PURPOSE
To establish a process that will enable Certified Diabetes Educators (CDE) and/or staff with Board Certification in Advanced Diabetes Management (BC-ADM) to initiate or adjust diabetes medication(s) (oral and/or injectable) while receiving Diabetes Self-Management Training (DSMT) or Medical Nutrition Therapy (MNT) as an aid to the primary care provider (PCP).

BACKGROUND
When patients are seen for DSMT or MNT, self-monitoring of blood glucose (SMBG) patterns often emerge that indicate a need for initiation or adjustment of diabetes medication. Recent research shows that CDE’s (RN’s, RD’s, RPh’s) following treatment algorithms with physician supervision produce superior outcomes, including HbA1c, FBG, blood pressure and lipids.

PROCEDURE
I. DIABETES MEDICATION MANAGEMENT BY A CDE/BC-ADM is APPROPRIATE FOR:
   A. Patients with type 2 Diabetes who have:
      1. Serum Glucose less than 400 mg/dl.
      2. Serum glucose 400-600 mg/dl, only if patient is medically stable and has adequate social support and mental stability to assure safe self-administration of diabetes medication(s) and home glucose monitoring.

   B. Patients with type 1 diabetes who have:
      1. Serum glucose less than 500 mg/dl.
      2. Arterial pH greater than 7.3, if done in ED facility.
      4. < small ketones on urine ketostick.
         a. Adequate social support and mental stability to assure safe self-administration of insulin and home glucose monitoring.

II. Target blood glucose (BG) ranges will be individualized based on age, hypoglycemia unawareness and/or other safety concerns. The American Diabetes Association (ADA) guidelines will be used as a starting point as follows:

   Pre-meal BG range: 90-130 mg/dl
   Post-meal BG range: +/-30 mg/dl from pre-meal BG or <180 mg/dl
Driving and bedtime range: 100-140 mg/dl
HbA1c Target: <7.0%

III. Definitions:

A. Pattern
The CDE/BC-ADM will assess patterns in SMBG readings. Adjustments will be recommended based on patterns of highs lasting at least 3 days, or a pattern of lows lasting two days. Patterns will be identified only when SMBG readings are taken at the same time each day.

B. Hypoglycemia
Blood glucose <70 mg/dl OR below the patient’s target range

Severe Hypoglycemia:
<40 mg/dl OR requires the assistance of someone else to treat

Hyperglycemia
Series of blood glucose readings:
>140 mg/dl OR above patient’s target range

IV. Oral Medication Adjustment and Management
Oral diabetes medication(s) will be initiated or adjusted to maintain glycemic control as defined by the individual’s target range. CDE/BC-ADM’s will not adjust 1st generation sulfonylureas other than to decrease with patterns of hypoglycemia, or for other potentially dangerous situations or for safety concerns that are identifiably present. Oral diabetes medication classes of sulfonylureas, biguanides, meglitinides, thiazolidinediones (TZDs), DPP-4 inhibitors and alpha-glucosidase inhibitors (and others that may be developed) will be initiated or adjusted according to best practice guidelines. The following examples describe potential adjustments:

<table>
<thead>
<tr>
<th>Concern Of</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>A pattern of hypoglycemia or one episode of severe hypoglycemia</td>
<td>Decrease previous dose by 1/2</td>
</tr>
<tr>
<td>A pattern of hyperglycemia associated with a pattern of hypoglycemia or other safety concerns identified by CDE</td>
<td>Split the dose to BID</td>
</tr>
<tr>
<td>A pattern of hyperglycemia</td>
<td>Increase dose by up to 50%-100% to a max. dose of 20 mg</td>
</tr>
<tr>
<td>- glyburide</td>
<td>Increase dose by up to 50%-100% to a max. dose of 40 mg</td>
</tr>
<tr>
<td>- glipizide (Glucotrol)</td>
<td>Increase dose by increments of 1-2 mg to a max. dose of 8 mg</td>
</tr>
<tr>
<td>- glimepiride (Amaryl)</td>
<td>Increase dose by up to 50% of current dose to a max. dose of 120 mg pre-meal</td>
</tr>
<tr>
<td>- nateglinide (Starlix)</td>
<td>Increase dose by increments of 1 mg to a max. dose of 16 mg</td>
</tr>
<tr>
<td>- repaglinide (Prandin)</td>
<td>Increase dose by up to 50% of current dose to a max. dose of 20 mg/2000 mg</td>
</tr>
<tr>
<td>- Glucovance</td>
<td>Stop medication</td>
</tr>
<tr>
<td>A pattern of hypoglycemia, with no alternate patterns of hyperglycemia and is on the lowest dose available</td>
<td>Hold medication; contact PCP or physician on call immediately</td>
</tr>
<tr>
<td>A critical level of hypoglycemia, as defined per lab</td>
<td>Hold medication; contact PCP or physician on call immediately</td>
</tr>
<tr>
<td>An allergic reaction</td>
<td>Hold medication; contact PCP or physician on call immediately</td>
</tr>
</tbody>
</table>
Any signs of liver damage or jaundice | Hold medication; **contact PCP or physician on call immediately**
---|---
Renal insufficiency | Decrease dose of glimepiride (Amaryl) and/or sitagliptin (Januvia) (see pg 4)

