

What are managed clinical networks?

Foreword

From the Chief Medical Officer for Scotland

The concept of managed clinical networks (MCNs) was first set out in the report of the Scottish acute services review, published in June 1998. The Executive's continuing commitment to the concept was made clear in *Our National Health: A plan for action, a plan for change* (December 2002), which highlighted the potential of MCNs to improve services for those suffering from chronic conditions. The key role which MCNs can play in healthcare delivery also features prominently in the report of the coronary heart disease (CHD)/stroke task force (September 2001), which forms the basis of our national strategy for CHD and stroke; in the *Scottish Diabetes Framework* (April 2002); and in *Future Practice* (July 2002), the fundamental review of the Scottish Medical Workforce.

As our new Health Department letter makes clear, MCNs are an essential mechanism for implementing a range of Scottish Executive policies. They promote our central commitment to involving

patients. They help us to achieve our waiting times targets, by looking at services from the patient's point of view and ensuring the care pathway is as smooth as possible. They also take forward our aim of improving the quality of services, and access to those services, across Scotland as a whole.

There is now considerable expertise in Scotland in developing MCNs, and we are keen that this should be shared as widely as possible to avoid unnecessary duplication of effort. These guides are consistent with that aim. Dr Chris Baker, Lead Clinician of the Dumfries and Galloway Cardiac Services MCN, has been instrumental in setting up that network, which has yielded generic lessons of relevance to the development of every type of MCN. He is therefore able to give an authoritative account of the subject. I wholeheartedly commend these guides to those who want to know more about the concept, as well as to those who are looking for some practical help in creating an MCN.

Dr E M Armstrong
Chief Medical Officer for Scotland



Sponsored by
an educational
grant from
Pfizer Limited

Introduction

Managed clinical networks (MCNs) offer a new and potentially revitalising way of considering and delivering clinical services within the NHS. If they are widely adopted, there is likely to be a quiet revolution in healthcare that will result in patients and clinicians acting as the main drivers for change and the principal arbiters on how finite resources are used in local healthcare systems. In the recent past, there have been wholesale changes within the NHS. To ordinary clinicians these changes have sometimes appeared arbitrary; often, reorganisation has seemed to be for its own sake or for the sake of political dogma.

The concept of an MCN that delivers services across the boundaries between professions and the different sectors of the NHS, and that places the focus on patients and services rather than on organisations, may seem like common sense to most clinicians and patients. Unfortunately, common sense alone does not make things happen, and developing an MCN involves a lot of work in the early stages. The different parts of the NHS are often defined by their boundaries and are

designed to work within them, meaning that the existing systems can act as an obstacle to working in MCNs.

Having been instrumental in establishing the first MCN for coronary heart disease (CHD) in Scotland, I am absolutely certain that MCNs hold the key to the future success of the NHS in Scotland, and that the effort is extremely worthwhile. My experience has been that a structured approach and way of thinking are invaluable in maximising the chances of success and in minimising the problems.

This guide outlines the concept of MCNs and explores some of the thinking behind their development. Terms that are defined in the glossary (page 8) are underlined in the text. More information and practical advice on setting up MCNs is provided in a companion publication – *Managed clinical networks: a guide to implementation*.¹

Dr Chris Baker

MBBS MRCGP MBA (Health care)
GP; Lead Clinician, Dumfries and Galloway
Managed Clinical Network for Coronary Heart
Disease; Member of CHD and Stroke Reference
Group, Scottish Executive Health Department

Key principles and aims of MCNs

The principles and key issues to be considered by MCNs were set out in a Scottish NHS management executive letter (MEL) in 1999 and reiterated in a Health Department letter (HDL) in 2002.^{2,3} They are summarised below.

- **MCNs must be managed** rather than drifting, so they need clear structures and lines of responsibility. A clinician or a clinical manager should take a lead role but there should be clear responsibilities for all concerned.
- **The purpose of the networks is to improve patient care** in terms of quality, access, convenience and co-ordination.
- **Work undertaken must be evidence-based**, using [Scottish Intercollegiate Guidelines Network \(SIGN\)](#) guidelines and [protocols](#) where available. Networks must support appropriate research and continuous professional development.
- **Outcomes need to be measured** and [audit](#) is an integral part of networks. All staff must participate in open review of results.
- **A quality assurance programme** that is acceptable to the [Clinical Standards Board for Scotland \(CSBS\)](#) is required. (From 1 October 2002, the CSBS will become part of NHS Quality Improvement Scotland.)
- **Each network must produce a written annual report** that is made available to the public. It must also have a clear policy about dissemination of information to patients.
- **Networks must be truly multidisciplinary** and multiprofessional. A properly functioning network needs appropriately trained clinicians with adequate facilities, working in partnership. Training and continuing professional development should be an integral part of networks.
- **Patients must be involved in shaping the network** and each network must have a policy on disseminating information.

