

# Education and debate

## Rethinking management of chronic diseases

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Recent organisational changes to the NHS are bound to affect the care of patients with chronic diseases. But will they help or hinder?

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Chronic disease represents a huge burden of ill health in the United Kingdom and a large cost to the NHS. Yet for many years government policy has focused on improving access to elective care. Recently, attempts have been made to improve the management of selected chronic conditions through the introduction of national service frameworks together with the associated activity of the NHS Modernisation Agency and the national clinical directors. But the NHS still has no agreed model for managing all chronic diseases. We aim to stimulate debate by suggesting some basic ingredients of good management of chronic diseases and examining how recent policies might influence their development and implementation in the NHS in England.

### Basic ingredients of chronic disease management

Workers in chronic care have tried to develop a consensus on the basic ingredients of a model of good management for chronic disease. One model that has gained widespread credibility in the United States is the chronic care model.<sup>1,2</sup> The model was constructed after a literature review and considering evidence from a large panel of national experts.<sup>3</sup> It recognises that chronic care takes place within three overlapping “galaxies”: the wider community, the healthcare system, and the provider organisation. Box 1 shows the six main components of the model.

Although the importance of each component is likely to be familiar, the interest lies in putting them

#### Box 1: Components of chronic care model<sup>3</sup>

##### Community

Mobilise community resources to meet needs of patients—for example, encourage patients to participate in effective community programmes

##### Organisation of health care

Create a culture, organisation, and mechanisms that promote safe, high quality care—for example, promote effective improvement strategies aimed at comprehensive change of systems

##### Support self management

Empower and prepare patients to manage their health and health care—for example, use effective self management support strategies that include assessment, goal setting, action planning, problem solving, and follow up

##### Design of delivery system

Assure the delivery of effective, efficient clinical care and self management support—for example, define roles and distribute tasks among team members

##### Decision support

Promote clinical care that is consistent with scientific evidence and patient preferences—for example, embed evidence based guidelines into daily clinical practice

##### Clinical information systems

Organise patient and population data to facilitate efficient and effective care—for example, provide timely reminders for providers and patients



together in a coherent model. The chronic care model is used in over 500 healthcare organisations in the United States,<sup>4</sup> and it has been shown to have positive effects. For example, a review of studies of diabetes management showed that interventions consistent with the chronic care model improved at least one process or outcome measure (in 32 of 39 studies reviewed).<sup>5</sup> An analysis of the implementation of this model across a wide range of American healthcare organisations also showed that it improved the quality of care.<sup>6</sup> However, barriers to implementing the model have also been identified.<sup>7,8</sup>

### Effect of current NHS policies

The centrepiece of UK government policy to improve the management of chronic disease is national service

frameworks. These focus on single diseases or groups of diseases and are underpinned by the best available international evidence. Their implementation is supported by extra resources, targets for implementation, and developmental activity by the NHS Modernisation Agency. Each framework promotes most of the components of the chronic care model. However, the disease based approach does not acknowledge the importance of developing a generic model for managing chronic disease applicable to patients with multiple conditions or single conditions not yet included in a national service framework. In addition, the frameworks largely ignore the influence of the wider policy context<sup>9</sup> in the NHS. Different elements of policy (such as how hospitals are paid and the development of consumer movements) will affect attempts by providers to improve management of chronic disease.

The chronic care model also under-represents the effect of policy context. Nevertheless, it provides a useful framework within which to analyse the effect of national policy initiatives on management of chronic diseases. The key policies (box 2) are discussed below in terms of their effect on the six components of the chronic care model.

### Community resources

The integration of broader community resources into the programme of chronic care management may be enhanced as the government pursues a mixed economy of care. This gives voluntary sector organisations greater opportunities to obtain NHS contracts for managing disease and allows for better integration of formal and informal healthcare resources. The advent of foundation trusts with mutual ownership and governance will enable community groups both to influence providers' strategies and to hold them to

account for performance. Community groups organised around particular diseases will be ideally placed to ensure strong representation within foundation trusts' boards of governors.

### Health system organisation

Many current policies are relevant to the organisation of health systems. Giving staff and institutions financial and other incentives to improve care will influence the focus of leaders within the NHS. For example, efforts to improve care for people with chronic disease will increase as the new general practice contract introduces specific financial incentives to do so.<sup>10</sup> By 2005-6, 15% of total resources paid through the contract in England will be tied to defined quality measures in a new quality and outcomes framework.<sup>11</sup> Of the 1050 points available under this framework, 550 relate to indicators of clinical care, overwhelmingly in chronic disease management.

Conversely, new policies to expand patients' choice of provider for elective care<sup>12</sup> and a new system of financial flows within the NHS (based on cost per case contracts) will reward NHS trusts according to the number of episodes of care provided.<sup>13</sup> These incentives, together with competition with new diagnostic and treatment centres, may cause hospitals to focus efforts on securing admissions to ensure their survival. Incentives that apply to primary and secondary care are thus not well joined up.

