



INTRODUCTION

In the spring of 1997, the Vermont legislature passed and the Governor signed “An Act Relating to Diabetes and Health Insurance,” 8 V.S.A. §4089c. This law requires health insurers to “provide coverage for the equipment, supplies and outpatient self-management training and education, including medical nutrition therapy, for the treatment of insulin dependent diabetes, insulin using diabetes, gestational diabetes and noninsulin using diabetes if prescribed by a health care professional legally authorized to prescribe such items under law.”

The act went into effect in October of 1997 and required that this coverage be provided upon sale or renewal of health insurance policies on or after that date. The law was fully implemented by September of 1998.

Since that time, questions have arisen about the specific content of self-management education, qualifications for teaching, and administrative issues such as appropriate billing codes, limits on education, if any, and reimbursement procedures.

In order to address these questions, the Vermont Department of Banking, Insurance, Securities and Health Care Administration requested that the Vermont Program for Quality in Health Care (VPQHC) convene a work group to provide recommendations to the Department.

The group included physicians, diabetes educators, payers, and state government representatives. A full list of participants is in the appendix.

The group met twice, in December 1999 and January 2000. At the first meeting three key questions were identified:

1. What types of education health insurers should cover?
2. Who should be reimbursed for providing education?
3. What administrative issues should be addressed?

At the second meeting the panel developed consensus answers to the questions. Discussions focused on the best ways to provide self-management education for people with diabetes while recognizing financial and administrative constraints on payers.

BACKGROUND

Diabetes is a chronic disease that affects the way a person uses a sugar called glucose in his or her blood. Insulin is a hormone that helps turn glucose into energy. Diabetes is a group of metabolic diseases that includes type 1 diabetes, type 2 diabetes and gestational diabetes. Type 2 diabetes is the most prevalent form. People with type 2 diabetes either don't make enough insulin or can't properly use the insulin that they do make. Type 2 diabetes may be managed through diet and exercise alone or in conjunction with oral medications or insulin. People with type 1 diabetes can not make insulin at all and must take insulin injections.

While diabetes is a serious disease that affects nearly every part of the body research has shown that with good metabolic control people with diabetes can live full, normal lives. Metabolic control requires careful attention to diet, daily exercise, self –monitoring of blood glucose , and use of any medication that has been prescribed. If diabetes is not appropriately managed, both acute and chronic complications may occur. Acute complications include hypoglycemia (low blood sugar), hyperglycemia (high blood sugar), and diabetic ketoacidosis. Chronic complications may include blindness, heart disease, kidney damage, periodontal disease, or limb amputation.

Diabetes self-care management is essential to good metabolic control. One frequently cited review of research about diabetes care is an article called “Diabetes Self-Management Education,”¹ by Stephen Clement, MD, CDE. Clement says that “since the earliest days of insulin therapy, health care providers have discovered that simply prescribing the correct dose of insulin, oral agents, or correct meal plans is not enough to achieve adequate metabolic control or to prevent medical crises resulting from diabetes. Severe knowledge deficits in self-management skills such as medication administration, glucose testing, diet, sick day guidelines, and foot care have been identified in 50-80% of diabetic adults and children.”

After reviewing over 100 studies and articles on self-management education, Clement drew several conclusions. Two that are important to these recommendations are:

1. Diabetes self-management education is associated with reduced hospitalizations for diabetes-related problems; and
2. Diabetes self-management education is associated with reduced diabetes-related health care costs.

One of the most important studies of diabetes care was the Diabetes Control and Complications Trial (DCCT). The DCCT was conducted by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) from 1983 through 1993. In his article, Dr. Clement discussed the DCCT.

The DCCT was a multi-center randomized trial to test the efficacy of intensive diabetes management on reducing the risk for microvascular complications. The trial demonstrated a marked reduction in retinopathy, nephropathy, and neuropathy in the intensively treated group compared to the conventionally treated group. Although not designed to test the efficacy of self-management education per se, the success in achieving near-normal glucose control in the intensively-treated group was attributed to the excellent nursing, dietary, and behavioral personnel who worked as a team in providing intensive self-management education and treatment.

