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Speaker 3 = Joy Murphy, patient

- Speaker 1: Welcome to the American Heart Association's podcast series on Getting to the Heart of Stroke. Today's episode we'll focus on the topic of the patient perspective and stroke diagnostic workup. My name is Dr. Susan Wilson, and I'm a nurse practitioner and researcher from the University of North Carolina at Chapel Hill. And I will be your moderator. We are joined by our co-host, Dr. Alex Schneider, and a special guest stroke survivor, Joy Murphy from Sanford, North Carolina. Thank you all for being here. Let's get everyone to introduce themselves, starting with Dr. Schneider.
- Speaker 2: Hello, everyone. My name is Dr. Alex Schneider, and I'm a practicing neuro hospitalist at Mission Hospital in Asheville, North Carolina, where I also serve as the Chief of neuroscience, and also as the Medical Director for our comprehensive stroke center Mission Comprehensive Stroke Center. I'm glad to be here with you today and very excited to talk about stroke.
- Speaker 3: Hello everyone. My name is Joy Phillips Murphy. My stroke occurred in 1982, so I have 40 years of experience in stroke survival, and I have become a very strong and passionate advocate since then.
- Speaker 1: Great! Thank you both for joining us today. First, let's review today's learning objectives before we dive into our conversation. After listening to this podcast, we hope that you are able to first identify ischemic stroke subtypes as a way to understand the underlying stroke etiology. Second, demonstrate knowledge of the basic stroke workup. Third, describe shared decision making strategies that better engage patients in healthcare decisions. And lastly, discuss how to improve patient provider communication and patient centered care.

Joy, your stroke was obviously a major life event for you, what led you to start a stroke support group?

Speaker 3:Actually, that was not in my plans at all. It has been my unexpected privilege to found
and facilitate the Sanford Lee County Stroke Support group, of course, located in
Sanford, North Carolina 12 years ago, that is endorsed by the UNC Comprehensive
Stroke Center.

This began as a way to support stroke survivors and their families and led to other endeavors, such as becoming a member of the North Carolina Stroke Center Advisory Board and patient Family centered care committee. The advisory board advises, of course, the stroke center on educational materials, reviews, drug care data, helps plan outreach and educational programs, and discusses, uh, new research protocols. The patient family center care committee provides a vital patient voice to enhance and patient center care in the hospital setting.

- Speaker 1: Wow, that's quite impressive. Can you tell us how you or the support group members say they felt while being in the hospital after having a stroke?
- Speaker 3: There are two very succinct words that describe this generally. Frightened and overwhelmed. You are fighting for your life that has been dramatically altered and you're on strange ground. You don't know what's going on.
- Speaker 2: I really appreciate your description, Joy of, of being frightened and overwhelmed. I certainly see this in my day-to-day practice and I'm always amazed at how little information stroke survivors retain from their hospitalization, despite all of our best efforts to convey important information. Uh, and there are a number of factors at play here, as you can imagine. You know, the brain injury of stroke itself is gonna affect cognitive function, sleep deprivation from being in the hospital. Nobody sleeps well in the hospital, as you know. And, you know, there are new medications that can affect memory or, or cognition and retention of information. And as you mentioned, just that general anxiety that we feel (that a patient feels) when they're in the hospital for whatever reason. But certainly stroke, a very life altering event, can really drive the anxiety of uncertainty. And so a small way that we try to address this is by being repetitious in our education of stroke and our explanation of stroke. And hopefully our patients and their families are hearing it from us, the clinicians daily, but also from the nurses each shift multiple times during the shift, maybe when they're doing their neurologic checks. You know, the therapy team, the physical therapy team, the occupational therapy, the speech therapy should be doing stroke education with each visit. And also just as part of the, the discharge education that's provided, uh, would be another iteration of stroke education in addition to any written information that's provided.
- Speaker 1: Now, do you think patients understand medical testing or terminology used by healthcare professionals?
- Speaker 3: How, how could they? You need a medical background to wade through and you're, you're hit with it, bam. You don't know what's going on. If you are fortunate enough to have caregivers that ask a lot of questions, you might get the broad concept. It's quite complex and overwhelming.
- Speaker 2: Oh, I bet. And, you know, we do try to simplify the terms we use, but it can be very challenging without compromising the specifics of the diagnostic impression and plans. And I, I've been doing this for a long time and I'm always trying to tailor how I say things, and I gotta be honest over the years, I forget what's a lay term versus what's a scientific term. And so sometimes I feel like I'm really simplifying it to the point of it almost being too simple. And so trying to find that balance, I think is really difficult. And so, Joy, I'd love to hear your thoughts on recommendations on how we clinicians can do better at conveying the diagnosis of stroke, the stroke workup, and the, the goals and the plan that we're trying to outline.

