

SUPPLEMENTAL MATERIAL

PRIMARY PREVENTION OF CVD

HYPERTENSION

DYSLIPIDEMIA

BASIC TREATMENT RECOMMENDATIONS

Smoking Cessation/Reduction (counseling, meds, nicotine replacement)
Antiplatelet Therapy (Aspirin 81 mg qd) for at risk individuals
Exercise (30 minutes walking most days of the week; start 10-15 min 3x/week and increase as tolerated)
Weight Reduction if needed
Diet (low fat, low cholesterol, plant based, calorie restriction)
Stress Management

*ASPIRIN TREATMENT RECOMMENDATIONS

WOMEN: Consider if benefit of ischemic stroke prevention outweighs risk for GI bleed:

AGE 55-59: 10 year stroke risk \geq 3% **AGE 60-69:** 10 year stroke risk \geq 8% **AGE 70-79:** 10 year stroke risk \geq 11%

MEN: Consider if benefit of MI prevention outweighs risk for GI bleed and hemorrhagic stroke:

AGE 45-59: 10 year CHD risk \geq 4% **AGE 60-69:** 10 year CHD risk \geq 9% **AGE 70-79:** 10 year CHD risk \geq 12%

The above applies to adults not taking NSAIDs and who do not have upper GI pain or GI ulcer history; based on 2009 USPSTF Recommendations.

ADDITIONAL CONDITION-SPECIFIC TREATMENT RECOMMENDATIONS

HYPERTENSION

- Medications
 1. Diuretic
 2. ACEI or ARB
 3. CCB
 4. BB

MONITOR

- BP
- Lipids
- Weight
- Lifestyle behavior

GOALS

BP \leq 139/89 mm Hg
or
BP \leq 129/79 mm Hg
for Renal Disease

DYSLIPIDEMIA

- Medications
 1. Statins
 2. Fibrate
 3. Nicotinic Acid
 4. Resins
 5. Ezetimibe

MONITOR

- Lipids
- BP
- Weight
- Lifestyle behavior

GOALS

LDL $<$ 130 if moderate risk; Non HDL-C $<$ 160
LDL $<$ 160 if at lower risk; Non HDL-C $<$ 190
TG $<$ 150 for all

SECONDARY PREVENTION OF CVD (OR HIGH RISK: DIABETES)

BASIC TREATMENT RECOMMENDATIONS

Smoking Cessation/Reduction (counseling, meds, nicotine patch)
Antiplatelet Therapy (ASA 81 mg or Clopidogrel 75 mg qd)
Exercise (30 minutes walking most days of the week; start 10-15 min 3x/week and increase as tolerated)
Weight Reduction if needed
Diet (ADA or low fat, low cholesterol, plant based, calorie restriction)
Stress Management

ADDITIONAL CONDITION-SPECIFIC TREATMENT RECOMMENDATIONS

DIABETES

- Diabetic teaching
- Medications
 1. Biguanides
 2. Thiazolidinedione
 3. Sulfonylureas
 4. Alpha glucosidase inhibitor
 5. Insulin

MONITOR

- FBS, HgbA1c
- Lipids
- BP
- Weight
- Lifestyle behavior

GOAL

FBS \leq 100
HgbA1c \leq 7.0%

HYPERTENSION

- Medications
 1. Diuretic
 2. ACEI or ARB
 3. CCB
 4. BB

MONITOR

- BP
- Lipids
- Weight
- Lifestyle behavior

GOAL

BP \leq 129/79 mm Hg

DYSLIPIDEMIA

- Medications
 1. Statins
 2. Fibrate
 3. Nicotinic Acid
 4. Resins
 5. Ezetimibe

