

UAMS IDHI STROKE PROGRAM

2021 Annual Report



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Dear Readers,

Throughout the past year, digital health and digital communication tools have been essential and utilized like never before. Due to the COVID-19 pandemic, virtual visits specifically have been used to provide safe and effective health care when in-person visits weren't possible.

The UAMS Institute for Digital Health & Innovation (IDHI) Stroke Program is a digital health model that has helped institutions for nearly 13 years, including through the pandemic when new stroke concerns arose. A key player in providing emergency stroke care across rural Arkansas, the Stroke Program offers remote consults for patients and providers and educates patients, providers and the general public on stroke care. Before this program started, Arkansas ranked worst in the nation (50th of 50) for stroke mortality. The Stroke Program has helped our state reach a new and exciting milestone during one of the nation's most challenging times. Arkansas has improved to 38th of 50 for stroke mortality, a significant improvement. Though there is still room for improvement, this accomplishment is something to celebrate, along with the addition of new program partners. The program is now at 56 sites, making all but two of the state's emergency departments an acute stroke ready facility.

Just like many other programs, the Stroke Program's community outreach transitioned to virtual platforms during the pandemic. Happily, outreach participation has increased more than 24% as program leaders shifted focus to public service announcements, monthly challenges, newsletters and virtual conferences. In 2019, the program and its partner hospitals held 1,868 events that reached 197,766 attendees. In 2020, 1,717 events reached 246,786 attendees.

I am proud of all that the IDHI Stroke Program has accomplished. I have no doubt that the program will continue to improve health outcomes in Arkansas for years to come.

Respectfully,

Joseph Sanford, MD

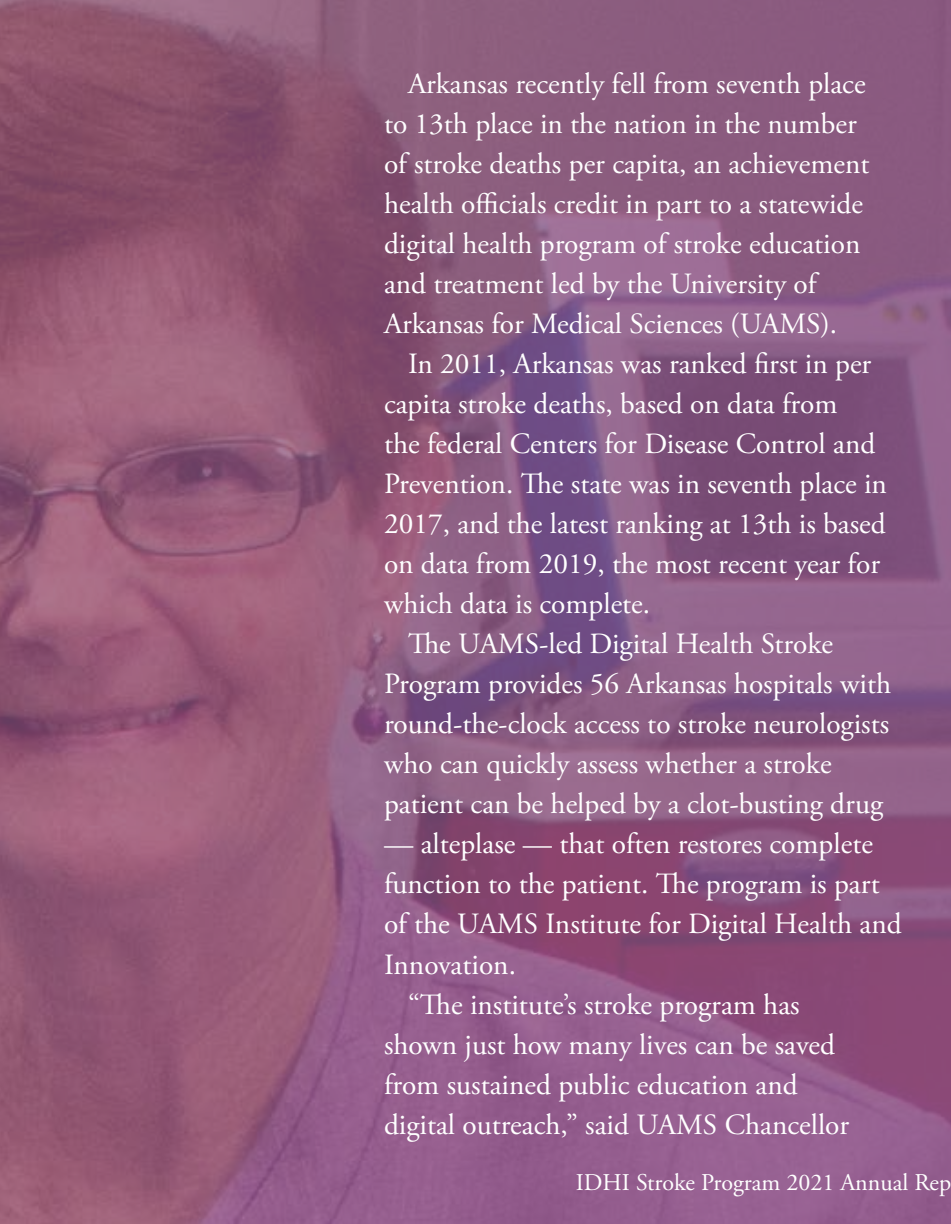
Associate Vice Chancellor - CCIO

Director, Institute for Digital Health & Innovation

UAMS-Led Digital Health Stroke Program Helps Improve Arkansas' Stroke Deaths Ranking



*Stroke Survivor Freda
Dodd at Arkansas
Methodist Medical Center*



Arkansas recently fell from seventh place to 13th place in the nation in the number of stroke deaths per capita, an achievement health officials credit in part to a statewide digital health program of stroke education and treatment led by the University of Arkansas for Medical Sciences (UAMS).

In 2011, Arkansas was ranked first in per capita stroke deaths, based on data from the federal Centers for Disease Control and Prevention. The state was in seventh place in 2017, and the latest ranking at 13th is based on data from 2019, the most recent year for which data is complete.

The UAMS-led Digital Health Stroke Program provides 56 Arkansas hospitals with round-the-clock access to stroke neurologists who can quickly assess whether a stroke patient can be helped by a clot-busting drug — alteplase — that often restores complete function to the patient. The program is part of the UAMS Institute for Digital Health and Innovation.

“The institute’s stroke program has shown just how many lives can be saved from sustained public education and digital outreach,” said UAMS Chancellor

Cam Patterson, M.D., MBA. “This is a milestone achievement for the program, institute and UAMS.”

The program uses a high-speed video communications system that enables a stroke neurologist to evaluate patients at partner hospitals that lack such specialists. Patients must be evaluated and treated within the critical 4.5 hour period following the first signs of stroke. Since the program began Nov. 1, 2008, more than 9,500 patients have received stroke consultations through the Digital Health Stroke Program.

The Digital Health Stroke Program has treated more than 3,200 patients with alteplase through its network of hospitals. The program also conducts statewide outreach to educate the public on how to recognize and get help fast for those having a stroke.

“Ten years ago, stroke neurologists were out of reach for many Arkansans, especially those in rural areas,” said institute Director Joseph Sanford, M.D. “Timely treatment is essential to saving lives and preventing debilitating deficits. A key part of digital health is about bridging the gaps to definitive care that physical distance can create. These tools rely

on collaborating teams of physicians, nurses, and health professionals to make fast access possible at any participating hospital in the state. We are grateful for their partnership.”

One of thousands helped by the program was Freda Dodd of Marmaduke. On the morning of Feb. 24, 2017, Dodd, then 61, received a text message on her phone. She was confused and didn’t know what to do in response. Her husband recognized her symptoms, including loss of speech and paralysis in one arm, and took her to Arkansas Methodist Medical Center in Paragould.

There, after a video consultation with a UAMS neurologist, she received alteplase. An air ambulance transported her to UAMS Medical Center.

“It seemed like within minutes my arm was coming back,” Dodd said. “When I got in that ambulance, I started to sing. Everybody was good to me at UAMS and in Paragould. I am so thankful for life. When I began to thank the Lord and sing in that helicopter, I knew my words were coming out normal, I was as normal as I have ever been.”

Dodd said she has no lasting impairments from the stroke.

“Stories like Freda’s are why we do this every hour of every day,” said Lori Berry, MNSc RN CNOR Digital Health Stroke Program director. “They are the faces in front of the numbers. As impressive as the new ranking is, we are not stopping at 13th. We are constantly working to improve response times and the network that makes improved stroke care possible for Arkansans.”

“When I got in that ambulance, I started to sing. Everybody was good to me at UAMS and in Paragould. I am so thankful for life. When I began to thank the Lord and sing in that helicopter, I knew my words were coming out normal, I was as normal as I have ever been.”

— Freda Dodd

Monticello Man Grateful for More Family Time after Stroke Recovery



Bill Whiting laughs with his grandson, Cam, on an afternoon walk.

Bill Whiting, 67, of Monticello doesn't remember a lot about what happened to him on Aug. 9, 2020. But he does know he called his wife.

"He was mumbling," Mary Whiting said. "I couldn't understand what he was saying. I told him I'm on my way home."

She arrived within 10 minutes to find their home in disarray. Bill Whiting had broken things as he tried to get around. He had fallen at least once and was bruised from his neck to his hip. The left side of his face was drooping and his balance was off because he could only operate the right side of his body.

"It was obvious to me he was having a stroke," she said.

The Whitings have two adult sons. Will Whiting and his spouse live in Austin, Texas. Matt Whiting and his spouse live in Conway with their 3-year-old son Camden. The Whiting boys played a lot of baseball growing up.

"There's probably a bat in just about every room of the house," Bill Whiting said. "When Mary saw I couldn't walk or stand, she went and grabbed a bat and asked me to lean my good side on the bat. She propped up my left side and got me to the car."

Mary Whiting, who is now director of admissions and recruitment at the University of Arkansas in Monticello, used to be a nurse and spent time working in the operating room and emergency room. She was relieved to see a familiar face

once they reached the emergency room: Haley Edwards, a registered nurse.

"Haley asked me what I was doing there. I said, 'Bill's having a stroke.'"

