

*ediba Diabetes Center
of
Excellence*

(Diabetes Center of Oklahoma)

*Education Program
Overview*



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Diabetes Education Program

DEFINITION OF DIABETES EDUCATION/SELF MANAGEMENT TRAINING:

A series of planned learning experiences including a combination of teaching, counseling, and behavior modification that influence the patient's knowledge, health behaviors, and health outcomes. Self-management training is acquisition of knowledge, skills and management techniques necessary to perform appropriate self-care and control blood glucose levels. It is an integral aspect of patient management.

PROGRAM SUMMARY

Comprehensive diabetes education/self-management training is offered in an ambulatory setting to adults and children (and their families) with Type 1, Type 2, and Gestational Diabetes. The education is provided individually or in group classes. Each individual participates in a needs assessment with an individualized education/self-management training plan developed by the patient – nurse / dietitian – physician team. Upon completion of initial education plan (usually consisting of 4 - 9 hours depending on patient's needs and diagnosis) follow up is done through individual visits or phone contact. The participant's progress in achieving education objectives, self-care behaviors, and outcome measures is evaluated at 3, 6, and, 12 months.

COMPONENTS OF DIABETES EDUCATION PROGRAM

- Education / self-care assessment completed
- Education / self-management training plan developed
- Education / self-management training provided via individual visits and/or group setting
- Planned follow up contact
- Evaluation of participant's progress in achieving education objectives, self-care behavioral goals, and outcome measures.

CREDENTIALS

The educators in this program are **Certified Diabetes Educators (CDE)**, or working towards that credential, through the National Certification Board for Diabetes Educators. The primary educators are Registered Nurses and Registered/ Licensed Dietitians. The program at specified sites has been awarded **Recognition** by the American Diabetes Association in accordance with the National Standards for Diabetes Self-Management Education Programs.

EDUCATION PATHWAYS

For Newly Diagnosed:

Type 1	Ambulatory Insulin Program I 6-9 hours of education – individual visits Appropriate follow-up contact
Type 2	Type 2 class (7 hrs) and follow up contact or Individual visits – 4-5 hours and follow-up contact
GDM	2-4 hours individual visits and follow-up contact or 2½ hr. class and follow-up visit

Existing Diabetes:

Type 2/GDM:	To start insulin – Ambulatory Insulin Program II 2-4 hours and follow-up contact
Type 1	Individual visits – 3-6 hours and follow-up contact
Problem solving & Crisis Intervention / refresher education Type 1 or Type 2	2-5 hours individual and follow up contact or Type 2 may enroll in class

Targeted Classes:

Provide self-management instruction in specific areas through small group instruction:

Type 2 and What to Do
Advanced Insulin Management (AIM)
Pre-pump
Gestational Diabetes

Recommended Education Strategies

<u>Diagnosis / Needs</u>	<u>Program</u> **	<u>Time frames</u>
TYPE 1		
•newly diagnosed →	Ambulatory Insulin Program I	6-9 hr indiv. f/u contact
•existing disease-poor control, needs education →	Individual counseling for self-care assessment, education plan, problem solving	2-6 hr indiv. f/u contact (phone/visit) as needed
•needs advanced info on insulin mgmt. – physician implementing intensive insulin therapy →	Individual counseling or AIM class	3-4 hr 2 hr
TYPE 2		
•newly diagnosed, poor control, no previous educ. →	TYPE 2 class or	7 hr class + 1 hr f/u visits f/u contact (phone/visit) prn
	Individual counseling – if pt. has physical, mental disability which makes class not appropriate or cannot attend at class times	4-5 hr indiv. f/u contact (phone/visit) prn
•starting insulin →	Ambulatory Insulin Program II	2-4 hr indiv. f/u contact (phone/visit) prn
GESTATIONAL DIABETES		
→	GDM class or	2½ hr class + 1 hr f/u visit 6 wk postpartum f/u + f/u contact (phone/visit) prn or
	Indiv. counseling	2-4 hr indiv., 6 wk postpartum f/u contact (phone/visit) prn
INSULIN PUMP		
→	Intensive Insulin Therapy Program	6-9 hr, includes pre-pump (class or individual), pump training (individual) and f/u intensive phone contact 1-3 hr

DESCRIPTION OF PROGRAMS

AMBULATORY INSULIN PROGRAM I

A structured outpatient program for the initiation of insulin therapy in lieu of hospitalization for the newly diagnosed person with Type 1 diabetes. Under supervision of the physician, self-management training is provided by diabetes nurse and dietitian specialists in the basic knowledge and skills needed: insulin administration, self-blood glucose monitoring, urine ketone testing, medical nutrition therapy, disease process, crisis intervention (hypoglycemic management, Glucagon administration, ketoacidosis, illness management), problem solving, daily living adjustments, insulin adjustment and supplements, blood glucose pattern control, chronic complication prevention.

