

23 July 2015

Secretary  
Standing Committee on Health  
House of Representatives  
PO Box 6021  
Parliament House  
Canberra ACT 2600

**RE: Inquiry into Chronic Disease Prevention and Management in Primary Health Care**

Dear Mr Armstrong,

Thank you for your invitation to provide a submission to the House of Representatives Standing Committee on Health inquiry into chronic disease prevention and management in primary health care. We will not attempt to address each of the terms of reference of the inquiry in detail, but will address those areas where we have especial expertise. In particular, the School of Medicine at the University of Wollongong is one of the few medical schools in Australia with both a rural focus and a strong multidisciplinary chronic disease research program, and our comments will reflect this perspective.

**Best practice in chronic disease management in Australia and internationally**

There is general agreement in the literature that the Chronic Care Model described by Wagner and colleagues, which incorporates patient self-management, education, behaviour change and multidisciplinary care,(1) is the most effective approach to chronic disease management (CDM) in primary health care.(2) However, internationally, there are a wide variety of funding and organisational approaches to CDM broadly based upon the Chronic Care Model. The experience from the UK indicates that pay for performance for CDM can improve CDM outcomes.(3) However, unintended consequences including a reduction in patient-centeredness and patient satisfaction can result, (3-6) indicating care needs to be taken to include patient-based measures in outcomes. The Canadian experience from Ontario's health funding reforms has suggested that blended payment models (fee for service and capitation/performance payments) can provide a favourable balance between productivity and quality in CDM measures in primary care.(7) In the USA, research from the Kaiser Permanente health insurance group indicates that better integration of primary health care and hospital services can reduce overall health related costs. (8) The Dutch experience in bundled payment for primary health care CDM, coupled with integrated information platforms, have demonstrated favourable CDM outcomes and reduced rates of hospitalisation.(9)

Thus, international consultants McKinsey, who undertook the recent Australian government funded Diabetes Care Trial, synthesised best practice from international experience of disease management programs and came to the following conclusions: programs needed to be sufficient size to achieve economies of scale; program structures

and lines of responsibility for patient outcomes need to be clear and simple; programs need to have a patient focus; there needs to be transparency and effective use of information; and financial and non-financial incentives need to be used to align the interests of all stakeholders.(10)

Some components of the above models are included in current Medicare funding e.g. in Service Incentive Payments, GP Management Plan and Team Care Arrangement Medicare items. However, there is significant scope for a more cohesive approach to primary health care funding policy in order to improve CDM outcomes in our population.

### **Opportunities for the Medicare payment system to improve chronic disease management**

While components of Australian primary health care policy and funding have been informed by best practice in CDM, more work needs to be done. In addition to refining current policy to reflect best practice, three significant factors in chronic disease incidence and management, which have been left largely unaddressed in health policy, need attention.

The first factor is that most chronic disease disproportionately affects those at greatest social disadvantage.(11)

The second factor is that social disadvantage is unequally distributed, or clustered, geographically.(12)

The third factor is that distribution of health care providers such as GPs, specialists and dentists, is unequal, with reduced proportions practising in areas of greatest disadvantage.(11)

For example, Australian research demonstrates that the incidence of diabetes increases significantly in residents of more disadvantaged neighbourhoods.(13) Our own research in the Illawarra-Shoalhaven region demonstrates significant disparities in health risk indicators according to neighbourhood socioeconomic disadvantage. Consistent with nationally representative data,(14) in the Illawarra-Shoalhaven, women in the most disadvantaged neighbourhoods have twice the odds of being obese in comparison with women in the least disadvantaged neighbourhoods.(15) This may be even more accentuated in rural areas of the region.(15) This uneven distribution of disease risk is also associated with worse health outcomes. In the Illawarra-Shoalhaven, our work has identified significantly worse diabetes control in more disadvantaged neighbourhoods.(16) Our modelling indicates that as a result of the poorer control there are significantly higher rates of diabetic complications in the most disadvantaged neighbourhoods, which translates into increased health care costs.(16) According to our models, the most disadvantaged neighbourhoods incur twice the health care costs for myocardial infarction and microvascular disease due to diabetes that the least disadvantaged neighbourhoods incur.(16) Other research has indicated that similar disparities in health outcomes associated with area-level disadvantage occur across Australia, affecting rural health and also disadvantaged areas in major metropolitan

areas.(12) Indigenous health disparities account for a significant component of these health inequalities.(12) Thus, there are clear social justice and economic imperatives for structuring health resource planning to reduce area-level socioeconomic health disparities.

