

APPROXIMATELY SIX PERCENT OF THE UNITED STATES POPULATION HAS DIABETES MELLITUS (AMERICAN DIABETES ASSOCIATION 1998), AND THE TOTAL COST OF CARE FOR DIAGNOSED DIABETES PATIENTS IS GREATER THAN \$92 BILLION (AMERICAN DIABETES ASSOCIATION 1992).

Many of the costs can be attributed to the long-term complications of the disease, which can be minimized with blood glucose control. However, it is estimated that 40 to 50 percent of patients with diabetes do not use their medications correctly (Huffman 1996), and 70 percent have never had any formal diabetes education (Campbell 1995). As a result of these statistics, community pharmacists have been urged to provide diabetes education and other disease state management services. Allcare Pharmacy in Arkadelphia, Arkansas, is seizing this opportunity to provide diabetes self—management training.

BY DONNA WEST, Ph.D.

Assistant Professor, UAMS College of Pharmacy

Continued on Page 22



A Team Approach

Allcare Pharmacy is utilizing a team approach to provide diabetes self-management training. The education team at Allcare Pharmacy consists of a pharmacist, a registered nurse, and a dietitian. Several years ago, Fran Stotts, the pharmacist, became interested in educating patients about diabetes. She attended NIPCO's Diabetes Care Program and UAMS' diabetes disease state management course. She then teamed up with Mary Alice Blevins, a Registered Nurse, and the two began working together to develop a diabetes education program in the pharmacy. As required by Medicare, Allcare Pharmacy then hired Detri Brech as a dietitian consultant to complete the education team.

Diabetes Self-Management Training

To develop the program, the education team used the National Standards for Diabetes Self-Management Education. Physicians completing a Certificate of Medical Necessity for Diabetes Self-Management Training refer patients to the program.

The self-management training program is designed so that patients with diabetes participate in a one-onone initial assessment followed by weekly group education sessions. The education sessions are taught by one of the three members of the education team, depending on the topic. Topics

covered in the pharmacy's training program are listed below. A follow-up assessment is conducted three to six months after the participant completes the program.

- Assessment and Goal Setting
- Medications and monitoring
- Nutrition basics
- Nutrition exchange diets
- Exercise and foot/skin/dental care
- Nutrition: Healthy Heart
- Nutrition-food choice-trip to grocery store
- Prevention and detection and treatment of acute and chronic complications
- Stress and psychosocial adjustment, behavior change strategies. community resources

To receive reimbursement from Medicare and other payers, Allcare Pharmacy decided to apply for ADA (American Diabetes Association) recognition. The ADA Education Recognition Program recognizes providers that have met the National Standards for Diabetes Self-Management Education. The application process for ADA recognition can be found on the ADA Website (http://www.diabetes.org). AllCare Pharmacy obtained ADA recognition in May 2001 and has since then received reimbursement from Medicare, Blue Cross/Blue Shield, and other payers, including HMOs and PPOs.

Marketing the program has also been critical to its success. Blevins visits physician clinics to distribute brochures, explain the program, and

The Allcare diabetes team.

Left to Right: Mary Alice Blevins, RN, BSN, MA, Detri Brech, Ph.D., RD, LD, Fran Stotts, P.D., CDM

seek referrals. To gain further visibility for the program, they have marketed the program to area industries, have provided diabetes information on the pharmacy website, and have offered a free diabetes support group in conjunction with the county cooperative extension service. The diabetes support group is promoted by monthly mailings to approximately 300 people and radio and newspaper releases. The pharmacy was also redesigned to include a special diabetes section, containing protective shoes, sugarfree candy, cookbooks for patients with diabetes, and other diabetic supplies. Since the onset of the diabetes education program, sales of diabetic supplies (e.g., strips) have increased significantly.

Outcomes

The education team collects outcome data with the intention of evaluating the effectiveness of their diabetes self-management training program. The data for each patient are recorded in a permanent, confidential patient education record at the initial assessment and at the follow-up assessment. During the program, documentation includes progress notes, change of condition and/or treatment, and information about the education sessions attended. The pharmacy has a HbA1c machine and a Cholestech LDX analyzer that can be used to obtain lab values; however, physicians supply most lab data on request. The following data points are collected for each patient.

Clinical Outcome Data

- : 'HbA1c
- Cholesterol levels: HDL, LDL, and trigylcerides
- Body Mass Index (BMI)

Self-Care Behavior Data

- Annual eye exam
- Foot exam
- Exercise

During the follow-up assessment, each participant is asked to evaluate the program by rating the helpfulness of each session. Allcare Pharmacy plans to compare baseline data and follow-up data to determine the success of their diabetes education program.

Continuous Quality Improvement data has been gathered on more than 70 patients and indicates an average admitting HbA1c of 9.6 and an average HbA1c at the time of "follow-up" to be 8.4. According to the UKPDS study, this difference would reduce participant complications by over 25%. When admitted to the program, 33% of participants were monitoring their blood sugar. At follow-up 99% were monitoring. There was a 96% increase in participants observing their feet on a daily basis. Other clini-

cal and quality of life outcomes appear to indicate patient behavior improvement. One case example is a patient who enrolled in the program with a HbA1c of 9.8, and after completing the program, his HbA1c was 6.9. He participates in a walking exercise program, conducts daily foot exams, and has obtained an annual eye exam. Decreasing HbA1c levels and improving self-care behaviors should lead to a reduction in the risk of diabetes complications for this patient.

Future Opportunities

Although Allcare Pharmacy has established a diabetes self-management training program, the idea of providing diabetes education in a community pharmacy is still in its infancy. This education team hopes to demonstrate that providing diabetes education in a community pharmacy is an effective method of improving intermediate clinical outcomes for

patients with diabetes. For more information on developing a team-based diabetes education program in a community pharmacy, please call Fran Stotts, PD, or Mary Alice Blevins, RN at Allcare Pharmacy, (870) 246-3044.

References

American Diabetes Association, Direct and Indirect Costs of Diabetes in the United States in 1992. Alexandria, VA: 1993.

American Diabetes Association, Clinical Practice Recommendations, Diabetes Care, 21(1): 1998.

Campbell RK. The Value of Pharmaceutical Care of Patients with Diabetes, Eli Lilly Continuing Education Series: 1995.

Huffman DC. The 76 Billion Dollar Question: Documenting the Value of Pharmacist Care, The National Community Pharmacists Association. Alexandria, VA: 1996.

The Allcare diabetes team leads a group discussion of patients with diabetes.