**Metformin**: (Glucophage, Glucophage XR, Glucovance, Glumetza, Fortamet, Riomet, Avandamet, Metaglip, ActoPlusmet, Janumet, etc.)

<table>
<thead>
<tr>
<th>Concern of</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>A pattern of hyperglycemia and has a normal serum creatinine as indicated by: males &lt; 1.5; females &lt; 1.4</td>
<td>Increase dose by 500-850 mg to a max. dose of 2000 mg per day</td>
</tr>
<tr>
<td>A problem of hypoglycemia</td>
<td>Decrease dose by 1 tablet or 50%</td>
</tr>
<tr>
<td>Serum creatinine values for: Males &gt; 1.5 Females &gt; 1.4 or creatinine clearance &lt;80</td>
<td>Stop medication</td>
</tr>
<tr>
<td>48 hrs prior to surgery and/or x-ray contrast (IVP)</td>
<td>Hold medication; restart under direction of PCP</td>
</tr>
<tr>
<td>Evidence of ETOH abuse (binge drinking)</td>
<td>Stop medication. Contact PCP</td>
</tr>
<tr>
<td>Vomiting and/or severe diarrhea resulting in dehydration</td>
<td>Stop medication; call PCP or physician on call</td>
</tr>
<tr>
<td>GI side effects as reported by the patient as unmanageable, without dehydration</td>
<td>Hold medication, then restart at 50% of previous dose. Increase as tolerated.</td>
</tr>
<tr>
<td>Severe muscle aches</td>
<td>Stop medication. Call PCP</td>
</tr>
<tr>
<td>Patient has COPD on home oxygen</td>
<td>Stop medication.</td>
</tr>
<tr>
<td>Patient is also using glaucoma medication (Acetazolamide) (Diamox)</td>
<td></td>
</tr>
<tr>
<td>An allergic reaction</td>
<td>Stop medication. Call PCP or physician on call</td>
</tr>
<tr>
<td>Type 1 or DKA</td>
<td>Call PCP</td>
</tr>
<tr>
<td>Age &gt; 80 yrs</td>
<td>Notify PCP. Recommend creatinine clearance</td>
</tr>
</tbody>
</table>

**Sitagliptin** (Januvia)
Indications for use: patients with type 2 diabetes; may be used as monotherapy or in combination with metformin, TZD, and/or sulfonylurea.
Contraindications: patients with type 1 diabetes.
Administration:
- a dose adjustment is recommended in patients with moderate renal insufficiency (serum creatinine of 1.7-3.0 in men and 1.5-2.5 in women) and in patients with severe renal insufficiency (serum creatinine of > 3.0 in men and > 2.5 in women).
- assessment of renal function should be done prior to starting and periodically thereafter.
- for patients on digoxin, a digoxin level should be done after starting sitagliptin and thereafter as needed.
Dosing:
- 100 mg daily
- 50 mg daily for patients with moderate renal insufficiency
- 25 mg daily for patients with severe renal insufficiency
- if patient is on a sulfonylurea, decrease dose of sulfonylurea by 50% when starting sitagliptin.

V. **Exenatide (Byetta) Initiation, Adjustment and Management**
Assess appropriateness of starting exenatide using the following parameters:
A. Indication for use of exenatide:

1. Patients with type 2 diabetes who are taking metformin, a sulfonylurea, or a combination of metformin, TZD and a sulfonylurea.
2. Exenatide is approved for use with TZDs.
3. Patients have not achieved adequate glycemic control, as evidenced by HbA1c > 7%.
4. Patients with type 2 diabetes who are on insulin with the approval of PCP or Endocrinologist.

