

MDON: A Network of Community Partnerships

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This model for strengthening diabetes care in communities teams the public health system with the professional and lay community to address prevention, early detection, and treatment of diabetes. This article describes how the Michigan Diabetes Outreach Network (MDON) develops local, regional, and statewide partnerships to increase professional and public knowledge and to improve care delivery for this chronic and complex disease.

Introduction

From 1990 to 2000, Michigan, as the rest of the nation, experienced a dramatic 48% increase in the prevalence of diabetes. The number of people with diabetes continues to expand, and the number of debilitating complications associated with diabetes continues to rise. Recent studies provide evidence that the alarming growth in macrovascular and atherosclerotic complications can be halted through aggressive preventive management and with successful strategies for helping individuals achieve optimal glucose control.

In an effort to respond to the increasing prevalence of and to reduce the serious and costly complications caused by diabetes, the Michigan Department of Community Health (MDCH) established the Michigan Diabetes Outreach Network (MDON) statewide in 1995. MDON consists of six Diabetes Outreach Networks (DONs). (see attached map). Each DON serves one-sixth of Michigan's population of 10 million in a specific geographic region of the state.

The MDON is modeled after the first Diabetes Outreach Network, piloted from 1985 to 1991 in Michigan's Upper Peninsula (UPDON). Results from this pilot showed a decreased rate of hospitalizations and lower extremity amputations. These outcomes coupled with partnership development across the public health and medical care system suggested that the UPDON model might be successful in reducing the burden of diabetes throughout the state. With the help of a competitive grant from the Centers for Disease Control and state tobacco tax dollars, five additional DONs were funded.

The six DONs joined together to carry out the MDON mission—"to create innovative partnerships to strengthen diabetes prevention, detection, and treatment throughout Michigan." By teaming public health with the medical, business, and community groups and members, the mission is achieved through a variety of means. For example, developing collaborative partnerships to address regional and local needs by:

- Identifying and working toward solving disparities in diabetes care delivery
- Identifying diabetes care, education, and support resources within local communities and strengthening services where few exist
- Enhancing the knowledge of health care professionals regarding diabetes treatment
- Working toward increased community awareness regarding diabetes issues
- Facilitating diabetes data collection and use to improve adherence to the American Diabetes Association Clinical Practice Guidelines and to focus regional and partner goals

Structure

Each DON is staffed by a director, a diabetes educator(s), a data analyst, and an office manager/administrative assistant. Although each DON has a sponsoring fiduciary such as a hospital or health department, most DON operations are separate from the parent organization. The small size and independent status provide each DON the autonomy to respond quickly to opportunities. Since the DONs do not provide direct health services, they are viewed as noncompetitive and neutral. This enables them to take a leadership role in facilitating cooperative agreements with multiple and often competing organizations.

Each DON establishes an advisory council composed of health professionals, consumers, and representatives from both public and private organizations in the community. Council members may include representatives from regional fitness councils, local hospital associations, and health coalitions. The advisory council is a meeting place for those with an interest in diabetes care improvement and is often the genesis of ideas for joint programming and alliances. The advisory council also reviews DON annual plans and outcomes, assists in identifying and meeting the needs of the communities it serves, and provides partners who are vital to fulfilling the vision and mission of MDON.

Collaborative Partnerships

The cornerstone of the Diabetes Outreach Networks' effectiveness is collaboration and the building of relationships to promote diabetes prevention, detection, and care. The structure of each DON lends itself to collaboration with a wide variety of partners. Each DON represents numerous counties, towns, and health systems within a region. With different alliances, regional, local, and individual needs can be identified and addressed. Many of the partnering organizations serve a large region. This multilevel focus encourages cooperation by both small and large organizations.

Each DON develops an annual plan that is consistent with the goals of the Michigan Department of Community Health and the requirements for meeting the Centers for Disease Control agreement. However, these are implemented with a flexibility that allows each DON to take advantage of opportunities and respond to known weaknesses that arise in the region.