The NIDDK identified the following benefits related to lowering blood glucose levels:

- Eye disease – 76% reduced risk

¹ *Diabetes Care*, August 1995, Volume 18, number 8, pp. 1204-1214

- Kidney disease – 50% reduced risk
- Nerve disease – 60% reduced risk”²

Since 1996 the Vermont Department of Health has received an annual grant from the federal Centers for Disease Control (CDC). The goal of this grant program is to reduce the burden of diabetes in Vermont. The Department estimates that about 19,000 Vermonters have been told that they have diabetes and another 6,500 to 19,000 may have the disease and not know it.³ Prevalence of the disease is increasing, from 3.9 percent in 1991 to 4.3 percent in 1997. Mortality from diabetes is also increasing and is the seventh leading cause of death in Vermont.

Three activities funded by that grant are related to these recommendations.

The first is development of *Recommendations for the Management of Diabetes in Vermont*. This manual was developed by Vermont health care professionals working with the Vermont Program for Quality in Health Care, Inc. (VPQHC) and is based primarily on *Clinical Practice Recommendations* developed by the American Diabetes Association⁴. *Recommendations for the Management of Diabetes in Vermont* addresses a wide range of topics, from blood testing to exercise. It includes specific recommendations about self-management education. *Recommendations for the Management of Diabetes in Vermont* has been accepted as a standard of care by Vermont health care providers as well as many Vermont health insurers and HMOs. The volume will be updated periodically to remain consistent with current scientific knowledge.

The second is development of the *Survival Skills* curriculum and accompanying educational materials. *Survival Skills* is a program intended for people who have been newly diagnosed with diabetes. The intent of the program is to supply basic skills until a comprehensive course in diabetes self-management education can be attended.

The third is an effort led by the Department of Health to ensure that comprehensive diabetes self-management education is available throughout Vermont. This has involved purchase and distribution of the ADA course *Life with Diabetes* and a mentoring program for diabetes educators to enable access to a comprehensive education course in each community.

² National Institute of Diabetes and Digestive and Kidney Diseases web site – www.niddk.nih.gov/health/diabetes/pubs/dcct1/dcct.htm

³ Diabetes in Vermont – a Review of the Data; Vermont Department of Health, 1999

⁴ American Diabetes Association: Clinical Practice Recommendations 1999. *Diabetes Care*. 22: Suppl. January 1999.

RECOMMENDATIONS

1. What types of education health insurers should cover?

The group identified three types of diabetes self-management education:

- a) Comprehensive diabetes self-management education;
- b) Survival Skills diabetes self-management education; and
- c) Customized diabetes self-management education.

a) Comprehensive diabetes self-management education

The group recommends that:

- i. comprehensive education be covered in both group and individual settings;
- ii. course content of the comprehensive program be the latest American Diabetes Association release;
- iii. comprehensive programs need not be repeated more often than every three years unless a significant change in the patient's condition necessitates changes in self-management; and
- iv. individuals who need supplemental education in specific areas will be eligible for customized sessions rather than repeating the entire program.

Currently the comprehensive program follows the national standard curriculum, *Life with Diabetes*, developed by the American Diabetes Association. This program covers 15 subject areas during twelve hours of instruction taught over up to a six-week period. It is usually taught in a group setting, but individualized sessions may be conducted.

Currently, the 15 subject areas in the comprehensive program include:

- 1) Diabetes overview
- 2) Stress and psychological adjustment
- 3) Family involvement and social support
- 4) Nutrition
- 5) Exercise and activity
- 6) Medications
- 7) Monitoring and use of results
- 8) Relationships among nutrition, exercise, medication, and blood glucose level
- 9) Prevention, detection, and treatment of acute complications
- 10) Prevention, detection, and treatment of chronic complications
- 11) Foot, skin, and dental care
- 12) Behavior change strategies, goal setting, risk factor reduction, and problem solving
- 13) Benefits, risks, and management options for improving glucose control
- 14) Use of health care systems and community resources
- 15) Preconception care, pregnancy, and gestational diabetes

b) Survival skills diabetes self-management education

The group recommends that:

- i. survival skills diabetes self-management education be covered once in either group or individual settings;
- ii. course content for the survival skills program be the latest version as developed by or under the direction of the Vermont Department of Health or an equivalent program as determined by the Department;
- iii. individuals who take a survival skills program should also take the comprehensive program; and
- iv. there should be no required waiting period between the survival skills program and the comprehensive program.