- Speaker 3: Well, if possible, if you, um, teach residents and interns and other people that you're training to, to come up with their own personal, very understandable analogy, if you can have, a pat answer that will be an automatic explanation. For example, I've heard of the vascular system compared to a tree, and that made it very clear. And of course, suggesting they explain to the patient's educational level. And the, the present cognitive state always, always see you have to involve caregivers. Having additional ears there allows the patient and family to discuss what they heard. As soon as you leave the room, then you can begin to compare notes and say to each other. Did, did I understand that correctly?
- Speaker 1: What did you know about stroke and stroke treatment before you had your stroke?
- Speaker 2: Not very much at all. I have acquired quite a bit of knowledge and information since I was 26. Actually, I thought only really old people had strokes, and that is absolutely not the case. Yeah, I do believe that that's a very common thought.
- Speaker 1: And do you find that the members of the stroke support group have knowledge about stroke treatment?
- Speaker 3: Um, actually our group is an education based support group. Um, when the members come consistently, their knowledge, that knowledge base should be broadened significantly post stroke. However, not very much that they didn't know very much at all before they joined us. And I didn't either.
- Speaker 2: You know, it's interesting thinking about, uh, community knowledge of stroke over the past 25 years. I've been doing this for about 25 years, and I do think there's some greater awareness about stroke as a neurologic emergency. And, and even the cot, clot busting therapies, you know, t p a that we use or other therapeutic modalities. I think it has improved, but there's still a lot of, uh, lack of insight and lack of knowledge, uh, out there. And so I think, you know, your support group or other community-based education efforts is, is so important at, at getting the message of, of stroke awareness, stroke recognition as an emergency, and recognizing stroke warning signs. You know, we use a lot of the, uh, the mnemonics like fast F A S T or BFAs, I don't know if you all use that in your support group. Joy,
- Speaker 3: Um, in doing some outreach, I used that. Alex, Dr. Schneider, I'm sorry, <laugh>, please
- Speaker 2: Call me Alex.
- Speaker 3: Didn't want to get too relaxed here. <laugh>. Um, I've done quite a bit of the outreach in my community. There was a local TV station, and I had the privilege. I've been on the TV talk show once a year, especially in May, which was stroke awareness month. And I, I'd had the opportunity have a wonderful advocate host, TB host friend who's actively involved in our stroke support group. So he made careful sure that somebody was there to talk about stroke awareness, and I've always stressed signs on what to do. Call 9 1 1. And it really, you're, you're right, awareness has increased tremendously in the past, what, 20 years? Mm-hmm. affirmative, wouldn't you say Susan? Mm-hmm.

