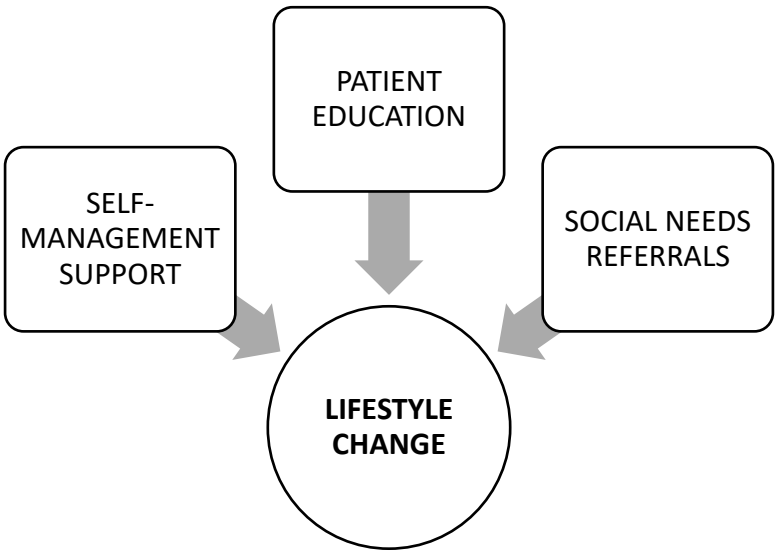
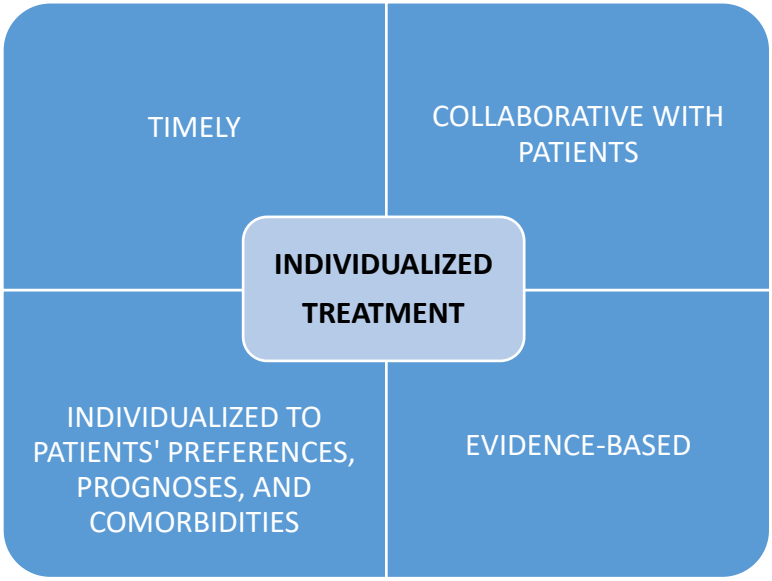
DIABETES CARE PATHWAY: TRENTON, NJ

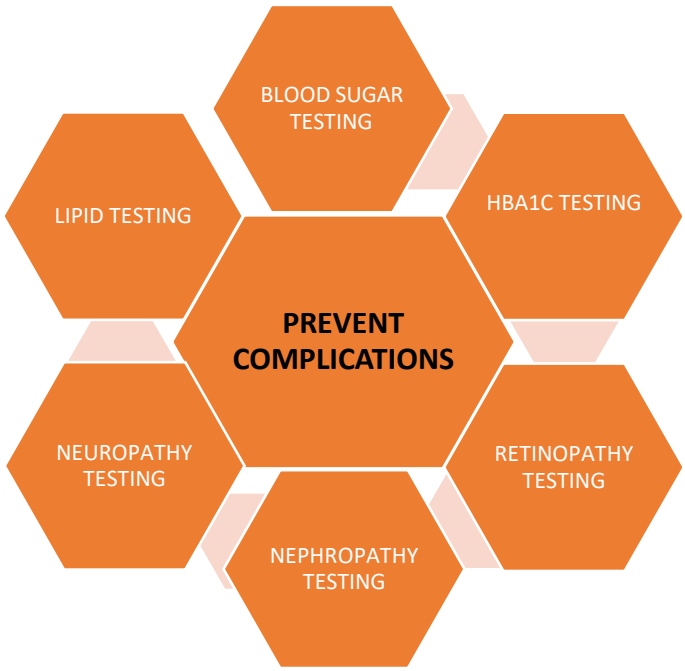
Developed by the Capital City Diabetes Collaborative

This Care Pathway was developed by the Trenton Health Team's Community-wide Clinical Care Coordination Team and is based on guidelines from the American Diabetes Association and the American Association of Clinical Endocrinologists to summarize the best practices in the diagnosis and treatment of Diabetes.

