Missouri Heart Disease and Stroke Prevention News E-Bulletin

Winter 2010

Director of the Centers for Disease Control and Prevention (CDC) Addresses Mid-America Coalition on Health Care (MACHC)

Inside This Issue:

On November 16, 2009, Dr. Thomas R. Frieden, the new Director of the CDC, addressed the MACHC and partners at the Annual Meeting and Executive Briefing in Kansas City. He spoke about worksites and public-private partnerships to address heart disease and stroke prevention. Dr. Frieden discussed successful methods for community prevention and reduction of heart disease and stroke through legislative changes including laws to reduce exposure to second hand smoke and increasing taxes on cigarettes. While serving as the NYC Commissioner of the Department of Health and Mental Hygiene, Dr. Frieden led efforts that reduced the number of smokers in NYC by 350,000 and cut teen smoking in half. He also led a successful campaign to ban the use of *trans* fat, a hydrogenated fat found mostly in margarine, pastries and fried foods that has been linked with an increased risk of coronary heart disease. Controlling blood pressure (BP) is key to reducing heart disease and stroke. Dr. Frieden stated that since sodium increases average levels of BP, more needs to be done with sodium reduction in foods on a large scale. Most of the average American's daily sodium intake comes from processed and restaurant foods. Other promising community prevention strategies include reducing obesity and increasing physical activity. In conclusion, Dr Frieden discussed some clinical interventions with proven effectiveness such as the use of low dose aspirin in the appropriate risk groups.

ANNOUNCEMENTS

Medicare Beneficiaries:

Flu season has arrived, posing a serious threat to the health of Medicare beneficiaries with chronic illnesses. Care Improvement Plus, a Medicare Special Needs Plan for Missouri Medicare beneficiaries living with diabetes and/or heart failure, understands the importance of helping to protect seniors during flu season.

Care Improvement Plus offers the following tips to area seniors for a healthy flu season:

- Make a flu shot part of your yearly routine – flu shots are available through your doctor, or at a number of local clinics in your area – check your local newspaper for listings.
- Handkerchiefs can carry germs! Use tissues when you cough or sneeze, and dispose of each tissue after you use it.
- Wash your hands often with soap and warm water.
- If someone you know has the flu, try to avoid coming into contact with them.
- If you get the flu, stay home and rest!

MO-HEART DISEASE AND STROKE PREVENTION NEWS

High Blood Pressure Risk Calculator Now Available: The Heart Disease and Stroke Prevention Program (HDSP) and the American Heart Association (AHA) are working to increase the proportion of Missouri adults and older adults who are aware of the health risks associated with uncontrolled high blood pressure. With the help of 10 local health agencies scattered throughout the state and the St. Louis Area Agency on Aging, the HDSP is leading an extensive promotion of a web-based tool, the ***AHA's High Blood Pressure Risk Calculator***. An individual's blood pressure, height, weight and gender are entered into the calculator to assess risk for potential health conditions including heart disease, stroke, kidney disease and heart failure. In addition, the calculator allows the user to identify lifestyle modifications that can help reduce their risks for these conditions. In collaboration with HDSP, the AHA has established a special project web site, www.heart.org/missouriproject which enables HDSP to conduct an evaluation of the project through a survey. The website is being promoted and demonstrated at numerous locations and events that reach a large number of people such as health fairs, senior centers, churches and a variety of other settings. The Phelps County Health Department reported using the calculator at an event titled, "Heart to Heart." Findings for the Heart to Heart event showed that 29 of 30 individuals screened had elevated blood pressures with four having readings of 180/90 or above which meets the Alert value in the WISEWOMAN program and related JNC-7 [1] guidelines. Most of the individuals screened were elderly and did not check their blood pressure regularly, nor did they understand the importance of doing so. Participants were counseled by health professionals about the risks associated with uncontrolled high blood pressure, the need to see a physician and the lifestyle changes that they could adopt to lower the risks. These individuals were amazed to discover that high blood pressure could affect the kidneys. Everyone is encouraged to visit the web site to learn your risk for heart disease, stroke, heart failure and kidney disease and to determine what lifestyle changes you can make to lower your risk. For additional information, contact Lisa Britt at lisa.britt@dhss.mo.gov or Kathy Craig at kathy.craig@dhss.mo.gov .

