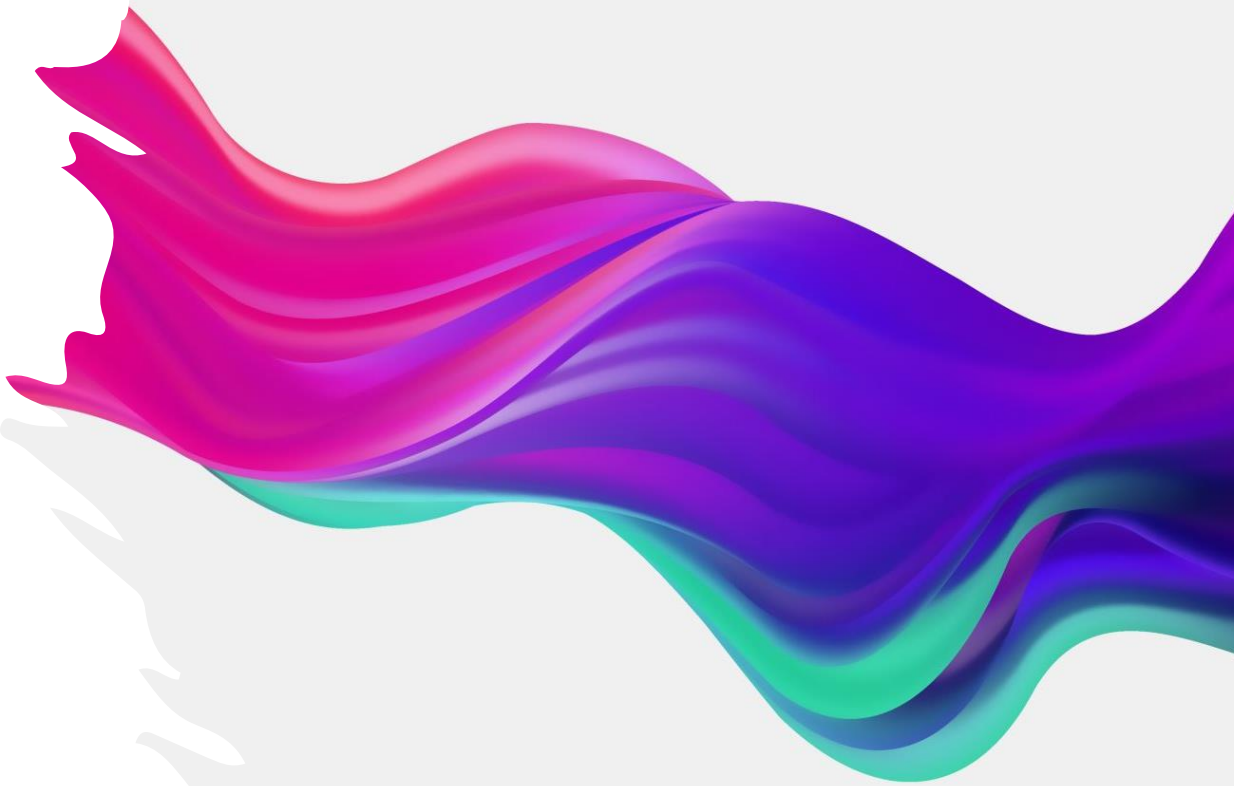
Conquering Diabetes Therapeutic Inertia: Patient Engagement Strategies

National Center for Health in Public Housing



May 22, 2023

Housekeeping

- All participants muted upon entry
- Engage in chat
- Raise hand if you would like to unmute
- Meeting is being recorded
- Slides and recording link will be sent via email
- Mentimeter case study activities
  - Go to **Menti.com**
  - Enter code **5485 6701**

zoom

Mentimeter

NCHPH
National Center for Health in Public Housing

National Center for Health in Public Housing (NCHPH)

- The mission of the National Center for Health in Public Housing (NCHPH) is to strengthen the capacity of federally funded Public Housing Primary Care (PHPC) health centers and other health center grantees by providing training and a range of technical assistance.
- The National Center for Health in Public Housing (NCHPH) is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U30CS09734, a National Training and Technical Assistance Partner (NTTAP) for $2,006,400 and is 100% financed by this grant. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

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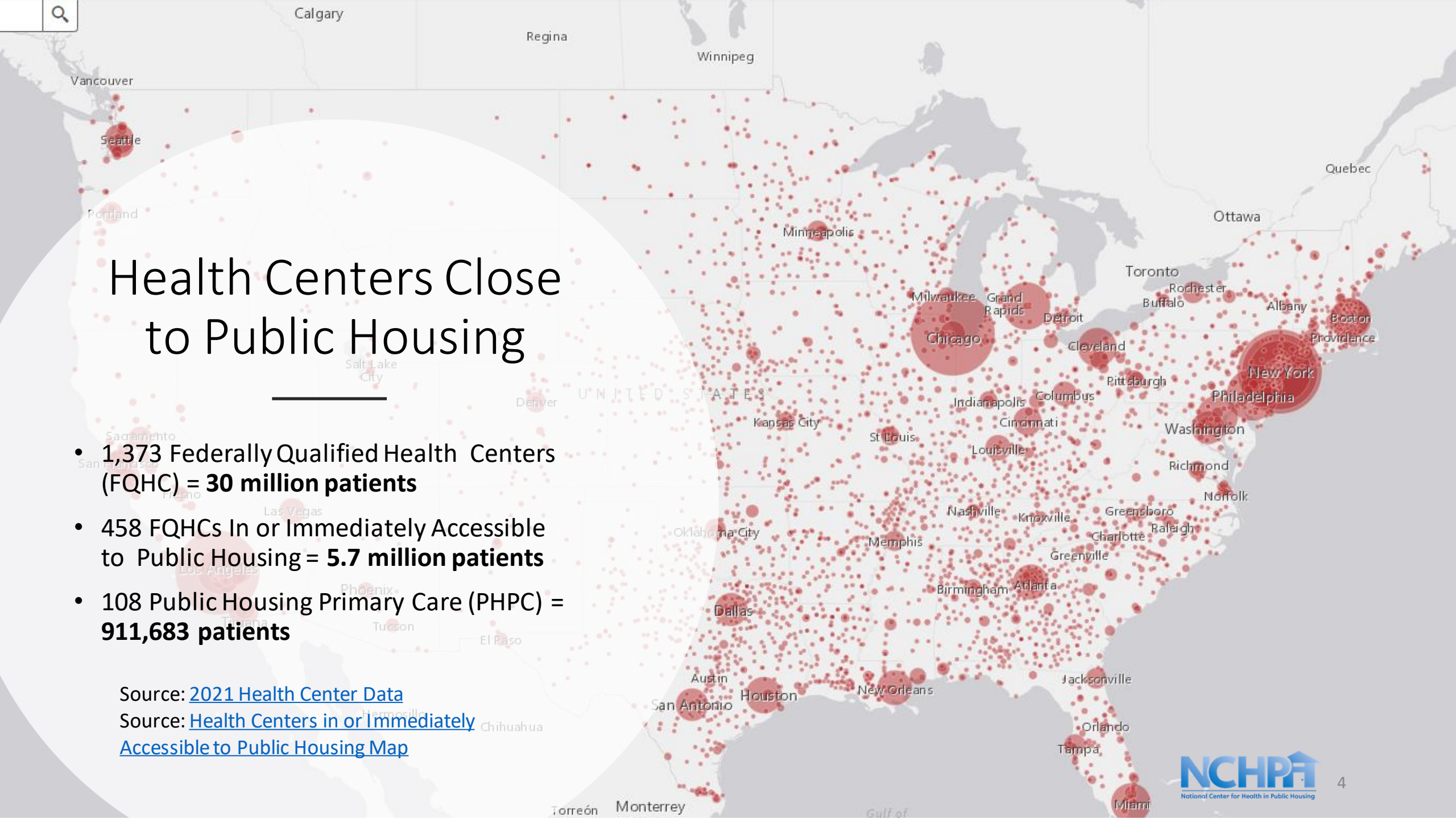
Health Centers Close to Public Housing

