Solving the clinical inertia conundrum

Clinical inertia – failing to start or intensify therapy when appropriate – can undermine glycaemic control and increase the risk of diabetic complications. The multitude and diversity of contributing factors mean that clinical inertia poses a particularly difficult conundrum. As Mark Greener reports, however, potential solutions are beginning to emerge.

Health care professionals (HCPs) attempt to tread a fine line between under- and over-treatment. Nevertheless, more than a fifth of patients managed by GPs with a special interest in diabetes show evidence of clinical inertia – failing to start or intensify therapy appropriately – which can increase the risk of complications. As David Strain, Clinical Senior Lecturer and Honorary Consultant at the University of Exeter Medical School, and colleagues commented in Diabetes Therapy, ‘If “clinical inertia” was an intervention associated with this increased risk of complications, it would rapidly be withdrawn pending safety analyses.’

Clinical inertia is, however, a complex, complicated problem, influenced by numerous factors related to HCPs, patients and the health care system. ‘Rather than focus on new medications, we should learn to use the treatments we have more effectively,’ Dr Strain told Practical Diabetes. ‘This means overcoming clinical inertia.’

A common problem

Eighteen years after Phillips and colleagues introduced the term, clinical inertia remains common in diabetes care. For instance, a recent analysis of 240 patients managed by 12 GPs with a special interest in diabetes found that the most recent mean HbA1c was 70.78mmol/mol, compared to an average target of 56.15mmol/mol. Despite the GPs’ special interest in diabetes, 22.1% of patients showed clinical inertia. Clinical inertia accounted for the lack of intensification in 37.6% of patients in whom treatment was not stepped up. In the remaining cases, not intensifying treatment was clinically justified.

A retrospective study of 105 477 patients in the UK followed between 1990 and 2012 found that 26% and 22% of patients with HbA1c consistently above 7% (53mmol/mol) and 7.5% (58mmol/mol) respectively during the two years after diagnosis did not receive intensification. In people with HbA1c consistently above 53mmol/mol in the year after diagnosis, delaying intensification by more than a year increased the risk of myocardial infarction by 67%, stroke by 51%, heart failure by 64% and at least one cardiovascular event by 62% compared to those whose treatment was intensified and had an HbA1c below this threshold. In those with HbA1c consistently above 58mmol/mol, delaying intensification by more than a year increased the risk of myocardial infarction by 52%, stroke by 36%, heart failure by 58% and at least one cardiovascular event by 50%.

The advent of new drugs might have changed the figures, but it’s clear that clinical inertia remains rife. ‘The problem of clinical inertia seems to be worse in diabetes than in many other conditions,’ Dr Strain comments. ‘The Scandinavian Simvastatin Survival Study (4S) changed dyslipidaemia management within a year or two. Studies showing that improving glycaemic control reduces cardiovascular risk in people with diabetes were first published several years ago, but the findings have not yet been implemented fully.’

Factors contributing to clinical inertia

Clinical inertia is a complex, multifaceted problem. A recent review, for example, suggested that physician-related factors accounted for 50% of the problem posed by clinical inertia. Patient- and health care-related factors accounted for 30% and 20% respectively.

Ruth Poole, Consultant Physician in Diabetes and Endocrinology at Poole Hospital NHS Foundation Trust, identifies several factors that contribute to clinical inertia. In some cases, HCPs feel that more tablets could ‘overburden’ patients or lead to poorer compliance. Worries about potential side effects may also hinder a switch in treatment and there is often not enough time in the appointment to discuss benefits and risk.

‘Some patients feel criticised if there are too many negatives, for example, that their blood sugars are too high, their blood pressure is too high and their cholesterol is too high. So doctors concentrate on just one aspect,’ Dr Poole remarked. ‘There is some unintended collusion with the patients. The patient may say their blood pressure is high because they were in a rush or that their cholesterol is high because of Christmas.’ The doctor agrees to check the blood pressure or cholesterol at the next appointment. Finally, Dr Poole comments that patients ‘often negotiate to change their lifestyle to avoid starting or intensifying a treatment’.

In addition, HCPs may have ‘limited awareness of clinical inertia’ and may overestimate their quality of care and adherence to guidelines. Moreover, HCPs often focus on the current HbA1c, cholesterol levels, blood pressure and Quality and Outcomes Framework targets, ‘rather than the glycaemic burden caused by the duration of poor glucose control.’ ‘Time pressures mean that HCPs tend to focus on things that can be measured – such as HbA1c, cholesterol and blood pressure – rather than checking the patient’s knowledge, mood and so on,’ Dr Poole says. ‘This distracts HCPs from making changes that affect knowledge and understanding, and the patient’s emotional state, and which can have long-term health benefits.’

