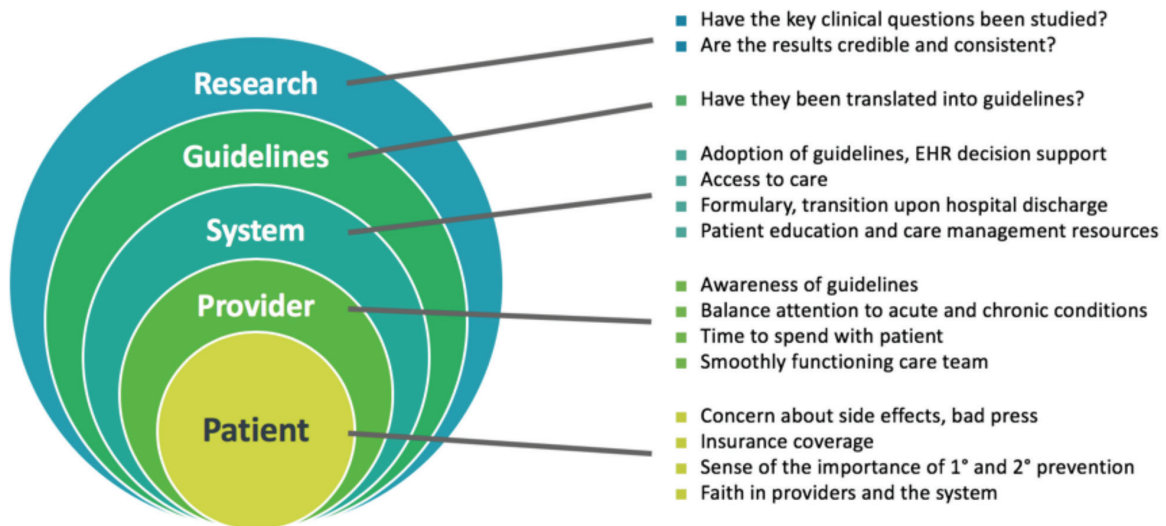


Therapeutic inertia (also referred to as “clinical inertia”) is a lack of treatment intensification for a patient who has not reached evidence-based goals, in this case, patients with Type 2 diabetes with uncontrolled blood sugar levels (hemoglobin A1c or simply A1c).

## Therapeutic Inertia

There is no single, identifiable cause for therapeutic inertia. Research, guidelines, systems, physicians, and patients are all potential factors. Patients express concern about medication side effects, a lack of confidence in their provider and/or the healthcare system, as well as in costs associated with newer diabetes medications. Newer drugs often are not added to prescription drug lists (“formularies”) that determine which drugs will be covered by insurers or health plans. A non-covered medication significantly increases patients’ out-of-pocket costs, making patients and providers reluctant to initiate new medications.

**Figure 1. Potential Causes: Therapeutic inertia**



Providers are also challenged by the short duration of patient visits and availability of a smoothly functioning diabetes care team for support (Figure 1).

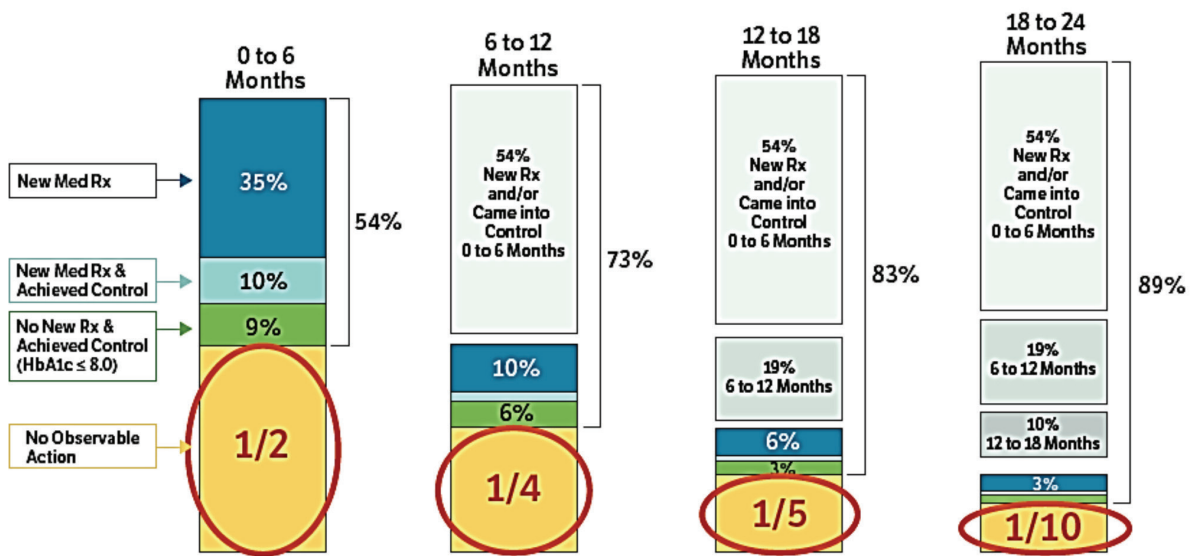
### What Are the Consequences of Long-Term Therapeutic Inertia?

