Designing payments for GPs to improve the quality of diabetes care

Three features are essential in designing the flexible funding payments and pay-for-performance elements

Anthony Scott
BA(Hons), MSc, PhD, ARC Future Fellow and Professorial Fellow[1]

Mark F Harris
MB BS, FRACGP, MD, Executive Director[2]

1 Melbourne Institute of Applied Economic and Social Research, University of Melbourne, Melbourne, VIC.

2 Centre for Primary Health Care and Equity, University of New South Wales, Sydney, NSW.

a.scott@unimelb.edu.au

doi: 10.5694/mja11.11013

Performance pay for doctors has been introduced in many countries, including the United Kingdom through the Quality and Outcomes Framework (QOF) and the United States through the patient-centred medical home model.[1] The effectiveness of these models remains in question, although there is emerging evidence that these schemes can reduce hospital admissions.[2-4] In Australia, the Coordinated Care for Diabetes Pilot (CCDP) begins in 2012.[5] The key elements of the pilot (Box) are voluntary patient enrolment, a flexible payment for each diabetes patient to cover allied health services (among other things) and a pay-for-performance element. General practitioners will continue to be able to charge fee-for-service payments and claim diabetes-related payments from the Practice Incentives Program (PIP), but will no longer be able to claim the Chronic Disease Management Medicare Benefits Schedule (MBS) items for GP management plans or team care arrangements.[5]

Doubts about the effectiveness of financial incentives are raised, not only by poor design of evaluations, but also by poor design of funding models. Careful design, based on theory and empirical evidence, is essential in designing interventions to change professional behaviour.[6,7] This helps to ensure that the intervention is likely to be effective, and that unintended and undesirable consequences of incentives are minimised.

Our aim in this article is to propose three essential features of the flexible payment-per-patient and the pay-for-performance elements of the new CCDP.[8,9]

Rewarding improvements in quality of care

An objective of the CCDP is that incentive payments will be paid for:

> . . . the delivery of patient-centred care in accordance with best practice management guidelines for diabetes, and for achieving improvements in patients' health against specific indicators.[5]

Current and new mix of payments for patients with diabetes under the Coordinated Care for Diabetes Pilot (CCDP)

Payments	Current mix	New mix of payments in the CCDP*†
1. Fees for professional attendances		
	For each visit, general practitioners can charge patients what the market will bear, and patients claim (often via their GP) a fixed rebate determined by the MBS.	No change‡
2. Practice Incentives Program		
	Practices can claim payments for patients with diabetes within the PIP (the diabetes sign-on payment, the diabetes service incentive payment for completing a three-visit cycle of care, and the outcomes payment for each diabetes patient if the practice has completed cycles of care for at least 20% of their patients with diabetes). Practices in rural areas (RRMA 3–7) receive a loading on all PIP payments (including diabetes payments) of between 15% and 50%.	No change
3. Fees for GP management plans and team care arrangements		
	GPs can claim under MBS items 721 (development of a GPMP), 723 (development of TCA) or 732 (review of a GPMP or TCA). These are fees for each visit (so standard professional attendance fees cannot be claimed), with one GPMP or TCA claim allowed in 12 months (with some exceptions) and one review claim once every 3 months. Patients being managed under the chronic disease management items may be eligible for: allied health services (MBS items 10950–10970); and/or allied health group services (MBS items 81100–81125); and/or dental services (MBS items 85011–87777). There are restrictions on claiming both SIPs and GPMP/TCA/review payments.	Practices can no longer claim these fees
4. Flexible funding		
	None	A single payment per enrolled patient per year
5. Pay for performance		
	See PIP diabetes outcome payment for completion of cycles of care above.	Payments related to improvements in quality of care — to be designed

GPMP = GP management plan. MBS = Medicare Benefits Schedule. PIP = Practice Incentives Program. RRMA = Rural, Remote and Metropolitan Areas classification. SIPs = service incentive payments. TCA = team care arrangements.
* There are other indirect funding sources for the care of patients with diabetes, including funding for practice nurses, which changed in late 2011 from practice nurse MBS items and payments under the PIP scheme, to fixed subsidies for practice nurse and allied health salaries under the Practice Nurse Incentive Program (http://www.medicareaustralia.gov.au/provider/incentives/pnip.jsp). † The levels of payments are to be determined as part of the implementation of the CCDP. ‡ To the extent that the scheme leads to more visits by patients with diabetes, this will also increase costs to the MBS. ◆