MONITOR

- Lipids
- BP
- Weight
- Lifestyle behavior

GOAL

LDL < 70
Non HDL-C < 100
TG < 150

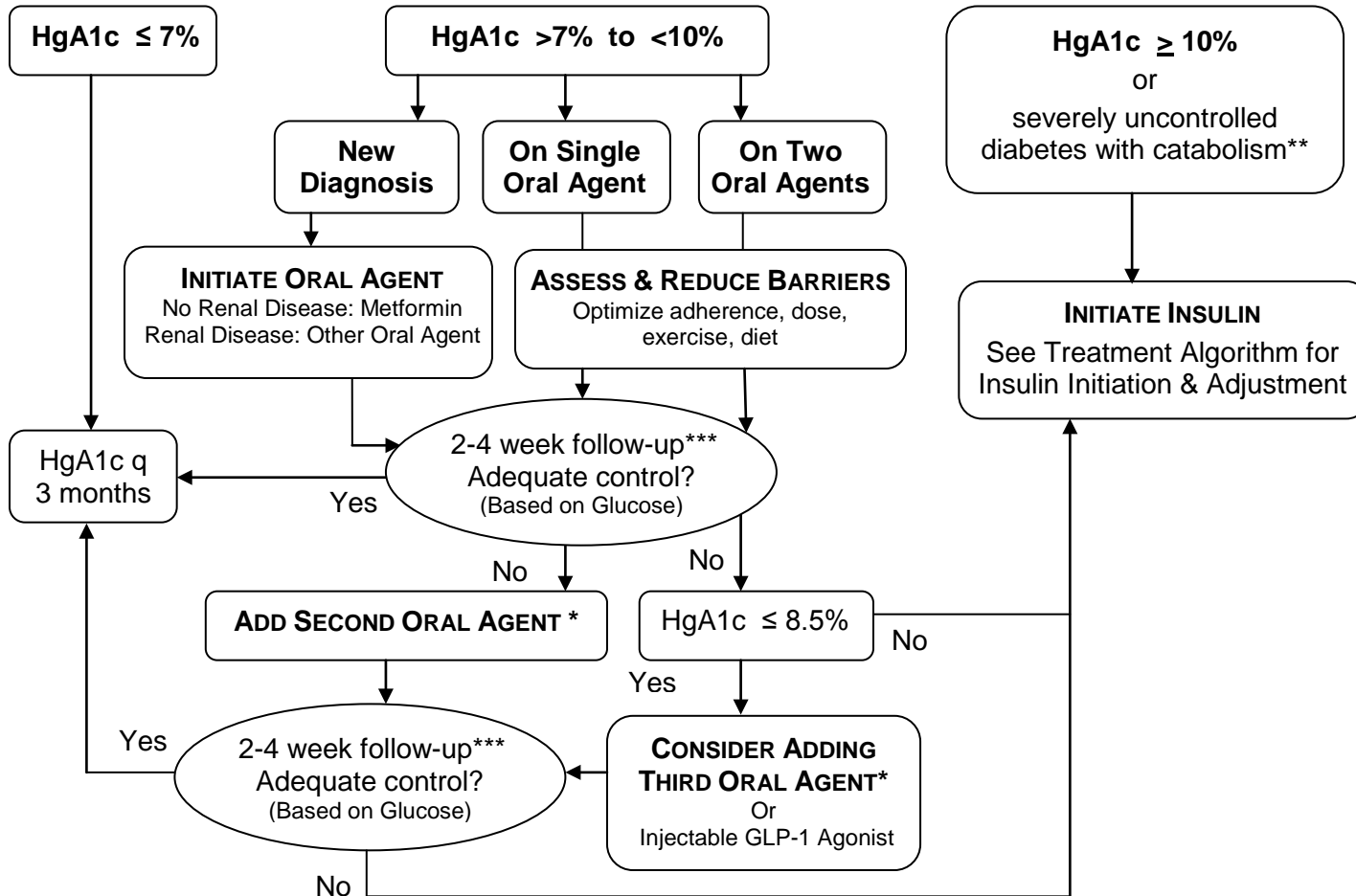
TREATMENT ALGORITHM FOR DIABETES

1. Diet/Exercise Counseling

2. Initiate glucose self-monitoring

3. Screen for target organ damage complications

4. Aspirin + Ace Inhibitors or ARB'S unless contraindicated



ACE-I OR ARB'S
CONTRAINDICATIONS

1. Allergy
2. Pregnancy

ASPIRIN
CONTRAINDICATIONS

1. Allergy
2. Ulcer
3. Pregnancy

*OPTIONS FOR ORAL AGENTS

1. Metformin
2. Sulfonylureas
3. Thiazolidinedione
- 4-5. DPP-4 Inhibitor
- 4-5. Glinide
- 6-7. Alpha-glucosidase inhibitor
- 6-7. Colesevelam

