MARYLAND STATE ADVISORY COUNCIL ON
HEART DISEASE AND STROKE

December 12, 2013

The Honorable Martin O'Malley
Governor
State of Maryland
Annapolis, MD 21401-1991

RE: House Bill 492 (Chapter 238) of the Acts of 2001 and Health-General Article, §13-206(c)
2013 Biennial Report of the State Advisory Council on Heart Disease and Stroke

Dear Governor O'Malley:

Pursuant to Health-General Article, §13-206(c), Annotated Code of Maryland, the State Advisory Council on Heart Disease and Stroke is directed to submit this biennial report on the evaluation of heart disease and stroke prevention, education, and treatment activities in Maryland.

If you have any questions about this report, please contact Dr. Donald Shell, Director of the Cancer and Chronic Disease Bureau, at 410-767-1365.

Sincerely,

Catherine E. Cooke

Catherine E. Cooke, PharmD
Chair

Enclosure

cc: Joshua M. Sharfstein, MD
Laura Herrera, MD, MPH
Michelle Spencer, MS
Donna Gugel, MHS
Donald Shell, MD, MA
Christi Megna, Esq
Sarah Albert, MSAR # 2322

MARYLAND STATE
ADVISORY COUNCIL ON
HEART DISEASE AND STROKE

2013 BIENNIAL REPORT

Department of Health and Mental Hygiene
Prevention and Health Promotion Administration
Center for Chronic Disease Prevention and Control

Martin O'Malley, Governor

Anthony G. Brown, Lt. Governor

Joshua M. Sharfstein, MD, Secretary

Catherine E. Cooke, PharmD, Chair

List of Key Acronyms

A1c: hemoglobin A1c levels

Action-GWTG: Action-Get with the Guidelines

Advisory Council: State Advisory Council on Heart Disease and Stroke

AHA: American Heart Association

Department: Maryland Department of Health and Mental Hygiene

DBM: Maryland Department of Budget and Management

CIC: Cardiac Intervention Center

CSC: Comprehensive Stroke Center

EMS: emergency medical services

eMeds: electronic Maryland EMS data system

HIT: health information technology

MHCC: Maryland Health Care Commission

MIEMSS: Maryland Institute for Emergency Medical Services System

MTM: medication therapy management

P3: Patients Pharmacists Partnership Program

PCI: percutaneous coronary intervention

SHIP: Maryland State Health Improvement Process

STEMI: ST- elevation myocardial infarction

History of the Council

The Maryland State Advisory Council on Heart Disease and Stroke had its beginning in 1972 with the Hypertension Detection Follow-up Program, a study to evaluate the effectiveness of a Statewide multidisciplinary approach to identifying, treating, and following–up with hypertensive individuals. Throughout the 1970s and 1980s, the program's mission continued to evolve. During the 2001 legislative session, the Maryland General Assembly renamed the Council as the State Advisory Council on Heart Disease and Stroke (Advisory Council) under Subtitle 2, Health-General Article, and Title 13.

Duties of the Council

Pursuant to Health-General Article, §§13-201 – 13-206, the Advisory Council is charged with developing and promoting educational programs for the prevention, early detection, and treatment of heart disease and stroke targeted to high-risk populations and to geographic areas where there is a high incidence of heart disease and stroke. To accomplish this, the Advisory Council may use existing programs and groups. The Advisory Council is also required to recommend that the Department of Health and Mental Hygiene (Department) establish guidelines for the effective management and treatment of heart disease and stroke. The Departmental guidelines are to include primary prevention, detection, case finding, diagnosis, diagnostic workup, therapy, long-term management, and any other services that the Advisory Council believes should be covered. The State and local health departments are mandated to conform to the guidelines in carrying out any heart disease and stroke prevention, education, and treatment programs.

Council Structure and Recommendations

The Advisory Council includes a wide representation of State and local leaders and community members familiar with implementing policy, environmental, programmatic, and infrastructure changes. The Advisory Council currently addresses issues not only related to heart disease and stroke, but other chronic disease prevention areas including childhood obesity, tobacco use, and diabetes.