The health care professionals at Drew Memorial acted immediately. Drew Memorial is one of 56 Arkansas hospitals that are part of the UAMS-led Digital Health Stroke Program. These hospitals have round-the-clock access to stroke neurologists who can quickly assess stroke patients.

Mary Whiting also called her brother, Steve Metzger, M.D., a retired neurologist who practiced at UAMS. After a digital health consultation with a neurologist at the UAMS Medical Center, doctors at Drew Memorial quickly administered recombinant tissue plasminogen activator (alteplase), a clot-busting drug. Soon after, Whiting was on a helicopter to UAMS, central Arkansas' only comprehensive stroke center. At UAMS, Interventional Neuroradiologist Adewumi O. Amole, M.D., performed a surgical thrombectomy to remove the clot. Neurologist Krishna Nalleballe, M.D., monitored Whiting's progress as he recovered from the stroke. Whiting's heart was later evaluated by Hakan Paydak, M.D., a UAMS cardiologist.

"The benefits of a comprehensive stroke center like UAMS is that you have all neuroscience specialties like interventional neuroradiology, neurosurgery and neurology," Amole said. "We have state-of-the-art equipment and a team skilled in managing acute ischemic and hemorrhagic stroke."

At the time, the UAMS Medical Center was under visitation restrictions because of COVID-19. While Mary Whiting would have preferred to be by her husband's side while he was hospitalized, she says the staff did a great job of checking in and keeping her updated.

Immediately after his stroke, Bill Whiting scored a nine on the National Institutes of Health Stroke Scale/Score (NIHSS). NIHSS is a tool health care professionals use to quantify the severity of a stroke. The score can range from zero to 42. A score of one to five is considered mild. Anything over 25 is very severe. Twenty-four hours after treatment, Whiting's score improved to a two. He was at a zero by the time he was discharged from UAMS on Aug. 12. He scored another zero when he was reexamined during his 90-day follow-up.

The Digital Health Stroke Program has had a significant effect on the state's stroke outcomes. Arkansas recently fell from seventh place to 13th place in the nation in the number of stroke deaths per capita.

"His mind is as sharp as it ever was," Mary Whiting said. "This is the perfect example of what the coordination of care can do between hospitals. I was ready to face the worst. This coordination saved him from not being able to function."

When Bill Whiting left the hospital, his family gathered at their son's home in Conway, grateful for the opportunity to make more memories together.

Whiting has since gone back to his job at Potlatch Deltic Corporation, where he is a client lands manager. He's lost 30 pounds and has been more active. His grandson Camden may be responsible for some of the increased activity. Mary Whiting says her husband "lights up at the thought of seeing Cam." Camden became a big brother on May 5 with the birth of his little sister. Whiting now has two grandkids to enjoy.

"We're grateful for the way everything worked out," Mary Whiting said. "One minute we were thinking he could die. Then the news improved to the possibility of him being paralyzed or unable to speak. Three days later we were told we could come pick him up, and he was able to walk. It's amazing. We credit the coordination of care and the help of the good Lord."

The IDHI Stroke Program team would like to express their gratitude to MJ Orellano and Marzella Backus of the UAMS Comprehensive Stroke Center for making this stroke survivor story possible.

Bill Whiting



COVID CONVERSATIONS

IDHI Leverages Relationships to Address Rural Provider's COVID Concerns

As the COVID-19 pandemic threatened Arkansas in March of 2020, many physicians and nurses across the state had more questions than answers about the disease. Thanks to the relationships fostered through the IDHI Stroke Program, rural healthcare providers pointed their questions to program administrators.

When questions came in, they were doled out to expert physicians and nurses at UAMS. It was about that time that Renee Joiner, clinical program director for the UAMS Institute for Digital Health & Innovation partnered with Terry Collins, director of the UAMS Trauma and Acute Care Services in early spring to meet the demand for information.

COVID-19 ED2ED All Sites Calls were quickly created as town hall style video discussion sessions to provide a venue for ED physicians, nurses, respiratory therapists, infectious disease specialists and emergency management staff to ask questions, share experiences and seek guidance on the treatment of COVID positive patients and safety measures for their staff.

The first meeting took place 12 days after the first presumptive positive case was reported in Arkansas. Since then, more than 1,100 of the state's health care professionals have taken part in 25 meetings to share experiences and learn more about COVID-19.

"The people on the other end didn't have a lot of questions at first because they didn't know what to ask," Collins said. "As time has gone on, they have had more specific questions for the subject matter experts as they have learned more from them."

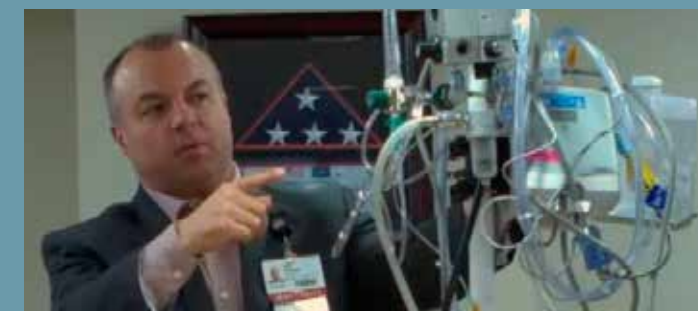
Those questions helped shape how UAMS responded, and participants shared what they were experiencing in different hospitals across the state, adding to what UAMS physicians and nurses knew about what was going on outside of UAMS.

Many of our partner hospitals do not have ICU capability or have limited ICU capability. A "Critical Care of COVID-19 Patients for Nurses" training course was developed under Collins. This course was provided virtually, reached 359 nurses across the state and awarded more than 600 hours of continuing education credits. Kelly Urban,

Ph.D., M.Ed., R.N., taught four of the sessions and a fifth session was taught by Urban and Tammye Whitfield, M.Ed., registered respiratory therapist. A physicians Q&A series was also provided virtually with Nhan "Marc" Phan, M.D., Kevin Sexton, M.D. and Franklin "John" Gray, M.D. presenting case studies and evidenced based resources.

With support from the IDHI's leadership and newly available grant funding, what started as a question from a site looking COVID in the eyes, has turned into a continuously growing project.

"There are so many who had a role in this outreach effort," said Joiner, "My team often hears from me that everything comes down to relationships. It is because of our outreach nurses, educators and administrators' strong relationships with the emergency department professionals across the state that they trust us to help. "



Jeff Halbert, director of UAMS Respiratory Care, discusses the use the high-flow nasal cannula on an All Sites Call

“As the pandemic continued, we continued to learn,” said Baylee Field, project manager for the COVID Education initiative. “Just as clinicians were pivoting their practices to adapt to new treatment considerations, the COVID Education team had to pivot and expand our efforts to more than just the COVID ED2ED All Sites Calls.”

As documentation and best practices were being shared on the all sites calls, a resource website for physicians was created to serve as a warehouse of UAMS protocols as well as additional provider information. The resource website also featured a submission form for questions to be answered by the UAMS panelists on calls as well as a case studies submission form.

The COVID education grant funding made it possible for the IDHI to purchase over 400 iPads to be distributed to sites across the state. The devices were configured with COVID-19 information. Through relationships with the IDHI Stroke Program partner hospital in Fort Smith, AR, the Good Samaritan Clinic found out about the iPads and jumped on the opportunity. Executive Director, Patti Kimbrough said “[The iPads] have been a huge asset when providing health education to our 5,000 plus patient base, at the Good Samaritan Clinic. Our providers in the past have tried to use their personal hand held devices, but it was always cumbersome and difficult to see. The iPads have made this so much easier and we cannot thank UAMS enough for their continued partnership in education, for our charitable clinic and those we serve.”

When Arkansas saw its highest number of cases and hospitalizations, the project team decided to create the “COVID Conversations” podcast. Franklin “John” Gray M.D. and Kevin Sexton M.D. have hosted a variety of guests on the podcast from medical professionals to business owners, providing them a platform to share how the pandemic has impacted their everyday lives.

At the end of each episode, Dr. Gray asks every guest the same two questions.

The first is, “What keeps you up at night during the pandemic?” The responses have varied from “I’m afraid of bringing this virus home” to “e-mails keep me up at night”

The answers to the final question – What keeps you going? -- had a common theme.

“My family, my coworkers, my friends, my online book club, my patients.”

Relationships and Community. That’s what keeps us going.

*Baylee Field
delivering
iPads to Pattie
Kimbrough,
Good
Samaritan
Clinic
- Fort Smith.*



Meeting Adversity with Innovation

The COVID 19 pandemic forced the world to find new ways to conduct business and the IDHI Stroke Program was no exception. At the height of the surge, ICUs across the state were at maximum capacity forcing rural hospitals to care for high acuity patients.

Stroke patients who receive the clot-busting drug alteplase typically require transfer to a higher level of care for close observation in the intensive care setting, as well as neurological re-evaluation after 24 hours. It was not by chance that the infrastructure to overcome the shortage of beds was in place long before it was needed.

The program transitioned to a temporary care model built on the foundation of an existing pilot initiative. The pilot

began in 2019 and provided evidence-based post-alteplase care instructions and 24-hour neurology consults to two hospitals without a continuous neurology presence, eliminating the need to transfer the patient to another facility. The overall goal of the pilot was to allow patients to remain close to home while providing partnering hospitals resources and around-the-clock support via digital health.

When adversity was met with innovative ideas and processes, post-alteplase patients were able to be safely and successfully treated in their community’s local hospital. The pilot was a success with positive outcomes for patients who participated and the processes in place provided a smooth transition of care when adversity struck.

Consult Score Sheets

January 2020 began a new era of quality improvement for the IDHI Stroke Program with the implementation of the “Consult Score Sheet”. The score sheet enabled the IDHI Stroke Program staff to gain an objective view of clinical performance during consults and improve interrater reliability. Performance on each step of the consult is marked “complete without error”, “complete with minimal error”, or “needs improvement”. Results are tallied to arrive at the “nurse performance score”. Time target performance is then factored in and weighs heavily on the overall consult score. Using Redcap, a data processing software, score sheets of each consult

are entered into an online database offering fully customizable reporting capability.

Equipped with the ability to easily identify trends in clinical performance, the IDHI Stroke Program is now able to offer customized training on IDHI Stroke Program protocols, workflow efficiency, telemedicine equipment, the NIHSS exam, and alteplase administration to each partnering facility on a “needs” basis. The implementation of the consult score sheet also allowed for design and implementation of the program’s very first recognition program, the Stroke Champion Program.

