

# Improving Chronic Disease Management

Chronic disease represents a significant and exciting challenge for the NHS. Good chronic disease management offers real opportunities for improvements in patient care and service quality, and reductions in costs. This note sets out the current position and is aimed at PCT, NHS Trust and SHA management teams.

## The case for chronic disease management

The increased incidence of chronic diseases and conditions<sup>1</sup> presents a huge challenge not just to the NHS but worldwide. Chronic diseases are those that can only be controlled and not, at present, cured. They include diabetes, asthma, arthritis, heart failure, chronic obstructive pulmonary disease, dementia and a range of disabling neurological conditions.

Living with a chronic disease has a significant impact on a person's quality of life and on their family. The incidence of such diseases increases with age. Many older people are living with more than one chronic condition and this means that they face particular challenges, both medical and social.

The care of people with chronic conditions also consumes a large proportion of health and social care resources. People with chronic conditions are significantly more likely to see their GP (accounting for about 80% of GP consultations), to be admitted as inpatients, and to use more inpatient days than those without such conditions.

The World Health Organisation has identified that such conditions will be the leading cause of disability by 2020 and that, if not successfully managed, will become the most expensive problem for health care systems.

## How getting services right for patients with chronic disease will enable the NHS to deliver improvements in other areas

This is not just a primary care agenda, although many interventions aimed at managing and preventing chronic disease are delivered in the primary and community care setting. Improving care and services for people with such conditions will have a beneficial impact on secondary and emergency care – waiting lists, demand, workforce, improving other services and prescribing. There will also be implications for social care: many people living with long-term disabling conditions are dependent on social services for a range of support like community equipment, housing adaptations and personal care. There are often problems with staying in work, with all the knock-on economic problems involved.

For the NHS, good chronic disease management is about making the right things easier to do. Getting this right will not only improve things for these patients but will also free up resources to improve services across the NHS and social care.

### Benefits of good chronic disease management

#### Results of Castlefields Health Centre (UK) pilot of active management of conditions:

- 15% reduction in admissions for older people
- average length of stay fell by 31 per cent (from 6.2 days to 4.3 days)
- total hospital bed days used by this group fell by 41 per cent
- improved links between practice staff and other agencies in the community, leading to more appropriate referrals to other services and much faster response times for social services assessments

#### Evaluation of Evercare model of case-management for elderly in US:

- 50% reduction in unplanned admissions, without detriment to health
- significant reduction in medications, with benefits to health
- 97% family and carer satisfaction rates and high physician satisfaction

#### Veterans Administration (US), focus on improving chronic disease management:

- 50% reduction in bed-day rates from 1994-1998
- 35% reduction in urgent care visit rates
- moderate increase in clinic visits, tests and consultations

#### Kaiser Permanente

There are dramatic differences in bed-day use between Kaiser Permanente (and other US providers) and the NHS – e.g. the average length of stay for hip replacement is four days (Kaiser). This is in part due to their management of chronic disease, facilitated by greater integration between generalist and specialist care.

<sup>1</sup> The terms chronic disease, chronic condition, life-long disease/condition, long-term disease/condition and non-communicable disease/condition are commonly all used interchangeably

## Incidence

- In GB, 17.5 million adults may be living with a chronic disease
- Around 6 in 10 adults in the household population report some form of chronic health problem
- It is likely that up to three-quarters of those over 75yrs are suffering from chronic disease, and this figure continues to rise
- By 2030, the estimate is that the incidence of chronic disease in the over 65s will more than double
- It is estimated that 45% of those with chronic disease suffer from more than one condition
- WHO data indicates that this incidence is globally reflected, with 75% of the total population having one chronic condition and 50% having two or more conditions

## Burden of chronic disease

- Around 80% of GP consultations relate to chronic disease
- Patients with a chronic disease or complications use over 60% of hospital bed days
- Two thirds of patients admitted as medical emergencies have exacerbation of chronic disease or have chronic disease
- For patients with more than one condition costs are six times higher than those with only one
- People with more than one condition make much higher use of health care – e.g. the 15% of people with three or more problems account for almost 30% of inpatient days
- Some people are highly intensive users of services (10% of inpatients account for 55% of inpatient days) or very high intensive users (5% of inpatients account for 40% of inpatient days)
- In the Evercare pilots in nine PCTs, 2% of the at-risk over-65s accounted for 30% of the unplanned admissions for that group
- Evidence from the US shows that the care of people with chronic conditions consumes about 78% of all healthcare spending

Good chronic disease management can make a real difference, helping to prevent crises and deterioration, and enabling people living with chronic conditions to attain the best possible quality of life.