- 1,373 Federally Qualified Health Centers (FQHC) = **30 million patients**
- 458 FQHCs In or Immediately Accessible to Public Housing = **5.7 million patients**
- 108 Public Housing Primary Care (PHPC) = **911,683 patients**

Source: [2021 Health Center Data]
Source: [Health Centers in or Immediately Accessible to Public Housing Map]



Public Housing Demographics

1.5 Million Residents

2 Persons Per Household

38% Disabled

52% White

91% Low Income

43% African-American

26% Latinx

19% Elderly

36% Children

32% Female Headed Households with Children

- Source: 2022 HUD Resident Characteristics Report

National Center for Health in Public Housing

Diabetes Snapshot in Public Housing Primary Care (PHPCs)

Population	Total Patients	# of Patients with Diagnosis	Percentage of Patients with Diabetes
All FQHCs	30,193,278	2,873,252	10%
Public Housing Primary Care	911,683	91,563	10%
In or Immediately Accessible to Public Housing	5,714,900	1,269,671	22%

Source: National Health Center Program Uniform Data System (UDS) Awardee Data 2021

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Learning Objectives

- Define therapeutic inertia.
- Discuss tips to engage patients in their diabetes management.
- Review Self-Assessment Tools and Conversation Guides

Case Study: Fear of Injections

A female patient presents with an HbA1c of 9.5% and has received metformin plus SU for the last 2 years. During a discussion of therapeutic options, the patient expresses anxiety about using injectable therapy, but her target HbA1c goal has not been attained with any of the multiple oral regimens she has tried.

Question: How would you talk to your patient about this "fear" of injections?

Case study: Uncontrolled Diabetes

History: A 59-year-old male clerk comes for diabetes assessment. He walks 30 minutes per day and consumes a healthy vegetarian diet. He does not smoke or take alcohol. He is taking metformin 1000 mg twice a day.

- Examination: The height is 166 cm and the weight is 84 kg (BMI: 30.48). Examination indicates a blood pressure of 130/90 mm Hg. Heart rate is 79 /min. There are no other significant findings.
- Tests: FPG -145 mg/dl & PPG- 271 mg/dl

Question: Before addressing therapeutic inertia, what else would you like to know about his glycemic control?

Case study: Negative Beliefs

“My mother had diabetes, and it was no big deal to her for over 20 years. She rarely saw a doctor and never paid much attention to it, and it never really bothered her. But then her doctor finally convinced her to start insulin and—bam! Over the next year, she started having serious problems with her eyes, and then there were terrible pains in her legs. In fact, she eventually lost most of her left leg. No doubt about it, insulin was the culprit. And now you want me to start insulin? No way!”

Question: How would you address the patient's negative belief?

Therapeutic Inertia at a Glance

In diabetes care, therapeutic inertia means being slow to advance the treatment plan when A1C is too high. For example, waiting to intensify insulin therapy or add an additional medicine can be signs of therapeutic inertia.

The American Diabetes Association® (ADA) recommends advancing treatment if a patient doesn't reach their A1C goal within three to six months.

The Legacy Effect in Type 2 Diabetes: Achieving Early Glycemic Control Has Long-Term Benefits

- Lower A1C and glycemic burden[1]
- Better maintenance of A1C control over time[1]
- Better overall long-term health outcomes[1,2,3]
- Lower risk of microvascular and macrovascular complications[1]
- Economic benefits[3,4]

1. Khunti K, et al. *Diab Care 2013;36:3411–7;'* Del Prato S, et al. *Int J Clin Pract.* 2005;59:1345–1355
2. Laiteerapong N, Ham S, Goo Y, et al. *Diabetes Care* 2019;42:416-0426
3. Mehta R, et al. *Journal of Clinical & Translational Endocrinology.* 19(2020) 100215
4. Ali SN, Dang-Tan T, Valentine WJ, Hansen BB. *Advances in therapy.* 2020;37:869

Timing is Important When Managing Type 2 Diabetes

Achieving glycemic goals in <6–12 months results in long-term health and economic benefits.

Most Frequently Cited Contributors to Therapeutic Inertia in Type 2 Diabetes

Clinician-Related

- Time constraints and competing priorities
- Failing to set and use glycemic targets and goals to initiate, evaluate, or intensify treatment
- Concerns with treatment side effects (hypoglycemia)
- Underestimating patient self-management needs and abilities
- Underutilizing medical nutrition therapy (MNT) and diabetes self-management education and support (DSMES) services

Patient-Related

- Cost and access to medication
- Social determinants of health (SDOH)
- Limited understanding of the progressive nature of diabetes and need for treatment to change with time
- Poor access and low participation in diabetes education and MNT
- Poor communication/trust among physician, health system, and patient

System-Related

- Failing to identify therapeutic inertia
- Lack of transparency or accuracy in formulary options at point of care
- Not providing and promoting access to DSMES services
- No team approach to care