Stroke Champion Clubs

Equipped with an objective view of clinical performance provided by the Consult Score Sheet, the IDHI Stroke Program team was able to build and implement our first-ever clinical recognition program, Stroke Champion. The Stroke Champion Program was developed through a collaborative effort between IDHI Stroke Program Staff and Nurse Facilitators from partnering facilities. Clinicians scoring ≥ 90 percent for clinical performance on the consult score sheet in addition to meeting or exceeding time target metrics are recognized and awarded membership in one of three “Stroke Champion Clubs”: Gold, Silver, or Bronze. Stroke Champion Club members are eligible for nomination for the regional “Stroke Champion Award”, which recognizes one clinician from each region of the state who demonstrates excellence in clinical performance, participation, leadership, and collaboration in stroke care.



Courtney Watson being recognized as a Gold Club Stroke Champion by Saint Mary's Regional Medical Center Nurse Facilitator, Tim Tanner



Lauren Holt awards Shelton Rose with Silver Club recognition at North Arkansas Regional Medical Center.



Hailey Clifton and Layla Fisher were inducted into the Stroke Champion Club at St. Bernards Medical Center, Jonesboro

	REQUIREMENTS	RECOGNITION
	<ul style="list-style-type: none"> $\geq 90\%$ nurse performance ≤ 30 minute door-to-needle time 	<ul style="list-style-type: none"> Stroke Champion Badge Buddy Gold sticker for Badge Buddy Stroke Champion Badge Reel Name called out at All Sites Introduction at Conference Group photo at Conference
	<ul style="list-style-type: none"> $\geq 90\%$ nurse performance 31-45 minute door-to-needle time 	<ul style="list-style-type: none"> Stroke Champion Badge Buddy Silver sticker for Badge Buddy Name displayed at Conference Group photo at Conference
	<ul style="list-style-type: none"> $\geq 90\%$ nurse performance 46-60 minute door-to-needle time 	<ul style="list-style-type: none"> Stroke Champion Badge Buddy Bronze sticker for Badge Buddy
<p>ALL CLUB LEVELS RECOGNITION</p>	<ul style="list-style-type: none"> Certificate indicating specific time target achievement to be delivered by Outreach Nurse at quarterly site visits Photos with Hospital Leadership, Nurse Facilitator, Outreach Nurse at quarterly site visits Achievements posted on social media by home facility & the IDHI Stroke Program Club achievement listed in clinical performance section of All Sites agenda for the months of November, February, May, & August 	

Consults with no alteplase administration are recognized when the overall consult score is 100%

Credentialing by Proxy

The Arkansas General Assembly passed Act 921 during the 2019 Regular Session to improve the credentialing verification process for remote physicians who provide telemedicine consultations to distant site hospitals.

This initiative, spearheaded by the Arkansas Hospital Association, has increased access to specialty care for patients in rural and underserved Arkansas communities and has substantially benefited health care programs throughout the state, including the IDHI Stroke Program.

Twenty-three of the IDHI Stroke Program's 56 partner hospitals currently use credentialing by proxy. Program leaders recommend all hospitals make the transition.

“Credentialing by proxy reduces the amount of paperwork that’s required for both our program and the credentialing offices at our partner hospitals.” said IDHI clinical program director Renee Joiner, RN, BSN.

Credentialing by proxy is a streamlined process that allows distant site hospitals to verify a remote provider’s credentials through the provider’s home hospital and forgo the requirement of a full credentialing verification packet, which typically costs about \$250; there is no charge to the Stroke Program’s partner hospitals for credentialing by proxy.

“Full credentialing of our remote physicians has been a barrier in our ability to expand digital health services in rural hospitals across the state,” said Joiner.

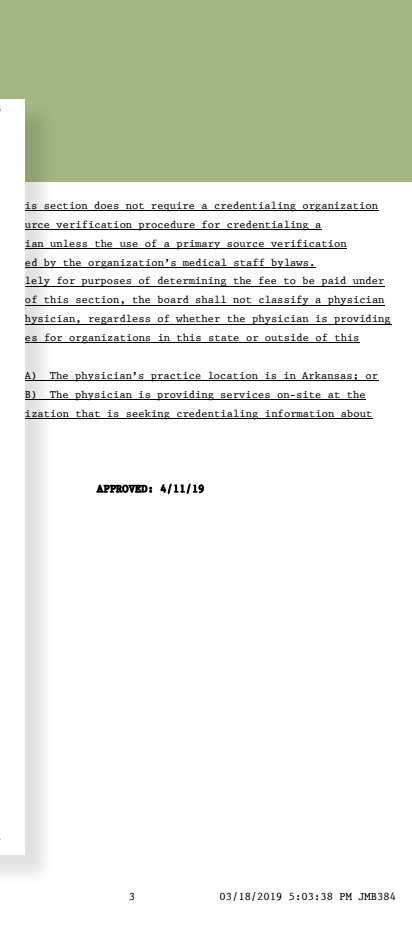
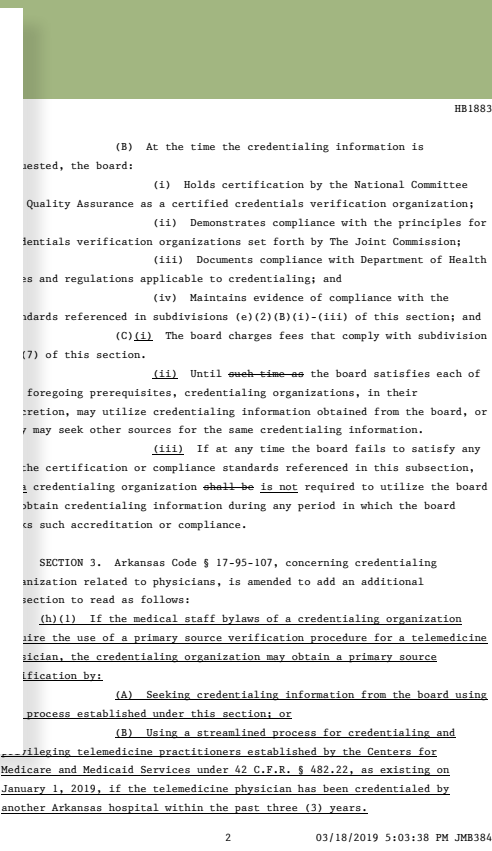
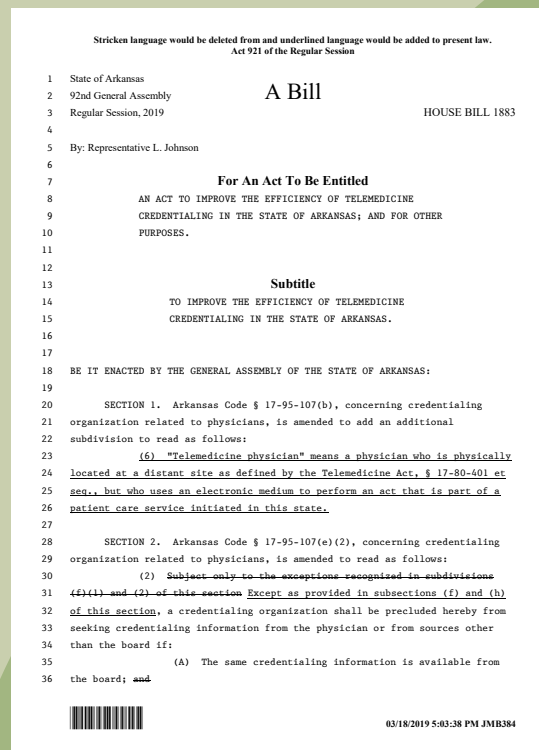
Every hospital has its own specific materials required for a full credentialing packet, which normally includes a series of mandatory shots and vaccines, several references, procedural logs, insurance claims and letters from program directors, in addition to other various documentation. In contrast, the credentialing by proxy packet is only three pages in length.

In order to use credentialing by proxy, the remote physician is required to actively practice at an Arkansas hospital. The distant site hospitals must also amend their bylaws to incorporate credentialing by proxy.

“Getting this legislation passed and working with our partner hospitals to adopt credentialing by proxy in their bylaws has been a huge step forward in expanding digital health services – not just for the Stroke Program but for all hospital-based digital health programs,” said Joiner.

The amendment process began after the Centers for Medicare & Medicaid Services (CMS) clarified terminology for credentialing by proxy for telemedicine.

Arkansas legislators then amended Act 921 to mirror the CMS modifications – less than a year before the COVID-19 pandemic would amplify the significance of digital health and its efficiency.





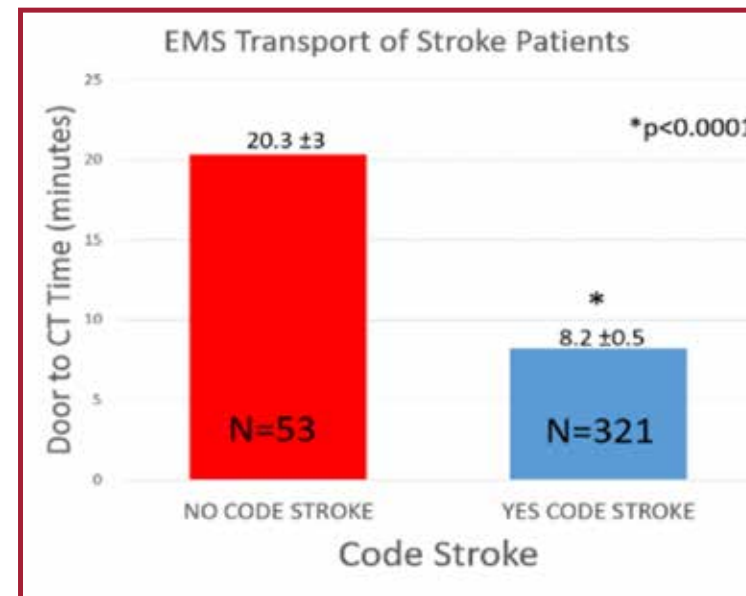
Tim Vandiver observes nurses performing the NIH Stroke Scale exam at Ozarks Community Hospital, Gravette

EMS Training is Making a Difference in Arkansas Stroke Care

For six years, the IDHI Stroke Program has provided stroke education designed specifically for our pre-hospital providers in Arkansas. The education discusses the impact and urgency of strokes, types of strokes and basic stroke physiology. Also included in this training is the universal screening BE FAST tool and the utilization of “Code Stroke” terminology when notifying the receiving Emergency Department (ED).

