

Texas Council on Cardiovascular Disease and Stroke Report for the 84th Regular Texas Legislative Session Heart Disease and Stroke in Texas: A Call to Action

Enacted by the 76th Legislature (House Bill 2085), the **Texas Council on Cardiovascular Disease and Stroke** (TCCVDS) is charged with developing an effective and resource-efficient plan¹ to reduce the morbidity, mortality and economic burden of cardiovascular disease (CVD) and stroke in the State of Texas. The TCCVDS also makes written recommendations to the legislature, submits legislation, and/or comments on pending legislation that affects persons with CVD and stroke.

Human and Fiscal Implications of Heart Disease and Stroke

- Heart disease and stroke are the **number one and number four leading causes of death** in Texas².
- Approximately 1 in 17 adult Texans have heart disease (5.9%), and 2.7% have had a stroke³.
- For every 10,000 adults in Texas, about 113 hospitalizations occurred annually for heart disease; and about 28 hospitalizations occurred annually for stroke⁴.
- From January to June 2014, Texas EMS agencies reported over 6,000 stroke runs and nearly 2,500 ST-elevated myocardial infarction (STEMI) runs (see Figures 1 and 3).
- EMS run data and hospital discharge data (see Figures 1,2,3,4) demonstrate **significant gaps in Texas' capacity** to prevent the human and financial impact of heart disease and stroke.
- In 2012, inpatient hospitalization charges for CVD and stroke were approximately **\$21.5 billion**⁴.
- Of the above inpatient hospitalization charges for CVD and stroke, over **\$1 billion were Medicaid charges**⁴.
- Estimations that include both direct medical costs and the indirect costs of CVD are significantly higher. In the 2010, coronary heart disease, hypertension, stroke and heart failure cost the nation a total of **\$290.7 billion**⁵.

