# Diabetes Education Center
# Review of Plan

**Advisory Council Members:**
RD, LD, CDE
MD, Endocrinology Clinic
PA-C, Endocrinology Clinic
RN, BSN – Inpatient Diabetes and Endocrinology
RN, Inpatient Nurse Educator
PSO Practice Manager III
Community Stakeholder
RD, LD, CDE, Program Coordinator
Program Assistant
Community Stakeholder
Office Manager, Diabetes Education Center/Endocrinology
RN, CDE, Diabetes Nurse Educator
RN, MSN, Director of Nursing

**Program Mission Statement:**
The mission of the Diabetes Education Center (DEC) is to improve the health and well-being of people with diabetes in our community through interdisciplinary care and self-management training to individuals and their families and educational support of health care providers.

**Program Goals:**
1. To provide Self-management training to people with diabetes and their families to achieve and maintain good health and minimize complications.
2. To provide information concerning diabetes to the general public, to encourage early detection of diabetes, and to foster a greater understanding of those who have diabetes.
3. To provide information regarding diabetes to health care professionals to encourage up-to-date skills and knowledge.

**Review of Program Objectives:**
1. Maintain or improve on the number of referrals to the Diabetes Center Program.

Objective not met. 438 referrals received this year
505 referrals received previous year

During the reporting period, several of the referring providers are no longer working for the Health system. At present, there are again only two referring providers at the Endocrinology office. A nurse practitioner who was working at the Endocrinology office and was a consistent referrer to the Diabetes Education Center stopped working for after 4 months of service.

55 providers made referrals to the Diabetes Education Center during the previous year. Last year 69 providers sent referrals. 175 of the referrals were received from Endocrinology office providers and 263 were received from other practice offices.

Once the present hiring freeze is lifted we hope to see additional providers added, which should lead to an increase in referrals.

2. Continue to work on strategies to encourage referrals to educational programs/classes.

Objective met.

We have started a process of meeting with providers during one of their scheduled provider meetings. Our goal is to inform the providers of services the Diabetes Education Center can offer. In addition, as new providers are added to the system we hope to make our services known to them. A brochure indicating the value of diabetes education is shared with each office.

We met with office managers during one of their monthly meetings, to share the services available through the Diabetes Education Center.

3. Conduct at least 3 community service programs through health fairs and other outreach education programs.

Objective met.

On the second Wednesday of each month an educator from the Diabetes Education Center conducts a support group which is held at = from 1-2 pm. About ten participants attend this free service on average. An educational program is offered each month on topics related to diabetes care and improved health. The attendance in this group has increased to the point that a larger meeting room is now being used.

When requested we try to do presentations related to diabetes and pre-diabetes diagnosis and management for groups in our community. This past year a senior adult church group received a presentation.

A program about neuropathy was presented to the Stroke Support Group at the hospital.

**Data Analysis:**
The Diabetes Education Center makes use of the AADE7 Program to store and compile education center data. Reports from this system can be used to analyze changes and monitor outcomes.

**Analysis of Target Population:**

| **Diabetes Type** | Percentage this year | Percentage last year |
|---|---|---|
| Type 1 | 5.2% | 5.9% |
| Type 2 | 91.8% | 78.7% |
| Gestational | 0.2% | 9.7% |
| Pre-Diabetes | 1.6% | 3.9% |
| Other | .9% | 1.6% |

| **Race Ethnicity** | Percentage this year | Percentage last year |
|---|---|---|
| American Indian/Alaskan Native | 1.6% | 0.8% |
| Asian/Chinese/Japanese/Korean | 1.1% | 1.0% |
| Black/African American | 10.7% | 8.5% |
| Hispanic/Latino/Mexican | 8.0% | 8.5% |
| White/Caucasian | 62.6% | 70.8% |
| Native Hawaiian/Pacific Islander | 0% | 0% |
| Other | 0.5% | 1.0% |
| Do not know | 15.5% | 9.5% |
| Not documented | 0% | 0% |

| **Age** | Percentage this year | Percentage last year |
|---|---|---|
| Over 64 years | 36.1% | 32% |
| 45-64 years | 47.5% | 42.4% |
| 19-44 years | 16.2% | 25.4% |
| 0-18 years | 0.2% | 0.2% |

| **Gender** | Percentage this year | Percentage last year |
|---|---|---|
| Female | 57.5% | 66.3% |
| Male | 42.5% | 33.7% |

There was a slight change regarding the ethnic population statistics with a slight increase in the Black/African American population. It is well known that individuals from certain ethnic groups are at higher risk of developing diabetes. The Diabetes Education Center will continue to try to identify and enroll those of higher risk ethnic groups and will look for opportunities to market and communicate to the target high-risk population.