This class has been well received with more than 5,300 EMS personnel attending this training. This class offers two Continuing Education Units awarded by the Arkansas Department of Health EMS office. An online version of the course was developed this year for use during the pandemic, providing all EMS personnel with access to training.

Stroke patients transported by EMS were treated faster than private vehicle arrivals to the ED. The training is working, and the utilization of “Code Stroke” is saving brains.



Patients arriving by EMS with “Code Stroke” activation had door to CT times 12 minutes faster than the Non Code Stroke arrivals.

Data note: 62% of all EMS transported stroke patients were treated in less than 60 minutes whereas 42% of patients who arrived by privately owned vehicle were treated in less than 60 minutes.



Crossett Fire Department EMS during a Code Stroke and EMS training (photo was taken pre-COVID).

2020 IDHI Stroke Program Conference



Saint Mary's Regional Medical Center - Russellville.

The COVID-19 pandemic has certainly wreaked havoc across the globe, but it didn't stop the creativity and dedication of the heroes in scrubs who gathered virtually for the first time at the 12th Annual Institute for Digital Health & Innovation (IDHI) Stroke Program Conference on Sept. 22.

The conference is typically held in-person with over 400 participants, but in 2020, the program quickly pivoted to a virtual platform.

"COVID-19 has brought about many changes to our way of life. One of them is a renewed appreciation for all you do," said Renee Joiner, the institute's clinical program director, after walking on the stage to welcome conference participants while sporting a lime green Hazmat suit.

The conference is normally held over the course of three days but transitioned to a one-day event filled with expert panel discussions and presentations in the fields of neurology, emergency services and quality improvement.

A week before the conference went live, registered participants received conference themed "Heroes In Scrubs" swag bags filled with a tumbler, pen, T-shirt and in true 2020 fashion – a mask.

While the virtual shift was unexpected, it had its advantages. Since conferences are now just a click away, this was the first time the stroke program could expand its reach to a broader audience, specifically to those interested in stroke education, information, networking – and inspiration.

Motivational speaker Pamela Crim energized attendees through the screen during her "Powerful Not Pitiful" presentation. Nearly two decades ago, Crim nearly collapsed at work and when she finally made it to the hospital, it took eight hours for medical staff to discover that she had a major stroke at just 19 years old. At the time, many emergency services personnel and health care providers in her home state of Missouri didn't have stroke training.

While in the hospital, she recounted her struggles and explained how a compassionate nurse, filled with tough love, sparked her road to recovery.

"My nurse was a game changer," Crim said. One effect of the stroke was temporary paralysis, so she needed to

re-learn motor skills. But in frustration, she often gave up, and her husband would help her. However, all that changed one night when this particular nurse came in.

"She said 'Mr. Crim, if you keep feeding her, you'll be feeding her for the rest of her life,' Crim recounted. "She gave my husband permission to let me struggle. From then on, he never offered me pity, instead, he offered me power."

Crim suffered a second stroke four years later when she was pregnant with her first child and also had a series of mini-strokes after her baby was born. Doctors couldn't determine why she was having strokes, especially at such a young age, and after being worried that she'd have to deal



Medical Center of South Arkansas in El Dorado masked up to watch the virtual conference

2020 IDHI Stroke Program Conference

with the uncertainty for the rest of her life, a new physician finally offered her hope.

He diagnosed Crim with antiphospholipid syndrome, a treatable autoimmune disease that creates antibodies and can result in blood clots. She hasn't had a stroke in more than 20 years and credits her strokes for giving her purpose. During her presentation, she also emphasized the emotional role that caregivers play in the road to recovery.

"Never, ever offer pity. Pity can be more crippling than the stroke itself," Crim said. "As a health care provider, you have the opportunity to impact the family and teach them that pity will not help their loved one. You have to give them courage and confidence. Regardless of their prognosis, see their potential."

Crim's experience, and this year's COVID-19 outbreak, amplify the significance of digital health and innovation, and experts discussed the monumental role technology and communication have served in providing the best care for stroke



Nurses gather at Ozark Health Medical Center to watch the virtual conference.

patients – an initiative that the stroke program began from inception in 2008.

Later in the day, Franklin John Gray Jr., M.D., presented the connection between coronavirus and strokes, including developments that were implemented to treat patients. Gray, an assistant professor in the UAMS Division of Internal Medicine in the College of Medicine, explained that stroke patients who tested positive for COVID-19 had a 63% mortality rate as opposed to 6% mortality rate from solely having a stroke, according to a New York Health System study. He also discussed how coronavirus stringently limited access to health care and rehabilitation services for stroke patients and how hospitals have used

digital health visits to increase accessibility to medical services.

While participants were disappointed they couldn't physically gather to celebrate each other's successes, they were provided with educational and networking opportunities through engaging activities, including stroke program trivia and a physician luncheon.



Howard Memorial Hospital tuned into the conference wearing their "Heroes in Scrubs" masks!

IDHI Stroke Program Conference 2020 **AWARDS**

Door to Needle Award: This award is presented to the hospital with the fastest Door to Needle Time.

Site Excellence Award: Awarded to sites that met and exceeded the contract deliverables, performed multiple mocks each month, had 100% All-Sites attendance, did excellent community outreach, met deadlines for data submission, and went above and beyond the expectations of a site. This is the highest honor awarded to a hospital.

Honorable Mention Award: Presented to sites that have met the basic requirements and have made improvements with many of their internal processes, training and outreach during the past year.

EMS Certificate of Excellence Award: Nominated by an IDHI Stroke Program site that they serve. 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, and participate in community outreach and process improvement.

Directors Choice Award: Chosen by the IDHI Stroke Program Director for contributions to the IDHI Stroke Program.

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

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

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

Stroke Program All-Star: Nominated by the IDHI Stroke Program staff for their performance in improving our program.

Call Center Call Out Award: Presented to our call center staff who have exceeded in their service and training of our nurses at our IDHI Stroke Program sites.

Outstanding Facilitator Outreach Award: This award is presented to the nurse 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.

Community Outreach Award: This award is presented to Stroke 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.

24 MINUTE DOOR TO NEEDLE AWARD Saint Mary's Regional Medical Center Russellville, AR



SITE EXCELLENCE AWARDS



Ashley County Medical Center
Crossett, AR



Baxter Regional Medical Center
Mountain Home, AR



Conway Regional Medical Center
Conway, AR



Ozark Health Medical Center
Clinton, AR



Saint Mary's Regional Medical Center
Russellville, AR

IDHI Stroke Program Conference 2020 **AWARDS**

HONORABLE MENTION AWARDS



Arkansas Methodist Medical Center
Paragould, AR



Fulton County Hospital
Salem, AR



Lawrence Memorial Hospital
Walnut Ridge, AR



North Arkansas Regional Medical Center
Harrison, AR



Northwest Medical Center Springdale
Springdale, AR

EMS CERTIFICATE OF EXCELLENCE AWARD



North Arkansas Regional EMS
North Arkansas Regional Medical Center
Harrison, AR



Southwest EMS
Mena Regional Hospital
Mena, AR



DIRECTOR'S CHOICE AWARD

Renee Joiner presents Phillip Martin with the Director's Choice Award at the 2020 Virtual Stroke Program Conference.



PHYSICIAN CHAMPION AWARD

Dr. Patrick Fox and Nurse Facilitator Tony Tackett, Mena Regional Hospital Mena, AR



STROKE HERO

IDHI Stroke Program outreach nurse, Jennifer McCurry, presents Brittany Savage of Saint Mary's Regional Medical Center the 2020 Stroke Hero Award.

ALL STAR AWARD



Shelia Crymes
Stone County Medical Center



Lauren Elliott
North Arkansas Regional
Medical Center



Baylee Field
IDHI Stroke Program



Pam Hackett
McGehee Hospital



Renee Moncrief
Jefferson Regional Medical
Center



Tony Tackett
Mena Regional Medical Center

CERTIFICATE OF APPRECIATION



Austin Porter III, DrPH, MPH



Nathan King
UAMS e-Link Program
Manager

CALL CENTER CALLOUT



Samantha Hanard,
NREMT



William Tremaine, BSN,
NREMT

OUTSTANDING FACILITATOR



Tim Tanner
Saint Mary's Regional Medical
Center Russellville, AR

COMMUNITY OUTREACH



Pam Adams
Northwest Medical Center
Springdale, AR



Sarah Cochran
Fulton County Hospital
Salem, AR



Amanda Ford
CHI St. Vincent
Hot Springs, AR



Shawna Hawkins
Ashley County Medical Center
Crossett, AR



Mark Holden
St. Bernards Medical Center
Jonesboro, AR



Kimberly Slaughter
Dallas County Medical Center
Fordyce, AR

2021 Virtual Nurse Facilitator Retreat

The IDHI Stroke Program's 5th annual Nurse Facilitator Retreat resumed virtually in May 2021 after the event was canceled last year due to the COVID-19 pandemic.

To open the two-day retreat, program director Lori Berry welcomed the 189 attendees and recognized their dedication to their patients and respective communities during the pandemic.

"The phenomenal teams across the state have risen to the challenges and continue to provide excellent care of stroke patients in Arkansas communities," said Berry. "Unprecedented obstacles and uncertainties were met with courage and tenacity, and it resulted in patients receiving the care they need."

During the retreat, nurse facilitators participated in various sessions where presenters discussed improvements made to consult score sheets, strategies to decrease door-to-call center times and opportunities for collaboration to educate staff and Arkansas communities on stroke awareness.

Outreach nurse and Stroke Program EMS educator, Tim Vandiver, also provided training options for continuous improvement and collaboration with EMS agencies to ensure accountability, community education, mock drills

and process improvement to enhance patient care and improve door-to-needle and door-to-CT scan times.

"When EMS is involved in the stroke process, especially the calling in of a CODE Stroke, we are saving about 12 minutes per patient when everyone is working together as a team. That's a lot of brain cells," said Vandiver, emphasizing that 32,000 brain cells die each second someone has a stroke.

