



### **PRACTICE**

**NIHR SIGNALS** 

# Patient centred care for multimorbidity improves patient experience, but quality of life is unchanged

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#### **Abstract**

The study

A patient-centred intervention to improve the management of multimorbidity in general practice: the 3D RCT.

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To read the full NIHR Signal, go to: https://discover.dc.nihr.ac.uk/content/signal-000658/patient-centred-care-for-multimorbidity-improves-patient-experience-but-quality-of-life-is-unchanged

#### Why was this study needed?

The UK has an ageing population. A 2018 study of multimorbidity in England found that 54% of people over 65 had multimorbidity in 2015. This is expected to rise to 68% by 2035, with 17% of people over 65 expected to have four or more conditions.

National guidelines tend to focus on single conditions. People with multimorbidity may have their conditions managed individually without due consideration of the overall burden of their diseases and treatments. Recognition of this prompted the National Institute for Health and Care Excellence (NICE) and other international organisations to develop guidelines on managing multimorbidity. These focus on regular comprehensive review of the person's health and circumstances. But there is uncertainty over the best approach. A 2016

But there is uncertainty over the best approach. A 2016 Cochrane review found that trials had assessed diverse patient centred interventions in primary care, with mixed findings.

This trial assessed a care model that incorporated all strategies recommended by guidelines.

#### What did this study do?

This cluster randomised controlled trial allocated 33 general practices in England and Scotland to provide comprehensive, three dimensional reviews of multimorbidity or to continue with usual care. Medical records were used to identify adults with at least three of 17 chronic conditions listed in the Quality and Outcomes Framework (QOF). A total of 1546 participants were included (average age 71 years).

Three dimensional reviews were conducted six monthly. They included a nurse appointment to discuss the patient's key health concerns and their effects on daily life, and to screen for depression and dementia. A pharmacist reviewed the patient's medications. The patient met with their doctor, who considered the reviews from the nurse and pharmacist and agreed with the patient a health plan, including realistic goals.

Two thirds of people eligible for the study declined or did not respond to the invitation, which could affect representation. Only 49% of participants in intervention practices received two reviews as intended.

#### What did it find?

- The multimorbidity review had no effect on quality of life at 15 months. There was 0.00 difference in EQ-5D-5L quality of life score between groups (95% confidence interval –0.02 to +0.02) following adjustment for baseline variables, practice location, and list size.
- There was no difference in any measure of illness burden, which included self rated health, anxiety, and depression scores, or in measures of treatment burden, which included number of drugs prescribed and medication adherence.
- Patients having the multimorbidity review did, however, have better patient centred care than those receiving usual care. This included higher Patient Assessment of Care for Chronic Conditions scores, which ranged??? from 1 to 5 (adjusted mean

difference 0.29, 96% confidence interval 0.16 to 0.41), and greater proportions of participants reporting being very satisfied with care (56% compared with 39%) and having the opportunity to discuss problems of greatest importance to them (42% compared with 26%).

- By 15 months the multimorbidity review had increased the number of GP consultations to 10 compared with 8 (adjusted mean 1.13, 95% confidence interval 1.02 to 1.25) and nurse consultations to 6 compared with 4 (1.37, 95% confidence interval 1.17 to 1.61). There was improved continuity of care, but no effect on the number of QOF indicators met, number of indicators of high prescribing, number of hospital admissions, or outpatient appointments.
- Economic analysis showed no real difference in cost or quality adjusted life years between the arms.

## What does current guidance say on this issue?

The NICE 2016 guideline on clinical assessment and management of multimorbidity provides guidance on identifying patients with multimorbidity. It recommends establishing the patient's burden of disease and treatment and their values and priorities, reviewing medications, and agreeing an individualised management plan. The central aim of this approach is to enable patients to actively participate in their care, ensure services meet their needs, improve continuity of care and relationships, and ultimately improve the patient's quality of life.

However, there is no recommendation on how often multimorbidity reviews should be carried out.

#### What are the implications?

Comprehensive care reviews for multimorbidity appear to improve patients' experience of care but have no effect on quality of life. It may be because the intervention was not delivered at full dose/intensity (only 49% received the full two sessions) or monitored for long enough. However, the results are in line with other large trials included in a recently updated Cochrane review.

The principles of care in the control group are generally consistent with NICE guidelines. Yet there is likely to be variation across trusts and practices in the specifics of how reviews are conducted and how frequently. This is the largest trial to date of approaches to improve management of multiple

conditions in primary care. Cost effectiveness analysis was uncertain with only small differences in costs and outcomes. The process evaluation highlighted difficulties for practices in implementing this. Further refinements of the intervention, including better training of practice staff and targeting of patients, may increase effectiveness in the future.

#### **Education into Practice**

How well do you identify patients with complex needs in your practice?

Do you systematically ask about depression in people with other physical conditions?

How do you combine reviews for different conditions and medication checks for individuals in your practice?

**Competing interests** *The BMJ* has judged that there are no disqualifying financial ties to commercial companies. The authors declare the following other interests: none.

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