

SMBG

Is it really useful for T2D not on insulin??

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Service for asking stupid questions



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- Excuse me, is this the Service for asking stupid questions?

WHY SMBG ?

(Mayo Clinic 2012)

- 1-Judge how well you're reaching overall treatment goals
- 2-Understand effect of diet and exercise
- 3-Understand how other factors, such as illness or stress, affect blood sugar levels
- 4-Monitor the effect of diabetes medications on blood sugar levels
- 5-Identify blood sugar levels that are dangerously high or low

MAYO
CLINIC



1-Judge how well you're reaching overall treatment goals

- What is overall TTT goals?
 - HbA1c
 - MicroVX
 - MacroVX
 - Answer
 - 2-3 months
 - Years
 - decades
- ACCORD**
VADT
ADVANCE
UKPDS
KUMAMOTO
STENO 2

2-Understand effect of diet and exercise

- **EMPOWERMENT ON DIET/ EXERCISE BETTER AND LESS EXPENSIVE**

The 10-Year Cost-Effectiveness of Lifestyle Intervention ...

The Diabetes Prevention Program Research Group*,Diabetes Care :April 2012↓

3-Understand how other factors, such as illness or stress, affect blood sugar levels

- AN EPIPHENOMENON
- NOT AN ISSUE SINCE IT IS ALREADY KNOWN

4-Monitor the effect of diabetes medications on blood sugar levels

- **MOST ORAL THERAPIES ACTS ON THE LONG RUN
>1/2 LIFE = 6-24HS**
- **MONITORING PRE/POST PRANDIAL**
 - **DO NOT GIVE IDEA ABOUT MEDICATION**
 - **BUT ABOUT NUTRITION WICH SHOULD BE TEACHED THUS EMPOWERING THE PATIENT.**

SMBG ACCURACY IS A JOKE

Celle-là



elle est super !

Johnson & Johnson's LifeScan division announced Monday that it is recalling and replacing about 90,000 units of its OneTouch Verio IQ blood glucose meter in the U.S. due to operational dysfunctions
Source:Reuter-Diabetes pro-smart 28 March 2013.

FINALY:When to test your blood sugar **(Mayo Clinic honest conclusion 2012)**

- Type 2 diabetes.** If you take insulin to manage type 2 diabetes, you **may** have blood sugar testing one or more times a day, depending on the number of insulin doses you take.
- If you manage type 2 diabetes with noninsulin medications **you may not** need to test your blood sugar daily.

EVIDENCES= FEW HEAD TO HEAD



Efficacy of self monitoring of blood glucose in patients with newly diagnosed type 2 diabetes (ESMON study): randomised controlled trial

BMJ 2008; 336 doi: <http://dx.doi.org/10.1136/bmj.39534.571644.BE> (Published 22 May 2008)

At the end of the year, HbA1c was no better in the self monitoring group.

METANALYSIS 12 studies involving 3259 patients with diabetes who are not insulin-dependent:

-minimal impact on glycemic control

-Expensive

-Consequently: no long-term benefit.

Hypoglycemic episodes were reported more often in the SMBG group than in the control group in 4 of the studies.

Uriell L. Malanda, MD, and colleagues (University Medical Center in Amsterdam)

Cochrane Database of Systematic Reviews. 2012, Issue 1.

ADA 2013 Jan Diab Care.

- Prescribed as part of a **broader educational context**
SMBG results **may** be helpful = **E**
- For patients using less frequent insulin injections or noninsulin therapies. (**E**)

COST FOR SMBG T2D IN SOUTH BANK v-s USA or western europe

GNI= 47000 \$ USA””

33M T2D

20M NOT ON INSULIN

20 BILLION \$ MARKET

GNI= 4000\$ EAST MED””

- **Structured Testing Program Study=7 tests/day* 25-40% GNI**
 - 3.5\$ day= 1260\$ year
 - HbA1c (1.2% vs -0.9%, $P = .04$)
- 50ct/test/X2/day=1\$
- 360 \$/year
 - **Between 8 -14 % GNI**

“”Sources for entire population salaries and job offers sites. Jan 2013

* *Diabetes Care*. 2011;34:262-267

Cost effectiveness of self monitoring of blood glucose in patients with non-insulin treated type 2 diabetes: economic evaluation of data from the DiGEM trial


BMJ 2008; 336 doi: <http://dx.doi.org/10.1136/bmj.39526.674873.BE> (Published 22 May 2008)