WISEWOMAN NEWS

WISEWOMAN has grown! Currently, 63 Show Me Healthy Women clinics deliver WISEWOMAN services. This is up from 47 clinics at the end of June 2009. Show Me Healthy Women (SMHW) is Missouri's Breast and Cervical Cancer Early Detection Program that provides funding for screening and diagnostic services for low income Missouri women (200% of federal poverty level) and underinsured. WISEWOMAN is a heart disease prevention service for women who are clients of the SMHW program. WISEWOMAN provides screening tests to identify risk of heart disease, stroke and lifestyle education to help women reduce their risk of heart disease.

NATIONAL NEWS

America's Healthiest And Unhealthiest States:

If you want to be healthy, live in Vermont—or at least act like you do. It is the healthiest state in the country, according to a new report from the nonprofit United Health Foundation. The annual ranking looks at 22 indicators of health, including everything from how many children receive recommended vaccinations, to obesity and smoking rates, to cancer deaths. (The foundation is funded by the insurer UnitedHealth Group).

UnitedHealth Group Executive Vice President Dr. Reed Tuckson says the report is meant to draw attention to public health issues, particularly the twin challenges of smoking and obesity. While the smoking rate has decreased in the past 20 years, nearly one in five Americans still smoke. More than one-quarter of American adults suffer from obesity, a condition that the report estimated will cost $344 billion in annual health care costs by 2018. With the aging of the population and development of risk factors for chronic diseases in the population, we will soon have a population with a myriad of chronic diseases who need health care interventions. According to Dr. Reed: "**We are about to deliver a tsunami of preventable chronic illness that will come pouring into the medical care delivery system.**"

Missouri ranked in the bottom third of states (38). To see the rankings of all states, open the following link: Forbes Chart: See the Entire List of the Healthiest & Unhealthiest States

MISSOURI NEWS

Missouri Challenge: Your Heart is in Your Hands

Lt. Governor Peter Kinder recently unveiled the "Your Heart is in Your Hands" challenge for Missouri. He was joined at the announcement by Jerry Kennett, MD, Chair of Missouri State Medical Association (MSMA) Committee on Legislative Affairs.

The Lt. Governor's Challenge is a physical fitness and nutrition program designed to improve heart health. The campaign covers issues including heart disease and stroke, and contributing factors to heart and stroke risk such as high cholesterol, high blood pressure, diabetes, obesity, smoking and atherosclerosis. The central message of this campaign is to help individuals understand that they have it within their own power to make substantial health improvement.

The 12-week online program will allow individuals to track their physical fitness and nutrition goals, and those who reach their goals will receive a pin from Lt. Governor Kinder honoring their success

Anyone can participate, and you can encourage your clients/patients to take the challenge by logging onto Lieutenant Governors' Challenge.

HEART DISEASE AND STROKE DATA DEVELOPMENTS

DO YOU NEED TO ENHANCE YOUR COMMUNITY ASSESSMENT SKILLS?

MICA USER HANDBOOK NOW AVAILABLE!

The Missouri Information for Community Assessment (MICA) user handbook is now available for download in Microsoft Word from the following website: http:www.dhss.mo.gov/MICA/CHAIPTraining.html

The handbook was developed for Local Public Health Agency trainings conducted in the summer of 2009. The handbook contains sections on Community Data Profiles, MICA and Priorities MICA. Several different data systems are examined including: vital statistics, inpatient hospitalization and emergency room data, Behavioral Risk Factor Surveillance System (BRFSS) and County-Level Study. In addition, some of the enhanced features are highlighted. At the end of each section, a set of exercises allows users to test their knowledge about the material covered. If you have questions about the user handbook or MICA, please contact Andrew Hunter at: Andrew.Hunter@dhss.mo.gov or Becca Mickels at Becca.Mickels@dhss.mo.gov

CONFERENCES/TRAININGS

National Association of Chronic Disease Directors (NACDD) 2010 Chronic Disease Academy

February 17-19, 2010; Wyndham Orlando Hotel, Orlando, FL

The 2010 Academy Planning Committee has finalized an exciting educational program offering 10 trainings in five competency tracks. The trainings combine a return of previously sold out sessions, including *Strategic Leadership in Chronic Disease* and *Building the Business Case in Chronic Disease* with exciting new training on topics such as partnership management and cultural competency. The Academy will be held in Orlando, Florida, on February 17 – 19, 2010. You can review the classes to be offered as well as hotel and travel information currently at www.chronicdiseaseacademy.org.; additional sections of the website are "Under Construction", and information will be added as quickly as possible.