Clinical inertia may also arise from HCPs’ belief that patients are unable or unwilling to adhere to more complex regimens. HCPs may also fail to set clear goals, identify and manage comorbidities, such as depression, underestimate patients’ needs and avoid escalating treatment because of concerns over side effects, such as hypoglycaemia.
New drugs could assuage such concerns by reducing the risk of, for example, weight gain or hypoglycaemia. But, ironically, therapeutic innovations may contribute to clinical inertia. ‘HCPs often worry about new drugs,’ Dr Poole comments. ‘We worry about a new drug may look good but turn out to have adverse events. We all remember rosiglitazone, for example.’

Patients’ attitudes – such as beliefs that insulin is not efficacious, that their quality of life will drop considerably and they will not be able to adhere or develop side effects – are influential. Some may deny they have diabetes or that the condition is serious, have low health literacy or may not trust their HCPs.

As Strain et al. commented: ‘One of the key elements appears to be a lack of open communication in both directions allowing the person with diabetes to understand the gravity of their diagnosis and engage them in treatment choices.’

An absence of a team approach can exacerbate clinical inertia. ‘Many changes require input from other HCPs,’ Dr Poole remarks. ‘However, finding the time to meet with diabetes specialist nurses, dietitians and so on can be difficult. In some cases, we work with a big team that may include primary and secondary care, the CCG, weight loss services, bariatric surgeons and transplant teams. The challenges of working with a big team, especially when they don’t all know each other, can contribute to clinical inertia. In addition, altering one part of the service has implications elsewhere. Running a multidisciplinary clinic takes someone away from another clinic or requires a bigger room, for example.’

**Overcoming clinical inertia**

Despite the multifaceted causes, approaches that may help overcome clinical inertia are emerging. GPs may benefit from, for example, formal education, assistance and specialist feedback. For instance, a practice nurse or pharmacist could follow an approved treatment algorithm, which reduces time pressure and avoids confusion. ‘There is a real risk that non-specialist HCPs could become confused,’ Dr Strain says. ‘There are some 128 permutations of the current drugs for diabetes. So protocols are important. Nurses are excellent at following protocols and are often better than physicians at having difficult conversations with patients about, for example, lifestyle and non-adherence.’

**Team work**

Dr Poole also stresses the importance of team work when developing services that attempt to overcome clinical inertia. ‘Designating different people in the team to have specific areas can help,’ she says. ‘One person could be responsible for bringing in changes related to medications, another for changes related to foot care and other complications. This minimises the work for any one person, although the team needs to have a long-term plan. Regular team meetings and mutual support are also essential.’

**Educational strategies**

Educational strategies, such as self-management programmes, can help address patient-related causes of clinical inertia. Education should help patients and carers appreciate the progressive nature of type 2 diabetes (T2D) and the risks inherent in long-term poor glycaemic control as well as allaying concerns about side effects, ‘needle phobia’ and the misperception that starting insulin means that self-management has failed. Khunti et al. suggest explaining at diagnosis that as T2D is progressively more people eventually require insulin, could help overcome this misconception.

‘Certainly, there is a need for better patient education. Dr Strain was the lead author on a study that asked patients about hypoglycaemia, as part of a larger investigation of factors driving clinical inertia. Fifteen percent of the 652 patients interviewed did not know that severe hypoglycaemia can cause loss of consciousness and seizures. Just 44% knew that alcohol consumption can increase hypoglycaemia risk. Only 41% knew that hypoglycaemia may be associated with an increased risk of heart problems. The findings underscore the wide range of knowledge among patients.’

**Audits and real-world data**

As a final example, audits and other real-world studies can provide the evidence base to improve care. ‘Guidelines can form the basis for audit forcing changes to better practice,’ Dr Poole comments. ‘Clinical trials enrol a selected population that does not represent the more heterogeneous patients we see in practice,’ Dr Strain adds. ‘People in clinical studies also tend to be more engaged with treatment. So the extent to which a clinical trial applies to the rest of the population is uncertain. Early real-world studies were not especially robust. That’s changed and today real-world studies can provide the evidence we need to implement a change.’

Audits and also real-world data can help commissioners appreciate the need for investment to overcome clinical inertia and reduce complications. Dr Strain suggests getting commissioners and managers to attend a clinic. ‘Diabetes management is often complex and takes time. The pressure of clinical practice and the time limitations of primary care contribute to the clinical inertia,’ he concludes. ‘Managers and funders need to appreciate that it’s unrealistic to address clinical inertia when we face time and budgetary constraints. They need to see patients to realise just how difficult diabetes management can be.’

Mark Greener, BSc (Hons), MRSB, Medical Correspondent

**References**