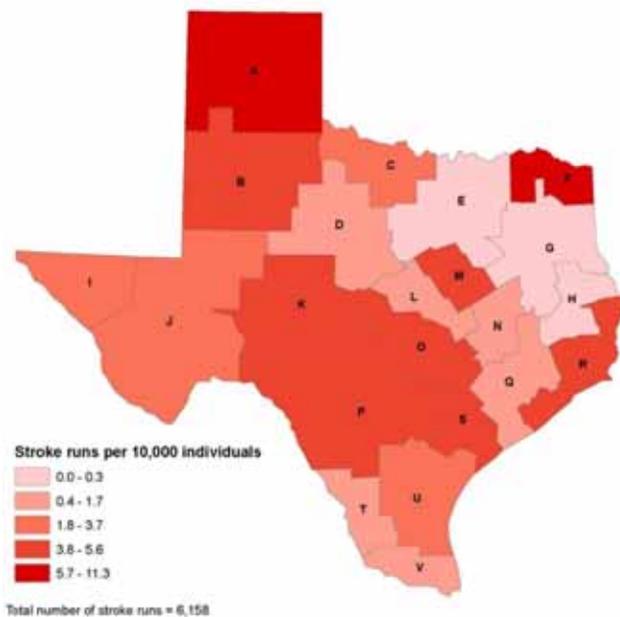


Figure 1: Number of Stroke Runs per 10,000 Individuals, by RAC, Jan-June 2014

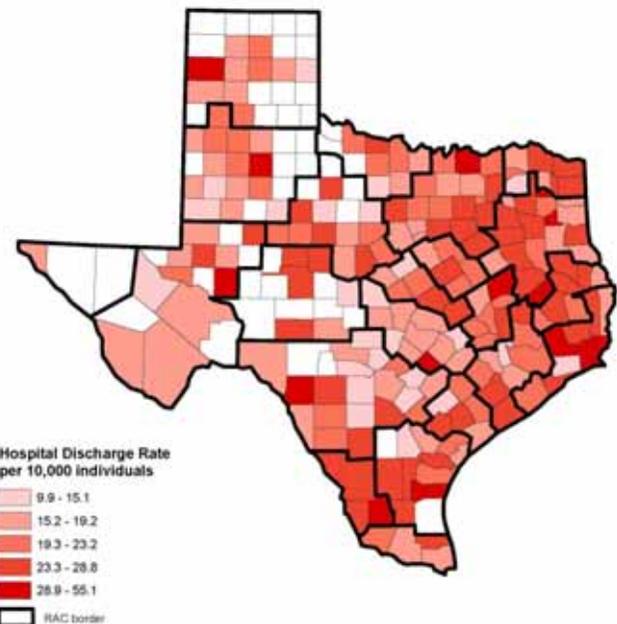


Figure 2: 2012 Age-adjusted Hospital Discharge Rates for Stroke⁴

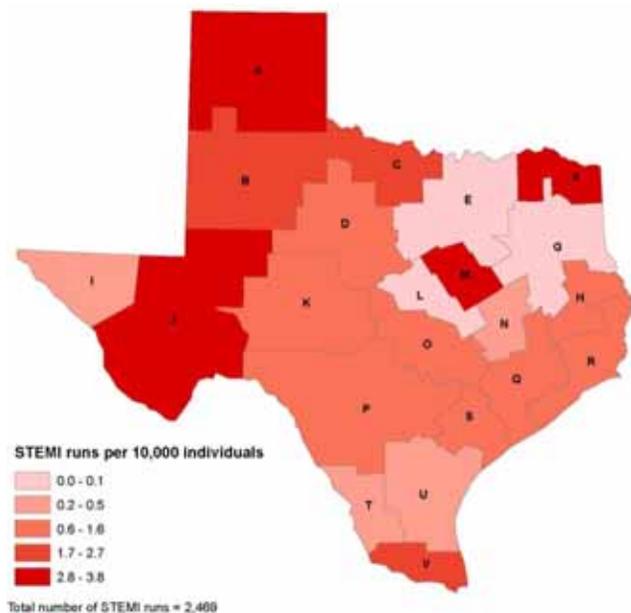


Figure 3: Number of STEMI Runs per 10,000 Individuals, by RAC, Jan-June 2014

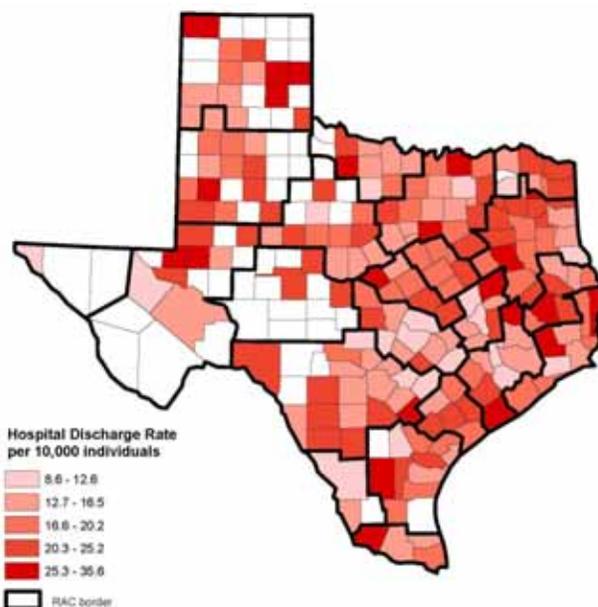


Figure 4: 2012 Age-adjusted Hospital Discharge Rates for Acute Myocardial Infarction⁴

Note: Some RACS could not report total number of runs so the data displayed may be incomplete. Stroke runs are counted based on signs and symptoms and STEMI runs are counted based on pre-hospital ECG.

Rider 97 – TCCVDS Accomplishments over the Biennium

During the 83rd Regular Texas Legislative Session, funds were appropriated to advance heart attack and stroke reduction efforts throughout Texas. As directed, the TCCVDS, through the DSHS, has provided funding to the University of Texas to develop a statewide, stroke clinical research network (Lone Star Stroke Consortium) and has launched a Heart Attack and Stroke Data Collection Initiative.

The Data Collection Initiative already has begun to see successes. The availability of critical pre-hospital and hospital data points for STEMI and stroke has increased dramatically, allowing the TCCVDS to make data-driven recommendations on where resources need to be directed in Texas. Pre-hospital data (see Figures 1 and 3) were provided by the 22 Texas Regional Advisory Councils (RACs) which oversee the trauma systems and EMS services across the state. Unfortunately, RACs' capacity for data collection and management varies widely, due to limited resources for these critical activities. Only 13 of the 22 RACs have any personnel dedicated to these critical tasks, which represents an opportunity for improvement with additional resources.

Other accomplishments to date over the biennium include:

- Recognition of seven communities as Texas Healthy Communities;
- Funding 22 RACs to facilitate data exchange, develop stroke transport plans and educate health care providers and the public on signs and symptoms of stroke;
- Funding University of Texas System to develop Lone Star Stroke Consortium, which has established five hub coordinating centers with four spoke centers per hub for a total of 25 participating research centers. Three research protocols have been approved, and new telemedicine connections are being established to reach patients in underserved areas.

Council Recommendations for the 84th Legislative Session

To reduce the burden of heart disease and stroke and direct costs to the State, the TCCVDS recommends the following priorities that address the prevention, acute care and remediation of heart disease and stroke for the 84th Legislative Session.

Heart attack and stroke systems of care range from disease prevention to acute care to chronic care and rehabilitation. For heart attack and stroke, high quality care, including rapid diagnosis and treatment, can mean the difference between recovery, disability or death.