The idea of MCNs has developed further since these principles were written, and a key element has in effect been added, by the pilot processes that have occurred. This is the principle that **MCNs should provide a mechanism for patients and clinicians to be involved in disease-specific planning and strategic thinking** with NHS boards. This inevitably also means being involved in discussions and decisions about allocation of resources.

If MCNs are to be effective and act as drivers for change, it is clear that all of the above key elements will be required. It could be argued that they will define the network, and local circumstances and resources will give the network its form. The principles, even if followed to the letter, allow sufficient latitude that major variations can occur to accommodate differing geography and demography, while still dealing with the same clinical area. There might even be subdivisions within a network if different locations within an area had widely differing needs or circumstances.

The ultimate aim of MCNs is to improve patient care in terms of quality, access and appropriateness. To achieve this, the quality assurance programme needs to be based upon the [patient journey](#), with key standards set out at each major stage. To make this realistically applicable for clinicians, the programme and the standards need to be locally agreed (using national guidance where available) and set out in a care pathway that spans the professions and health sectors. The care pathway will need to have clinical protocols at each stage to back it up; these again should be locally agreed, using existing materials where available. All of this should fulfil the MCNs' subsidiary aims, which are to ensure that the right treatment gets to the right patient at the right time in the most appropriate place and is delivered by a clinician with appropriate training and resources.

Defining MCNs

The term 'managed clinical network' is used to refer to a way of working in the NHS which relies on clinicians being part of a 'virtual' organisation that actively involves patients in service design and focus. In essence, an MCN comprises clinicians from all backgrounds and sectors in the local NHS who deal with a particular clinical problem or area, working across the boundaries between the professions and between primary and secondary care.²

In Scotland, there are local MCNs for diabetes, CHD, vascular services and palliative care.⁴⁻⁷ There is also a national MCN that covers care of people with cleft lips and palates.⁸ In all of these MCNs, the focus is on patients and clinical services rather than on buildings or organisations. While it could be said that in some areas clinicians were already networking very effectively across boundaries, the main difference in MCNs is that the process is actively managed, with the system supporting the work – rather than the work happening in spite of the system. One other important difference is the direct involvement of patients in the process.

Different definitions for MCNs are used in different parts of the UK, but the first definition made in an official document is the one that is still used in Scotland. The definition is included in a Scottish NHS [management executive letter \(NHS MEL\)](#)² that sets out the principles and key issues to be considered by MCNs. It states:

'Managed clinical networks are defined as linked groups of health professionals and organisations from primary, secondary and tertiary care, working in a co-ordinated manner, unconstrained by existing professional and health board boundaries, to ensure equitable provision of high-quality, clinically effective services throughout Scotland.'²

These core principles are reiterated in a recently published Health Department letter (HDL).³

MCNs offer a new way of delivering services which should mean that existing health service resources and staff are focused on what matters – patients and their problems. The direct involvement of patients in these networks should ensure that this focus is not lost.

In the past, the concentration upon individual hospitals, surgeries and institutions has served the NHS and patients well, but the world has moved on, as have patient demands, demographics and expectations. There have been attempts to redesign service provision through consideration of different models of service design – such as the 'hub and spoke' model, where the hub is a tertiary centre and the spokes are primary and secondary care. However, this model fails to recognise the increasing expertise and resources of the primary and secondary sectors. Nor does it allow for the great variety of local geography and demography in the UK, which makes it quite clear that one model would never suit all.

The concept of an MCN is not a set design but a way of working. This means that each model should be developed by a partnership of patients, clinicians and managers and, therefore, should be effective in delivering care in a local context. It is one simple way in which the NHS can be encouraged to be more 'joined up' at local level.

NHS trusts are structured towards a focus on meeting their own financial and organisational targets, rather than on delivering an agenda that spans the service. This, along with planning processes that work on an organisational basis, has resulted in fragmented developments when services do not occur solely within one organisation. The concept of an MCN should allow for smoother development.