## What makes for good chronic disease management?

There is growing evidence, from service improvements, initiatives already in place and the experience of other countries, that the essential components of good chronic disease management include:

- Use of information systems to access key data on individuals and populations
- Identifying patients with chronic disease
- Stratifying patients by risk
- Involving patients in their own care
- Co-ordinating care (using case-managers)
- Using multidisciplinary teams
- Integrating specialist and generalist expertise
- Integrating care across organisational boundaries
- Aiming to minimise unnecessary visits and admissions
- Providing care in the least intensive setting

“ Personal health services have a relatively greater impact on severity (including death) than on incidence. As inequities in severity of health problems (including disability, death and co-morbidity) are even greater than inequities in incidence of health problems, appropriate health services have a major role to play in reducing inequities in health.”

Barbara Starfield, MD, MPH, Professor at Johns Hopkins University  
Schools of Public Health and Medicine, December 2003

#### Some examples of chronic disease

##### Arthritis

- Arthritis is the main cause of physical disability in the UK
- It is estimated that 8-10 million people in the UK suffer from arthritis, including: one million adults under the age of 45; 15,000 children; and 70% of 70 year-olds
- The cost of medical care in the UK has been calculated at £240-£600m annually
- Time lost from work is estimated to cost £650m
- Residential and nursing home costs are estimated at £130m

##### Asthma

- Asthma is the most common chronic disease in the UK
- Statistics for 1996 estimate that 6.7% of men and 6.9% of women in England &

Wales were treated for asthma – around 3.5 million people

- In 2001-02, 39 million prescriptions were dispensed for the treatment of asthma, at a net cost of £574m

##### Diabetes

- There are 1.3 million people with diabetes in England, and this increases every year
- Diabetes is the biggest cause of kidney failure, the leading cause of blindness in adults of working age and one of the biggest causes of limb amputation
- Diabetes significantly increases the risk of coronary heart disease and stroke

##### Respiratory disease

- Respiratory diseases (such as lung cancer, pneumonia and chronic obstructive pulmonary disease) cause 20% of all deaths and some 25% of hospital admissions
- 75% of respiratory disease deaths are in people over retirement age

##### Stroke

- Stroke is the single biggest cause of severe disability and the most common cause of death in the UK and other developed countries
- Each year 110,000 people in England and Wales have their first stroke
- 30,000 people go on to have further strokes

#### Key approaches to managing chronic disease

**Self-care and self-management:** supporting people to take an active role in managing their own care. Helping people to manage their specific conditions, and to adopt approaches that prevent these conditions from getting worse and reduce the risk of getting further conditions.

**Disease management:** multidisciplinary teams providing high-quality, evidence-based care, including the use of pathways and protocols.

**Case management:** the active management of high-risk people with complex needs, with case managers (usually nurses) taking responsibility for caseloads working in an integrated care system.

**Knowledge management:** the ability to identify at-risk groups within the population, carry out needs assessments, understand resource and activity levels and identify trends.

The complexity and challenge of managing chronic care increases as people develop multiple conditions as they age. However, while individual people may have complex conditions, the system for managing chronic care can be simple. Different interventions can be used for patients with different degrees of complexity.

### Deciding the right approach

It is important to have the information and knowledge to be able to carry out a risk-stratification on local populations to identify those who are most at-risk.

#### Level 3

As people develop more than one chronic condition (co-morbidities), their care becomes disproportionately more complex and difficult for them, or the health and social care system, to manage. This calls for case management – with a key worker (often a nurse) actively managing and joining up care for these people.