B. Contraindications:

1. Patients with end-stage renal disease, GFR < 30 or severe gastrointestinal disease such as gastroparesis or severe reflux.
2. Use with caution in patients who are on medications that require rapid gastric absorption (for example antibiotics or birth control pills). Also use caution in patients with GERD.
3. Not approved for patients who are pregnant or breastfeeding.
4. Exenatide usage has not been studied in pediatric patients at this time.
5. Exenatide should not be used in patients with decompensated diabetes (i.e. HbA1c > 11%).

C. Start and regulate exenatide using the following parameters:

1. Starting dose is 5 mcg SQ BID for the first month.
2. After 1st month, adjust to 10 mcg SQ BID unless the patient has complete normalization of BG or is not tolerating the 5 mcg dose.
3. Exenatide should be injected anytime within 60 minutes before morning and evening meals.
4. Do not take exenatide after meals.
   If not eating, do not take exenatide dose.
5. If patient is on a sulfonylurea, decrease dose of sulfonylurea by 50% when initiating exenatide.
   a. Instruct patient regarding the following:
      1) When not in use, exenatide pen should be refrigerated.
      2) Do not freeze.
6. Potential side effects may include hypoglycemia, nausea, vomiting, diarrhea, dizziness, headache, feeling jittery, and acid stomach. Nausea is the most common, but decreases over time in most patients.
7. Pancreatitis – stop exenatide and notify PCP of severe nausea and vomiting and/or if severe abdominal pain occurs.
VI. Symlin (pramlintide acetate) Initiation, Adjustment and Management

A. Indication for use of Symlin:

1. Patient has not achieved adequate glycemic control, as evidenced by HbA1c > 7%.
2. Patient with type 1 diabetes who is on insulin with the approval of PCP or Endocrinologist.
3. To lower postprandial BG.
4. Potential reduction of mealtime insulin by 50% on initiation of Symlin.

B. Contraindications:

1. Never mix Symlin with insulin.
2. Hypoglycemia potential when:
   a. Premeal insulin is not reduced.
   b. Less food than normal is eaten.
   c. Patient is sick and cannot eat.
   d. Patient is more active than usual.
   e. Patient is hypoglycemic before eating.
   f. Patient drinks alcohol.

C. Instruct patient regarding the following:

1. Must be taken immediately before a major meal (250 calories or at least 30 grams of carbohydrate).
2. Inject Symlin SQ in abdomen or thigh at least 2 inches away from insulin injection site.
3. If a dose is missed – wait until the next mealtime.
4. Opened vials can be refrigerated or kept at room temperature for 28 days.
5. Dosing:
   a. Day 1: Begin Symlin at 2 ½ units (15 mcg). Reduce mealtime insulin doses (including premixed) by 50%.
   b. Day 4: Increase to 5 units (30 mcg) if NO nausea for 3 days.
   c. Day 7: Increase to 7 ½ units (45 mcg) if NO nausea for 3 days.
   d. Day 10: Increase to 10 units (60 mcg) if NO nausea for 3 days.
   e. If significant nausea persists at the 45 or 60 mcg dose, decrease to 30 mcg. If the 30 mcg dose is not tolerated, discontinuation of Symlin should be considered.
   f. Adjust insulin doses to optimize glycemic control once the target dose of Symlin is achieved and nausea, if experienced, has subsided.

VII. Insulin Initiation, Adjustment and Management

Insulin management consists of three components: basal injections of a long acting insulin; bolus injections before meals; and a correctional dose that may be added to the
mealtime dose or taken as an additional injection. Most often, insulin naïve patients will be started on a once daily dose of long acting (basal) insulin. Each patient will be continually assessed and monitored to determine the need to move forward with mealtime and/or correctional insulin dosing. Intensive insulin therapy is the use of multiple daily injections (MDI) of bolus and basal insulin or an insulin pump to mimic the normal secretion of insulin from the pancreas. The first step in initiating insulin is calculation of a total daily dose.

