NORTH CAROLINA CARDIOVASCULAR STATE PLAN 2011-2016

INTRODUCTIONS, GOALS, OBJECTIVES AND STRATEGIES

PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE THROUGH HEALTHY LIVING

Substantial reductions in the burden of cardiovascular disease can be achieved by decreasing associated risk factors, primarily high blood pressure and high cholesterol. Lifestyle modifications that improve nutrition and physical activity, reduce tobacco use and eliminate exposure to secondhand smoke can substantially lower these risk factors. These lifestyle modifications are supported through public education and awareness, and through policy, system and environmental changes that make healthy choices the easier choices.

[Resources: The NC Institute of Medicine (IOM) Prevention Action Plan, 2009; Healthy North Carolina 2020; ESMM Plan; Tobacco Plan]

Goal: 1 Increase the proportion of North Carolinians who live healthy lifestyles conducive to cardiovascular health.	
Objective: 1.1 By June 2016, increase the number of state and local laws and/or policies that support reduction of cardiovascular risk factors (e.g., tobacco use and exposure, poor nutrition, and physical inactivity).	
Strategies:	
1.1.1	Educate and inform key policymakers about policy, system, and environmental factors that influence cardiovascular health.
1.1.2	Provide community education and relevant consumer tools regarding the reduction of cardiovascular disease.
1.1.3	Promote partnerships that link healthcare systems, providers, and community resources to develop policies and initiatives to reduce cardiovascular risk factors.
1.1.4	Support efforts to reduce sodium and eliminate trans fats in the food supply.
1.1.5	Advocate for policies that encourage schools and day care settings to provide healthier food options.
1.1.6	Promote smoke-free and tobacco-free policies that increase safe and healthy workplaces and public places.
1.1.7	Support evidence-based pricing strategies and policies that lower smoking/tobacco use rates in youth and adults.
1.1.8	Promote and support statewide tobacco use prevention, control and cessation initiatives based on evidence-based recommendations from CDC and from the NC Institute of Medicine Prevention Task Force.
1.1.9	Support policy changes that reduce out of pocket costs for preventive services.

Goal 1: Increase the proportion of North Carolinians who live healthy lifestyles conducive to cardiovascular health.	
Objective 1.2: By June 2016, decrease the percentage of North Carolinians who smoke and/or are exposed to secondhand smoke.	
Strategies:	
1.2.1	Maintain the strong support for North Carolina's smoke-free restaurants and bars law.
1.2.2	Educate policymakers and the public about benefits of regulations that eliminate involuntary exposure to tobacco smoke.
1.2.3	Build support for a comprehensive smoke-free law that eliminates exposure to secondhand smoke in all NC worksites and all public places.
1.2.4	Promote and support statewide tobacco use prevention, control and cessation initiatives based on recommendations from CDC and from the NC Institute of Medicine Prevention Task Force.

Goal 1: Increase the proportion of North Carolinians who live healthy lifestyles conducive to cardiovascular health.	
Objective 1.3: By June 2016, increase the proportion of North Carolinians who consume heart healthy diets and engage in recommended amounts of physical activity.	
Strategies:	
1.3.1	Support and champion implementation of the Eat Smart Move More NC Plan.
1.3.2	Educate key policymakers on policies and legislation regarding nutrition and physical activity as they relate to heart disease and stroke prevention.
1.3.3	Provide public education concerning the relationship between healthy eating, physical activity, and the prevention of heart disease and stroke.
1.3.4	Promote and support healthy eating and physical activity initiatives based on recommendations from CDC and from the NC Institute of Medicine Prevention Task Force.

Goal 1: Increase the proportion of North Carolinians who live healthy lifestyles conducive to cardiovascular health.	
Objective 1.4: By June 2016, reduce the average daily consumption of dietary sodium among adult North Carolinians by 20%.	
Strategies:	
1.4.1	Increase the availability, accessibility, and consumption of lower sodium food options (e.g., competitive pricing in worksites and government institutions; promote prominent placement of fresh produce).
1.4.2	Advocate for procurement policies that encourage the reduction of sodium in prepared foods, including through state contracts for foods served in schools, prisons, and other state venues.
1.4.3	Provide public education/awareness regarding recommended daily sodium consumption.

PREVENTION OF CARDIOVASCULAR DISEASE THROUGH CONTROL OF RISK FACTORS

While North Carolina has made progress in reducing mortality from heart disease and stroke, many people at high risk for cardiovascular disease have never had their risk factors identified. While some risk factors for heart disease and stroke cannot be changed (age, sex, family history and genetics), others can be controlled or modified. High blood pressure and high cholesterol are conditions that are highly associated with heart disease and stroke. Lifestyle approaches can significantly reduce high blood pressure and cholesterol for some people, but lifestyle alone is often not sufficient to manage or control these risk factors. Early detection and treatment and control of risk can often prevent heart disease and stroke, can prolong and improve the quality of life for people so affected, and can significantly reduce the burden of cardiovascular disease. Identification of risk factors, wellness programs in worksites and other community entities, improved access to health services, and health care system changes that assure adherence to clinical guidelines for treatment and management of risk factors are essential to controlling and managing critical risk factors.

