

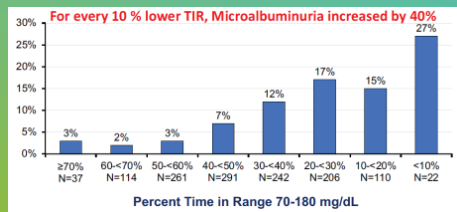
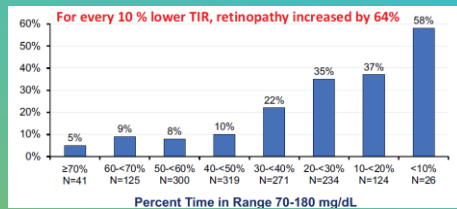
Tracking time in range can help.³

- Reveal your patient's blood glucose levels, as well as changes, for any time frame
- Help you analyze glucose fluctuations even when HbA1c is on target, informing therapy decisions
- Provide more accurate glycaemic control assessment for patients with iron deficiency or other anaemias, hemoglobinopathies, or pregnancy
- Motivate patients to make healthier choices

Correlation between Time in Range and Diabetes Complications

Time in Range (TIR) is strongly associated with HbA1c. As a result, it is also associated with diabetes complications. As TIR increased, the risk for complications decreased.

In a re-analysis of a landmark study (DCCT), researchers found the association of Time in Range 70 - 180 mg/dL (3.9-10.0 mmol/L) with the development or progression of retinopathy and development of microalbuminuria.⁵



Although the targets for TIR can be difficult to achieve for some people with Diabetes, the consensus group that developed the recommendations of self-monitoring blood glucose (SMBG) system suggests using a step-by-step approach to achieve those goals. Even small changes can have a big effect: each additional increase of 5% of the TIR is associated with clinically significant benefits.⁸⁻¹⁰

By working collaboratively with your patients to personalize treatment objectives and implement small changes that can lead to success, you can help them to make real changes to their health.

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STAYING IN RANGE



Introduction

Detailed tracking of blood glucose levels allows patients to see how their actions affect their well-being. By monitoring time in range (TIR) or Tests in Range (TiR), you can help your patients take greater control of their health. Even small, incremental successes in keeping blood glucose levels at an acceptable range can have big effects on your patients' diabetes complications.¹

What is Time in range or Tests in Range?

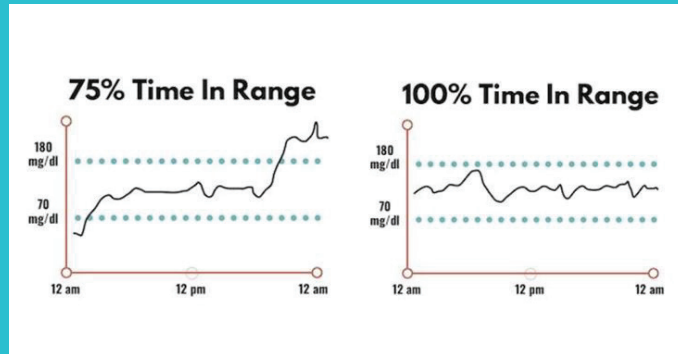
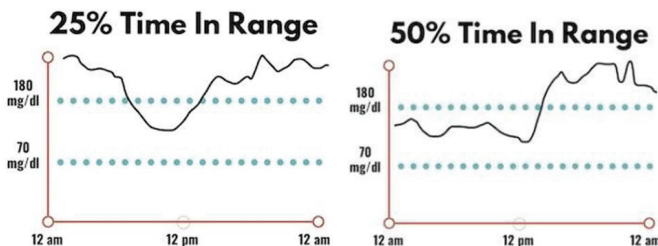
Time in range (TIR) is an actionable metric that captures the percentage of time people with diabetes experience highs, lows and in-range each day. It can either be a percentage of continuous glucose monitoring (CGM) results or an average of hours a patient stays in range every day.¹

Tests in Range (TiR) is the percentage of measured blood glucose values that are within range (a BGM metric). For example, %70 TiR is equal to 7 BG tests in range out of every 10.² Tests in Range is a way of demonstrating this BG metric in the same way that people are used to Time in Range.²