A. Calculation of Total Daily Dose (TDD) of Insulin using Weight
   The chart below can be used as a guide:

<table>
<thead>
<tr>
<th>Type of patient</th>
<th>Weight (in # or kg)</th>
<th>Units/kg</th>
<th>TDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>New to insulin or Newly diagnosed or Thin</td>
<td>Any</td>
<td>0.1-0.3 u/kg</td>
<td>Variable &lt;15 units*</td>
</tr>
<tr>
<td>Currently using insulin</td>
<td>100# or 45 kg</td>
<td>0.3-0.5 u/kg</td>
<td>14-23 units</td>
</tr>
<tr>
<td></td>
<td>120# or 55 kg</td>
<td>0.3-0.5 u/kg</td>
<td>16-27 units</td>
</tr>
<tr>
<td></td>
<td>140# or 64 kg</td>
<td>0.3-0.5 u/kg</td>
<td>19-32 units</td>
</tr>
<tr>
<td></td>
<td>160# or 73 kg</td>
<td>0.5-0.7 u/kg</td>
<td>36-51 units</td>
</tr>
<tr>
<td></td>
<td>180# or 82 kg</td>
<td>0.5-0.7 u/kg</td>
<td>41-57 units</td>
</tr>
<tr>
<td></td>
<td>200# or 91 kg</td>
<td>0.7-1.0 u/kg</td>
<td>64-91 units</td>
</tr>
<tr>
<td></td>
<td>220# or 100 kg</td>
<td>0.7-1.0 u/kg</td>
<td>70-100 units</td>
</tr>
<tr>
<td></td>
<td>240# or 109 kg</td>
<td>0.7-1.0 u/kg</td>
<td>76-109 units</td>
</tr>
<tr>
<td>Insulin resistance (i.e. acanthosis nigricans or overweight)</td>
<td>Any</td>
<td>1.0-2.0+ u/kg</td>
<td>Variable &lt;15 units*</td>
</tr>
</tbody>
</table>

*For patients new to insulin, if the dose exceeds 15 units/day, the PCP must approve the dose(s).

1. Calculation of TDD for Patients Currently on Insulin
   Determine TDD by adding all the doses of insulin used by a patient during the day. This includes all basal and bolus insulin. If a patient is using a sliding scale, have him/her estimate the usual amount of bolus insulin that he/she uses during a typical day. If a patient has frequent hypoglycemia or hypoglycemic unawareness, decrease their TDD of insulin by 10-20%.

   Other factors to consider:
   - If a patient has a HbA1c > 7.5% and is not having any hypoglycemia, increase their TDD 10-20% or calculate a new TDD based upon their weight using the table above. Whichever calculation is used, the new TDD should be higher than their previous TDD. Before calculating, it is important to know if patients are skipping their injections.
   - If a patient has a normal HbA1c with good BG control but wants to switch to intensive insulin therapy, do not change the TDD.

2. Splitting the TDD into Basal/Bolus Doses
   Calculate insulin needs for intensive insulin therapy using:
   a. 50-60% long acting basal insulin (Lantus, Levenir, NPH)
   b. 40-50% rapid acting bolus insulin (Humalog, Novolog, Apidra)

B. Basal Insulin Therapy

1. Lantus:
Starting Lantus for an insulin naïve patient: take the calculated TDD and use-60% once a day as the starting Lantus dose. A consistent injection time will be discussed and determined with the patient.

Switching to Lantus from another insulin regimen:

a. HbA1c is <7.5% or they are having frequent hypoglycemic episodes: Add up the TDD of all insulin used for current regimen and reduce it by 25%. Multiply the reduced TDD by 0.5-0.6 and this will be the daily dose of Lantus.

b. HbA1c is >7.5% and they are not having frequent hypoglycemia, increase the TDD by 10-20%. Multiply the TDD by 0.5-0.6 and this will be the daily dose of Lantus.

2. Levemir:
Starting Levemir for an insulin naïve patient: take the calculated TDD and use 50-60% as their Levemir dose. This can either be given once a day at a consistent time or split between two doses about 12 hours apart (i.e. breakfast and bedtime).

Switching to Levemir from another insulin regimen:

a. HbA1c is <7.5% or they are having frequent hypoglycemic episodes: Add up the TDD of all insulin used for current regimen and reduce it by 25%. Multiply the reduced TDD by 0.5-0.6 and this will be the daily dose of Levemir.

b. HbA1c is >7.5% and they are not having frequent hypoglycemia, increase the TDD by 10-20%. Multiply the TDD by 0.5-0.6 and this will be the daily dose of Levemir.