- Speaker 1: And, and I agree with you that it's very important to stress, as Dr. Schneider said, the F.A.S.T. and, and teaching people to call 911. Now, do you find that post-stroke people will actually understand the recommended follow up care?
- Speaker 3: Um, if they're very fortunate and have a very informed strong advocate? They might. It's a lot of complicated stuff to remember to understand. Uh, uh, you get home, you have to do therapy, you have to get a handle on the schedule. If you're in the working phase, you have to work to get back to work. There are a lot of variables in the equation. Finding a strong support group is crucial. I think there with strong leadership, survivors will learn from their peers and guest speakers. You, you have to have some role models. You have to have some help. You, you can't, you can't do it by yourself. You can, but it's difficult. Why reinvent the wheel?
- Speaker 2: Yeah. Joy, I, I really think you do a great job underscoring two points. I want to also underscore one follow up point, and that is the, the community support that a group like yours is providing. And in many ways, I wish more stroke survivors and their families and their support network would, would join these support groups. And I think, you know, I would say that probably less than 10% actually join these support groups would be, would be my estimate if that. And so that's extremely important. The follow up care is so important because it gets us back to this idea that, that patients and their family, they can't remember everything that's happened in the hospital because of all of those challenges. And so the follow up care, it reiterates some of that education as well as it helps make sure that the, the stroke survivor is on the best therapeutic plan for future stroke prevention. And their rehab and recovery plan and, and illness, including stroke is dynamic. It can change from, you know, this week to the next in terms of the recovery or, or a new diagnosis is, is better tailored to fit that person. You know, may maybe they've had some cardiac monitoring, which we'll get into here in a minute, that may change the, the medication recommendations for stroke prevention. And so that follow up care is so important at making sure these things do not get missed.
- Speaker 1: So thank you both for your comments. And I would just like to also add that we found that during a follow up phone call within a week of discharge, some, some as early as two days afterwards, is very helpful to reinforce that education and support. Many patients and caregivers are adjusting to that diagnosis. And they have so many questions about those medications and rehab and making sure that the rehab professionals are set up as well as their follow up appointments and many questions about self-care and what, what can they do to prevent another stroke. So during these phone calls, we take that time to provide additional support and education.
- Speaker 3: And serving as a volunteer for 18 years has allowed me at UNC Hospital, has allowed me to function as a stroke peer mentor. And I was providing support to newly diagnosed, uh, patients with stroke and their families. In addition, leading the support group allows survivors to receive ongoing and continuous repetitive stroke education from experts and their peers.
- Speaker 1: Joy, I think that point is critical. Having someone come in there when you've just been diagnosed and share, and say I've been there. Um, I understand what you're going

through is so important. I've had so many of my patients tell me what it meant to them to meet you. So thank you both for the comments that you've shared. What I'd like to do now is switch gears and let's talk about stroke subtypes. Dr. Schneider.

- Speaker 2: Yes. Uh, let's do that. So stroke is generally used very loosely as a term to, that covers a lot of the subtypes of stroke. So this is a good opportunity to talk a little bit about that. And so, stroke is really an umbrella term that really encompasses injury to the central nervous system, uh, the CNS due to underlying vascular causes. And so this can include both hemorrhagic stroke as well as ischemic stroke. And our focus today is really in the series, uh, that we're on, is really to focus on ischemic stroke. And so when we talk about this, we really want to talk about the vascular blockage that then leads to an area of brain that's suffocating and dying. And there can be various pathophysiologic mechanisms leading to this. And that really drives us into this concept of the ischemic stroke subtypes.
- Speaker 2: And they're, they're basically five categories that, that we lump this into cardio, embolic, stroke, large vessel atherosclerotic stroke, small vessel or, or what we also call lacunar stroke, and then cryptogenic stroke, um, which is stroke of undetermined cause in the fifth category is, is what we just sort of refer to as "other." So it's all the sort of less common or rare types of strokes that doesn't, that does not fit into the other categories. Um, we lump into the other category. And so, yeah, this is a, this is a great opportunity to talk about some of these ischemic stroke subtypes.
- Speaker 1: Okay. The reason I, I'm sorry, Dr. Snyder, go, go ahead, please.
- Speaker 2: Well, no, that's my fault because I really as, as a lead in to talking about ischemic stroke subtypes, uh, Joy, I wanted to ask you about your stroke, you know, and, and the cause of your stroke, so many years ago.
- Speaker 3: Sure. Um, the reason I had stroke was caused by trauma. It, it was a head-on car crash, my right internal carotid artery severed, and I didn't even know I had an internal carotid. I didn't even know I had a carotid. I heard them called jugular veins <laugh>. So I, now I know what they are. I've seen pictures. Crisis causes you to become very informed. And a clot form trying to repair the damage and a piece broke off and travel to my brain.
- Speaker 2: Yeah. You know, Joy, it sounds like you're describing a traumatic carotid dissection, which is a tear of the internal part of the inside of the vessel, and then clot forms there that it, that could then just block off and, and cause suffocation from that point or clot can flow downstream or further up that vascular tree like you were talking about tree, you know, the carotid artery is like the trunk of the tree, but it flows into one of those, those branches further, further, uh, downstream and, and can cause stroke. And so, you know, it gets it at this, this very old and classic concept that stroke is still taught, from what I understand in medical school as, as thrombotic stroke versus embolic stroke. This again, we're talking about ischemic stroke. And the big problem with this classic paradigm is that it doesn't get at the underlying pathophysiology for the most part.

