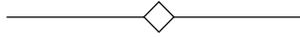


ARTICLES



A proposal for managed care payment options for patients with chronic conditions

TERRI JACKSON

Terri Jackson is Senior Research Fellow at the Centre for Health Program Evaluation, Monash University, Victoria.

ABSTRACT

This paper proposes an episode of care payment system for patients with chronic illnesses, extending earlier published work on this model of ambulatory care (Duckett & Jackson 1993). The payment system relies on annual voluntary enrolment and some marginal broadening of Medicare coverage in exchange for patients' willingness to participate in an ambulatory managed care arrangement. In the context of Australian health ministers' enthusiasm for managed care, the proposal embodies an intermediate policy approach which supports greater health care efficiency while minimising the prospect for reductions in patient autonomy or serious distortions in patterns of care. The policy is not designed to be applied population-wide, but to address the issues involved with a resource-intensive patient group, those requiring ongoing management of chronic conditions.

Introduction

The recent combined health ministers' document *Towards a National Health Policy* has placed case management of patients with chronic conditions at the centre of a set of goals for the reform of health service delivery by the year 2000:

A case management approach ensures continuity of care and avoids unnecessary complications or hospitalisation for patients with chronic conditions. For example, this may include funding on the basis of episodes of illness, budget holding arrangements for patients with chronic conditions, shared care arrangements and development of networks between primary care providers.

While the policy stresses the anticipated clinical benefits of case management, its motivation is undeniably economic as well. Case management systems attempt to address issues of how resources in the health care system (dollars, hours of nursing care, physiotherapy visits) are most efficiently used, by giving clinical decision-makers a capped pool or per capita budget within which to manage patients' care.

The health ministers' broad statement of intent has been reinforced in policy terms as part of the Council of Australian Governments' approach to reform of health and community services, where ministers have agreed that one of the key reform objectives in the 'coordinated care stream' is to 'provide further opportunities for care management to groups of people with complex or chronic conditions...' The Commonwealth Department of Human Services and Health has operationalised this by recently calling for proposals for funding of trials of coordinated care.

Why 'managed care' has appeared on ministerial agendas is easy to understand. Anyone who studies the effects of Australia's current funding arrangements – some capped, some uncapped; some salaried, some fee-for-service; some exclusively for inpatients, and some for ambulatory care – quickly comes to appreciate that a discontinuous policy history has resulted in a system which could yield a larger sum of reduced-misery and regained-health from the dollars which are currently invested. Existing funding arrangements are not easy to challenge because they reflect historical patterns of Commonwealth and State responsibility in health (McMillan 1992). The fact that some forms of care are only available or reimbursed in some settings, or from particular groups of providers, comes to be part of the 'natural' background of daily practice rather than being understood as an artefact of previous policy decisions.

In general terms there would be wide consensus that the health system could make better use of scarce resources by paying more attention to the allocations made across disease states, and across intervention modalities (Segal & Richardson 1994). Tools for predicting utilisation (Iezzoni 1994)

and identifying unnecessary care, however, are not well developed. The problem with many of the policy proposals currently on the agenda is that they assume that we have reliable methods for identifying the quantity and nature of necessary care, and for predicting which patients are high risk for utilisation and which are low risk. Policy proposals for care management often rely on various forms of patient compulsion such as general practice registration (Montalto 1994), and usually fail to distinguish between episodic and chronic care.

The term ‘managed care’ refers not only to the practical assistance which patients may require to find their way through the health care maze, but also to a system of payment. With regard to the former meaning, who would not agree that the fragmented, complex set of health professionals, visits and tests which patients are often asked to negotiate could be simplified by the appointment of a single ‘care manager’ to help patients find their way through the system? But ‘managed care’ is usually also conceived as a payment system. When used in this latter context it means that a set amount of money is budgeted for the care of a particular type of patient, and that the care manager will be held accountable for how that budget is expended, either on a patient-by-patient basis or across a group of patients. The most widespread application of managed care as a payment system is in the United States, where it has grown out of the development of health maintenance organisations. Some but not all forms of managed care introduce financial incentives in which providers, whether individuals or institutions, get to keep any excess as a bonus payment. As discussed below, there are possible adverse consequences for patients inherent in linking incentives to decreased levels of care.