Goal: 2

Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled.

Objective: 2.1

Decrease prevalence of high blood pressure and high cholesterol.

Strategies:

2.1.1	Promote provider adherence to current evidence-based hypertension guidelines.
2.1.2	Promote system changes that utilize quality improvement programs (such as American Heart Association Guideline Advantage, Consortium for Southeastern Hypertension Control, or similar programs) to promote implementation of evidence-based guidelines for diagnosis and management of hypertension and high cholesterol.
2.1.3	Promote use of health information technology by health care practices to detect and manage hypertension and high cholesterol, such as by using provider prompts, feedback reports, and/or disease registries.
2.1.4	Provide and or facilitate medical education regarding the use of evidence-based guidelines for risk factor prevention and disease management (such as the ABCS of Cardiovascular Disease Prevention, the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure and the Adult Treatment Panel).

2.1.5	Promote multi-disciplinary health care teams.
2.1.6	Promote blood pressure and cholesterol screenings and education at worksites, local health departments and other community settings, using mobile health units or other resources to disseminate these services.
2.1.7	Advocate for health care systems and practices to promote adherence to a diet that provides nutrition support for controlling high blood pressure and high cholesterol.
2.1.8	Promote the use of home blood pressure monitoring by patients with high blood pressure, including education and physician follow-up and coverage of home blood pressure measurement devices that meet measurement performance quality standards.
2.1.9	Promote coverage for and participation in evidence-based lifestyle interventions that reduce high blood pressure and high cholesterol.

Goal 2 Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled.	
Objective 2.2: By June 2016, increase the number of North Carolina worksites with environments and behavioral approaches that support detection and self-management of cardiovascular disease and the related risk factors for employees.	
2.2.1	Encourage employers/insurers to offer health screenings and chronic disease self-management programs as an employee benefit.
2.2.2	Encourage employers to work with their health insurers to include reimbursement for cardiovascular risk reduction and self-management services.
2.2.3	Provide training and technical assistance to worksites to help them develop and implement policy and environmental supports for the reduction of cardiovascular risk factors.

Goal: 2

Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled.

Objective 2.3

By June 2016, increase the number of community health workers in North Carolina addressing cardiovascular disease prevention and management.

2.3.1	Advocate for system changes which integrate and sustain use of community health workers and other healthcare extenders into healthcare settings.
2.3.2	Partner with relevant agencies to develop a network of community health workers.

Goal 2 Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled.	
Objective 2.4 By June 2016, increase the percentage of North Carolinians at a healthy weight.	
2.4.1	Support and champion the NC Obesity Prevention Plan.
2.4.2	Promote obesity diagnosis, prevention, and treatment in health care settings.
2.4.3	Promote availability of weight management programs in worksites and communities, such as Eat Smart Move More Weigh Less, or other evidence-based programs.
2.4.4	Provide public education/awareness about the relationship between obesity and cardiovascular disease.

Goal: 2	
Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled.	
Objective 2.5: By June 2016, increase the percentage of current smokers who receive evidence-based tobacco prevention and cessation services.	
2.5.1	Promote coverage by insurers, payers, and employers for comprehensive, evidence-based tobacco cessation services and benefits including counseling and appropriate medications at no or low cost.
2.5.2	Advise health care providers to recommend and deliver comprehensive, evidence-based tobacco use treatment services including counseling and appropriate medications as well as referrals to evidence-based services, such as the State Quitline, or other recommended services.
2.5.3	Promote sufficient funding to maintain existing and support additional evidence-based cessation programs.

Goal 2

Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled.

Objective 2.6:

By June 2016, for those patients for whom aspirin therapy is indicated 100% have been counseled as to risks and benefits and are complying with physicians' recommendations for aspirin therapy.

2.6.1	Implement a public awareness/education campaign to encourage adults to initiate a conversation with their healthcare providers about aspirin therapy.
2.6.2	Promote adherence to guidelines for aspirin therapy in health care practices.

Goal: 2 Increase the proportion of North Carolinians whose cardiovascular risk factors are identified, appropriately managed, and controlled.	
Objective 2.7 By June 2016, increase the percentage of current smokers who receive evidence-based tobacco prevention and cessation services.	
Strategies:	
2.7.1	Promote coverage by insurers, payers, and employers for comprehensive, evidence-based tobacco cessation services and benefits including counseling and appropriate medications at no or low cost.
2.7.2	Advise health care providers to recommend and deliver comprehensive, evidence-based tobacco use treatment services including counseling and appropriate medications as well as referrals to evidence-based services, such as the State Quitline, or other recommended services.
2.7.3	Promote sufficient funding to maintain existing and support additional evidence-based cessation programs.