You know, like in your case, you can have a, a vessel that develops a blockage in it, and then that thrombosis, that thrombotic stroke right there, uh, uh, with suffocation of brain tissue would be sort of how we describe a quote, thrombotic stroke. But when some of that clot embolizes or flows further downstream and causes a blockage elsewhere or several clots flow downstream, we refer to that as embolic stroke. And so differentiating with thrombotic versus embolic is less helpful, in my opinion, than trying to differentiate with the ischemic stroke subtypes. But in my experience, working with third and fourth year medical students and, and, uh, medical residents, they're still taught this old paradigm and they're not taught the ischemic stroke subtypes. And so we really try to focus some of the, uh, bedside education on that in, in, our graduate medical education work.

- Speaker 1: And Dr. Schneider, based on the stroke subtypes, can you explain the diagnostic workup necessary for an ischemic stroke and, and why do we use this process?
- Speaker 2: Sure. The, uh, first approach in diagnosis is having suspicion for stroke, which can have a number of mimics, and we won't get into a lot of that, but that would be a whole nother, uh, topic that, that I would, we would love to talk about. Um, patients typically present with acute focal neurologic symptoms. Um, they may have a clinical picture that's very clear and syndromic where they have an obvious, what we refer to as a left middle cerebral artery or left MCA syndrome or right MCA syndrome. But patients can also have a very vague presentation where the diagnosis, clinical diagnosis of stroke can be very challenging. Uh, the history and the physical are important tools in, in diagnosis along with neuro imaging. You have to have the neuro imaging to exclude brain hemorrhage. And typically we use a CT scan, which can be done emergently and very quickly, uh, to, to rule out or exclude hemorrhage.

But MRI can also be another imaging modality takes longer to do a little bit more challenging in some ways. Um, and so CT is probably the most common initial imaging that we have that that's obtained across the United States in stroke care. Um, and on the CT, if, if the stroke is very acute, you may not actually see the infarcted tissue. And so this quote negative CT, uh, doesn't rule out stroke. It just means you don't have a hemorrhage. And so a clinical diagnosis of stroke can be made and then even with a quote, negative ct. And then, uh, and then we can institute, uh, emergent interventions like clot busting therapies with TPA or endovascular treatments with thrombectomy. Um, later a confirmatory MRI can be obtained. Um, and this may provide greater insight into stroke mechanisms. You know, for instance, small deep infarcts, typically less than 15 millimeters in size, uh, we refer to as small vessel stroke or lacuna stroke, and that's one of the ischemic stroke subtypes.

And then, um, if we see on, on a scan, for instance, multiple, uh, small strokes or multiple areas of brain that's injured from stroke, that actually is the appearance of emli. Uh, um, and that could be something from the heart like cardio embolic stroke, or in some cases we refer to it as embolic stroke of undetermined source. And so again, this is a shift in thinking about stroke, ischemic stroke more from the point of view of the pathophysiologic mechanisms. So, um, you know, once, once we make the diagnosis of stroke, we really look at mechanism I mentioned, we look at, um, uh, other risk factors. So you can have a risk factor that doesn't necessarily, uh, explain the cause of the stroke. Just as example, you know, smoking can be a risk factor for any stroke, but smoking in and of itself isn't the cause of the stroke.