In contrast, current Medicare arrangements currently provide the same level of resources for primary health care CDM, via Medicare rebates and Medicare funded allied health consultation, regardless of the socioeconomic status of the community a primary care practice services. There is an urgent need for evaluation of Medicare incentive and resourcing models that close the gap between outcomes in the most disadvantaged and least disadvantaged communities. Given the significantly higher health care costs associated with poorer outcomes in disadvantaged areas, there is scope for long term cost savings from such investment. The restructuring of rural health workforce retention incentives according to the Modified Monash Model is to be applauded. However, there needs to be ongoing support for the training in, and retention of, medical, nursing and allied health professionals in rural and other areas of socioeconomic disadvantage if significant gains in CDM are to be made.(12)

### **Opportunities for primary health networks and private health insurers**

In Australia, there is very poor integration between primary health care and public and population health. Rarely, if at all, do individual primary health care services work in concert with public or population health authorities on agreed targets for health outcomes for local regions. Neither are the population health impacts of individual practices on population chronic disease outcomes in local regions measured, evaluated, fed back to practices for quality improvement or incentivised. If primary health care is to achieve its potential in improving population health for chronic conditions, these gaps need to be rectified. Our research has demonstrated that Primary Health Networks (PHNs) offer a mechanism by which regional population health for chronic disease burden can be measured so that co-ordinated action across populations can be undertaken.(17) It is vital that PHNs are sufficiently resourced to build capacity for this work, as in most cases, there is a lack of extant population level data collection infrastructure to facilitate the role.

There are also opportunities for private health insurers to assist in improving chronic disease outcomes. The experience of private insurer involvement in primary care funding in the Netherlands provides an example. The Dutch bundled payment scheme aimed to improve multidisciplinary collaboration, improve health care and also the affordability of health care for patients with chronic diseases, including diabetes care, chronic obstructive pulmonary disease care and vascular risk (18). Many studies have shown improvements in diabetic patient care through the bundled payment system (19-22) and other outcomes including improvements in process, outcome and patient satisfaction indicators.(23) Thus, exploration of private insurer involvement in a similar capacity in Australia is warranted.



Summary of recommendations:

- The Australian Government should continue to refine Medicare according to best international practice to achieve a cohesive approach to primary health care CDM funding
- Geographic socioeconomic disadvantage should be included as a factor in primary health care funding policy
- Training and retaining a rural health workforce needs to remain a key health policy priority
- Health policy should aim to promote better integration of population health and primary health care
- Primary health networks should be sufficiently resourced to undertake the significant task of population CDM health measurement and co-ordination
- Private insurer participation in CDM should be investigated within an overall cohesive CDM policy framework in Australia

Yours sincerely,

Prof Andrew Bonney  
Roberta Williams Chair of General Practice  
On behalf of the School of Medicine  
University of Wollongong

