

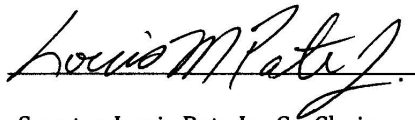


2013 – 2014
**Report of the Justus-Warren Heart
Disease and Stroke Prevention Task Force**

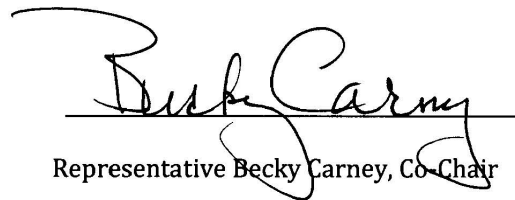
NORTH CAROLINA G.S. 143B-216.60

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Justus-Warren Heart Disease and Stroke Prevention Task Force



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Introduction

The Justus-Warren Heart Disease and Stroke Prevention Task Force (Task Force) was established in 1995 (N.C.G.S. 143B-216.60) to address the burden of heart disease and stroke, two of the state's leading causes of death, disability, and health care costs.

There are several substantive duties assigned to the Task Force. Three of the major charges are:

- 1) Profile the burden of heart disease and stroke in North Carolina;
- 2) Publicize the burden and preventability of heart disease and stroke; and,
- 3) Develop, promote and implement a comprehensive statewide Heart Disease and Stroke Prevention Plan.

In 2006, the North Carolina General Assembly (NCGA) passed legislation that established a Stroke Advisory Council (SAC). The SAC was charged with advising "...the Task Force regarding the development of a statewide system of stroke care that shall include, among other items, a system for identifying and disseminating information about the location of primary stroke centers" (N.C.G.S. 143B-216.60 (j)(10)).

The Task Force and SAC are comprised of legislatively prescribed organizational representatives and categorical stakeholders (e.g., heart attack and stroke survivors). Task Force members are appointed by the Governor and the General Assembly. SAC members are appointed by the Task Force as prescribed in the enabling legislation. In addition to the formally appointed members, numerous stakeholders from across the state work with the Task Force and its SAC in planning and implementing *The North Carolina Plan for the Prevention and Management of Heart Disease and Stroke 2012-2017*, which is located on the Start With Your Heart website. This can be found at: www.startwithyourheart.com.

Appointed and partner stakeholders from across the state engage in coordinated efforts to reduce the cardiovascular burden in North Carolina. Task Force meetings are scheduled twice per year when the General Assembly is not in session. The SAC and its Work Groups meet throughout the year.

Burden of Heart Disease and Stroke in North Carolina

North Carolina remains in the quartile of states with the highest cardiovascular disease (CVD) rates in the nation. While heart disease and stroke are the second and fourth leading causes of death in North Carolina, CVD (which includes heart disease, stroke, other diseases of the circulatory system and congenital cardiovascular defects) is the number one killer of North Carolinians. In addition, North Carolina is part of the Stroke Belt, an eight to twelve state region with the highest mortality rates in the nation. The eastern counties of North Carolina are part of the Buckle of the Stroke Belt, comprised of the coastal plains of Georgia, South Carolina, and North Carolina. This area has experienced the highest stroke death rates in the nation for approximately the last 30 years.

The Task Force serves as a key resource for the burden of CVD in North Carolina. The Task Force uses several mechanisms to publicize this burden to the general population and stakeholders across the state, including policy makers and health care providers (e.g., the Start With Your Heart website, Task Force publications and updates, presentations to groups across the state, responses to inquiries from the general public as well as internal and external partners).

While much work remains to be done, North Carolina met its *Healthy North Carolina 2010* target in 2009 and, in partnership with numerous stakeholders, is taking a lead role in meeting the *Healthy*

North Carolina 2020 target. North Carolina is partnering with the national Million Hearts Initiative, led by the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare and Medicaid Services. The Initiative, launched in 2012, has a goal of preventing one million heart attacks and strokes in the United States by 2017.

Beyond mortality, many North Carolinians live with the physical, mental and financial consequences of CVD. In addition, mortality, morbidity, and the economic impact of CVD varies by race/ethnicity, gender, and age as well as by socioeconomic status and (as noted above) geographic location.

