

Reforming funding for chronic illness: Medicare–CDM

Hal Swerissen and Michael J Taylor

Abstract

Chronic diseases are a major challenge for the Australian health care system in terms of both the provision of quality care and expenditure, and these challenges will only increase in the future. Various programs have been instituted under the Medicare system to provide increased funding for chronic care, but essentially these programs still follow the traditional fee-for-service model. This paper proposes a realignment and extension of current Medicare chronic disease management programs into a framework that provides general practitioners and other health professionals with the necessary “tools” for high quality care planning and ongoing management, and incorporating international models of outcome-linked funding. The integration of social support services with the Medicare system is also a necessary step in providing high quality care for patients with complex needs requiring additional support.

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THE MOST RECENT REPORT on chronic disease in Australia indicates that 77% of the population have at least one chronic medical condition, and that chronic diseases (including cancers) account for more than 80% of the burden of disease and injury.¹ Monitoring the cost of service utilisation by people with chronic disease is not comprehensive and estimates of costs are relatively crude. Nevertheless, in 2000–01 it was estimated that total health expenditure attributable to specific

What is known about the topic?

Chronic diseases are a major challenge for a health care system that is still geared towards acute and episodic care. International evidence suggests that pay-for-performance can be successful in improving primary care chronic disease prevention and management.

What does this paper add?

This paper describes potential funding reforms using pay-for-performance that can be made to existing Medicare programs to provide improved care to chronic disease patients, particularly those who require more complex care.

What are the implications for practitioners?

This paper suggests moving towards health care policy that includes funding models that have been used internationally where additional primary care payments are made on the basis of care outcomes achieved.

diseases was \$50.1 billion (87.5% of total health expenditure); the major chronic diseases accounted for about \$30 billion (60%) of all allocated health care expenditure.¹

It is likely that demand for health and aged care services will rise dramatically with flow-on effects for health expenditure in the near future.² In addition to existing chronic disease, risk factors for chronic disease are widely distributed in the Australian population; for example, 54% of adults are either overweight or obese and 21% smoke tobacco.¹ Both chronic diseases and risk factors are disproportionately prevalent among the regional, low socioeconomic and Indigenous populations.¹ While this would indicate an apparent need for longer general practitioner consultations with people in low socioeconomic areas, such consultations occur at lower rates than in more advantaged areas,³ although there is evidence of greater-than-average use of Medicare care planning items in disadvantaged areas.⁴

The level of general management of chronic disease in accordance with recommended care is surprisingly low. A major United States study

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demonstrated that chronic disease patients receive only 56.1% of recommended care, and adherence to recommended care varies according to the condition, from 64.7% for hypertension to 10.5% for alcohol dependence.⁵ A study of low-income diabetic patients highlighted variability in the levels of recommended care processes such as HbA_{1c} measurement (52.7% of patients receiving recommended care), blood pressure measurement (77.9%), lipid measurement (44.5%) and complete foot examination (3.3%).⁶ Beyond these process-of-care measures, the attainment of desirable outcomes was also low for indicators such as HbA_{1c} levels (only 39.6% of patients achieving a level of $\leq 9.5\%$), blood pressure ($30.0\% \leq 140/90$ mmHg) and LDL cholesterol ($23.5\% < 30$ mg/dL).⁶ Preliminary Australian data from the National Primary Care Collaborative (NPCC) are similar: 48% of patients in Wave 1 (18 months' participation) achieving a blood pressure below the target of 140/90 mmHg and 35% of diabetic patients in Wave 2 (10 months' participation) with HbA_{1c} levels below the target of 7%.⁷

The provision of care for chronic disease is a major challenge for health systems; primary and secondary prevention, disease self-management by patients, and integrated and coordinated service provision are well understood elements of chronic disease management used in approaches such as the Wagner model.⁸ The capacity of system elements to deal with chronic disease have more than an abstract influence on the clinical indicators described above. A recent study of Indigenous health centres in the Northern Territory demonstrated that individual organisations rated as having better capacity for managing chronic disease care were better able to adhere to care process standards and had better outcomes in indicators such as HbA_{1c}.⁹