And so we, we try to do a full assessment, and as I tell the patients and, and families, you know, something's going on under in the engine, we gotta take a look under the hood, you know, you were talking Joy about analogies and things like that. And as, that's one that I like to use to sort of explain why we're doing some of the tests we're doing, and really, it, it gets at the goal. One of the big goals that we try to outline is, is that what's the best way to prevent this from happening again,

- Speaker 1: I like that analogy of looking under the hood, and I couldn't agree with you more. Could you further elaborate on the general diagnostic approach?
- Speaker 2: Yeah, so we mentioned the basic brain imaging, and then we want vascular imaging, and there are different modalities for that, including CTA MRA, carotid ultrasound, transcranial doppler, ultrasound, all of this these types of vascular imaging. They have their pros and cons and each center does it a little bit differently, but we're looking at are there narrow vessels? Are there blocked or occluded vessels? Um, and then, I'll mention too, the gold standard for vascular imaging is the catheter-based arteriogram or angiogram. And, you don't see it as often used because it is invasive. Now we do a lot of it in association with acute stroke treatment. But that is the gold standard of looking at blood vessels. And then when in, in looking at vessels, we're looking at the carotid arteries, we're looking at the vertebral basal arteries as well as the intra cranial circulation, such as the MCA, the ACA, the PCA and so forth. And then if we see 50% or more narrowing or total occlusion of the blood vessel, if it's in the right territory of the stroke, we may ascertain that that stroke, ischemic stroke subtype is a large vessel atherosclerotic category of, of, of stroke. And so, and in those patients, the management plan can be quite different than others. It may include surgical, uh, or procedural revascularization of the vessel in addition to best medical therapy.
- Speaker 1: Now, when you're considering your patient, when do you think about a cardiac evaluation
- Speaker 2: In general? We, it is part of all evaluation with the simple diagnostics as EKG and telemetry monitoring while they're in the hospital. You know, we're, we're most commonly looking for forms of atrial fibrillation. Um, and then in patients who you've done a diagnostic workup in including maybe an echocardiogram, maybe a bubble study with that, looking for paradoxical embolism, uh, and in some cases, a transesophageal echo or TEE can be helpful, you know, in that cardiac evaluation. Um, in that stroke evaluation, everything may come up negative. You may not determine exactly what the stroke etiology is, and in that case, you would fall into the subtype category of cryptogenic stroke or stroke of undetermined cause. And this is really important because we may then recommend longer term cardiac monitoring with, with concerns that there may be intermittent or proximal AFib that we are just not detecting in the hospital. And upwards of about 15% of patients with cryptogenic stroke may have that,

and that that can lead to a different, uh, secondary prevention strategy such as anticoagulation.