North Carolina Plan for the Prevention and Management of Heart Disease and Stroke

One of the outstanding achievements of the Task Force has been the ability to influence collaboration and partnerships from diverse individuals and organizations across the state. The broad commitment and collaboration to reducing the burden is reflected in *The North Carolina Plan for the Prevention and Management of Heart Disease and Stroke 2012-2017*. The Plan is the third comprehensive statewide plan to address heart disease and stroke since the Task Force was established in 1995. The overall goal for each of the plans has been to increase the quality and years of healthy life through improved cardiovascular health and the elimination of health-related disparities.

The North Carolina Plan for the Prevention and Management of Heart Disease and Stroke 2012-2017 provides a roadmap to reduce the burden of cardiovascular disease in North Carolina through the collective work of many partners. This roadmap also incorporates the previously developed recommendations in the *Stroke System of Care Plan for North Carolina*, December 2010. In addition to serving as a roadmap, the Plan also provides a platform for funding and policy priorities. The evidence-based goals, objectives, and strategies are those determined to be the most effective and feasible to address CVD in North Carolina. The plan addresses the following goals:

- Goal 1:** Increase the proportion of North Carolinians who live healthy lifestyles conducive to cardiovascular health;
- Goal 2:** Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled;
- Goal 3:** Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events;
- Goal 4:** Increase the proportion of North Carolinians who receive appropriate coordinated management of post-acute transitional care following cardiovascular events; and,
- Goal 5:** Enhance utilization of current data resources, expand/develop additional resources, extend their availability, and improve accessibility of information derived from evaluation and surveillance processes.

Selected Historical Accomplishments

The Task Force has coordinated statewide leadership for the prevention and management of CVD, including serving as an umbrella organization for stakeholders along the continuum of care. This has enabled diverse support from multiple partners across the state to leverage significant human and financial resources. Related accomplishments include:

- Meeting the *Healthy North Carolina 2010* targets for stroke and coronary heart disease mortality by 2009. Reduction of all North Carolina deaths due to CVD from 38.1% in 1996 to slightly less than 29% in 2011.
- Statewide Convocation of Community Leaders to Prevent Heart Disease and Stroke. Proceedings of the Convocation published in 1996.

- Save Your Sweet Heart, first Legislative Heart Health Day, held in 1997 and then biennially every odd year until 2009.
- First edition (1997) of *The Burden of Heart Disease and Stroke in North Carolina* surveillance document printed and distributed to numerous stakeholders (periodic updates provided during subsequent years).
- Convening of two CVD Data Summits (1998 and 1999) leading to the development of the Tri-Stroke Network serving North Carolina, South Carolina, and Georgia.
- Initiation of the Start With Your Heart evidence-based and award-winning public awareness campaigns, including campaigns on hypertension, secondhand smoke, and heart attack and stroke signs and symptoms and the need to immediately call 911.
- Start With Your Heart website created (2000) by the Task Force and utilized by health care professionals and the general population for numerous educational and resource materials.
- Publication of the first comprehensive *North Carolina Plan to Prevent Heart Disease and Stroke 1999 – 2003*. Current plan covers the period 2012-2017. Approximately 80 partners contributed to its development.
- Publication of *Unexplained Stroke Disparity: Report and Recommendations from Three Southeastern States – Tri-State Stroke Network (TSSN)*, 2000.
- Non-recurring state funding provided in 2000 for Strike Out Stroke, a public education program targeting hypertension and stroke in African Americans.
- Tri-State (North Carolina, South Carolina, and Georgia) Stroke Summit held annually from 2001- 2010 when CDC funding for stroke networks was discontinued.
- With support of the Task Force, funds awarded by CDC in 2002 to the University of North Carolina at Chapel Hill to lead a collaborative effort to develop a prototype for North Carolina Stroke Registry. Following this successful project, CDC awarded a three-year grant in 2004 to the former Heart Disease and Stroke Prevention Program to implement the North Carolina Stroke Care Collaborative (NCSCC), originally the North Carolina Acute Stroke Registry.
- Completion of a *Stroke System of Care (SSoC) Plan for North Carolina* and the establishment of Work Groups aligned with the SSoC components to guide implementation of the Plan. *SSoC Plan* is incorporated in the 2012-2017 *North Carolina Plan for the Prevention and Management of Heart Disease and Stroke*.
- North Carolina's support of the Task Force positioned the state to be one of the first two states in the nation to receive CDC funding at the comprehensive level (\$1.25 million/yr. for 5 years).
- Establishment and support of a Stroke Advisory Council (SAC) to the Task Force that provides ongoing advice and technical assistance on the development and implementation of a statewide system of stroke care for North Carolina.
- Support of the development of an eastern and a western stroke network that provide regionally coordinated and locally driven approaches to cerebrovascular issues in the western and eastern areas of the state.
- Provision of supplemental support to the CDC-funded NCSCC's quality improvement program, as recommended by the Task Force's SAC in January 2007, to assure evidence-based stroke care, protocols, and policies in all North Carolina hospitals.
- Partnership with the North Carolina Office of Emergency Medical Services to develop an acute stroke care toolkit for the of the state's EMS systems to assure evidence-based protocols for prehospital recognition and treatment of stroke.
- Leadership of Task Force legislative members in the development and passage of legislation to support Task Force recommendations related to tobacco use, including prohibition of smoking in multiple venues (e.g., 2007 legislation prohibiting smoking in all state government buildings; 2008 legislation prohibiting smoking in the state government motor fleet; 2008

