

# Libby Holden Ian D Williams Elizabeth Patterson Jane Smith Paul A Scuffham Lily Cheung Robyn Chambers Xanthe A Golenko Robyn Weare

## Uptake of Medicare chronic disease management incentives

A study into service providers' perspectives

#### **Background**

Chronic disease is responsible for 80% of the burden of disease in Australia. The Australian Government Medicare Benefits Schedule (MBS) provides incentives through specific Medicare items to optimise chronic disease management (CDM), yet little is known about factors that influence their uptake.

#### Methods

Exploratory qualitative research was used, which incorporated focus groups and interviews with 26 staff from nine general practices in southeast Queensland, together with review of practice-specific data on CDM income. Content analysis of qualitative data was undertaken to identify barriers, enablers and service models associated with MBS CDM item uptake. Triangulation of methods and data sources facilitated confirmation of findings.

#### **Results**

Time pressures and unreliable MBS information were common barriers to uptake for general practitioners. Employing a nurse, team-based approaches, recall systems and using only selected MBS CDM item numbers were associated with best uptake.

#### Conclusion

Improved systems within general practice and Medicare may increase the uptake of MBS CDM item numbers.

#### Keywords

chronic disease/therapy; general practice; delivery of health care

The management of chronic disease has become an increasing burden for the Australian healthcare system<sup>1</sup> with an estimated 77% of Australians having at least one chronic disease.<sup>2</sup> The Australian Government has provided financial incentives to general practitioners since November 1999, through specific Medicare Benefits Schedule (MBS) items, to improve the care of chronically ill patients.3 Although some studies have reported good patient outcomes as a result of these MBS chronic disease management (CDM) items, previously known as Enhanced Primary Care (EPC) items, 4,5 others argue that the MBS CDM items have not adequately addressed the healthcare needs of the chronically ill.<sup>6,7</sup>

In 2002, it was found that GPs were discouraged from using the CDM items because of time constraints and difficulty in staying abreast with changing eligibility criteria,8 a finding supported in a 2008 study. In 2004, a study 9 suggested that CDM was a major challenge for general practice, suggesting that only 50% of patients were receiving optimal quality care and that a change in the health system, both in policies and in attitudes, was required. In 2007, it was asserted that although studies conducted overseas suggest that clinical information systems, team work, decision support, linkages and leadership are all important in managing chronic illness, we do not know which of these is important in Australia.10

Optimising the use of MBS CDM incentives is an area requiring further exploration. This study was conducted to explore the barriers and enablers to CDM item uptake in general practice and to identify CDM service delivery models that result in optimal use of CDM incentives.

#### **Methods**

An exploratory qualitative design utilising multiple sequential methods and data sources was used to investigative participants' perceptions and experiences of the MBS CDM incentives and to explore patterns of practice uptake. The study sample, comprising 26 general practice staff from nine practices, was drawn from both rural and urban practices of varying sizes in southeast Queensland. It included GPs, practice principals, practice nurses and practice managers. Participants were recruited via the South East Queensland Research Network (SEQRN, a network of health professionals interested in research relevant to general practice) and through snowballing sampling. The senior researcher, a practice principal and member of SEQRN, approached other SEQRN members and colleagues inviting them to participate if their practice characteristics were consistent with the study's requirements. We sought representation from practices that were both rural and urban, of varying size and MBS CDM item usage (MBS CDM usage was categorised as low if less than once per month, moderate of more than once per month and less than once per week, and high if more than once per week). For interviews, practice principals were contacted first to approve the collection

of financial data; all those approached agreed to participate. Staff from participating practices were then invited to participate (only one nurse declined).

The study was conducted in three phases using focus groups, individual interviews and document review. The purpose of Phase 1 was to guide the research in Phase 2, that is, to ensure that all the appropriate questions were being asked and to ensure that acceptable methods of data collection of CDM income were used. Phase 1 involved a series of three discipline-specific focus groups with general practice staff (one for GPs/practice principals, one for practice nurses and one for practice managers) using open-ended questions to identify issues affecting MBS CDM item uptake and to determine acceptable methods of collecting data on income from MBS CDM recoupment. Focus groups were attended by a stenographer who transcribed a de-identified record of the discussions.