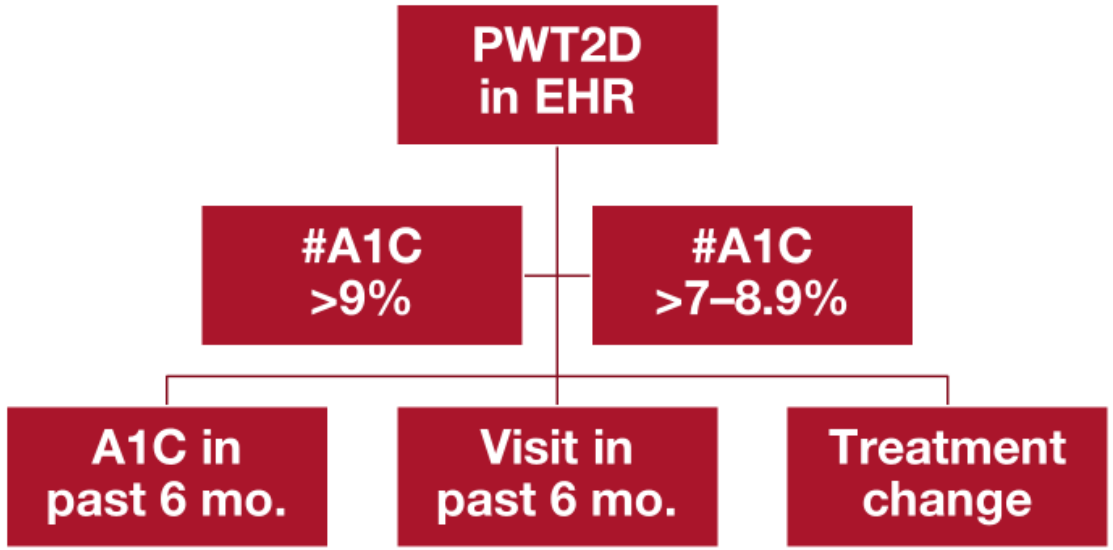
Adapted from: G Reach, V Pechtner, et al.; Clinical inertia and its impact on treatment intensification in people with type 2 diabetes mellitus; Diabetes & Metabolism Vol 43, Issue 6, Dec. 2017, 501-511
Addressing Therapeutic Inertia in 2020 and Beyond: A 3-Year Initiative of the American Diabetes Association, Clinical Diabetes July 31, 2020;

Action Plan

Action Item 1:

Identify high-risk patients with type 2 diabetes who are not at target goals

Identifying High-Risk Patients with Type 2 Diabetes (PWT2D) in Practice



Discussion: Identifying high-risk patients with type 2 diabetes

Does the practice have a system in place to identify individuals with A1C >9% and/or >7–8.9%?

- Have they had an A1C check in the past 6 months?
- Have they had a doctor's visit in the past 6 months?
- Has there been a change in treatment?

What do we need to initiate or improve in our process for identifying these high-risk patients with type 2 diabetes?

Action Item 2:

Identify and prioritize reasons for not achieving goals

Most Frequently Cited Contributors to Therapeutic Inertia in Type 2 Diabetes

Clinician-Related

- Time constraints and competing priorities
- Failing to set and use glycemic targets and goals to initiate, evaluate, or intensify treatment
- Concerns with treatment side effects (hypoglycemia)
- Underestimating patient self-management needs and abilities
- Underutilizing MNT and DSMES services

Patient-Related

- Cost and access to medication
- SDOH
- Limited understanding of the progressive nature of diabetes and need for treatment to change with time
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Discussion: Identifying Reasons for Therapeutic Inertia in Our Organization

- What are the major drivers of therapeutic inertia in our clinic or institution?
- Which drivers are within our control?
- Which drivers are easiest to address and have the greatest value?
- What are best practices for tackling therapeutic inertia?

Action Item 3:

Implement a team-based approach

Diabetes Team Members Provide Critical Treatment Foundation

DSMES Services

All people with diabetes should participate in DSMES services and necessary for diabetes self-care.

- Annually
- When not meeting treatment targets
- Complicating factors develop
- Transitions in life occur

MNT

All people with diabetes should be provided individualized MNT to achieve glycemic and overall health goals (provided by RDN).

Care Management

Coordination of care.

ADA Standards of Care 2022, 5.1, 5.9

Discussion

- **Do we have nurses, pharmacists, dietitians, and CDCESs in our organization to help manage diabetes?**
  - If so, how can we optimize their clinical responsibility and time to help manage diabetes?
  - If not, do we have resources to recruit? Work with other organizations to share resources? Contract with independent providers; collaborative agreements (pharmacist, RD, NP, CDCES)

- **Do we provide easy access to DSMES services and MNT for our patients and providers?**
  - Locate local CDCES

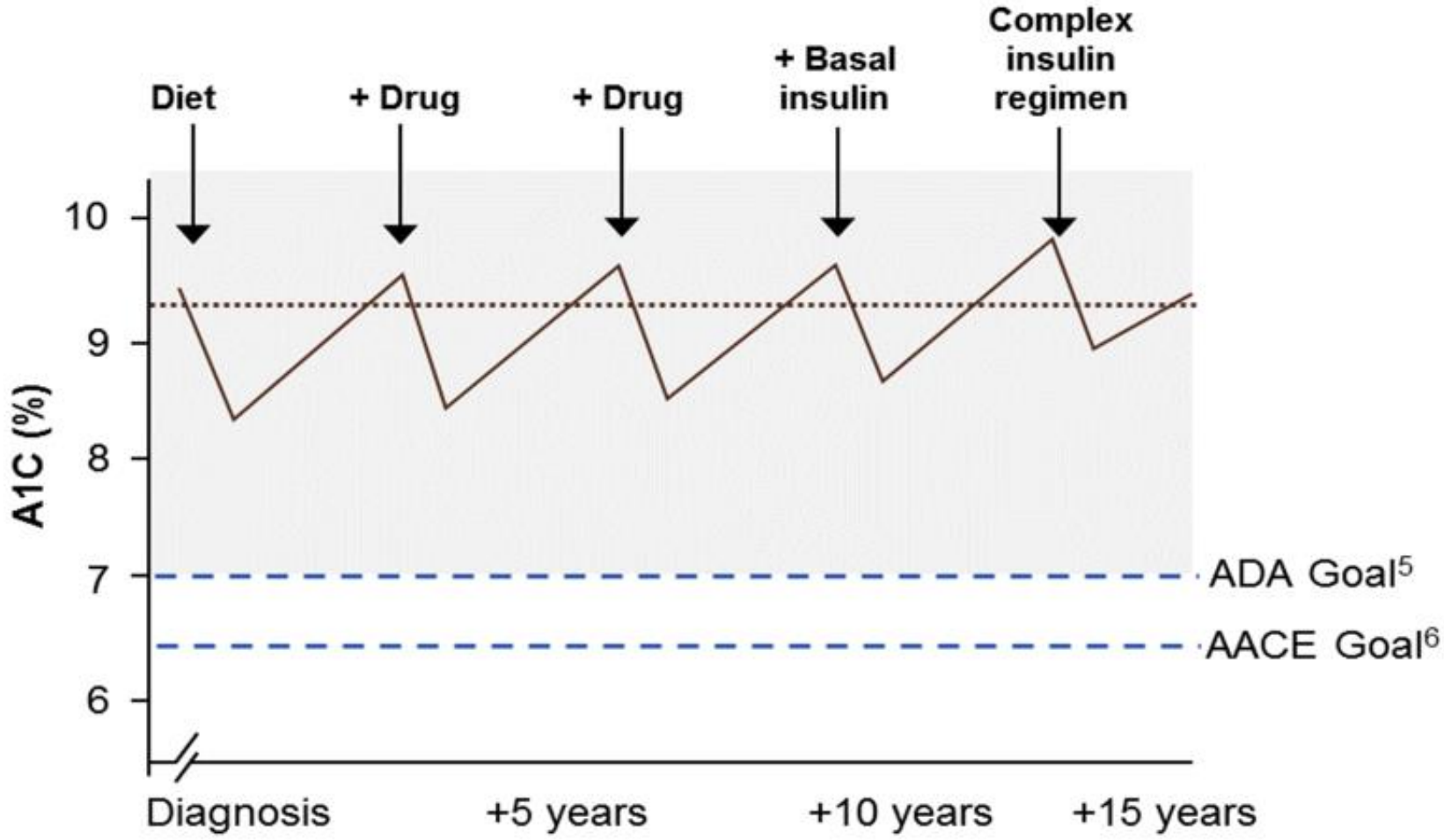
    Go to: /professional.diabetes.org/ERP
    OR diabeteseducator.org/Education Program