Six to nine (6-9) hours of individual instruction, follow-up contact, 24-hour phone coverage.

AMBULATORY INSULIN PROGRAM II

A structured outpatient program for the initiation of insulin therapy, in lieu of hospitalization, for the person with Type 2 diabetes. Under supervision of the physician, self management training is provided by diabetes nurse and dietitian specialists in the necessary knowledge and skills: insulin administration, self-blood glucose monitoring, medical nutrition therapy, crisis intervention (hypoglycemic management, illness management), problem solving, daily living adjustments, lower extremity amputation risk assessment.

Two to Four (2-4) hours of individual instruction, follow up contact, 24-hour phone coverage.

INTENSIVE INSULIN THERAPY / INSULIN PUMP PROGRAM

Self-management training on appropriate knowledge and skills for initiation of intensive insulin therapy with a continuous subcutaneous insulin infusion system (CSII, insulin pump), by diabetes nurse and dietitian specialists (Certified Pump Trainers), under supervision of a physician: pump operation, preparing insulin infusion, site care, special programming, precautions and emergency situations, trouble shooting, instructions for daily use, daily living, hypoglycemic management, ketoacidosis prevention, concurrent illness management, insulin pattern management, carbohydrate counting, medical nutrition therapy, and monitoring of therapy.

Six to nine (6-9) hours of class and individual instruction, intensive phone follow-up contact, 24-hour phone coverage.

AIM (Advanced Insulin Management)

A group program for the person with diabetes who needs advanced knowledge and self-management training in insulin therapy and who is progressing to intensive insulin therapy (Basal/ Bolus). This class is not for a newly diagnosed Type I nor does it teach basic insulin administration or home blood glucose monitoring. Training is provided by diabetes nurse and dietitian educators (Certified Diabetes Educators) in insulin management (basal/bolus concepts, calculating bolus doses- insulin:carb ratio, correction factor) special guidelines, insulin adjustment, new developments), problem solving, carbohydrate counting, nutrition therapy, crisis management (hypoglycemia, Glucagon, sick days and Ketoacidosis).

Three (3) hours group instruction, follow up contact 1 hr.

TYPE 2 Class – DIABETES TYPE 2 AND WHAT TO DO

A group program for the person with Type 2 diabetes who is newly diagnosed or who has had no previous education or needs refresher education. Self-management training provided by a diabetes nurse specialist and dietitian in disease process, self-management and treatment, goals of control, home blood glucose monitoring, medical nutrition therapy, individual meal planning, complication prevention, foot care, crisis intervention (sick day management, hypoglycemia), exercise, eating out, recipe modification, problem solving.

Seven (7) hours of group instruction, follow-up contact 1 hour (includes lower extremity amputation risk assessment).

GESTATIONAL DIABETES PROGRAM

Targeted education/self-management training for the woman diagnosed with gestational diabetes. May be provided either individually or in a small group class. Self-management training provided by diabetes nurse and dietitian specialists in disease process, goals of control, desired outcomes, home blood glucose monitoring, urine ketone testing, physician alert situations, medical nutrition therapy, exercise, problem solving, risk of and prevention of Ty 2 diabetes. A protocol is agreed upon with the physician for target goals and alert values.

Two and one half (2½) hours group instruction or 2 hr. initial individual counseling, follow up and phone contact.

