Frailty in diabetes: A new complication with enormous clinical significance

he recent launch of the Association of British Clinical Diabetologists' Position Statement on frailty in diabetes (Sinclair and Gallagher, 2020) is a timely initiative that explains why frailty is emerging as a new complication of diabetes and why it is increasingly recognised to have a significant impact in terms of increased adverse outcomes and reduced survival. All clinicians involved in direct clinical care of older adults with diabetes should become aware of how to detect frailty in everyday clinical practice by various assessment methods, and to have insight on how to plan the initial management.

Frailty is defined as a state of increased vulnerability to physical or psychological stressors because of decreased physiological reserve in multiple organ systems that cause limited capacity to maintain homeostasis (Bergman et al, 2007). Several assessment methods are available, including the Fried Score, based on two practical measures of gait speed and grip strength plus three questions about weight loss, activity levels and self-reported exhaustion (Fried et al, 2001); and the Frailty Index, which is a measure of the number of comorbid illnesses or conditions an individual has (Rockwood and Mitnitski, 2007). The latter is now available as the Electronic Frailty Index (eFI), used in primary care by GPs and primary care nurses, and does not involve direct measurement by questionnaires or procedures. Both of these assessment methods have good predictive value in relation to future events and functional level and survival.

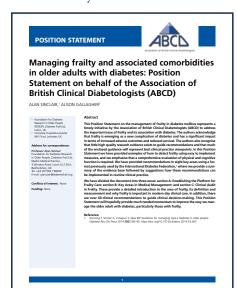
Frailty is a common finding in ageing populations and may be present in 32–48% of adults aged 65 years and over with diabetes (Morley, 2008). Up to now, recommendations of care relating to frailty and diabetes have not been extensive and were first considered in a set of European guidelines nearly a decade ago (Sinclair et al, 2011), and more objectively by the International Diabetes Federation (Dunning et al, 2014). However, adapting a

practical and workable care pathway in the NHS for managing older adults with both conditions has not been achieved up to now, and this Position Statement should enable teams of clinicians to start the process of implementing change.

The ABCD Position Statement

The guiding principles for the Position Statement include three key aspects that have special relevance for older adults with diabetes:

- Individualising goals of care that take into account functional status; complexity of illness, including comorbidity profiles; and life expectancy.
- To base, where possible, all therapeutic decisions on a detailed geriatric assessment and riskstratification process (e.g. risk of hypoglycaemia, falls and adverse events from treatment).
- To have at all times a clear focus on patient safety, avoiding hospital/emergency department admissions and institutionalisation by recognising the deterioration early and maintaining independence and quality of life to a dignified death if necessary.





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"Adapting a practical and workable care pathway in the NHS for managing older adults with both conditions has not been achieved up to now, and this Position Statement should enable teams of clinicians to start the process of implementing change."

In many ways, these three principles underpin the platform for enhancing diabetes care in frail older adults but, as you can see, some training and education in these areas are needed.

This Position Statement has been structured into three main section headings, dealing with the definitions and clinical importance of frailty, followed by a summary of the key areas of management, including glucose regulation; blood pressure and lipid management; the role of exercise interventions; and hypoglycaemia. It concludes with clinical audit aspects of frailty management and the development of a frailty care pathway in the NHS. We require more evidence from observational and randomised clinical trials to support the expert-based views expressed in the document, and we need clinical teams to test out the care pathway we have designed.

For those with recent-onset frailty identified within the pathway, the early management plan is relatively straightforward:

- 1. Agree a regular exercise and nutritional plan that will prevent further weight loss and increase muscle mass.
- **2.** Identify any micronutrient and/or vitamin D deficiency which can adversely affect muscle function.
- **3.** Set appropriate glucose and HbA_{1c} targets.

Clearly, for those with moderate to severe frailty or those in which other clinical problems have been identified, such as malnutrition, peripheral neuropathy or peripheral vascular disease, more specialised intervention will be required.

With the support of local diabetes teams, it is hoped that healthcare commissioners and policy makers will accept the need to support the planning of care pathways in their local regions for those older people with diabetes who are developing frailty (pre-frail), those who have developed frailty, and those progressing to disability.

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