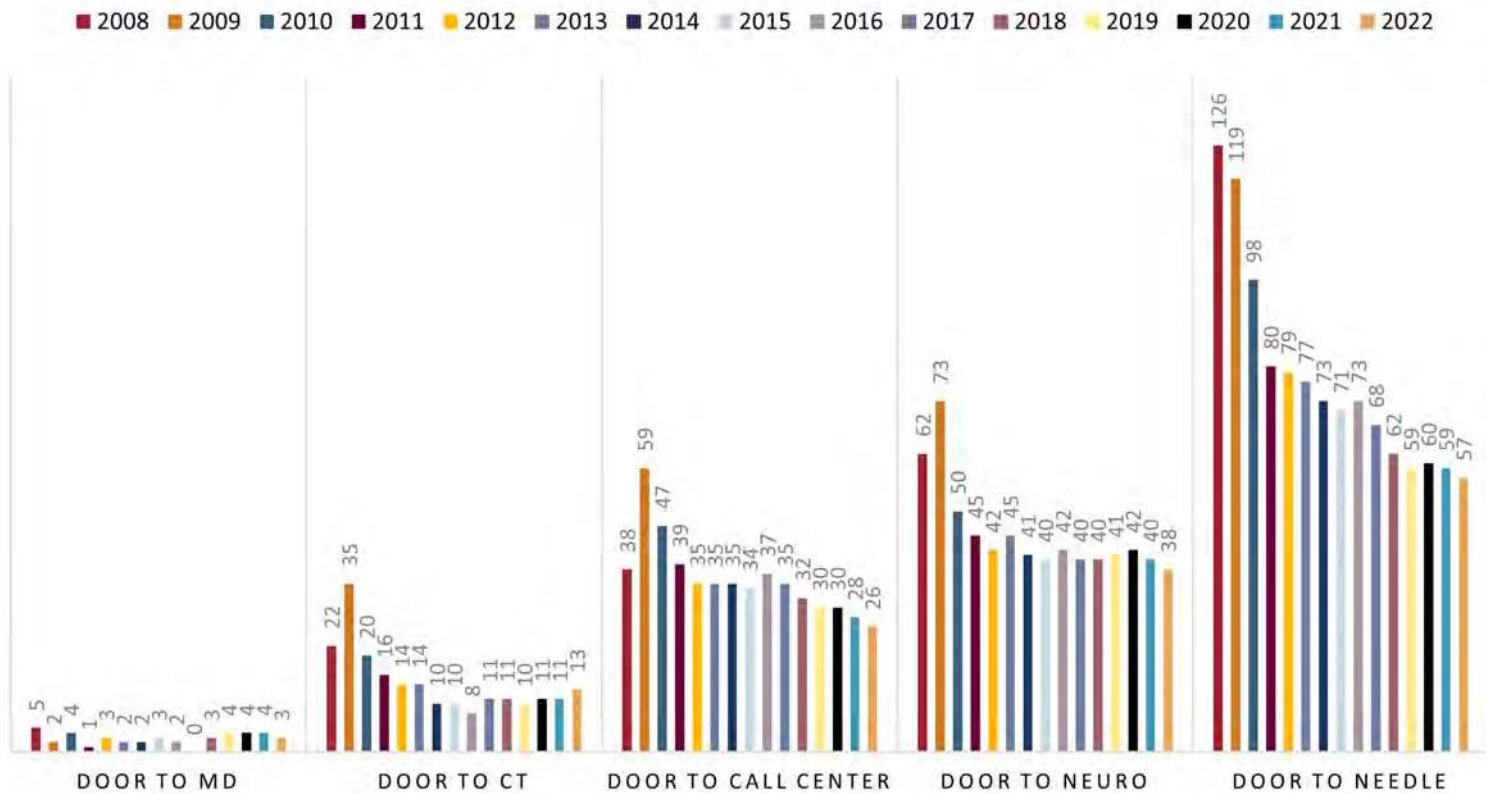
| Facility City | Consults | Alteplase Administration | Consults Only | Quality Review | Community Events | Community Attendees |
|--|----------|--------------------------|---------------|----------------|------------------|---------------------|
| Drew Memorial Hospital Monticello | 16 | 3 | 13 | 28 | 68 | 21877 |
| Eureka Springs Hospital Eureka Springs | 8 | 2 | 6 | 17 | 110 | 29335 |
| Fulton County Hospital Salem | 2 | 1 | 1 | 19 | 27 | 1409 |
| Great River Medical Center Blytheville | 25 | 9 | 16 | 57 | 46 | 4803 |
| Helena Regional Medical Center Helena | 7 | 2 | 5 | 17 | 27 | 1190 |
| Howard Memorial Hospital Nashville | 5 | 2 | 3 | 20 | 31 | 2146 |
| Izard Regional Hospital Calico Rock | 4 | 2 | 2 | 38 | 55 | 2416 |
| Jefferson Regional Medical Center Pine Bluff | 74 | 27 | 47 | 14 | 41 | 2142 |
| John Ed Chambers Memorial Hospital Danville | 14 | 8 | 6 | 18 | 30 | 5012 |
| Johnson Regional Medical Center Clarksville | 7 | 6 | 1 | 14 | 25 | 939 |
| Lawrence Memorial Hospital Walnut Ridge | 22 | 2 | 20 | 16 | 41 | 4434 |