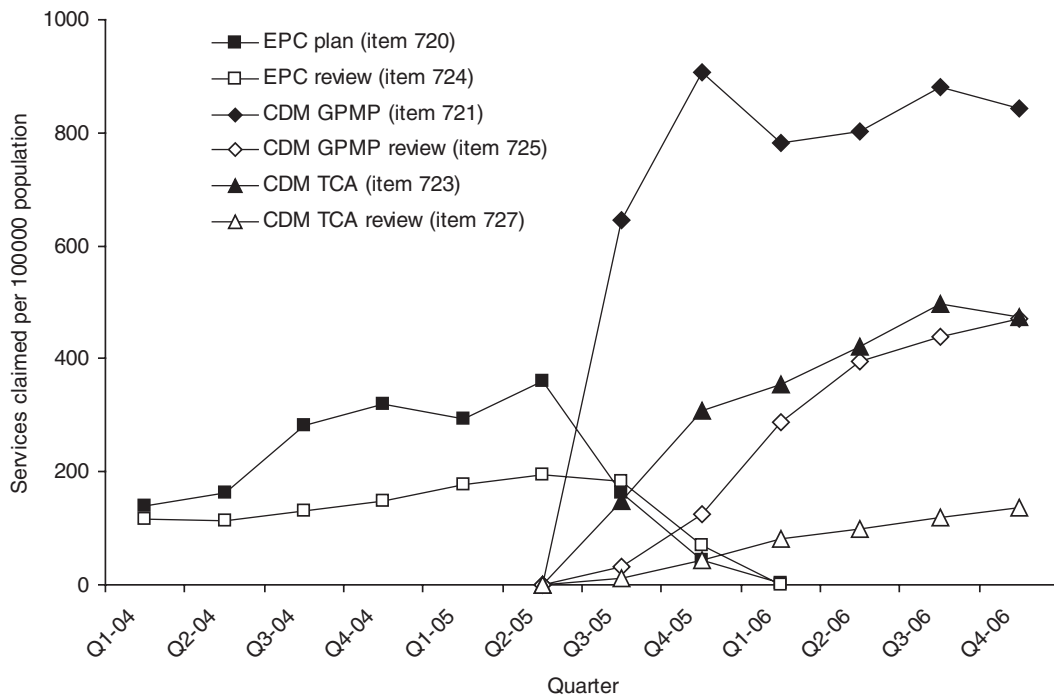
While these system elements are understood, their implementation in Australia will require reform in funding for primary care of chronic disease. Funding systems that focus on primary care,¹⁰ service integration¹¹ and effective chronic disease management strategies are likely to produce significantly better outcomes⁸ and returns on investment.¹² Traditional funding approaches

are inadequate for chronic disease care because they focus on short-term and relatively proscribed service delivery for episodes of care, and lack incentives for prevention and early intervention, as well as long-term, comprehensive and integrated management of chronic disease. Health reform debate in Australia is overly concerned with major structural changes,¹³⁻¹⁵ whereas actual reform to the system often takes the form of slight adjustments, for example the addition of new items to the Medicare Benefits Schedule (MBS). The obvious "middle ground" is program reform and realignment. While program realignment is significant, it is an approach that would be both more feasible and more productive in bringing about improvements in the efficiency and effectiveness of chronic disease prevention and management. Currently, the most obvious opportunity for such program reform and realignment is the Medicare chronic disease management strategy; the model proposed here builds upon the existing strategy and system components, moving beyond simple item number-driven, incremental change.

Medicare and chronic disease management

Building upon the traditional fee-for-service model, various attempts have been made to improve chronic disease prevention and management under the Medicare system. These attempts include health assessments targeted to specific groups, the Practice Incentives Program (PIP) and Service Incentives Payment (SIP) focussing on specific diseases and associated care processes (eg, diabetes cycle of care), and care planning, either in the form of the Enhanced Primary Care (EPC) items or their successors, the current Chronic Disease Management (CDM) items.

The PIP was designed as a partial capitation payment to promote continuity and quality of care. In 2005–06 \$261.8 million in payments were made to 4745 practices (an average of \$55 000 per practice).¹⁶ SIP was designed to provide specific service incentive items to GPs for activities such as cervical screening, diabetes

I Medicare EPC/CDM care planning item usage, 2004–06

EPC = enhanced primary care. CDM = chronic disease management. GPMP = general practitioner management plan. TCA = team care arrangements.

