Care of patients with chronic disease: the challenge for general practice

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ABSTRACT

- General practice can provide good quality care for a range of high-prevalence chronic diseases, at the same time providing continuity of care and management of comorbidity.
- Although the quality of care for patients with chronic disease is improving in general practice, about half of patient care does not meet optimal standards.
- Factors contributing to the gap between optimal and current practice include the method of financing, the availability of other disciplines to participate in team care, limited engagement with self-management education, and lack of information and decision support systems.
- National initiatives and incentives have enhanced planned and systematic care in general practice, and some programs have been introduced to improve access to allied health care.
- The number and complexity of programs, and lack of integration between them are a significant administrative burden for general practice, and the financial incentives are small compared to overseas programs. A better integrated and more comprehensive strategy is required to achieve widespread and sustained improvements in the quality of care for people with chronic disease in general practice.

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Care for people with chronic disease is a major challenge confronting our health system, with 77% of Australians reporting one or more long-term health problems and more than half of those aged 65 years and older having five or more conditions.[1] Eighty-seven per cent of the population attend general practitioners at least once each year, and general practice provides the majority of care to patients with chronic illness, especially those with mild to moderately severe disease.[2] Thus, general practice figures prominently in strategies to address the rise in chronic disease. In this article, we review what has been achieved and what we might yet need to do to achieve better outcomes for people with chronic disease.

Effectiveness of management in general practice

With adequate support from specialist services and a systematic approach, general practice can provide good quality of care for patients with most high-prevalence long-term conditions. This has been demonstrated for patients with type 2 diabetes,[3,4] hypertension,[5,6] and chronic musculoskeletal disorders.[7] Optimal care often involves some kind of "shared care" arrangement between generalists and specialists as part of an ongoing relationship among the patient, GP, and specialist. Shared care between primary care and specialists is at least as effective as specialist care alone for patients with moderately severe asthma or chronic obstructive pulmonary disease.[8,9] A shared care model may also provide optimal care for patients with heart failure.[10,11]

Comorbidity and continuity

There are good reasons why, apart from its population reach, general practice is well suited to managing chronic disease. Most patients with chronic diseases have more than one chronic condition. Primary care practitioners are more effective in dealing with comorbidity than specialist providers.[12] Patients attending specialist services are less likely than patients in primary care to receive preventive care for conditions unrelated to the specialty.[13] General practice also offers continuity of care, which patients with chronic disease seek as their needs become more complex.[14]

Improving the quality of care for people with chronic disease in general practice

Despite general acceptance of the important role that general practice plays in chronic disease management, only about half of patients receive optimal quality of care and outcomes in Australian general practice. This has been demonstrated in the care of children with asthma,[15] and adults with type 2 diabetes[16] or hypertension.[17]

Key factors contributing to this gap between optimal and current practice include (Box 1):

- The dominance of fee-for-service funding of general practice care, encouraging reactive rather than systematic care;
- A lack of multidisciplinary patient care teams within many general practices;
- Limited engagement between general practice and patient self-management education programs;
- Underdeveloped information and decision support systems; and
- A lack of physical infrastructure within many practices to allow workforce diversification.

Many of these factors are addressed by the "chronic care model",[18,19] which has been associated with improved health outcomes and lower health care costs.[20,21]

The Australian Government has introduced a number of funding initiatives that have gone some way in supporting improved management of chronic disease by GPs and allied health providers (Box 2). These include:

- The enhanced primary care (EPC) programs, which include incentives for GPs to develop structured management plans for patients with chronic illnesses (GPMP) and team care arrangements (TCA) for multidisciplinary care of patients with complex needs;
- Medicare items for patients with team care arrangements to be funded for up to five occasions of service per year from private allied health services and, more recently, for group services;
- Specific funding through the Practice Incentives Program (PIP) for practice systems and completing an "annual cycle of care" for patients with diabetes and a series of planned visits for asthma