  - Leverage virtual/online DSMES programs

Action Item 4:

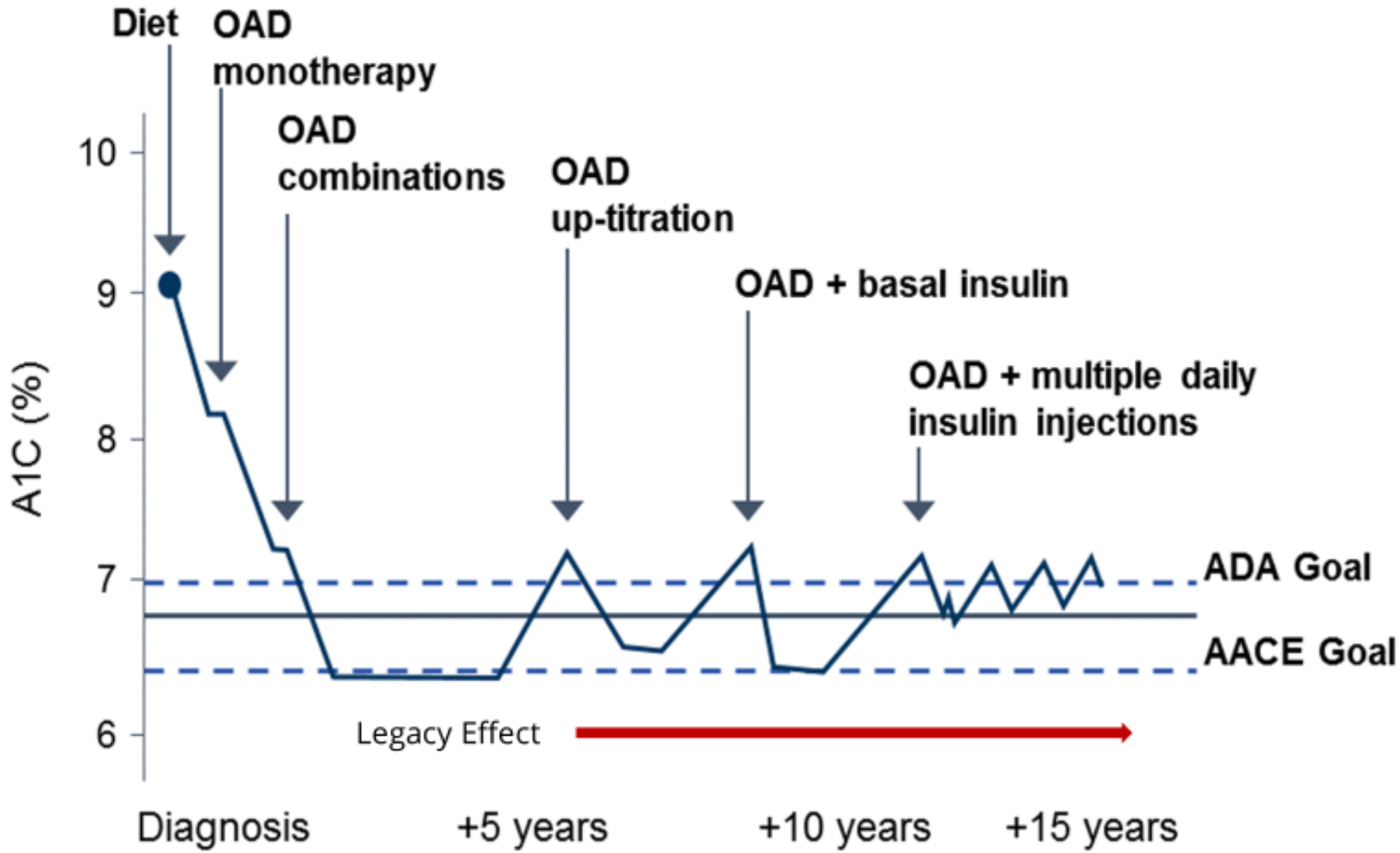
Use algorithms and/or protocols to intensify therapy efficiently and effectively

Historical "Treat to Failure" Approach



Campbell IW. Br J Cardiol. 2000;7:625-631.

