The TEAMcare Treatment Protocol and Discussion Tool

**Note:** This tool is based on current Group Health Cooperative (GHC) clinical guidelines, but has been written for a broader audience with systems that may differ from GHC. It does not take the place of medical orders. Changes in medication dosage are documented in the medical record and are co-signed by the PCP. All plans, interventions, and outcomes of medical care must be appropriately documented in the patient’s medical chart.

**Eligibility Criteria:** Patients can be included if: they are 18-80 years old, have diagnosis codes for diabetes or coronary heart disease, have at least one measure of poor disease control (LDLc > 130, BP > 140/90 or HbA1c ≥ 8.5), and meet DMS IV criteria for major depression or dysthymia.

**Exclusion Criteria:** Patients are excluded if their systolic BP > 200 or their diastolic BP > 115; if they have ICD 9 codes indicating alcohol or substance abuse, bipolar disorder, schizophrenia, or end-stage renal disease (dialysis); are taking antipsychotic medications or lithium; are enrolled in hospice or are living in a skilled nursing facility, or are currently managed by the Clinical Pharmacists (metformin therapy, lipid therapy or BP therapy).

1) **TEAMcare Interventions for all patients include:**

   _____ Order all outstanding labs
   _____ Encourage medication adherence by discussing medication’s desired effect and dosage when first ordered, by inquiring about side effects and missed doses at each visit, and encouraging the use of medication reminder tools.

   **ASPIRIN:**
   _____ ASA enteric coated 81 or 325 mg/day
BEHAVIORAL ACTIVATION FOR HEALTHY LIFESTYLE CHANGES:

___ **Nutrition:** Goal is to maintain weight or 5% weight loss initially (if overweight); progress to greater weight loss if needed and able; self-described decrease in intake of saturated fats, sweets, and salt; and a diet high in fruits, vegetables, whole grains and nonfat dairy products.

- TCM to discuss Healthy Lifestyle changes and their anticipated effects (including the importance of small amounts of weight loss on insulin action), patient interests and readiness to change, and past lifestyle efforts. Brainstorm options with patient and problem-solve ways to improve nutritional pattern. Details of this discussion are incorporated into *My Better Health Plan*.

**STEP 1:** Salt restriction; DASH, ADA, AHA, or Mediterranean diets; Weight Watchers® OR other “healthy plan” that patient has had success with in the past or is ready to try.

- TCM to discuss behavioral activation strategies, “emotional eating,” or other monitored programs (dietitian consult, Take Charge if > 20 pounds overweight, or Weight Watchers®).
- TCM to encourage use of diet diary and daily weights.

**STEP 2:** Carbohydrate counting to be considered when patient beginning on daytime insulin with Aspart given before lunch and dinner.

___ **Physical Activity:** Goal is to increase current activity, as able, to 30 minutes walking per day or equivalent OR

- TCM to elicit patient’s current activity level, past lifestyle change efforts, patient interests and readiness to change. Brainstorm patient options and problem-solve ways to increase physical activity. Details of this discussion incorporated into *My Better Health Plan*.

2) **Blood Pressure**

**Goal:** BP < 130/80 or _______

- TCM to teach home blood pressure monitoring using optimum technique and ask patient to take BP daily when titrating medications (or weekly to monthly when medication titration completed).
- TCM to discuss indications, benefits and risks of antihypertensive therapy as well as when to call PCP Team (e.g., if dizzy or SBP < 110), and urgent care services (concerns after hours or weekends).
- TCM to order K+ after 2 weeks if using diuretics or K+ & SrCr after 2 weeks if using ACE inhibitor.
- If ACE inhibitor is not tolerated or patient complains of cough, TCM to use their organization’s HTN guidelines for follow-up care discussion with PCP.
• TCM to consult with TEAMcare Specialists and PCP if starting antihypertensive medications for patients with evidence of heart failure.

• If starting Beta Blocker, TCM to teach patient to check pulse. If pulse rate < 60, teach patient to hold the Beta Blocker and call PCP team.

**STEP 1:**
- **Prinzide** 10mg lisinopril/12.5mg HCTZ. ½ pill/day X 2 weeks; 1 pill/day for 2 weeks; 2 pills/day X 2 weeks (diabetes and no evidence of CHD) OR
- **Atenolol** 25mg. ½ pill/day X 1 week; 1 pill/day X 1 week; 2 pills/day X 1 week (CHD).