****INDICATIONS OF SEVERELY UNCONTROLLED DM**

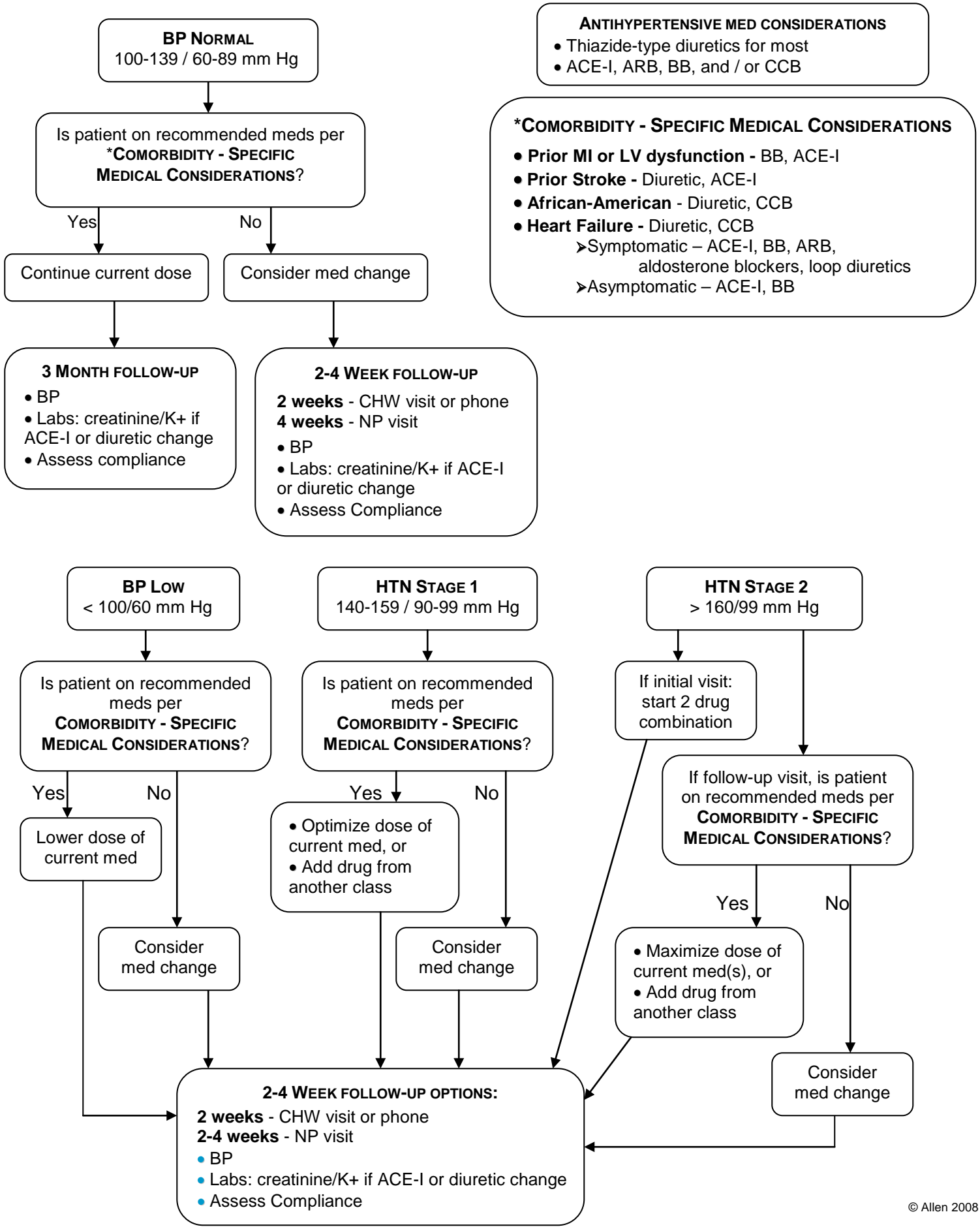
- Fasting glucose >250
- Random glucose consistently >300
- A1c > 10%
- Ketonuria
- Symptomatic: polyuria, polydipsia & weight loss.