“Treat to Target” Approach

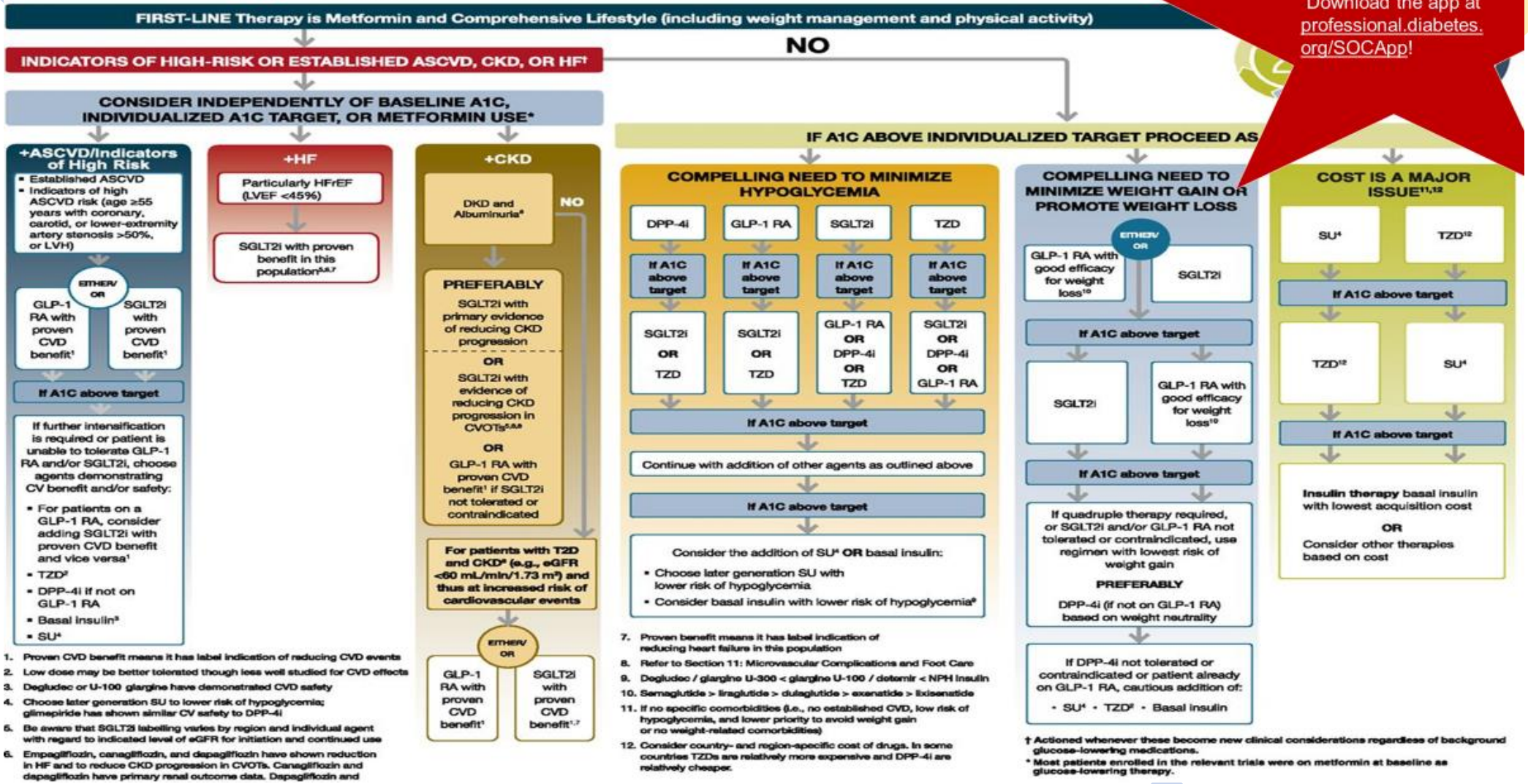


Lovshin JA, Zinman B. Nat Rev Endocrinol. 2013;9(11):635-636.
Fu AZ et al. Diabetes Obes Metab. 2011;13(8):765-769.
(UKPDS F/U) Holman, R. R., et al. (2008). NEJM, 359, 1577-1589.
doi:10.1056/NEJMoa0806470 (legacy effect)

American Diabetes

From: **9. Pharmacologic Approaches to Glycemic Treatment: Standards of Medical Care in Diabetes—2021**

Download the app at professional.diabetes.org/SOCApp!



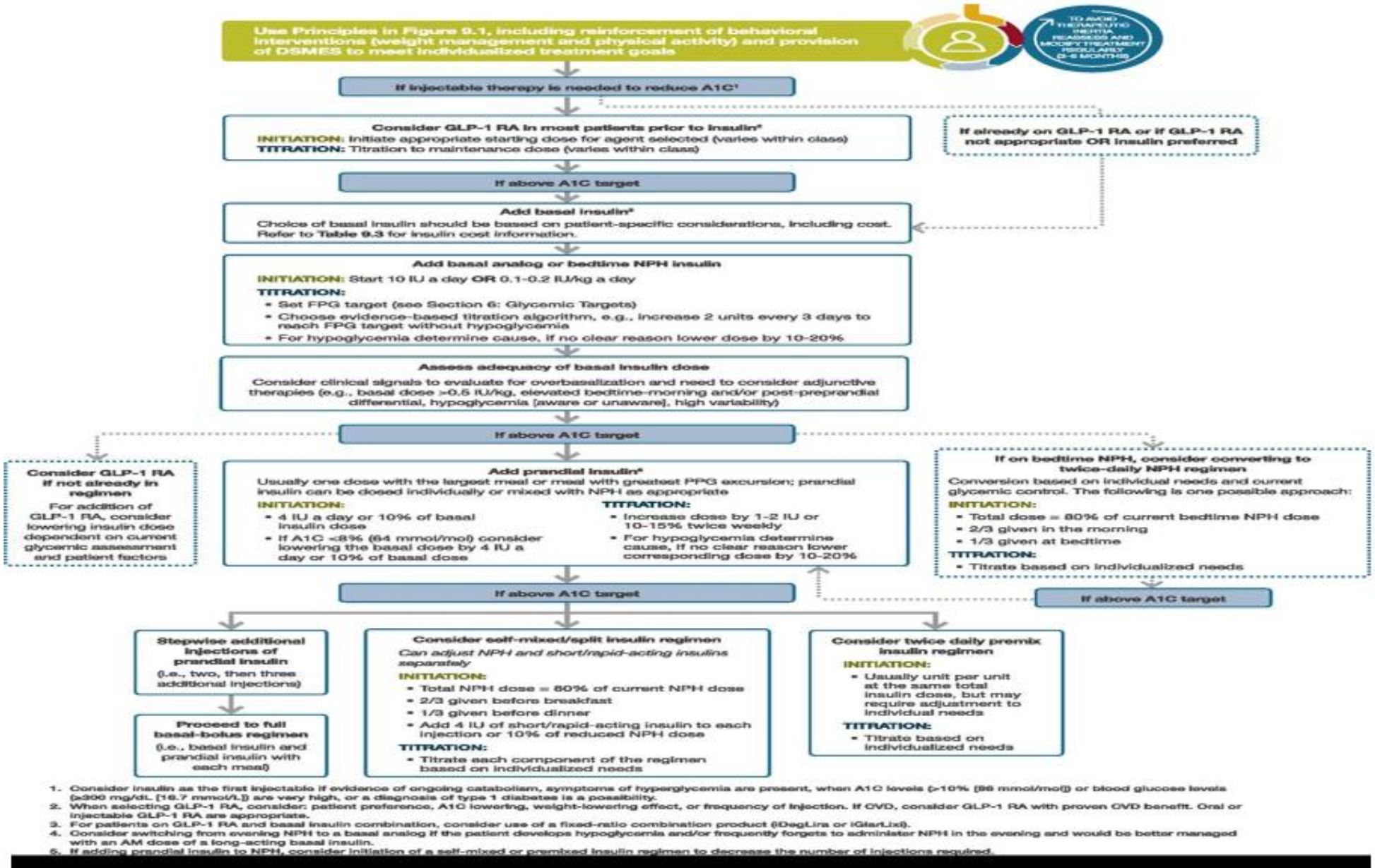
1. Proven CVD benefit means it has label indication of reducing CVD events
2. Low dose may be better tolerated though less well studied for CVD effects
3. Degludec or U-100 glargine have demonstrated CVD safety
4. Choose later generation SU to lower risk of hypoglycemia; glimepiride has shown similar CV safety to DPP-4i
5. Be aware that SGLT2i labelling varies by region and individual agent with regard to indicated level of eGFR for initiation and continued use
6. Empagliflozin, canagliflozin, and dapagliflozin have shown reduction in HF and to reduce CKD progression in CVOTs. Canagliflozin and dapagliflozin have primary renal outcome data. Dapagliflozin and
7. Proven benefit means it has label indication of reducing heart failure in this population
8. Refer to Section 11: Microvascular Complications and Foot Care
9. Degludec / glargine U-300 < glargine U-100 / detemir < NPH insulin
10. Semaglutide > lixisenatide > dulaglutide > exenatide > lixisenatide
11. If no specific comorbidities (i.e., no established CVD, low risk of hypoglycemia, and lower priority to avoid weight gain or no weight-related comorbidities)
12. Consider country- and region-specific cost of drugs. In some countries TZDs are relatively more expensive and DPP-4i are relatively cheaper.