| Facility City | Consults | Alteplase Administration | Consults Only | Quality Review | Community Events | Community Attendees |
|--|----------|--------------------------|---------------|----------------|------------------|---------------------|
| Little River Memorial Hospital Ashdown | 5 | 1 | 4 | 37 | 45 | 3601 |
| Magnolia Regional Medical Center Magnolia | 14 | 5 | 9 | 17 | 26 | 2135 |
| McGehee Hospital McGehee | 9 | 3 | 6 | 22 | 32 | 4154 |
| Medical Center of South Arkansas El Dorado | 30 | 11 | 19 | 34 | 52 | 3369 |
| Mena Regional Health System Mena | 20 | 12 | 8 | 15 | 27 | 1173 |
| National Park Medical Center Hot Springs | 40 | 13 | 27 | 29 | 54 | 5339 |
| North Arkansas Regional Medical Center Harrison | 65 | 29 | 36 | 46 | 43 | 9288 |
| Northwest Medical Center Bentonville | 4 | 1 | 3 | 13 | 26 | 7300 |
| Northwest Health Emergency & Urgent Care Bentonville | 4 | 2 | 2 | 10 | 8 | 100 |
| Northwest Medical Center Springdale | 4 | 2 | 2 | 25 | 54 | 9415 |
| Ouachita County Medical Center Camden | 23 | 12 | 11 | 26 | 47 | 4521 |

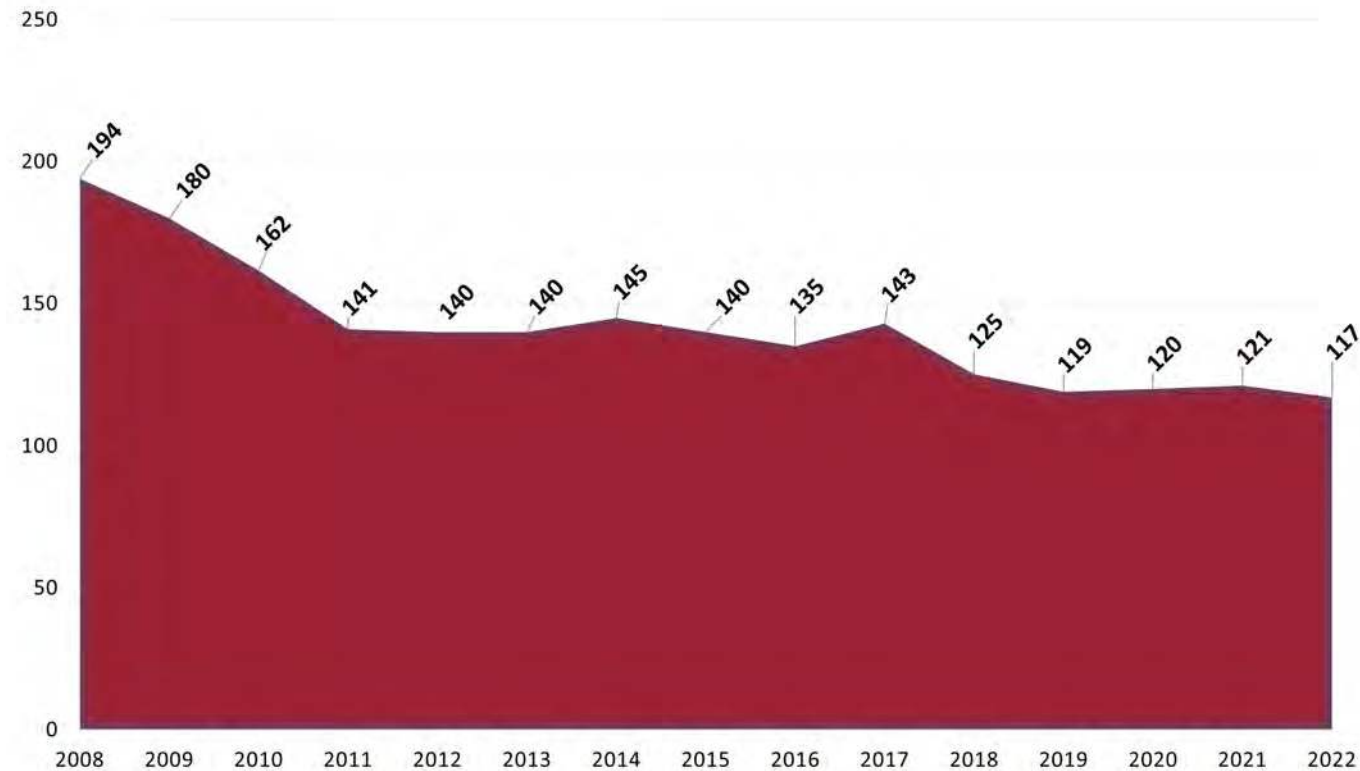
| Facility City | Consults | Alteplase Administration | Consults Only | Quality Review | Community Events | Community Attendees |
|---|----------|--------------------------|---------------|----------------|------------------|---------------------|
| Ozark Health Medical Center Clinton | 12 | 6 | 6 | 28 | 26 | 2759 |
| Ozarks Community Hospital Gravette | 9 | 6 | 3 | 12 | 28 | 3755 |
| Piggott Community Hospital Piggott | 18 | 8 | 10 | 24 | 65 | 7726 |
| Saint Mary's Regional Medical Center Russellville | 75 | 22 | 53 | 18 | 71 | 13696 |
| Saline Memorial Hospital Benton | 45 | 18 | 27 | 21 | 38 | 25123 |
| Sevier County Medical Center DeQueen | 8 | 3 | 5 | 13 | 19 | 1056 |
| Siloam Springs Regional Hospital Siloam Springs | 15 | 3 | 12 | 9 | 27 | 6432 |
| Siloam Springs Regional Hospital Northwest Health Emergency Department Fayetteville | 10 | 3 | 7 | 19 | 26 | 2974 |
| South Mississippi County Regional Medical Center Osceola | 1 | 0 | 1 | 27 | 40 | 4509 |
| St. Bernard's Five Rivers Medical Center Pocahontas | 20 | 8 | 12 | 24 | 44 | 5151 |