For most people with type 1 and type 2 diabetes, the target range is 70 to 180 mg/dL (10.0-3.9 mmol/L), with more than 70 percent of their measurements within TIR limits.¹

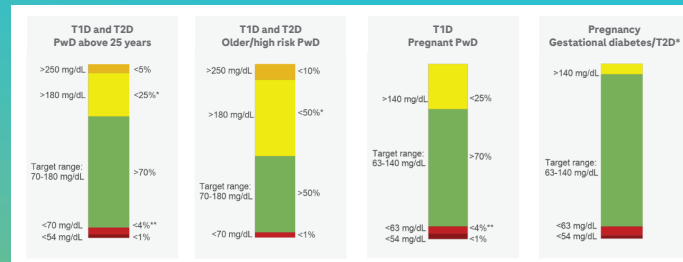
TIR correlates inversely with HbA1c: a %50 TIR corresponds to a HbA1c of approximately %7.9, and a %70 TIR corresponds to a HbA1c of %7. Each variation of %10 in TIR corresponds to a change in HbA1c of approximately %0.5.¹

The example graphics below show various levels of Time in Range, from %25 to %100:⁷



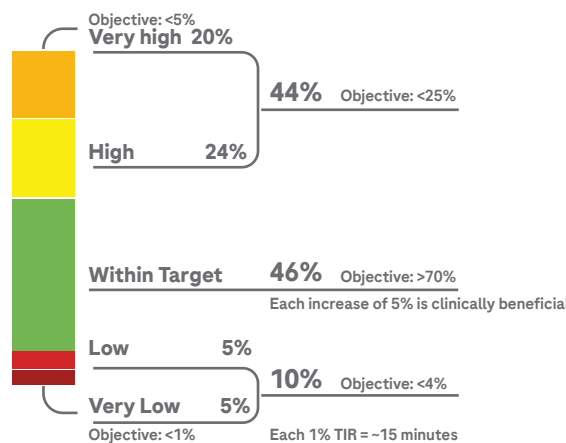
Time in Range Goals: Target guidance for glucose control of different patient groups

According to the International Consensus on Time in Range: different target ranges can be set to accommodate the needs of specific patient groups:⁴



*Due to limited evidence, percentages of TIR/TBR/TAR for women with gestational diabetes T2D in pregnancy have not been included here.

TRI Objectives For Diabetes type 1 and type 2



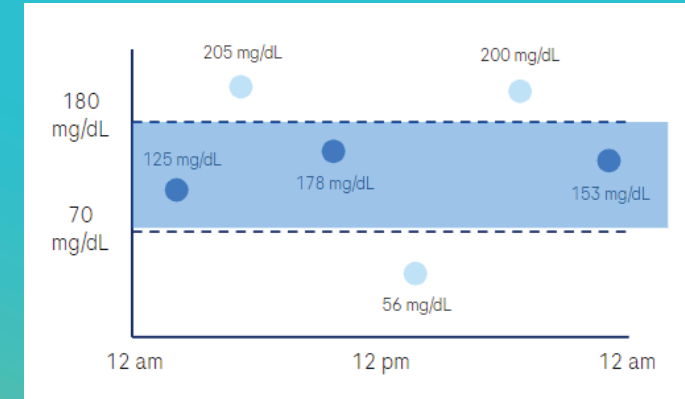
Goals vary based on several individual factors such as type of diabetes, medications, age, health and food. In general, people with diabetes should aim for as much time as possible within the target range, in order to avoid hypoglycemia.

People younger than 25 with an HbA1c target of less than 7.5 percent should aim for more than 60 percent of measurements to fall within TIR limits. Older people or those with high-risk complications such as cardiovascular or kidney disease, have a goal of more than 50 percent of measurements within the target range.³

How to measure TIR:

In order to determine the most accurate time in range (TIR), the more blood glucose tests, the better. PwDs should make sure to test throughout the day, including after meals and overnight.

To calculate TIR with a blood glucose meter, PwDs should take the percentage of data points in range over a period of time (e.g., 14 days).⁷



If you are using BGM data, TIR is the percentage of data points that fall in range over a period of time. In the graphic above, TIR would be 50% - half the readings are in-range and half are out-of-range TIR, or even Tests in range, can also help you analyze the blood glucose levels of patients using structured testing.⁶