



THE KIDNEY LINK

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Senator Beverly Hammerstrom,
State Senator, Michigan

WOMEN IN GOVERNMENT MEMBER PARTICIPATES IN FOURTH ANNUAL NEPHROLOGY COVERAGE ADVISORY PANEL (NCAP) FORUM

In carrying out the mission of Women In Government's Chronic Kidney Disease Policy Resource Center, Michigan State Senator Beverly Hammerstrom, immediate past chair of Women In Government's board of directors, participated in the National Renal Physicians Association (RPA) Nephrology Coverage Advisory Panel Forum, which was held in Denver, Colorado. The Renal Physicians Association represents and serves nephrologists in their commitment to delivering optimal care for patients with renal disease. In suit with the meeting's agenda, Senator Hammerstrom highlighted the importance of state initiatives in preventing chronic kidney disease (CKD). Renal healthcare providers and advocates from around the country were informed about the need for improving methods of early detection of CKD and strategies for better management of CKD in Senator's Hammerstrom presentation, "State Initiatives in Prevention of Chronic Kidney Disease."

Currently, Senator Hammerstrom and her colleagues are challenging the health burden of CKD in the state of Michigan through various policy initiatives. Michigan has already adopted a resolution that designates March as National Kidney Month and hosted a luncheon for the Health and Appropriations Committee in order to initiate an awareness and education program regarding CKD for at-risk individuals. In efforts to emphasize the importance of preventive measures in avoiding the onset of CKD, legislation has also been introduced to amend the Social Welfare Act to allow Medicaid to cover screening, diagnostic, early intervention and treatment services for individuals with CKD. With the number of individuals with end-stage renal disease (ESRD) increasing by 7 percent, Michigan has realized the importance of preventing CKD for its citizens.

As a result of Women In Government's efforts, 28 states have introduced policy initiatives regarding chronic kidney disease. Focusing on the idea of prevention, the subject matter of current legislation includes: creating taskforces to determine the best approach for detection and management of CKD, designating a day/week/month of the year for "Chronic Kidney

Disease Awareness," developing a CKD management program for Medicare and Medicaid beneficiaries to improve health outcomes, and appropriating state funds for university-based CKD management programs for general and at-risk populations. With statistics demonstrating that the prevalence of kidney failure is more than likely to double from 326,217 to 661,330 cases by 2010¹, awareness and education programs that focus on early detection and prevention are the most effective measures in battling against this silent epidemic.

MISSION

Women In Government's
**Chronic Kidney Disease
Policy Resource Center**

Mission supports state legislative and outreach activity, and serves as a clearinghouse of information, policy and educational materials on chronic kidney disease for state legislators.

TARGETING CARDIOVASCULAR RISK FACTORS IN DIALYSIS PATIENTS WITH CHRONIC KIDNEY DISEASE

Cardiovascular disease (CVD) is one of the leading causes of death in America, with more than 70 million Americans currently suffering from it.² Furthermore, CVD is the major cause of morbidity and mortality in patients with chronic kidney disease (CKD), particularly for individuals with kidney failure.³ These individuals have a greater chance of developing CVD since factors related to renal replacement therapy (RRT) and dialysis have been identified as developmental risks for CVD. These factors include: anemia, chronic inflammation, disturbances in lipid metabolism, hyperparathyroidism (parathyroid glands secrete too much hormone and causes in a rise in blood calcium, which can build up as plaques in the arteries and valves), oxidative stress (steady state level of oxidative damage in a cell, tissue, or organ, caused by the reactive oxygen species), and hypoalbuminemia (low levels of albumin in the blood, which is indicative of a possible nephrotic syndrome).