Care planning services claimed per 100 000 population during 2004–06 for both EPC and CDM items. Note, the EPC items were phased out over the latter half of 2005 following the introduction of the CDM items on 1 July 2005. Data obtained from Medicare Australia Statistical Reporting website (http://www.medicareaustralia.gov.au/providers/health_statistics/statistical_reporting.shtml).

care and asthma care. In 2005–06 \$12 million was allocated to these specific SIPs.¹⁷

EPC planning items were originally envisaged as a means of encouraging improved, coordinated multidisciplinary care for chronic disease patients with complex needs by providing incentives for GPs to collaborate with other health professionals.¹⁸ The initial uptake of the EPC planning item during 1999–2001 was slow,¹⁹ and qualitative studies of GP attitudes to the EPC program demonstrated that while positive about the intent of care planning, time pressures and communication problems with other providers were barriers to the use of care planning.²⁰ In 2004, following the findings of the Productivity Commission into the adminis-

trative costs of government programs on GPs (an estimated 5% of total income),²¹ EPC items were identified as a major contributor to this cost and were subsequently labelled “red tape”²² and in need of an overhaul. Recently, EPC items featured in the media following the release of the Professional Services Review (PSR) report of case-auditing of Medicare billing, which included an investigation of a Sydney GP who claimed 1046 EPC care plans, all of which were found to have been inappropriate.²³ As a post-script to the EPC program, a recently reported study provided preliminary evidence that care planning under the EPC program increased adherence to treatment guidelines for diabetes, and that metabolic control and risk factors

improved for patients receiving multidisciplinary care.²⁴

In 2005, EPC items were reworked into the CDM program, which expanded the availability of the items to chronic disease patients beyond those with complex care needs, and introduced the GP management plan (GPMP), a GP-only form of care planning. Multidisciplinary care planning was retained under the team care arrangements (TCA) and separate review items for each plan type were included in the CDM package, which also expanded the role of practice nurses in the overall process.²⁵ CDM item usage has also received media attention, with anecdotal reports of inappropriate use and the high growth in item usage and subsequent cost “blow-out” of the scheme. In response to such concerns, Medicare Australia is preparing to conduct an Australia-wide audit of CDM care planning.²⁶

Statistical information available from Medicare Australia's website demonstrates that the use of the GPMP far exceeds that of the TCA option, reviews of either item, or indeed EPC plans themselves (Box 1). Usage to date far exceeds expectations — if the current trend continues, it is projected that more than half a billion dollars will be spent over the first 4 years of the program, compared with the \$247 million predicted.²⁷ From July 2005 to December 2006, the total benefits paid on the four new CDM item numbers were about \$195 million.¹⁷ While the claims of roting are anecdotal thus far, and there are no audit results, given the importance and the cost of the CDM program, consideration should be given to the design of the program. Any program reform must ensure inclusiveness of those most in need, enshrine the importance of multidisciplinary care where it is appropriate, account for patient factors (such as complexity of care needs), provide appropriate remuneration and incentives for GPs and, in line with emerging international trends, be outcomes (rather than output) driven. In addition, program reform must also extend into social support and other services to provide overall quality care to chronic disease patients.

Overall estimates of health expenditure and chronic disease suggest that about 29% of total

expenditure on chronic disease was attributable to non-institutional services including 8% to out-of-hospital medical services, 7% to pharmaceuticals, 9% to community, public health and dental, and 3% to other professionals.¹ Using the latest available health expenditure data,^{1,28} the total non-institutional cost of chronic disease is \$22 billion, including both government and out-of-pocket expenditure for medical, pharmaceutical and allied health as well as \$1.3 billion for Home and Community Care (HACC) program expenditure.

It is arguable that currently Medicare is only a partial response to the rapidly emerging issues for the effective and efficient management of chronic disease in out-of-hospital settings. There is considerable evidence from international research, outlined below, that suggests Medicare needs to be reformed to deal more effectively with prevention and management of chronic disease.