"The more time we save on treating these patients, the better our patient outcomes are going to be," he added.

Monthly mock drills, or simulation training, is required for each spoke site, giving medical personnel the opportunity to practice and improve stroke protocols in a real-life learning environment, but program leaders suggested nurse facilitators include non-medical personnel in their drills in order to educate a variety of staff on stroke symptoms and procedures.

Teaching non-medical personnel, such as patient transporters, security, social workers, administrative clerks and others the signs to look for and steps to follow can result in quicker response times, faster door-to-needle times and better patient outcomes.



IDHI Stroke Program Health Educator, Ariel Washington, presenting as the audio-visual team broadcasts to sites.

"Your hospitals and your departments are full of untapped potential," said Julia Weatherford, the program's outreach nurse for central Arkansas.

She also mentioned that including lay personnel could help foster a sense of community within a department in working towards a common goal.

"There are many different professions that go into making a cohesive and collaborative effort within a hospital," said Weatherford. "The more diversity you have in stakeholders, the more capacity you have for change."

Working together "allows for multiple sets of extra eyes to be on the patient at all times, and it's an opportunity to alert medical personnel of a sudden change in a patient's condition," she said.

Along with live demonstrations and Q&A sessions for outreach opportunities, retreat facilitators provided participants with tips on how to conduct public stroke presentations and host virtual and in-person outreach events such as stroke booths at sporting events.



Sarah Cochran is off to deliver BE FAST swag at Fulton County Hospital!



Renee Moncrief, Nurse Facilitator at Jefferson Regional Medical Center shows off their new swag wagon!

COMMUNITY OUTREACH

Arkansas Communities Mask Up for Stroke Awareness:

Have you seen these masks around your town? If not, you will very soon! Hospitals across Arkansas have distributed the BE FAST masks throughout their communities. Since the first masks were ordered in December 2020, more than 33,000 masks have been distributed to every corner of the state. These masks are being used not only to prevent the spread of COVID-19 but also serve as an educational tool for stroke awareness. Each mask has the message “Is it a stroke? Call 911!” and also includes the acronym for stroke symptoms –BE FAST. Each letter in BE FAST contains a picture to help identify each symptom. The consistent messaging of BE FAST, combined with masking up for COVID-19, has helped to raise stroke awareness in communities all over Arkansas amid the pandemic. Remember to mask up and know the signs and symptoms of stroke!



#BEFASTforPhysicians

One of the spoke site nurse facilitators presented an idea to create a tool kit that would educate physicians and their patients on the signs and symptoms of stroke in Arkansas’ rural communities. The concern was local physicians would not be familiar with the IDHI Stroke Program (formerly AR SAVES). The physician tool kits provide an opportunity for physicians to discover the unique capabilities of the statewide stroke program while educating patients during an office visit. Each kit includes two BE FAST posters for general community education, 25 BE FAST pens and magnets and five note pads for the staff. These items will help educate members of each community by teaching them common signs and symptoms of a stroke and why it is crucial to seek medical assistance quickly by calling 911.

Every Minute Counts

The IDHI Stroke Program announced a new monthly initiative to focus education efforts on a target population for 2021. Each participating hospital is responsible for reaching local partners and collaborating with EMS, physician offices, clinics, skilled nursing facilities and schools, in addition to educating their family, friends and colleagues.

October 2020 #BEFASTWorldStrokeDay

On Oct. 29, Stroke Awareness ribbons were worn by health professionals across Arkansas to raise awareness of the signs and symptoms of a stroke.



Arkansas Methodist Medical Center used pumpkins to teach the signs and symptoms of stroke in October!



Ashley County Medical Center staff sporting their stroke awareness ribbons and BE FAST poster on World Stroke Day!

November 2020 #BEFASTForGrandparents

In November, we focused on virtual learning to educate students on the signs and symptoms of a stroke using the Grandpa’s Crooked Smile book.



Candice Baldwin, Jayme Smallie, Jeremy Stogner, and Denise Smith of Saline Memorial Hospital with Grandpa’s Crooked Smile.

December 2020 #JingleForStroke

In December, the first annual Stroke Awareness Holiday Tree Competition was introduced. Each hospital was tasked with decorating a tree with stroke education materials.



Ouachita County Medical Center's BE FAST Stroke Awareness Tree.



White River Medical Center Batesville decorated their stroke awareness tree in true COVID fashion!

January 2021 #BEFASTForPhysicians

Physician tool kits provided an opportunity for physicians to discover the unique capabilities of the stroke program while educating each patient during an office visit.

February 2021 #BEFASTForMinorities

Stroke Program hospitals showed their support for minority health by creating heart collages with employees wearing red to educate their communities on stroke signs and symptoms.



Mena Regional Health System stepped up to the plate in February's challenge!

March 2021 #BEFASTForWomen

In light of National Women's Health Month and International Women's Day on March 8, Stroke Program hospital staff created collages with their mothers, sisters, aunts, and other important women in their lives. They used social media to further educate their communities on stroke and women's stroke statistics.



The IDHI Stroke Program Staff created their own collage for Women's Stroke Awareness month.

April 2021 #BEFASTForSeniors

The #BEFASTForSeniors tool kit was provided to Stroke Program hospitals to help them connect with skilled nursing facilities and rehabilitation facilities in their local areas. It provided the opportunity to educate staff on stroke signs and symptoms, and the risk for seniors age 65 and older.



Drew Memorial took BE FAST Swag to local skilled nursing facilities.

May 2021 #BEFASTStrokeAwarenessMonth

May was Stroke Awareness month! Every Monday in May, the Stroke Program Health Educators challenged sites to take their outreach to a new level. Sites educated their communities on the signs and symptoms of stroke through PSAs, by wearing red, and creating photo collages and sharing them on social media.



#BEFASTStrokeAwarenessMonth Saint Mary's Regional Medical Center.

Conway Regional Health System wore their red stroke awareness ribbons and BE FAST masks for their May is Stroke Awareness Month photo challenge!



June 2021 #BEFASTforMen

In June, the stroke program team put sites to the test with the first ever BE FAST quiz! Each hospital participant that aced the quiz received a crooked smile t-shirt with the BE FAST acronym on the back. More than 2,000 shirts were distributed across the state!



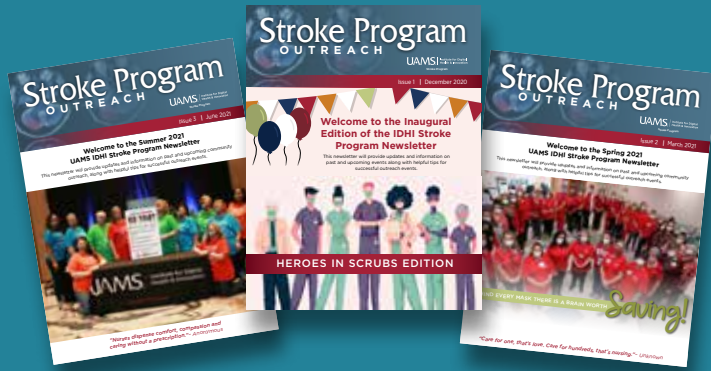
Drew Memorial Hospital sporting their new BE FAST Shirts after successfully completing June's #BEFASTforMen quiz!



These Mena Regional Health System men successfully completed the June BE FAST challenge!

Stroke 411!

The Stroke Program’s Community Outreach quarterly newsletters have been developed for the IDHI Stroke Program hospitals to stay up-to-date with ongoing and future stroke awareness initiatives. The newsletters provide partner hospitals with updates and information on past and upcoming events, including the virtual Nurse Facilitator Retreat and the Annual Stroke Program Conference. They were created to encourage and educate sites on new ways to complete outreach efforts in light of the covid-19 pandemic. Photo collages and creative events where partner hospitals educated their communities on stroke via social media, virtually or face to face are highlighted quarterly. Sites are celebrated and their amazing community outreach photos are shared to show them just how much we appreciate their continued effort despite the pandemic.



Stroke Public Service Announcements

The Stroke Program created Public Service Announcements (PSAs) to provide IDHI Stroke Program hospitals with additional assistance on stroke education during the pandemic. Each PSA is tailored to a specific community or theme to shine a light on stroke statistics, signs and symptoms. Partner hospitals post the PSAs on social media, internal hospital communications such as lobby televisions and computer screensavers, and use them as an added tool during face-to-face community events.

Minorities and Stroke PSA: This PSA is focused on minority health to educate minority populations on their risk factors, including what they can do to decrease their risk.

Women and Stroke PSA: This PSA is focused on women’s health and provides statistics and other information.

Seniors and Stroke PSA: This PSA is focused on senior citizen stroke statistics and the importance of family members, caregivers and skilled nursing facilities recognizing the signs and symptoms of a stroke.

Stroke Survivor Ambassadors Join Forces to Educate Arkansans

The IDHI Stroke Program team has introduced the Stroke Survivor Ambassadors, a new set of partners to help in the fight against stroke mortality. These Ambassadors share their stories by joining forces with their local hospitals and the IDHI Stroke Program team. By sharing their stories, the ambassadors will educate communities on the signs and symptoms of a stroke, as well as the importance of seeking treatment right away.

The goal for every stroke survivor is to prevent a stroke from disabling a family member, loved one, friend or fellow Arkansan. With the help of this new team of Stroke Survivor Ambassadors, the IDHI Stroke Program team plans to expand sharing real-life experiences with Arkansas communities with one goal in mind – to save a life.

Stroke Survivor Ambassador, Don Koger and his wife, Rebecca.



Stroke Survivor Ambassador, Dr. Michael Pafford.