Payment should be made for improvements in the quality of care, which requires measuring changes in quality over time. Previous schemes have made payments for the achievement of a level of quality, often based on a relatively high threshold, rather than for an improvement in quality. Using thresholds may not lead to changes in behaviour because: (i) doctors in practices with already high levels of quality of care can claim the highest threshold payment without changing their behaviour; (ii) there are no incentives to go beyond the threshold, and (iii) doctors in practices with low levels of quality of care have little incentive to reach a high threshold, as they perceive the costs to be greater than the financial reward.[10]

One option is to reward improvements in quality between two time points, and set successive thresholds close together, say at 5% intervals.[8] This would encourage those with low baseline levels of quality to improve the quality of their care. Furthermore, economic theory would predict that behaviour is only likely to change if the level of the payment is at least equal to the costs of improving the quality of care. These costs will vary across practices depending on their baseline level of quality and the complexity of the health problems of their patients.[3] Allowing payments to vary in line with these cost variations would lead to a potentially more effective intervention. The costs of improving quality of care from 10% to 15% are likely to be lower than those of improving from 90% to 95%. Practices that already attain high standards of care find it difficult and costly to improve further and would not be able to claim an improvement payment. Thus, an element of performance pay should recognise the high performance levels already achieved. The "improvement" payment should be higher than the "achievement" payment, or there would be little incentive for practices to improve their quality of care.

Avoiding "cream-skimming" and sharing financial risk

A fixed payment per patient gives GPs an incentive to minimise costs, as any surplus from the budget can be kept as personal income or reinvested in patient care, and any deficits are borne by the provider.[11] This is good for governments, who want to control costs and ensure costs are predictable, because it shifts the financial risk to GPs. However, if this risk is perceived to be too high, GPs may choose not to participate in the scheme or to enrol only "healthy" patients, so a careful balance needs to be struck between risk-sharing and the strength of incentives.

The incentives to minimise costs and "cream-skim" are already ameliorated to some extent in the proposed CCDP. GPs can still claim standard MBS items and PIP payments for their patients with diabetes. Total revenue per patient will vary according to the number of visits made per year, and the length of each visit, which partly reflects complexity. However, this may not cover intensity in terms of the use of other resources in the practice, such as practice nurses or the costs of employing allied health professionals.

> "the new payment system in the CCDP should attempt to maximise the impact of the incentives on quality of care"

One option is to "risk-adjust" fixed and performance payments, so that higher payments are made to practices with patients with higher needs or more complex health problems than the average. There is much international literature on this subject, including on the use of risk adjustment in the design of the patient-centred medical home pilots in the US.[12] Risk adjustment requires data on the primary care costs of diabetes care for all patients and how this varies according to patients' characteristics. Unfortunately, there are no routinely available data, and very little information on the use of allied health services by patients with diabetes and the associated costs.[13,14] Primary care and hospital data would need to be linked to obtain adequate measures of patients' severity of illness and diabetes complications.[14] It is doubtful whether adequate risk adjustment can be developed and implemented in time for the pilot. However, given continued access to MBS and PIP payments, the additional level of risk for practices under the new scheme may not be high, although this will vary across practices.

Avoiding exception reporting

A further way that cream-skimming can take place for enrolled patients is exception reporting.[15,16] Paying for the proportion of patients who achieve a certain target means that payments are based on a ratio, with the numerator equal to the number of patients reaching the target and the denominator equal to the number of patients in the population. Exception reporting occurs when practices exclude patients from the denominator, thus increasing measured performance and earning income, while not improving quality. For example, in the first year of the UK Quality and Outcomes Framework, a median of 5.4% (range, 0–40%) of practices used exception reporting for patients with diabetes. This translated into median gains of between £1700 and £15 000 per practice.[15]

One way to avoid exception reporting is to make payments based on the numerator only — that is, on the number of patients whose quality of care improves from one period to the next. This would involve a payment for each patient achieving a desired change in performance. Payments can only be increased from one time period to the next if the number of patients achieving a target, or whose quality of care improves, increases.

