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Scottish School of Primary Care

GP Clusters

Briefing Paper 3

Managing Multimorbidity

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Collaborative Quality Improvement in General Practice Clusters

This paper is the third in a series that relates to areas of quality and safety on which general practice clusters could usefully focus improvement activity. Each paper summarises research, guidelines and other evidence about areas of care which can be improved, and improvement methods and interventions.

Managing Multimorbidity

Multimorbidity (the coexistence of 2 or more long-term conditions within an individual) is the norm rather than the exception in patients with a long-term condition, affecting 1 in 4 people in Scotland. Worldwide, multimorbidity is increasing as populations age, but research into the management of multimorbidity is still at an early stage. This paper describes the epidemiology of multimorbidity and the evidence-base for interventions in primary care, including recent research involving targeted longer-consultations for multimorbid patients in Scottish general practice.

The problem

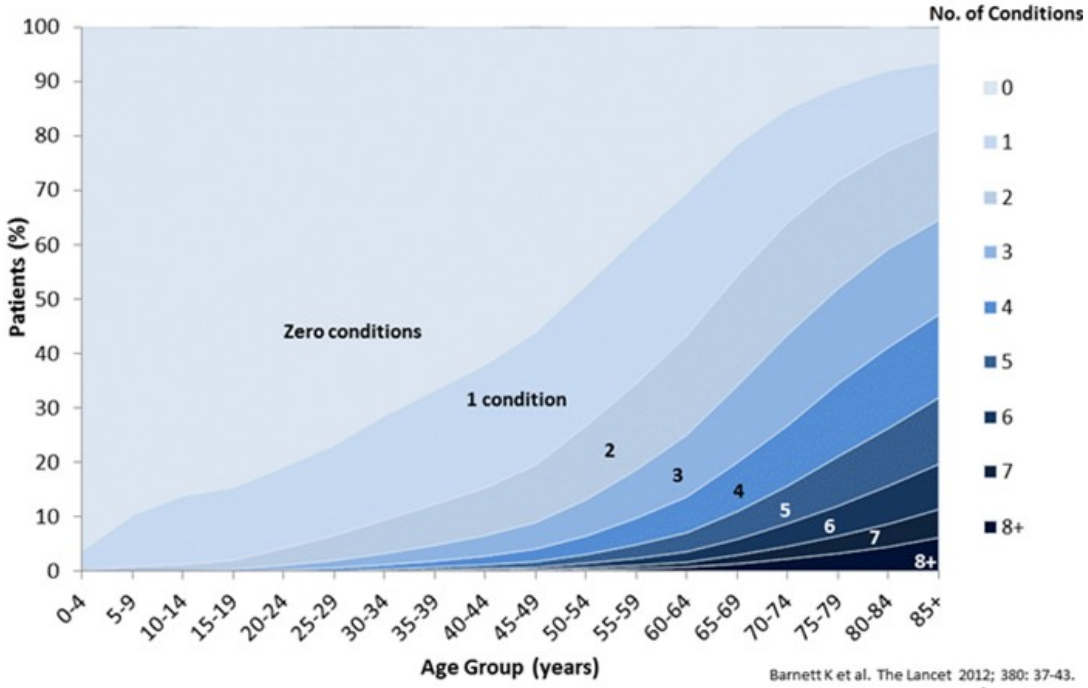
Multimorbidity, defined as the co-existance of 2 or more conditions within an individual, is increasing globally and is becoming the norm rather than the exception in people with any long-term condition[1]. Multimorbidity increases with age and with socio-economic deprivation[1]. In a nationally representative study of almost 1.8 million people in Scotland derived from primary care electronic records we found the prevalence of multimorbidity to be 24% ; the majority of people in Scotland aged 65 or more had multimorbidity (Figure 1)[2]. Multimorbidity is also highly socially patterned, being more common and occurring some 10-15 years earlier in people living in areas of high deprivation compared with those in affluent areas of Scotland(Figure 2)[2]. The combination of mental health and physical health problems is commonest in deprived areas, although pain and depression are in the top 5 conditions in multimorbid patients of all ages, and across all deprivation levels[3].

Multimorbidity markedly reduces quality and this effect is more pronounced in younger deprived patients[4]. Multimorbidity increases mortality and unplanned hospital admissions, including potentially preventable admissions[5]. Multimorbidity also increases primary care consultation rates and is associated with polypharmacy and thus prescribing safety issues and costs[6].

Can the management of multimorbidity be improved?

