

Stroke Coordinator Meeting March 26, 2025

- ▶ Media Campaign Planning
 - ▶ Recognition of Stroke Signs & Symptoms
 - ▶ Urgency of Calling 9-1-1

<https://tarheels.live/strokeperspectives/>

Stroke Survivor and Caregiver Perspectives on Seeking Care: A Qualitative Study

INTRODUCTION

- Critical first step in acute stroke care continuum = **early recognition + activation of emergency medical services (EMS)**

OBJECTIVE

- Identify **challenges in early initiation of EMS** among adult stroke survivors and caregivers in North Carolina, a “stroke belt” state

METHODS

- Semi-structured interviews** were conducted May-Dec. 2024 by Zoom & in-person
- Topics: stroke context, response behaviors to signs/symptoms, & any concerns of seeking help
- Content analysis** to identify key variables of care-seeking behaviors

RESULTS

- 42 interviews on 34 stroke events
- 60% stroke survivor, 40% caregiver
- 50% female; 12% Black, Non-Hispanic; 31% rural

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Table. Care-Seeking Behaviors & Perspectives

	Time delay to seeking care*, No. events (%)	
	Immediate Response: 21 events	Delayed Response: 13 events
Survivor alone at onset	0 events (0)	5 events (38)
Stroke Recognition	Recognized/suspected – 15 events (71)	Unsure/thought low severity – 9 events (69)
Person that initiated care-seeking	Known bystander – 18 events (86) Self in 2 events (10)	Known bystander – 9 events (69) Self in 3 events (23)
First to be contacted	9-1-1/EMS – 11 events (52) No call made – 3 events (14)	9-1-1/EMS – 6 events (46) No call made – 6 events (46)
EMS was utilized	18 events (86)	8 events (62)

*Defined as time from sign/symptom onset to contacting a medical professional (physician, nurse, paramedic, emergency personnel). Immediate response defined as <1.5 hr. Delayed response defined as >6 hrs.

Stroke recognition and social connections are facilitators to prompt care-seeking

ILLUSTRATIVE QUOTES



"I don't hesitate to call for support ...I'd be concerned about ...getting care to him as quickly."

"He was—both cases, he was very receptive to seeking the care."

"We have never...called the ambulance lightly...[the issue] didn't seem ambulance worthy"

"It's always difficult to determine if you have really mild symptoms...I didn't want to be the boy who cried wolf."

"...it was just so clear and so dramatic that it didn't matter at that point what the cost was."

"You're always thinking about bills and stuff and I'm like, I don't wanna pay an ambulance bill when I can walk into the hospital by myself."

□ -Survivor
■ -Caregiver

LESSONS LEARNED: STROKE SURVIVOR & CAREGIVER STUDY

STUDY GOALS

In this study, we wanted to understand the challenges that stroke survivors and their caregivers in North Carolina face when seeking emergency help. To do this, we interviewed 42 North Carolinians about their experiences with acute stroke.

We carefully wrote down and analyzed these interviews to find common themes and reasons for seeking medical help. We were especially interested in understanding what stroke survivors and caregivers thought/felt about calling 9-1-1 for their stroke.

STUDY RESULTS

Of the stroke experiences discussed in our interviews, participants sought medical help right away roughly two-thirds of the time. In about one-third of the strokes, participants had a delay of more than six hours.

Family, friends, or neighbors were helpful in recognizing the signs/symptoms of stroke and were often the first to contact medical professionals. If the survivor was alone when symptoms started, he/she was more likely to wait to seek care.

WHAT HELPED PARTICIPANTS?

- Spotting stroke-like symptoms, such as one-sided facial or limb weakness, speech difficulties, or confusion
- Having a family member, friend, or neighbor who works in healthcare and who participants could ask about symptoms

WHAT MADE SEEKING CARE DIFFICULT?

- Not being sure what was happening, especially when symptoms didn't seem like a stroke or didn't feel serious
- Hesitating to get medical help because of discomfort with healthcare providers or going to the hospital
- Being alone when symptoms first started
- Concerns about the costs of healthcare



IMPORTANT STUDY TAKEAWAYS

1. Know the BE-FAST signs/symptoms

- Sudden loss of Balance
- Sudden vision changes in one or both Eyes
- Drooping on one side of Face
- Weakness or numbness in one Arm
- Difficulty speaking or slurred Speech
- Terrible headache

Signs/symptoms may vary. The person experiencing the symptoms may not be aware.

2. Call 9-1-1

Stroke is an emergency. Even if you or a loved one lives near a hospital, it's best to call 9-1-1.

3. When in doubt, get checked out

If you're feeling symptoms that are unusual or something you think might be related to a stroke, it's best to get checked out by a medical professional. Stroke can happen at any age, for any race or gender.

A big thanks to everyone who participated in our study!

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Questions

- ▶ A significant proportion of participants who sought care early initially reached out to a friend or neighbor who worked in healthcare about their symptoms and concerns. Often that person told the patient/caregiver to call 9-1-1 immediately, which we concluded was a facilitator to seeking EMS care.
- ▶ Some participants reported reluctance to calling 9-1-1 because it felt like an over-reaction or had worries about cost. However, people who have access to a friend or family member in healthcare may help reduce that barrier.
- ▶ Is there space for a more nuanced public message like call 9-1-1 but if you're not sure then call your doctor's office or a telehealth nurse line first?