RENAL DISEASE

- eGFR <60ml/min/1.73m²
- Cr >1.5 in men
>1.3 in women
- Albuminuria >300mg/day
(or 200mg albumin per gram of creatinine)

***12 weeks needed to determine effectiveness of Thiazolidinedione

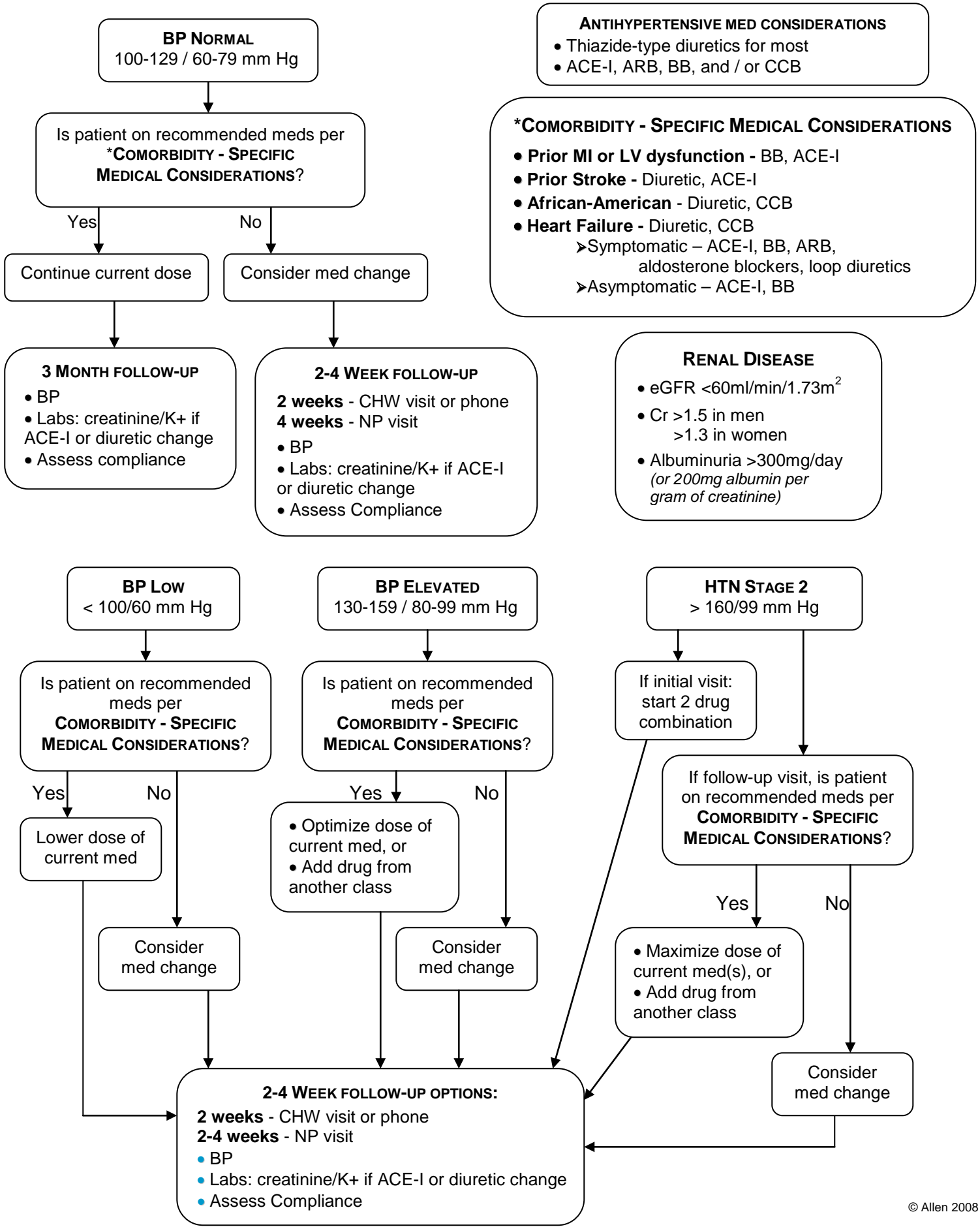
TREATMENT ALGORITHM FOR HIGH BLOOD PRESSURE WITHOUT DM, CAD AND/OR RENAL DISEASE



- ANTIHYPERTENSIVE MED CONSIDERATIONS**
- Thiazide-type diuretics for most
 - ACE-I, ARB, BB, and / or CCB

- *COMORBIDITY - SPECIFIC MEDICAL CONSIDERATIONS**
- Prior MI or LV dysfunction - BB, ACE-I
 - Prior Stroke - Diuretic, ACE-I
 - African-American - Diuretic, CCB
 - Heart Failure - Diuretic, CCB
 - Symptomatic – ACE-I, BB, ARB, aldosterone blockers, loop diuretics
 - Asymptomatic – ACE-I, BB

