The impact of chronic illness: partnerships with other healthcare professionals

Peter M Brooks

ABSTRACT

- Healthcare workforce shortfalls require a rethinking of models for delivering care to people with chronic disease.
- Chronic disease needs to be managed by a multiskilled team of healthcare professionals with specialist input.
- Education at undergraduate, graduate and postgraduate levels needs to prepare healthcare professionals for this new paradigm.
- Some tasks currently seen only as part of a doctor's purview could be performed by other trained professionals to allow doctors to concentrate on more appropriate activities.
- We need to explore new collaborations to deliver multidisciplinary healthcare for chronic disease and evaluate these for patient outcomes and cost effectiveness.

MJA 2003; 179: 260–262

AUSTRALIA'S POPULATION is ageing: our average healthy life expectancy of 73.2 years is second only to that of Japan (74.5 years).[1] Total life expectancy is some 10 years longer, but this further longevity may be accompanied by significant and increasing disabilities.[2] Burden-of-disease data show that depression, dementia, asthma, osteoarthritis, hearing loss and diabetes account for nearly 30% of the years of life lost due to disability in Australia. These are all chronic conditions that are increasingly prevalent,[3] in the face of healthcare workforce shortfalls in Australia.[4] Thus, there is a need to explore alternative models of healthcare delivery. These need to be collaboratively developed and should provide a range of healthcare professionals with broad knowledge and competency to care for patients with chronic illness.

Recently, Wagner defined what constitutes a patient care team and outlined strategies necessary for the effective functioning of chronic disease programs.[5] A patient care team comprises diverse healthcare professionals who communicate regularly about the care of a defined group of patients and participate in that care on a continuing basis.[6] The strategies that underpin this team care include:[5]

- Population-based care;
- Treatment planning, which should be negotiated with the patient;
- Evidence-based clinical management;
- Self-management support, with the emphasis on patient self-education, self-care and counselling in behavioural change;
- More effective consultations; and
- Sustained follow-up, which may not need to be face to face, but could be carried out, for example, over the telephone.[7]

It is apparent that some elements of a chronic disease management program (Box 1) need not involve clinicians. But one important issue that does is that of "managing" the team. This is still seen to be the responsibility of a healthcare professional, but increasingly there is a need for specific management expertise within the team. Role delineation is also an important issue. In the paradigm of diagnosis and management, there is no doubt that medical graduates have the major role in diagnosis and initial assessment of patients, but management can and should be shared with other healthcare professionals.[9]

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The development of team care for chronic disease needs to involve and cater for both institutional and community care, and these may be very "system" dependent: public and private hospitals and community facilities can have quite different systems and approaches. Current organisational structures for healthcare delivery are discipline-based, but we need to abandon this paradigm in dealing with chronic disease. Healthcare structures are often, by their nature, hierarchical "ego systems"[10] and can interfere with the ability to develop comprehensive healthcare delivery services. It is important to break through the barriers between these "silos".

The concept of multidisciplinary disease clinics where orthopaedic surgeons and rheumatologists work closely with physiotherapists is well accepted. Cardiologists and cardiac surgeons combine to provide advice on acute intervention in chronic cardiovascular disease. These concepts work well within the hospital system, but need to be adapted for community care.

Another problem with disease management for chronic conditions is that the healthcare system is predominantly geared for healthcare professionals rather than for patients, and for episodes of acute care (albeit often in chronic disease) rather than for chronic care. In the shift of care delivery, it is critical that the "team" work across the interfaces of the community and institutions and that communication between specialists and the primary care teams be maximised for the patients' good. The development of multidisciplinary disease-specific healthcare delivery teams helps to break down those barriers, but patients need to be involved more in that dialogue.

How do we develop the new paradigm for chronic illness care?

Future healthcare professionals will need to have some skills or knowledge of case management and integration of care. They will need to:

- Be aware of health promotion and disease prevention issues;
- Be able to act as the patient's advocate; and
- Empower patient self-care through education and provision of basic skills for self-care. Patients with chronic disease will have increasing knowledge of their conditions and will want to be involved in decision-making. Healthcare professionals will need to be aware of this patient empowerment.[11]

These issues of health promotion, patient advocacy and patient empowerment, along with education in healthcare systems, need to be addressed at both undergraduate and postgraduate levels so that future healthcare professionals will understand the vagaries of healthcare systems — how they work and how they can be made to work better, and how to promote patient self-management. In a way, the aim is to shift the healthcare system from one concerned with "illth" to one concerned with "health". Many of these skills may be acquired by healthcare professionals through multidisciplinary learning. Programs can be developed in which individuals from different disciplines learn together around particular clinical problems, and see what skills each can bring to the problem.[12]

The "generic" healthcare professional

There may be a role for a more "generic" healthcare professional who has a defined range of allied health skills (physiotherapy, occupational therapy, nursing, etc), but not necessarily the specialty expertise of any one discipline. These people would work closely with other members of the healthcare team, particularly general practitioners. "Generic" healthcare professionals with various skills may be useful in the care of patients with chronic disease or in assessing elderly patients in a community setting. They might be particularly useful in rural areas where allied health professionals are often in short supply. These "generic" healthcare professionals could use technologies such as video or computer to link with specialists, medical or other (physiotherapists, pharmacists, etc), in urban centres. Similarly, "generic" healthcare practitioners with skills in acute resuscitation, dental care, basic physiotherapy, counselling and limited prescribing could provide useful care in local communities, especially if they have contact with, and are regarded as part of a team of, healthcare professionals in regional centres. This model might also have a place in providing services in community aged-care facilities, closely linked with local general practice and community services.