Conclusion

The design of the new payment system in the CCDP should attempt to maximise the impact of the incentives on quality of care while also ensuring an "appropriate" sharing of financial risk with providers, in addition to minimising any unintended consequences, such as exception reporting and cream-skimming. This will partly depend on the validity and reliability of quality indicators, but experience from the Australian Primary Care Collaboratives Program suggests that such data can be extracted from practices. The balance of additional revenue between the flexible payments and performance-pay

elements is also crucial, and can influence behaviour as well as costs. Careful design of incentive schemes is essential for their success.

Acknowledgements: Anthony Scott is funded by an Australian Research Council Future Fellowship. Mark Harris acknowledges funding from a National Health and Medical Research Council Senior Principal Research Fellowship. We thank Ralph Audem, Stephen Campbell, Stephen Colaguiri, Chris Del Mar, Colin Frick, Jane Hall, Marion Haas, Anushka Patel, David Peiris, Gawaine Powell Davies, Peter Sivey, Christine Walker, Doris Young and Nick Zwar for discussions.

Competing interests: No relevant disclosures.

Provenance: Not commissioned; externally peer reviewed.

1 Bitton A, Martin C, Landon B. A nationwide survey of patient centered medical home demonstration projects. *J Gen Intern Med* 2010; 25: 584-592.
2 Eccles M, Shepperd S, Scott A, et al. An overview of reviews evaluating the effects of financial incentives in changing healthcare professional behaviours and patient outcomes. *Cochrane Database Syst Rev* 2011; (7): CD009255.
3 Scott A, Sivey P, Ait Ouakrim D, et al. The effect of financial incentives on the quality of health care provided by primary care physicians. *Cochrane Database Syst Rev* 2011; (4): CD008451.
4 Dusheiko M, Doran T, Gravelle H, et al. Does higher quality of diabetes management in family practice reduce unplanned hospital admissions? *Health Serv Res* 2011; 46: 27-46.
5 Department of Health and Ageing. Request for tender. To finalise the design of, and implement, manage and evaluate, the Coordinated Care for Diabetes Pilot. Canberra: Australian Government, 2011. http://www.health.gov.au/internet/main/publishing.nsf/Content/Listing+of+Tenders+and+Grants-1 (accessed May 2011).
6 Ellis R, McGuire T. Optimal payment systems for health services. *J Health Econ* 1990; 9: 375-396.
7 Eccles M, Grimshaw J, Walker A, et al. Changing the behavior of healthcare professionals: the use of theory in promoting the uptake of research findings. *J Clin Epidemiol* 2005; 58: 107-112.
8 Campbell S, Scott A, Parker R, et al. Implementing pay-for-performance in Australian primary care: lessons from the United Kingdom and the United States. *Med J Aust* 2010; 193: 408-411.
9 Young D, Scott A, Best JD. For love or money? Changing the way GPs are paid to provide diabetes care [editorial]. *Med J Aust* 2010; 193: 67-68.
10 Mullen KJ, Frank RG, Rosenthal MB. Can you get what you pay for? Pay-for-performance and the quality of healthcare providers. *Rand J Econ* 2010; 41: 64-91.
11 Robinson J. Theory and practice in the design of physician payment incentives. *Milbank Q* 2001; 79: 149-177.
12 Ash A, Ellis R. Risk-based comprehensive payment for the patient-centered medical home: building and testing a partial capitation model. *Med Care* 2011. In press.
13 Colagiuri S, Colagiuri R, Conway B, et al. DiabCost Australia: assessing the burden of type 2 diabetes in Australia. Canberra: Diabetes Australia, 2003.
14 Clarke P, Leal J, Kelman C, et al. Estimating the cost of complications of diabetes in Australia using administrative health care data. *Value Health* 2008; 11: 199-206.
15 Doran T, Fullwood C, Reeves D, et al. Exclusion of patients from pay-for-performance targets by English physicians. *N Engl J Med* 2008; 359: 274-284.
16 Gravelle H, Sutton M, Ma A. Doctor behaviour under a pay for performance contract: treating, cheating and case finding? *Econ J* 2010; 120: F129-F156. ❑