| Facility City | Consults | Alteplase Administration | Consults Only | Quality Review | Community Events | Community Attendees |
|---|-------------|--------------------------|---------------|----------------|------------------|---------------------|
| St. Bernard's Regional Medical Center Jonesboro | 191 | 41 | 150 | 25 | 98 | 8605 |
| Stone County Medical Center Mountain View | 22 | 7 | 15 | 18 | 25 | 2123 |
| Unity Health Jacksonville Jacksonville | 6 | 2 | 4 | 13 | 9 | 271 |
| Unity Health Newport Newport | 18 | 5 | 13 | 17 | 24 | 738 |
| Unity Health White County Medical Center Searcy | 90 | 40 | 50 | 12 | 24 | 1734 |
| Wadley Regional Medical Center Hope | 5 | 1 | 4 | 22 | 32 | 1298 |
| White River Medical Center Batesville | 103 | 34 | 69 | 42 | 29 | 3463 |
| White River Medical Center Medical Complex Cherokee Village | 13 | 7 | 6 | 23 | 30 | 2361 |
| Totals (FY 2023) | 1795 | 654 | 1141 | 1325 | 2304 | 405982 |

Median Time Targets

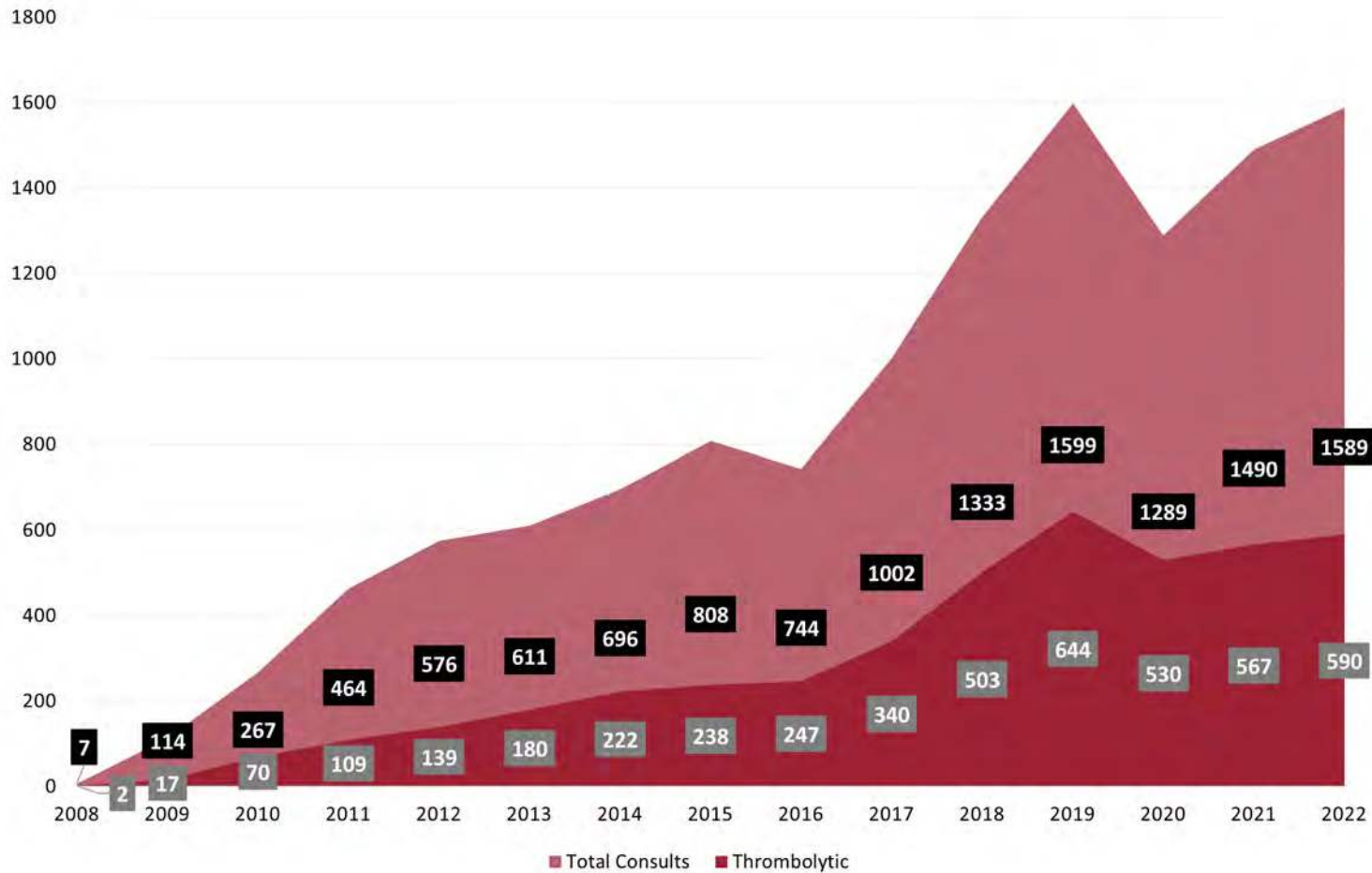


Median Symptom Onset to Thrombolytic Time (Minutes)

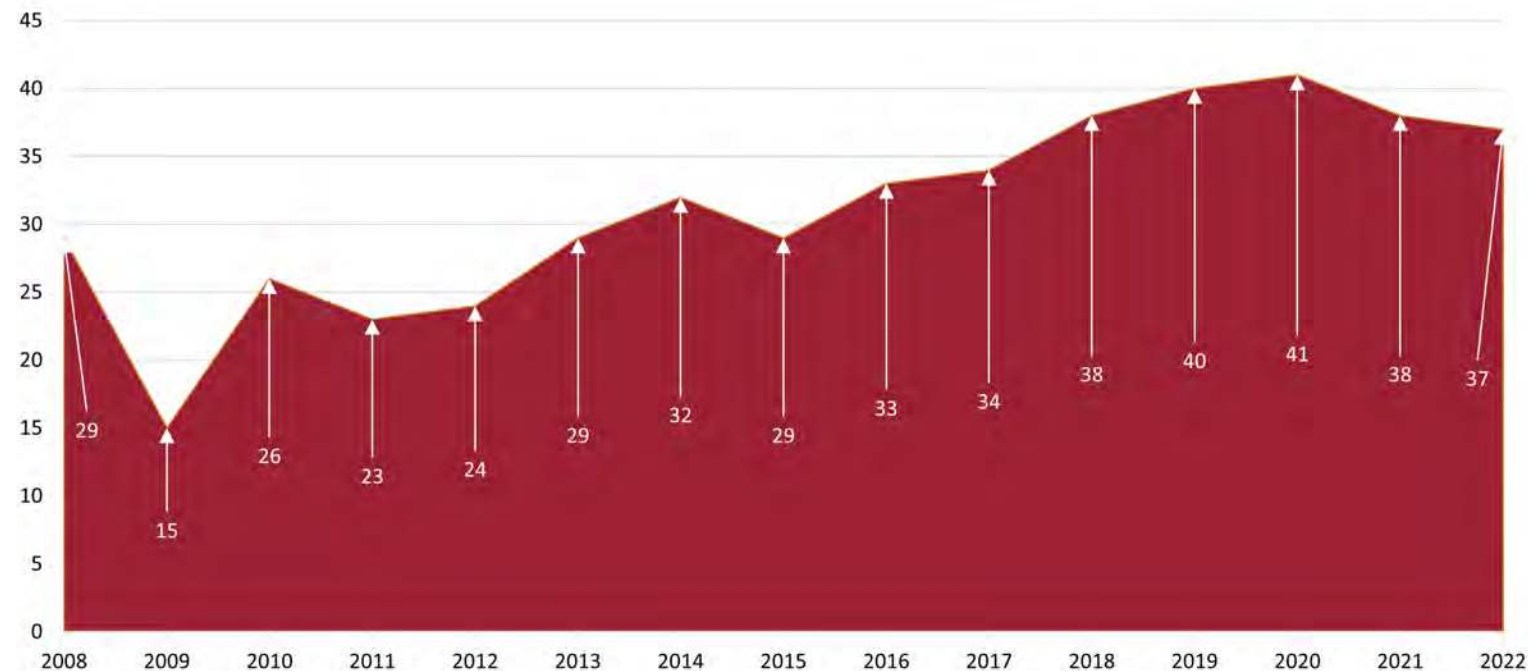


EMS prehospital activation of "Code Stroke" significantly decreased door-to-CT time by **11 minutes**.