1 Some barriers, current initiatives and possible enhancements to general practice care for people with chronic disease

Barriers and problems	Current initiatives	Possible enhancements
Lack of effective multidisciplinary team care in general practice	• Practice nurse involvement in chronic disease management • Team care arrangements with allied health providers • Access to allied health through Medicare or More Allied Health Services programs in rural Divisions	• Systems to support better communication between general practice and allied health • Infrastructure funding to provide space and equipment or other health professionals within general practice
Patient understanding of self-management and adherence to management plan	• Sharing Health Care Initiative	• More available local self-management programs • Involvement of practice staff in delivering self-management education • Better feedback from self-management programs to general practitioners
Care that does not meet evidence-based guidelines	• Guidelines disseminated by NHMRC, RACGP, Diabetes Australia, NHF	• Better integration of guidelines into structure of practice information systems
Inability of most clinical information systems to provide effective clinical audit of quality of care	• Templates for Care Plans • Support for disease registers through PIP • Division and NPCC collaborative programs	• Greater capacity for audit incorporated into practice systems

NHF = National Heart Foundation. NHMRC = National Health and Medical Research Council.
NPCC = National Primary Care Collaboratives. PIP = Practice Incentives Program.
RACGP = Royal Australian College of General Practitioners. ◆

education and management (originally three and recently reduced to two visits), accompanied by evidence-based management guidelines; and

• Specific funding for practice nurses through the PIP and Medicare items.

In addition to these financial incentives, the Divisions of General Practice have provided support to practices to establish the systems and infrastructure for chronic disease management, such as information management systems and disease registers. Divisions also have an important role in coordinating shared care and liaison programs with specialist services for a variety of chronic diseases.

The Australian National Primary Care Collaboratives (NPCC) form an important quality improvement program that has so far reached more than 600 practices in almost half of the Divisions across Australia.[22] The NPCC aim to improve care for patients with complex and chronic conditions largely through peer leadership, decision support and the use of the plan-do-study-act cycle.

What has been the impact of these initiatives?

GPs have actively taken up some of these incentives — notably the GPMP, TCA and the diabetes Service Incentive Payment (SIP). Other incentives, such as the GP asthma SIP, have been less widely used. Barriers to use of this incentive included paperwork and complexity of Health Insurance Commission requirements and payments.[23] Indeed, the number, complexity and administrative burden of all the incentives and initiatives have reduced their impact. Claims for all the EPC items still comprise less than 2% of attendances and, together with the diabetes and asthma SIPs, these incentives provide less than 5% of GP incomes.[24] This compares with a third of GP incomes based on quality indicators under the new general medical services contract in the United Kingdom.[25]

Despite these limitations, there is some evidence that these incentives have at least coincided with improvements in quality of care for patients in general practice. In a cohort of patients in diabetes registers, we found that indicators of quality of care improved following the introduction of the diabetes SIP in 2001.[26] We have also demonstrated improved adherence to guidelines and metabolic control for patients who had multidisciplinary care provided as part of a care plan.[27]

However, although there is some evidence of improved uptake and trends in quality of care, there are few published data to demonstrate that the introduction of these initiatives has been associated with improved patient health outcomes. Likewise, the NPCC have reported impressive improvements in aspects of quality of care.[28] However, it has not yet been demonstrated if these improvements will be sustained in the long term or diffused to other practices.

In general, the initiatives appear to have been worthwhile (although they have required some iterations to get right). However, they are too limited to produce substantial reorientation of GP care. Their contribution towards a multidisciplinary team approach has also been limited by the availability of allied health services in the community, restrictions on the eligibility and number of services funded by Medicare, and waiting times for state allied health services, which have become increasingly focused on the care of recently hospitalised patients.[29]

The GP incentives have provided little to support chronic disease self-management, and few of the Australian Government's Sharing Health Care Initiative programs have effectively engaged GPs.[30] Similarly, although evidence-based guidelines for diabetes, cardiovascular disease and asthma have been distributed, these have not yet been systematically incorporated into practice information systems, continuing professional development and clinical audit requirements.

What else needs to be done to ensure the effectiveness of general practice in chronic disease management?