KEY POINTS







DIABETES DIAGNOSTIC CRITERIA

- Fasting Glucose ≥126
- Random Glucose ≥200
- A1C ≥6.5%
- 2 Hour GTT ≥200
- Results to be confirmed by repeat testing in the absence of unequivocal hyperglycemia

TESTING AND MONITORING

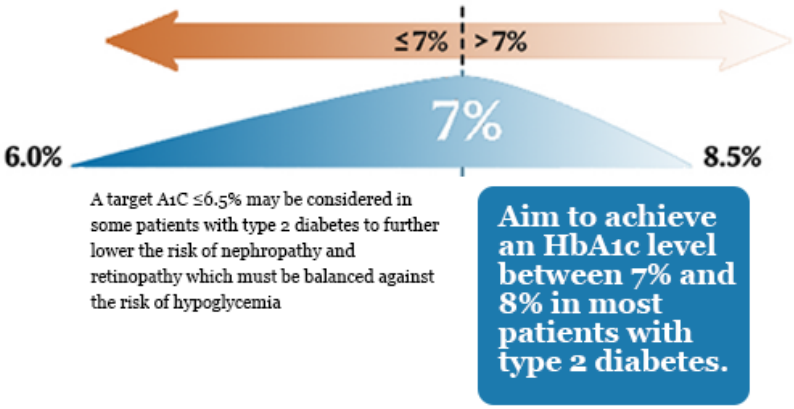
GLYCEMIC CONTROL:

HbA1c Testing:

Bi-annually in patients who are meeting treatment goals and have stable glycemic control OR every 3 months for changed therapeutic regimen or not meeting treatment goals [3]

Goals:

- General goal between 7% and 8% for most patients.
- Personalize goal for patients.
- Consider de-intensifying pharmacologic therapy in patients who achieve HBA1c levels <6.5%



Approach to Management of Hyperglycemia

Treatment Options: (Appendix A and Appendix B)

If entry A1C is <7.5%, consider monotherapy
If entry A1C is ≥7.5%, consider dual therapy.

Self-monitoring of Blood Glucose:

Pre-prandial Goal: 80-130*
Two Hours Post-prandial Goal: <180*
*More or less stringent glycemic goals may be appropriate for individual patients (e.g. elderly).

VACCINATIONS TREATMENT

Routine vaccinations for children and adults with diabetes according to age-related recommendations

- Annual vaccination against influenza for all persons with diabetes ≥6 months of age
- Vaccination against pneumonia for all people with type 2 diabetes through 64 years of age with PPSV23. At age ≥65 years, administer the PCV13 at least 1 year after vaccination with PPSV23, followed by another dose of PPSV23 at least 1 year after PCV13 and at least 5 years after the last dose of PPSV23

- Administer 3-dose series of hepatitis B vaccine to unvaccinated adults with diabetes who are 19-59 years
- Consider administering 3-dose series of hepatitis B vaccine to unvaccinated adults with diabetes who are age ≥60 years

RECOMMENDATIONS FOR STATIN AND COMBINATION TREATMENT

Take ASCVD risk score and consider appropriate intensity of statin.

Age	ASCVD or 10-year ASCVD risk >20%	Recommended statin intensity* and combination treatment^
<40 years	No	None • Moderate-intensity statin may be considered based on risk-benefit profile and presence of ASCVD risk factors. ☺
	Yes	High ▪ In patients with ASCVD, if LDL cholesterol ≥70 mg/dL despite maximally tolerated statin dose, consider adding additional LDL-lowering therapy (such as ezetimibe or PCSK9 inhibitor) ◊
≥40 years	No	Moderate • High-intensity statin may be considered based on risk-benefit profile and presence of ASCVD risk factors. ☺
	Yes	High ▪ In patients with ASCVD, if LDL cholesterol ≥70 mg/dL despite maximally tolerated statin dose, consider adding additional LDL-lowering therapy (such as ezetimibe or PCSK9 inhibitor) ◊

ASCVD: atherosclerotic cardiovascular disease; LDL: low-density lipoprotein; PCSK9: proprotein convertase subtilisin/kexin type 9.
* For patients who do not tolerate the intended intensity of statin, the maximally tolerated statin dose should be used.
^ In addition to lifestyle therapy.
☺ ASCVD risk factors include LDL cholesterol ≥100 mg/dL (2.6 mmol/L), high blood pressure, smoking, chronic kidney disease, albuminuria, and family history of premature ASCVD.
◊ Adults aged <40 years with prevalent ASCVD were not well represented in clinical trials of non-statin-based LDL reduction. Before initiating combination lipid-lowering therapy, consider the potential for further ASCVD risk reduction, drug-specific adverse effects, and patient preferences.

