


Mission: Lifeline Stroke Nebraska



Heart.org/Quality

What is Mission: Lifeline Stroke?



Mission: Lifeline Stroke is the American Heart Association's **national** initiative to transform stroke care by **focusing efforts on connecting all of the components of acute stroke care into a smoothly integrated system that reinforces use of evidence-based guidelines, measures performance, identifies gaps and engages in improvement projects at a system level.**

Why Stroke Systems?

- 5th leading cause of death
- Number 1 cause of disability
- 7.2 million Americans have had a stroke
- Each year 795,000 people experience a new or recurrent stroke
- Approximately 10% of all strokes occur in individuals 18 to 50 years of age
- Every 40 seconds, someone in the US has a stroke
- African Americans have 2 to 3 times the risk for stroke
- Up to 50% of patients do not call 9-1-1

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A state without a stroke system of care:

- 31 year old male
- While at work, Experienced sudden weakness on his right side of his body
- Unable to talk
- EMS transported him to local hospital
- Gave him Ativan and observed for 6 hours

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The story continues.....

- Moved to larger hospital,
- Hours later did an MRI and spinal tap
- Found ischemic stroke almost **24 hours** later!
- A month later:
- In rehab, unable to speak, unable to use his right side, not able to walk , just then able to try and eat ground food.
- Out of a Job!

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A state **with** a Stroke System

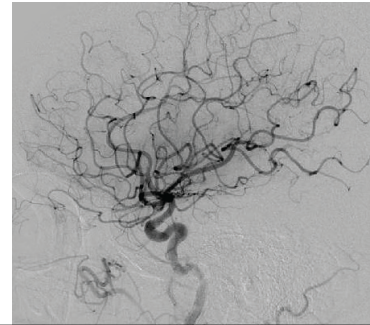
- 54 year old female
- Just left a birthday party, left facial droop and slurred speech
- Family took to CAH
- Phone consult with CSC
- tPA administered
- Initial NIHSS 11

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Continued:

- CT Angiogram and perfusion study
- Occlusion of right M1, large area of ischemic penumbra
- Embolectomy
- 24 hours later: NIHSS 2
- MRI showed small right infarct
- D/C NIHSS 1



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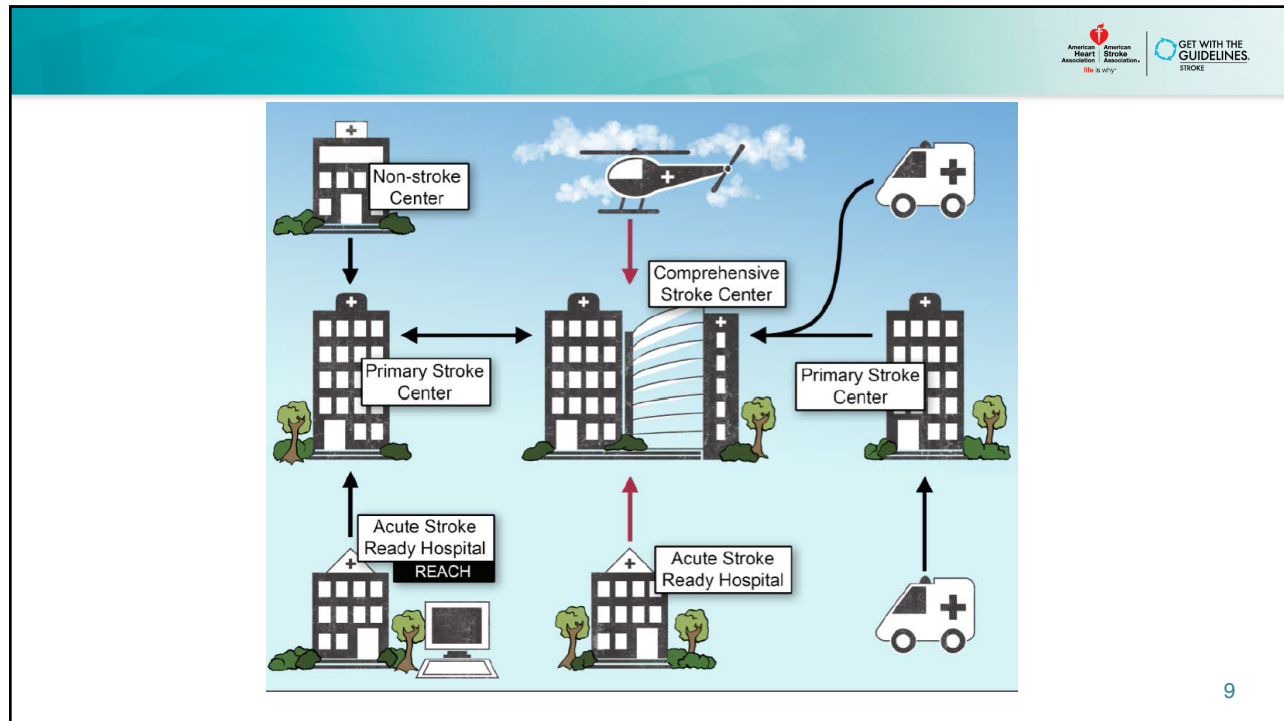