The Advisory Council's strength is its multi-sectoral nature and strong community perspective with the involvement of local health departments, medical/health professionals, community physicians, and community members (see the Appendix for a membership list). The Advisory Council's Committees develop recommendations for the Governor to address issues related to heart disease, stroke, and other chronic disease prevention areas. The Advisory Council also serves as an advisory capacity for several of the Department's federal grants, including the Community Transformation Grant; the Preventive Health and Health Service Block Grant; and the new State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health Grant. In this role, the Advisory Council convenes members and community members from related coalitions, committees and councils to leverage resources, coordinate efforts, bring collaboration, and assist in planning for events such as the Million Hearts Symposium. Additionally, the Advisory Council provides recommendations to other state advisory councils and committees on collaborative projects, such as the Maryland Coordinated Chronic Disease Plan and other chronic disease prevention efforts.

The Advisory Council is organized into four Committees: 1) Cardiovascular Disease Management and Prevention; 2) Childhood Obesity; 3) Hypertension Detection, Treatment, and Prevention; and 4) Stroke Management. See below for progress reports from each Committee:

I. Cardiovascular Disease Management and Prevention Committee

Acting Chair Person: Jennifer Whitten, MBA

Goal: Reduce morbidity and mortality associated with heart disease through improved quality of care and systems coordination.

Justification: Cardiovascular disease is the leading cause of death in Maryland, accounting for 171.4 deaths per 100,000 residents in 2011 (MD Vital Statistics Report, 2011).

Actions:

Maryland Institute for Emergency Medical Services System Regulations on Cardiac Interventional Center Standards

Maryland Institute for Emergency Medical Services System's (MIEMSS) regulations on cardiac interventional center standards (See COMAR 30.08.16, MIEMSS – Designation of Trauma and Specialty Referral Centers – Cardiac Intervention Center Standards) became effective in May 2011. The Advisory Council has since provided advice on many activities outlined by these regulations. By 2013, 23 in-state cardiac intervention centers (CICs) were designated by MIEMSS and 4 out-of-state hospitals also participating for a total of 27 CICs able to receive Maryland ST- elevation myocardial infarction (STEMI) patients and provide primary percutaneous coronary intervention (PCI) when appropriate. The CICs will all be applying for re-verification by MIEMSS in 2014.

The CICs submit data to the National Cardiovascular Data Registry Action-Get with the Guidelines (Action-GWTG) and Cath-PCI registries, as well as to the Maryland Health Care Commission (MHCC) and MIEMSS. Mission Lifeline System reports have been created using data entered in to the Action-GWTG Registries which MIEMSS and the CICs began receiving in 2012. The 5 Regional STEMI Committees continue to meet and evaluate the STEMI plans for their individual regions.

Legislation to Assure Quality in Provision of Percutaneous Coronary Intervention Services throughout Maryland

The MHCC has been tasked with implementing House Bill 1141, entitled "Maryland Health Care Commission- Cardiac Surgery and Percutaneous Coronary Intervention Services", effective July 1, 2012. The legislation established a consistent framework of oversight across all hospitals delivering emergency or elective PCI. 2012 Session House Bill 1141 requires MHCC to:

- Develop new mechanisms for oversight of services through certificates of conformance and certificates of ongoing performance;
- Develop requirements for peer or independent review of randomly selected and difficult or complicated PCI cases; and
- Create a clinical advisory group to provide guidance to the MHCC on appropriate standards for PCI and cardiac surgery oversight.

PCI is currently offered at 23 general hospitals, half of the general hospitals in Maryland. These hospitals will be subject to ongoing performance review of their PCI programs. Any hospital proposing to initiate PCI services for the first time or to provide elective PCI for the first time will need to obtain a certificate of conformance with the standards adopted by the MHCC. The Advisory Council has monitored the progress of this legislation and provided advice to partners implementing this program.

Cardiovascular Disease Management and Prevention Committee Recommendations for Maryland:

1. Continue to support and monitor a Statewide STEMI System of Care based on American Heart Association/American College of Cardiology guidelines, including:
    - Each CIC is required by COMAR 30.08.16 to provide prevention education to STEMI patients and their families.
    - All participating STEMI centers and designated stroke centers provide ongoing patient discharge information through GWTG-Stroke and Action Registry data quality tools specific to a patient's condition and management of care based on national guidelines.
    - Hospital dashboards providing access to emergency medical service (EMS) providers/electronic Maryland EMS data system (eMEDS) report.
2. Utilize health information technology (HIT) to improve provider-to-provider communication and transfer of care.
3. Increase access to and support of culturally appropriate heart disease prevention educational resources that are based on current national guidelines and standards of care, including American Heart Association's (AHA) Go Red for Women campaign and Check. Change. Control. ™ initiative.

