Warwick Medical School

Type 2 diabetes in adults
NICE guideline Draft for consultation, January to March 2015
Dr Roger Gadsby MBE


THE UNIVERSITY OF WARWICK

Warwick Medical School

How the guideline was developed

Scope – update of CG 87 from 2009. (which was a rapid update of CG 66 from 2008)

Some recommendations from 2009 repeated in 2015 eg blood pressure. Doesn't discuss lipids.

Guideline development group Chair – Dr Damien Longson (Psychiatrist), 3 GP's (1 Academic) , 3 diabetologists (1 academic), nurses, and people with diabetes

Very strict conflict of interest policy

Controversy!

Warwick Medical School

Glucose lowering section has been attacked. The word "bonkers" has been used to describe it!

Critical editorial published in BJDVD (Dr Paul O'Hare is first author)

Much of the guideline is non controversial and has sensible recommendations regarding lifestyle, patient education, monitoring and targets

Recommendations - Targets

- 1.6.5 Involve adults in decisions about their HBA1 Target
- 1.6.7 Set a target HBA1c level of 48mmoles/mol (6.5%) for most adults with type 2 managed by either lifestyle and diet or with one oral agent that is not associated with hypoglycaemia
- 1.6.8 If HBA1c levels rise to 58mmoles/mol (7.5%) or higher, intensify drug treatment, set a target of 53 mmoles/mol (7%) and reinforce advice about diet, lifestyle and adherence

Recommendations - Targets

1.6.9 Relax targets on a case by case basis

- In people unlikely to achieve longer term risk benefit (e.g people with reduced life expectancy)
- From whom tight glycaemic control poses risk
- People with a high risk of the consequences of hypoglycaemia (e.g. people at risk of falling, people who drive, people who operate machinery)
- Where intensive management is not appropriate e.g people taking multiple drugs and people with significant co-morbidities

These factors will need particular consideration for people who are old and frail

Recommendations – self monitoring

- 1.6.12 Take DVLA guide into account when offering smbg
- 1.6.13 Do not routinely offer smbg unless the person is on insulin, experiences symptomatic hypoglycaemia, is on oral medication that may increase their risk of hypoglycaemia while driving or operating machinery
- 1.6.14 If adults with T2 DM are self monitoring carry out a structured assessment at least annually to include skills, quality and frequency of testing, how results are used, impact on Quality of Life, the continued benefit and equipment used

Recommendations – Glycaemic lowering therapy

1.6.16 Offer standard release metformin as initial drug treatment

1.6.17 Gradually increase dose to minimise GI side effects

1.6.18 Review if eGFR is below 45. STOP if eGFR is below 30

1.6.19 If standard release metformin is contra indicated or not tolerated consider repaglinide as initial drug therapy. Advise the person that if treatment with repaglinide does not control HBA!c then the person would need to change to pioglitazone, a sulphonylurea, or a DPP4 inhibitor before adding another treatment

1.6.20 If both metformin and repaglinide are contraindicated or not tolerated consider pioglitazone as initial drug treatment

CONTROVERSY!

Repaglinide, was launched in the 1990's and died soon after! Because:-

It causes hypos and weight gain

It has to be taken with each meal i.e. tds (so poor adherence)

It has a wide dose range. According to SPC start at 0.5mgs tds then uptitrate every 2 weeks according to smbg results!! Costs of smbg and multiple visits to practice diabetes team have not been factored in by guideline group.

Prescribers don't know how to use it, so education programme will be needed (again costs not factored in)

CONTROVERSY

Pioglitazone prescribing has been reducing in England because

1 Association with rosiglitazone which was withdrawn in 2010. Though Pio has RCT and observational data to suggest CVD protection

2 It causes weight gain (due to fluid retention)

3 It is associated with increase in admissions for CCF

4 It is associated with an increase in fracture rates

5 It was thought to be associated with an increase in bladder cancer but recent evidence suggests this is probably not true

There is some uncertainty over the correct dose (My opinion its 45mgs daily)

So prescribers may need education in how to prescribe and use it

CONTROVERSY

Why is extended release metformin not mentioned as per

Recommendation 29 of Guideline CG 66 “Consider a trial of extended absorption metformin where GI tolerability problems prevents continuation of standard release metformin therapy”

If the new GDG have not reviewed any new evidence they should, in my opinion, have this recommendation in the 2015 draft