Managed care for inpatients

In the inpatient setting, casemix funding has already introduced a form of managed care. Under the incentives of a set payment for a particular case type, care managers are expected to provide the average patient with a mix of services which costs around the average reimbursement. Most care managers will have some patients within each case type who require less than average, and some patients who will require more.

Many services related to hospitalisation can be provided either in or out of hospitals, or at least are currently counted as ‘outpatient’ services. This includes tests and visits prior to admission, as well as rehabilitation and care after discharge. The incentives of current systems of funding (both

casemix and area funding) encourage care managers to shift the costs of care to other sources of funding rather than undertake the more onerous task of weighing the benefits of particular interventions against their costs on a case-by-case basis. Costs may be shifted between the States and the Commonwealth, from acute care institutions to nursing homes, palliative care organisations or other longer term institutions, or from institutions to families who may now be expected to provide volunteer care that was previously provided by paid professionals.

It is important to recognise that 'saving costs' in a single institution, for example, by shortening length of stay for patients, may not be 'efficient' if costs are simply shifted off to other care providers. Costs to the economy are still incurred, regardless of whether they appear on the acute care hospital's budget. To achieve efficiency, some person or group with knowledge of both the patient and their condition must exercise judgement as to which aspects of the process of care can be reduced without jeopardising the clinical outcome, safety or comfort of the individual patient. Care managers need to weigh up the potential benefits of each diagnostic investigation, nursing observation, physiotherapy session, day of stay, and medical examination against the costs of these inputs to care (Fetter 1991).

Whose ambulatory care should be managed?

Managed care requires some compromise on the part of patients. For the majority of health consumers, health problems are intermittent, not very complex, and not very expensive to the health care system – a 24-hour clinic near home, a physiotherapist near work and a family general practitioner could each be required periodically. With such low-level requirements, managing one's own care is a small inconvenience which is more than compensated by the benefits of flexibility, convenience and privacy conferred by selecting a range of primary care providers. However, a patient with more chronic or intrusive health problems might find considerable advantage in maintaining a single source of care.

Bundling chronic care

Chronic conditions range in the severity of their impact on patients' lives, but typically require one or more medications taken on a daily basis, regular pathology or imaging to monitor the progression of the condition or outcomes of treatment, and the involvement of multiple medical and

other care providers. Typically, these are non-resolving conditions which require continuing medical supervision. Clearly there would be advantages to both the patient and the health budget if a single care manager tailored recommendations to each patient's needs. Some patients would be recalled only occasionally, others at greater frequency; advertising claims for the more expensive drugs would be weighed with due scepticism, and such drugs prescribed only when benefits outweighed the costs. Providers offered a set per-patient rate for an enrolled population of patients with the same condition would have to think more carefully about the use of resources for each individual.

Hospital outpatient departments have developed many characteristics which are ideal for treating patients with chronic conditions. Care in these clinics is managed by a hospital medical specialist with access to other medical specialties, allied health professionals, medical records support, and specialised diagnostic and pharmacy services. For the patient, such a one-stop-shop has real advantages (Summers 1992; National Health Strategy 1992), provided some attention is paid to scheduling of appointments so that patients are not required to travel from home to hospital for visits which might have been scheduled as part of a single visit.

There would also be potential clinical advantages to having a single provider or institution responsible for all care. Particularly amongst elderly patients, polypharmacy is a risk arising from multiple care providers, as is contradictory advice leading to poor self-management. A complete history of the patient's response to treatment could be built over time, and greater familiarity with the patient's own goals and life situation would support more individualised care.

In the current context of multiple providers and overlapping sources of funding, however, it would be extremely difficult to construct a payment system which would provide incentives to manage care. As it stands, specialists could easily refer patients who they felt required more frequent follow-ups to general practitioners for any additional care, thus moving the costs off-budget. The temptation would be strong to shift services to unregulated sectors, including inpatient treatment, where additional payment through the diagnosis related group would be available. Given that managing resources requires providers to think about patient care in unaccustomed ways, this would be the likely response of care managers to a bundled payment for outpatient care for people with chronic illnesses.

In order to avoid such problems, essential features of such a system

would be: an empirically derived classification (initially excluding inpatient care), weighting for multiple co-existent conditions; inclusion of intercurrent ambulatory care for acute conditions; case management limited to high-volume conditions for both prediction and averaging of financial risks; voluntary enrolment and periodic re-enrolment; and accreditation of care management programs. Each of these features will be taken up in turn.