The decrease in service to those with gestational diabetes is mainly due to the Women's Clinic hiring a nurse practitioner to educate and follow the patients with gestational diabetes and follow any gestational diabetes patient requiring insulin or having high-risk needs. We will remain available to educate patients on gestational diabetes when referred.

**Program Participation:**

Entering the Program: A referral from the provider, who handles the patient's diabetes care, is required for entry into the Diabetes Education Program. Each year a number of patients without a provider referral will contact the center to enroll in the program. The patient is informed that a referral is required and the education staff (program assistant) will offer to assist the patient in obtaining the referral.

With appropriate referral, the patient is then scheduled into education which fits his or her needs. Some patients have been referred but do not receive education as listed below.

Referrals- Not Seen

| | |
|---|---|
| Declined education | 26 |
| Not covered by insurance<br>Or high deductible/copay | 44 |
| No response to contact attempts | 71 |
| Scheduled appointment then did not show up and could not be contacted to reschedule | 40 |
| Incorrect diagnosis on referral<br>(did not have diabetes based on lab results) | 2 |

Total 98

**Education Services:**

**Self- Management Training**: This service is designed to help the patient gain the tools and knowledge to manage blood glucose values, maintain health and reduce the risk of complications associated with poor blood glucose control. This program starts with a one-hour individual assessment visit, followed by 3 class sessions totaling 8 hours. Three months after attending classes the participant is asked to attend a free follow-up session to evaluate goals set and help address concerns or questions.

**Pregnancy and Diabetes/Gestational Diabetes**: This Service includes a 90-minute initial class with a one-week follow-up to assess how the participant is doing with goals for control and to help with questions or problems. A 6-12-week postpartum follow-up is encouraged.

**Pre-Diabetes Education**: The Diabetes Center offers Pre-Diabetes education to those diagnosed with insulin resistance, impaired glucose tolerance, or impaired fasting glucose. Since pre-diabetes is often not covered by insurance, the self-pay cost often prevents patients from obtaining this education. Some insurance will pay for preventive services and pre-diabetes may be covered under the category of Medical Nutrition Therapy (MNT) which is conducted by a registered dietitian. If covered, patient may be scheduled for individual MNT. Those that do not have this insurance benefit, and can't afford education, are mailed basic information about pre-diabetes.

**Medical Nutrition Therapy MNT**: This service is offered to individuals diagnosed with diabetes, pre-diabetes, or renal disease by physician referral. Sessions involve individualized assessment and consultation by a Registered Dietitian. Goals for MNT may include obtaining blood glucose control; Preventing or treating chronic complications of diabetes such as elevated cholesterol, high blood pressure or renal disease; Improve health through food choices and physical activity.

**Living Well with Diabetes**: This is designed as a refresher class for those who have completed their initial training. The appointments are individualized to meet the needs of each participant. Topics reviewed include meal planning, physical activity, diabetes overview/medications, monitoring, standards of care, behavior change, goal setting, and coping with diabetes.

**Professional Continuous Glucose Monitoring (CGM)**: Endocrinology providers may refer the CGM device for initiation. The CGM is worn for one week and collects readings of interstitial plasma glucose. This equipment is used to help with the evaluation of patient's blood glucose patterns and to see where episodes of high or low blood glucose may be occurring. The diabetes educators are also available to help with analysis of blood glucose patterns.