8 D's of stroke care

- **Detection:** Rapid recognition of stroke symptoms
- **Dispatch:** Early activation and dispatch of EMS
- **Delivery:** Rapid EMS identification, management, and transport
- **Door:** Appropriate triage to stroke center
- **Data:** Rapid triage, evaluation, and management within the ED
- **Decision:** Stroke expertise and therapy selection
- **Drug:** Fibrinolytic therapy, intra-arterial strategies
- **Disposition:** Rapid admission to the stroke unit or critical care unit

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Publications to Support Stroke System

ASA Policy Recommendations

Recommendations for the Establishment of Stroke Systems of Care

Recommendations From the American Stroke Association's Task Force on the Development of Stroke Systems

Task Force Members

Lee H. Schwamm, MD; Arthur Pancioli, MD; Joe E. Acker III, EMT-P, MPH, MS;
 Larry B. Goldstein, MD; Richard D. Zorowitz, MD; Timothy J. Shephard, PhD(c), CNRN, CNS;
 Peter Moyer, MD, MPH; Mark Gorman, MD; S. Claiborne Johnston, MPH, MD, PhD;
 Pamela W. Duncan, PhD; Phil Gorelick, MD; Jeffery Frank, MD; Steven K. Stranne, MD, JD;
 Renee Smith, MPA; William Federspiel, BA; Katie B. Horton, RN, JD;
 Ellen Magnis, MBA; Robert J. Adams, MD

AHA/ASA Policy Statement

Interactions Within Stroke Systems of Care

A Policy Statement From the American Heart Association/American Stroke Association

Randall Higashida, MD, FAHA, Chair*; Mark J. Alberts, MD, FAHA, Co-Chair*;
 David N. Alexander, MD; Todd J. Crocco, MD; Bart M. Demaerschalk, MD;
 Colin P. Derdeyn, MD, FAHA; Larry B. Goldstein, MD, FAHA;
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 Eric D. Peterson, MD, FAHA; Robert H. Rosenwasser, MD, FAHA; Jeffrey L. Saver, MD, FAHA;
 Lee Schwamm, MD, FAHA; Debbie Summers, RN, MSN, ACNS-BC, FAHA;
 Lawrence Wechsler, MD, FAHA; Joseph P. Wood, MD, JD;
 on behalf of the American Heart Association Advocacy Coordinating Committee

Why Stroke Systems?