Empirically based classification

Policy-makers seem keen to find alternative funding mechanisms but are comparatively unaware of the risk that patterns of care will be detrimentally affected by such changes unless policy proposals are underpinned by careful research. We have relatively little descriptive data in Australia about patterns of care for people with chronic conditions, either in hospital outpatient departments or under the care of private specialists. On average, how many consultations in a year are required for management of diabetes? How often are X-rays ordered for rheumatoid arthritis patients? How much difference in resource use is there between patients with mild and severe hypertension?

In particular, some cross-sectional data are available (what proportion of a year's specialist consultations were with cardiologists?), but we have almost no information about patterns of care for individuals over time. Australian casemix research in ambulatory care has focused exclusively on visit-based rather than episode-based classifications which track patients over a course of treatment (Lagaida & Hindle 1992; Michael, Piper & Heard 1994; Jackson et al. 1995). Researchers in the United States have devised a classification system for use by health maintenance organisations and other managed care organisations there termed 'Ambulatory Care Groups' (Weiner et al. 1991; Starfield et al. 1991). These are based on analysis of longitudinal data from health maintenance organisations and Medicaid sources and provide a useful research approach, but may not reflect Australian clinicians' patterns of care (Jackson 1991).

Obviously, current treatment decisions in the settings from which data are collected will have a strong influence on how classifications are constructed and what relative weights are assigned to various conditions and combinations of conditions. Sampling from settings where incentives exist for over-provision of care will overestimate weights; using settings

where care has been historically under-provided will yield underestimates.

As hospitals continue to close or privatise outpatient services, patterns of care which arose in the cost-constrained but clinically-rigorous setting of outpatient clinics are disappearing. That same care, if provided at all, will take on characteristics of care in the totally uncapped Medicare fee-for-service sector. As well, long-established patterns of multidisciplinary care for these patients will be eroded, as there is no equivalent to the Medical Benefits Schedule for physiotherapy, nutrition services, speech pathology and social work; thus opportunities to shift this care to other payers are largely non-existent.

The Commonwealth's Ambulatory Care Reform Program which provides funding for outpatient research under the 1993 Medicare Agreements with the States may prove to be important in the next five years as a source of data to design policy instruments for these sorts of payment system developments. If historically successful patterns of non-fee-for-service care are to provide models for managed care, it is imperative that good quality data be collected early in the life of the agreement before such patterns of care disappear irrevocably through the States' current cost-shifting efforts.

Multiple conditions

One obvious complication of designing such a payment system is the fact that chronic diseases rarely travel alone. Patients with chronic obstructive airways disease may also have circulatory problems or diabetes. Empirical work may be able to identify major pairs or groups of such conditions which significantly increase resource use and these may be incorporated into the classification. A system of defining variables ('classification breaks'), such as those in the diagnosis related group system which distinguish patients with complications and co-morbidities, could also accommodate multiple complicating conditions, with patients assigned to the classification which accounts for the highest use of resources.

The payment system need not designate the type of provider most appropriate to manage a person's care. While it may be clinically desirable for a diabetes patient to have ongoing contact with an endocrinologist, this could be organised or contracted by a diabetes education centre, or another medical specialist managing a concurrent condition. Principles of patient choice of enrolment, accreditation, and fair payment for managing a patient

with a particular level of need for medical resources would govern appointment of a care manager for a patient with one or more chronic conditions.

Payment for intercurrent acute care

Similarly, intercurrent ambulatory care for acute conditions would be managed as part of the overall chronic care plan, and the use of these services would form part of the research base on which classes and weights are determined. Thus the diabetes patient with a sore throat would have treatment provided or purchased from within the set per-patient payment. This would not necessarily mean a centralised or hospital-based usual-care system, as the care manager could well contract with general practitioners to provide 'shared care' for patients in a chronic care plan.

It might seem intuitively neat to separate a patient's chronic condition from their need for a Pap smear or medical certificate for work. But if the shifting of costs from one funding source to another is to be avoided, an ambulatory episode of illness model must be all-inclusive. Research to characterise care for patients with chronic illnesses must thus include all care received, not just care in the hospital outpatient department, but also general practitioner, specialist and diagnostic services through Medicare. Once other chronic conditions have been taken into account, it is likely that remaining care for acute conditions is fairly randomly distributed, but this remains to be tested against real utilisation data.