† Actioned whenever these become new clinical considerations regardless of background glucose-lowering medications.

* Most patients enrolled in the relevant trials were on metformin at baseline as glucose-lowering therapy.

American Diabetes Association®

From: **9. Pharmacologic Approaches to Glycemic Treatment: Standards of Medical Care in Diabetes—2021**



1. Consider insulin as the first injectable if evidence of ongoing catabolism, symptoms of hyperglycemia are present, when A1C levels (>10% [86 mmol/mol]) or blood glucose levels (>300 mg/dL [16.7 mmol/L]) are very high, or a diagnosis of type 1 diabetes is a possibility.
2. When selecting GLP-1 RA, consider: patient preference, A1C lowering, weight-lowering effect, or frequency of injection. If CVD, consider GLP-1 RA with proven CVD benefit. Oral or injectable GLP-1 RA are appropriate.
3. For patients on GLP-1 RA and basal insulin combination, consider use of a fixed-ratio combination product (iDegLira or iGlarLixi).
4. Consider switching from evening NPH to a basal analog if the patient develops hypoglycemia and/or frequently forgets to administer NPH in the evening and would be better managed with an AM dose of a long-acting basal insulin.
5. If adding prandial insulin to NPH, consider initiation of a self-mixed or premixed insulin regimen to decrease the number of injections required.

Action Item 5:

Leverage technology in practice

Meta-Analysis: Most Effective Care Management Used Technology to Support Communication and Treatment

Examples of technology:

- Cloud-based diabetes management program
- Technology-based case management via telehealth glucose monitor
- Mobile diabetes management software supporting automated coaching and patient-provider portal

Example of technology in management:

- Continuous glucose monitor (CGM)
- Software to upload glucose meter data
- Technology to share blood glucose log and other health data in multiple places within practice

Powell et al. Diabetes Obes Metab. May 2021

Discussion

- Do we use these technologies in our institution?
- Can we incorporate those that are missing?
- Can we train our providers and patients on using CGMs to reach target glycemic goals faster?

Action Item 6:

Empower patients with type 2 diabetes to actively manage their diabetes

Therapeutic Inertia at a Glance

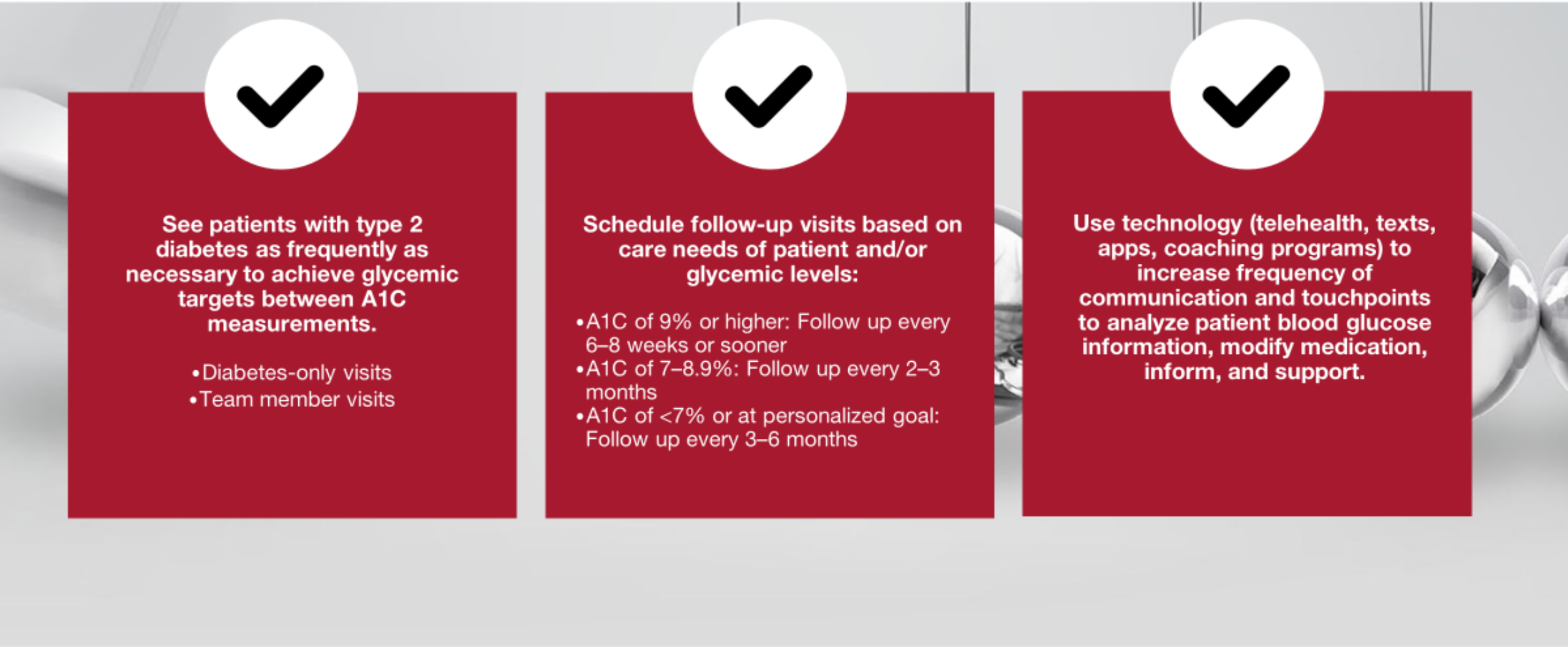
We know you have limited time with patients, so try to:

- Talk about A1C at every visit
- Cover one or two additional timely topics at each visit—like if they say they don't understand their treatment plan or can't afford their medicines
- Assess for hypoglycemia at every visit

Action Item 7:

Follow-up and manage time

OTI: Follow-Up Best Practices



See patients with type 2 diabetes as frequently as necessary to achieve glycemic targets between A1C measurements.