There is limited evidence on the best way to improve the management of multimorbid patients. A recent Cochrane review identified 18 RCTs examining a range of complex interventions for people with multimorbidity[7]. In 12 of these studies, the predominant intervention element was a change to the organisation of care delivery, usually through case management or enhanced multidisciplinary team work. In six studies, the interventions were predominantly patient-oriented, for example, educational or self-management support-type interventions delivered directly to participants. Their results found little or no difference in clinical outcomes. Mental health outcomes improved with modest reductions in mean depression scores for the studies that targeted participants with depression. Two studies

Figure 1. Prevalence of multiple chronic condition in Scotland by age



Barnett K et al. The Lancet 2012; 380: 37-43.

that targeted participants with depression. Two studies that specifically targeted functional difficulties in participants had positive effects on functional outcomes with one of these studies also reporting a reduction in mortality at four year follow-up (absolute difference 7%). The interventions may make little or no difference to health service use and cost data were limited.

Another recent systematic review of programmes treating high burden-high cost patients with multiple chronic diseases or disabilities in the USA between 2008-2014 examined 27 studies of which 12 were RCTs. They looked at 3 types of outcomes (patient satisfaction, clinical outcomes, and health care use and costs) across 5 models of care. The findings were generally disappointing, with no study showing improvements in all three outcomes. Case and care management studies (which in the USA generally involved a nurse or social worker helping patients and their families assess problems, communicate with health care professionals and navigate the health care system) did however report improvements in all 3 outcomes across different studies.

Since these two reviews were published, a large major new trial has been conducted in Scotland and England called the 3D study, a primary care-based complex intervention that introduced an integrated, patient-centred care approach for multimorbid patients[9]. This was effective in improving patient-centred care, and was highly valued by patients, but did not improve quality of life or clinical outcomes.

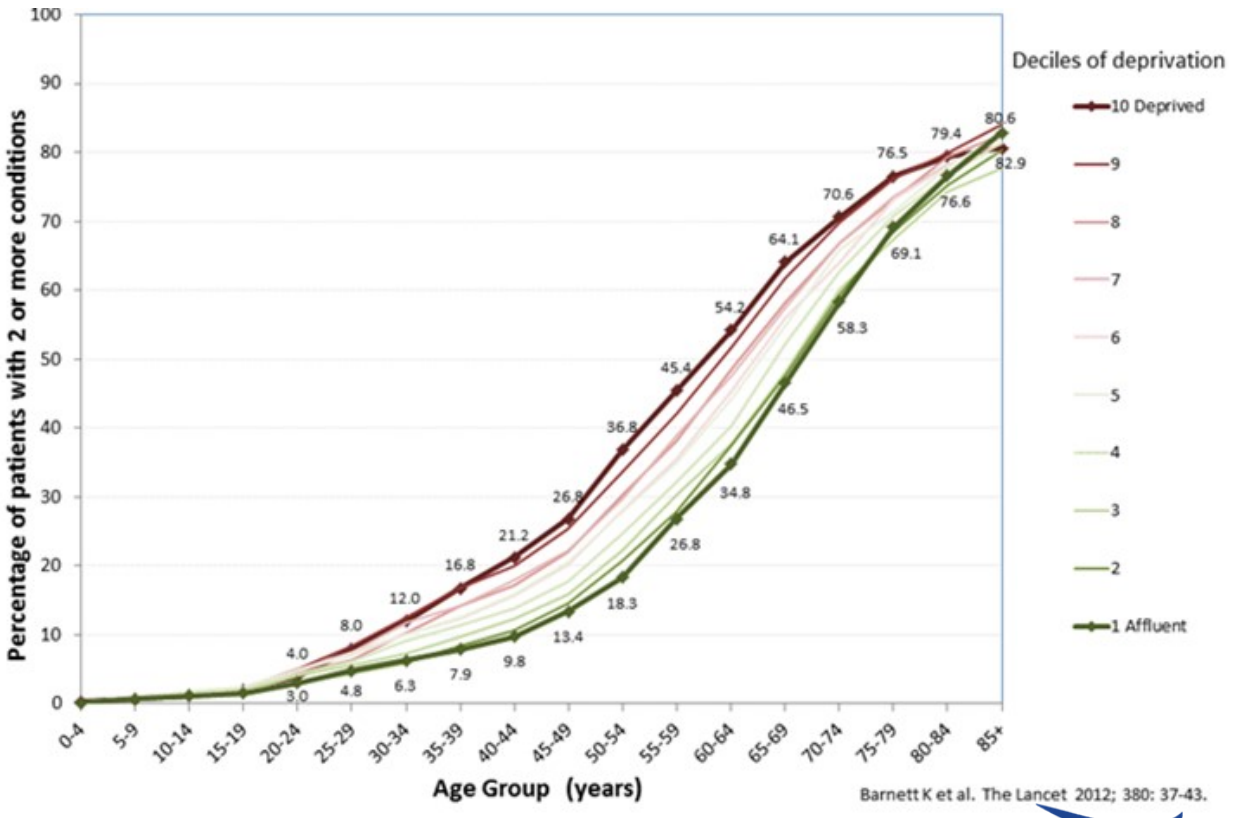
A programme of research in Scotland funded by the Chief Scientist Office co-developed (with practitioners and patients) a complex 'whole-system' intervention (CARE Plus) for patients with multimorbidity living in areas of high deprivation[10]. This involved targeted longer consultations for multimorbid patients, with a care plan based on an empathic, patient-centred approach, support and training for practitioners, and additional self-management support for patients[10]. An exploratory phase 2, cluster RCT involving 8 practices in very deprived areas of Glasgow and 152 patients found preliminary evidence of benefit in terms of quality of life and wellbeing[11]. The cost-effectiveness ration of £12,224 per QALY gained was well below that the cost effectiveness threshold recommended by NICE (£20-30,000 per QALY gained) and thus represents good value for money[11] .