Not all chronic conditions

It is probable that the course of some chronic conditions is so variable, or the number of patients with that condition so small, that reliable estimates of a fair payment rate are not possible. Initial research effort should focus on the common and high-volume conditions, as better resource management for these will have the largest overall impact on the system. Such a focus will also ensure that risk pools are large enough, particularly in the early period of planning and delivery of managed care plans, to allow provider groups sufficient scope to balance the costs of patients with high care needs against those with costs of care below the all-patient average. Even with an empirically derived classification, individual level variation will require such cost-balancing.

In the medium term, bundling the costs of inpatient care into the average payment would give care managers greater scope to substitute more appropriate services. The inclusion of inpatient care into the episode definition would require careful study to identify any systematic predictors of hospitalisation to avoid serious consequences of under-servicing by care managers.

Voluntary enrolment and broadened benefits

Given the earlier comments on the advantages of managing one's own care, what's in it for patients to enrol for managed care? Some prefer hospital outpatient department care and would be likely to affiliate with the plan offered by their current care providers, others might be persuaded by the clinical advantages, and still others could be recruited on diagnosis to join whichever plan was involved in their initial care.

Other patients, however, may resist the sacrifice of flexibility in choosing care providers, even to the extent of neglecting care for their condition if it were available only from or managed by a single source. If Medicare were to require patients with chronic illnesses to seek care only from a designated provider, the enforcement and policing of compliance would be a major burden.

In the face of these problems, voluntary enrolment with the provision of incentives for patients to enrol in cost-effective managed care would be a more rational and politically attractive course. The need to identify clear benefits to patients is an important one, as previous Australian attempts to graft concepts like health maintenance organisations onto the Australian health policy arrangements have foundered because of the widespread popularity and success of Medicare. Incentives would include coverage of pharmaceuticals and, for some chronic conditions, provision of allied health services such as nutrition advice, physiotherapy and/or appliances. In addition, periodic re-enrolment would allow patients to switch to other providers, and an opting out arrangement (back into ordinary fee-for-service medical care) should be incorporated as a safeguard against quality levels dropping below patient expectations across the range of care plans. Because chronic conditions tend to be lifelong, re-enrolment procedures would not normally entail screening or diagnostic work to establish eligibility.

Similarly, provider-group participation would be voluntary, with teaching hospital departments, divisions of general practice, and innovative care organisations such as diabetes education centres expected to be amongst the early sponsors of managed care programs. Managed care funding arrangements will represent substantial new management challenges for providers and provider organisations. These include developing an understanding of risk management on a statistical rather than a patient-by-patient basis; monitoring resource use both within the contracting organisation (for example, call-back frequency) and outside (for example, use of external diagnostic services); developing best practice protocols; and employing or contracting with allied health providers and providers of intercurrent acute care. Research funded through the Commonwealth GP Branch project grants, through divisions of general practice, and through the Commonwealth's Ambulatory Care Reform Program may generate models for some of these innovative arrangements.

Accreditation and maintenance of standards

Finally, an accreditation system for managed care plans should be established to provide further safeguards for high-quality care and regulation of systematic under-provision. Professional colleges would be expected to take a lively interest in the development of standards for care and, in the longer term, the monitoring of outcomes of such care.

Measurement of outcomes of managed care, for example, admission rates for particular groups, would generate additional data for classification and payment policy, as well as draw attention to areas where greater investment in other forms of direct care, or in prevention, would be likely to yield better outcomes.

Conclusion

Many proposals for managed care are designed to be population-wide, that is, are designed to manage utilisation of ambulatory services by both the chronically ill and the rest of the population with only occasional calls on such services. Some aspire to fold in not only treatment but also lifestyle and other preventive interventions.

By contrast, this paper has argued that payment policy should 'hasten slowly'. The major immediate problems are the distortions to care and payment which our divided Commonwealth/State funding system imposes

on the health care system. The largest group for whom ambulatory care is important comprises people with chronic diseases requiring ongoing management. We do not yet have the tools to predict fair and reliable per capita payments for people without chronic conditions, nor are there incentives (other than financial penalties) sufficient to induce these medical consumers to surrender self-management of their care.

For people whose health needs entail use of multiple providers, considerable out-of-pocket expenditure for pharmaceuticals, and a complicated self-management regimen, however, contracting in to a managed care plan could have real advantages. It is possible to collect sufficient data on a limited range of conditions to ensure reasonably accurate estimates of annual utilisation and costs for different sorts of care. It may even be possible to bundle in some forms of inpatient care, although the ‘hasten slowly’ maxim would be important in this regard as well.

