

Evaluation of a Community-Based Diabetes Education Program

This article describes how Jefferson University Hospital's Center for Urban Health conducted a diabetes self-management education program evaluation guided by National Standards for Diabetes Education to improve program quality and receive accreditation from the American Association of Diabetes Educators.

Diabetes self-management education (DSME) is the formal process of improving knowledge, skills and abilities necessary for self-care for individuals with, or at risk for, diabetes.¹ To receive program recognition and comply with evidenced-based practice, the structure, process, and outcomes of a DSME program must meet national standards and the essential elements defined by the American Diabetes Association (ADA), Indian Health Services (IHS), or the American Association of Diabetes Educators (AADE). The AADE Diabetes Education Accreditation Program (DEAP), established in 2009, was designed to be sensitive to the unique characteristics of a community-based program, allowing a flexible process to accredit multiple sites with one application and fee.²

In response to the burden of diabetes in the Philadelphia community, the Thomas Jefferson University Hospital Center for Urban Health (CUH) has provided community-based diabetes education for over 10 years. The DSME program is designed to reach vulnerable populations in the Jefferson service area. The curriculum content area includes: disease process and treatment, nutrition, benefits of physical activity, safe and proper use of medications, blood pressure and blood glucose monitoring, strategies for preventing, detecting, and treating complications, stress management and problem solving. Behavior goals are assessed and monitored using the AADE 7 Self-Care Behaviors.³ These 7 behaviors – healthy eating, being active, monitoring, taking medication, problem solving, reducing risks and healthy coping – provide a framework for measurable behavior change. The CUH's DSME program supports a patient-centered approach to DSME that is skills based and

promotes collaboration with an interprofessional health care team. To sustain and grow the DSME program, an extensive program evaluation was conducted to identify gaps and implement recommendations to ensure that the program is consistent with the goals of the AADE DEAP.

Program documentation from 2008-2010 was selected for this review. Sources of data included the CUH's policies and procedures, grant reports, the DSME curriculum, de-identified participant pre- and post-session documents, attendance records, and quality improvement information. Findings from this review suggested that the department needed clearer identification of staff roles and responsibilities specific to the DSME program. The diabetes education sessions needed more opportunities for staff and participant collaboration in the development of individualized personal action plans, and follow-up and ongoing plan support. The program curriculum was revised to integrate assessed learner needs into educational interventions and to provide adequate time for class discussions, and skill-building exercises (return demonstration of glucose monitoring, blood pressure monitoring, etc.). Policies and procedures specific to the DSME program were developed, as well as mechanisms to more accurately measure attainment of patient-defined goals.

To strengthen team-building skills and interprofessional collaboration, the CUH staff participated in an interprofessional learning practicum offered through the Jefferson Center for Interprofessional Education (JCIPE). The practicum was designed to improve interprofessional care through implementing and evaluating patient-centered education. The staff worked together to revise the program structure and process for data collection and continuous quality improvement.

The administration and staff of CUH partnered with a local community center to conduct a pilot

of the revised DSME program. Each participant worked collaboratively with staff to create an individualized follow up and ongoing support plan. At least one self-care behavior goal was met by each participant one month post-class.

Based on the revisions to the DSME program and positive patient outcomes, an application was submitted to the AADE and approved. These outcomes include a structured individualized self-management and follow-up support plan for each participant that is reviewed with participants at regular intervals. In September 2011, the CUH received AADE accreditation for the DSME program.

Diabetes is a serious public health concern. Aligning with the goal of Healthy People 2020 to increase access to DSME, community-based programs offer an innovative and effective strategy for care delivery to at-risk communities.⁴ The CUH has established a community-based DSME program that is accredited and recognized by the AADE. This program remains a work in progress, as performance measures that reflect evidence-based outcomes are continuously reviewed. ■

Neva White, DNP, CRNP, CDE
Senior Health Educator

Rickie Brawer, PhD, MPH
Associate Director, Assistant Professor

James D. Plumb, MD, MPH
Director, Professor

Pamela Harrod-Smith, MS
Health Educator

David Madison, MEd
Health Educator

For more information on this program contact neva.white@jeffersonhospital.org

REFERENCES

1. Funnell M, Brown T, Childs B, et al. National standards for diabetes self-management education. *Diabetes Care*. 2011; 35 (suppl): S101-S108.
2. Mensing C. Comparing the processes: Accreditation and recognition. *Diabetes Educ*. 2010; 36: 219-243.
3. Mulcahy K, Maryniuk M, Peoples M, et al. Diabetes self-management education core outcomes measures *Diabetes Educ*. 2003; 20:768-803.
4. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Healthy People 2020*. Diabetes. <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=8> Accessed June 19, 2012.