Total Consults/Total Thrombolytic Consults

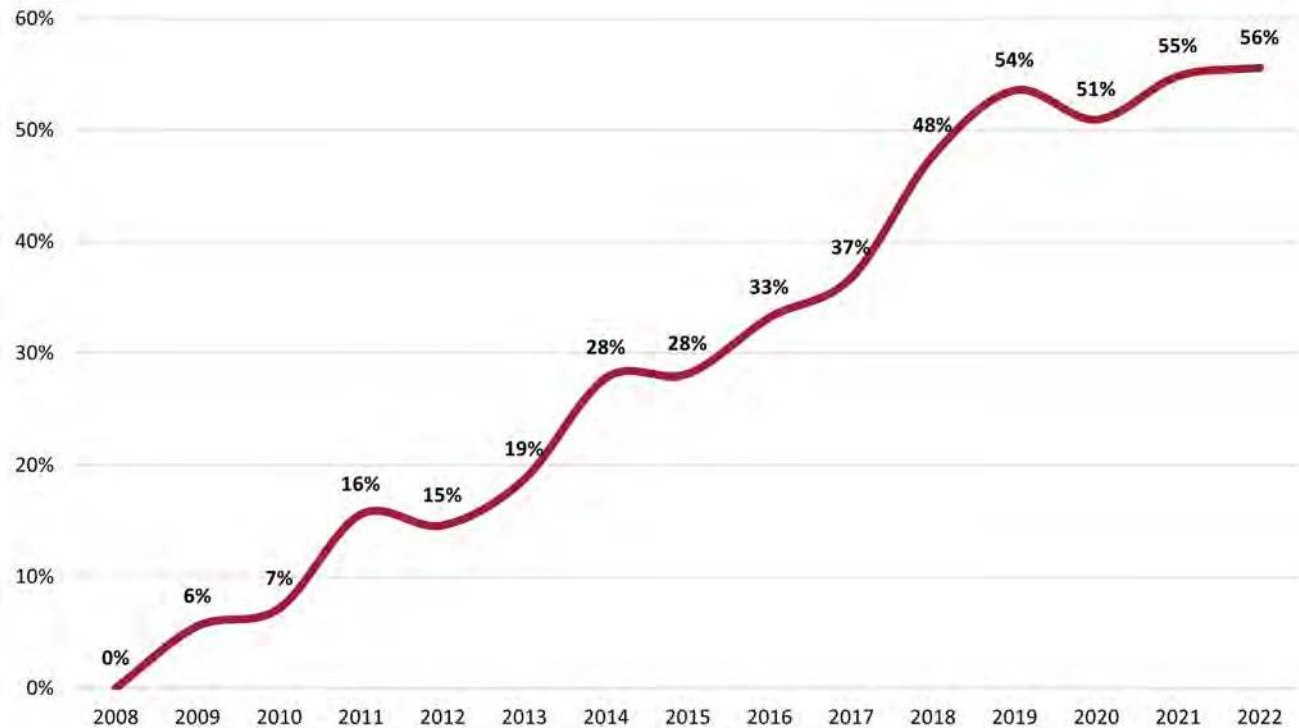


Thrombolytic Administration (Percentages)