Core elements for improvement

NICE has recently produced evidence guidance on managing patients with multimorbidity (currently out for consultation). They recommend a tailored approach to care for people with multimorbidity which includes an individualised management plan focusing on:

- improving quality of life by reducing treatment burden, adverse events, and unplanned care
- the person's individual needs, preferences for treatments, health priorities and lifestyle
- how the person's health conditions and their treatments interact and how this affects quality of life
- the benefits and risks of following recommendations from guidelines on single health conditions
- improving the coordination of care across services.

Figure 2. Prevalence of multimorbidity by age and deprivation in Scotland



Barnett K et al. The Lancet 2012; 380: 37-43.

When providing such a tailored approach to care, the guidelines suggest that one should;

- Explain to the person the purpose of a tailored approach to care
- Establish disease and treatment burden
- Establish patient preferences, values and priorities
- Review medicines and other treatments taking into account evidence of likely benefits and harms for the individual patient and outcomes important to the person
- Develop an individualised management plan with the person agreeing goals and plans for future care
- Agree who is responsible for coordination of care
- Ensure that responsibility for coordination of healthcare is communicated to all healthcare professionals and services involved
- Agree the timing of follow-up for review and how to access urgent care

Implementation in real-life NHS practice

Table 1 illustrates the paradigm shift required to create a system that will be attuned to multimorbidity and complexity[12] .

Multimorbidity is a priority area within the Scottish Governments policy[11]. The legislative integration of adult health and social care services in Scotland aims to better serve the needs of people with multiple complex problems. Thus, the policy drivers and legislation in Scotland should drive improvement and place people with complex multimorbidity problems at the very centre of care. However, it is not clear what changes have taken place in the NHS in Scotland since the publication of these policy documents and integration is, of course, at an early stage.

Implication for collaborative quality improvement in general practice clusters

The new GP contract in Scotland, which will come into effect in 2017 (with 2016 being a transition year) includes the aim that GPs will be able to have longer consultations with patients with multiple, complex needs. Several practices in Scotland in various sites are testing new models of primary care (some funded by the Primary Care Transformation Fund) and are already implementing targeted longer consultations of selected patients with multiple, complex needs. In this respect, the learning gained form the 3D study[9,] and the CSO research programme that led to the development and optimisation of the CARE Plus intervention may be helpful[10,11] together with the NICE Guidelines and local experience. Improving the management of patients with burdensome multimorbidity would be a suitable topic for early implementation of general practice clusters because it is a topic which has high-level policy support, and is a key aim of the new GP contract. GPs, as generalists trained in a holistic approach to care, are ideally placed to lead such development.

Table 1. A paradigm shift to create a future system

Current System	Future System
Geared to acute / single condition	Designed around people with multiple conditions
Hospital centred	Embedded in local communities and their assets
Doctor dependent	Multi-professional and team based care
Episodic care	Continuous care and support when needed
Disjointed care	Well coordinated and integrated health and care
Reactive care	Preventive and anticipatory care
Patient as passive recipient	Informed and empowered patients and clients
Self care infrequent	Self management / self directed support enabled
Carers undervalued	Carers are supported as full partners
Low tech	Technology enables greater choice and control

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