- Speaker 1: Now you mentioned the cryptogenic strokes and what happens when the workup is non-diagnostic?
- Speaker 2: Yeah, as I was mentioning, the implantable loop recorders or, I mentioned long-term cardiac monitoring. And what we're mostly seeing these days is implantable loop recorders. And there are different ones out on the market, but these are very small devices that fit under this, basically under the chest wall skin. So it's not deep, it's just right there under the skin. And typically use Bluetooth technology to transmit cardiac rhythm over time. And, uh, the batteries last a long time. These things can be in place for months to years, they can be very effective and in, and in my opinion, they're, they're less cumbersome and, and in that sense, more effective than the traditional Holter monitoring that we used to do for maybe a couple weeks or event monitors, which I think even have lower yield if the patient's not having any symptoms. And so, um, yeah, the, the, uh, implantable lucor is really, is, has changed a bit of the, our ability to characterize cryptogenic stroke patients and shift them more into cardio embolic stroke, again, changing their, their prevention strategy.
- Speaker 1: Yes, I, I have found that, uh, these loop recorders are more commonplace, and I've seen that with, with my patients. What are some of the other more routine diagnostics?
- Speaker 2: Uh, great question. You know, we, we check glucose A1C testing looking for, uh, diabetes, either as a new diagnosis or quality of diabetic control. Lipid panel testing may help identify hyperlipidemia as a stroke risk factor. Uh, you know, routine chemistry panel, basic coags blood counts, uh, you know, certain abnormalities can, can, can trigger other diagnostics potentially. Um, obstructive sleep apnea is a stroke risk factor, so screening for that in the right patient, uh, can be performed. Uh, toxicology testing for evidence of substance abuse, especially, uh, stimulant drugs such as methamphetamines and cocaine, uh, can be helpful. Um, other testing, inflamamatory markers, hypercoagulable testing, genetic testing. Um, these are, these are less commonly obtained, but, uh, are important to be aware of for less common causes of stroke. Um, and again, as I mentioned earlier, these sort of, this other category of ischemic stroke subtype is really less than 5%. It's one of these categories that as medical students and junior residents and training we like to talk about, but we don't actually see it as often. We like to talk about it.
- Speaker 1: And so we heard from Joy that she had a dissection. What are some of the other rare causes of stroke?
- Speaker 2: Yeah, so, uh, sickle cell disease, PH disease, cancer related hypercoagulable state and other hypercoagulable disorders, are, are not common. Um, venous stroke, such as a sagittal sinus thrombosis. Uh, we can see, this is, you can think of as like a DVT of the brain, which causes venous back pressure in those patients, which can have ischemic stroke as the mechanism, but they can often have a hemorrhagic component to it because of that, that venous back pressure. Um, and, uh, you know, just thinking about

Joy and, and, uh, your case as a, as having a dissection, you know, the, on the surface you'd think this falls in the large vessel category and it is a large vessel, but we really think of dissection as vasculopathy and we put it in the other category, and we really reserve the large vessel category as that really due to underlying atherosclerotic disease.

- Speaker 1: So why is it so important to know the stroke subtypes in guiding your stroke prevention?
- Speaker 2: I really can't stress enough the importance of thinking in terms of ischemic stroke subtypes because a, as I've been trying to describe, it really does drive and guide or diagnostic workup. And from there it guides our secondary prevention strategies. You know, for instance, most strokes will be managed with antiplatelet therapies like aspirin, but when we identify cardio embolic stroke due to AFib atrial fibrillation, we would recommend anticoagulation. And in patients who may not be able to tolerate anticoagulation, there are other, other, uh, modalities such as endovascular procedural closure of the left atrial appendage that may be an option for some patients in reducing their, their AFib related stroke risk. We mentioned large vessel strokes due to carotid stenosis, for instance, that's often treated with best medical management in, in addition to, uh, either surgery or other procedural revascularizations like carotid endarterectomy or carotid stenting.
- Speaker 1: So Joy, we've heard Dr. Schneider provide a very thorough discussion concerning stroke workup. How do you feel that healthcare professionals can better engage patients and their families to improve communication?
- Speaker 3: Actually, you just have to be as clear and concise as you possibly can. Uh, we talked earlier about developing your own way of making an excellent, excellent notion of stroke as understandable as possible, uh, and have it on the ready. So you can, you're automatic pilot will click in. And when you're countering that situation, uh, it it turns on your patient and their caregivers are, are already tremendously confused and under a lot of stress. You know, to add to her comment, Dr. Schneider, how do you see social determinants of health play a role in secondary stroke prevention and how are they addressed at your facility?
- Speaker 2: Yeah, thank you for that question. You know, um, there can be a lot of challenges, um, uh, for, for many people for many different reasons. And, um, so, so having awareness of that I think is number one. You know, they, a person may have, uh, uh, uh, challenges for access to follow up, for instance, or different therapies, um, affordability of therapies, affordability of medications. Um, some patients may be a primary provider with children in the home, and so that stroke could affect them versus someone who say, we're retired and, you know, out, out of, um, uh, that season of life. And so, but, you know, mobility within the community such as driving and or maybe difficulty accessing public transportation that may be limited in, in rural areas, um, you know, stroke survivors, they may not have com. The, the community support that others may have and, and that could pose difficult, uh, challenges as well.