Currently, survival skills diabetes self-management education uses the *Survival Skills* curriculum which was developed in Vermont and represented a sub-set of the comprehensive program described above. The program is designed for people with newly diagnosed diabetes and addresses only the most critical information needed to manage the disease for a short period of time. It is intended to be followed by customized and/or comprehensive instruction within six to nine months.

The current course content of the *Survival Skills* curriculum includes:

- 1) Diabetes overview
- 2) Nutrition
- 3) Exercise
- 4) Self-Monitoring of Blood Glucose
- 5) Hypo- and/or Hyperglycemia
- 6) Medications relevant to members of the class
- 7) Administration of insulin if appropriate
- 8) Resources

The *Survival Skills* curriculum development was a joint project of the Vermont Association of Diabetes Educators and the Vermont Program for Quality in Health Care, Inc. The Vermont Department of Health funded the effort.

c) Customized diabetes self-management education

Customized diabetes self-management education is designed to address specific individual needs. The group recommends that customized education be covered:

- i. when medically necessary e.g. if a person's diabetes is not well controlled or if there is a major change in health status or therapy;
- ii. in cases of gestational diabetes and pediatric patients;
- iii. to provide additional training in areas covered in other programs; and
- iv. that customized education is always individual (one-to-one) counseling.

2. Who should provide diabetes training and education?

The group recommends the following guidelines be used if an insurer chooses to credential individuals for providing diabetes self-management education:

1. the individual be a Certified Diabetes Educator (CDE)*; or
2. the individual be licensed in a profession that is eligible for certification as a CDE,** and the individual has completed 16 hours of continuing education in diabetes education and principles and the individual has received at least 6 hours annually of continuing education in diabetes principles.

*Certification of Certified Diabetes Educators is given by the National Certification Board for Diabetes Educators.

**The list of professions eligible for certification is subject to change. A current list is available from the National Certification Board for Diabetes Educators.

8 V.S.A. §4089c states that “Diabetes outpatient self-management training and education required to be covered by this section shall be provided by a certified, registered or licensed health care professional with specialized training in the education and management of diabetes.” It also says “A health insurer may require that such prescriptions be made, and care be given, by a health care professional under contract with the insurer.”

The group identified two issues in this area. The first is that some health professionals, such as registered nurses, who are qualified to provide self-management education may not be able to contract with insurers. This is an issue if these professionals are in an independent practice, but not if they are employees of organizations that may bill insurers.

The second is credentialing. Most health insurers base their credentialing process on professional licensure not on specific training. The group recommended the above guidelines for insurers who choose to incorporate diabetes-specific education into their credentialing process for diabetes educators.

3. What administrative issues should be addressed?

The group identified issues that can create barriers to care for insured individuals and contribute to administrative difficulty for diabetes educators. These include:

- a) use of different CPT codes for the same service by different payers; and
- b) not knowing in advance about specific payer contracts with suppliers, e.g. this may lead to a patient being trained in the use of a different brand of glucometer than an insurer will pay for.

The group hoped to continue working to address these issues but made no specific recommendations at this time. The group expressed interest in creating a forum for discussion between payers and providers to address these issues and to periodically review and update the recommendations made in this document.

APPENDIX

Participant List

Addie Burkett, MVP Health Plan

Lynne Dapice, Vermont Department of Health

Paula DiStabile, Vermont Department of Banking, Insurance, Securities and Health Care Administration

Steven Kappel, Vermont Program for Quality in Health Care

Sarah Narkewicz, Rutland Regional Medical Center

Mildred Reardon, University of Vermont College of Medicine

Linda Ruth, MVP Health Plan

Christine Ryan, Delmarva Foundation for Medical Care

Anne Sevee, Vermont BlueCross BlueShield

Margaret Terrien, Fletcher Allen Health Care

Ellen Thompson, Vermont Department of Health

Paul Wallace-Brodeur, Office of Vermont Health Access

Janice Waterman, Green Mountain Nutrition Associates