legislation giving clear local authority for community colleges to prohibit smoking and all tobacco use on community college campuses; 2009 legislation making all restaurants and bars smoke-free).

- Sponsorship of Legislative Heart Health Day (LHHD) at the General Assembly in 1997 and biennially every odd year until 2009. LHHD promoted cardiovascular education and screening activities and policy, system, and environmental changes conducive to cardiovascular health promotion.
- Facilitated and/or supported health care provider education including Advanced Stroke Life Support.
- Partnership formed with Carolinas/Georgia Chapter of American Society of Hypertension (ASH) in 2004 to provide continuing medical education regarding new hypertension (HTN) guidelines (The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure).
- TSSN – Geographic Information Systems (GIS) Mapping Project in 2004 for stroke care resources in North Carolina, South Carolina and Georgia.
- Establishment of a sustainable Stroke Advisory Council (SAC) to develop a Stroke System of Care (SSoC) Plan for the state. SAC established work groups on Prevention/Public Awareness, Pre-hospital Care, Acute and Subacute Care, Post-hospital and Transitions of Care, and Telestroke.
- Innovative Quality Improvement (QI) Grant Program initiated by NCSCC for participating hospitals in 2007.
- Association of State and Territorial Health Officials (ASTHO) awarded funding in 2010 to help support the further development of the SSoC Plan, which was published in 2011. North Carolina was one of only two states to be awarded this funding.
- Enabled North Carolina Office of Emergency Medical Services (OEMS) to receive funding to develop an Acute Stroke Care Toolkit for Emergency Responders throughout North Carolina.
- Ongoing Advanced Stroke Life Support (ASLS) trainings held for pre-hospital and hospital personnel and representatives from other NCSCC partner organizations across the state.

Selected accomplishments for 2013-2014

- Publication and promotion of the recommendations in the Task Force's third comprehensive *Plan for the Prevention and Management of Heart Disease and Stroke 2012-2017*.
- Update of the *Burden of Cardiovascular Disease in North Carolina* documents through publications and presentations.
- Passage by NCGA of Task Force supported primary stroke center legislation and assistance with the rule making process. North Carolina is now able to recognize all levels of stroke center certification (comprehensive, primary, and acute stroke ready).
- Expert presentations on evidence-based findings/recommendations on CVD prevention and management including a presentation on the Eighth Joint National Committee (JNC 8) Hypertension Guidelines, the development of Telestroke services in North Carolina, cardiovascular disease as a risk factor for firefighters, women and stroke, mobile integrated health care and community paramedicine. Follow up provided with key stakeholders on selected recommendations.
- Facilitated convening of an ad hoc hypertension committee comprised of key stakeholders to address strategies for increasing hypertension prevention and management in North Carolina.
- Became a partner with national Million Hearts Initiative to prevent one million heart attacks and strokes nationwide by 2017.

- Established partnership with Alliant Quality, North Carolina’s new Quality Improvement Organization to implement a statewide initiative to address Goal 2 (Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled) of *The North Carolina Plan to Prevent Heart Disease and Stroke, 2012-2017*.
- Passage of Sodium Resolution in the North Carolina House of Representative in May 2011.
- Sponsorship of Hypertension Awareness Day, in partnership with the American Heart Association/American Stroke Association, Carolinas Center for Medical Excellence, North Carolina Academy of Family Physicians, and Consortium for Southeastern Hypertension Control at the North Carolina General Assembly in May of 2013 and 2014.
- Passage of Hypertension Resolution in the North Carolina House of Representatives in May 2014 and the reading of a Senatorial Statement on Hypertension in May 2014.
- Support of Governor’s Hypertension Proclamation in 2014.
- Representation on the North Carolina Stroke Association’s Board of Directors.
- Sharing Task Force educational materials on the ABCS (Aspirin when appropriate, Blood Pressure control, Cholesterol control, Smoking cessation) of heart disease and stroke prevention that resulted in the development and distribution of related education material by the North Carolina State Health Plan for Teachers and State Employees. Materials distributed to approximately 275,000 at risk members.
- Continued implementation of targeted award winning public education campaigns regarding signs and symptoms of heart attacks and strokes and the need to immediately call 911.
- Partnered in the planning and served on the faculty of cardiovascular conferences targeting health care providers and other stakeholders (e.g., 2014 Duke Stroke Symposium and 2014 Hypertension Evidence-Based Academy in Eastern North Carolina).