3. NPH:
Use 35% of the TDD for the AM dose and use 15% of the TDD for the HS dose.

C. Bolus Insulin Therapy

1. Meal bolus:

a. Insulin to Carbohydrate Ratio (ICR)
   An insulin to carbohydrate ratio is the approximate number of grams of carbohydrate that one unit of rapid acting insulin will cover. The usual starting ICR is 1:15 and the patient will be taught to test and adjust this ratio by using postprandial SMBG.

b. Set bolus doses:
   If a patient is not counting carbohydrates at meals, use 50% of their TDD split evenly at each meal. They should be advised to eat meals that are similar in size and carbohydrate content (minimum of 45-60 grams per meal) while using this method. It is important that patients do not eat snacks without insulin coverage.

   Example: 30 units TDD/2 = 15 units. 15/3 = 5 units/meal.

c. Alternatively, one may count an average of the amount of carbohydrate consumed at each meal and establish a fixed dose of insulin based upon their calculated ICR.

   Example: For someone with an ICR of 1:15, they would take: 3 units for 45 gram carb breakfast
4 units for 60 gram carb lunch
5 units for 75 gram carb evening meal
1 unit for 15 gram carb snack

3. **High blood glucose correction factor (CF):**
   a. The CF is the expected amount that one unit of insulin will decrease the BG under normal circumstances. The initial CF is calculated by dividing 1700 by the TDD (ideally use an average of the past 3 days).

   Example: Patient has 3-day average of 30 units TDD:
   \[
   \frac{1700}{30} = 57 \text{ CF}
   \]
   This CF means that 1 unit of rapid-acting insulin will lower BG by approximately 57 mg/dl.

D. **Standard Insulin Therapy using Two Injections per day**

1. MDI is the standard of care, but if a patient cannot or will not do it, standard insulin therapy is the next option.
   Give 2/3 (65%) of the TDD of insulin in the AM and 1/3 (35%) in the PM (before breakfast and supper).

2. **AM Dosing (65% or 2/3 of TDD)**
   a. 2/3 as NPH
   b. 1/3 as a short or rapid-acting insulin
   c. If using premixed insulin, the entire dose (65% of TDD) would be given as 75/25 or 70/30

3. **PM Dosing (35% or 1/3 of TDD)**
   a. ½ as NPH
   b. ½ as short or rapid-acting insulin
   c. If using premixed insulin, the entire dose (35% of TDD) would be given as 75/25 or 70/30

E. **Insulin Adjustment Guidelines for Hyperglycemia**

| General Guidelines | - Basal doses should only be adjusted by 1-2 units at a time for type 1 and may be adjusted by 10% of TDD for type 2. Basal insulin should only be changed every 2-3 days.  
- Bolus insulin: Carb ratios should be adjusted so that the overall dose only changes by 1-2 units for a type 1 and 5-10 units for a type 2. The same applies for correction factors. Bolus insulin can be changed every 1-2 days.  
- For most people, try to keep the basal/bolus ratio approximately 50/50. |
| Time of Hyperglycemia | **ACTION**  
| Fasting Blood Glucose (FBG) in AM | - SMBG checks should be done between 12-3 am on 1-2 occasions to distinguish the dawn phenomenon from the Somogyi effect.  
- If BG is >100 during the predawn hours (12-3 am) and increases by morning (dawn phenomenon), increase the basal insulin (Lantus, Levemir, NPH)  
- If the dawn phenomenon is not corrected |
using a “peakless” basal insulin (Lantus, Levemir), try adding a small amount (2-3 units) of “peaking” basal insulin (NPH) at HS.
- If BG is <70 during the predawn hours and increases by morning (Somogyi effect), decrease the basal insulin (Lantus, Levemir, NPH).
- If BG is high at bedtime, the supper insulin may need to be adjusted prior to adjusting the basal.
- If patient eats high fat meals late in the evening, they may need to split their supper bolus.
- If Lantus or Levemir is taken in the AM, consider moving it to supper or bedtime; or splitting the dose if it exceeds 60-80 units/day.

Before Meals
- Increase previous meal’s ICR or fixed bolus insulin dose.
- Or, increase basal insulin if 2 hr postprandial BG is within expected ranges.

Before evening meal
- Increase AM basal insulin or lunch bolus insulin.