Consequences from not intensifying therapy for patients with Type 2 diabetes include microvascular complications such as vision loss, nerve pain, chronic kidney disease, poor wound healing, and amputation. Recent evidence also suggests macrovascular complications can lead to heart attack, stroke, and cardiovascular disease when a patient does not receive needed adjustments to therapy over time.

### All Patients Are Not Receiving Treatment Aligned with Guidelines

Using data from the Optum® Analytics database,<sup>1</sup> AMGA looked at electronic health records across 22 high-performing healthcare organizations, identifying nearly 28,000 adult patients with Type 2 diabetes who had uncontrolled glycemia (A1c ≥ 8%). AMGA followed these patients from January 2012 to June 2017 to see if they had moved into glycemic control (A1c < 8) or

**Figure 2. Potential therapeutic inertia and observable actions over 6-24 months among bolus naïve patients with an A1c > 8%**



received a prescription for a new class of diabetes medication. Although ADA guidelines recommend increasing therapy every 3 months when a patient has not reached target A1c, after six months, 55%, or about half, of patients with uncontrolled glycemia (A1c ≥ 8%) showed no signs of therapy adjustment or of moving into glycemic control. Even by the end of two years, a tenth of patients with uncontrolled glycemia (A1c ≥ 8%) still had not received additional therapy (Figure 2).

### What Do Patients Least Likely to Receive Appropriate Treatment Have in Common?

Patients with more prescriptions in general, and those on more second-line diabetes medications specifically, were least likely to receive a new prescription or move into glycemic control. Differences by race were also observed. At the end of two years, 15% of African American patients had received no observed action, compared to 11% of White patients. Other characteristics of patients not receiving appropriate therapeutic action include having a "normal" body mass index and having Medicaid public insurance or no insurance at all.

### Steps to Reduce Therapeutic Inertia

- Use EHR data to:
  - Identify patients who may need additional diabetes care and schedule an office visit with monthly follow-up until their blood glucose is at goal
  - Analyze providers' diabetes management decisions to identify patterns alerting you to therapeutic inertia. Enlist champions who can mentor, coach and work with other providers to set goals, initiate, and adjust treatment over time until goals are achieved *(See campaign planks: Measure HbA1c Every 3-6 Months and Contact Patients Not at Goal and with Therapy Change within 30 days.)*
- Provide specific clinical decision-making support tools for providers at the point of care with guidance on evidence-based treatment algorithms, include strategies for managing conditions associated with intensifying treatment. *(See campaign planks: Embed Point-of-Care Tools and Adopt a Treatment Algorithm.)*
- Provide simulated clinical cases to illustrate effective therapy options for complex or fragile patients who are vulnerable to adverse pharmacotherapy outcomes as well as the cultural sensitivities inherent to minority and underserved populations. *(See campaign planks: Build an Accountable Diabetes Team and Integrate Emotional and Behavioral Support.)*
- Use patient-facing, [Diabetes Medication Choice decision aid cards](#)<sup>2</sup> developed by Mayo Clinic to help patients choose the medication that is best for them. Developed from information gathered in research studies, the cards address seven areas: lowering A1c; daily routine; low blood sugar; cost; daily sugar test; weight; and other considerations. *(See campaign plank: Integrate Emotional and Behavioral Support.)*

- Require routine documentation in the EHR after each office visit, virtual visit, or telephone contact stating whether clinically indicated changes in therapy were made and if not, the justification for this decision. *(See campaign plank: Build an Accountable Diabetes Team.)*
- Include behavioral therapists, coaches, counselors, and pharmacists on your diabetes care team to support shared decision-making. Arrange consultations with a pharmacist so patients can weigh the risks and benefits associated with therapy options and the consequences of choosing not to advance treatment. *(See campaign plank: Build an Accountable Diabetes Team.)*
- Prioritize patient intervention based on the patient's risk for complications, readiness to change, and resource availability. *(See campaign plank: Adopt a Treatment Algorithm.)*

**References**

1. The study used longitudinal electronic health record (EHR) data from 22 U.S. healthcare organizations who pool their EHR data as part of a national learning collaborative. All organizations in the collaborative use Optum's population health management and risk analytics platform which extracts data for multiple sources, cleans, normalizes and validates it, making it possible to conduct accurate lateral analysis and comparisons. Optum Analytics' clinical database is comprised of longitudinal ambulatory EHR data from 106 million patients treated by 84 U.S. healthcare organizations. The longitudinal patient records are de-identified and become part of one of the largest integrated data warehouses in the U.S., also managed by Optum.
2. [www.ihl.org/resources/Pages/Tools/SharedDecisionMakingDiabetesMedicationDecisionAid.aspx](http://www.ihl.org/resources/Pages/Tools/SharedDecisionMakingDiabetesMedicationDecisionAid.aspx)

*Developed in partnership with Optum, AMGA's Distinguished Data & Analytics Corporate Collaborator*