At the practice level

Organisational changes could enhance the capacity of general practice to provide more effective care for patients with chronic disease. These include building decision support into practice information systems and tools for extraction of data for clinical audit. Given the plethora of systems in use in Australian general

2 Medicare benefits for chronic disease management in general practice and allied health*

Type (Item no.)	Description	Frequency	Amount
GPMP (721)	Assessment of needs, identification of management goals, plan for ongoing management in patients with a chronic illness	2-yearly	$122.40
TCA (723)	Contact with at least two other health or community care providers to develop a plan for the care of patients requiring multidisciplinary care	2-yearly	$96.90
Review of a GPMP (725) or review of TCA	Review of the GPMP or TCA	6-monthly	$61.20
Diabetes SIP	Completion of an annual cycle of care, including assessment of HbA_{1c}, blood pressure, lipids, weight, behavioural risk factors, screening for eye, renal and foot complications, and review of medications	12-monthly	$40 per patient with diabetes
Diabetes SOP	Completion of an annual cycle of care in at least 20% of patients with diabetes	12-monthly	$20 per patient with diabetes for all patients receiving SIP
Asthma SIP	Completion of an annual cycle of care in at least two visits to a GP over a period of 12 months, which includes: • diagnosis and assessment of asthma severity and level of control; • development of a written asthma action plan; • provision of information and patient self-management education; and • review of asthma management and the written asthma action plan	12-monthly	$100 per patient
Allied health	For patients with a GPMP and TCA (with chronic and complex care needs) for up to five services provided by registered allied health providers	12-monthly	$45.85 per service

*Information from Medicare Australia <http://www.medicare.gov.au/providers/incentives_allowances/index.shtml> and Australian Government Department of Health And Ageing Medicare Benefits Schedule 2007 <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/Medicare-Benefits-Schedule-MBS-1>. GPMP = General practice management plan. HbA_{1c} = glycated haemoglobin. SIP = Service Incentive Payment. SOP = Service Outcome Payment. TCA = Team care arrangement. ◆

practice, this is difficult. However, it is possible to work with the software industry to develop tools based on common standards and minimum datasets.[31] Clear signals are needed to the industry about what is required (both directly and indirectly by GP users).

The development of multidisciplinary team care requires more than care planning and the current allied health items. Within practices, there is scope for practice nurses to take on additional roles in chronic disease management, especially in supporting patients to develop self-management skills. This needs direct funding in addition to the indirect support through the EPC items (to which practice nurses can contribute). There also needs to be adequate space within practices to support more nurses taking on these roles — this requires infrastructure support in addition to specific incentives for their involvement in chronic disease care.

The development of more effective team care for patients with chronic disease with allied health services outside the practice will require an extension of the eligibility criteria to include patients earlier in the course of chronic disease, as it is these patients who can most benefit from allied interventions. Similarly, there needs to be an increase in the number of services that can be funded (from five from any provider in a year), especially where more than one allied health service needs to be involved. Divisions of General Practice may need to broker such services on behalf of their members, especially where private providers are in short supply.

The links between general practice and private or state-employed community and allied health services are poorly developed. The current team care arrangements rarely involve more than paper-based communication. At the very least, teamwork requires a relationship based on shared principles and goals and effective two-way communication. Regular interpersonal contact helps to build professional trust and understanding of each other's roles. This can develop where providers are under one roof — something that would be a lot easier if one level of government were to take responsibility for primary health care. However, in the meantime and for most general practices, we need to develop models where providers who are not necessarily collocated can work as a team.

System change

Although there have been some significant advancements, Australia still lags behind the UK and New Zealand in having a comprehensive approach to improving chronic disease management in general practice.[32] This is in part due to the lack of systematic implementation of evidence-based guidelines through audit and incentives. The NPCC demonstrate that this is possible. However, long-term widespread change requires a clear national strategy for primary health care, which, among other things, tasks our Divisions to develop a common clinical governance culture within general practice.

Finally, most funding for general practice is still for episodic care, which is ill suited to continuing management of patients with chronic diseases. The incentives and programs for chronic disease management in primary care need to be more extensive, better integrated, simpler to understand, and less administratively burdensome. The General Practice Quality and Outcomes Framework in the UK,[33] as complex as it is, should be examined as an alternative to our plethora of incentives and initiatives.

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Competing interests

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