In sum, if designed to support better resource management for patients with chronic conditions, an episode of care payment system would:

- be based on a classification system empirically devised to classify patients in Australia into clinically meaningful and resource-homogeneous groups, for care provided over a particular period of time, probably a year
- have classes and payment weights derived from research on current practice settings with minimal incentives for either under or over-provision of services
- make payment for patients with multiple co-existent conditions at the rate for the highest level of severity (as measured by resources required), regardless of what professional specialty actually managed the patients’ care
- require the care manager to provide and supervise all medical and allied health care for the patient, including treatment of transient or intercurrent acute conditions
- limit the scope of chronic conditions covered by episode of care payment to those where a reasonable prediction of the risks of managing care could be made, and where the condition was common enough that care managers could manage a large enough volume of cases to allow risk averaging; some classifications would include inpatient care in the episode, while others would not

- entail voluntary enrolment (and periodic re-enrolment) of patients in a care management program in exchange for broadened entitlements to pharmaceuticals and forms of care currently outside the Medicare program
- require managed care organisations to be accredited and standards of care periodically monitored; groups would be encouraged to work towards measurement of longer term outcomes of this type of care.

The advantage of the proposal is that it focuses on where utilisation can be better managed without creating a two-tier ambulatory health care system, with 'private' patients maintaining choice of provider outside Medicare, and 'public' patients offered only managed care options. The opting-in, annual re-enrolment and broadened benefits are all designed to ensure that the managed care option is seen as a desirable one within a high-quality Medicare system guaranteeing universal access to services.

Acknowledgements

I am grateful to Professors RB Scotton, Jeff Richardson and SJ Duckett for helpfully critical comments on the manuscript, and to Ms Roslyn Littler for editorial assistance. This is a revision of a paper presented to the La Trobe University School of Nursing 'Managing Matters in Health Care' Conference, August, 1994.

References

- Australian Health Ministers' Forum 1994, *Towards a National Health Policy: A Discussion Paper*, April.
- Duckett SJ & Jackson TJ 1993, 'Casemix classification for outpatient services based on episodes of care,' *Medical Journal of Australia*, vol 158, no 7, pp 489-92.
- Fetter RB 1991, *DRGs: Their design and development*, Health Administration Press, Ann Arbor.
- Iezzoni LI 1994, *Risk adjustment for measuring health care outcomes*, Health Administration Press, Ann Arbor.

- Jackson T 1991, 'Ambulatory casemix in Australia: APGs or AVGs?' *Australian Health Review*, vol 14, no 3, pp 335–45.
- Jackson T, Sevil P, Tate R & Collard K 1995, *The development of relative resource weights for non-admitted patients*, National Centre for Health Program Evaluation and Victorian Department of Health and Community Services.
- Lagaida R & Hindle D 1992, *A casemix classification for hospital-based ambulatory services*, A report to the National Ambulatory Casemix Project, State Health Publication No IC 92-89, New South Wales Department of Health.
- McMillan J 1992, *Commonwealth constitutional power over health*, Consumers' Health Forum, Canberra.
- Michael R, Piper K & Heard P 1994, *Ambulatory Encounters Project: a report to the Commonwealth Department of Health, Housing and Community Services*, Flinders Medical Centre, Adelaide, South Australia.
- Montalto M 1994, 'Patient registration a valuable alternative', *Australian Doctor*, 28 October, p 11.
- National Health Strategy 1992, *A Study of Hospital Outpatient and Emergency Department Services (Background Paper No 10)*, Department of Health, Housing and Community Services, Canberra.
- Segal L & Richardson J 1994, 'Economic framework for allocative efficiency in the health sector', *Australian Economic Review*, 2nd quarter, pp 89–98.
- Starfield B, Weiner J, Mumford L & Steinwachs D 1991, 'Ambulatory Care Groups: A categorization of diagnoses for research and management', *Health Services Research*, vol 25, pp 990–1015.
- Summers M 1992, 'Hospital outpatient and emergency department services', *Health Issues*, December, no 33, pp 7–9.
- Weiner J, Starfield B, Steinwachs D & Mumford L 1991, 'Development and application of a population-oriented measure of ambulatory care case-mix', *Medical Care*, vol 29, pp 452–72.