INTERVENTIONS FOR CARDIOVASCULAR RISK REDUCTION

Community Health Workers and Cardiovascular Risk Reduction: A Pilot Program

The Minnesota Heart Disease and Stroke Prevention Unit, in partnership with the Native American Community Clinic (NACC) and United Family Medicine (UFM), received funding in 2007 from the Otto Bremer Foundation and the American Heart Association to design and implement a Community Health Worker (CHW) pilot program. The pilot program utilizes CHWs to help patients manage their heart disease risk factors. A community health worker, also called a lay health worker, a community health advisor or promotores de salud often represents the community they serve.

This link to the community helps assure that the services provided are culturally appropriate. The CHWs work with patients to assess and eliminate the socio-economic or health systems' barriers that impede successful chronic disease management. The barriers are dynamic and always in fluctuation. This is both challenging and rewarding. Many patients who are at risk for heart disease or have heart disease also have other life events that compete for their attention. Caring for family members, affording healthy foods, and managing life stressors can make it difficult to focus on healthy living.

The CHWs share their patients' successes. "Every once in a while a patient will surprise you; a patient who once was reluctant to make changes will slowly begin to improve habits. It starts with a walk around the block every day, eating a little less food at lunch, or registering for a class. Within a month it turns into half-hour walks, cutting pop from the diet and becoming a model for other community members. A quiet ripple effect begins."

For more information about the program, contact Elizabeth A. Gardner, M.A., Community Health Planner, at (651) 201-5411, or elizabeth.gardner@state.mn.us

---

The Potency of Team-Based Care Interventions for Hypertension: A Meta-Analysis

Team-based care is the strategy that has had the greatest effect on improving blood pressure (BP). The purpose of the Meta-Analysis was to determine the potency of interventions for BP involving nurses or pharmacists.

This evaluation of team-based care for hypertension found that interventions involving nurses or pharmacists are effective strategies to improve BP control. Several individual components were associated with improvements in BP. Research involving team-based care must be carefully designed, reported, and interpreted to include the organizational structure in which the intervention is performed, the educational level and training of the intervention providers, and the individual components of the intervention so that similar interventions can be implemented within a given health system.

http://archinte.ama-assn.org/cgi/content/full/169/19/1748

RISK FACTOR NEWS

SMOKING BANS REDUCE THE RISK OF HEART ATTACKS ASSOCIATED WITH SECONDHAND SMOKE

WASHINGTON -- Smoking bans are effective at reducing the risk of heart attacks and heart disease associated with exposure to secondhand smoke, says a new report from the Institute of Medicine. The report also confirms there is sufficient evidence that breathing secondhand smoke boosts nonsmokers' risk for heart problems, adding that indirect evidence indicating that even relatively brief exposures could lead to a heart attack is compelling.

"It's clear that smoking bans work," said Lynn Goldman, professor of environmental health sciences, Johns Hopkins Bloomberg School of Public Health, Baltimore, and chair of the committee of experts that wrote the report. "Bans reduce the risks of heart attack in nonsmokers as well as smokers.

Further research could explain in greater detail how great the effect is for each of these groups and how secondhand smoke produces its toxic effects. However, there is no question that smoking bans have a positive health effect."

About 43 percent of nonsmoking children and 37 percent of nonsmoking adults are exposed to secondhand smoke in the United States, according to public health data. Despite significant reductions in the percentages of Americans breathing environmental tobacco smoke over the past several years, roughly 126 million nonsmokers were still being exposed in 2000.

Copies of SECONDHAND-SMOKE EXPOSURE AND CARDIOVASCULAR EFFECTS: MAKING SENSE OF THE EVIDENCE are available from the National Academies Press; tel. 202-334-3313 or 1-800-624-6242 or on the Internet at HTTP://WWW.NAP.EDU/. Additional information on the report can be found at HTTP://WWW.IOM.EDU/SECONDHANDSMOKECVEFFECTS.