II. Childhood Obesity Committee

Chairperson: Surina Ann Jordan, PhD

Goal: Reduce childhood obesity for all Maryland children to reduce future morbidity and mortality rates associated with cardiovascular disease and diabetes in adults.

Justification: Evidence suggests that childhood obesity is linked with many chronic conditions in children and increased the risk of adult obesity (Centers for Disease Control and Prevention, 2013)[1]. Data from the 2010 Maryland Youth Tobacco Survey indicate that among Maryland public school children age 12 years and older, 11.6% are obese and 16.0% are overweight. Data from the 2010 Maryland Healthy Kids Study showed that among children aged 2-19 years enrolled in Medicaid, 20.1% are obese and 16.7% are overweight. Maryland was one of 19 states/territories to experience a small but significant decline in obesity prevalence among low-income preschoolers during 2008-2011.

Actions: In October 2012, an Update on Reducing Childhood Obesity in Maryland was presented to the Maryland General Assembly's Joint Committee on Children, Youth, and Families by the Department. The Childhood Obesity Committee's recommendations and Maryland's actions to address these recommendations are outlined below.

Childhood Obesity Committee Recommendations for Maryland:

1. Implement policy and environmental changes that enhances community access to healthy foods and to physical activity opportunities.
2. Require government-funded and regulated agencies to collaborate to increase enrollment, participation, and coordination of nutrition education in programs.
3. Improve awareness for all women of childbearing age of the critical role of nutrition and physical activity for their children.
4. Establish policies that promote recommended infant and early childhood feeding practices.
5. Develop child care wellness policies.
6. Improve nutritional awareness and physical activity opportunities for children by demonstrating a statewide commitment to implement and monitor wellness policies.

[1] Centers for Disease Control and Prevention. Basics About Childhood Obesity. Accessed on November 7, 2013. http://www.cdc.gov/obesity/childhood/basics.html

7. Ensure evidence-based prevention, assessment, and treatment for children who are overweight and obese.
8. Continue to support meaningful use of data through the School Health Dashboard and to strengthen clinical community linkages for the management of students with chronic conditions and youth who are obese.
9. Implement a social marketing campaign that raises family and community awareness of healthy food choices and the importance of physical activity for obesity prevention.
10. Implement a statewide surveillance system to monitor nutrition, physical activity, and related health behaviors of children.
11. Consider a sustainable revenue source to support the implementation of these recommendations through the imposition of a tax levy such as a tax on snack foods.

III. Hypertension Detection, Treatment, and Prevention Committee
Chairperson: Catherine E. Cooke, PharmD

Goal: Reduce morbidity and mortality associated with heart disease and stroke through the detection, treatment, and prevention of hypertension (high blood pressure).

Justification: Over 75 percent of stroke patients, over 73 percent of angina/coronary heart disease patients, and over 60 percent of heart attack patients report having high blood pressure (Maryland Behavioral Risk Factor Surveillance System, 2011).

Actions:

Food Procurement Policies
The Advisory Council provided the Department with guidance and technical support to explore methods for developing and implementing healthy food procurement policies for Maryland State agencies. As a major self-insured employer offering health benefits to 140,000 employee covered lives, a high-volume food purchaser, and leading institutional service provider, the Advisory Council strongly supports the efforts of the State.

The Patients Pharmacists Partnership (P3) Program
The Advisory Council advises several P3 Program activities conducted with the Department. The P3 Program assists self-insured employers in improving their employees' health management skills and has served hundreds of patients in the Mid-Atlantic region, including Maryland. The program engages employers, insurance providers, employees, and local pharmacists to control high blood pressure, high blood cholesterol, and high blood sugars hemoglobin A1c levels (A1c). Specially trained pharmacists coach employees in medication adherence, lifestyle changes, and self-care skills. The goal of P3 Program is to achieve the triple aim: improving individual health, improving population health, and saving money.