Source: American Diabetes Association Standards of Medical Care in Diabetes 2020

SCREENINGS FOR COMPLICATIONS

BLOOD PRESSURE

Every Visit

- Individualized to patients
- General recommendation :<140/90 mmHg for most patients
- <130/90 mmHg for patients at high-risk of cardiovascular disease (See Appendix C for Recommendations for the Treatment of Confirmed Hypertension in People with Diabetes)

RENAL FUNCTION

Annual

- Urine microalbumin to creatinine ratio, eGFR, serum creatinine, and spot testing as warranted

EYE SCREENING

At time of diagnosis and annually if retinopathy present, every 1-2 years if not present and glycemia well controlled

- Dilated and comprehensive eye exam by Optometrist or Ophthalmologist
  - Image capture by primary care team if Digital Retinal Exam equipment available

COMPREHENSIVE FOOT EXAMINATION

Annual

- 10-g monofilament exam by Medical Assistant or Nurse
- Visual inspection (skin integrity, callus formation, foot deformity, ulcer, toenails) by PCP
- Screen for PAD (pedal pulses, refer for ABI if diminished) by PCP
- Determination of temperature, vibration or pinprick sensation by PCP

Every Visit

- General inspection of skin integrity and musculoskeletal deformities

DENTAL EXAM

Every six months

DIABETES IN PREGNANCY

PRECONCEPTION COUNSELING

- Incorporate into routine diabetes care for all girls of childbearing potential starting at puberty up to women 50 years old.
- Discuss family planning and encourage use of effective contraception until woman is ready to conceive.

GOALS:

- <6 to 7% (individualized to patient) to reduce risk of congenital anomalies

TARGETS:

- Fasting < 95 mg/dL (5.3 mmol/L)
- *AND at least one of the following:*
  - One-hour postprandial < 140 mg/dL (7.8 mmol/L)
  - Two-hour postprandial < 120 mg/dL (6.7 mmol/L)

CONTINUOUS GLUCOSE MONITORING

Professional and Personal Continuous Glucose Monitoring for Patients with Medicaid

Professional: Providers may contact Libre representative to receive a continuous glucose monitor for office use. The provider places the glucose sensor on a patient's arm to collect continuous readings over a set number of days. Results are read on office monitor upon return. Providers may bill Medicaid for placement of glucose sensor and interpretation of results. This method does not require patient to be on insulin or insurance preauthorization and will not give patients real-time glucose results. Benefits include: Identification of extremes in blood glucose levels and Time in Range targets as well as assessment of nocturnal glucose patterns and success of treatment regimen.

Personal: To qualify for personal continuous glucose monitoring, a patient must be prescribed at least three injections of insulin a day. The patient must check and log blood sugar four times a day for 8 weeks. Providers then submit a prior authorization and copy of glucose log to the managed care organization, typically by fax. Once CGM is approved, it is supplied through the patients Durable Medical Equipment (DME) (i.e. Edgepark), not through a local pharmacy. This process may take a few weeks to complete.

When to Consider Personal Continuous Glucose Monitoring

- If patient administers three or more injections per day
- If patient's glucose readings fluctuate between extreme highs and lows
- If patient wants to decrease the number of times he/she has to manually check his/her blood glucose