Abnormal cholesterol levels may raise risk of heart failure

Study highlights:

- Abnormal blood cholesterol levels may lead not only to heart attack but to a serious weakening of the heart's pumping ability.
- People with the highest levels of "good" cholesterol are up to 40 percent less likely to develop heart failure; those with the highest levels of "bad" cholesterol have up to 29 percent higher risk, and are more likely to develop the condition.

Even if you never have a heart attack, abnormal blood cholesterol levels may significantly raise your risk of heart failure, according to research reported in *Circulation: Journal of the American Heart Association.*

"We hypothesized that there might be a direct effect of lipids on the function of heart muscle," said Daniel Levy, M.D., senior author of the study and director of the National Heart, Lung, and Blood Institute's Framingham Heart Study. "For example, if lipids infiltrate the heart, like they do the liver, this might be one reason that people with diabetes are predisposed to heart failure."

"This study goes a step further in implicating cholesterol levels (both HDL and non-HDL) in heart failure and suggests that cholesterol-altering therapy may have long-term benefits in preventing heart failure above and beyond its effects on preventing myocardial infarction," Levy said.

http://americanheart.mediaroom.com/index.php?s=43&item=898

MODELS FOR QUALITY IMPROVEMENT EFFORTS

The Chronic Care Model (CCM):

The Chronic Care Model (CCM) identifies the essential elements of a health care system that encourage high-quality chronic disease care. These elements are the community, the health system, self-management support, delivery system design, decision support and clinical information systems. Evidence-based change concepts under each element, in combination, foster productive interactions between informed patients who take an active part in their care and providers with resources and expertise.

The Model can be applied to a variety of chronic illnesses, health care settings and target populations. The bottom line is healthier patients, more satisfied providers, and cost savings.

For citations concerning the evolution of the Chronic Care Model, please reference either:

> Wagner EH. "Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness?" **Effective Clinical Practice. 1998; 1:2-4**
>
> http://www.acponline.org/clinical_information/journals_publications/ecp/augsep98/cdm.htm
>
> Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. "Improving Chronic Ilness Care: Translating Evidence Into Action." **Health Affairs** (Millwood). **2001; 20:64-78.**
>
> http://content.healthaffairs.org/cgi/content/full/20/6/64

Assessment of Chronic Illness Care (ACIC):

Health care organizations require practical assessment tools to guide quality improvement efforts and evaluate changes in chronic illness care. In response to this need, the Improving Chronic Illness Care (ICIC) staff developed the Assessment of Chronic Illness Care ("ACIC", Bonomi et al., 2002) and the Patient Assessment of Chronic Illness Care ("PACIC", The MacColl Institute, 2004) surveys.

Modeled after an instrument developed by the Indian Health Service for evaluating diabetes care (Acton et al., 1993, 1995), the ACIC is intended for use by medical teams to: (1) identify areas for improvement in care for chronic illness before beginning quality improvement work, and (2) evaluate the level and nature of improvements made in response to quality improvement interventions.

To assess the quality of chronic illness care delivery from the patient perspective, ICIC staff and colleagues developed the PACIC. It is a brief, validated patient self-report instrument assessing the extent to which patients with chronic illness receive care that aligns with the Chronic Care Model —measuring care that is patient-centered, proactive, planned and includes collaborative goal setting, problem-solving and follow-up support.

ACIC Survey

The content of the ACIC was derived from specific evidence-based interventions for the six components of the Chronic Care Model (community resources, health organization, self-management support, delivery system design, decision support and clinical information systems). Like the Chronic Care Model, the ACIC addresses the basic elements for improving chronic illness care at the community, organization, practice and patient level.

http://www.improvingchroniccare.org/index.php?p=ACIC_Survey&s=35

RESOURCES/TOOLS

The National Institutes of Health (NIH) is the primary Federal agency for conducting and supporting medical research. Helping to lead the way toward important medical discoveries that improve people's health and save lives, NIH scientists investigate ways to prevent disease as well as the causes, treatments, and even cures for common and rare diseases. The mission of NIH is the pursuit of scientific knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life and reduce the burdens of illness and disability.

The National Institutes of Health provides leadership and direction to programs designed to improve the health of the Nation by conducting and supporting research in the following topics:

- the causes, diagnosis, prevention, and cure of human diseases;
- the processes of human growth and development;
- the biological effects of environmental contaminants;
- the understanding of mental, addictive and physical disorders; and
- directing programs for the collection, dissemination, and exchange of information in medicine and health, including the development and support of medical libraries and the training of medical librarians and other health information specialists.