For example, despite evidence in the MDON data and the literature that the care was suboptimal, most physicians believed they were practicing optimal care. Although DON staff have difficulty scheduling meetings with staff in busy primary care physician's offices to address diabetes care improvement, a group of primary care physicians in a regional medical center were interested in a diabetes initiative to address some strategic goals. An advisory council member with knowledge of this interest initiated contact with the DON. The partnership began with the development of a diabetes flowsheet designed to improve adherence to the American Diabetes Association (ADA) clinical practice recommendations. A small pilot group (five physicians) was assembled to test a diabetes flowsheet and its usefulness in primary care. This project's success in increasing adherence to standards led to interest from primary care physicians beyond the pilot group. As a result of this project's success, the DON has promoted the use of this tool to over 200 physicians in its service region. In addition, two new grants have been funded to facilitate the use of a diabetes database in primary care settings as a spin-off to the success of the

flowsheets.

Another example of collaboration to solve disparities in diabetes care and identify resources within communities is the “Healthy Hair Starts with a Healthy Body” campaign. This project is designed to increase awareness and motivate the African-American community to address the high prevalence of diabetes and kidney disease in their community. Hair stylists are trained to give their clients a “health chat,” brochures, risk survey, blood pressure check, and a canvas bag of health- and beauty-related incentives. Program partners include the National Kidney Foundation, American Heart Association, local health departments, hospitals, and managed care programs, and the MDON. The MDON played a pivotal role as a noncompetitive entity that forged partnerships, provided training to the hair stylists, and coordinated local resources to maintain the partnerships and spread the initiative. To date, 175 stylists from 85 salons have been trained and supported in their goal of talking to 25 clients (each) about preventing kidney failure. In all, 4,000 African-American salon clients have been reached.

Each DON finds opportunities to help communities identify diabetes care needs. In an isolated, rural area of Michigan that had a high rate of lower limb amputation, there were no diabetes education programs or support groups. Over a 2-year period, the DON staff worked with community and health care professionals to acknowledge the problem and identify the need for a diabetes self-management program and support group. The DON contacts throughout the region provided the resources, expertise, and persistence to develop the area’s first local diabetes education program and support group.

The Diabetes Outreach Networks have created and facilitated many mutually beneficial relationships. Through the numerous contacts of each DON, groups with intersecting goals can be brought together to collaborate on a project. Successful alliances have rewards for each partner and for the communities they serve. As described in the examples above, collaboration results in more and stronger detection, prevention, and care improvement activities.

Professional Education

A major DON focus is to update health professionals’ knowledge of current science and practice to improve their delivery of diabetes care. Oral presentations and self-paced learning guides were designed based on the ADA clinical practice recommendations. As interest and demand have grown, educational programs and online self-paced learning guides were developed and made available to all health professionals for continuing education credits through the Michigan Nurses Association (MNA) and the Commission on Dietetic Registration (CDR). (Table 1).

A variety of teaching techniques have been used to incorporate adult learning principles and to make learning fun. Two of the DONs serving large rural regions regularly offer diabetes continuing education programs via video conferencing methods (interactive TV).

Some of the topics include:

- Diabetes & Exercise
- What’s New & No Longer True in Diabetes Care
- Step Up to Better Foot Care
- Promoting Healthy Food Choices
- Medication Options for Type 2 Diabetes Control

This professional education supports the work of providers in the success of the Diabetes Care Improvement project, which will be described in more detail later. The MDON and MDCH staff have shared diabetes education programs as part of regional, state, and national conferences for a variety of health care professionals such as physicians, nurses, nurse practitioners, physician assistants, pharmacists, and dietitians.