Before bedtime
- Increase evening meal bolus insulin.
- Split meal dose if high fat meal or eating late at night.

F. Insulin Adjustment Guidelines for Hypoglycemia

General Guidelines
- Basal and bolus insulin doses should be decreased by any amount and as often as needed to eliminate hypoglycemia.
- For most people, try to keep the basal/bolus ratio approximately 50/50.

Time of Hypoglycemia

<table>
<thead>
<tr>
<th>FBG in AM</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease PM or HS basal insulin.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Within 5 hours after meal insulin and/or before bedtime</th>
<th>Decrease previous meal’s ICR or fixed bolus insulin dose.</th>
</tr>
</thead>
</table>

| After a high fat (>20 grams/meal) or high fiber (>10 grams) or because of gastroparesis | Split the meal dose in half and delay the 2nd half by 1-4 hours.
- Consider using Regular insulin or a mixture of Regular and rapid-acting insulin. |
|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|

| During the night | Move supper NPH insulin to bedtime.
- Decrease evening basal insulin, if low is caused from that insulin. Rule out other causes, i.e. exercise or correction bolus taken before bedtime.
- BG should be ≥ 100 mg/dl before bed or a 5-10 gram carbohydrate snack without bolus insulin will be needed. |
|--------------------------------|-------------------------------------------------------------------------------------------------|

| BG < 70 mg/dl at any time | Hypoglycemia treatment with 15 grams of fast-acting carbohydrate (glucose tabs).
- If caused by insulin, decrease responsible insulin by 10-20%. Rule out specific or isolated causes (CHO counting, high fat meal resulting in delayed digestion, increased |
G. **Insulin Adjustments for Exercise guidelines:**

1. **For Strenuous Exercise (4 hours or more):**
   - Reduce intermediate or long-acting insulin by 50%
   - Reduce short or rapid-acting insulin by 50-100%

2. **For Moderate Exercise (1-4 hours)**
   - No change in intermediate or long-acting insulin
   - Reduce short or rapid-acting insulin by 30-50%

3. **For Light Exercise**
   - No change in intermediate or long-acting insulin
   - Reduce short or rapid-acting insulin by 10-20%

VIII. The following labs will be evaluated and ordered as needed at the initial and/or follow-up visits if not done prior per the Essential Diabetes Mellitus Care Guidelines:

A. **HbA1c** within past 3-6 months
B. **Urine microalbumin/urine creatinine ratio** within past 1 year or 24 hr creatinine clearance and total protein
C. **Fasting lipid panel** within past 1 year
D. **C-Peptide with glucose and/or GAD antibody** for possible type 1 diagnosis clarification

E. Consider the following exceptions:

1. If on metformin, add serum creatinine if not done within past 6 months
2. If on thiazolidinedione for less than 1 year add ALT within past 2 months
3. If on thiazolidinedione for more than 1 year add ALT within past 3 months
4. If using home glucose meter add serum glucose for meter/lab comparison two-three times/year for quality control on the meter
5. If home glucose meter readings and HbA1c do not correlate, add serum glucose for meter/lab comparison to verify meter accuracy
6. If using home glucose meter and for any reason, the CDE/BC-ADM feels that the meter is inaccurate add serum glucose for meter/lab comparison to verify meter accuracy
7. If urine microalbumin/creatinine ratio is abnormal, repeat test in 3 months after glycemic control has improved, or 24 hr urine creatinine clearance
and protein, based on CDE/BC-ADM assessment or verbal discussion with PCP

F. When indicated in PCP’s notes, order lab tests as indicated by PCP.

G. Critical lab values, as defined by laboratory standards, will be reported to the PCP or on call physician.

IX. Any medication adjustments that fall outside of this protocol must be made by the PCP.

X. The CDE/BC-ADM will determine how frequently the patient needs to report SMBG records for review. If insulin adjustments are being made, the patient may need to report SMBG results every other day. Others may need to report SMBG results weekly or every other week. The CDE/BC-ADM will instruct the patient on how to fax or mail SMBG records in for review. The CDE/BC-ADM will call the patient to discuss SMBG records and advise any necessary medication adjustments. All telephone encounters, as well as any medication adjustments, will be documented in the patient's electronic medical record (EMR). The CDE/BC-ADM will communicate all medication adjustments to the PCP either through the EMR or by phone.