- Diabetes-only visits
- Team member visits

Schedule follow-up visits based on care needs of patient and/or glycemic levels:

- A1C of 9% or higher: Follow up every 6–8 weeks or sooner
- A1C of 7–8.9%: Follow up every 2–3 months
- A1C of <7% or at personalized goal: Follow up every 3–6 months

Use technology (telehealth, texts, apps, coaching programs) to increase frequency of communication and touchpoints to analyze patient blood glucose information, modify medication, inform, and support.

Best Practice Actions to Overcome Therapeutic Inertia

Clinician-Related

- Set clear glycemic goals and timelines with patients
- Empower team members to independently manage medications (algorithms or protocols)
- Use technologies/CGM to adjust therapy between A1C tests
- Develop and refer to a team of clinicians and community resources

Patient-Related

- Recognize progressive nature of type 2 diabetes and progressive need to change therapy
- Share in treatment decision making with clinicians—include SDOH
- Seek information and learn to be a self-manager—attend DSMES services and MNT
- Use technology to evaluate personal glycemic profiles

System-Related

- Identify patients with diabetes who are newly diagnosed or not meeting goals with an A1C >9%
- Support, empower, and use a team approach
- Provide access to DSMES services
- Address SDOH in community
- Use technologies in office practices

Doctor/Patient Conversation

Dr. Jose Leon
Chantel Moore

What can make your blood sugar **go up**?

- Too much food, like a meal or snack high in carbohydrates (starches), or eating more carbohydrates than usual
- Not enough physical activity
- Not taking enough insulin or other diabetes medications
- Side effects from other medications, such as steroids
- Getting sick—your body releases hormones to get better and those hormones can raise blood sugar levels
- Stress or pain, which can produce hormones that also raise blood sugar levels
- Menstrual periods, which also cause changes in hormone levels
- Dehydration

What can make your blood sugar **go down**?

- Not eating enough food. This could be eating a meal or snack with fewer carbohydrates than usual or missing a meal or snack
- Alcohol, especially on an empty stomach. Alcohol use can cause dangerously low blood sugar. Low blood sugar can also happen many hours after alcohol use
- Too much insulin or other diabetes medications
- Side effects from other medications
- More physical activity or exercise than usual—physical activity makes your body more sensitive to insulin and can lower blood sugar

How can you track your blood sugar?

There are two ways to keep track of your blood sugar levels:

- Using a blood sugar meter or continuous glucose monitor (CGM) to measure your blood sugar level at that moment
- Getting an A1C blood test at least twice a year to find out your average blood sugar for the past two to three months

What does an A1C/eAG result mean?

Usually, your A1C gives you general trend in your blood sugar that matches what you see with your day-to-day blood sugar checks. Sometimes, however, your A1C result may seem higher or lower than you expected. That may be because you aren't checking your blood sugar at times when it's very high or very low.

Use the chart below to understand how your A1C result translates to eAG. First find your A1C number on the left. Then read across to learn your average blood sugar for the past two to three months.

A1C	Average Blood Glucose (eAG)
6%	126 mg/dL
6.5%	140 mg/dL
7%	154 mg/dL
7.5%	169 mg/dL
8%	183 mg/dL
8.5%	197 mg/dL
9%	212 mg/dL
9.5%	226 mg/dL
10%	240 mg/dL
10.5%	255 mg/dL

The relationship between A1C and eAG is described by the formula 28.7 X A1C – 46.7 = eAG.

Communication with Patient with Diabetes Builds Trust and Promotes Medication Adherence

Patient's ability to maintain medication and treatment regimens are impacted by many factors not always explored[1]

A disconnect between patients and clinicians with type 2 diabetes contributes to therapeutic inertia[2]

Patients are more frustrated with lack of treatment progress than their clinicians

Patients can do more than their clinicians believe they can

1. Edelman SV, Polonsky WH. Diabetes Care 2017;40:1425-1432
2. Edelman SV, Wood R, Roberts M, Shubrook JH. Clinical Diabetes 2020;38:222-229

Empower Through Critical Conversations with Patient with Type 2 Diabetes and Families

Type 2 diabetes is progressive	Changes over time	Early glycemic and risk factor management is important to long-term health
Treatment changes over time	Not a personal failure	More than one medication often needed to manage risk
Set expectations	Set individual targets and goals in shared-decision-making (SDM)	Timelines are important to long-term health legacy
Explore challenges together	Beliefs around medications	SDOH

strategies recognize the tenets of osteopathic medicine, in which the person is a unit of body, mind, and spirit.