In the past, there have been clear demarcations between professional roles and responsibilities, which were comfortable for patients and clinicians alike. Teamworking has always been evident in the best parts of the NHS, and while the professional boundaries remained clear with teams in the past, clinicians worked well within the constraints. However, in a fast-changing and technologically advancing health service, the roles of doctors, nurses and allied health professions (AHPs) are changing significantly – the expanding role of nurses is a good example. With increasing use of multidisciplinary education, the idea of professional boundaries is becoming dated. A shift is required towards a health service where the competence, training and facilities to provide a service are more important than professional labels. MCNs offer a way of facilitating that change, and the direct involvement of patients should help to speed the shift that has already started in the public's attitude.

It will be noted that we have been discussing the concept of a *managed* clinical network rather than simply clinical networking. There is a need for formal structure and organisation to ensure clarity of roles, co-ordination and quality assurance. Active management of resources, relationships and quality are integral to the concept of MCNs. To be effective in managing clinical issues and clinicians, it is clear that MCNs will need some direct clinician involvement in management. It could be argued that MCNs have been misnamed and should have been called CMNs – clinically managed networks.

Where MCNs are effective and involve all the local clinicians and a representative selection of patients, they have a great deal to offer to planners and commissioners. The clinicians have all of the up-to-date local intelligence about their service, and the knowledge of new and developing techniques and treatments; the patients bring the perspective of the public. MCNs

can have a role in supporting strategic planning and should have a role in drafting the section of the local health plan that covers their clinical area. Informed patient participation also means that MCNs can be extremely useful when considering resource allocation.

While no substitute for a good health promotion service, MCNs can be important in providing information on health issues to the public at large. The patients involved in an MCN can be invaluable in guiding the development of materials, and may have useful skills to be able to produce materials themselves. Patients are often enthusiastic users of the internet and can offer great help and insight when developing web-based material – which seems to be one of the most effective ways of conveying a health message.

Don't we network already?

Clinicians do network already, and often this networking is very effective and in patients' best interests. However, what networking there is tends to progress through the efforts of motivated and interested individuals, and is far from universal. Clinicians have very busy lives, and rarely does the system allow for clinicians in the same or similar disciplines to meet and discuss matters. Where this does take place, it is often in spite of the system and a tribute to those who make it happen. MCNs should foster and support this kind of work and build upon it, making networking more systematic.

While clinicians can often work together very effectively across the boundary between primary and secondary care when dealing with individual patients, this inter-service working may not take place when discussing populations and whole services. Clinicians often polarise into groups that reflect their health profession or the

sector of the service that they work in. They then seek support and funding for their group alone. This polarisation does not support a balanced development of services; working through an MCN should increase understanding and support for a more integrated approach.

Why network?

Most of the services in the NHS are of high quality and provided by well-trained and well-motivated clinicians. However, it is possible in any service to identify areas that could be improved. For example, despite committed, hard-working staff in Scotland focusing on cardiac services as a national priority, there are still problems with thrombolysis, secondary coronary prevention coverage, heart failure management and cardiac rehabilitation.^{9,10} This is even in spite of the provision of excellent national guidelines from SIGN¹¹ and the existence of good training programmes.

Analysis of the limitations on progress has identified the following as contributory causes to the deficiencies in cardiac services:⁹

- Poor co-ordination of services and staff between primary, secondary and tertiary care
- Lack of clarity in roles
- Problems in identifying patients and in delivering treatment to all of them
- Lack of knowledge about the benefits of specific treatments – among some clinicians as well as patients
- Concerns about use of resources – not just drug costs but also clinician time.

An MCN should address the main causes of these problems – provided it has a clear structure, clear roles for all, co-ordination across the boundaries, directed training and directed use of resources.

Where has the idea come from?

The idea of reorganising some services into MCNs was developed during the Scottish acute services review. The review, which was initiated by Sir David Carter, then Chief Medical Officer for Scotland, published its conclusions and recommendations in a report in 1998.¹⁰ While the review looked only at hospital services in Scotland, it involved individuals from a wide variety of backgrounds.¹⁰ It became clear during the review that any consideration of issues such as waiting times and waiting lists, or service provision in remote areas, would be flawed without consideration of the primary care aspects of service demand and provision.¹⁰ Hence the need for developing a whole-system approach which would, for example, consider referral rates when thinking about waiting times, or consider 'intermediate specialists' in primary care when thinking about hospital services to remote areas.¹⁰

The review also highlighted the problems that rural parts of Scotland would face if specialist services all became concentrated in the centre of the country.¹⁰ Designing services across geographical, political and NHS boundaries would provide a way of achieving full coverage of specialist services away from the major population centres. MCNs were therefore also seen as a way of formalising this concept and providing the necessary structures and mechanisms.¹⁰