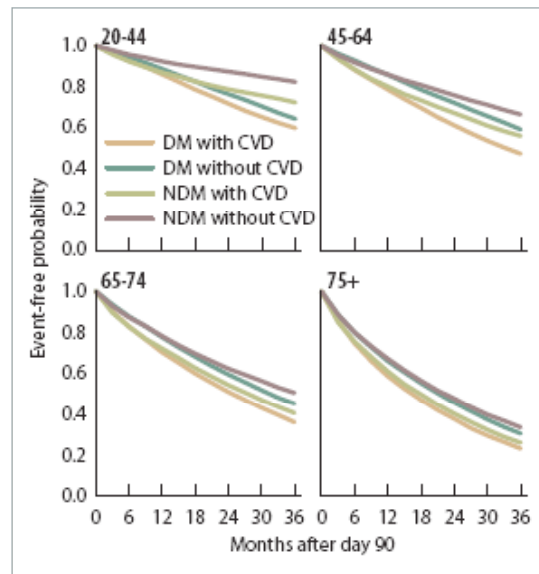
These comorbid factors place a greater burden on the kidneys, thereby weakening its abilities to function properly despite dialysis treatment. Traditional factors such as age, male gender, hypertension, diabetes, dyslipidemia (elevation of lipid levels in the blood) and physical inactivity increase the risk of developing CVD, in turn increasing the susceptibility for the onset of CKD.⁴

The onset of kidney disease is also attributed to diabetes and hypertension, both of which negatively affect the cardiovascular health of an individual. Individuals with diabetes have a multitude of health problems (high blood pressure

and high cholesterol) that increase their risks for developing CVD and in turn, CKD.⁵ Severe hypertension has been shown to cause significant damage to the kidneys and the incidence of end-stage renal disease associated with hypertension has been increasing. Therefore, an individual with kidney disease might suffer from complications related to cardiovascular disease long before his/her health status deteriorates to kidney failure.

Scientific research has demonstrated that individuals with renal replacement therapy experienced a greater risk of cardiovascular-related deaths when in comparison to age-matched individuals in the general population.⁴ As shown in the graphic, cardiovascular comorbidity and age affect survival in individuals with dialysis.⁵ The likelihood of survival for dialysis patients with CVD is much lower when in comparison to individuals not on dialysis with CVD, thereby indicating that individuals on dialysis treatment are more likely to develop CVD-related complications.

Furthermore, the age of the individual on dialysis has a significant impact on the likelihood of survival, especially since as age increases, the likelihood of survival decreases considerably. With such significant scientific documentation, it is imperative that patient care for individuals with kidney failure includes the following: adequate dialysis facilities, management of anemia, and addressing therapies for cardiovascular risk factors. A comprehensive patient care program needs to have these components to improve the health outcomes for these individuals.⁶



Source: U.S. Renal Data System, USRDS 2005 Annual Data Report: Atlas of End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2005

QUALITY OF CARE FOR INDIVIDUALS WITH END-STAGE RENAL DISEASE (ESRD)

For individuals with end-stage renal disease (ESRD), quality of care is essential in maintaining their health status and preventing the progression to total kidney failure. The Institute of Medicine defines quality as “the degree to which health services for individuals and populations increase the likelihood of improved outcomes and are consistent with current, professional knowledge.” Additionally, there are six objectives that are used to evaluate the quality of care: safety, effectiveness, patient centeredness, timeliness, efficiency and equity.⁷

In terms of quality of care, **safety** is defined as avoiding misuse of healthcare and preventing injury. Healthcare professionals must carefully administer dialysis treatment for individuals with end-stage renal disease to ensure that no mistakes are made. The **effectiveness**

of healthcare is measured by the provision of appropriate healthcare according to the needs of an

individual. Therefore, healthcare that is neither under-used nor over-used is defined as “effective.” With different types of dialysis treatments, individuals with end-stage renal disease have to have a specific treatment plan tailored to their health condition for maximum therapeutic benefits. The delivery of healthcare must take into account the personal values and preferences of the patient so that he/she is at the “center” of decision-making process. For individuals with end-stage renal disease, health professionals should educate their patients about the different options of treatment so that additional risk factor for these individuals for the development of kidney failure. Differences in quality attributed to gender, ethnicity, and socioeconomic status should not serve as obstacles for individuals receiving healthcare for their chronic illnesses.