CONTENT OUTLINE

Content areas determined by the American Diabetes Association Standards for Diabetes Education Programs:

- Disease Process
- Psychosocial adjustment
- Nutrition management
- Physical activity
- Medications
- Monitoring
- Acute complications (prevention, detection, treatment) – Hyperglycemia (DKA, HHNS, Illness) and Hypoglycemia
- Chronic complications (prevention, detection, treatment) through risk reduction
- Goal setting and problem solving
- Preconception planning, Pregnancy and Gestational Diabetes

INSTRUCTION RESPONSIBILITIES ***

Certified Diabetes Educator Registered Nurse

- Disease Process – Type 1, Type 2, Gestational
- Self-care / Self-management responsibilities
- Treatment, management, goals of control
- Insulin administration – drawing, injecting, site selection/rotation, timing and spacing of meals*, snacks, & insulin, storage, syringe disposal.
- Oral hypoglycemic agents
- Home blood glucose monitoring - meters
- Ketone testing
- Hyperglycemia/Diabetic Ketoacidosis
- Hypoglycemia management*
- Glucagon administration
- Sick day management
- Insulin adjustment/supplements
- Complication prevention
- Foot care
- Exercise*
- Travel
- Stress management
- Preconception planning and pregnancy*
- Coping and psychosocial adjustment*
- Insulin pumps*
- Special aids and devices for visually impaired and handicapped
- Pattern control
- Problems solving / management options *
- Resources

Certified Diabetes Educator Registered / Licensed Dietitian

- All areas pertaining to nutrition and diet management:
- Medical Nutrition Therapy
- Healthy eating guidelines
- Individualized meal plan
- Counting methods – carbohydrate counting, CHOICES, exchanges, other
- Balanced meal planning, timing/spacing*
- Special consideration: fiber, alcohol, cholesterol, fat, protein, sodium, supplements
- Weight control
- Special event planning, eating out, travel
- Reading food labels
- Adapting recipes
- Behavior modification
- Sugar & sugar substitutes
- Food selection and blood glucose monitoring
- Grocery shopping tips
- Resources for menu planning
- Exercise*
- Modifying meals with illness
- Hypoglycemia management*
- Use of monitoring*
- Problem solving*
- Coping and psychosocial adjustment*
- Preconception planning and Pregnancy*
- Insulin pumps*
- Use of supplements

***** Instruction topics are not an absolute division but fluid, and may cross over between professionals.**

DETAILED DESCRIPTIONS OF CLASSES

INTENSIVE INSULIN THERAPY PROGRAM / INSULIN PUMP PROGRAM

A structured outpatient program for the initiation of intensive insulin therapy with a continuous subcutaneous insulin infusion system (CSII, insulin pump). Includes self-management training on appropriate knowledge and skills, by diabetes nurse and dietitian specialists (Certified Pump Trainers), under supervision of a physician: pump operation, preparing insulin infusion, site care, programming basal and bolus rates, precautions and emergency situations, trouble shooting, instructions for daily use, daily living, hypoglycemic prevention and management, ketoacidosis prevention, concurrent illness management, insulin pattern management, individualized nutrition therapy, carbohydrate counting, and monitoring of therapy.

Protocol

*Appropriate paperwork / insurance approval and financial arrangements completed

*Pre-pump education – completed prior to initiation of pump; individual or class

Individual

1-2 hrs Dietitian	Carbohydrate counting Nutrition meal plan
1-2 hrs Nurse	Home blood glucose monitoring – assessment of skills Concurrent illness management, ketoacidosis prevention Hypoglycemia management, Glucagon Insulin adjustment / pattern management

Class

3 hrs	same content as above
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•Pump Training

2-4 hrs with pump trainer (nurse or dietitian) to initiate pump therapy

•Follow up

1-2 weeks with pump trainer (and Dietitian if needed) ~ 1-1½ hr.

If patient needs additional help with carb counting ~ 1 hr with RD (if Pump Trainer is an RN)

Phone contact intensive / as needed for ~ 1-2 week

6-9 hours of instruction – includes follow up plus intensive phone contact

Type 2 class

A group program for the person with Type 2 diabetes who is newly diagnosed or who has had no previous education or needs refresher education. Self-management training provided by diabetes nurse and dietitian specialists in disease process, self management and treatment, goals of control, home blood glucose monitoring, basic nutrition planning, individual meal planning, complication prevention, foot care, crisis intervention / prevention of acute complications, (concurrent illness management, hypoglycemia prevention and management), exercise, eating out, recipe modification, problem solving.

Seven (7) hours of group instruction, follow up contact 1-2 hrs (for those on insulin).