Selected Historical Policy Highlights

During its history, the Task Force has been instrumental in influencing major policy changes impacting cardiovascular health:

- Task Force legislative members have successfully sponsored legislation that prohibited smoking in multiple venues statewide:
 - Task Force recommended legislation in 2007 that made all state government buildings smoke-free, and sponsored the bill that prohibited smoking in the state government motor fleet in 2008.
 - Task Force recommended legislation in 2008 that gave clear local authority for community colleges to prohibit smoking and tobacco use on their campuses.
 - Task Force members sponsored legislation in 2009 making all restaurants and bars smoke-free.
- Task Force supported quality improvement initiatives (e.g., North Carolina Stroke Care Collaborative and health care provider training) to improve hospital policies and protocols for acute stroke care.
- Task Force supported development of an acute stroke care toolkit to enable EMS systems throughout North Carolina to benchmark and improve their emergency response to stroke.
- Task Force members supported legislation on newborn screening for congenital heart disease utilizing pulse oximetry.
- Task Force supported House resolution creating awareness about the benefits of eliminating excessive dietary sodium intake and related supporting measures aimed at decreasing heart disease and stroke.

Selected Policy Highlights for 2013-2014

During the last two years, Task Force activity has addressed policy changes in several areas including:

- Passage of legislation to identify the three levels of acute stroke care in North Carolina hospitals (i.e., comprehensive stroke center, primary stroke center, and acute stroke ready).
- Convening Hypertension Awareness Day at the General Assembly in May 2013 and May 2014 to support policy and systems change for improved management of hypertension and supportive environments.
- Support of a Governor's Proclamation on Hypertension Day (May 21, 2014), Passage of House Resolution 1172 recognizing the third Wednesday of May as Hypertension/High Blood Pressure Awareness Day as recommended by the Justus-Warren Heart Disease and Stroke Prevention Task Force, and a Senatorial Statement recognizing the third Wednesday of May as High Blood Pressure Awareness Day.
- Collaboration with the North Carolina Office of Emergency Medical Services on drafting the rules for the legislation designating stroke centers.
- Expert presentation at the April 2014 Task Force meeting on CVD and firefighters that facilitated Task Force support of legislative changes in Firemen's Relief Funding enabling utilization of funds for annual physical exams.
- Expert presentation at the November 2014 Task Force meeting on the utilization of mobile integrated health care/expanded paramedicine and related policy measures at the state and national levels.
- Initiated collaboration with North Carolina Office of Rural Health and Community Care to build on existing efforts to support the effective and systematic development of Telestroke services throughout the state.
- Continued support of North Carolina Smoke Free Restaurants and Bars Law.

Justus-Warren Task Force and Stroke Advisory Council Meetings

Task Force meetings are structured to provide expert presentations and input on previously prioritized and emerging cardiovascular issues impacting North Carolinians. While the Task Force and SAC meet separately, there is some overlap in membership and partners. Two members of the SAC, including the SAC Chair, serve on the Task Force. In addition, the Executive Director of the Task Force serves as staff for both the Task Force and SAC. A prominent part of each Task Force meeting is a report from the SAC which provides key updates and recommendations consistent with Task Force and SAC priorities and mission. Presentations and dialogue influence related policy recommendations and action items. Examples of Task Force expert presentations and key focal areas for 2013-2014 have included:

- 2014 Update of the Burden of CVD in North Carolina
- New Guidelines for the Prevention and Treatment of Hypertension
- Results of Task Force sponsored Public Education Campaigns on the Signs and Symptoms of Heart Attacks and Strokes
- Firefighters and Cardiovascular Disease
- Surgeon General's 50th Anniversary Report on Smoking and Health
- 2013 and 2014 Hypertension Awareness Day
- Mobile Integrated Healthcare and Expanded Paramedicine