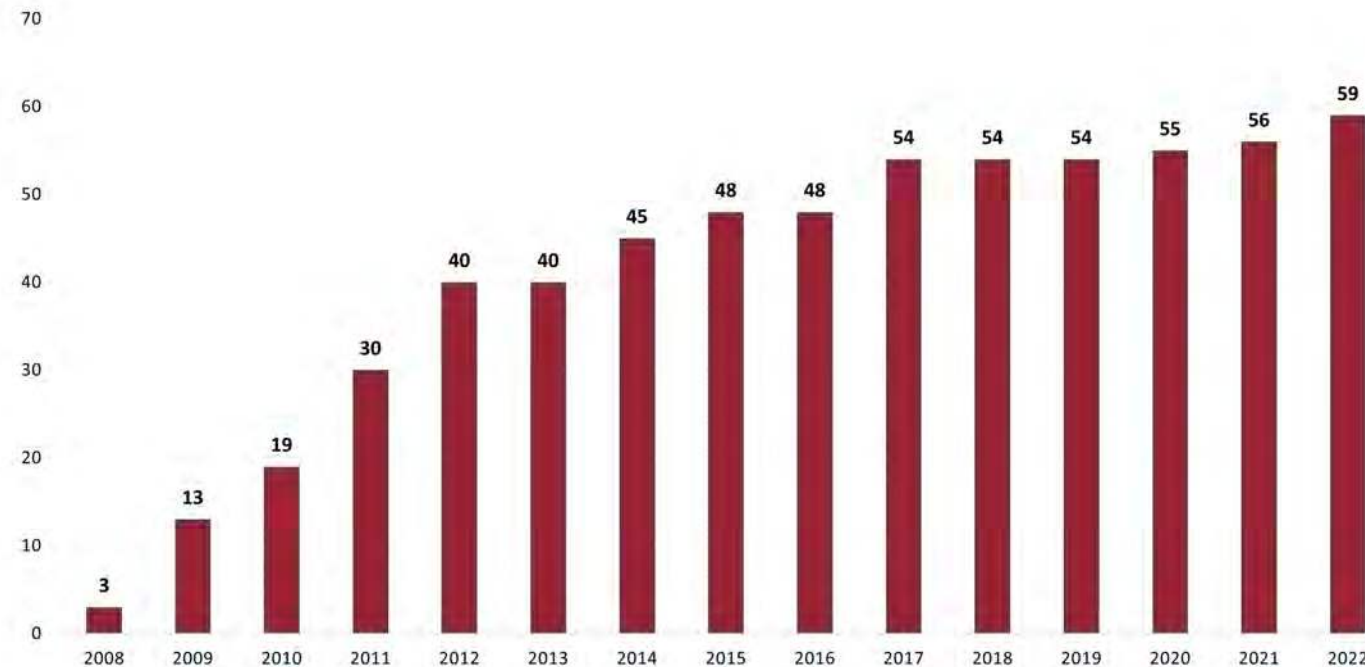
Rates of consults improved equally across sites for the year, regardless of hospital size.

Golden Hour Target Less Than 60 Minutes

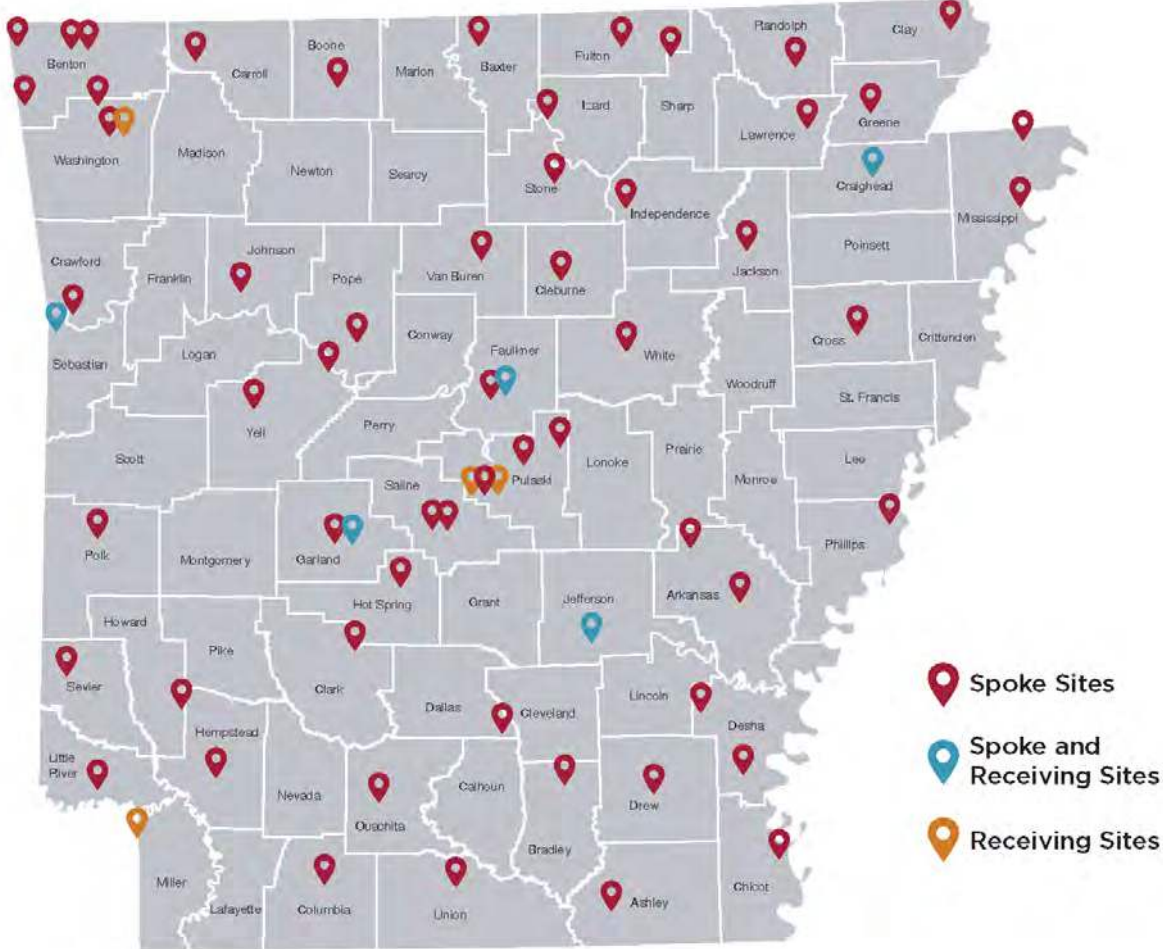


Patients receiving consults that arrive by EMS are treated significantly sooner than those arriving by privately owned vehicle (POV).