Criteria for participants:

- type 2 diabetes only
- are diet controlled or on oral agents
- are newly diagnosed or have had no previous education or poorly controlled and need refresher and update on self-management skills
- Patients who are insulin requiring may attend but this class **does not teach insulin administration nor is it for people with Type 1 diabetes.**

Structure:

A.M.	3½ hr	What is Type 2 diabetes, disease process Self-management and treatment Goals of control Home blood glucose monitoring Basic nutrition planning
P.M.	3½ hr	Complication prevention Foot care Crisis prevention – Sick day management and Hypoglycemia Oral agents – diabetes pills Exercise Eating out / recipe modification

Class size is limited to 6 participants and one guest each.

Class is 7 hr. Included with the class and follow-up visits are: individual meal plan, risk assessment for protective sensation of the feet, *CHOICES* book, class notebook, two fingerstick blood sugars.

Recommended follow-up: 1 hr (½ hr with RN, ½ hr with RD)
If patient on insulin – 1 hr with RN, 1 hr with RD
(equivalent to 4-5 hr. individual instruction)

AMBULATORY INSULIN PROGRAMS

I – TYPE 1

A structured outpatient program for the initiation of insulin therapy in lieu of hospitalization for the newly diagnosed person with Type 1 diabetes. Under supervision of the physician, self-management training is provided by diabetes nurse and dietitian specialists in the basic knowledge and skills needed: insulin administration, self-blood glucose monitoring, urine ketone testing, nutrition therapy plan, crisis intervention (hypoglycemic management, Glucagon administration, ketoacidosis, illness management), problem solving, daily living adjustments, insulin adjustment and supplements, blood glucose pattern control, chronic complication prevention.

6-9 hr. individual instruction, follow-up contacts, 24-hour phone coverage.

II – TYPE 2

A structured outpatient program for the initiation of insulin therapy for the person with Type 2 diabetes, in lieu of hospitalization. Under supervision of the physician, self-management training is provided by a diabetes nurse specialist and dietitian specialists in the necessary knowledge and skills: insulin administration, self-blood glucose monitoring, nutrition therapy plan, crisis intervention (hypoglycemic management, illness management), problem solving, daily living adjustments, LEAP (lower extremity amputation prevention) risk assessment.

2-4 hr. individual instruction, follow-up contacts, 24-hour phone coverage.

GESTATIONAL DIABETES PROGRAM

Targeted education / self-management training for the woman diagnosed with gestational diabetes. May be provided either individually or in a small group class. Self-management training provided by diabetes nurse and dietitian specialists in disease process, goals of control, desired outcomes, home blood glucose monitoring, ketone testing, physician alert situations, nutrition therapy plan, exercise, problem solving. A protocol is agreed upon with the physician for target goals and alert values.

Two and one half (2½) hours group instruction or 2 hr. initial individual counseling, 1 hr. follow up and phone contact.

Individual counseling

1 hr Nurse
1 hr Dietitian

follow up as indicated

Class

2½ hr – RN and RD (1 hour RN and 1 ½ hour RD)
4-6 participants and 1 guest each

1 hr. individual f/u with RD; follow-up contact (visit/phone) – every 1-3 wk until delivery; 6 wk postpartum

1 hr. with Nurse if appropriate for insulin administration

Content RN: Disease process, Target goals, HBGMing, Urine ketones

RD: Nutrition plan

AIM class
(Advanced Insulin Management)

This class is for Type 1 and 2 diabetics

*who need advanced knowledge in insulin management

*who are progressing to intensive insulin therapy (basal/bolus)

criteria : not newly diagnosed

must already be on insulin and have received basic education on insulin administration

must know how to do blood glucose monitoring

Program consists of

*3 hr class

*individual follow up with Dietitian – 1 hr. and Nurse – 1 hr.

AIM class

*taught by CDE's - nurse educator and dietitian

*content / time frames

RN (1 ½ hr) Insulin – insulin & blood glucose effects, insulin management (basal/bolus concepts, calculating bolus doses- insulin:carb ratio, correction factor), insulin adjustment, new developments. Goals of control, use of HBGM'ing, Crisis management (hypoglycemia, glucagon, sick days)

RD (1 ½ hr) Carbohydrate Counting

Class size ~ 10