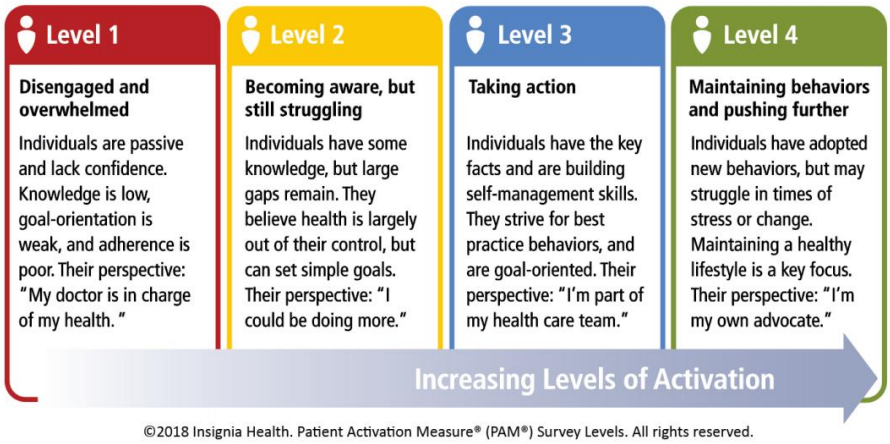
REFERRALS

SOCIAL NEEDS ASSESSMENT AND REFERRALS

- Assess social context, including potential food insecurity, housing stability, and financial barriers, and apply that information to treatment decisions.
- Use the Trenton Social Determinants of Health Screening Tool (Appendix B) in NowPow.
- Refer patients to local community resources when available using the NowPow platform to match community resources to patients' social needs and geography.
- Provide patients with self-management support from lay health coaches, navigators, or community health workers when available.

PATIENT READINESS: MOTIVATIONAL INTERVIEWING AND PATIENT ACTIVATION MEASURE (PAM)

- Ask open-ended questions, make affirmations, use reflections and summarizing to understand patient motivations and if he or she is willing and ready to make changes in his or her health.
- PAM is a survey tool that helps us: Identify/target patients that need more support, customize an action plan that meets patients where they are, provide information the patient needs to help them reach their potential and track progress
    - The survey produces a PAM Score (0-100) and a Level of Activation (1-4) that are predictive of future utilization and outcomes



For access to the PAM survey tool, please contact Renee Kraus: rkraus@trentonhealthteam.org

CLINICAL REFERRALS FROM PRIMARY CARE

Nephrology

- ***At least one of the following:***
  - Uncertainty about etiology of kidney disease
  - Difficult management issues: anemia, resistant hypertension, electrolyte disturbances)
  - Advanced kidney disease (eGFR <30 mL/min/17.3 m2) requiring discussion of renal replacement therapy or ESRD

Endocrinology

- ***All of the following:***
  - Patient's A1c persistently ≥ 9.0% despite triple therapy
  - Clinical pharmacy care OR intensive treatment in office for at least 6 months
  - Total insulin exceeds 200 units/day
- ***Assess patient's motivation & consider:***
  - Unmanaged psychiatric disorder, polysubstance abuse, or non-compliance present

Podiatry

- **At least one of the following:**
  - Symptoms of claudication or decreased or absent pedal pulses should be referred for ankle-brachial index and further vascular assesssment
  - Cigarette smokers
  - History of prior lower extremity complications, loss of protective sensation, structural abnormalities, or peripheral arterial diesase

Ophthalmology

- **At least one of the following:**
  - Patients with any level of macular edema, severe nonproliferative diabetic retinopathy, or any proliferative diabetic retionopathy
  - All patients with type 2 diabetes should recieve a comprehesive eye exam and dilated eye exam at time of diagnosis and every 1-2 if retinopathy is not present

Clinical Pharmacy

- ***At least one of the following:***
  - Suspected medication non-compliance or non-adherence – conjunction with BH and SW
  - Need for medication reconciliation (patient on multiple medications and/or multiple comorbidities present)
  - Patient not meeting a1c goal

Behavioral Health

- ***Both of the following:***
  - Diagnosable mental health issue
  - Patient is interested in treatment