Launched in April 2013, the Department collaborated with the University of Maryland and the Maryland Department of Budget and Management (DBM) to implement the P3/State Employee pilot program, offering medication therapy management (MTM) and comprehensive MTM Services to a pool of 5,000 state employees located in and surrounding the West Preston Street State Center Complex. This pilot collaborates with the DBM, Express Scripts, and State Employee insurance providers to improve health outcomes for employees participating in the pilot, while showing cost savings for the State.

The Institute for a Healthiest Maryland, University of Maryland School of Pharmacy Center for Innovative Pharmacy Solutions, and Department co-hosted the "Medication Therapy Management: Addressing Challenges-Advancing Adoption" roundtable on May 13, 2013. The goal of the roundtable was to promote understanding and overcome barriers to the adoption of MTM by linking it to the triple aim of better quality of care, improved health outcomes and reduced unnecessary health care costs. Seventy-nine individuals attended and the majority of participants represented health systems and

community-based organizations. Equipped with insights gained from the MTM Roundtable, with particular attention to the challenges to implementation, the University of Maryland School of Pharmacy's Center for Innovative Pharmacy Solutions facilitated a webinar series for local health officials, employers, insurance companies and health provider organizations in a webinar series in July and August 2013. These webinars answered questions and provided additional evidence to support MTM adoption in Maryland.

Hypertension Detection, Treatment, and Prevention Recommendations for Maryland:

1. Explore methods for developing and implementing healthy food procurement policies for State agencies in Maryland.
2. Enhance and expand collaboration between the Advisory Council and the University of Maryland to research different strategies to increase participation rates in the P3 State center pilot to achieve improved health outcomes for participating employees, while showing cost savings for the State.
3. Expand efforts to improve blood pressure outcomes to Federally Qualified Health Centers across the State of Maryland.

IV. Stroke Management Committee

Chairperson: Barney Stern, MD

Goal: To reduce morbidity and mortality associated with stroke through improved quality of stroke care and systems coordination.

Justification: Data from the 2011 Maryland Vital Statistics Report show that cerebrovascular disease is the third leading cause of death in Maryland (37.9 deaths per 100,000 residents).

Actions:

State Telemedicine System

The Advisory Council collaborated in the creation of a Departmental white paper entitled "Improving Stroke Care through Telemedicine in Maryland"; as a result, three bills were proposed during the 2011 legislative session. Although none of the telemedicine bills were enacted, discussions led to the establishment of a Telemedicine Task Force to examine issues in greater detail. Advisory Council members participated in the Task Force workgroups and provided feedback to these workgroups from the Council as a whole. The Task Force reported the advisory workgroups' recommendations to the Maryland Health Quality and Cost Council in December of 2011 and the recommendations were sent to the Maryland General Assembly.

These recommendations resulted in the development and enactment of Senate Bill 781 (Chapter 579)/House Bill 1149 (Chapter 580), entitled "Health Insurance - Coverage for Services Delivered Through Telemedicine" during the 2012 legislative session, which the Advisory Council supported. The law requires certain insurers, nonprofit health service plans, and health maintenance organizations to provide coverage for health care services delivered through telemedicine.

Senate Bill 776 (Chapter 319)/House Bill 934 (Chapter 320), entitled "Telemedicine Task Force – Maryland Health Care Commission", effective July 1, 2013, required MHCC in conjunction with the Maryland Health Quality and Cost Council to reconvene the Telemedicine Task Force. The Task Force is currently required to identify opportunities to expand the use of telemedicine to improve health status and care delivery in the State, assess factors related to telehealth, and identify strategies for telehealth deployment in rural areas. An interim report is due to the Governor, Senate Finance Committee and the House Health and Government Operations Committee by January 1, 2014, and a final report is due by December 1, 2014. The Task Force began meeting in July 2013 and will sunset on June 30, 2015.

Advisory Council members participated in these workgroups as well and provided feedback to these workgroups from the Council as a whole.

Telemedicine has the potential to improve access to quality health care for stroke patients and others, while reducing associated costs. Implementing a telemedicine system in Maryland, however, will require addressing infrastructure, financial, and medical-legal issues. In order to collaborate and standardize our telemedicine care and overcome the specific barriers mentioned, there is a need in Maryland for a telemedicine network infrastructure and consortium. The Advisory Council will continue to monitor telemedicine implementation and provide advice and comment as opportunities arise.