Prevention

Texas ranks 33rd in the nation for state investment in public health at \$19.31 per capita for fiscal year 2012-2013⁶, yet we know that every \$1 invested in community-based public health programming returns \$5.60⁶. The TCCVDS recommends the following cost-effective prevention programs:

1. Texas Healthy Communities Program

Recommend funding for local communities for chronic disease prevention activities through the Texas Healthy Communities (TXHC) Program. The TXHC Program assists cities to assess their existing environments, implement changes in local environmental and policy infrastructure, and adopt priority public health practices to reduce risk factors for chronic diseases including heart disease and stroke.

2. Million Hearts® Initiative

Recommend funding to support the ongoing efforts of the Million Hearts® initiative in Texas. The national goal of the Million Hearts® initiative is to prevent one million heart attacks and strokes by 2017. Funds will be used to develop a comprehensive messaging campaign for patients and clinicians.

3. Self-Measured Blood Pressure

Recommend funding to support efforts to increase the use of self-measured blood pressure monitoring. High blood pressure (hypertension) is a significant risk factor for heart disease and stroke. In 2012, almost one in three adult Texans reported having high blood pressure³. Self-measurement and monitoring of blood pressure is a best practice in blood pressure control with a growing body of literature supporting its effectiveness. Funds will be used for outreach to clinicians and payers and for the purchase of home blood pressure monitors.

4. Stroke and Heart Attack Public Education

Recommend funding to increase awareness of signs and symptoms of stroke and heart attack through the Texas Cardiovascular Disease and Stroke Partnership. Awareness of signs and symptoms of stroke and heart attack is crucial to ensuring prompt care. Funds will support an education campaign on the signs and symptoms of stroke and heart attack.

5. American Heart Association/American Stroke Association Prevention Priorities

Support the American Heart Association/American Stroke Association 2015 Public Policy Agenda for prevention initiatives.

Acute Care

Medicaid spending on beneficiaries with cardiovascular diseases (including heart attack and stroke) totaled \$260 million in 2011.⁷ Timely and successful treatment of acute heart attack and stroke events will save the state money. Faster treatment for STEMI patients has reduced the average hospital stay by two days, with a decrease in average hospital costs of \$10,000 per patient.⁸ Another analysis showed that if just 20 percent of ischemic stroke patients in the United States received timely and appropriate

therapy, \$74 million would be saved in just the first year post-stroke.⁸ The TCCVDS recommends expeditiously focusing resources to limit these liabilities through the following cost effective programs:

1. Data Collection Initiative

Recommend continued funding for the biennium to cover DSHS expenses to continue the statewide Heart Attack and Stroke Data Collection Initiative and expand its reach among STEMI-receiving hospitals.

2. Regional Advisory Councils

Recommend funding for the biennium to fund Regional Advisory Council (RAC) heart attack and stroke education, data collection and management, development and support of transport plans, and quality improvement activities. A recent survey of the RACs suggests that they do not have the capacity to collect data for heart attack and stroke. Data collection and analysis is critical to improving the systems of care for heart attacks and strokes. This funding will support staff at each RAC for heart attack and stroke data collection and analysis.

3. 12 Lead Telemetry and Equipment Grant Program

Recommend funding for an EMS 12 lead grant program to be managed by DSHS staff, under the direction of the TCCVDS, Governor's EMS and Trauma Advisory Council's Cardiac Care Committee and Texas Heart Attack Coalition. 12 lead monitors will be provided to 911 EMS agencies without equipment, in order to increase the number of ambulances in Texas that respond to suspected cardiac emergencies with the ability to complete and transmit a 12 lead ECG.

4. Lone Star Stroke Program

Recommend continued funding for the ongoing research started by the established Lone Star Stroke Consortium through the University of Texas.

Chronic Care and Rehabilitation

Ongoing care for Texans with stroke and chronic heart disease is a significant ongoing cost, and outpatient rehabilitation is consistently an underutilized service.⁸ The TCCVDS recommends the following cost-effective chronic care and rehabilitation programs:

1. Texas Speech Remediation

Recommend funding to replicate the Austin Speech Labs model throughout Texas. Currently, medical insurance covers physical and occupational therapy post stroke. Speech, language and ability to comprehend take a long time to recover and require intensive speech therapy, which is not covered by most insurers. Austin Speech Labs has developed a model for an effective, intensive speech therapy model that should be rolled out statewide.

2. Caregiver Resources

Recommend funding to expand Department of Aging and Disability Services' resources for caregivers providing care for heart attack and stroke survivors.

3. Chronic Care and Rehabilitation Services for Stroke Survivors

Recommend funding to establish a program at the Department of Assistive and Rehabilitative Services (DARS) for stroke chronic care and rehabilitation services. Currently, DARS only provides chronic care and rehabilitative services for individuals with traumatic brain injuries.

References

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8. Facts- When Minutes Matter – Systems of Care for Acute Cardiovascular Conditions. American Heart Association. Accessed at http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_304794.pdf on December 10, 2014.