Data from the United States suggest that partnerships between primary care physicians and "advanced practice nurses" can provide better patient outcomes.[13] If the training of advanced practice nurses were extended to include knowledge of physiotherapy, occupational therapy and pharmacy, these "generic" healthcare professionals could provide a broad range of advice and services in partnership with other disciplines.

1: Elements of a chronic disease management program[8]

- Clinical practice guidelines and clinical pathways
- Responsive and accessible patient information systems
- Methods for continuous quality improvement and clinical audits
- 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

Assessing alternative systems

The important issue is that we should consider alternative models of healthcare delivery for chronic disease, and assess whether they might work in Australia.

In some other areas of healthcare, particularly in the US and Europe, other healthcare professions have taken on roles hitherto considered the purview of the doctor. Nurse anaesthetists are well accepted in Scandinavia, where they have an important role in assessing chronic pain and managing post-operative pain.[14,15] The idea of "medical practitioner assistants", where nurses or others can be trained to be anaesthetic assistants or assist in other procedures, has long existed in the US. The supply of non-medical clinicians in the US is growing significantly, with the number of non-physician clinicians in primary care expected to be equivalent to 20% of the supply of physicians by 2015.[16] A recent US study[17] of the trend towards care by non-physician clinicians has shown that, although the number of patients visiting non-physician clinicians is increasing, many are seeing physicians as well. This is accompanied by a shift towards the provision of preventive services by non-physician clinicians and an increase in the proportion of patients seen by both types of providers. It is important that these physicians and non-physicians are truly complementing each other, delivering the same services to different groups or different services to the same group. For patients, the type of clinician may be less important than whether the care meets their needs and achieves a "better" or "equivalent" outcome. The success of these models depends on close collaboration and communication between the various care providers. It is important to evaluate these models carefully from the start to ensure that continuity and quality of care are not reduced.[18]

Sharing tasks

We need to work together to identify tasks performed by one professional group that might be equally well performed by others. This would then free that group to concentrate their expertise in other important areas. For example, pharmacists or nurses might be involved in providing repeat prescriptions, or reviewing medication and compliance; radiographers or expert systems could be involved in x-ray interpretation; and human movement professionals might

2: Possible role substitutions in the healthcare system

Healthcare practitioner	Substitute	Activity
Doctors	Appropriately trained health professional	Anaesthetics Endoscopy Minor surgical procedures Pain management Cataract extraction Cardiac stress testing
	Pharmacist	Limited repeat prescriptions Medication reviews
	Radiographers and expert systems	X-ray interpretation
	Human movement studies professionals	Exercise programs for obesity or musculoskeletal problems
Nurses	Trained personal carers	Aged care Dementia care
Allied health practitioners	Nurses/trained technicians	Application of ultrasound
	Health educators	Teaching exercise programs
All health practitioners	School teachers	General/specific health education
Ophthalmologists	Optometrists	Refractions

be involved in exercise programs for obesity, osteoporosis and chronic arthritis. Optometrists might play a role in the management of specified eye problems. Indeed, it should be asked whether it is possible to train non-medical practitioners to perform specific procedures such as gastrointestinal tract endoscopy, cataract extraction or arthroscopy.

We could also consider professional groups outside the healthcare system, such as teachers. Developing closer links between the healthcare and education systems could have significant effects on what children learn about the most important thing they have — their own bodies. Teachers could play a very important public health role as health educators to children in the 8–16-year age bracket. Development of basic knowledge, particularly on the importance of exercise, could play an important role in reducing the current epidemic of obesity in young people, which will inevitably lead to chronic diseases such as diabetes, arthritis and cardiovascular disease.

This role substitution will not be easy and can only be achieved with appropriate training and the ability for these different professional disciplines to respect each other and work together to improve patient care. Some possible role substitutions that might be considered are shown in Box 2.

Driving the change agenda

Muir-Gray[19] recently proffered what he considers to be the characteristics of a modern healthcare system. These include:

- 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 patients' satisfaction and experience of care;
- Commitment to continual quality assurance; and
- Emphasis on accountability.

Undergraduate and postgraduate health education needs to equip modern healthcare professionals to cope with this "post-modern" model of healthcare. In Australia, the shift to community learning experiences within the undergraduate and graduate curricula, together with multiprofessional learning across the healthcare disciplines, offers an opportunity to introduce the practitioners of the future to team management at an early stage.[12] It would be useful to explore the opportunities for these multiprofessional learning experiences in the training of specialists.

The challenges of chronic diseases, particularly in an ageing population and, paradoxically, an ageing workforce, provide an unprecedented opportunity to explore new models. What is important is that we work together and use our incredible expertise cost-effectively to improve patient outcomes.

Competing interests

None identified.

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(Received 30 Oct 2002, accepted 25 Apr 2003) ❑

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