NO improve of diabetes control BUT

**cost more and even more importantly,
decreased quality of life.**

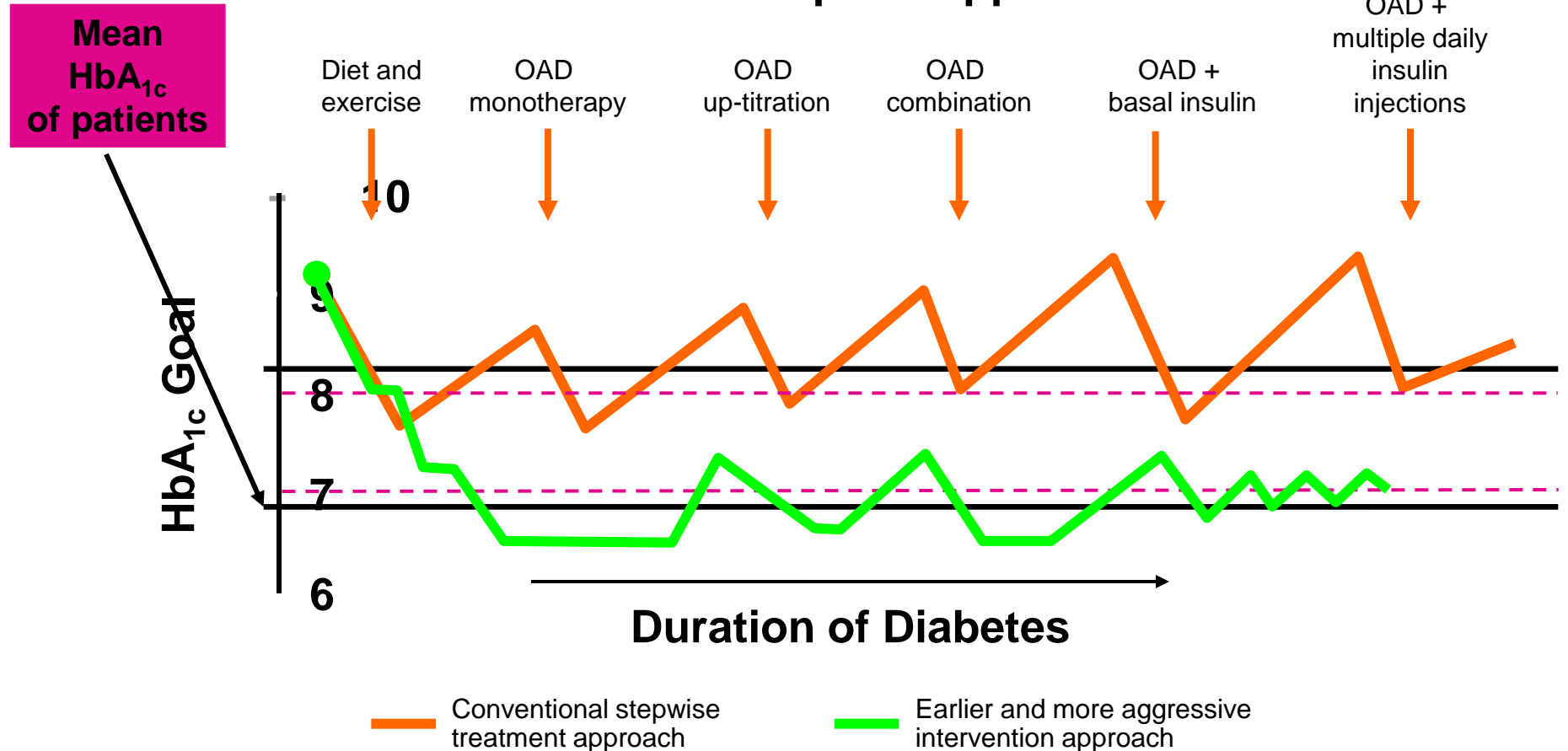
THE CHALLENGE



 American Diabetes Association.
Care • Cure • Commitment[®]

Proactive Therapy May Improve Treating to Target Compared With Conventional Therapy

Published Conceptual Approach



OAD=oral antihyperglycemic agent.

Adapted from Campbell IW. Need for intensive, early glycaemic control in patients with type 2 diabetes. *Br J Cardiol.* 2000;7(10):625–631. Del Prato S et al. *Int J Clin Pract.* 2005;59:1345–1355.

DOES SMBG (per-se) LOWERS BLOOD GLUCOSE ?

- ANSWER= NO
- EMPOWERMENT DOES
- LSM/MEDECINE DOES.

THANK YOU