#### Level 2

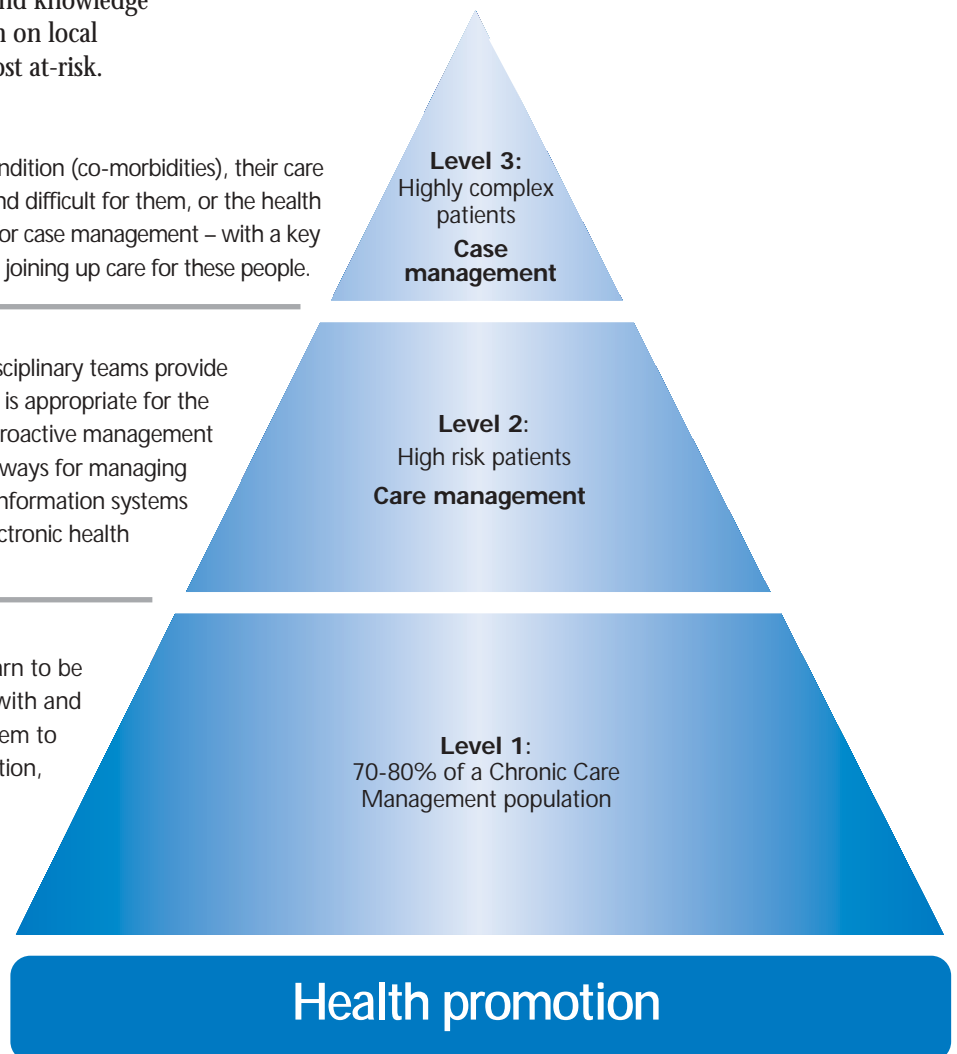
Disease/care management, in which multidisciplinary teams provide high quality evidence based care to patients, is appropriate for the majority of people at this level. This means proactive management of care, following agreed protocols and pathways for managing specific diseases. It is underpinned by good information systems – patient registries, care planning, shared electronic health records.

#### Level 1

With the right support many people can learn to be active participants in their own care, living with and managing their conditions. This can help them to prevent complications, slow down deterioration, and avoid getting further conditions. The majority of people with chronic conditions fall into this category – so even small improvements can have a huge impact.

