## 2019 GEORGIA STROKE CONFERENCE

#### Stroke Health Status: Where are we now?

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GEORGIA DEPARTMENT OF PUBLIC HEALTH

# **Georgia Department of Public Health**

- Is the leading agency in
  - preventing disease, injury, and disability
  - promoting health and well-being
  - preparing for and responding to disasters from a health perspective
- Accomplishes by
  - assessing the population health status
  - ensuring that people have the necessary resources and skill
  - supporting the development and implementation of sound public health policy

# **Stroke Burden**

- Georgia is in the Stroke Belt
  - Stroke death rate 30% higher than the U.S. average<sup>1</sup>

Georgia's Coastal plains are in the "Buckle" where death rate reaches 40% higher than the U.S. average<sup>1</sup>

- Stroke is the **5<sup>th</sup>** leading cause of death in Georgia<sup>2</sup>
  - ~4,400 stroke deaths in 2017 Average of 12 stroke death/day
- In 2017 more than **21,000** hospitalization<sup>3</sup> Average of 57 stroke hospitalization/day
  - → Direct cost/hospital charges over **\$1.6 billion** 
    - a median charge per hospitalization of \$35,185

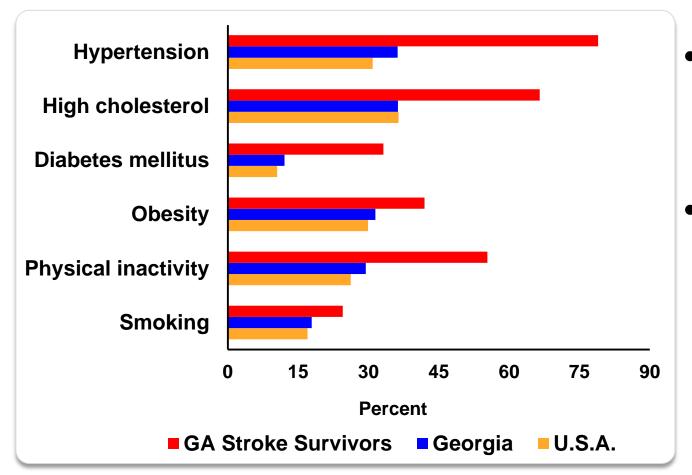
Source:

1. Benjamin EJ, et al. Circulation. 2017;135(10):e148-e603.

2. CDC, NCHS. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, http://wonder.cdc.gov/ucd-icd10.html

3.2017 Georgia Hospital Discharge, GCASR

# Prevalence of risk factors among adult Georgians, Georgia stroke survivors, and U.S., BRFSS 2016<sup>\*§</sup>



- Overall Adult Georgians have a high prevalence of Stroke risk factors
  - Stroke patients in Georgia
    have a much higher risk
    factors than an average adult
    Georgians and U.S. Adults.

\*: Prevalence of Hypertension and high cholesterol level were determined based on the 2015 Georgia BRFSS data

§: a person is physical inactive if he or she didn't do any physical activity or exercise during the past 30 days other than their regular job

**Obese: Body mass index 30 or greater** 

#### GEORGIA DEPARTMENT OF PUBLIC HEALTH

# **Georgia DPH Efforts**

- Hypertension Management and Diabetes Management Outreach Program
- Georgia SHAPE
- Tobacco Use Prevention Program
- Tobacco Quitline
- The Georgia Coverdell Acute Stroke Registry
  - 2005: 19 hospitals
  - 2019: 81 hospitals + 31EMS agencies + 6 Post-hospital care providers (3 hospitals and 3 EMS agencies)

### **GCASR: Improvements in Quality of Stroke Care**

	2008	2018
- Defect-free care <sup>a</sup>	37%	77%
- IV Alteplase <sup>b</sup>	4.8%	10.7%
- Door to IV Alteplase time <sup>c</sup>	82 min	48 min

- In 2018
  - 90% eligible ischemic stroke patients received IV Alteplase
  - 84% received IV Alteplase within 60 minutes of hospital arrival

a: among all acute stroke patients; b: among ischemic stroke patients; c: among eligible ischemic stroke patients