The development of MCNs is a theme that underpins the whole vision for the future of health services in Scotland, and the acute services review report refers to MCNs throughout.¹⁰

The report states, 'The review sees the development of managed clinical networks as arguably its most important recommendation. Such networks offer the best prospect for delivering high-quality services which make optimal use of resources and offer more uniform access to patients than is the case at present ... Network development will require major

shifts in working practice on the part of all professionals and the traditional boundaries between disciplines and professional groups will need to be broken down and/or redrawn'.¹⁰

It goes on, 'The review ... is anxious to encourage the removal of barriers at the interface between primary and secondary care and sees managed clinical networks as promoting new and effective ways of working with extension of traditional staff roles, multiskilling and multidisciplinary working. It looks to the new primary care trusts and acute hospital trusts to work constructively to facilitate the movement of patients between these two sectors and values the contribution that integrated trusts have made in this regard'.¹⁰

The report also states, 'It favours a structure in which, wherever possible, networks comprise a blend of academic tertiary centre, district general hospitals and primary care. It sees this as: promoting equity for patients; providing a stimulating environment for staff in which there is equal access to resources; facilitating multidisciplinary working, skill enhancement and professional development; strengthening training programmes for all staff; and fostering research and development'.¹⁰

At roughly the same time as the Scottish acute services review started its work, consideration was being given to what systems might replace the NHS 'internal market', with its fundholding and contracts for services. It was thought that although the contracting and fundholding system had brought about a number of important changes to services and attitudes, it was not the only way forward. It was also clear that while a change of government had resulted in an end to the internal market, the new administration had no ready plans for an alternative system. The main political message at the time was that the NHS was moving away from competition between its component parts and towards co-operation. Although it was seen only in

terms of co-operation between trusts, the concept of MCNs seemed to provide a useful alternative to the old system and extended the idea of joint working to the whole of NHSScotland.

The development of local health care co-operatives (LHCCs) and primary care trusts (PCTs) in 1998–1999 resulted in a significant change in primary care in Scotland. Through the work of LHCCs, GPs and other primary care professionals have started to think about primary care services in terms of localities rather than simply in terms of practices. It seems that the co-operative working between practices in some LHCCs has followed from the joint working and sharing of experience which has resulted from out-of-hours co-operatives. The move to MCNs could be seen as the next stage in a process that has not until now involved hospital services in a direct way.

References

1. Baker CD. *Managed clinical networks: a guide to implementation*. London: HMC, 2002.
2. Scottish Executive Health Department. *Introduction of managed clinical networks within the NHS in Scotland*. NHS MEL (1999) 10.
3. Scottish Executive Health Department. *Promoting the development of Managed Clinical Networks in NHSScotland*. NHS HDL (2002) 69.
4. www.diabetes-healthnet.ac.uk/report01/mcnstmnt.htm (Last accessed 22 October 2002.)
5. www.show.scot.nhs.uk/mcn/html/about.html (Last accessed 22 October 2002.)
6. www.show.scot.nhs.uk/nhslanarkshire/hq/health_promotion/topics.htm (Last accessed 22 October 2002.)
7. www.show.scot.nhs.uk/gpac/about.htm#gpac (Last accessed 22 October 2002.)
8. The Scottish Executive. *Health in Scotland 2000. Report of the Chief Medical Officer*. Edinburgh: The Stationery Office, 2001.
9. NHSScotland. *Coronary heart disease/stroke task force report*. Edinburgh: The Stationery Office, 2001.
10. The Scottish Office. *Acute services review report*. Edinburgh: The Scottish Office, 1998.
11. www.sign.ac.uk/guidelines/published/index.html (Last accessed 22 October 2002.)
12. Health Professions Council (HPC) website (www.hpcuk.org/docs/about_us.htm). Last accessed 22 October 2002.
13. Great Britain. *National Health Service and Community Care Act 1990*. London: The Stationery Office, 1990.
14. The Scottish Office. *Designed to care: renewing the National Health Service in Scotland*. Edinburgh: The Stationery Office, 1997.

Glossary

Allied health professions (AHPs) – currently there are 12 professions regulated under the auspices of the Health Professions Council (HPC): chiropodists/podiatrists; dietitians; occupational therapists; orthoptists; physiotherapists; radiographers; medical laboratory scientific officers; speech and language therapists; clinical scientists; art therapists; prosthetists/orthotists; and paramedics.¹²

Audit – a systematic examination of current practice to assess how well an institution is performing against set standards. Audit should be an integral part of the work of MCNs, allowing the organisation to measure performance against agreed targets.