TREATMENT ALGORITHM FOR HIGH BLOOD PRESSURE WITH DM, CAD AND/OR RENAL DISEASE

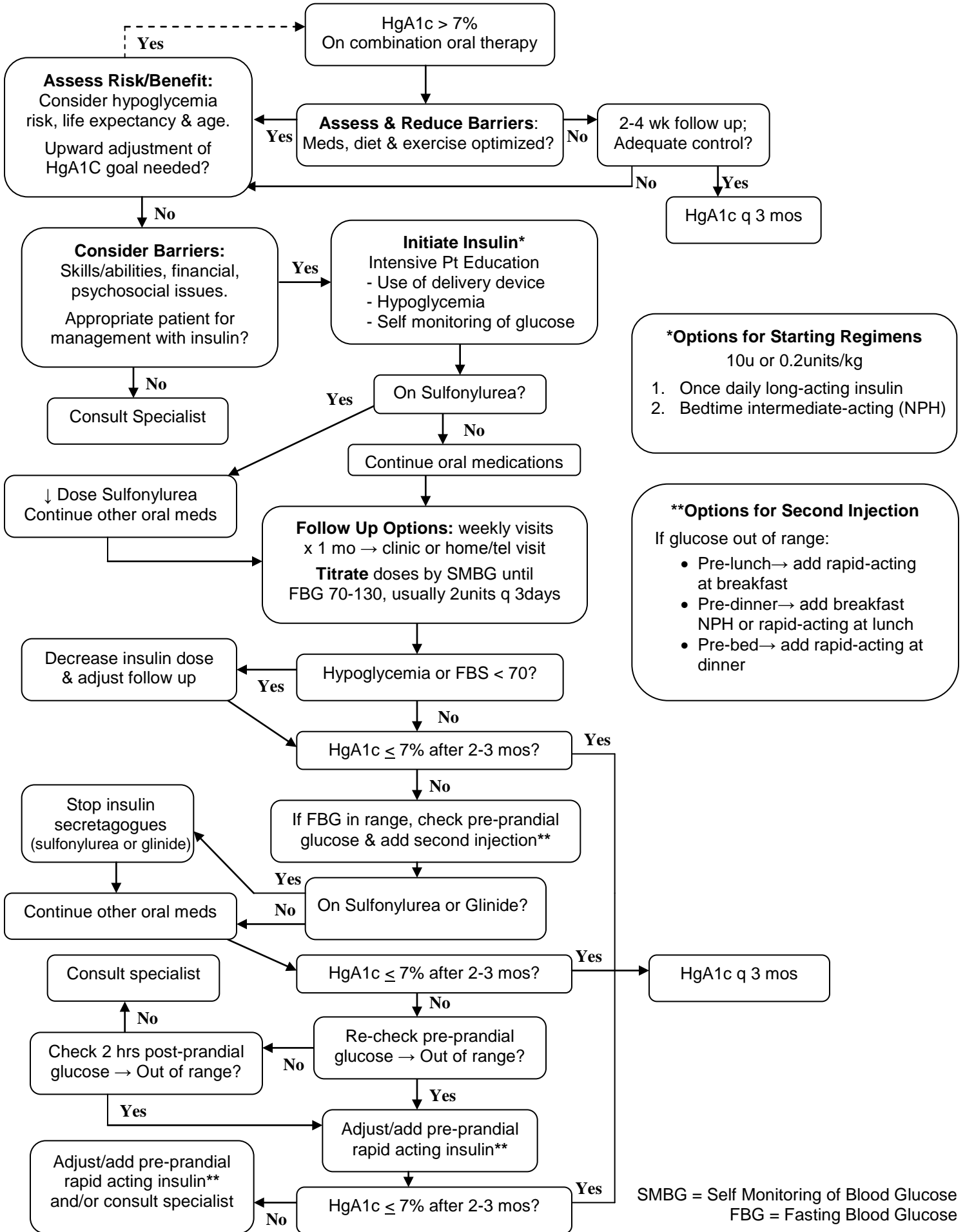


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TREATMENT ALGORITHM FOR INSULIN INITIATION AND ADJUSTMENT



***Options for Starting Regimens**
10u or 0.2units/kg