INTEGRATED EMERGENCY AND ACUTE CARE FOR PATIENTS WHO HAVE EXPERIENCED CARDIOVASCULAR EVENTS

Immediate responses to acute cardiovascular events, such as heart attack and stroke are critical both to survival and to long-term outcomes. An integrated and coordinated system of care includes consistency in response, immediate treatment, transport and destination protocols, and hospital resources and protocols. While some of the necessary strategies are the same for any acute cardiovascular event, treatment protocols are different; therefore, there are objectives and strategies that are event specific as well as some that apply to both heart attack and stroke.

Goal 3:

Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events.

Objective 3.1:

By June 2016, increase the percentage of North Carolinians who recognize the warning signs and symptoms of heart attack and stroke and who know to immediately call 9-1-1.

Strategies:

3.1.1	Pursue funding to extend the stroke recognition and call 9-1-1 television campaign to more areas of the state.
3.1.2	Partner with emergency medical systems, hospitals and other appropriate community and health care organizations to incorporate the signs and symptoms of acute cardiovascular events into various outreach communications (Target priority populations).
3.1.3	Identify non-traditional partners to participate in public education concerning cardiovascular risk factors, signs/symptoms, and call 9-1-1, particularly in organizations and settings that serve/employ high risk populations.
3.1.4	Provide resources and technical assistance for use in outreach communications concerning cardiovascular signs and symptoms and need to call 9-1-1.
3.1.5	Incorporate signs and symptoms and the need to call 9-1-1 into discharge protocols, including providing information in patients' discharge materials.

Goal 3:

Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events.

Objective 3.2:

By June 2016, all patients with cardiovascular events who contact 9-1-1 will receive treatment by pre-hospital staff that is consistent with recognized protocols.

Strategies:

3.2.1	Advocate for a statewide policy requiring Emergency Medical Dispatch certification for all 9-1-1 center personnel.
3.2.2	Develop and implement standardized training for 9-1-1 call center personnel, first responders, and transport personnel on recognition of signs and symptoms of heart attack and stroke and appropriate actions for response.
3.2.3	Develop and implement standard, written protocols for transport of heart attack and stroke victims that include criteria for appropriate destination hospitals.

Goal 3:

Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events.

Objective 3.3:

By June 2016, 100% of NC acute care facilities will have in place protocols for management of heart attack and stroke as defined by current clinical guidelines.

Strategies:

3.3.1	Provide training and education for primary care practitioners, emergency department physicians, urgent care, and clinical staff on current clinical practice guidelines for heart attack and stroke treatment and management.
3.3.2	Promote initiatives within the state that would enhance providing rapid, coordinated care of heart attack and stroke.
3.3.3	Promote adoption of protocols that incorporate current clinical guidelines for management of heart attacks and stroke.
3.3.4	Partner with the North Carolina Hospital Association to inform hospitals of these measures.
3.3.5	Provide resources to help hospitals prepare for reporting of these measures.

Goal 3:

Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events.

Objective 3.4:

By June 2016, standardize statewide protocols that improve coordination of and minimize delays in care for acute heart disease and stroke patients among 9 -1-1 personnel, first responders, transport personnel and destination hospitals.

Strategies:

3.4.1	Develop systems that allow for the secure communication of patient information and outcome data among acute cardiovascular treatment personnel.
3.4.2	Coordinate statewide and local emergency response and transport policies for cardiovascular events with other time-sensitive illness and injury policies.
3.4.3	Develop, integrate and disseminate EMS providers' "Triage and Destination" plans for cardiovascular events.
3.4.4	Promote policies that integrate the 9 -1-1 call centers with EMS systems.

Goal 3:

Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events.

Objective 3.5:

By June 2016, adopt a statewide system for designating the stroke care capabilities of each hospital that is not a primary stroke center to include elements of rehabilitation and secondary prevention.

Strategies:

3.5.1	By June 2013, the state will convene an expert panel to determine the process for defining NC's hospital designation standards for stroke capabilities to include review of current definitions.
3.5.2	Partner with the NCHA to garner support from hospitals, emergency medical services and other key stakeholders to endorse and implement the definitions/designations.