Recommendations – Glycaemic control continued

First Intensification of Drug Treatment

1.6.22 If initial therapy with standard release metformin has not controlled HBA1C to below the persons individually agreed threshold for intensification

- Offer metformin and pioglitazone
- If pio not tolerated or contra-indicated use Met plus sulphonylurea
- If pio and sulp are contraindicated or not tolerated use metformin plus DPP4

1.6.23 If initial therapy with repaglinide has not controlled … Consider

- Piog plus sulph
- Piog plus DPP4
- Sulp plus DPP4

Recommendations – Glycaemic Lowering continued

1.6.24 If initial drug treatment with piog has not controlled … Consider

- Piog plus Sulph
- Piog plus DPP4

1.6.25 If initial drug with DPP4 has not controlled … Consider

- DPP4 plus sulph

1.6.26 If initial treatment with sulp has not controlled … Considee

- Sulph and DPP4
- (choose option with lowest acquistion cost)

Treatment combinations of medicines with SGLT2 may be appropriate for some people see NICE Guidance on dapagliflozin and canagliflozin

CONTROVERSY

NICE has done TA's on dapa and cana (and empla) so why is information on their use been added as a subscipt in smaller font size at the end of the section.

Why are they not therefore added in the main text (and in the algorithms) at the points where the TA recommends their use??

Recommendations – Second intensification

1.6.27 If met plus pio not controlled HBA1c to below the persons individually agreed threshold for intensification

- Consider Met plus piog plus sulph
- If pio is contraindicated consider met plus sulph plus DPP4
- Or consider insulin based treatments

If using DPP4 choose the option with the lowest acquisition cost

Recommendations – second intensification

1.6.29 If combination therapy with 2 oral drug treatments has not controlled HBA1c …… consider Met plus sulph and GLP-1 instead of 3 orals or 2 orals plus insulin. Consider if

- Have BMI of 35 or higher AND specific psychological or medical problems associated with obesity OR
- Have a BMI lower than 35 for whom insulin would have occupational considerations or where weight loss would benefit other significant obesity related complications.
- Base the choice of the GLP-1 mimetic on persons preference after discussing risks and benefits. If more than one GLP-1 option is considered appropriate choose the one with the lowest acquisition cost

Recommendations – second intensification GLP-1

Warwick Medical School

1.6.30 Only continue GLP-1 if the person has a beneficial metabolic response (a reduction of at least 11 mmmol/mol (1%) in HBA1c and a weight loss of at least 3% in body weight at 6 months)

CONTROVERSY In my opinion it should read OR not AND)

1.6.31

Only offer a GLP-1 in combinatin with insulin in a specialist care setting

CONTROVERSY Why? What Evidence for this?

Recommendations – Insulin

Warwick Medical School

1.6.32 When starting insulin use a structured education programme empl0ying active dose titration that includes Structured education, telephone support, smbg etc

1.6.33 Continue metformin

1.6.34 Initiate insulin from a choice of types and regimens

- Use NPH once or twice daily

Consider long acting analogues (detemir, glargine)

- If carer needed to do injections and it would enable once daily dose
- If symptomatic hypos
- Consider pre-mix (psarticularly if HBA1c is 75 mmole/mol (9%) or higher

1.6.35 Consider switching to basal analogue if hypos

Recommendations - Complications

Warwick Medical School

1.7.2 Gastroporesis Consider trial of Metoclopramide, domperidone or erythromycin

1.7.5 Autonomic neuropathy

1.7.12 ED

1.7.14 Use PDE 5 initially choosing drug with lowest acquisition cost

CONTROVERSY

Warwick Medical School

All the glucose lowering recommendations seem to mean that newer and more expensive therapies such as DPP4, SGLT2, GLP-1 and Analogue Insulin get used further down the treatment cascade.

Overall result is that glucose lowering therapy budget is cheaper!! How strange!!

What will Happen?

Warwick Medical School

" We believe that these recommendations, if enacted will undermine seriously the reputation of NICE both nationally and internationally" (Ref BJDVD editorial).

Possibilities

- GDG digs in (and NICE doesn't force them to change)
- GDG change the repaglinide section say we have listened and keep the rest
- GDG says their needs to be a rewrite (guideline publication delayed)
- They redo the glycaemic lowering section as a rapid update with new GDG (cost £0.5 million??)
- They adopt EASD/ADA guideline (metformin first then individualise after that)