Chronic disease management programs should aim to incorporate these six goals of quality to deliver the most appro-

SIX GOALS OF QUALITY IN HEALTHCARE:

- Safety
- Effectiveness
- Patient centeredness
- Timeliness
- Efficiency
- Equity

DISTRICT OF COLUMBIA ALLOCATES \$250,000 FOR KIDNEY DISEASE SCREENING

DC Councilmember David Catania, Chairman of the Committee on Health, secured unanimous approval for the 2007 budgets of the Departments of Health and Mental Health, which includes \$250,000 for the National Kidney Foundation of the National Capital Area (NKF/NCA) to provide kidney screening for at-risk and low-income DC residents.

In addition to the \$250,000 awarded to the Foundation, the 2007 budget includes two other line items that will help bolster the NKF mission. Howard University will receive \$250,000 for the expansion of diabetes screening, prevention, education, and treatment of diagnosed, uninsured DC residents. (Diabetes is the leading cause of kidney failure, accounting for one-third of the new cases each year.) In addition, \$100,000 will go to the Washington Regional Transplant Consortium (WRTC) to conduct an organ and tissue donor public awareness and education campaign. WRTC rolled out a new online donor registry for the District on August 1.

According to Catania, who spoke at the annual meeting of the NKF/NCA on June 28, the \$600,000 in funding is a significant step for the District, which has never allocated funds for kidney disease prevention or organ donation. "This budget will allow us to truly begin addressing the chronic health problems that plague our residents," said Catania.

The DC screening initiative will fall under the Foundation's newly named "Knock Out Kidney Disease" program, which encompasses all prevention initiatives including medical consultation, referral, public education, and primary care physicians' education, in addition to screening.

For screening participants who have the early stages of kidney disease, early detection, along with lifestyle changes and medication, can delay or prevent the progression to

kidney failure. This program is intended to reduce the number of people who need dialysis or a kidney transplant in the future. "We are excited to roll out the Knock Out Kidney Disease program in the District. We believe that early screening will have a significant impact on the health of our community," said NKF/NCA President & CEO Preston A. Englert, Jr., CAE.

For the DC screening initiative, the Foundation will employ the national Kidney Early Evaluation Program (KEEP), which includes tests for diabetes and hypertension (the two leading causes of kidney failure) as well as kidney functioning, cholesterol, and anemia. Staff and volunteers will screen 1,650 District residents over the course of the year beginning October 1, 2006. After the screening, the National Kidney Foundation will contact participants with results, send results to their doctors (with their permission), refer them to a doctor or public health facility, if needed, and provide additional information, education, and support.

NKF/NCA is partnering with the Most Worshipful Prince Hall Grand Lodge in the District of Columbia, as well as the NKF headquarters in New York for the KEEP screenings in the District. The National Kidney Foundation is working to secure funding in Maryland and Virginia for similar screening programs. While the District leads the nation in the prevalence of kidney disease, its neighbors do not fare much better. Maryland is number 7 and Virginia is number 11. *For more information on NKF/NCA, please visit www.kidneywdc.org or contact Michele Anthony, Vice President of Communications of NKF/NCA at manthony@kidneywdc.org.*



*David Catania,
Councilmember,
District of Columbia*

NATIONAL KIDNEY DISEASE EDUCATION PROGRAM (NKDEP) ENCOURAGES EARLY DETECTION AND TREATMENT OF CKD

Chronic Kidney Disease (CKD) is a growing public health crisis in the United States. Because early CKD has no symptoms, many of the estimated 20 million people living with the disease do not know they have it. If not detected and treated early, CKD can progress to kidney failure, or end-stage renal disease (ESRD). By the end of 2003, more than 128,000 people were living with a kidney transplant, and almost 325,000 were on dialysis — a number that has nearly tripled since 1988.

In addition, millions of people living with diabetes and high blood pressure—the two leading risk factors for CKD—are unaware of their elevated risk. Diabetes and high blood pressure now account for about 70 percent of new cases of ESRD.

The good news is that people with risk factors can take steps to protect their kidney function and those who already have CKD can take steps to slow its progression to kidney failure. That is why early detection and early treatment are critical.