## Population management

More than care and case management



## What will help to deliver good chronic disease management?

There is a great deal already happening at both national and local levels. Existing and developing national initiatives include:

- **The national service frameworks** have a strong focus on better joined-up service delivery, including prevention and the patients' role in managing their own care, with a key theme of better integration of health and social care

- **New GMS** and the associated **Quality and Outcomes Framework** provide financial incentives for primary care to increase its focus on managing chronic disease – with additional incentives in areas of greater prevalence, boosting investment in socially deprived areas. It also encourages organisational improvements that will support better chronic disease management

- **Developments in IT** through the centrally-funded procurement of an Integrated Care Record Service being led by the National Programme for IT will support better chronic disease management

- The introduction of **choice** at point of GP referral will place a strong incentive in the hands of general practice to better manage patient demands, become more involved in management of acute sector waiting times and influence primary care modernisation and development

- **NHS Estates** has established a joint research project with the Centre for Clinical Management Development, University of Durham. This aims to develop new principles of strategic asset planning, design and funding methodologies necessary to introduce greater flexibility, responsiveness and better VFM in health facility development; that build on new principles for chronic disease management.

## Developing new roles and new ways of working

- New roles and new ways of working are emerging for all professionals in relation to chronic disease management. **Liberating the Talents** outlines the strategic direction for primary care nursing, and **Freedom to Practise** provides guidance for implementing CNO's ten key roles.

- **Meeting the Challenge** and **The Chief Health Professions Officer's Ten Key Roles for Allied Health Professionals** focus on current and future roles for allied health professionals.

- This is being supported by expanding non-medical prescribing via extending use of Patient Group Directions, Independent and Supplementary Prescribing. Supplementary prescribing will increase the number of practitioners with responsibility for managing patients with chronic diseases such as diabetes, asthma and CHD.

- There is a growing recognition that delivering truly patient-centred care is a team activity. **Practitioners with special interests** are playing a key role in redesigning services around patients, providing greater convenience, faster access, more choice, an improved patient experience and improved quality of life for those with long-term illness.

## Models for delivering

Models and techniques being implemented and tested in the NHS include:

- The **Expert Patients Programme**

- The **National Primary Care Collaborative**

- The **Healthy Communities Collaborative**

- New planning models and tools to predict demand and plan services

- Learning from and working with successful organisations such as **Evercare**, **Kaiser Permanente**, **Pfizer Health Solutions** and programmes such as **Pursuing Perfection**

# The forward work programme

## Case management demonstration sites

Good management of specific diseases can greatly improve care and impact on service use. However, people suffering from more than one chronic condition have a complex mix of health and social problems. This calls for good management of their specific diseases to be embraced within a wider holistic approach. For the most vulnerable people, simple problems can often lead to a rapid deterioration in condition – but many of these problems are amenable to early intervention.

We are launching a funded programme to establish case-management demonstration sites, building on PCTs' existing experience of developing and implementing these approaches. The demonstration sites will introduce active management of high-risk patients. The aim is to provide co-ordinated patient-centred care within an integrated whole systems approach in order to:

- maintain health and promote well-being
- detect early changes in condition and prevent unnecessary admissions
- when admissions do occur, facilitate safe, early discharge

We will ensure that the demonstration sites have access to advice and support on applying and developing tools and techniques to extract, analyse and stratify data that will enable them to identify their target populations.

## Developing self-care support programmes

People living with chronic conditions often know best how to manage their conditions, but they need to be supported in this. We aim to develop good self-care support programmes, together with well-organised arrangements locally – perhaps with access to a national support structure – for delivering courses/programmes/materials to people with chronic conditions.

This will entail developing programmes that combine the generic approach of the Expert Patients Programme (EPP) with disease-specific approaches, such as those in the EPP and the national service frameworks. Work will include looking at how to address the needs of particular groups such as: older people with long-term conditions (who often have multiple, complex medical and social needs); people with mental health problems; children and young people and their families; and different socio-economic groups.

The involvement of patients, carers and their representatives will be central to this work.

We will be working with SHAs on the detail of this programme, and the process for establishing the case-management demonstration sites, by the end of April 2004.

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For further information, follow the links in the online version of this document at [www.dh.gov.uk/organisation](http://www.dh.gov.uk/organisation) – click on the Primary Care section, then the Chronic Disease Management link.

Questions or comments on this document can be sent to: [improving-chronic-disease-management@doh.gsi.gov.uk](mailto:improving-chronic-disease-management@doh.gsi.gov.uk)