Comprehensive Stroke Centers

The Advisory Council worked with MIEMSS as a member of their stakeholder group on the development of the regulations establishing the standards for Comprehensive Stroke Center (CSC) designation (See COMAR — 30.08.17 MIEMSS Designation of Trauma and Specialty Referral Centers). The regulations provide structural and functional requirements that a hospital must meet to become designated as a CSC. At this time, there is one designated CSC in the State.

The Power to End Stroke program

The Advisory Council advised and provided guidance for this program, which is focused on educating African-American Marylanders about the warning signs of stroke and necessity of quick treatment as well as to engage communities through its ambassador program. The campaign seeks community professionals, leaders, and volunteers to help educate and spread awareness through local workplaces, faith-based organizations, community centers, and hospitals. Over 11,112 citizens across Maryland received information regarding the importance of knowing the signs and systems of stroke through this campaign. In May 2013, the American Heart Association/American Stroke Association in conjunction with Johns Hopkins Hospital hosted the 6th annual Power To End Stroke Brunch to increase awareness of stroke and risk of stroke. This free event took place at Johns Hopkins University and included health screenings, information on fitness activities, and healthy cooking demonstrations.

Stroke Management Committee Recommendation for Maryland:

1. Promote and advocate for the statewide use of telemedicine and telestroke as a prime utilization of HIT to increase access, improve quality, and reduce cost to Maryland's healthcare system.
2. Continue to support a Statewide STEMI system of care based on AHA guidelines.

Future Goals/Projects for the Advisory Council

The Advisory Council's future activities will be guided by the recommendations of each of the committees listed above and will continue to align and support the 10 health objectives related to heart disease, stroke, modifiable risk factors, and care as defined by the Maryland State Health Improvement Process (SHIP), including:

1. increase access to healthy foods (Objective 18);
2. reduce deaths from heart disease (Objective 25);
3. reduce diabetes-related emergency department visits (Objective 27);
4. reduce hypertension-related emergency department visits (Objective 28);
5. increase the proportion of adults who are at a healthy weight (Objective 30);
6. reduce the percentage of children and adolescents who are obese (Objective 31);
7. reduce the proportion of adults who are current smokers (Objective 32);
8. reduce the proportion of youths who use any kind of tobacco products (Objective 33);
9. increase the proportion of persons with health insurance (Objective 36); and
10. reduce the proportion of individuals who are unable to afford to see a physician (Objective 39).

In 2014 and 2015, the Advisory Council will monitor its progress towards meeting the Committees' goals and work with its many dedicated partners in developing and promoting educational programs for the prevention, early detection, and treatment of heart disease and stroke targeted to high-risk populations and to geographic areas where there is a high incidence of heart disease and stroke.

Appendix: Membership of the State Advisory Council on Heart Disease and Stroke

The Advisory Council consists of 24 members appointed by the Governor. A member may serve two consecutive four-year terms.

	NAME	REPRESENTATION
1	Michael Silverman, MD, FACEP	American College of Emergency Physicians
2	Vacant*	American College of Physicians
3	Jennifer Whitten, MBA	American Heart Association
4	Barney Stern, MD	American Stroke Association
5	Vacant*	Department of Health and Mental Hygiene
6	Roger Harrell, MHA	Maryland Association of County Health Officers
7	Anna Aycock, MHA, RN	Maryland Institute for Emergency Medical Services Systems
8	Vacant*	Johns Hopkins University School of Medicine
9	Vacant*	Maryland Academy of Family Physicians
10	Vacant*	Maryland Chapter, American College of Cardiology
11	Vacant*	Maryland Hospital Association, Inc
12	Vacant*	Maryland Nurses Association
13	Vacant*	Maryland State Medical Society
14	Vacant*	Monumental City Medical Society
15	Catherine Cooke, PharmD	Maryland Pharmacists Association
16	Surina Ann Jordan, PhD	State Advisory Council on Physical Fitness
17	Marcella Wozniak, MD, PhD	University of Maryland School of Medicine
18	Alexander Martin	Public
19	Heide Morgan, BSPT	Public
20	Vacant*	Public
21	Vacant*	Public
22	Vacant*	Public
23	Vacant	Public
24	Vacant	Public

* Identified candidate with membership/paperwork pending.