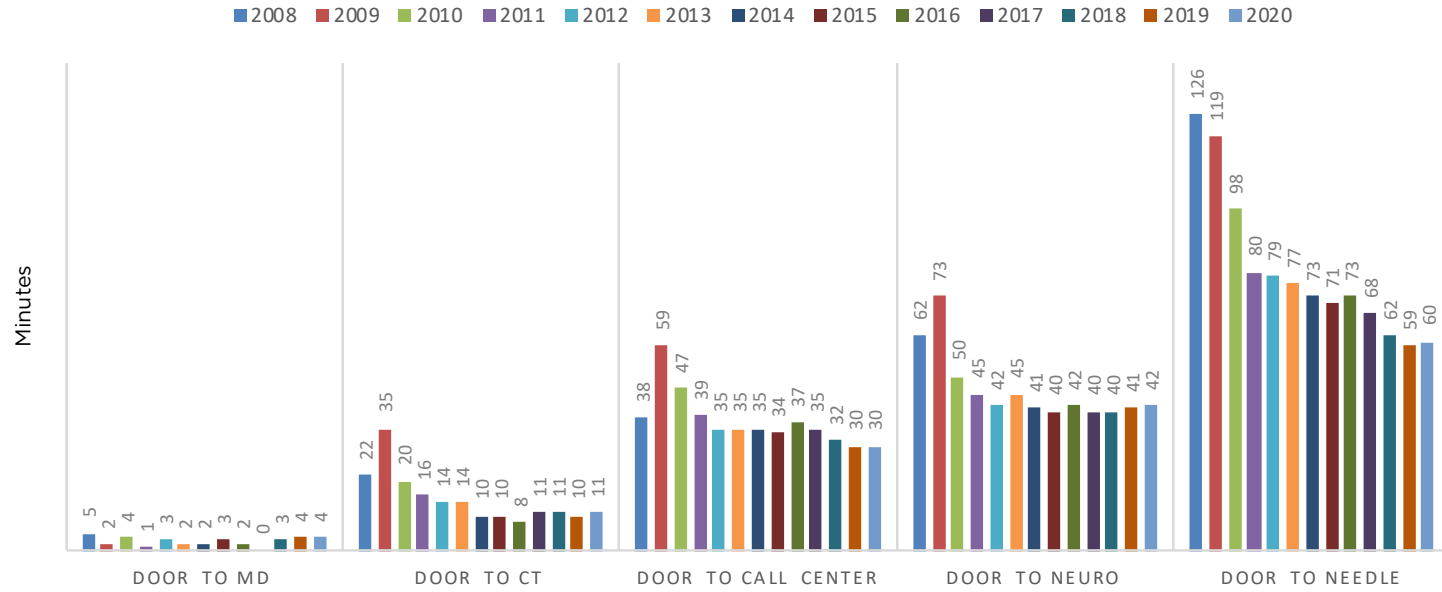
Stroke Survivor Ambassador, Lanetta Cothorn.

IDHI Stroke Program Sites around Arkansas

Spoke Sites	FY 2021 Totals					
Facility / City	Consults	Alteplase Administration	Consult Only	Quality Review	# Community Events	# Community Attendees
Arkansas Methodist Medical Center / Paragould	48	20	28	20	27	2,160
Ashley County Medical Center / Crossett	14	4	10	50	56	14,894
Baptist Health Medical Center / Arkadelphia	12	7	5	22	25	1,543
Baptist Health Medical Center / Conway	27	7	20	13	29	6,976
Baptist Health / Fort Smith	44	18	26	33	26	5,195
Baptist Health Medical Center / Heber Springs	18	6	12	13	26	856
Baptist Health Medical Center / Hot Spring County	7	3	4	20	26	2,719
Baptist Health Medical Center / North Little Rock	18	9	9	13	35	3,784
Baptist Health Medical Center / Stuttgart	16	7	9	12	25	1,467
Baxter Regional Medical Center / Mountain Home	93	43	51	20	28	6,299
Bradley County Medical Center / Warren	9	3	6	16	28	650
CHI St. Vincent Medical Center / Hot Springs	101	43	58	33	47	3,632
Chicot Memorial Medical Center / Lake Village	16	5	11	15	29	756
Conway Regional Health System / Conway	64	19	45	24	34	3,577
CrossRidge Community Hospital / Wynne	18	9	9	14	25	1,236
Dallas County Medical Center / Fordyce	6	3	3	16	77	21,975
Dardanelle Regional Hospital / Dardanelle	0	0	0	15	26	652
Delta Memorial Hospital / Dumas	2	0	2	15	32	1,573
DeWitt Hospital & Nursing Home / De Witt	5	4	1	14	37	6,275
Drew Memorial Hospital / Dumas	7	4	3	21	55	20,463
Eureka Springs Hospital / Eureka Springs	5	0	5	14	30	3,714
Fulton County Hospital / Salem	5	3	2	21	40	1,951
Great River Medical Center / Blytheville	22	9	13	48	34	2,833
Helena Regional Medical Center / Helena	7	4	3	12	25	1,402
Howard Memorial Hospital / Nashville	10	2	8	32	25	1,754
Izard County Medical Center / Calico Rock	0	0	0	25	44	4,557
Jefferson Regional Medical Center / Pine Bluff	49	23	26	13	26	6,120

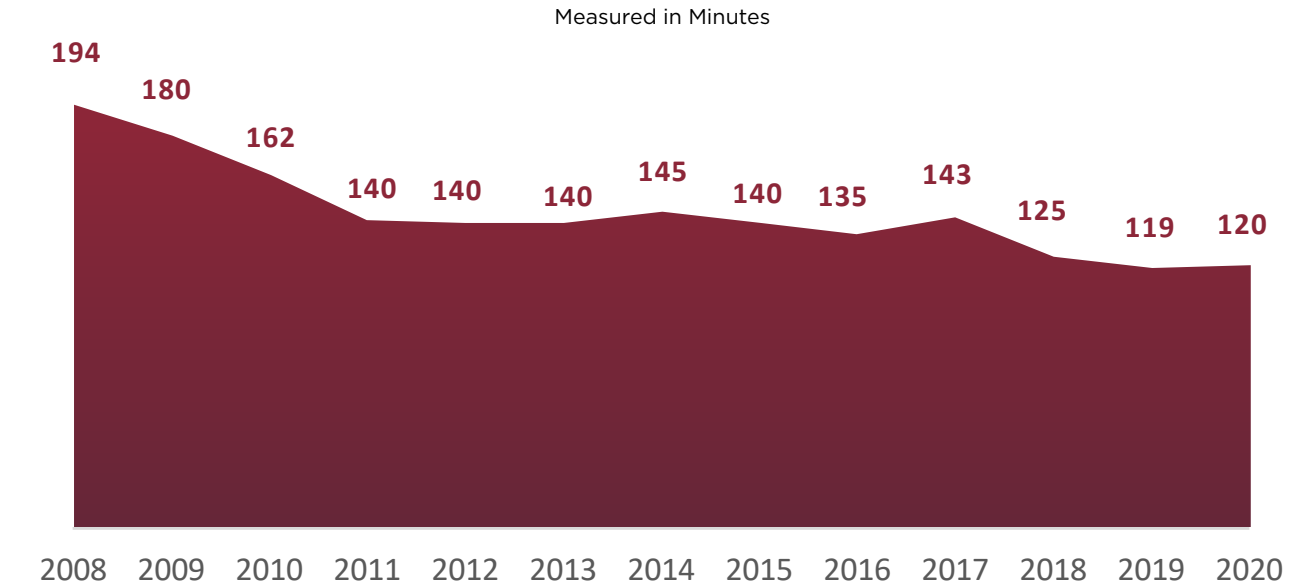
Spoke Sites	FY 2021 Totals					
John Ed. Chambers Memorial Hospital / Danville	13	4	9	26	30	3,268
Johnson Regional Medical Center / Clarksville	11	5	6	11	27	1,094
Lawrence Memorial Hospital / Walnut Ridge	9	3	6	16	42	1,557
Little River Memorial Hospital / Ashdown	3	2	1	36	27	2,150
Magnolia Regional Medical Center / Magnolia	14	6	8	12	32	3,998
McGehee Hospital / McGehee	7	3	4	26	33	3,274
Medical Center of South Arkansas / El Dorado	33	15	18	13	54	6,161
Mena Regional Health System / Mena	22	11	11	23	27	8,098
National Park Medical Center / Hot Springs	44	13	31	15	33	6,340
North Arkansas Regional Medical Center / Harrison	45	17	27	44	34	12,984
Northwest Health Emergency Department / Fayetteville	0	0	0	6	14	1,847
Northwest Medical Center / Bentonville	18	6	12	27	32	4,410
Northwest Medical Center / Springdale	22	9	13	28	54	12,570
Ouachita County Medical Center / Camden	14	8	6	18	29	2,150
Ozark Health Medical Center / Clinton	16	8	8	24	29	2,792
Ozarks Community Hospital / Gravette	1	1	0	13	5	203
Piggott Community Hospital / Piggott	5	3	2	18	29	872
Saint Mary's Regional Medical Center / Russellville	62	19	43	23	54	10,724
St. Bernards Five Rivers Medical Center / Pochontas	22	7	15	14	29	1,636
St Bernards Regional Medical Center / Jonesboro	96	35	61	12	38	6,313
Saline Memorial Hospital / Benton	32	11	21	13	24	10,604
Siloam Springs Regional Hospital / Siloam Springs	43	10	33	21	32	7,215
South Mississippi County Regional Medical Center / Osceola	5	0	5	50	32	1,538
Stone County Medical Center / Mountain View	12	3	9	12	24	838
Unity Health Harris Hospital / Newport	11	7	5	16	34	14,104
Unity Health White County Medical Center / Searcy	92	43	48	14	32	2,546
Wadley Regional Medical Center / Hope	7	2	5	19	33	1,198
White River Health System / Batesville	37	15	22	21	25	3,168
White River Health System Medical Complex / Cherokee Village	8	2	6	22	25	2,491
Total 2021	1,327	523	804	1,157	1,830	265,156