- Speaker 2: Some may not have internet access, which I think we often take for granted, but I actually see that, and that can affect the utility of an implantable loop recorder, for instance. And so you may have to divert to older options or different options or help try to overcome some of those challenges. So again, having awareness of these challenges and actively seeking, um, uh, to understand the individual circumstance so that we may be able to intervene or assist them, I think is, cannot be stressed enough at, at Mission Hospital. We work very closely, uh, with our care management team to address these issues. We have a very multidisciplinary approach to stroke with our, our clinical team in addition to maybe the medical team or the cardiology team plus the, the therapy team, uh, the, the nursing staff. And so it's really not incumbent on any singular individual like the doctor to identify these things. It really takes everybody working to identify these things and coming up with solutions. And so I, I think, I think this is a common challenge everywhere across the United States.
- Speaker 1: Thank you for pointing out that multidisciplinary approach to the care and, and bringing in the patient and their family. I'd like to ask you both one last question. Are there additional points you would like healthcare professionals to know that could improve communication and patient understanding regarding the stroke diagnostic workup?
- Speaker 3: Dr. Schneider, can I jump on my soapbox first? <laugh>,
- Speaker 2: Please, please do.
- Speaker 3: I, I find myself climbing up there to plead with residents and interns to please, please underlined both words to me as compassionate as possible. I, I've realized there's a very, very immediate job, urgent job you have to get done right at the moment to str say the stroke survivor's life. And also please realize the power of the human spirit that is being so strong. I, um, I re I had this little mantra, I, I, I remember from 40 years ago, every time someone entered my room, I said, I will walk again. I will not be in a wheelchair and I will not be in a bed. So you, you just have to recognize the, the strength of the human, human spirit and appeal to this and let it'll work for you and your patient.
- Speaker 2: I agree Joy, and I appreciate you talking about having that compassion. And to me it's a reminder to each of us as to why do we, why are we doing this? You know, why am I here every day trying to help a stroke survivor and having compassion for what he or she may be going through is we have to remind ourselves every day. And I've, I've found that being compassionate, I isn't like this hour long thing. You can be compassionate in that moment of two to three, to four to five minutes. It doesn't take long to do that. And some of it's trying to be encouraging. Um, you know, I like to try to be as honest without sugarcoating what a person's dealing with when I talk about their prognosis. Um, but I also am, am quick to speak to the uncertainties that I have about what tomorrow holds for any of us.
- Speaker 3: And in that try to encourage the, the patient to really push and to really try to recover and that they can achieve a quality of life after stroke. Uh, it can take a while. Um, there, there can be some grieving that goes, that occurs before that, but, um, we, we do try to

be encouraging and compassionate at the bedside. Um, and I'll just finish with, with, to me, engaging the patient and the family in goal setting, uh, is so important. And you have to individualize these things. You know, you could read a textbook that says, this is the approach to stroke workup, but that's all that is, is an approach. It is not a recipe. You know, a person who's towards the end of life may not be interested in anything surgical. And so, um, you don't necessarily need to, to, to do every diagnostic test then looking for that lesion. And so I think, um, engaging the patient and family and decision making and shared goal setting, I think is very empowering to the patient and their family. And I think that really does resonate with people that we take care of.

Speaker 1: I would agree with you and thank you for such a great conversation. Both of you have provided such valuable comments for today's program, Dr. Schneider and I would like to thank Joy for joining us today and sharing her experiences with the listeners. As a reminder, the views and opinions in this podcast are those of the speakers and reflect their training and experience. This content should not be considered as the official policy of the American Heart Association. Also, remember to review the ASA 2021 guideline for the prevention of stroke in patients with stroke and TIA that can be found on the American Heart Association website, as well as download the extremely helpful guidelines on the go Mobile app. It has the new guidelines and several resources specific to stroke and secondary stroke prevention.

Thanks again for joining us, and please keep an eye out for the next podcast and webinar in the American Heart Association series "Getting to the Heart of Stroke."