Clinical Standards Board for Scotland (CSBS) – a statutory body, established as a special health board in April 1999. Its role is to promote public confidence that services provided by NHSScotland are safe and that they meet nationally agreed standards, and to demonstrate that NHSScotland is delivering the highest possible standards of care. Current plans are that the board, along with Scotland's two other central clinical effectiveness organisations (the [Health Technology Board for Scotland](#) and the [Scottish Health Advisory Service](#)), will be integrated into a single new special health board, NHS Quality Improvement Scotland. Further information on CSBS can be found at the organisation's website (www.clinicalstandards.org).

Health Technology Board for Scotland (HTBS) – an organisation which provides evidence-based advice to NHSScotland on the clinical effectiveness and cost-effectiveness of new and existing health technologies (medicines, devices, clinical procedures and healthcare settings). Further information can be found at the HTBS website (www.htbs.org.uk).

Intermediate specialist – a specialist in intermediate care. Intermediate care encompasses services for those patients who do not necessarily require hospital care but whose needs are beyond the scope of a traditional primary healthcare team.

Internal market – this policy was passed into law as the NHS and Community Care Act 1990.¹³ Under this system, 'purchasers' (health authorities and some family doctors) were given budgets to buy healthcare from 'providers' (such as acute hospitals and ambulance services). To serve as 'providers' in the internal market, health organisations became NHS trusts – competitive organisations managed independently.

Local health care co-operatives (LHCCs) – in Scotland, voluntary groupings of GPs and other local healthcare professionals intended to strengthen and support the primary healthcare team in delivering local care. There are 70 LHCCs in Scotland, based on natural communities.

Managed clinical networks (MCNs) – in Scotland, linked groups of health professionals and organisations from primary, secondary and tertiary care, working in a co-ordinated manner, unconstrained by professional and health board boundaries, to ensure equitable provision of high-quality, clinically effective services.

Management executive letter (MEL) – old name for the main series of circulars issued by the Management Executive to the National Health Service in Scotland (now NHSScotland). MELs are now known as Health Department letters (HDLs).

Patient journey – the pathway a patient takes while receiving healthcare; for example, from GP referral to discharge from hospital following treatment.

Primary care trusts (PCTs) – in Scotland, bodies established from 1 April 1999 as part of the *Designed to care*¹⁴ arrangements, with responsibility for the provision of the full range of primary care, community and mental health services.

Protocol – a set of agreed procedures for a specified circumstance or patient group.

Quality assurance – improving performance and preventing problems through planned and systematic activities including documentation, training and review.

Scottish Health Advisory Service (SHAS) – in Scotland, an independent organisation that helps to improve health service care and quality of life for people with a mental illness, for people with a learning disability or physical disability, and for frail older people. As a signatory to the Scottish Executive Charter for Inspectorates, SHAS provides professional advice and information to Scottish Ministers, the general public and other colleagues in the Scottish Executive. Further information can be found at the SHAS website (www.show.scot.nhs.uk/shas).

Scottish Intercollegiate Guidelines Network (SIGN) – a body formed in 1993, with the aim of improving the quality of healthcare received by patients in Scotland. Its work covers the development and dissemination of clinical guidelines for effective practice, based on the best available evidence, to reduce variation in practice and outcomes. SIGN guidelines can be downloaded from the organisation's website (www.sign.ac.uk).



Sponsored by an educational grant from Pfizer Limited

The data, opinions and statements appearing in the article(s) herein are those of the contributor(s) concerned; they are not necessarily endorsed by the sponsor or publisher. Accordingly, the sponsor and publisher, and their respective employees, officers and agents, accept no liability for the consequences of any such inaccurate or misleading data, opinion or statement. **Published by Hayward Medical Communications**, a division of Hayward Group plc, Rosemary House, Lanwades Park, Kentford, Newmarket CB8 7PW. Tel: 01638 751515. Fax: 01638 751517. email: admin@haywardmedical.co.uk **Design & Editorial Office** Hayward Medical Communications, 8–10 Dryden Street, Covent Garden, London WC2E 9NA. Tel: 020 7240 4493. Fax: 020 7240 4479. email: edit@hayward.co.uk Copyright © 2002 Hayward Group plc. All rights reserved.