Under "Health Topics" check out Heart Disease and Stroke for a plethora of information from basic primers to advanced research. It includes for example, overviews, the latest news, diagnosis/symptoms, treatment modalities, prevention/screening, nutrition, rehabilitation/recovery, specific conditions and related issues.

http://health.nih.gov/

Heart Disease and Stroke Pharmacological News

High Blood Pressure Medicines Show Promise for Treating Heart Disease

Two medications commonly used to treat high blood pressure appear to be effective in treating a common type of heart disease known as stable ischemic heart disease, according to a new comparative effectiveness review funded by the Department of Health & Human Services' (HHS) Agency for Healthcare Research and Quality (AHRQ). A version of the analysis was posted in the October 20 online version of the *Annals of Internal Medicine*.

Treatment featuring the two medications—inhibitors of angiotensin-converting enzyme, or ACE inhibitors, and angiotensin receptor blockers, or ARBs—can lead to a reduction in death, risk of heart attack, risk of stroke and fewer hospitalizations for heart failure for patients suffering from stable ischemic heart disease, researchers found. However, the drugs have risks of their own. Risks associated with ACE inhibitors include a persistent cough, sudden fainting, too much potassium in the blood, and dangerously low blood pressure (hypotension). Risks associated with ARBs include too much potassium in the blood and low blood pressure.

The AHRQ report found that patients with stable ischemic heart disease who take an ACE inhibitor in addition to standard treatment can reduce the likelihood of several negative outcomes, including death from heart attack or heart failure, non-fatal heart attacks, hospitalization for heart failure, and revascularization (surgeries that reroute blood to the heart). Patients who take an ARB in addition to standard medications can reduce their risk of death from a heart-related cause, heart attack or stroke.

The AHRQ's new report, *Comparative Effectiveness of Angiotensin-Converting Enzyme Inhibitors or Angiotensin II Receptor Blockers Added to Standard Medical Therapy for Treating Stable Ischemic Heart Disease*, is the newest research review from the Agency's Effective Health Care Program. That program, authorized by the Medicare Prescription Drug, Improvement and Modernization Act, represents an important federal effort to compare alternative treatments for health conditions and make the findings public. The program is intended to help patients, doctors, nurses, pharmacists and others choose the most effective treatments.

In patients on statins, raising good cholesterol with niacin, but not reducing bad cholesterol with ezetimibe, decreases plaque build-up. Study Highlights:

- In patients with or at high-risk for coronary artery disease and LDL (bad cholesterol) treated with statins to < 100mg/dL but low HDL (good cholesterol), adding medication to raise HDL was compared with lowering LDL further.
- Patients were randomized to the addition of niacin (primarily to raise HDL), or ezetimibe (to further lower LDL cholesterol). Plaque buildup in the lining of the neck arteries was significantly reduced only in the niacin group.

In combination with statins, adding a medication that raises high-density lipoprotein (HDL) cholesterol was more effective in reversing artery wall plaque buildup and in reducing heart disease risk than adding a drug that lowers low-density lipoprotein (LDL) cholesterol, researchers reported at the American Heart Association Scientific Sessions 2009.

"The Effect of Extended-release Niacin or Ezetimibe Added to Chronic Statin Therapy On Carotid Intima Media Thickness", *American Heart Association Scientific Sessions 2009*

[1] The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure.

Missouri Heart Disease and Stroke Prevention News E-Bulletin's *content is selected solely on the basis of newsworthiness and potential interest to readers. Missouri Department of Health and Senior Services (MDHSS) assumes no responsibility for the factual accuracy of the items presented. The selection, omission, or content of items does not imply any endorsement or other position taken by MDHSS. Opinions expressed by the original authors of items included in the News, or persons quoted therein, are strictly their own and are in no way meant to represent the opinion or views of MDHSS. References to products, trade names, publications, news sources and websites are provided solely for informational purposes and do not imply endorsement by MDHSS.*

If you have additional topics that would be of interest to you for future editions, please contact Kris Kummerfeld, Editor, at kris.kummerfeld@dhss.mo.gov or (573) 522-2879.