International trends in system reform and outcome measures

The United Kingdom National Health Service (NHS) has embarked upon an ambitious scheme to reward doctors for the provision of high quality care as determined by performance against quality indicators of both care processes and outcomes.²⁹ The quality indicators cover a variety of conditions; by way of example, the diabetes indicators include measures of process and outcome similar to those described in the quality of care studies mentioned previously.³⁰ The model is derived from the concept of pay-for-performance (P4P), a funding method centred on the idea of providing financial incentives for the attainment of specified levels of care. P4P has received international attention in health policy circles,³¹⁻³⁴ and is also a component of the 2004 US Medicare Modernization Act, under which incentives have been created for hospitals to report against selected quality indicators for acute myocardial infarction, congestive heart failure, and pneumonia.³⁵ A study of a pilot of the UK model found that major practice changes resulted and practitioners were motivated to take part by a desire to improve patient care, professional pride and the financial incentives on offer.³⁶ Studies of the large-scale implementation of the

model have demonstrated a high level of attainment of the targets, including 91% of diabetic patients having HbA_{1c} tests within 12 months; as a consequence, higher than expected payments have been made to practitioners.³⁷ While more research and evaluation is necessary, a considerable flaw in the design of the program has already been identified — apparent “cream skinning” by exclusion of those patients likely to bring down the rate of attainment of successful outcomes,^{35,37} thus producing inequitable access to services for those in need.

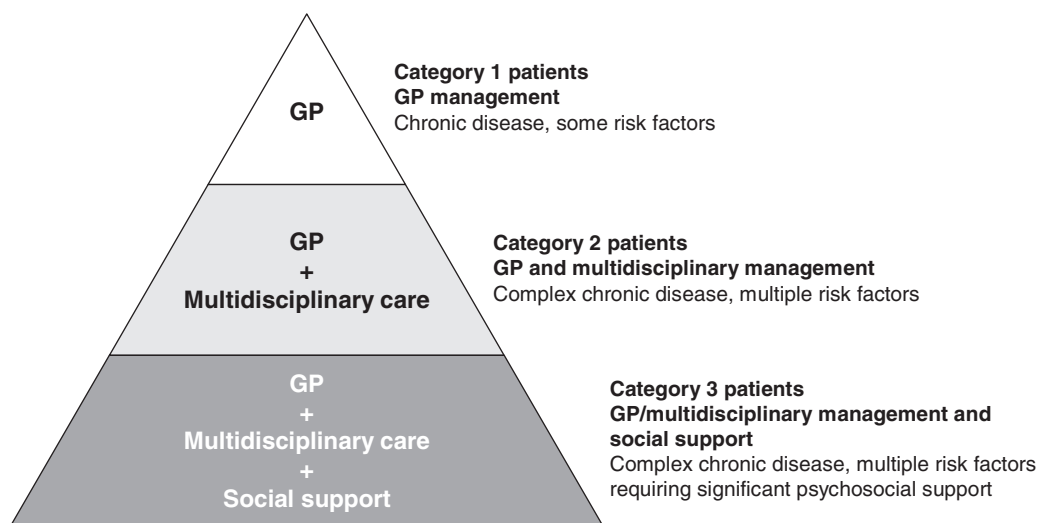
In Australia, current funding and program arrangements for the prevention and management of chronic illness in primary and community care settings are not optimally aligned in a Wagner-style fashion. Such realignment would integrate funding, monitoring, service delivery, clinical information systems and practice guidelines within a programmatic approach to chronic disease.⁸ The current arrangements provide a solid basis to the system, but require additional elements, such as increased service coordination and allied health provision and the incorporation of performance and outcome measures for care. In addition, the current alignment is not optimal with respect to

jurisdictional arrangements at policy and service provision levels. For example, HACC policy is multijurisdictional and this creates difficulties in providing comprehensive and coordinated services for patients with complex needs. At the primary care service provider level, considerable time and energy is being invested into local chronic disease prevention and management programs that attempt, as much as possible, to create an integrated service model using a patchwork of local, state and federal programs. To move forward in the prevention and management of chronic disease, the existing elements of the system need to be integrated across jurisdictional program boundaries to bring about the best possible outcomes for patients and use of resources.