Total Participating Sites



The IDHI Stroke Program contributed to **\$59 million** in costs-savings for the care of stroke patients in CY 2022.



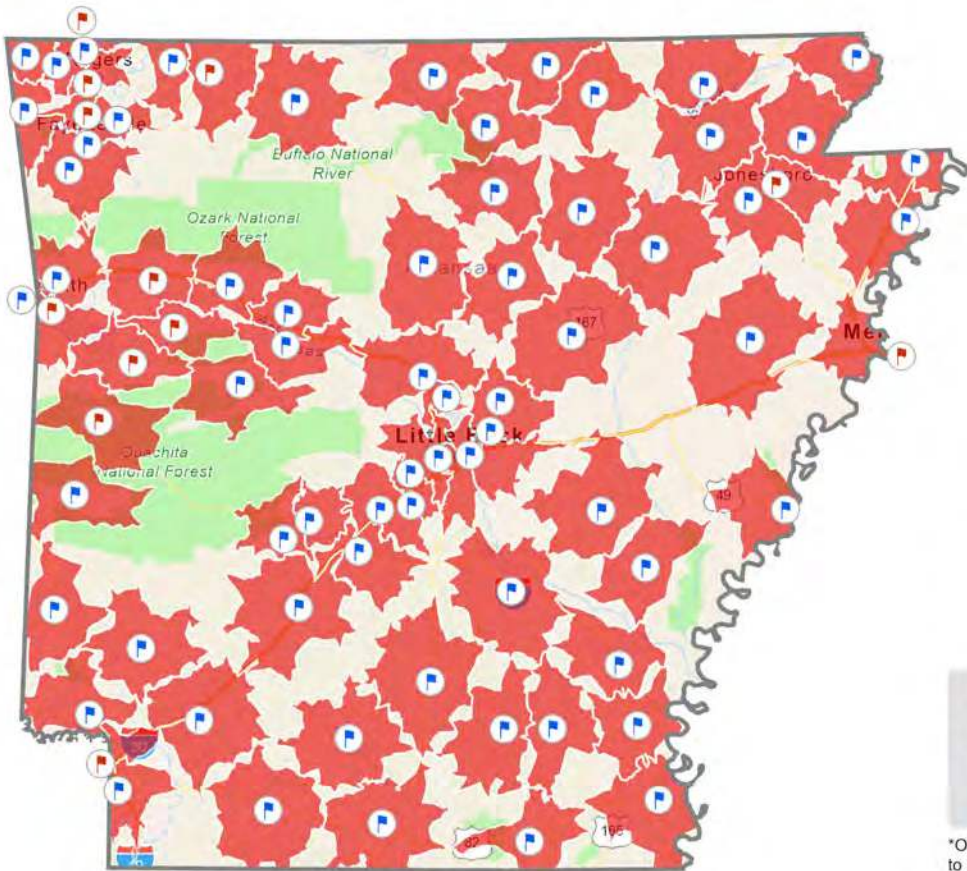
| SPOKE SITES | | |
|---|------------------|--------------|
| NAME | CITY | COUNTY |
| Baptist Health Medical Center | Arkadelphia | Clark |
| Little River Memorial Hospital | Ashdown | Little River |
| White River Medical Center | Batesville | Independence |
| Arkansas Heart Hospital Encore | Benton | 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 Regional Hospital | Calico Rock | Izard |
| Ouachita County Medical Center | Camden | Ouachita |
| White River Medical Center 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 Medical Center | Dardanelle | Yell |
| Sevier County Medical Center | De Queen | Sevier |
| 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 | Hope | Hempstead |
| National Park Medical Center | Hot Springs | Garland |
| Unity Health Jacksonville | Jacksonville | Pulaski |
| Chicot Memorial Medical Center | Lake Village | Chicot |
| Arkansas Heart Hospital | Little Rock | Pulaski |
| Magnolia Regional Medical Center | Magnolia | Columbia |
| Baptist Health Medical Center Hot Spring County | Malvern | Hot Spring |
| McGehee Hospital | McGehee | Desha |
| Mena Regional Health System | Mena | Polk |

| SPOKE SITES | | |
|--|-------------------|-------------|
| NAME | CITY | COUNTY |
| 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. Bernards 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 |

| SPOKE AND RECEIVING SITES | | |
|--------------------------------------|-------------|-----------|
| NAME | CITY | COUNTY |
| Conway Regional Medical Center | Conway | Faulkner |
| Baptist Health | Fort Smith | Sebastian |
| CHI St. Vincent | 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



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

Over **99%** are within a 60-minute drive."