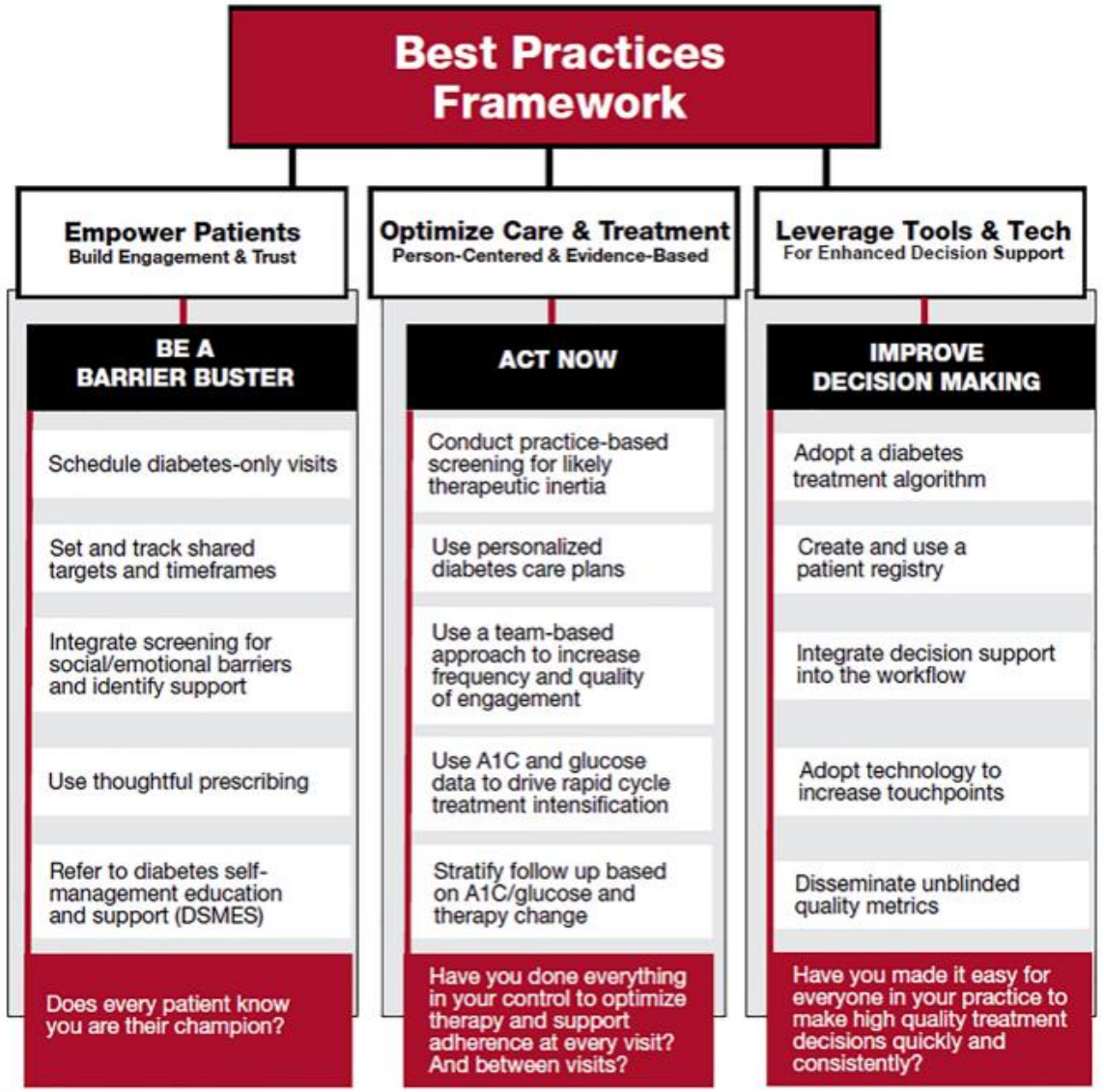
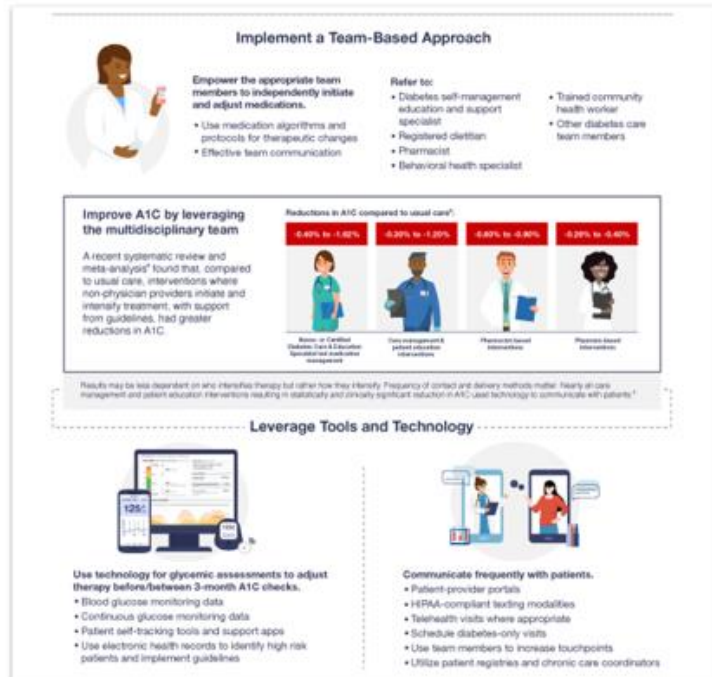


Figure 1:

The American Diabetes Association (ADA) overcoming therapeutic inertia best practices framework.

Discussion

Overview for Tackling Therapeutic Inertia



Learn more at TherapeuticInertia.Diabetes.org.

Facilitating discussions with your patients with diabetes

Moving forward

CREATE PERSONALIZED

SHARE DIFFICULTIES WITH MANAGING YOUR DIABETES - YOUR HEALTH CARE TEAM CAN HELP

Conversation Tips
- I take your diabetes seriously.
- Tell me the things that are getting in the way of managing your diabetes.
- I am on your side and will support you in whatever way you need to manage your diabetes well.

USE A TEAM BASED APPROACH

YOU CAN'T DO THIS ALONE

Conversation Tips
- Work with your care team, family and friends.
- Use your diabetes care support team + community resources to help you.
- Diabetes Self-Managment Education and Support (DSMES) works.

Response Guide

1 How long have you had diabetes?

Action tips	Talking points
For **any answer**:	
▪ **Keep in mind** that therapeutic inertia can happen at any time in your patient's journey.	▪ "Managing diabetes is a journey. Sometimes it may feel like one step forward and two steps back. That's okay. My job is to help you stay on track and meet your goals."

2 How do you think your diabetes treatment is going?

Action tips	Talking points
If answered **Great—I'm totally on top of it**:	
▪ **Celebrate** their successes. ▪ **Remind** them that you can help if anything changes.	▪ "I'm glad to hear that! And you know I'm always here to support you and help you meet your goals."
If answered **Okay—but it could be better** or **Not so good—something needs to change**:	
▪ **Remind** them that you can help.	▪ "Thanks for being honest about how you're feeling. Managing diabetes is hard, but I'm here to help. Let's take a closer look at what's going on."

SET SHARED A1C GOALS & TIMEFRAMES

THE NATURE OF TYPE 2 DIABETES IS TO CHANGE OVER TIME

Conversation Tips
- Diabetes is serious. The more seriously you take it the better you will do over the long-term.
- Your actions can make a big difference in how well you do.
- Meeting glycemic goals = fewer symptoms, better QOL & keeping complications at bay.
- Because your diabetes changes doesn't mean you have done something wrong.

YOUR TREATMENT PLAN WILL CHANGE OVER TIME

Conversation Tips
- Adding medications may be necessary.
- It is great that we have newer meds to help at each stage along your journey with diabetes.
- Adding new medications, including insulin, does NOT = failure.
- We will work together to find a treatment plan that works for you (thoughtful prescribing).

BARRIERS & PROVIDE SUPPORT

Patient centered
- Identify barriers

Shared Decision Making
- Present Options and Provide Choices

Motivational Interviewing
- Empower patients

Involve family and supports

Provide referrals and resources

Team-Based Decision-Making

Q&A Session

Complete our Post Evaluation Survey

National Center for Health in Public Housing

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Thank you!