Medicare–chronic disease management revisited

There is considerable potential to reform current Medicare programs for chronic disease, building upon the traditional fee-for-service approach and existing elements of the PIP/SIP and CDM programs, operating within a new framework shaped by international experience. The major elements

2 Patient grading for Medicare–CDM assessment and care planning



Based on the Kaiser Permanente triangle for chronic care.³⁸ CDM = chronic disease management.

of a Medicare–Chronic Disease Management (Medicare–CDM) program that should be considered include:

- Entry assessment and categorisation of the complexity of patient needs to ensure proper program targeting
- Care planning and funding levels for services based the complexity of patient needs
- Monitoring, feedback and incentives to achieve good practice and patient outcomes.

Entry assessment and patient categorisation

An entry assessment process that includes GP assessment of risk factors, comorbidities, existing disease severity, and need for multidisciplinary care as well as consideration of the patient's psychosocial issues should be established to provide a uniform method for eligibility for Medicare–CDM services. Patients with established disease that meet agreed criteria would automatically be eligible for Medicare–CDM. GPs would also be authorised to provide a risk assessment for any patient they considered to be eligible for Medicare–CDM notwithstanding the absence of established disease. Standardised algorithms would be used to assess risk factors (and for ease of use, be incorporated into software packages). GPs would also be able to override risk assessments if, in their judgement, it is warranted. In such cases the assessment would document the GP's judgement of the need for the care planning in the circumstances. The risk assessment process would form an individual MBS item.

The entry assessment process would include a mechanism for the categorisation of patients according to their anticipated care planning needs, similar to the current decision between GPMPs and TCAs. A three-level categorisation (Box 2), based on the Kaiser Permanente triangle for chronic illness care,³⁸ would grade patients as requiring:

- Medical management only: for example, patients with a chronic disease and some risk factors, who present with an uncomplicated clinical picture from a medical and psychosocial standpoint.

- Medical management plus multidisciplinary care: for example, patients with multiple chronic diseases and/or severe disease with numerous risk factors, who present with a more complex clinical picture and require the involvement of other health professionals to provide multidisciplinary care.

- Medical management, multidisciplinary care and social support: this category would be reserved for those patients who, in addition to meeting the second-level criteria, have psychosocial issues requiring more intensive support and case management beyond that which GPs and allied health professionals can provide; for example, home and community-based services.

Estimates suggest that about 70%–80% of people with a chronic illness self-manage with medical support (category 1),³⁸ with the remainder requiring additional multidisciplinary care (category 2), with or without social support (category 3).

Care planning and service funding

Patient categorisation should drive program eligibility, the mix of services provided and payments for services and outcomes. Patients with more complex needs will, by definition, require more complex and detailed care planning and follow-up. Currently, the CDM program pays a flat rate for all GPMP and TCA care plans regardless of the complexity of the patient's needs or the level of care planning required. As described above, the coordination and integration of multidisciplinary services has been identified as an impediment to the use of care planning as a whole, and reform must allow for increased payments to GPs to account for the greater length of time involved in the preparation and coordination of such complex plans. Secondly, in moving to an outcomes-oriented system, it is necessary to ensure that patients with complex needs, who have the potential to “weigh down” end-outcome measures, are included in the system by providing adequate incentives to avoid the cream-skimming limitation of the UK model.

Beyond the grading of overall payments for care planning to more appropriately reflect the time

and effort required in their preparation, consideration should also be given to the relative payments for care plan preparation and review. Currently, the CDM program pays double the amount for the preparation of a GPMP compared with its review. Reviews of care plans should be viewed as being *at least* as important as their preparation, and thus some rearrangement of the payment structure is indicated. The frequency of review would also be tied to the patient grading, with more frequent reviews for category 2 and 3 patients; the reviews themselves would also form part of the mechanism for the assessment of patient outcomes.

Service payments should also reflect the patient categorisation. Category 1 patients would be entitled to all standard Medicare and PBS services, plus the care planning and review payments included in Medicare–CDM. In addition, GPs would be eligible for incentive payments for patient outcomes (see below). Patients in category 2 would be entitled to allied health and nursing services as determined by the multidisciplinary care plan. The review process should ensure these services were appropriately and effectively provided as part of an integrated care plan. For category 3 patients, chronic disease management will require more than multidisciplinary care, and a straightforward pathway into home and community care services is required. In addition to community nursing and allied health included in category 2, home and community care, should include personal care, domestic assistance, home and garden maintenance, respite care, delivered meals, community transport and social support.

