



NATIONAL KIDNEY
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of Michigan

The Morris Hood III Chronic Kidney Disease and COVID-19 Complications Prevention Program

The Morris Hood III Chronic Kidney Disease and COVID-19 Complications Prevention program is based on the fact that COVID-19 complications and chronic kidney disease (CKD) are closely connected. The pandemic has highlighted the challenges faced by populations ranked high on CDC’s social vulnerability index, including evidence that kidney disease and its precursors—obesity, diabetes and hypertension, which significantly affect older adults—are known risk factors for serious COVID-19 complications up to and including death per the Centers for Disease Control & Prevention COVID-19 webpage. Individuals who are 30-day survivors of COVID-19 are at greater risk for acute kidney injury or eGFR decline regardless of whether hospitalized due to COVID-19. (1) These individuals with acute kidney injury are now at high risk for CKD. This intersection between COVID-19 and CKD highlights the need for the Morris Hood III prevention program described below. The foundation for this project is the “Chronic Kidney Disease Prevention Strategy in Michigan 2021-2026” which emphasizes that kidney disease is common, serious, costly and often preventable. The National Kidney Foundation of Michigan (NKFMI) and the Michigan Department of Health and Human Services (MDHHS) developed this public health approach to prevention with the support of many state and local partners.

Currently 1 in 3 adults are at risk and 1 in 7, totaling over 1 million Michiganders, have chronic kidney disease (CKD), but only 3-5% are aware they have it. It is well known that 64% of kidney disease is preventable through the management of its precursors of obesity, hypertension, prediabetes and diabetes. These precursors are the same conditions that result in COVID-19 complications per the research. (2) Preventing CKD through earlier identification and treatment, as well as increasing nutrition and physical activity can reduce the complications of COVID-19, especially in communities experiencing health disparities,. African Americans are almost 4 times more likely than White Americans to have kidney failure. Hispanics are 1.3 times more likely than non-Hispanics to have kidney failure. (3)

Early identification and treatment of CKD would change the trajectory. New science demonstrates that a combination of early identification, pharmacological treatment, physician directives and patient engagement in evidence-based healthy lifestyle interventions can prevent these diseases thus saving both lives and dollars. Michigan Medicaid alone spends over a billion dollars annually on kidney disease. The Morris Hood III project will be transformational.

Community Intervention

Increasing access and reducing barriers to healthy foods and opportunities for physical activity are central to supporting healthy behaviors that prevent chronic diseases (4) such as CKD and its

precursors. Some populations, including those with low socioeconomic status and those of certain racial and ethnic groups, including African American, Hispanic, and Native American, have a disproportionate burden of chronic disease, SARS-CoV-2 infection, and COVID-19 diagnosis, hospitalization, and mortality (5). These populations are at higher risk because of exposure to suboptimal social determinants of health (SDoH). SDoH are factors that influence health where people live, work, and play, and can create obstacles that contribute to inequities. Supporting and stimulating Social Determinants of Health SDoH efforts by concentrating on five major areas: built environment, social connectedness, food and nutrition security, tobacco policies, and connections to clinical care. (6) The NKFM has extensive experience in this arena having had 10 years of experience working in concert with CDC on the REACH (Racial and Ethnic Approaches to Community Health) program. The Morris Hood program will focus specifically (although not exclusively) on social connectedness, food and nutrition security and clinical community linkages. Working within early childhood health and prevention; Adverse Childhood Experiences (ACEs) awareness; expanding the number of Community Health Workers trained to deliver evidence-based programs and motivational interviewing strategies to support participants in reaching their goals of a healthier lifestyle; and work in partnership with community based organizations to identify community members needs and connect them to nutrition and physical activity resources.

For those with chronic disease, the impact of COVID-19 has been particularly profound. (7, 8) Heart disease, diabetes, cancer, chronic obstructive pulmonary disease, chronic kidney disease, and obesity are all conditions that increase the risk for severe illness from COVID-19 (9). The tie between CKD and diabetes, heart disease and obesity is significant and crucial when trying to “prevent” CKD and reduce complications of COVID-19.

Health Care System Intervention

Providing CKD data to health plans and health care providers will alert them to a patient progressing toward a costly scenario of needing dialysis or transplantation. Identifying patients early will give providers the opportunity to educate the patient, provide best practice treatment protocol and refer them to proven programs, saving significant costs in the long run. The NKFM will work with key partners such as the HHS Tech Group, University of Michigan, Michigan Association of Health Plans, Joint Venture Hospital Laboratories (JVHL) and Michigan Primary Care Association to identify CKD early and therefore, reduce COVID-19 complications. We will employ provider education strategies to ensure optimal treatment combined with a referral process for available services. Many Michigan health plans have reviewed the return on investment and understand the importance of preventing and managing chronic conditions. Implementing prevention strategies is not new for many conditions, but it is new for CKD. Currently, 95% of people with CKD don't know they have it nor do their health care providers. We must change this number for health plans, providers and patients. Early identification combined with appropriate treatment and healthy lifestyle or self-management support will transform lives. The NKF has developed excellent tools for primary care physicians to impact early identification and treatment

<https://www.kidney.org/CKDinform#:~:text=Why%20Is%20It%20Relevant?>. This data driven project will utilize Medicaid claims, pharmacy and laboratory data to inform policy makers, health plans and health systems of the large scope of CKD within their population. The NKFM will work with insurers and providers to support them in delivering optimal patient care to slow

CKD progression through innovative models and tools. Increased understanding of the importance of implementing clinical practice guidelines for testing, recognition and management of CKD will be a significant focus of the program. This will transform practices to a population health model for CKD by leveraging health informatics to improve patient outcomes and increased cost effectiveness of care. (10)

Community Clinical Linkages

Community based organizations (CBOs) can provide significant chronic disease management support to patients. Managing conditions such as obesity, prediabetes, diabetes and kidney disease requires that individuals have available support available to assist them. Of utmost importance is to support the individuals themselves, since 95% of chronic conditions must be managed by the person affected. Michigan has an infrastructure already in place. For example, the MDHHS Diabetes Prevention and Control Program has focused on these programs for a decade partnering with local public health, hospitals, insurers and CBOs. (See the PATH - Personal Action Towards Health- and the Diabetes Prevention Program https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2980---,00.html). It will be important for providers to identify patients and make referrals to programs that address patients' needs. The Morris Hood III program will address this challenge.

By working with communities at high risk and health care systems to identify CKD early and implement best practice treatment and program support, we have a significant opportunity to impact those at risk of COVID-19 complications by transforming kidney care in Michigan.

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