Phase 2 involved face-to-face individual interviews with 26 staff from nine practices which were located in both urban and rural areas and varied in size and CDM use. These semi-structured interviews were intended to further explore issues identified in Phase 1 and to collect data on income obtained from CDM item use. The interviews were recorded with consent and transcribed by a research assistant, Medicare Practice Incentive Payment (PIP) statements were obtained from practice managers with the consent of practice principals.

Direct content analysis of data from Phase 1 and 2 was conducted by two experienced researchers using qualitative analysis software Nvivo 9 to code responses into categories and sub-categories. A third experienced researcher (who had attended focus groups) participated in discussions to reach consensus on interpretation of sub-categories. Direct content analysis is used when categories are predetermined before data collection and the researcher asks questions related to these categories. 11 In this study, the predetermined categories were enablers and barriers to CDM item uptake and service models associated with their use. Medicare PIP statements were reviewed for the 12 months before semistructured interviews to explore patterns of uptake of specific items related to chronic disease. The total practice income for the items of interest was divided by the number of full-time equivalent (FTE) GPs (as stated in PIP statement for that time period) to obtain the income per GP for each practice.

Phase 3 involved a report of de-identified findings from Phase 1 and 2 being circulated to participants of Phase 2 to obtain endorsement

of findings and further develop emerging recommendations. Participants could give feedback via email or telephone and could attend the Phase 3 teleconferenced focus group.

Ethics approval was obtained from Griffith University, Queensland.

#### Results

#### Sample characteristics

Four practices participated in Phase 1: all were urban, three had a broad demographic and one an elderly demographic; two had 2-5 GPs, one had a solo GP practice and one had six or more GPs. Three practices had high and one moderate self-reported uptake of MBS CDM items. The demographic profile of the discipline-specific focus group participants is described in Table 1. There were four GPs or practice principals in the GP focus group, three practice nurses in the nurse focus group and four practice managers in the practice manager focus group. Although representation from practices meeting our criteria was not achieved in Phase 1, the goals of identifying the relevant issues to explore and acceptable methods of obtaining financial information on CDM income were achieved, so we moved on to Phase 2. We continued to recruit practices until we had representation from practices that were both urban and rural, of varying sizes and of varying CDM item use. However, we did not attempt to be representative of all general practices in southeast Queensland.

Nine practices participated in Phase 2. Of these, five were urban, two were from large rural centres and two were from small rural centres. Four practices had a broad specialty with a broad patient demographic, three had a family focus and demographic and two had a CDM/aged focus with an ageing, low socioeconomic status demographic. The size of recruited practices varied with two solo practices, four practices with 2-5 GPs and three practices with six or more GPs. MBS CDM item uptake also varied: two with low self-reported uptake, four with moderate and three with high self-reported uptake.

Phase 3 invited Phase 2 study participants (Table 2) to give feedback on a written report of findings and recommendations by email or telephone and/or attend a teleconferenced

Table 1. Profile of Phas	e 1	(focus group)	participants
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Role	Age (year	rs)	Gender		Years in practice#		Qualifications	
		n		n		n		n
One GP and three practice principals	35–44	0	Male	3	<10		MBBS and FRACGP	3
	45–54	3	Female	1	10–19	1	MBBS only	1
	55+	1			20+	3		
Three practice nurses	<35	0	Male	0	<10	2	RN	3
	35-44	0	Female	3	10–19	1		
	45–54	3						
	55+	0						
Four practice managers	35–44	0	Male	0	<10	1	Nil	
	45–54	3	Female	4	10–19	1	Cert/Dip Comm	2
	55+	1			20+	2	FAAMP	1

# Missing data: years in practice = 2 for GP/PP

<sup>\*</sup> One nurse was from an agency and contracted as needed

Table 2. Profile of Phase 2 (face-to-face interview) participants									
Role	Age (yea	rs)	Gender		Years in practice#		Qualifications		
		n		n		n		n	
Three GPs and six practice principals	35–44	4	Male	5	<10	1	MBBS and FRACGP	6	
	45–54	4	Female	4	10–19	3	MBBS only	3	
	55+	1			20+	3			
Eight practice nurses*	<35	1	Male	0	<10	6	RN	6	
	35–44	2	Female	8	10–19	2	EN	2	
	45–54	3							
	55+	2							
Nine practice managers	35–44	4	Male	0	<10	1	Nil	3	
	45–54	3	Female	9	10–19	6	RN or EN	2	
	55+	2			20+	2	Cert/Dip Comm	3	
							FAAMP	1	

- # Missing data: years in practice = 2 for GP/PP
- \* One nurse was from an agency and contracted as needed

focus group. Two practices responded via email endorsing the findings and stating they had no further recommendations. Three GPs, one practice nurse and one practice manager from three practices attended the teleconference, where the key findings and recommendations listed in the report were discussed in more detail.