Importantly, access to services in the Medicare–CDM program should be based on need as determined by the patient eligibility assessment and categorisation. Payments for medical, nursing, allied health and home and community care services would be tied to the patient categorisation and care plans. The responsibility for CDM care plans would rest with individual medical practitioners (normally a GP) but could be delegated to nursing and allied health staff as appropriate. Patients would elect to participate in the Medicare–CDM program on the understanding

that their CDM would be coordinated through one medical practitioner. By doing so they would gain access to a greater range of services than would be available to them through the general Medicare program, particularly for category 2 and 3 patients. If they chose not to participate they would retain their general Medicare entitlements, but they would not have access to additional Medicare–CDM services.

Payments for services would continue to be administered by Medicare Australia. Specific service guidelines for different categories of care would be developed to ensure adherence to good practice. The current CDM payment system for allied health would need to be extended to include community nursing for patients who meet the criteria for category 2. Similar service payment arrangements as those used by the Department of Veterans' Affairs for their Home Care program could be adopted for home and community care services provided through Medicare–CDM.³⁹

Monitoring, feedback and incentives

Given the more complicated nature of the care required for category 2 and 3 patients, it would be advantageous to include SIP-style payments for adherence to recommended care processes such as the cycle of care for diabetes. This would provide additional payment for the coordination of care and a greater measure of the quality of services delivered to chronic disease patients akin to the UK model.

Similarly, outcome measures should also be included to provide additional incentives to reward high quality care provision as is seen in the UK model and the P4P concept more generally. The PIP could be reformed to provide incentive payments for achieving successful outcomes for patients participating in care plans for CDM. For example, incentive payments could be made to GPs as part of the care plan review for patients who achieve appropriate blood pressure targets. To improve the quality of overall chronic disease care, such outcome incentives should be applied to all categories of patients using a grading of payments to provide

GPs with greater reward for desirable outcomes in patients with complex needs.

The proposed model may be criticised because the performance and outcome measures, as well as the patient categorisation structure, have the potential to re-create the “red tape” problem of the original EPC items. For any publicly funded initiative, especially those involving significant spending such as Medicare, accountability is essential but the requirements must be managed and streamlined as much as possible. In the move from the EPC to the CDM program, greater scope for practice nurses to contribute to patient care was included to divert “red tape” from GPs. The model proposed here would build and expand on this notion. For category 2 and 3 patients, where greater social support and service coordination is required, patient-related accountability and reporting should be handled by nursing and allied health workers to ensure GP time is maximised in managing the medical elements of care. For performance and outcome measures, better information technology and systems must be funded to streamline this approach, and payments should follow the incentive structure proposed.

Conclusions

The prevention and management of chronic disease in non-institutional settings has great potential for health improvement in Australia. Notwithstanding considerable discussion and debate, proposals for large-scale health system change have not been supported. Instead, this paper proposes reforming and extending the existing Medicare program to address these issues.

The introduction of Medicare–CDM would facilitate the functional alignment of responsibility for chronic disease prevention and management across the Commonwealth and the states. Effectively, the Commonwealth would take overall responsibility for non-institutional prevention and management of chronic disease through the Medicare program. This would include outpatient services for chronic disease currently provided through public hospitals. Consequential adjustments to the Australian Health Care Agreements and the HACC

program could be made in the next round of negotiations to reflect the changed responsibilities.

Any substantial program reform for chronic disease management will need to extend beyond Medicare and general practice into the domain of social support services, both Commonwealth and state funded. In line with international trends, outcomes-based incentives must be considered as a mechanism to improve the quality of care. Chronic diseases will continue to increase demand, and reform must be focused on both meeting this challenge and providing high quality services. Health systems are often described as being mismatched to the needs of chronic disease patients,⁸ and this mismatch is probably even greater for those chronic disease patients in category 3 requiring social support services in addition to medical care. As the burden of chronic disease continues to increase, greater expenditure will be necessary to fund service provision. Additional expenditure on program realignments, as has been done in the UK, is justifiable to minimise expenditure growth and optimise both the use of resources and outcomes for patients.

Competing interests

The authors declare that they have no competing interests.

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