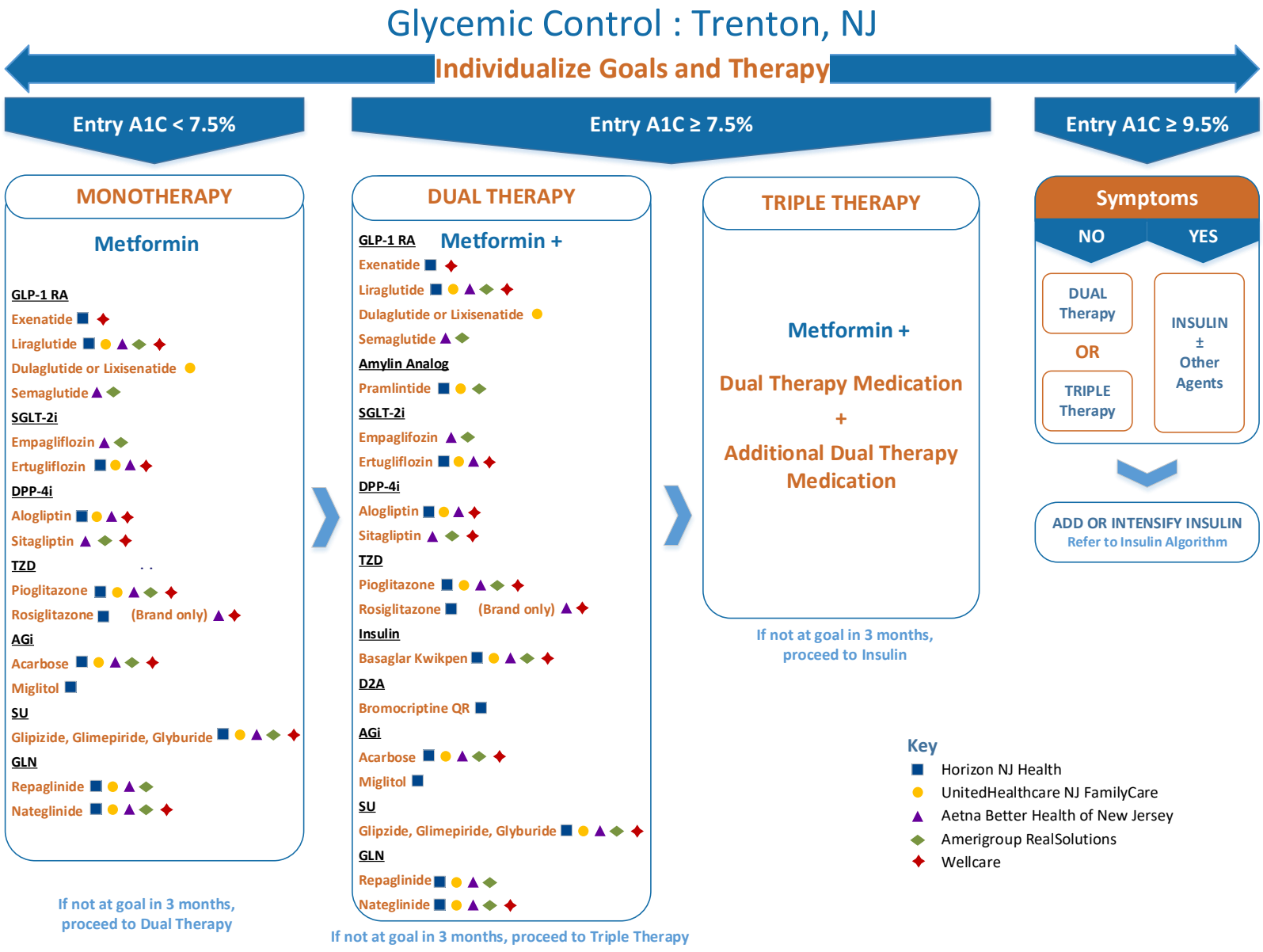
Nutrition

- ***At least one of the following:***
  - Newly diagnosed
  - HgbA1c >8
  - BMI ≥30
  - Triglycerides over 200
  - Experiencing regular episodes of hypo (<70) or hyperglycemia (>200), even if at goal for hgbA1c
  - Patient request
  - Provider discretion