#### **Barriers to MBS CDM item uptake**

Within this category, a number of sub-groups were identified. While time was the biggest barrier to CDM item uptake, other factors negatively influencing uptake were: conflicting or changing Medicare information, the complexity of the process, lack of access to information on patient eligibility, which resulted in wasted time through un-claimable items, fear of audits and not having a practice nurse. Where there was a practice nurse, some experienced performance pressures due to expectations to bring in sufficient CDM item revenue to cover wages:

'A lot of time taken up with phone calls and organising community services and this is not covered in the CDM items.' [PN]
'Possibly now for some of them I may decrease

my use because of government publicity about

auditing doctors excessively.' [GP]

Other barriers included inadequate infrastructure such as some nurses not having a private room to consult with patients or not having access to computers to manage related systems, lack of specific items that nurses could use independently and lack of available allied health and nursing staff particularly in rural areas.

Some practices did not see the value of time spent for income generated:

'From a business perspective, CDM is not optimal for profit.' [PM]

#### **Enablers of MBS CDM item uptake**

The most commonly reported enablers were having a motivated practice nurse and nurse-specific MBS item/s. Perceived income generation, having streamlined systems in place (eg. suitable software, relevant protocols and proformas, and reliable recall/booking systems) and having an updated comprehensive list of local available services for referral also influenced the uptake of some items:

'Well, it is facilitated in this practice by having nurses who are trained in applying them [CDM items] and really they put in a lot of the work.' [GP]

Participating practice staff commonly believed that the CDM items increased access to services

for patients, including time spent with the doctor or nurse and increased care monitoring and involvement in care management. This appeared to result in improved outcomes when adequate time was spent:

'I think it makes them [patients] a bit more compliant with their management of their diseases.' [PN]

Practices where staff worked as a team (particularly a good relationship between doctor and nurse) seemed to cultivate better systems for the uptake of items. Nurses commonly reported increased job satisfaction as a result of their increased CDM involvement.

Interviews identified a focus on a few items at a practice or GP level, with streamlined systems and templates reflecting items with greater uptake. Medicare financial support to employ a practice nurse was also identified as an enabler to increased MBS CDM item uptake.

### Models of care associated with MBS CDM item uptake

Analysis of financial statements identified that the practices earning the greatest MBS CDM incentive income used the MBS Item number 702 (Health Assessment in the Home, now 707) most frequently, closely followed by item 721 (GP Management Plan). The practice earning a much larger per GP income also used the MBS Item number 727 (Team Care Arrangement, now 732). It was confirmed in Phase 3 that practices used these items on the same patient. Items such as 704 (now 715), 712 and 700 (now 701, 703, 705 or 707 depending on time involved) all have a high rebate value but very low usage, especially compared to item number 702.

There appeared to be no link between GP/PN ratio and CDM item uptake but this could be simply due to lack of information about the other roles the PN was undertaking and the proportion of their role that was CDM related. Also, costs associated with the PN role were not factored into the earnings described above.

#### Recommendations

Consultation with study participants (Phase 3) validated findings and endorsed the following recommendations:

 System level recommendations. The following MBS changes were recommended: more uniform guidelines for incentive eligibility including patient eligibility; improved training and knowledge of Medicare staff to enable consistent and appropriate responses to information requests; online mechanisms to check current patient item eligibility; increased options for items that a registered nurse can administer independently; and improved Medicare support at a practice level focusing on improving incentive use rather than auditing

Practice level recommendations. The following characteristics were identified as supporting good MBS CDM item uptake: good use of teamwork such as the PN conducting health assessments and administration staff monitoring and recalling patients; focus on a few items relevant to patient demographic and having streamlined systems in place that support these; and employment and utilisation of nursing staff.