In addition, the Task Force receives a report from the SAC regarding priority areas and recommendations at each of its meetings. Expert presentations are also critical to the work of the SAC. Presentations and deliberations have included:

- Senate Bill 456: Proposed Rules for the Designation of Primary Stroke Centers

- Emergency Medical Services Capacity for Prehospital Stroke Care in North Carolina
- North Carolina Stroke Care Collaborative Update
- Overview of New Community and Clinical Connections for Prevention and Health Branch
- Practical and Detail Oriented Quality Improvement Intervention Model for Cardiovascular Disease
- Telestroke in North Carolina- 2014 Update
- Overview of Partner Priorities and Policy Agenda (American Heart Association/American Stroke Association, North Carolina Academy of Family Physicians, North Carolina Hospital Association, North Carolina Stroke Association)
- North Carolina Statewide Telepsychiatry Program (Provided as Telemedicine example in relation to Telestroke)
- Rehabilitation in Stroke Care
- North Carolina Survey of Hospital-based Stroke Rehabilitation Services
- New Stroke Prevention Guidelines for Women

A listing of SAC Work Groups and selected priority/focus areas for 2013-2014 is provided below:

Work Group	Selected Focus Areas
Prevention/Public Awareness	<ul style="list-style-type: none"> • Primordial and primary prevention as components of the Stroke System of Care including cardiovascular disease risk factor reduction (e.g., Healthy foods and food environments; cholesterol management and control, sodium reduction, physical activity) • Expanded observance of Hypertension (HTN) Awareness Day recognition and HTN prevention and management • Support for prevention of tobacco use and exposure efforts
Pre-hospital Care	<ul style="list-style-type: none"> • Interfacility transport from rural areas to stroke capable facilities • Emergency medical dispatch • Standardized stroke capable definitions and validated designations
Acute/Sub acute Care	<ul style="list-style-type: none"> • Comprehensive plan for stroke care for every hospital • Stroke care capability designation criteria for all hospitals not certified as a Comprehensive or Primary Center • Expanded resources for stroke care to underserved, high need regions of North Carolina • Promote/Support implementation of Primary Stroke Center Legislation
Recovery/Transitions of Care	<ul style="list-style-type: none"> • Expanded post-acute stroke resources and engagement • Assessment of early supported discharge • Linkage of post-hospital data with North Carolina Stroke Care Collaborative data
Telestroke	<ul style="list-style-type: none"> • Assessment of availability and placement of Telestroke services in North Carolina • Recommendations to maximize/leverage Telestroke resources • Telestroke quality improvement initiative

All Task Force and SAC meetings are open to the public and include representation by numerous partners. Meeting announcements, agendas, and minutes for Task Force and SAC meetings are maintained on the Start With Your Heart website.

North Carolina Stroke Care Collaborative: 2013-14 Highlights

The NCSCC continues to receive the strong endorsement/support of the Task Force as an evidence-based model for improving stroke care in North Carolina. It is one of 11 Paul Coverdell National Acute Stroke Registries funded to measure, track, and improve the quality of stroke care for North Carolina patients experiencing an acute stroke. It is a joint endeavor of the Clinical and Community Connections for Prevention and Health (CCCPH) Branch in the North Carolina Division of Public Health and the Cardiovascular Disease Program in the Department of Epidemiology at the UNC Gillings School of Global Public Health. Currently, there are 62 participating hospitals.

In fiscal year 2013-2014, funds from the North Carolina Legislature enabled the NCSCC to recruit four additional acute care hospitals and continue to assist hospitals with the development and expansion of their stroke care quality improvement (QI) programs. This included providing competitive grant funds to five hospitals, via the NCSCC Innovative QI Grant Program, to support implementation and enhancement of hospital QI efforts to improve stroke care. The NCSCC works directly with hospitals and emergency medical services and encourages evidence-based and best practices. A hallmark of the effectiveness of this program has been an increase in the percentage of defect free care provided to North Carolina stroke patients. Overall, defect free care improved for all NCSCC hospitals from approximately 49% in 2005 to 76% in 2014.

Conclusion

The North Carolina Plan to Prevent Heart Disease and Stroke and the priorities identified by the Task Force and SAC, in collaboration with other stakeholders, will continue to guide the work of the Task Force and its partners. While existing work groups and collaboratives are expected to continue, other groups and actions are likely to surface in response to new and emerging issues. Continuous monitoring and assessment will provide essential data to indicate the necessity for change.