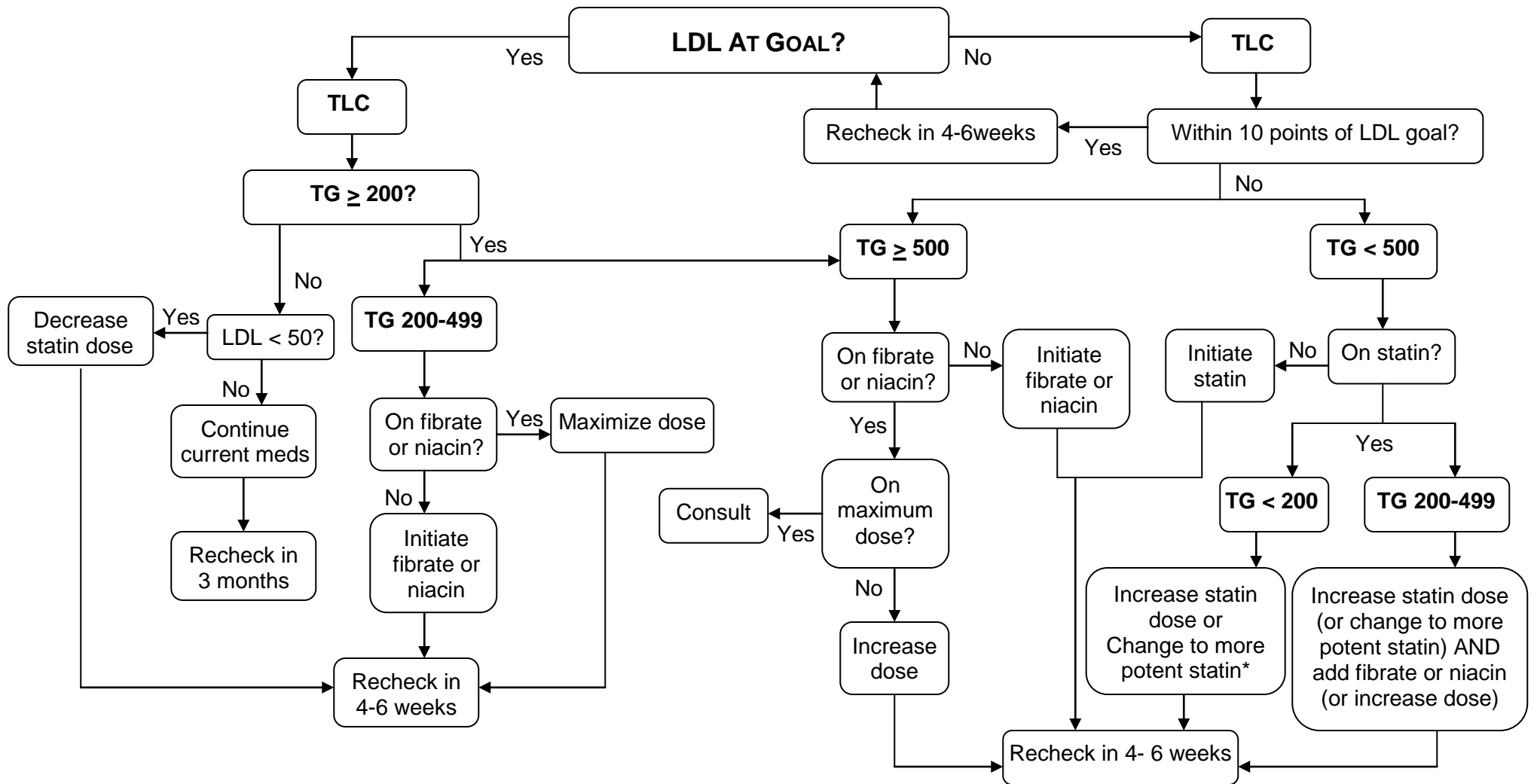
- Once daily long-acting insulin
- Bedtime intermediate-acting (NPH)

****Options for Second Injection**
If glucose out of range:

- Pre-lunch → add rapid-acting at breakfast
- Pre-dinner → add breakfast NPH or rapid-acting at lunch
- Pre-bed → add rapid-acting at dinner