- A fully functional stroke system of care will:
 - Reduces stroke related deaths by 2% to 3%
 - Translates into 20,000 fewer deaths in the United States
 - Approximately 400,000 fewer deaths worldwide
- Reduction in Post Stroke disability
 - Improve quality of life
 - Result in more efficient use of healthcare resources
 - Reduce financial burden

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Key Components of Stroke Systems

- Prehospital care and Triage
- Efficient transfer of patients between hospitals
- Telemedicine technologies
- Advanced interventions
- Monitoring/Quality Program and Data Collection
- Rehabilitation

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The Sum is greater than the Parts

- 30-day in-hospital mortality over 11 years
- Canadian Study
- 5 Providences with integrated systems of stroke care
- 7 Providences without integrated systems of stroke care
- 15% relative reduction in 30-day mortality
- Mortality declined only in those providences with systems.

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Mission: Lifeline Stroke Nebraska Grant

\$6.5 million initiative to enhance systems of care, save lives, and improve outcomes for Stroke patients in rural Nebraska, called Mission: Lifeline.

The lead funder for this investment in Nebraska is The Leona M. and Harry B. Helmsley Charitable Trust, one of the nation's largest foundations, providing a grant of \$5.35 million to the American Heart Association for the initiative.

THE LEONA M. AND HARRY B.
HELMSLEY
 CHARITABLE TRUST

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Interactions Within Stroke Systems of Care

- EMS
 - More public awareness to call 9-1-1
 - Use of Assessment tool
 - Reduced treatment times
- Triage and Routing
 - High Priority Care
 - Last Known Well
 - No more than 15 to 20 minutes

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Transfers

- Transfer of Patients between facilities should include:
 - Written protocols that detail criteria for such transfers
 - Who and when to call to arrange such a transfer
 - How the patient is monitored
 - How to communicate the outcome of each transfer
- Telemedicine
 - Remote consultative services

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Use of the System for Endovascular

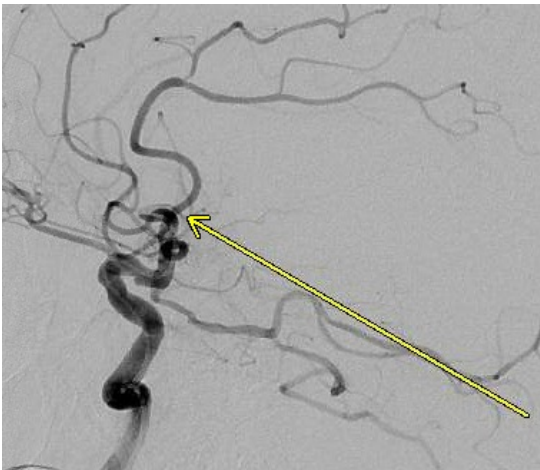


- 77 y/o Male
- Sudden right facial droop, right-sided weakness, and aphasia
- Transported by EMS to community hospital
- Pt had a hx of Afib and was taking anticoagulants
- Not a tPA candidate
- Transferred to CSC, NIHSS 19
- Recognized hyperdense MCA sign from CT
- Embolectomy, immediately regained movement to Right side
- Within 24 hours his symptoms completely resolved
- Studies revealed he was under-anticoagulated

11/2/18 D/C home 2 days later with NIHSS 0

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Pre-cerebral arteriogram



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Post-cerebral arteriogram



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Why Collect ~~Data~~ Information?

- To answer questions or identify questions
- To describe phenomena in the world around us
- To continue improvement or maintain a desired result
- To monitor an identified situation
- To strengthen our guidelines
- It drives the science!
- Don't collect data just for the sake of collecting data!
- Start with a question that data can answer!




Improving the System of Care for STEMI Patients

Can one little thing make a big impact?



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GET WITH THE GUIDELINES.
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To be a part of it....

- Participate in Task Forces
- Participate in Education
- Participate in GWTG Stroke

Mission: Lifeline Nebraska Staff Introductions & Roles

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A large graphic with the word "Questions?" in a bold, red, sans-serif font, centered on a white background. Surrounding the central text are numerous black question marks of various sizes, styles, and orientations, some appearing as simple outlines and others with more complex, artistic flourishes. The overall composition is dense and visually engaging. The graphic is framed by a teal header at the top, which contains the American Heart Association logo and the text "GET WITH THE GUIDELINES. STROKE" on the right, and a date "11/2/18" and the word "Association" on the left.