**Program Resources**: The program staff has remained basically the same over the past year. When the outpatient program assistant left the outpatient educators did their best to cover those duties until a replacement was hired and trained.

| Position | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Outpatient Educator/Program Coordinator RN, CDE | Full time (.9 FTE) | ------ | ----- |
| Outpatient Diabetes Educator RD,LD,CDE | Educator Part time (.6 FTE) | Educator (and then also became Program Coordinator 1/2016) Part time (.6 FTE) | Educator/Program Coordinator Part time (.6 FTE) |
| Outpatient Diabetes Educator RD,LD,CDE | Full time (1.0 FTE) | ------ | ----- |
| Outpatient Diabetes Educator RD,LD,CDE | One day per month | One day per month | One day per month |
| Outpatient Diabetes Educator RN,CDE | ------- | Full time (.9 FTE) | Full time (.9 FTE) |
| Outpatient Program Assistant | Full time (1.0 FTE) | Full time (1.0 FTE) | Full time (1.0 FTE) (Vacant March-April) |
| **INPATIENT EDUCATOR** | ------- | **Full time (1.0 FTE)** | **Full time (1.0 FTE)** |

Program Goal Evaluation/Follow-up: During class education, patients are encouraged to select "SMART" goals. At the 3-month follow-up those goals are reviewed and patients self-evaluate how well they did accomplishing the goals. Goal evaluations of doing the goal at least 60% of the time were considered successful. The following chart shows in each category how many started goals, how many of those were evaluated at 3-month follow-up, and of those, how many achieved their goal.

| Goals | | **Total # Starting Goal** | **# With Goal Evaluation** | **Of Those With Evaluation # Achieved** | **% Achieved** |
|---|---|---|---|---|---|
| Healthy Eating | Follow eating schedule better | 16 | 8 | 5 | 62.5% |
| | Eat better food | 14 | 6 | 5 | 83.33% |

| | | | | | |
|---|---|---|---|---|---|
| | Overeat less often | 1 | 1 | 0 | 0% |
| | Nutrition - other | 1 | | | |
| | **Total** | **32** | **15** | **10** | **66.67%** |
| Being Active | Exercise more often | 27 | 14 | 9 | 64.29% |
| | **Total** | **27** | **14** | **9** | **64.29%** |
| Monitoring | Check blood sugar more often | 26 | 12 | 11 | 91.67% |
| | Monitoring - other | 1 | 1 | 1 | 100% |
| | **Total** | **27** | **13** | **12** | **92.31%** |
| Taking Medication | Take medications on time more often | 1 | 0 | 0 | 0% |
| | **Total** | **1** | | **0** | **0%** |
| Problem Solving | | *No goal data found* | | | |
| Healthy Coping | | *No goal data found* | | | |
| Reducing Risks | Stop smoking | 2 | 1 | 1 | 100% |
| | Reducing Risks - other | 3 | 1 | 1 | 100% |
| | **Total** | **5** | **2** | **2** | **100%** |

**Summary of Outcome Measures**: A1C levels and weight are obtained on patients at baseline (before initial visit) and at follow-up visit (if available) which is generally 3 months after class attendance. Improvement in A1C and gradual weight loss (for those overweight) are outcomes that are looked for as patients follow educational guidance and work on their personal goals.

| | | Pre | Post | Change |
|---|---|---|---|---|
| A1C Level (54 records) | High | 13.00 | 10.4 | 2.6 |
| | **Avg** | **7.92** | **6.6** | **1.32** |
| | Low | 5.8 | 5.4 | 0.4 |
| Weight (32 records) | High | 307.0 | 298.0 | 9 |
| | **Avg** | **240.75** | **219.5** | **21.25** |
| | Low | 183.0 | 164.0 | 19 |

Participant Satisfaction Survey: 89% indicated that they would recommend the education class to others. 100% responded that they felt better able to manage their diabetes. The responses also showed that class was scheduled at appropriate times and the materials and instructors were easy to understand.

**Community Concerns**: The Advisory Council is encouraged to provide suggestions to better improve community involvement. The Diabetes Education Center will continue to look for opportunities to work with other organizations to serve the community.

**2017-2018 Proposed Goals/Objectives**:

1. Maintain or improve the number of referrals to the Diabetes Education Center.

2. Continue to work on strategies to encourage referrals to educational programs/classes.

Continue to make providers aware of our services through presenting information about education opportunities for their patients at provider meetings.

3. Conduct at least 3 community programs through health fairs and other outreach education programs.

**Continuous Quality Improvement (CQI):**

**Identified Problem:**

Not all patients referred by their providers are scheduled correctly or attend the program.

**Plan:**

Review all referral forms for whether they were able to be scheduled as referred.

Review charts of scheduled patients for whether they were seen as referred.

On a regular basis, audit referral forms and participant status report to discover correctable problems within the system and make improvements as needed.

Review patient charting to identify reasons education plan was not completed.

Contact participants as applicable to see if they are ready to continue with education plan.