Median Time Targets CY2020



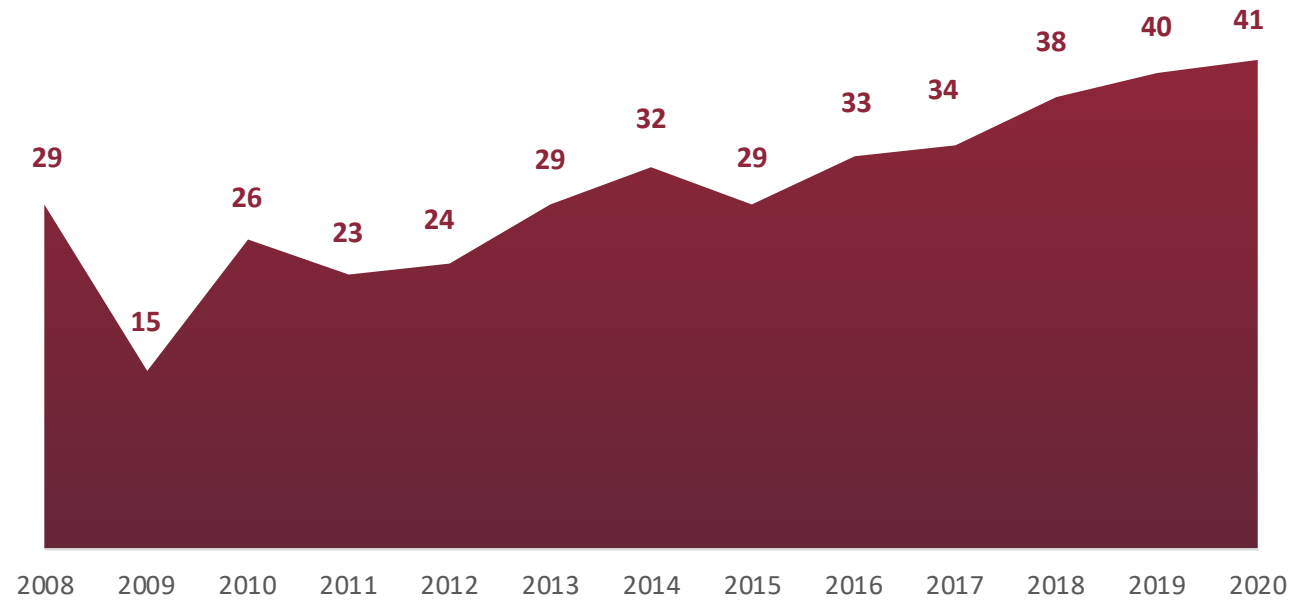
Partner hospitals did not see an increase of more than a minute in any of the above time targets throughout the COVID 19 pandemic of 2020-2021.

Median Onset of Symptoms to Alteplase CY2020

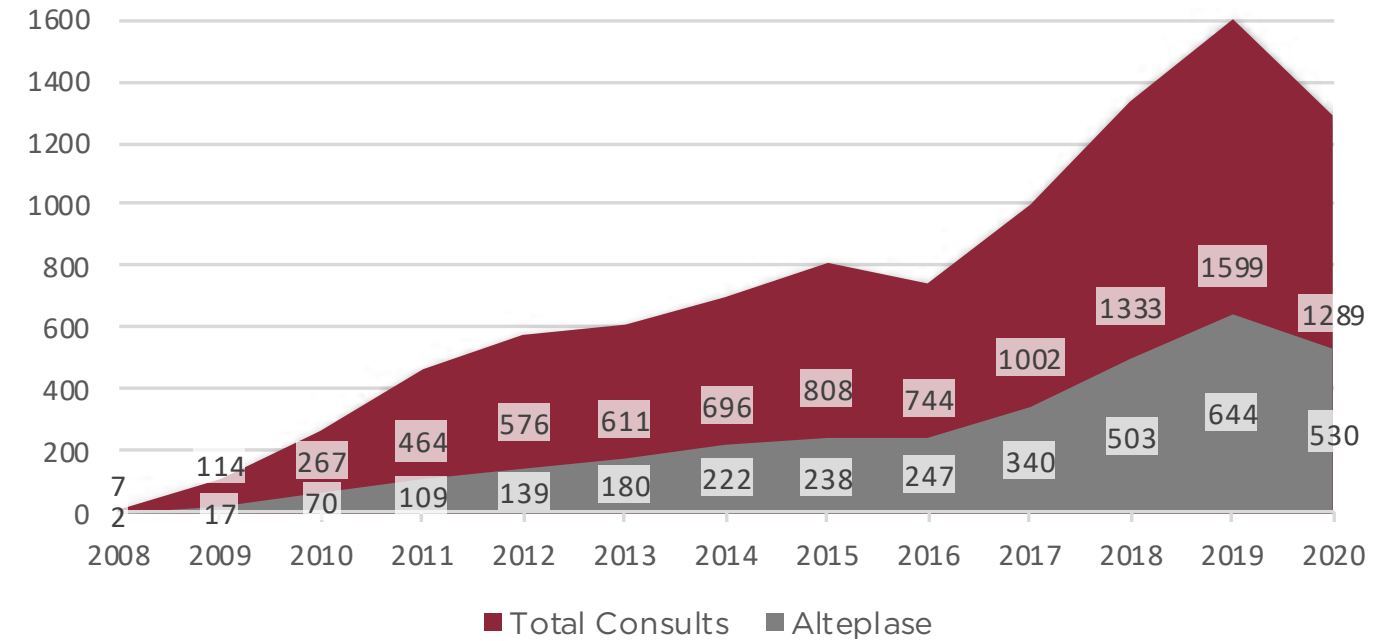


This is an extraordinary accomplishment given the delays in the ED related to COVID screening/testing and the addition of PPE requirements!

Percent Alteplase Administered CY2020



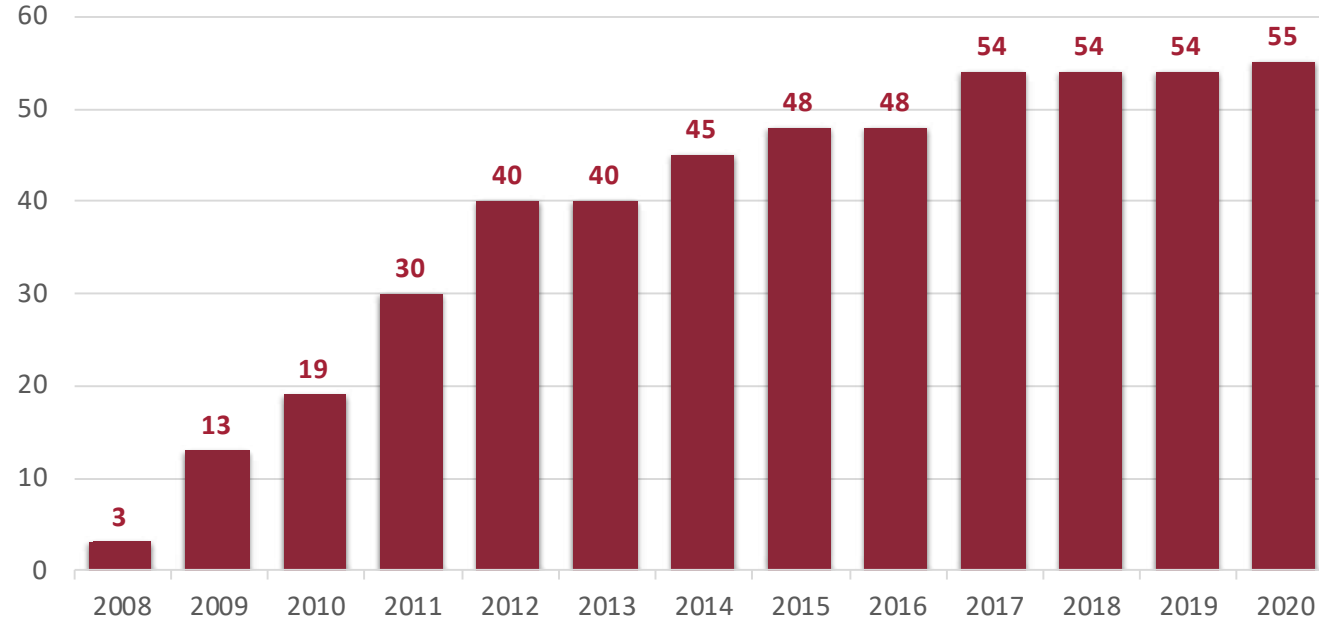
Total Consults / Total Alteplase CY2020



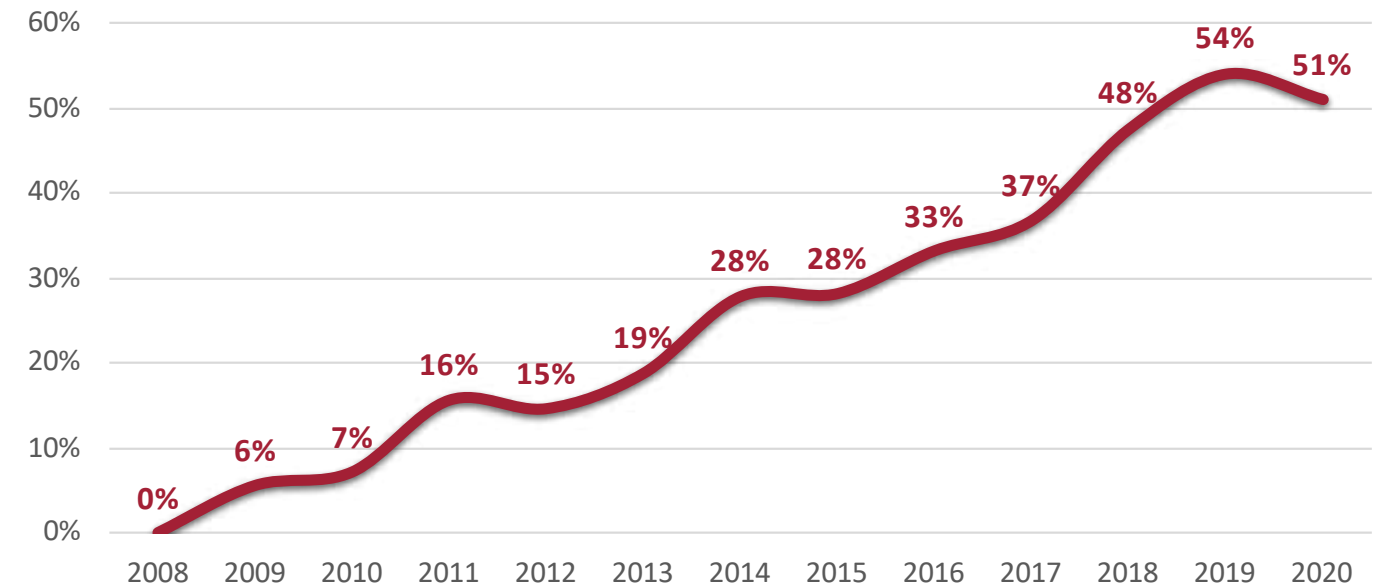
The UAMS IDHI Stroke Program had a **41%** treatment rate.