Public Awareness

Another major focus of the MDON is increasing public awareness of diabetes. Successful self-care is essential for glucose control and risk management. It is important that as much accurate information as possible be made available to consumers to assist them in managing this disease on a day-to-day basis. It is estimated that one-third of all people with diabetes are undiagnosed, and diagnosis frequently occurs only after complications of the disease have appeared. Public awareness is facilitated through a variety of events and activities designed to increase awareness that diabetes is a common, costly, serious, and controllable disease. Multiple partners are often involved with the community events. Examples include:

- Assisting with community screenings (ie kidney, A1c, and blood pressure)
- Participating in or organizing health fairs and diabetes expositions
- Giving presentations to established groups such as service clubs, church groups, or business organizations
- Conducting grocery store tours and cooking demonstrations

Statewide partnerships can also extend the public awareness work. A statewide partnership between the Michigan Fitness Foundation and MDON was created to increase awareness of the emerging problem of type 2 diabetes in youth and to promote physical activity for youth through a national initiative, All Children Exercising Simultaneously (ACES). Each year in Michigan, an informational brochure about physical activity is provided to ACES participants. Because of this partnership, a brochure was designed about type 2 diabetes in youth and the importance of physical activity in the treatment and possible prevention of type 2 diabetes. In 2001, Michigan had over 336,000 students, parents, and neighbors participate—336,000 informational pieces on type 2 diabetes in youth were distributed. As diabetes statewide networking has become more established and accepted, partnerships have been strengthened and are sustained with annual events and other statewide media campaigns.

Diabetes Care Improvement

Another important focus is the MDON Diabetes Care Improvement (DCI) program, which is based on the American Diabetes Association Clinical Practice Recommendations. This program was implemented to provide opportunities for practitioners in various settings to document, evaluate, and improve diabetes care. The DON provides tools, training, and resources to assist health professionals in achieving or exceeding the ADA targeted levels of care for individuals with diabetes. Currently, 150 health entities, including home health care, physician offices, diabetes support groups, and diabetes self-management educational programs use the DCI data collection and reporting system. After seeking consent from their patients with diabetes, the providers complete assessment and subsequent follow-up data collection. The forms for data

collection include diabetes clinical outcomes, suggested guidelines for care, demographics, and hospitalization information (Table 2).

The data collected are forwarded to the local DON. The DON develops quarterly reports that are designed to monitor key clinical outcomes and demographic information. Special reports are generated to anonymously compare like agencies and regional differences in diabetes outcomes. For example, physicians ask to be compared to other physician offices, self-management programs request comparison with other similar programs, etc. These reports are shared within agencies and with the regional DON advisory council to promote awareness of the current level of diabetes care. This awareness and data are utilized to promote goal-oriented care improvements.

The data are entered into a statewide MDON database. The MDCH Diabetes Control Program staff compiles MDON data to compare regional trends in diabetes outcomes throughout Michigan. These data are assessed to assist the MDON in focused statewide diabetes public awareness of professional education initiatives (ie: focused media campaigns on promoting foot exams, eye care, or HbA1c testing). The MDON database is also utilized for tracking statewide morbidity and mortality associated with diabetes.

MDON Results

Following are the MDON results from the Michigan Department of Community Health, 2002.

Professional Education

- MDON was involved in facilitating or assisting with 2220 educational programs for health care professionals from 1995 to 2001.
- More than 50,000 health care professionals and students have attended these programs.
- Use of self-paced modules went from 224 people in 1999, to 306 in 2000, and up to 1212 in 2001.

Community Awareness Events

- MDON participated in 169 public awareness events in Michigan, reaching an estimated 19,000 consumers in 1996.
- In 2001, MDON was involved with 526 community awareness events, reaching over 800,000 people in Michigan.

Impacts of the Diabetes Care Improvement (DCI) Project

- Over 31,320 people with diabetes in Michigan are in the DCI database.
- Follow-up trends for A1c measurement, foot exams, and microalbuminuria tests between 1996 and 2001 have shown improved outcomes and preventive care for people with diabetes.