Authorised by Prof Ian Wilson  
Dean  
School of Medicine

## References

1. Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Milbank Q.* [Review]. 1996;74(4):511-44.
2. Dennis SM, Zwar N, Griffiths R, Roland M, Hasan I, Powell Davies G, et al. Chronic disease management in primary care: from evidence to policy. *Med J Aust.* [Research Support, Non-U.S. Gov't]. 2008 Apr 21;188(8 Suppl):S53-6.
3. Gillam SJ, Niroshan Siriwardena A, Steel N. Pay-for-performance in the United Kingdom: Impact of the quality and outcomes framework-a systematic review. *Annals of Family Medicine.* 2012;10(5):461-8.
4. Llanwarne NR, Abel GA, Elliott MN, Paddison CAM, Lyratzopoulos G, Campbell JL, et al. Relationship between clinical quality and patient experience: Analysis of data from the English quality and outcomes framework and the national GP patient survey. *Annals of Family Medicine.* 2013;11(5):467-72.
5. Millett C, Gray J, Wall M, Majeed A. Ethnic disparities in coronary heart disease management and pay for performance in the UK. *Journal of General Internal Medicine.* 2009;24(1):8-13.
6. Ashworth M, Armstrong D. The relationship between general practice characteristics and quality of care: A national survey of quality indicators used in the UK Quality and Outcomes Framework, 2004-5. *BMC Fam Pract.* 2006;7.
7. Hutchison B, Levesque JF, Strumpf E, Coyle N. Primary health care in Canada: Systems in motion. *Milbank Quarterly.* 2011;89(2):256-88.
8. Ham C, York N, Sutch S, Shaw R. Hospital Bed Utilisation In The Nhs, Kaiser Permanente, And The Us Medicare Programme: Analysis Of Routine Data. *BMJ: British Medical Journal.* 2003;327(7426):1257-60.
9. Giesen P, Smits M, Huibers L, Grol R, Wensing M. Quality of after-hours primary care in the Netherlands: A narrative review. *Annals of Internal Medicine.* 2011;155(2):108-13.
10. Brandt S, Hartmann J, Hehner S. How to design a successful disease-management program. McKinsey&Company; 2010 [12th July 2015]; Available from: [http://www.mckinsey.com/insights/health\\_systems\\_and\\_services/how\\_to\\_design\\_a\\_successful\\_disease-management\\_program](http://www.mckinsey.com/insights/health_systems_and_services/how_to_design_a_successful_disease-management_program).
11. ABS. Health and Socioeconomic Disadvantage. Canberra: Australian Bureau of Statistics; 2014 [17th July 2015]; Available from: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features30Mar+2010>.
12. Butler DC, Petterson S, Bazemore A, Douglas KA. Use of measures of socioeconomic deprivation in planning primary health care workforce and defining health care need in Australia. *Aust J Rural Health.* 2010 Oct;18(5):199-204.
13. Williams ED, Magliano DJ, Zimmet PZ, Kavanagh AM, Stevenson CE, Oldenburg BF, et al. Area-level socioeconomic status and incidence of abnormal

glucose metabolism: The Australian Diabetes, Obesity and Lifestyle (AusDiab) study. *Diabetes Care*. 2012;35(7):1455-61.

14. Brown A, Siahpush M. Risk factors for overweight and obesity: results from the 2001 National Health Survey. *Public Health*. 2007;121(8):603-13.

15. Mayne D, Bonney A, Jones B, Bott L, Andersen S, Caputi P, et al., editors. A novel population health data source to inform local planning: the SIMLR Study. 2014 Primary Health Care Research Conference: Program & Abstracts; 2014; Australia.

16. Bonney A, Mayne D, Weston K, Magee C, Caputi P, Ghosh A. Area level socioeconomic disadvantage and diabetes control in the SIMLR Study cohort: Implications for health service planning. 2015 PHC Conference; Adelaide 2015.

17. Ghosh A, Charlton KE, Girdo L, Batterham M. Using data from patient interactions in primary care for population level chronic disease surveillance: The Sentinel Practices Data Sourcing (SPDS) project. *BMC public health*. 2014;14:557.

18. de Jong JD, van den Brink-Muinen A, Groenewegen PP. The Dutch health insurance reform: switching between insurers, a comparison between the general population and the chronically ill and disabled. *BMC Health Services Research*. 2008;8(1):58-.

19. Struijs JN, De Jong GM, Lemmens LC, Drewes HW, De Bruin SR, Baan CA. Three years of bundled payment for diabetes care in the Netherlands: Impact on health care delivery process and the quality of care. Bilhoven: National Institute for Public Health and the Environment; 2012.

20. de Bruin SR, van Oostrom SH, Drewes HW, de Jong-van Til JT, Baan CA, Struijs JN. Quality of diabetes care in Dutch care groups: No differences between diabetes patients with and without co-morbidity. *International Journal of Integrated Care*. 2013;13(OCT/DEC).

21. Tol J, Swinkels ICS, Struijs JN, Veenhof C, de Bakker DH. Integrating care by implementation of bundled payments: Results from a national survey on the experience of Dutch dietitians. *International Journal of Integrated Care*. 2013;13(OCT/DEC).

22. de Bakker DH, Struijs JN, Baan CB, Raams J, de Wildt JE, Vrijhoef HJM, et al. Early results from Adoption of bundled payment for diabetes care in the Netherlands show improvement in care coordination. *Health Affairs*. 2012;31(2):426-33.

23. Struijs JN, Baan CA. Integrating Care through Bundled Payments — Lessons from the Netherlands. *The New England Journal of Medicine*. 2011;364(11):990-1.