

## [Barnsley Health Community Guidelines for the management of type 2 diabetes](#)

The following information is to support prescribers regarding the medicines aspects of the type 2 diabetes algorithm, please refer to the BNF or Summary of Product Characteristics for further information on contraindications, precautions, adverse effects and interactions.

### Treatment of hyperglycaemia

- Only prescribe one agent from each class.
- Substituting agents is unlikely to improve glucose control – swapping metformin plus gliclazide for metformin plus pioglitazone is likely to cause deterioration in glycaemic control.
- **Bear in mind that most of the available agents only lower the HbA1c by a maximum of 1.0-1.5% (11.0-16.5 mmol/mol). The starting HbA1c may make dual or triple therapy and/or insulin inevitable.**
- **It is important that the target HbA1c is attained and maintained.** All too frequently, people spend months, or even years, with sub-optimal control without any change in treatment. There is ample evidence that excellent glycaemic control following diagnosis in people without co-morbidity confers significant long-term cardiovascular benefit. Lost benefit at this stage cannot be recouped.

### Glycaemic target

- **An individualised target should be discussed and agreed with each patient and reviewed every 2-6 months. This goal may not be appropriate or practical for some patients and clinical judgement needs to be applied.**
- Lifestyle should be reviewed before every treatment escalation.

### Setting a target ([NICE Clinical Knowledge Summary – type 2 diabetes, 2010](#), [ADA Standards of Medical Care in Diabetes, 2016](#))

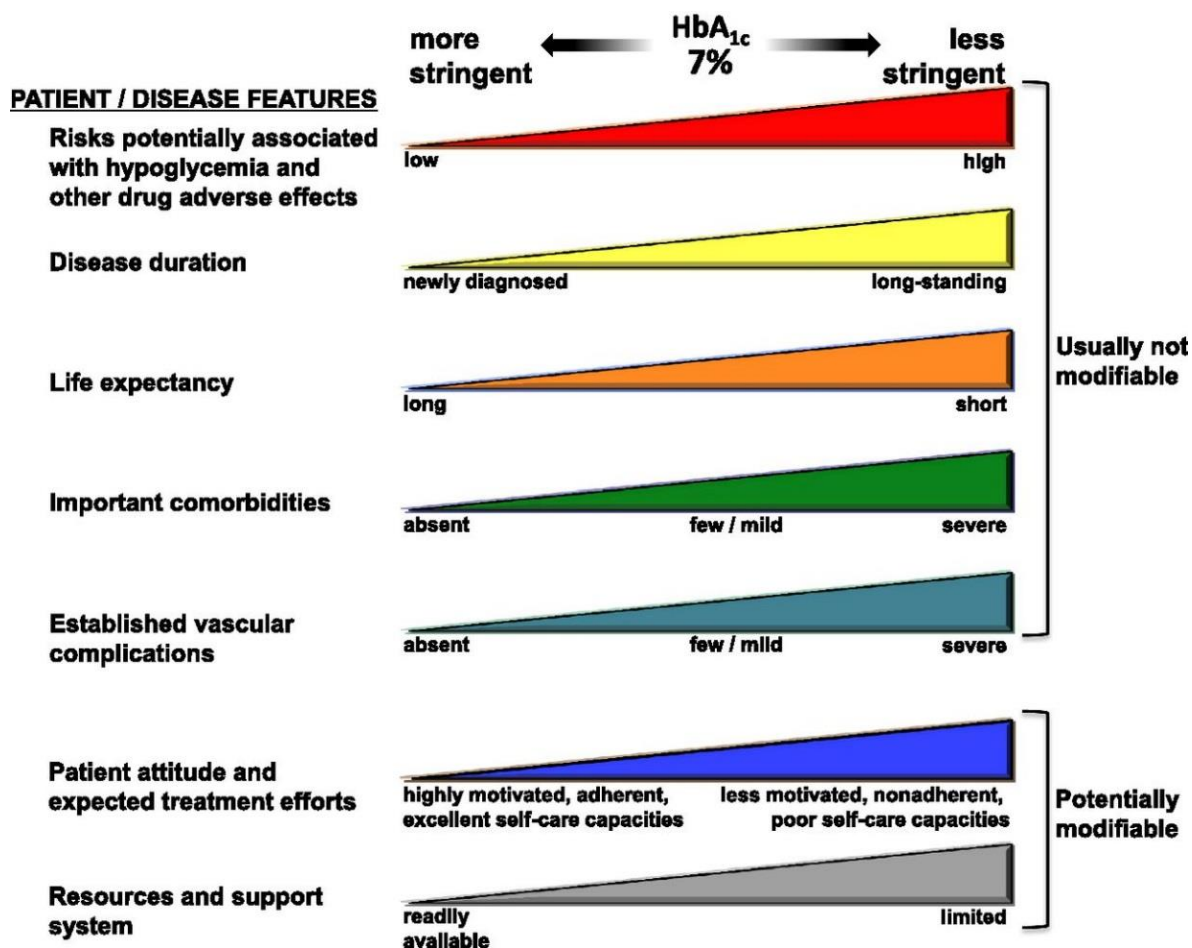
- Agree and set a target HbA1c value with the person.
  - For people treated with lifestyle measures alone or who are taking one antidiabetic drug, a reasonable target HbA1c value is 6.5-7.0% (48-53 mmol/mol). However, an individual's target may be set above this level.
  - For people taking two or more antidiabetic drugs (including insulin), the usual target HbA1c is less than 7.5% (59 mmol/mol). However, an individual's target may be set above this level.
  - In certain circumstances it may be appropriate to maintain a lower target (for example 6.5% [48 mmol/mol]) in people taking two or more antidiabetic drugs. This should be decided on an individual basis.
- When setting a target HbA1c value, take into account:
  - The person's preference.
  - The balance of likely benefits and harms of treatment.
  - The risk of microvascular and macrovascular complications.
  - The risk and consequences of hypoglycaemia.
  - Whether the person will benefit from self-monitoring.
  - The intensity of treatment.
- Avoid the use of highly intensive management strategies to achieve an HbA1c level less than 6.5% (48 mmol/mol).

HbA1c is the recommended method for measuring long term control of blood glucose in people with all types of diabetes. Results are now reported in mmol/mol but, for comparison, the conversion table below gives the equivalent figures in the previous units (%).

<b>HbA1c conversion table</b>	
<b>HbA1c (new units)</b>	<b>HbA1c (old units)</b>
(mmol/mol)	%
20	4.0
31	5.0
42	6.0
48	6.5
53	7.0
59	7.5
64	8.0
75	9.0
86	10.0
<b>A 0.5% difference in HbA1c is equivalent to a difference of about 5.5mmol/mol, and a 1% difference is equivalent to a difference of about 11mmol/mol.</b>	

From Silvio E, Inzucchi et al. Diabetes Care. 2015;38:140-149

## Factors to consider when setting target HbA<sub>1c</sub>



## Patient education

All people newly diagnosed with type 2 diabetes (and/or their carer) should be offered referral to a structured education programme (eg X-PERT). Inform people and their carers that structured education is an integral part of diabetes care. If patients are unable or unwilling to attend the group education sessions, they should be referred to a dietitian and early initiation of metformin should be considered.