Performance indicators have focused the minds of managers on a limited number of areas for action, often related to access times.<sup>14</sup> However, the recent NHS priorities and planning framework emphasised the importance of chronic diseases and set out several clear targets relating to, among other things, diabetes, coronary heart disease, mental health, and the care of older people.<sup>15</sup> These targets cover both processes (such as the establishment of disease registers in primary care) and outcomes (such as reductions in mortality from coronary heart disease).

The policy to develop foundation trusts could have mixed effects. Greater autonomy may undermine the effective integration of care that patients with complex chronic conditions need. Foundation trusts will be subject to fewer checks and constraints over their actions. For example, direct accountability to strategic health authorities will be replaced by oversight by an independent regulator and legally binding contracts with primary care trusts. The balance of power may shift decisively from primary care trust commissioners to foundation trusts because foundation trusts will establish a stronger democratic mandate through elected governors than primary care trusts that are governed by an appointed board informed, in future, by patients' forums.<sup>16 17</sup> Of course, boards of governors of foundation trusts may also see integration of care as a high priority and have greater opportunities to realise it.

### Self management

Support for patients to manage illness themselves is currently being developed by the national expert patient programme<sup>18</sup> and is a central feature in most national service frameworks. The willingness of patients to take greater responsibility for their health may also be strengthened by policies to give patients a choice of provider and treatments. This will be under-

#### Box 2: Policies that could affect NHS management of chronic diseases

##### Likely to help

- Greater investment in services and staff
- National service frameworks
- Development of primary care trust commissioning
- Foundation trusts (from the perspective of community engagement)
- The work of the Modernisation Agency (developing leadership, collaboratives)
- Expert patient programme
- New general practice contract
- Development of information technology systems
- Personal medical services pilots
- Local pharmaceutical services schemes
- Developing new professional roles
- Patient choice programme (from the perspective of empowered patients)

##### Likely to hinder

- Foundation trusts (from the perspective of more autonomous behaviour)
- New financial flows (cost per case reimbursement)
- Diagnostic and treatment centres
- Focus on targets, particularly waiting lists
- Patient choice programme (from the perspective of its focus on hospital care)

pinned by greater availability of information for patients through local NHS prospectuses, the internet, and other sources of health advice (including NHS Direct). These initiatives are in their early stages, and developing a culture within the NHS and among patients to support self management is a huge challenge.

#### Design of delivery systems

The chronic care model suggests that the structure of medical practice must be redesigned to ensure clearly defined roles, full use of non-medical staff, and a division of labour within clinical teams. In particular, care must be planned with case management available for patients with complex problems.

In this regard, positive initiatives can be detected in the NHS. Pilots of personal medical services have created more flexible types of organisation, introducing horizontal and vertical integration of clinical teams. In some cases, these new teams have incorporated specialist consultant opinion and diagnostic services into a single, integrated contract for care in which the incentives faced by primary and specialist team members are better aligned.<sup>19</sup>

New roles for primary care professionals are being encouraged, many with a particular focus on chronic disease. The advent of nurse specialists, general practitioners with special interests, and highly skilled pharmacists looks set to reorient the management of people with chronic disease, increasing the capacity of primary care and raising the threshold for hospital referral.

#### Decision support and clinical information systems

Decision support and clinical information systems have received substantial investment in the last few years. Integrated healthcare records are being created that will allow case information to be shared by all care providers.<sup>20</sup> Similarly, decision support for clinicians has been boosted by a variety of initiatives such as investment in general practice computing (with disease management templates) and on-line sources of clinical evidence (such as the National Electronic Library for Health). Under the new general practice contract, primary care trusts will take responsibility for ownership, development, and maintenance of clinical information systems as well as for training primary care staff. Among other things, the trusts will be responsible for developing disease registers in primary care together with effective means for extracting and analysing data. Incentives in the contract will encourage this activity.

#### The way forward?

Although the development of national service frameworks is welcome, the NHS requires a clear generic model of disease management. This model need not be the chronic care model outlined here, but it should be one that recognises the interplay between the macro policy environment, the incentives that drive health service organisations, and the organisation of frontline clinical services. This is particularly important because the NHS environment evolves rapidly; national and local policy makers will need help to ensure that gains in elective care are not at the expense of progress in chronic care.

### Summary points

Chronic diseases cause a large burden of ill health and treatment costs in the NHS

Much of government policy is driven by the need to improve elective care

Although national service frameworks have been established for some chronic diseases, the NHS has no generic model for managing chronic diseases

Such a model could help coordinate care for patients with multiple chronic conditions or those not yet included in a framework

A model could help alert policymakers to the effects of wider NHS policies on efforts to improve management of chronic diseases

Contributors and sources: RL and JD have studied the chronic care model as part of research into US chronic disease management in selected managed care organisations. They have also carried out extensive analysis of current government policy. JD has undertaken doctoral research into the avoidance of hospital admissions for patients with chronic conditions.

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