In CY20, the UAMS IDHI Stroke Program had **1,289** consults
and treated **530** patients.

UAMS IDHI Stroke Program Sites Around Arkansas CY2020



Golden Hour Target Less Than 60 Minutes CY2020



The UAMS IDHI Stroke Program contributed to

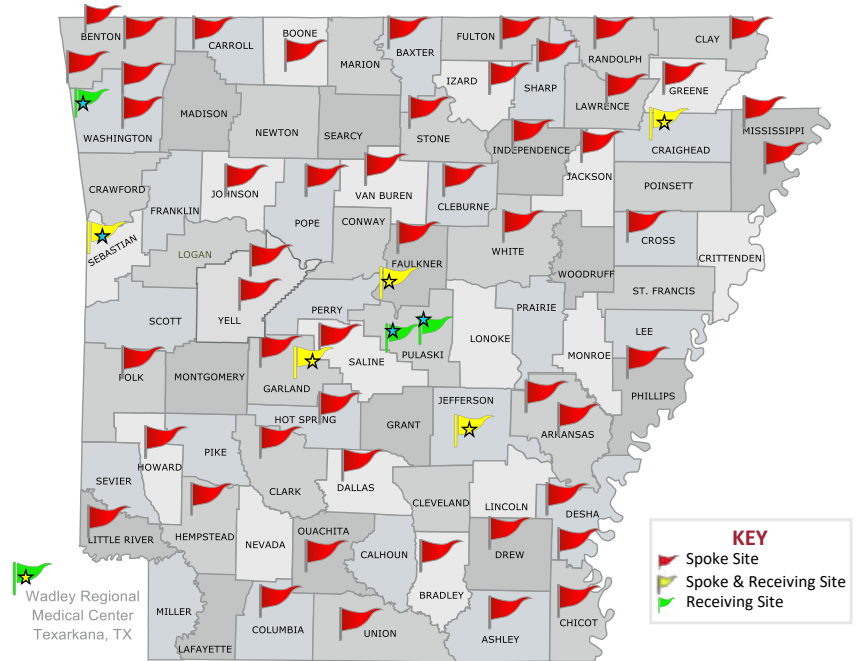
\$35 million

in cost savings for the care of stroke patients in CY2020.

EMS alerting the receiving hospital with a code stroke significantly decreased the door to CT times by

12.7 minutes.

IDHI Stroke Program Site Map



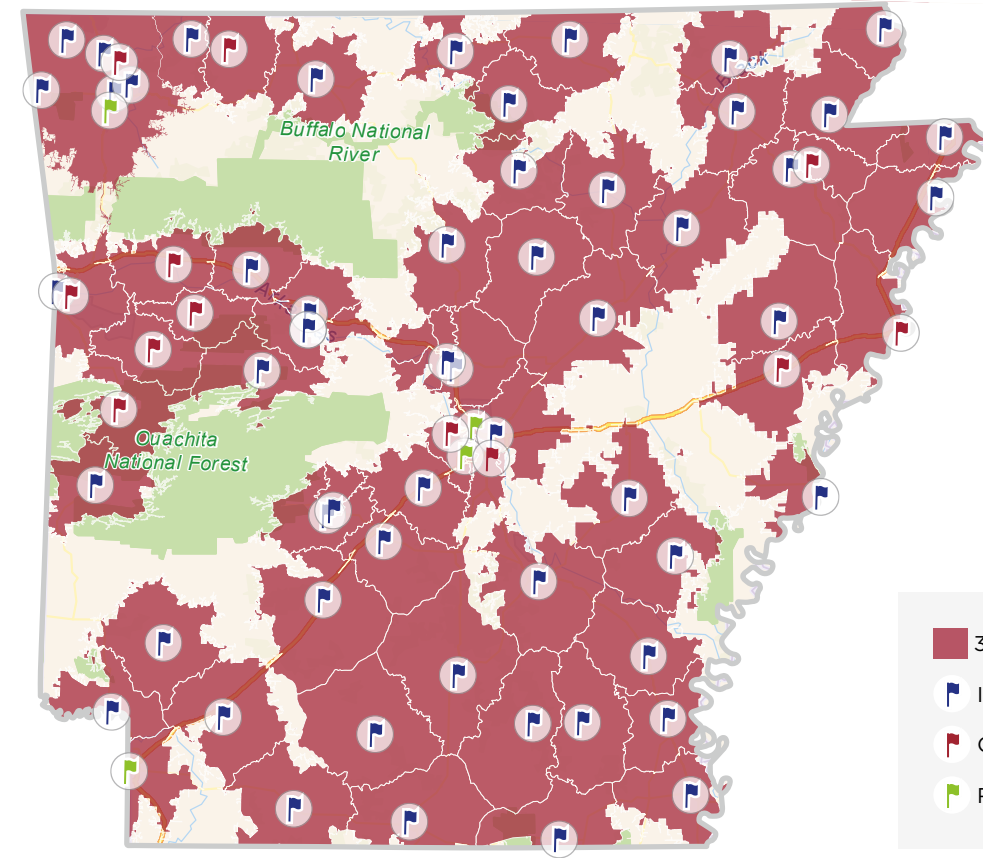
KEY

- Red Flag: Spoke Site
- Green Star: Spoke & Receiving Site
- Yellow Star: Receiving Site

- ★ Receiving Sites (INTERVENTION & ICU CAPABLE)**
- ★ UAMS Medical Center
 - ★ Washington Regional Medical Center
 - ★ Baptist Health Medical Center
 - ★ Baptist Health
- ★ Receiving Sites (ICU CAPABLE)**
- ★ Jefferson Regional Medical Center
 - ★ Conway Regional Medical Center
 - ★ Wadley Regional Medical Center
 - ★ St. Bernard's Regional Medical Center
 - ★ CHI St. Vincent Medical Center

NAME	CITY	COUNTY
Baptist Health Medical Center	Arkadelphia	Clark
Little River Memorial Hospital	Ashdown	Little River
White River Health System	Batesville	Independence
Saline Memorial Hospital	Benton	Saline
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
Conway Regional 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
Baptist Health Medical Center	Fort Smith	Sebastian
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
CHI St. Vincent Medical Center	Hot Springs	Garland
St Bernard's Regional Medical Center	Jonesboro	Craighead
Chicot Memorial Medical Center	Lake Village	Chicot
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- Harris Hospital	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
Jefferson Regional Medical Center	Pine Bluff	Jefferson
St. Bernard's 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
Siloam Springs Regional Hospital	Siloam Springs	Benton
Northwest Medical Center	Springdale	Washington
Baptist Health Medical Center	Stuttgart	Arkansas
Lawrence Memorial Hospital	Walnut Ridge	Lawrence
Bradley County Medical Center	Warren	Bradley
CrossRidge Community Hospital	Wynne	Cross

Drive Time Map



“Over **85%** of all Arkansans are within a 30 minute drive to a stroke ready hospital.

99% are within a 60 minute drive”

- Dark Red: 30 Minute Drive Time
- Blue Flag: IDHI Stroke Site
- Red Flag: Other Stroke Site
- Green Star: Receiving sites only

Stroke Program Staff



Renee Joiner
Clinical Program Director



Lori Berry
Director of Operations



Conelia Williamson
Program Manager, Operations



Baylee Field
Program Coordinator



Jennifer McCurry
Clinical Nurse Educator



Julia Weatherford
Clinical Nurse Educator



Robin Banks
Clinical Nurse Educator



Calvin Duncan
Quality Improvement Coordinator



Olivia Wilson
Program Manager, Community Outreach



Erin Wells
Program Manager, Data Analytics



Ariel Washington
Health Educator



Suzanne White
Clinical Nurse Educator



Tim Vandiver
Clinical Nurse Educator, EMS Educator



Trish Maynes
Clinical Nurse Educator



From the Director



“A problem is a chance for you to do your best”

– Duke Ellington.

The past year has been difficult due to the pandemic, but the phenomenal teams across the state have risen to the occasion and continued to provide excellent care for stroke patients in their communities. With courage and tenacity, we faced unprecedented obstacles and uncertainties to provide patients with the care they needed.

I was welcomed to the UAMS IDHI Stroke Program team this year, and I am so humbled and proud to be a part of this great work. We are so grateful for all of the teams at sites across the state, EMS professionals, video support personnel and the medics and nurses in the call center who make this program successful.

We welcomed two new sites to the program this year, increasing our number of spoke sites across the state to 56.

We also reported that Arkansas has continued to improve its ranking in stroke mortality by dropping from seventh to No. 13 in the nation. Our goal is to make it to No. 50, and I believe we can.

Virtual platforms and meetings were a seamless transition for our team — after all, we are part of the UAMS Institute for Digital Health & Innovation. Our outreach nurses conducted virtual training and site visits and our health educators continued to engage and motivate the sites as they provided community outreach. However, we do look forward to when life “gets back to normal” and we can meet in person with our friends and colleagues again as we continue to deliver the BE FAST message to communities in all corners of the state.

With appreciation,

Lori Berry, MNSc, RN, CNOR
Director of Operations
IDHI Stroke Program

From the Medical Director



We will remember 2020 as an unprecedented year, unlike any year we have ever seen, not only for the pandemic but also for the remarkable work done by front-line heroes, especially health care providers. Stroke care has looked different compared to previous years. It started with a drastic decline in the number of stroke

patients seeking medical attention, which resulted in a decreased number of acute treatments early on in the pandemic. COVID-19 has also become a contributor to acute ischemic strokes in both severe acuity patients and younger patients.

As a program, we were well established as the use of digital health has increased tremendously. Our expertise and networking provided timely and much-needed access to experts and information to hospitals across the state. There were resource constraints that limited patient transports at times, but we were able to provide continuous care to these patients with follow-up video

visits at spoke sites with help from the IDHI Stroke Program.

As we continue to understand the complete effects of the pandemic, we will continue to focus on our time targets, goals and pilot projects as we work towards the ultimate goal of improving stroke care in the state of Arkansas.

Sincerely,

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

2022 PROGRAM GOALS

- Decrease time between patient arrival and connection to the IDHI Call Center
- Reduce the Door to CT times of patients who arrive by privately owned vehicle.
- Decrease overall Door in to Door out times.



UAMS | Institute for Digital
Health & Innovation

Stroke Program

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