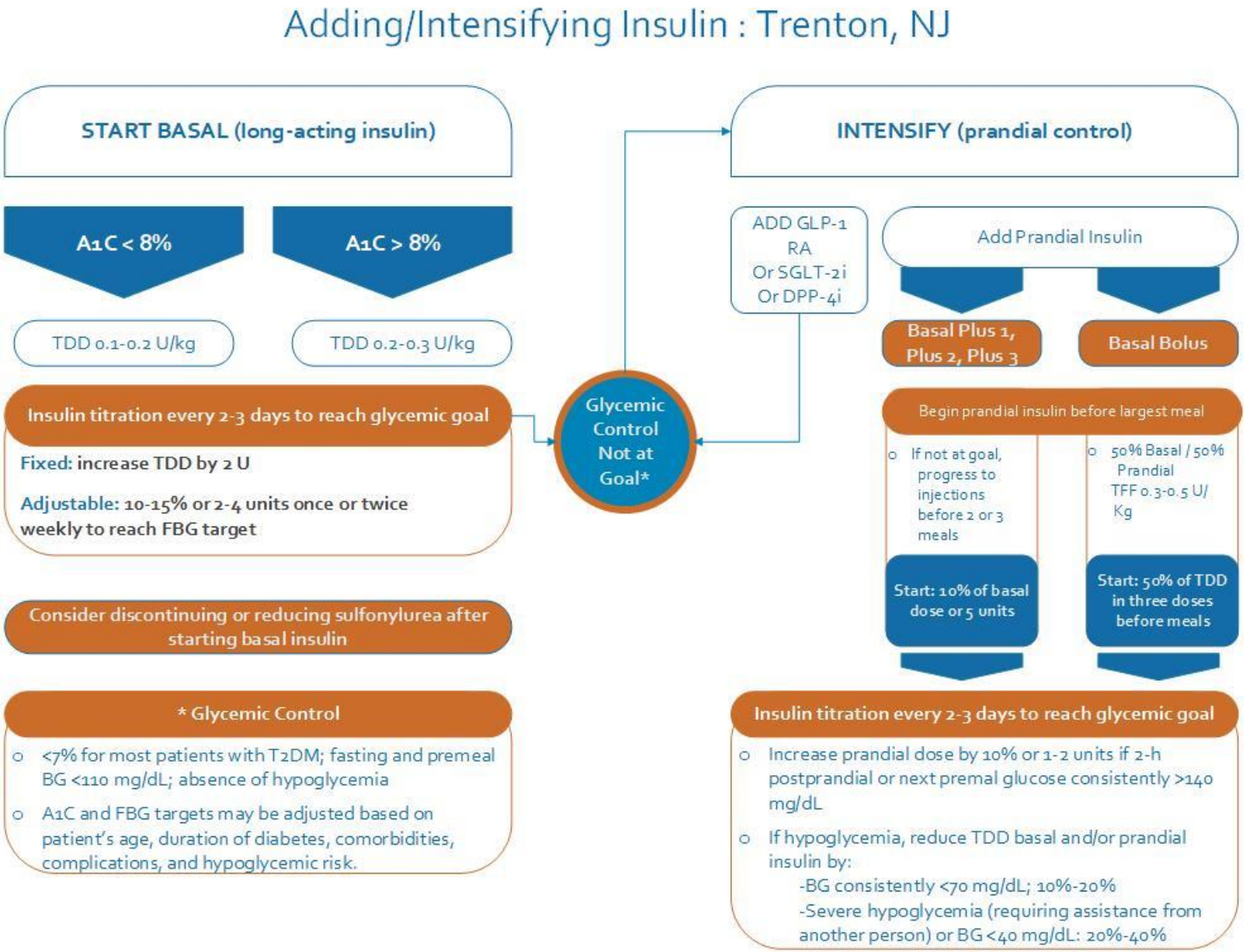
Care Management

- ***At least one of the following:***
  - New diabetes diagnosis
  - A1c ≥9
  - Provider discretion

