

MacLeod Diabetes & Endocrine Centre Royal Devon & Exeter Hospital

Glycaemic targets in frailty

Less stringent glucose targets are appropriate for older, frailer patients with type 2 diabetes, for two reasons:

1. Many of the benefits of tight glycaemic control, such as reduction in retinopathy, kidney disease and heart disease, are realised over 10+ years. Patients with shorter life expectancy are not likely to achieve these benefits.
2. Frailer patients are more susceptible to side effects. With different diabetes drugs these side effects might include hypoglycaemia, diarrhoea, nausea, hypotension, urine infections etc.

These targets were agreed in the Eastern locality in January 2018, and are in line with other published recommendations.

| Frailty group | Suggested HbA1c target |
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| Young or biologically young | 48 mmol/mol or below |
| Standard (or life expectancy 10-20 years) | 48-58 mmol/mol (NICE standard target) |
| Mild-moderate frailty (life expectancy <10 years) | 58-64 mmol/mol |
| Severe frailty (life expectancy <5 years) | 64-70 mmol/mol |

Note that these are approximate targets. A severely frail patient with HbA1c 63 mmol/mol does not need treatment urgently adjusted, particularly if currently no side effects.

Clearly also these targets only apply to patients on medication. Frail patients on diet alone may often have HbA1c values below these ranges.

If even these targets cannot be achieved without side effects, then clinical judgement can be used to adjust the targets upwards if appropriate.

In very frail patients with very reduced life expectancy, the value of any glycaemic target might be questioned. We advise aiming for 64-70 mmol/mol because studies show that patients with higher HbA1c are at increased risk of hospital admission with infections and hyperglycaemia. However, this additional risk of hospital admission is fairly small, and should not prevent de-escalation of therapy if troublesome side effects cannot be resolved in other ways.