SMBG = Self Monitoring of Blood Glucose
FBG = Fasting Blood Glucose

TREATMENT ALGORITHM FOR ANTIHYPERLIPIDEMIC DRUG THERAPY



FOR DIABETICS:

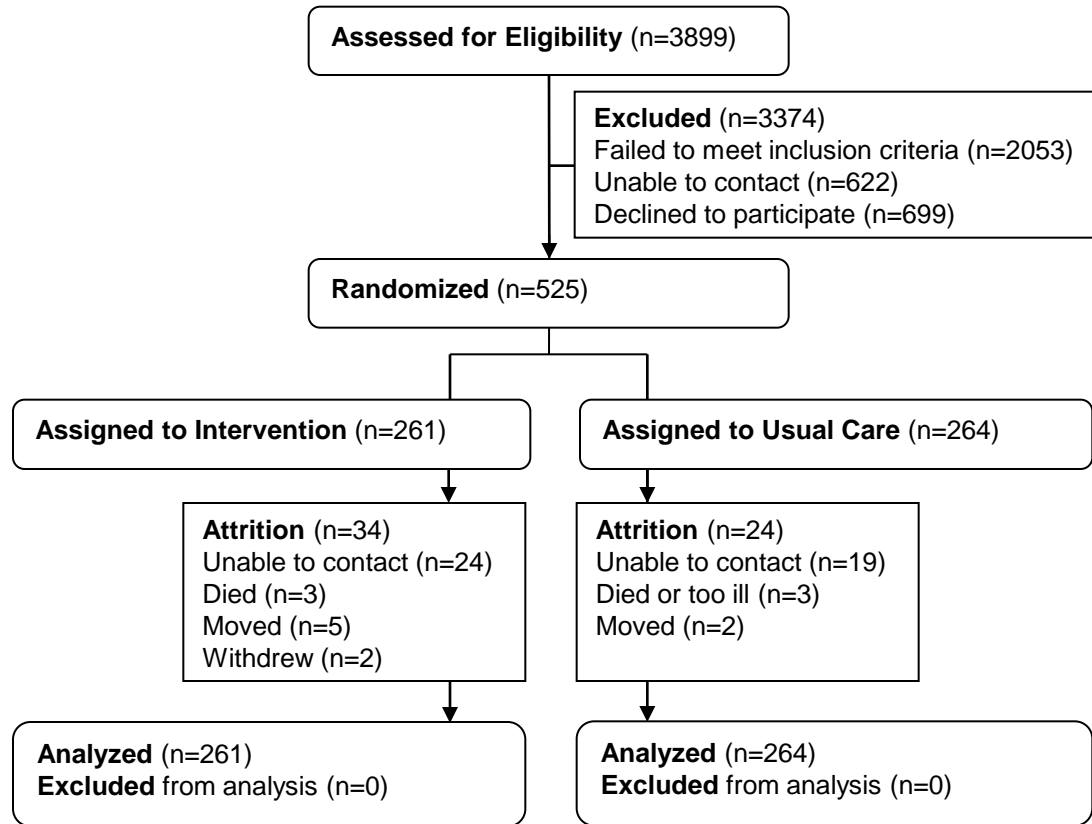
- If TG > 150, optimize glycemic control concurrently with lipid-lowering drug therapy.
- Fibrate preferred over niacin.

	LDL Goals:	
High Risk:	CHD or CHD risk equivalent	<70
Mod. High Risk:	2+ risk factors (10yr risk 10-20%)	<130 (<100)
Moderate Risk:	2+ risk factors (10yr risk <10%)	<130
Lower Risk:	0-1 risk factor	<160

***Non-HDL-C** is used for TG ≥ 200 or if sample drawn non-fasting.
TLC = Therapeutic Lifestyle Change
 ***Maximize statin use** prior to use of ezetimibe or other second line treatment

Figure Legend

Figure 1. CONSORT diagram of COACH Trial



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August 11, 2011

Jerilyn Allen, RN, ScD, FAAN
525 N. Wolfe Street
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Baltimore, MD 21205

Dear Dr. Allen,

I hereby give you permission to be named in the acknowledgement section of your journal article "COACH Trial: A Randomized Controlled Trial of Nurse Practitioner/Community Health Worker Cardiovascular Disease Risk Reduction in Urban Community Health Centers", manuscript ID# CIRCCVOQ/2011/961573.

Please let me know if you need anything further.

Sincerely,


Margaret Denny