Appendix A: Glycemic Control Algorithm

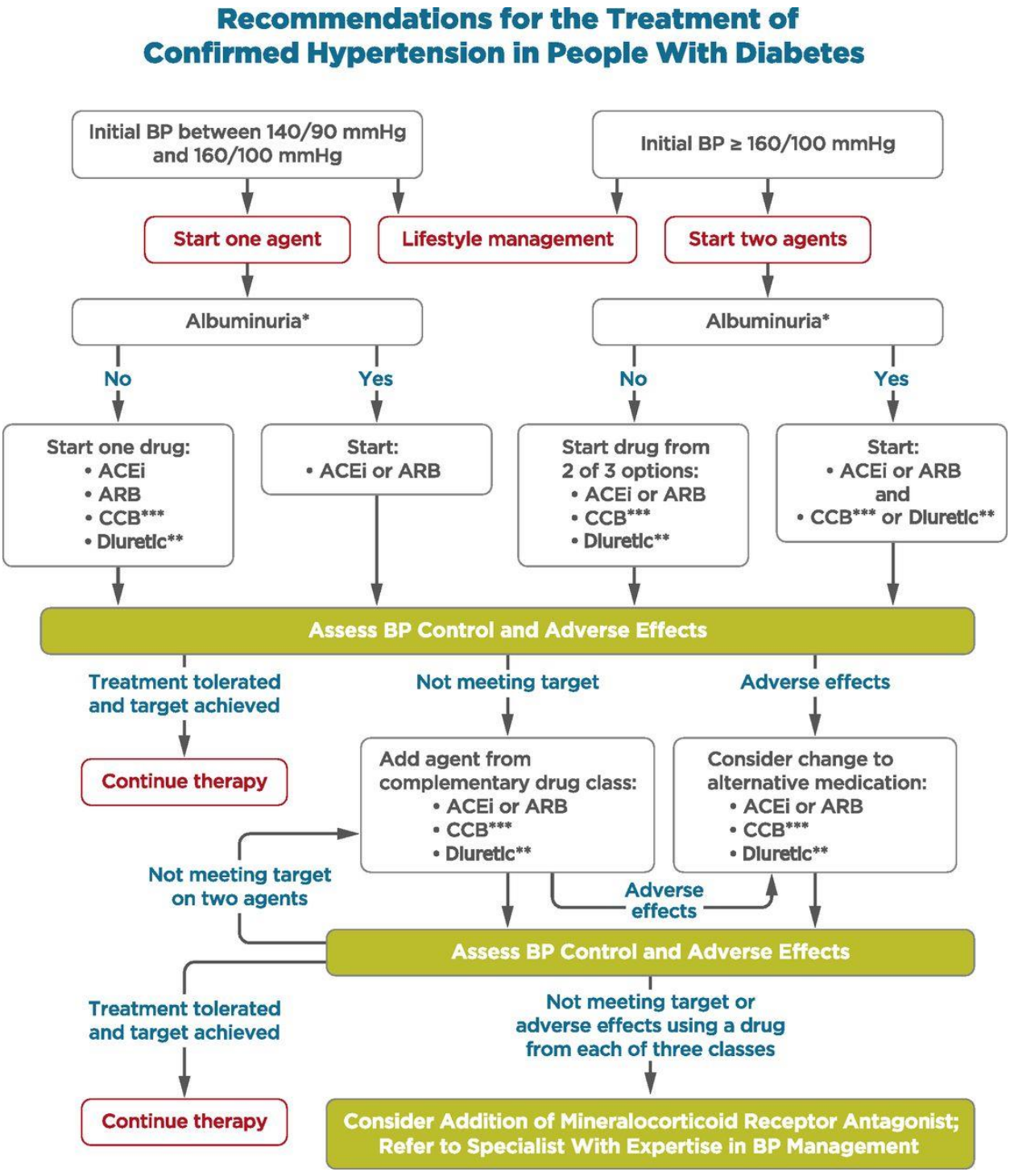


Appendix B: Insulin



Appendix C: Recommendations for the Treatment of Confirmed Hypertension in People with Diabetes

American Diabetes Association Standards of Medical Care in Diabetes 2020



Appendix D: Trenton Social Determinants of Health Screening Tool

Developed by Trenton Health Team, St. Francis Medical Center, Capital Health System, Henry J. Austin Health Center, and Catholic Charities

Part 1: Social Determinants of Health		
Food Insecurity	In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?	Y N
Utility Needs	In the last 90 days, has your utility company threatened to shut off your service for not paying your bills?	Y N
Housing Insecurity	Are you worried that in the next 2 months, you may not have stable housing that you own, rent or stay in as part of a household?	Y N
Housing Quality	Think about the place where you are living right now. Do you have problems with any of the following?	Pests such as bugs, ants, or mice Mold Lead paint or pipes Lack of heat Oven or stove not working Smoke detectors missing or not working Water leaks None of the above
Child Care Needs	Do problems getting child care make it difficult for you to work or study?	Y N N/A
Transportation Needs	Do you put off or neglect going to the doctor because of distance or transportation?	Y N
Financial Resource Strain	In the last 12 months, did you skip medications to save money?	Y N
Literacy	Do you ever need help reading hospital materials?	Y N
Exposure to Violence	Are you afraid you might be hurt in your apartment building or house?	Y N
Legal	Do you have any legal issues?	Y N
Employment	During the last 4 weeks, have you been actively looking for work?	Y N
Medical Home	Who is your family doctor?	Dr/NP _____ I don't have one I need a new one

Part 2: Substance Abuse and Behavioral Health		
Substance Abuse	How many times in the past month have you used an illegal drug or used a prescription medication for non-medical reasons?	
Alcohol Abuse	How many times in the past month have you had 5 or more drinks in a day?	
Mental Health	Over the last 2 weeks, have you had little interest or pleasure in doing things?	Y N
	Over the last 2 weeks, have you been feeling down, depressed or hopeless?	Y N
	Over the last 2 weeks, have you been feeling nervous, anxious or on edge?	Y N
Tobacco	Do you smoke tobacco on a daily basis?	Y N

Appendix E:

Comprehensive Diabetic Foot Exam

Foot exam components

Preformed Q3-6months by Providers, RN, or MA

Visual inspection
- -skin integrity
- -callus formation
- -foot deformity
- -ulcer
- -toenails

General inspection of skin integrity and musculoskeletal deformities
- -temperature
- -vibration or pinprick sensation
- -range of motion
- -pedal pulses

