

Multimorbidity: clinical assessment and management

NICE guideline

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Introduction

NICE has published a guideline on the assessment and management of people with multimorbidity.¹

Multimorbidity is defined as the presence of two or more long-term conditions and is increasingly common as people age.

Two-thirds of people aged 65 years will have multimorbidity, which is associated with reduced quality of life and higher mortality.² In older people this is associated with higher rates of physical health conditions, polypharmacy, adverse drug events, high treatment burden and greater use of health services. In younger people and people from less affluent areas, multimorbidity is often due to a combination of physical and mental health conditions. The guideline emphasizes that multimorbidity includes conditions such as sensory problems and pain as well as clearly defined medical conditions (Table 1).

The aim of this guideline is to support patients and clinicians in optimizing care for people with multimorbidity, in particular where there is potential for care to become burdensome or uncoordinated.

The Guidance

Impact of multimorbidity

Some people with two or more conditions can manage those conditions and associated treatments in line with single disease guidelines. This guideline suggests that healthcare professionals should consider an approach to care which takes account of multimorbidity, for patients such as those:

- who find it difficult to manage their treatments for day-to-day activities
- are prescribed multiple regular medications
- frequently seek unplanned or emergency care
- have frailty (i.e. reduction in resilience or biological/physiological reserve)

The guideline suggests that such people might be identified proactively using electronic health records. It is suggested that all people prescribed more than 15 medicines should be considered for an approach that takes account of multimorbidity. People on less than 15 medicines may also benefit, particularly where there is likely to be a higher risk of adverse events or drug interactions.

The guideline suggests the use of validated tools to identify people who might benefit from a multimorbidity approach to care and who may be at risk of unplanned hospital admissions or care home admission, although does not recommend any specific interventions to reduce unplanned hospital admissions. QAdmissions³ (an algorithm to quantify the absolute risk of emergency admission to hospital, which includes established risk factors, and designed to work in primary care) is recommended as a useful tool.

Assessment of Frailty

The 'Fit for Frailty' British Geriatrics Society campaign, produced in association with the Royal College of General Practitioners⁴, suggests that 'Frailty' is a distinctive health state related to the ageing process in which multiple body systems gradually lose their in-built reserves. Around 10% of people aged over 65 years have frailty, rising to between a quarter and a half of those aged over 85 years. People living with frailty are at risk of adverse outcomes such as dramatic changes in their physical and mental wellbeing, after an apparently minor event which challenges their health, such as an infection or new medication.

The multimorbidity guidance suggests that people with multimorbidity should be assessed for frailty, and offers some useful pragmatic approaches to assessment (see table 2), but cautions against assessment of frailty in a person who is acutely unwell. The eFI uses routine data to identify older people with mild, moderate and severe frailty, with robust predictive validity for outcomes of mortality, hospitalisation and

nursing home admission. Routine implementation of the eFI could enable delivery of evidence-based interventions to improve outcomes for this vulnerable group.⁵

Principles of managing people with multimorbidity

The guideline suggests assessing treatment burden⁶ by discussing with people how their health problems and treatments affect their day-to-day life. Table 3 suggests some areas the GP could explore. The guideline also reminds clinicians to consider associated mental health problems and the presence of pain, both of which are common in people with long-term conditions.

The guidance suggests that an approach to care for people with multimorbidity places an emphasis on encouraging people to clarify what is important to them, including their personal goals, values and priorities. Relevant areas for discussion would include maintenance of their independence, maintaining an active social or family life, preventing specific adverse outcomes, reducing treatment burden and lengthening life. The results of these discussions can help frame a discussion about current treatments and their value to the person.

Table 4 shows some important elements of such a plan which should aim to improve quality of life by reducing treatment burden, adverse events, and unplanned or uncoordinated care, and to improve coordination of care across services, particularly if this has become fragmented. An important outcome is how decisions to stop or change treatment are recorded and how such a plan is shared between healthcare professionals.

Of particular importance is the treatment burden of polypharmacy, especially in patients who are frail or who have limited life expectancy. Healthcare professionals are reminded that most recommended treatments are based on guidance derived from trials in which participants have single health conditions and are younger and fitter than people with multimorbidity. The trial results may be less relevant to, and treatments may offer limited overall benefit to patients who have multimorbidity. The guideline offers a database on preventative treatments to enable the practitioner to assess the relevance of treatment effects, including information on the duration of treatment trials and populations included in them. Practitioners are recommended to also review symptomatic treatments to check if people are gaining benefit from these.

A search for evidence on effects of stopping treatments was conducted as part of guideline development but little evidence was found for common treatments such as statins and antihypertensive

medication. The guideline recommends reviewing continued use of bisphosphonate after three years as there is inconsistent evidence of harm or benefit in the next three years. Fracture risk and patient choice should be considered as part of any decision. Unfortunately, no evidence was found on benefit or harm to support stopping any other drugs. It is important to note that optimising treatment may include the need to start treatments particularly in younger people who might otherwise miss out on important preventative treatments because of their multimorbidity.

Comment

The implications of multimorbidity are of increasing importance to both patients and the health service. However, there are a number of problems with attempting to develop guidelines to support management of individual patients with multimorbidity. The majority of the evidence that does exist is in populations of older people with little research in younger people with multimorbidity. There was a lack of evidence for planned holistic reviews and for organisational changes that might improve care and the guideline includes research recommendations in these areas.

There are challenges for practitioners in using information about treatment effectiveness and sharing this appropriately with patients. A recent systematic review found a lack of appropriate training for doctors in managing multimorbidity⁷. The Royal College of General Practitioners Report 'Responding to the needs of patients with multimorbidity' emphasises the need for changes in approach at practice, local and national level in order to better accommodate the needs of people with multimorbidity.⁸ This document makes 14 common-sense recommendations which resonate with the NICE guideline on multimorbidity.¹

Whilst this NICE guideline might be criticised as merely articulating pragmatic common sense, its importance is that it affirms a patient centred approach, taking into account patient's wishes, and consolidating management in patients with multimorbidity where the current treatment regime(s) may be based on single disease guidelines and no longer sit comfortably with the patient's most important goals.

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Table 1. What is multimorbidity?

Multimorbidity can include:

- defined physical and mental health conditions such as diabetes or schizophrenia
- ongoing conditions such as learning disability
- symptom complexes such as frailty or chronic pain
- sensory impairment such as sight or hearing loss
- alcohol and substance misuse.

Table 2. Pragmatic assessments of frailty that can be used by the GP

- an informal assessment of gait speed (for example, time taken to answer the door, time taken to walk from the waiting room)
- self-reported health status (that is, 'how would you rate your health status on a scale from 0 to 10?', with scores of 6 or less indicating frailty)
- a formal assessment of gait speed, with more than 5 seconds to walk 4 metres indicating frailty

Table 3. Assessing the impact of multi-morbidity on the patient

- How health problems affect quality of life or wellbeing
- How health problems, or treatments, interact
- The number and type of appointments a person has for each of their health problems, where they take place, and whether conflicting advice is given by different clinicians
- Changes in lifestyle needed due to health problems (eg diet)
- Non-pharmacological treatments such as diets, exercise programmes and psychological treatments
- The number and type of medicines a person is taking, and any side-effects arising from medications

Table 4. Elements of a management plan for patients with multimorbidity

- Goals and plans for future care (including advance care planning)
- Agreement about who is responsible for coordination of care
- Planning how the individualised management plan and the responsibility for coordination of care is communicated to all professionals and services involved
- Agreement of timing of follow-up and how to access urgent care

- A review of medicines and other treatments taking into account evidence of likely benefits and harms for the individual patient and outcomes important to the person