Since 2000, the National Kidney Disease Education Program (NKDEP), an initiative of the National Institutes of Health, has been collaborating with federal, state, nonprofit and professional partners to reduce morbidity and mortality caused by CKD and its complications. NKDEP encourages early diagnosis and treatment by increasing awareness about:

- The connection between diabetes, high blood pressure and kidney disease;
- Strategies proven to prevent or delay kidney failure;
- Standardizing serum creatinine measurement, used to test for kidney disease;
- Using estimated glomerular filtration rate (eGFR), a measure of kidney function, to diagnose kidney disease earlier; and
- Encouraging more labs to automatically report eGFR with all serum creatinine measurements.

To increase early detection, NKDEP has been raising awareness about the risk factors

ESRD con't from page 2

appropriate care to individuals with end-stage renal disease. The individual can make an informed decision and receive appropriate medical interventions based on their health conditions. Studies have also shown that increased patient-physician contact is associated with accomplishing the clinical performance objectives outlined for chronic kidney disease management.⁸

It is critical that individuals with end-stage renal disease receive treatment in a *timely* manner to prevent the onset of kidney failure or develop cardiovascular-related complications. Furthermore, delivery of healthcare needs to be *efficient* so that the patient needs are met accordingly, and resources are not wasted. For individuals with end-stage renal disease, it is essential that nephrologists assess the adequacy of dialysis facilities, address other medical complications that may arise due to dialysis/renal transplants, and coordinate care appropriately for these individuals to ensure a greater quality of life. Finally, *equity* in healthcare is essential for individuals with end-stage renal disease since a variation in quality of healthcare could serve as an additional risk factor for these individuals for the development of kidney failure. Differences in quality attributed to gender, ethnicity, and socioeconomic status should not serve as obstacles for individuals receiving healthcare for their chronic illnesses. Chronic disease management programs should aim to incorporate these six goals of quality to deliver the most appropriate care to individuals with end-stage renal disease.

NKDEP con't from page 3

for CKD and the need for routine screening of at-risk patients. Outreach strategies have focused on patients with diabetes and high blood pressure as well as health professional audiences who treat at-risk patients. Because CKD disproportionately affects minority populations, NKDEP has developed culturally tailored outreach initiatives and materials for at-risk African-American and Hispanic audiences. For example, NKDEP's African-American Family Reunion initiative encourages African-American families to discuss CKD risk factors at family reunions and other family gatherings.

To improve treatment of CKD, NKDEP has developed time-saving tools for use by health professionals. These include a CKD quick-reference card, online and downloadable GFR calculators, patient education materials on understanding GFR, and a letter template designed to improve communication between nephrologists and primary care physicians.

Dr. Andrew Narva, the incoming director of NKDEP, plans to place more programmatic emphasis on enhancing CKD care in primary care settings that serve communities with the highest rates of diabetes and hypertension. "Although CKD can be a frightening disease for both patients and providers, it is important to remember that it is treatable," Dr. Narva said. "Identifying those at greatest risk for ESRD progression and treating them early will contribute to achieving the Healthy People 2010 objectives of reducing the rate of new ESRD cases." *For more information on NKDEP and available resources, please visit www.nkdep.nih.gov.*

ENDNOTES

- ¹ National Kidney Foundation, 2002
- ² Centers for Disease Control and Prevention Division of Heart Disease and Stroke Prevention.
- ³ U.S. Renal Data System, USRDS 2005 Annual Data Report: Atlas of End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2005
- ⁴ National Kidney Foundation. 2005. NKF K/DOQI Guidelines: K/DOQI Clinical Practice Guidelines for Cardiovascular Disease in Dialysis Patients.
- ⁵ American Diabetes Association, 2006.
- ⁶ Brenner R. Wrona E. (1999). The Epidemic of Cardiovascular Disease In End-Stage Renal Disease. *Current Opinion in Nephrology and Hypertension* 8(3): 365-369.
- ⁷ Renal Physicians Association. (March 2002) Crossing The Quality Chasm, A New Health Care System For The 21st Century: An Overview.
- ⁸ Plantinga L. et al. (2005). Frequency of patient-physician contact in chronic kidney disease care and achievement of clinical performance targets. *International Journal for Quality in Health Care Advance Access*. 17(2): 115-121.

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