Goal 3: Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events.	
Objective 3.6: By June 2016, every hospital in NC will adopt a stroke plan that is comprehensive in scope.	
Strategies:	
3.6.1	Promote the development and adoption of a model/standard for acute stroke plans ensuring that these plans include: • Emergency Department evaluation to determine eligibility for IV tPA treatment. • Protocols for transferring patients to facilities providing higher levels of care, if needed. • Interventional stroke care, Intensive Care Unit stroke care, and neurosurgery.
3.6.2	Promote the development and adoption of a model/standard stroke patient care plan that includes strategies to reduce stroke-related complications, to begin secondary stroke prevention, and to provide stroke rehabilitation services.
3.6.3	Promote the development and adoption of a model/standard transfer plan for those hospitals that do not have all of the resources needed to treat acute stroke patients.
3.6.4	Ensure that EMS agencies know the stroke care level designations of all hospitals in their region as they follow the EMS Stroke Triage and Destination Plan.
3.6.5	Promote the adoption of a telehealth technology system that enables remote consultation capability for facilities with CT scan capabilities but lack associated medical expertise to interpret the scan.

Goal 3:

Increase the proportion of North Carolinians who have access to and receive appropriate integrated emergency and acute care for cardiovascular events.

Objective 3.7:

By June 2016, develop and adopt a system or plan that assures public availability of information concerning acute stroke plans, stroke capabilities of hospitals, and the NC Office of Emergency Medical Services' (NC OEMS) triage plans and definitions.

Strategies:

3.7.1	Institute a system whereby hospitals report their stroke plans and acute stroke capabilities to the NC Hospital Association and NC Department of Health and Human Services, Division of Public Health, Heart Disease and Stroke Prevention Branch and the information for each hospital is publicly available.
3.7.2	Partner with the North Carolina Hospital Association (NCHA) to encourage hospitals to submit these reports and to make them public.
3.7.3	Encourage EMS providers to develop/enhance transport plans based on area hospital stroke capability information, and to make these plans public.
3.7.4	Partner with NCHA and OEMS to encourage local EMS agencies and hospitals to keep public authorities informed about the stroke and transport plans, hospital designations, and definitions in the Stroke Triage and Destination Plan.

INTEGRATED, COORDINATED MANAGEMENT OF POST-ACUTE AND TRANSITIONAL CARE FOLLOWING CARDIOVASCULAR EVENTS

In addition to their effects on mortality and morbidity, heart attack and stroke are also leading causes of long-term disability. Coordinated planning and access to available resources and services are essential to help patients and their families cope with the effects of these acute events. The goal of rehabilitation is to improve function, so a heart attack or stroke survivor can become as independent as possible. Transitional care from hospital to rehabilitation to home can help survivors and their families achieve the best possible long-term outcomes.

Goal: 4

Increase the proportion of North Carolinians who receive appropriate coordinated management of post-acute transitional care following cardiovascular events.

Objective: 4.1

By June 2016, increase the percentage of cardiovascular event patients who receive timely and appropriate rehabilitation and transitional care.

Strategies:

4.1.1	Promote policies that increase the availability of primary healthcare providers skilled in managing cardiovascular disease and preventing cardiovascular events (workforce development).
4.1.2	Partner with hospitals to develop discharge protocols for cardiovascular patients that address post-acute, rehabilitation, and/or long term care needs.
4.1.3	Promote statewide policies that allow facilities to develop and expand cardiac and stroke rehabilitation programs (e.g., reimbursement, workforce development)
4.1.4	Increase communication about available community resources to patients with cardiovascular diseases and their providers.
4.1.5	Promote the use of transitional care and chronic disease self-management programs for both cardiac and stroke patients.
4.1.6	Identify community leaders and stakeholders and explore tailored communication strategies based upon specific community needs for cardiovascular patients and their caregivers.
4.1.7	Promote policies that encourage facilities to expand long term care services offered to stroke patients.
4.1.8	Encourage hospitals and/or rehabilitation facilities to utilize a patient navigation model for stroke and cardiac patients.

Goal: 4

Increase the proportion of North Carolinians who receive appropriate coordinated management of post-acute transitional care following cardiovascular events.

Objective: 4.2

By June 2016, ensure primary care providers and rehabilitation professionals are receiving increased and appropriate reimbursement for transitional care.

Strategies:

4.2.1	Promote and encourage policies that will increase reimbursement for rehabilitation and transitional care services.
4.2.2	Encourage insurance companies to incentivize their members to participate in rehabilitation and transitional care following cardiovascular events.
4.2.3	Pursue policies that support reimbursement for telehealth technology for rehabilitation.

Objective: 4.3 By 2016, extend the existing Paul Coverdell National Acute Stroke Registry's (PCNASR) Quality Improvement Program into rehabilitation.	
Strategies:	
4.3.1	Advocate for policies linking rehabilitation and outcomes data to the NC Stroke Care Collaborative/PCNASR.
4.3.2	Conduct a feasibility study linking rehabilitation and outcomes data to the NC Stroke Care Collaborative/PCNASR.