**STEP 2:**
- **Add Atenolol** 25mg. ½ pill/day X 1 week; 1 pill/day X 1 week; 2 pills/day X 1 week (if not previously started) OR
- **Add Lisinopril** 20mg. ½ pill/day X 2 weeks; 1 pill/day for 2 weeks; 2 pills/day X 2 weeks (if not already on Prinzide)

**STEP 3:**
• Consult with TEAMcare supervisors, consultants and PCP for follow-up orders if needed to bring BP to goal.

3) **Cardiac Risk Reduction**

**Goal:** LDLc < 100 OR

- **Lisinopril** 20mg, ½ pill/day X 2 days; then 1 pill/day
  - **Order:** K+, SrCr initially and 2 weeks after goal dose reached, then yearly.
  - TCM to discuss medication adherence, side effects, and when to stop medication and call (hives or dizzy standing).

- **Simvastatin** For all patients with diabetes ≥ 55 or patients with ASCVD (peripheral arterial disease or CHD). If LDLc < 140, 20mg in pm with food. If LDLc > 140, 40 mg in pm with food.
  - **Order:** lipid panel (non-fasting OK if patient unable to have fasting level drawn), K+, AST at 4 weeks, then AST every 6 weeks until reaches target, then fasting lipid panel yearly.
  - TCM to discuss medication side effects, and when to stop medication and call (muscle aches). TCM to order CPK and cc chart note to PCP if simvastatin stopped due to muscle aches.

4) **gluCose**

**Goal:** Weekly average or pre-meal FBG 80-120 and HbA1c < 6.5 OR

- TCM to discuss healthy lifestyle changes and their anticipated effects, past lifestyle efforts and assess patient interests and readiness to change. Details of this discussion incorporated into *My Better Health Plan.*
HYPOGLYCEMIC MEDICATIONS:

- TCM to teach blood sugar monitoring technique and when to call PCP (if significant hypoglycemia symptoms, if BG < 70 or concerns) and when to call urgent care (if concerns or hypoglycemia after hours or on weekends).
- **Order:** HbA\textsubscript{1c} quarterly, SrCr

**STEP 1: Metformin**

**Indications:** Patients with type 2 diabetes who are doing the best they can with lifestyle changes and have HbA\textsubscript{1c} and BG levels that exceed targets.

- TCM to discuss side effects, their usual course and ways to manage them.

**Contraindications:** Metformin should not be prescribed if SCr > 1.5 mg/dL, creatinine clearance < 50 mL/min, age > 80, or if patient is a frail elder, abuses alcohol, has severe CHF, or has progressive liver disease.

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**Standard Metformin Titration:** 250 mg/day with dinner X 2 days.
Then 250 mg twice daily, with breakfast and dinner, for 2–3 days.
Then 500 mg twice daily, with breakfast and dinner, for 2 weeks.
Titrate metformin slower if GI side effects.

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**Continued Metformin Titration:** Take 1000 mg Metformin twice daily. If patient has diarrhea when taking metformin, TCM may substitute Metformin in liquid preparation.

**STEP 2: Initiation of Late Evening Insulin**

**Indications:** Patients with type 2 diabetes who are doing the best they can with lifestyle changes, are taking full therapeutic doses of metformin and who haven’t reached target FBG or HgAlc targets.

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**Metformin:** Continue at current dosage if appropriate and tolerated OR

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**Initiation of Late Evening Insulin:**

- Teach patient to prepare and inject NPH insulin. Discuss expected action of NPH and when to inject evening insulin (8–9 hours before usual wake-up time). Review symptoms of and treatment of hypoglycemia.

- **Stop insulin titration and discuss with PCP if:** patient has symptoms of hypoglycemia that accompany a low blood glucose level.

- Put a note in the patient’s chart to PCP if patient reaches a dose of 50 units NPH. For doses of 50 units or more, better and more predictable absorption may be achieved by having patient divide the dose and inject half in one site and half in another site.
**HS Insulin dosing** (as below) OR
- For patient <200lbs and FBG <200. Begin with 12 units NPH qhs
- For patient <200lbs and FBG >200. Begin with 16 units NPH qhs
- For patient >200lbs and FBG <200. Begin with 20 units NPH qhs
- For patient >200lbs and FBG >200. Begin with 30 units NPH qhs
- Increase evening NPH dose by 2 units/2 days until am FBG target reached.
- When patient reaches FBG target, encourage them to test BG at least two times pre-lunch, pre-dinner and HS in one week. These results can help determine if daytime insulin is needed.

**STEP 3: Initiation of Daytime Insulin**
**Indications:** Patients with type 2 diabetes who are doing the best they can with lifestyle changes, are taking full therapeutic doses of metformin, and are taking evening insulin doses high enough to result in target FBGs, but continue to have HbA₁c and blood sugar levels that exceed targets.
- These insulin dosages are to be given in addition to maintenance HS insulin.
- TCM to encourage patient test FBG each day and prior to meals when titrating insulin or at least 4 pre-lunch, pre-dinner and before bedtime tests/week.