10-g monofilament exam

1. Apply the monofilament to the inner wrist so the patient knows what to expect.

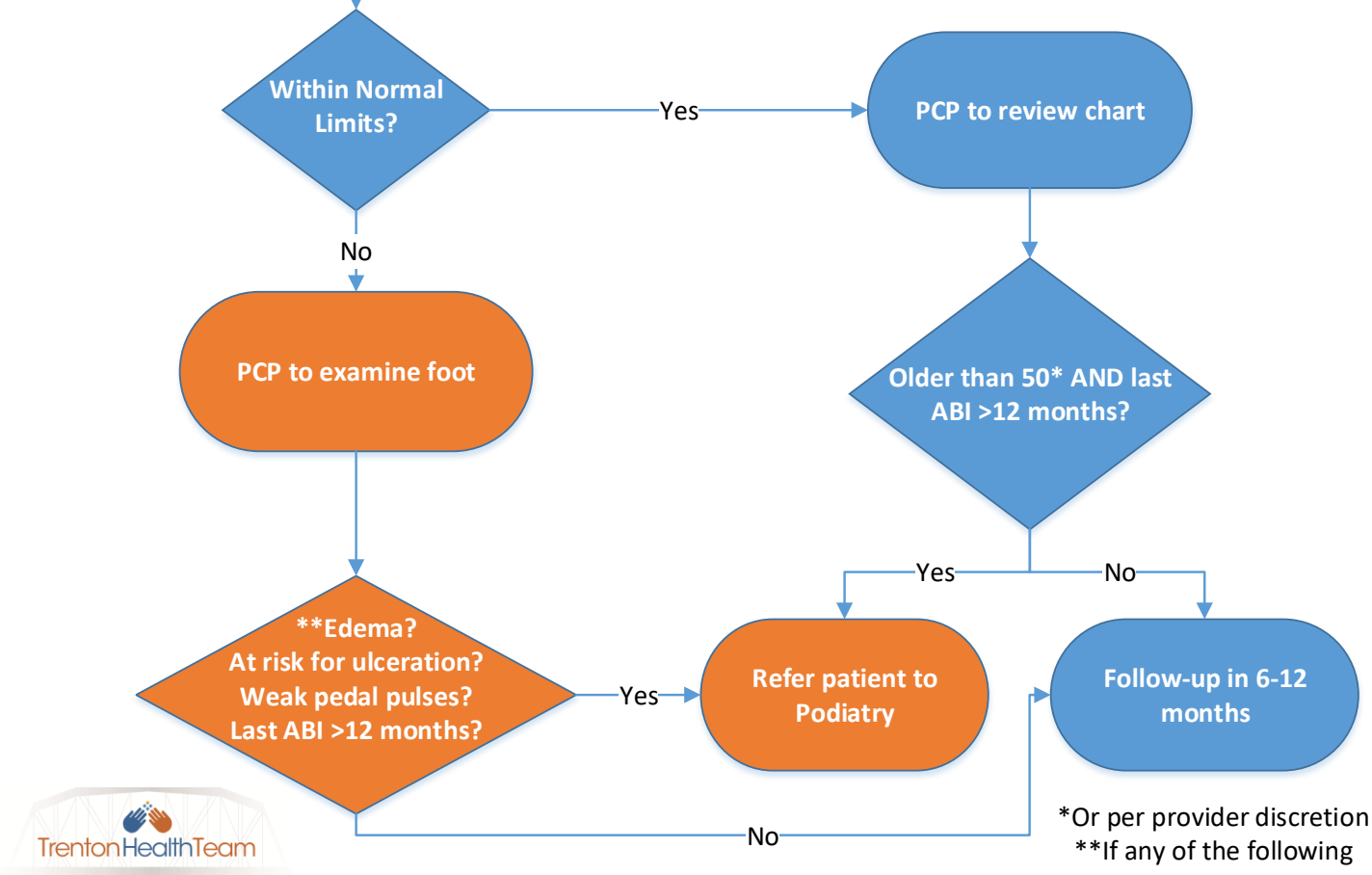
2. Apply sufficient force to cause the filament to bend or buckle (about 1 cm) with the total duration (approach, skin contact, and departure) of the filament being approximately 2 seconds.

3. Press the filament to the skin such that it buckles at one or two times as you say "time one" or "time two."

4. Have patients identify at which time they were touched. Randomizing the sequence of applying the filament throughout the examination. The site can be repeated to ensure accuracy.

5. Test the 12 designated sites, see documentation.

IMPORTANT **DO NOT** apply the filament on ulcers, calluses, scars, or necrotic tissue. **DO NOT** allow the filament to slide across the skin or make repetitive contact at the test site.



TrentonHealthTeam

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