

Managing chronic disease as a team – new models of care delivery

Peter Brooks

As the world's population ages, the impact of chronic diseases will drive health systems around the world in two ways – adding significantly to the cost, and imposing considerable constraints on the already strained healthcare workforce. It is estimated that the health budgets of most developed nations will consume 20% of their gross domestic product by the 2020s. The most recent World Health Organization Health Workforce Report suggests shortfalls of some 4.3 million healthcare workers over the next decade – including nurses, doctors and health administrators. In this article, Peter Brooks argues in favour of a radical change in the way healthcare services are delivered, accompanied by a shift in the focus of healthcare resourcing from acute care to disease prevention and health promotion – currently less than 10% of healthcare spending in most countries.

Alternative models of healthcare delivery need to be established to endow a range of healthcare providers with broad knowledge and a range of competencies to care for people with chronic conditions like diabetes. Team-based care should be delivered by a

diverse group of healthcare providers who communicate regularly about the care of a defined group of people, and participate in this care on a continuing basis. The overarching strategies of this healthcare team include such things as:¹

- population-based care
- treatment planning – negotiated with the patient
- evidence-based clinical management
- self-management support – emphasis on health education
- self-care and counselling in behavioural change
- more effective consultations
- consistent follow-up (face to face, by telephone or via the Internet).

Some key elements of chronic disease management do not necessarily involve doctors.

The important elements involved in a chronic disease management programme are summarized in the Table on page 47. A number of these do not necessarily involve doctors. Role delineation is an important issue within the multidisciplinary team, and, while there is no doubt that medical graduates have a major role to play in diagnosis and initial assessment, the continuing management and monitoring of people

Table: Key elements in chronic disease management

Clinical practice guidelines and clinical pathways
Responsiveness and accessible information systems
Methods for continuous quality improvement and clinical audit
Resource management techniques and systems
Access to specialty care management
Emergency room management for specific chronic conditions
Case management
Patient empowerment through education and counselling
Telephone monitoring and tracking systems
Community-based opportunistic health screening
National disease registries

with a chronic condition can and should be shared with other healthcare providers.

Multidisciplinary teamwork

Another important issue relating to the management of chronic diseases is that this should cross the barriers that currently separate hospital-based and community care. Unfortunately, healthcare systems are often hierarchical and as such interfere with the development of comprehensive healthcare delivery. It is most important that different sectors of the health system work together smoothly, and that the 'ego systems' – still so strong among healthcare professionals – are addressed.

Furthermore, healthcare professionals, rather than the people requiring care, remain the primary focus of health systems, in the same way that episodes of acute care (which are also common in chronic diseases) take precedence over chronic care. It is essential that multidisciplinary team-based care spans the community and the institutions within

that community, and that there is optimum communication between specialists, primary care teams, and the people requiring care.² People needing long-term care must be afforded a much stronger voice in this dialogue.

New roles for a new approach

In preparing for this new paradigm of chronic disease management, future healthcare providers will need to develop skills and knowledge involved in case management and integration. They will require expertise in health promotion and disease prevention, and the ability to empower people through education to effectively self-manage their condition.³

Increasingly, people will know as much or more about their chronic disease than their healthcare provider. Much of this data, however, is unfiltered. A key role of healthcare providers will be to assist people in their journey through this mass of information – to identify critical issues and appropriate parts of the healthcare system. Health

promotion, support and empowerment, along with education in healthcare systems and team working, need to be addressed at both undergraduate and postgraduate levels so that future healthcare providers will navigate effectively through the complexities of healthcare systems.

Health promotion, support and empowerment are required to navigate through the complexities of healthcare systems.

Many of these skills might be acquired by healthcare providers through inter-professional learning. Programmes should be developed in which people from different disciplines learn together around particular clinical problems to appreciate which skills and expertise each can bring to that particular issue.

The need for generic healthcare providers

While it is clear that more doctors and nurses are needed, the problems relating to chronic diseases cannot be solved by this group alone. A generic healthcare provider is required with a defined range of allied health skills – physiotherapy, occupational therapy, nursing, communication, and so on – but not necessarily specialty expertise in any one discipline. These professionals would work closely with other members of the healthcare team – general practitioners and the primary care sector in particular.

As well as coordinating care for people with a chronic disease, these generic healthcare providers may be useful in the care of elderly people in a community

setting, and in rural areas where healthcare providers are in short supply. New technology, such as video-conferencing, might be used to link those in rural areas with specialists – medical or other – in urban centres. Similarly, generic healthcare providers with skills in acute resuscitation, dental care, basic physiotherapy, counselling, and limited prescribing could provide useful care in local communities.

In the USA, around 70 000 physician assistants make an important contribution to the healthcare system. The physician assistant reports to a medical practitioner although that practitioner might not be on site. It is likely that physician assistants will play an increasingly significant role in future healthcare delivery, particularly for chronic diseases; similar programmes are being developed in Scotland, England, Canada, and Australia. In many parts of the world, nurse anaesthetists are playing an increasingly important role in assessing chronic pain, managing post-operative pain, and delivering anaesthesia. Anaesthetic assistants, surgical assistants and other groups are also being developed.

Models for role extension

Extending the roles of healthcare providers is of the utmost importance – by creating either delegated roles (the physician assistants mentioned above) or new autonomous roles, such as nurse practitioners. Implementing role extension requires the restructuring of healthcare, as well as progressive competency-based training. Underpinning role extension is the notion of generic descriptions of health competencies across professional boundaries.

The ‘skills escalator’ model developed in the UK is a good example. This model has a nine-level career framework which starts with supporting roles and moves to assistants and senior assistants, assistant practitioners, qualified practitioners, senior or specialist practitioners, advanced practitioners, consultant practitioners, and finally more senior posts. It provides a wide variety of entry points into healthcare careers, encourages and recognizes lifelong learning and the acquisition of new skills, and is used in an environment that seeks both job satisfaction and service efficiencies by delegating roles, work, and responsibility up and down the ‘escalator’ where appropriate.

Generic descriptions of health competencies across professional boundaries are central to role extension.

Many of these models will be developed with a focus on inter-professional care and competency-based training. However, it is important that they have a generic basis rather than developing specialist roles from the start.

The characteristics of the modern healthcare system have been described as incorporating the following:

- concern with health as well as healthcare – prevention as well as treatment
- evaluation of services in terms of their effectiveness, appropriateness and necessity
- public involvement in health and healthcare policy making
- concerns for people’s satisfaction with and experience of care

- commitment to ongoing quality assurance
- emphasis on accountability.

Diabetes provides a useful example of how these new models of care might be developed. Many people with diabetes have considerable knowledge about their condition and are keen to work with their diabetes in order to reduce their treatment needs – including medications. Team management is increasingly the rule in diabetes care. In this way, all stakeholders in healthcare can work together to draw on a wealth of available expertise, and thus cost-effectively improve people’s health outcomes.

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References

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- 3 Gaziano TA, Galea G, Reddy KS. Scaling up interventions for chronic disease prevention: the evidence. *Lancet* 2007; 370: 1939-46.