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

*Overlapping site locations adjusted to improve visibility

FY 2024 Goals

- Increase education to minority populations to address disparities and gaps to improve treatment outcomes
- Decrease time between patient arrival and CT scan
- Decrease overall door in/door out times for pathway patients

FY 2023 Goals Update

- Decrease time between patient arrival and connection to the IDHI Call Center**
 - Median door-to-call center time decreased from 28 minutes in CY 2021 to 26 minutes in CY 2022.
- Decrease time between patient arrival and CT scan for patients arriving by privately-owned vehicle (POV)**
 - Average door-to-CT time for POV arrivals increased from 18.8 minutes in CY 2021 to 23.3 minutes in CY 2022.
- Decrease overall door in/door out times**
 - Average door in/door out time increased from 151 minutes in CY 2021 to 178 minutes in CY 2022.

IDHI Stroke Program Staff



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Robin Banks
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Jennifer McCurry
Clinical Nurse Educator



Julia Weatherford
Clinical Nurse Educator



Cynthia West
Clinical Nurse Educator



Stroke Program



Brandi Alred
Clinical Nurse Educator




From the Director of Operations

Success never comes in a day. It comes with strong determination and hard work.

For 15 years, the stroke program has built, improved, overcome obstacles and sustained success in treating acute ischemic stroke across Arkansas. Thanks to partnerships with emergency departments across the state and funding and support from the Arkansas Department of Human Services Division of Medical Services Medicaid, citizens of Arkansas have lifesaving ischemic stroke treatment available to them in their own communities.

The stroke program team continues doing excellent work to provide education and training to health care providers at the sites and prehospital facilities, and to perform community outreach activities to educate Arkansans on the signs of stroke. We also recognize and appreciate the medics and nurses in the call center, video support, and vascular neurologists—their contributions are invaluable to the program and its success.

We welcomed three new sites to the program who are already providing great stroke care and education in their regions of the state: Northwest Health Emergency Department in Bentonville (Centerton), Sevier County Medical Center in DeQueen and Unity Health in Jacksonville. From eight sites in 2008 to 62 at present, the program has grown and established itself as a leader in stroke care in the nation.



Lori R. Berry, MNsc, RN, CNOR
Director of Operations, IDHI Stroke Program



From the Medical Director

The IDHI Stroke Program has played a pivotal role in improving stroke care and reducing stroke mortality in Arkansas over the past 15 years. The COVID-19 pandemic undoubtedly presented challenges to health care systems worldwide, and it has had a significant impact on stroke care in Arkansas. However, it is reassuring to know that despite the roadblocks caused by the pandemic, stroke care in Arkansas is getting back on track, as evidenced by the increased number of patients and treated consults.

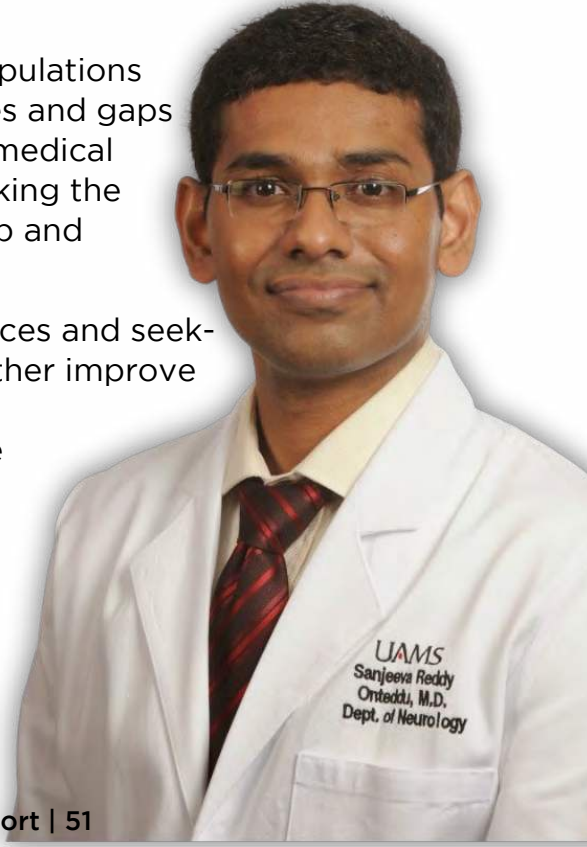
The focus on stroke education oriented toward minority populations in the state is crucial. It is essential to address any disparities and gaps in education that hinder identification of stroke and timely medical attention. Identifying areas for targeted education and tracking the outcomes in those communities will help in bridging the gap and improving stroke care for everyone.

Promoting awareness, implementing evidence-based practices and seeking out innovative approaches to unique challenges will further improve stroke care and outcomes in Arkansas. The dedication and commitment of every one of us will undoubtedly contribute to further advancements in stroke care.

Respectfully,



Sanjeeva Reddy Onteddu, M.D.
Medical Director, IDHI Stroke Program



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Health & Innovation

Stroke Program