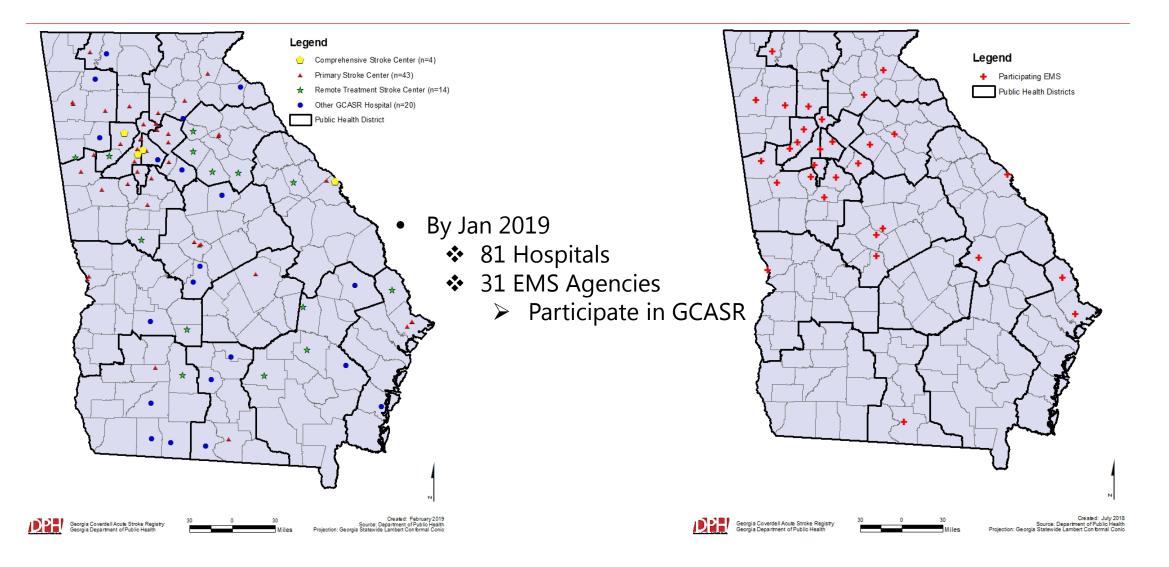
# **Georgia DPH Efforts**

- Coverdell-Murphy Act passed by the Georgia assembly in 2008
- A three tier stroke systems of care Comprehensive, Primary, and Remote Treatment Stroke Centers
- 81 Hospitals are participating in GCASR
  - Comprehensive Stroke Centers (n=4)
  - Primary Stroke Centers (n=43)
  - Remote Treatment Stroke Centers (n=14)
    - Based on 2008-2017 hospital discharge data from 12 designated RTSCs
      - acute ischemic stroke patients treated after the hospitals were designated had 51% lower odds of in-hospital death compared to patients admitted when the hospitals were not participating in the Georgia Coverdell Acute Stroke Registry effort of quality stroke care improvement.

# **Georgia DPH Efforts**

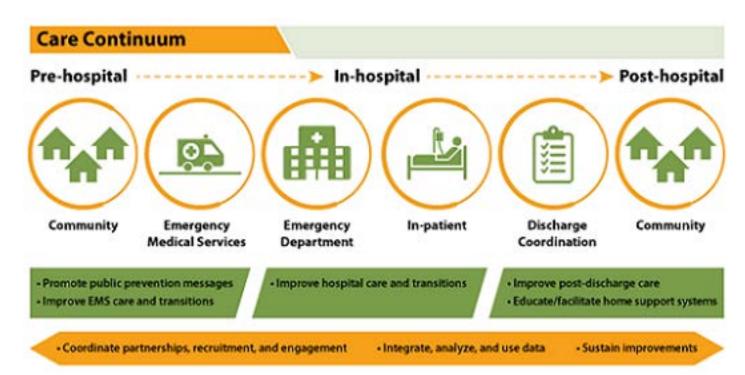
- But GCASR facilities and designated centers are not evenly distributed across the state
- Budget Ask
- Still,
  - < 60% of stroke patients were transported to hospitals by EMS
  - < 40% of stroke patients arrived at hospital within two hours of symptom onset
    - ➔ the need to raise public awareness to identify stroke in the community, call 911, and transport patients to designated centers rapidly

# **GCASR Coverage**



# **Stroke Care Continuum**

- Stroke is acute illness but requires coordinated care both in
  - Short-term: early recognition and provision of care improves outcome
  - Long-term: most patient develop one or complication and avoid 2<sup>nd</sup> attack



# Goal

- Strengthen the collaboration among partners to
  - improve quality of stroke care across the care continuum
  - educate the community to reduce the prevalence of risk factors
  - raise awareness in the community for early recognition and swift transport of stroke patient to a stroke-ready facility
- Maintain current and recruit additional hospitals & EMS agencies
  - Especially in area where we currently do not have participation
- Recruit EMS agencies that implement community paramedicine program
- Recruit Post-hospital follow-up by primary care providers

# **Expectations**

- Presentations on
  - Surveillance report
  - Stroke Advocacy
  - Community Paramedicine Program
  - Need to recognize and document stroke
- Active participation to have a fruitful discussions and suggestions
- Collaboration among healthcare providers across the care continuum
- Commitment to raise the bar for quality of stroke care