



The Diabetes Project

New evidence shows that one in three Americans born in 2000 will develop diabetes sometime during their lifetime. Together we can and must do more to prevent and control this growing epidemic of diabetes.

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Improving the Care & Management of 2 Diabetes

In Massachusetts, as in the United States, the rate of diabetes has increasing at an alarming rate with the number of affected residents soaring from a 1994 level of 183,000 to 294,000 in 2003 (CDC, 2004). The Education and Training branch of the Office of Community Programs (OCP) at UMASS Medical School, the Division of Medical Assistance, and the Diabetes Control Program of the Massachusetts Department of Public Health developed and implemented the Diabetes Provider/Member Education Project in an effort to improve the care and management of Type 2 diabetes.

The diabetes project assisted four primary care practices to incorporate the recommendations of the [Massachusetts Guidelines for Adult Diabetes Care](#); in their care of patients. The aim was to reach a culturally and linguistically diverse population of adults under the age of 65 who are MassHealth members diagnosed with type 2 diabetes.

Project Goals

Specific project goals included:

- To improve clinical and delivery system outcomes for diabetes care at each pilot site by assisting practice sites to increase adherence with the [Massachusetts Guidelines for Adult Diabetes Care](#); using the [Clinical Education Template](#) (PDF) for guideline implementation in high-risk practices.
- To improve access to and quality of diabetes care for MassHealth members by identifying new strategies and approaches to disease management and patient care;
- To assist four clinical practices to establish multidisciplinary teams to encourage utilization of the Diabetes Guidelines for Adult Diabetes Care;
- To offer resources and staff support to assess, implement and evaluate site based projects.
- To evaluate the effectiveness of the DMA/MAP template for guideline implementation in high-risk practices in influencing clinical and delivery system redesign.

Project Approach

To achieve project goals the following approaches were utilized as outlined in the MassHealth/MAP [Clinical Education Template](#) (PDF):

- ◆ The creation of a physician-led advisory committee to oversee and guide the project;
- ◆ Provider training on the at each practice site;
- ◆ The use of provider and member focus groups to assess factors which create barriers and potential solutions for the care and management of type 2 diabetes;
- ◆ Development of a community resource guide that included local resources to assist individuals with diabetes (e.g., food pantries, feeding programs, eye care screening, foot care screening, free influenza vaccinations, nutrition classes, support groups and other services);
- ◆ Distribution of a \$7,000 mini-grant to each site to support quality improvement efforts;
- ◆ The development of a [clinician toolkit](#) (PDF): as a written resource guide for physicians;
- ◆ The use of pre intervention chart reviews to identify potential areas for improving participating clinical practices adherence to clinical guidelines; and
- ◆ Project evaluation to determine the effectiveness of the project interventions.

Project Evaluation

The project evaluation included two approaches: the evaluation of the *Diabetes Physician Toolkit* and exit interviews with the quality improvement teams at each of the clinical practices. In addition E&T compared the outcomes of each site's projects with what they originally proposed in their quality improvement plans.

Exit Interviews: Participating clinicians found the project to be helpful and that they benefited from participation, especially to increase their knowledge of the *Massachusetts Guidelines for Adult Diabetes Care*. On-site trainings were especially helpful as well as the additional support in the form of staff assistance, mini-grants, patient education materials and other resources. Some sites stated that the project was lengthy and that change in the delivery of care for patients with diabetes at their practice would require dedicated staff time and greater resources.

Medical Directors at three of the four sites described the chart audit as having been "very helpful" in setting goals for the project and providing objective data to assist in ensuring that project goals were relevant. They particularly stressed the value of being able to see, work with, and build upon data that reflected their own practices.

Evaluation of the Diabetes Physician Toolkit: Overall, the clinician respondents stated that the Toolkit was helpful for education, particularly for students and residents, and occasionally for patients. However, half of the clinicians commented that they thought the Toolkit was too large and cumbersome to be useful as a working document. One respondent stated that clinicians do well with single page reminders, some of which are included in the Toolkit.

Comparison of Site Outcomes to Original QI Proposal:

There was great variability in project outcomes among clinical practices. One medical practice, Site A, participated fully in the project creating changes in educational programs to enhance the delivery of care for individuals with type 2 diabetes. The additional three practices reported that while their practice benefited from participation, changes in the delivery of care was not implemented. The complex nature of diabetes, significant barriers to health care, patient behavior change, limited project resources and the insufficient staff time devoted to the project affected the outcomes of the project.

Diabetes Resources

To speak to the program manager about the Diabetes Project, contact Theresa Glenn at 508-856-4859 or email Theresa.Glenn@umassmed.edu.

- ◆ [American Diabetes Association](#)
- ◆ [American Association of Diabetes Educators](#)
- ◆ [CDC National Center for Chronic Disease Prevention and Health Promotion](#) Diabetes Prevention and Control Program
- ◆ [Juvenile Diabetes Foundation International](#); Provides an overview of recent research on Type I (juvenile) diabetes;
- ◆ [Lifeclicnic Diabetes Information Guide](#)
- ◆ [Massachusetts Diabetes Prevention and Control Program](#) provides an overview of the Diabetes epidemic in Massachusetts and features downloadable patient brochures on Diabetes care and the Massachusetts Guidelines for Adult Diabetes
- ◆ [Massachusetts Guidelines for Adult Diabetes Care 2003](#)
- ◆ [National Diabetes Education Program \(NDEP\)](#) is a partnership of the National Institutes of Health, the Centers for Disease Control and Prevention, and more than 200 public and private organizations.
- ◆ [National Diabetes Information Clearinghouse \(NDIC\)](#)
- ◆ [Public Health Resource](#)