

# Medicines

## Optimisation intervention brief

### Medicines Optimisation Incentive Scheme 2018/19 Quality and Safety Intervention

<b>Title of Intervention:</b>
3.1.4 Polypharmacy and deprescribing sulfonylureas in frail elderly patients with a low HbA1c
<b>WHAT?</b>
<ul style="list-style-type: none"> <li>Review the medication of patients aged 75 years or more who are currently prescribed a sulfonylurea (SU) and have an HbA1c below 53mmol/ mol with the aim of optimising/deprescribing and avoiding hypoglycaemic episodes, ambulance callouts and acute hospital admissions.</li> </ul>
<b>WHY?</b>
<ul style="list-style-type: none"> <li>The long-term benefits of tight glycaemic control in frail elderly patients are thought to be less than those for younger patients.</li> <li>Impaired liver and renal function due to the ageing process results in decreased gluconeogenesis.</li> <li>This can be compounded further by reduced renal clearance of drugs such as SUs and insulin.</li> <li>SUs can cause hypoglycaemia which is linked to increased risk of myocardial infarction, stroke and falls leading to fractures or seizures in elderly people.</li> <li>Hypoglycaemia caused by SUs is often unreported in the elderly because early warning symptoms (such as sweating, tachycardia and tremor) can be absent (due to autonomic neuropathy and decreased beta receptor response), may be non-specific, and can be confused with other conditions such as Transient Ischaemic Attack.</li> <li>Furthermore, in the frail elderly this unawareness is made worse by the physical and mental inability to treat low glucose levels.</li> </ul>
<b>WHO?</b>
<ul style="list-style-type: none"> <li>Patients over the age of 75 who have an HbA1c &lt; 53mmol/ mol and are prescribed a SU</li> <li>Patients who are severely frail and/or have a diagnosis of dementia should be prioritised</li> </ul>
<b>TIPS?</b>
<ul style="list-style-type: none"> <li>Newer short-acting SUs such as gliclazide are less likely to cause hypoglycaemia than older long acting therapies such as glibenclamide.</li> </ul>
<b>HOW?</b>
<ul style="list-style-type: none"> <li>Search for patients over the age of 75 who are currently prescribed a SU who have an HbA1c of less than 53mmol/ mol.</li> <li>Carry out a medication review of their type 2 diabetes therapy</li> <li>Look at their current renal function.</li> <li>Does the patient drive? If so, they should be testing blood glucose levels prior to driving, in line with DVLA guidance.</li> <li>Assess whether they have concurrent comorbidities such as dementia or are severely frail which make them more susceptible to hypoglycaemia.</li> <li>Consider whether the SU could be reduced, stopped or switched to an agent that has less</li> </ul>



hypoglycaemic risk and whether further treatment is necessary.

- A general rule of thumb is to maintain HbA1c levels between 64 - 69 mmol/ mol in the frail elderly, especially if using medication that has a risk of hypoglycaemia such as insulin or SU, and avoid lowering it below this, as lower HbA1c levels are associated with increased hypoglycaemic events without accruing meaningful benefit for frail older adults with type 2 diabetes.
- See Appendix I for some tips on the management of multi-morbidities in the frail elderly.
- Does the patient monitor blood glucose levels? When do they test? What are their levels?
- If further treatment is required chose an agent with low hypoglycaemic risk.
- Avoid complex regimens and avoid agents which may cause nausea or GI disturbance or excessive weight loss in frail patients who are not overweight.
- For further guidance please see:  
Diabetes stepped approach guidance  
<https://www.westhampshireccg.nhs.uk/download.cfm?doc=docm93jjm4n1355> (accessed 9/5/18)

#### **FURTHER INFORMATION**

- <http://www.idf.org/guidelines-older-people-type-2-diabetes> (accessed 9/5/18)
- <http://edwpop.org/wp-content/uploads/2017/10/Position-Statement-on-the-Management-of-Frailty-in-Diabetes-Mellitus-%E2%80%93-June-18-2017-EDWPOP-upload-FINAL.pdf> (accessed 9/5/18)



## Appendix I: Management of Multi-morbidities

Recommendations from Position Statement on the Management of Frailty in Diabetes Mellitus  
June 2017 p 22

- Screening for dementia and cognitive problems is recommended to implement safe and quality care and to provide support for carers.
- Targets for care for comorbidities should be established in each case and adapted according to the patient's health status: this should form part of an individualised care plan.
- The glycaemic goal should be individualised based on the presence or not of frailty and other comorbid medical conditions in addition to cognitive and functional status.
- In mild to moderate frail older adults, an HbA1c target range of 53 – 64 mmol/mol is appropriate depending on self-care management abilities and presence of additional risk factors for hypoglycaemia
- In severe frailty, an HbA1c range of 59 – 69 mmol/ mol is more protective.
- Many frail older adults have medical conditions that interfere with HbA1c measurements. In such cases, focus on pre-meal blood glucose targets at 6.7 – 11.1 mmol/ l throughout the day, instead of HbA1c targets.
- Hypertension is commonly associated with type 2 diabetes and adds to the increased risk for cardiovascular disease. Therefore, screening and treating hypertension in older people with diabetes is essential.
- A target of 140/90 mmHg is reasonable but systolic blood pressure <140 mmHg may be associated with adverse events. Avoid blood pressure < 130 mmHg systolic and or < 65 mmHg diastolic.
- All major antihypertensive drug classes can be used to achieve the target.
- Dyslipidaemia often co-exists with diabetes and statin therapy is recommended in order to reduce cardiovascular risk unless specifically contraindicated.
- The addition of fibrate or niacin to statin therapy has no benefit and should not be considered for older people with diabetes.
- In those with a frequent history of urinary or chest infections, reduce infection risk by adjusting the HbA1c to be  $\leq$  69 mmol/mol.
- Bladder control may be improved by aiming for a HbA1c of  $\leq$  69 mmol/ mol owing to the resulting decrease of polyuria linked to hyperglycaemia.
- Nutritional status and oral health should be assessed with the purpose to optimise nutrition and physical function
- The patient with both cancer and diabetes requires integrative care to lower the potential toxicities during cancer treatment and to continue to favour active treatment and outcomes.