**A) Preferred option: Aspart (Novolog) Before Lunch and Dinner**
**Rationale for Use:** While this approach is more complex than simply adding NPH at breakfast, it may improve overall HbA₁c with less weight gain and less hypoglycemia.

**Requirements for Managing This Insulin Pattern:**
- This dosing regime works best when the patient is willing and able to count meal carbohydrates, as this increases likelihood of getting the most accurate pre-meal Aspart dose requirement. If a patient is unable or unwilling to count carbohydrates, then the simple titration scale (below) should be used.
- Have patient report blood glucose data every 2-4 days after this insulin dosage pattern is begun to assure that titration pattern is working well.

**A-1) Sophisticated Titration of Aspart (Novolog)** for the patient who’s able to CHO count. All Aspart should be taken immediately before beginning to eat a meal.
- Blood glucose 70-130: 1 u Aspart for every 15 grams of anticipated CHO intake
- Blood glucose 131-160: 1 u Aspart plus 1 unit of Aspart for every 15 grams of anticipated CHO intake
Simple Titration of Aspart (Novolog) for the patient who’s unable or unwilling to CHO count.
- TCM to review patient’s dietary pattern (usual intake, predictability of meal times and “usual” CHO intake) and work to moderate CHO intake. Aspart insulin to be given based on pre-meal blood sugar.
- Blood glucose less than 110mg/d: no additional insulin
- Blood glucose 111-150: 1 u Aspart immediately before meal
- Blood glucose 151-200: 2 u Aspart immediately before meal
- Blood glucose 151-200: 3 u Aspart intake immediately before meal
- Blood glucose 251-300: 4u Aspart immediately before meal
- Blood glucose over 300: 5u Aspart immediately before meal

Follow-Up Titration (if needed)
- If pre-dinner or h.s. BGs remain elevated, add an additional 2 units Aspart for every 50 mg/dL that the pre-meal BG is above 150.

Alternative: Daytime NPH
Indications: This insulin regime can work for patients who are unable to count CHOs or eat predictable amounts of CHOs. However, daytime NPH tends to cause weight gain and can make people hungry and hypoglycemic in the middle of the day. When taken in the a.m., the regimen usually requires that the patient does not omit or delay lunch.

Daytime NPH and Aspart (Novolog) Before Dinner
Indications: This routine can decrease the total dose of NPH needed in the a.m. and lessen the risk of mid-day hypoglycemia.
Begin dosage at one-half the h.s. dosage. Increase by 1–2 units every 2–4 days until pre-lunch BG range is within target.

If h.s. BG still exceeds target range, add sliding scale Aspart before dinner (as above).

Initial Titration of a.m. NPH: dosage equal to one-half the h.s. dosage. Increase by 1–2 units every 2–4 days until pre-lunch BG range is within target.

5) **Depression**  
**Goal:** PHQ-9 < 5 OR at least 50% decrease from baseline in PHQ-9

- TCM to encourage patient to fill out PHQ-9 weekly until reaches a “steady state”, then prn.
- TCM to discuss behavioral activation methods, medication adherence strategies, rationale for initial and long-term maintenance therapy with antidepressants (e.g., don’t decrease dose or stop without checking with TCM or PCP; take regardless of symptoms), and side effects (most disappear at 2 weeks).
- TCM to contact PCP and team psychiatrist if patient has: acute suicidal symptoms, psychotic symptoms, manic symptoms, severe lack of appetite with insufficient oral intake or weight loss, suspected alcohol or drug misuse, or severe medication side effects.
- Create **My Better Health Plan** initially and update at each visit.

**ANTIDEPRESSANT MEDICATION**

- **Citalopram OR Fluoxetine** 10 mg/day X 1 week; then 20mg/day X 1 week. If PHQ-9 hasn’t decreased by 50% or more, increase to 30mg/day. At week 4, if PHQ-9 hasn’t decreased by 50% or more, increase to 40mg/day.

- **If two or more negative SSRI trials** or for those patients with preexisting diabetes-related sexual dysfunction, start Bupropion SR 100mg/day for 1 week; then 100mg 2X/day for a week; then 200mg in am & 100mg in pm. If PHQ-9 at 4 weeks isn’t decreased by 50%, increase dose to 200mg BID.

- If patient doesn’t fit above criteria, or has severe diabetic neuropathy, or has significant medical or psychiatric symptoms, antidepressant medications to be suggested by CAREteam consulting psychiatrist or PCP.

6) **Smoking Cessation**  
**Goal:** Quit

- TCM to discuss behavioral activation and supported cessation strategies.
- TCM can refer to Free and Clear® or other quit smoking programs.