#### **Discussion**

This study used an exploratory qualitative research design with triangulation of data sources and methods to identify barriers, enablers and service models associated with MBS CDM item uptake. There was agreement among participating practice staff that the incentives had good outcomes for patients in terms of increased access and care monitoring, more holistic care and better self-care education. However, there were mixed opinions regarding the financial viability of the incentives as they were often seen as time-consuming. This was consistent with findings from studies in 2002 and 2008 reporting that GPs were discouraged from using the CDM items because of time constraints<sup>7,8</sup> and findings of two other Australian studies which highlighted the tension between GPs' goals for care and the time-consuming aspects of care including government requirements. 12,13

Focused use of selected items relevant to the practice demographic appeared to be important, with the most income per GP FTE coming from health assessments in the home and GP management plans. This may be because of the increased contribution of practice nurses to these activities. 14 Low usage of some high rebate items such as 704 (now

715) suggest that GPs select items based on patient need rather than income-generating potential. It could also suggest that these items of higher rebate value are not deemed a costeffective use of the GP's time.

Difficulties associated with collaborating with other health professionals resulted in few coordinated care plans, which is consistent with two earlier studies that explored CDM item uptake. 15,16 However, it has been suggested that practice nurses play a vital role in facilitating interactions between GPs and other health professionals. 14 Therefore, their increasing number in general practice provides and opportunity for increased coordinated care planning.14

Similar to our findings, a systematic review of comprehensive primary healthcare models reported that the CDM items were associated with patients reporting increased quality of care and increased knowledge of conditions and management; and with GPs reporting increased patient understanding of their condition and increased satisfaction with care. 17

Effective teamwork as an ingredient in the successful uptake of CDM items has been highlighted in our study and several other studies. 18,19 The importance of the role of practice nurses was highlighted in our study and reinforced through reports from the Australian Divisions of General Practice (ADGP)<sup>20,21</sup> and studies exploring patient perspectives. 9,22 The ADGP report described models of care where the nurse conducts home assessments, patient education and specialty clinics such as diabetes management.<sup>20,23</sup> As with our findings, the importance of streamlined systems and recall were highlighted in other studies, 10,17,24 including the use of care plan templates to facilitate the process for high use items. The recommendations from this study, particularly mechanisms to ensure time is not wasted doing reviews that patients are not eligible for, would remove a significant barrier to some GPs' utilisation of MBS items.

The recently introduced Practice Nurse Incentive Program (PNIP) aims to give practice nurses a greater focus on prevention, education and chronic disease management.<sup>25</sup> It also provides financial support for general practices to employ nurses, which is likely to expand the

percentage of practices that employ nurses. Therefore, the PNIP provides opportunity for the increased uptake of CDM items.

A strength of this study was the use of data and method triangulation which enabled data convergence and divergence and facilitated increased confidence in the findings. A limitation of this study was that it was restricted to one geographical region of southeast Queensland and therefore the findings may not be generalisable across Australia. However. because a diversity of settings (urban, large and small rural), patient demographics and practice staff profiles were employed, the findings should be transferrable to practices in similar settings and with similar profiles.

This study found key areas for improvement. both in general practice and Medicare, to facilitate improved uptake of MBS CDM incentives and thus, improved care for the chronically ill.

#### Implications for general practice

Practice based strategies, such as employing a PN, teamwork and streamlining operational systems can support the use and feasibility of MBS CDM incentives. Similarly, changes to Medicare such as consistent information and online tracking of current eligibility of specific CDM items could increase the uptake of the items

#### **Authors**

Libby Holden PhD, is Research Fellow, School of Population Health, University of Queensland, Brisbane Queensland, I.holden@uq.edu.au lan D Williams MBBS, FRACGP, is practice principal, Camp Hill Medical Centre, Brisbane, Queensland

Elizabeth Patterson PhD, is Chair and Head of Nursing, Department of Nursing, University of Melbourne, Melbourne, Victoria

Jane Smith MBBS, FRACGP, GradDipFM, MHS, FAICD, is Associate Professor, Faculty of Health Science and Medicine, Bond University, Gold Coast, Queensland

Paul A Scuffham PhD, is Chair of Health Economics, School of Medicine, Griffith University, Brisbane, Queensland

Lily Cheung MPH, is a research assistant, School of Medicine, Griffith University, Brisbane, Queensland

Robyn Chambers RN, is a practice nurse, Camp Hill Medical Centre, Brisbane, Queensland Xanthe A Golenko BBus, is a research assistant, School of Medicine, Griffith University, Brisbane Queensland

Robyn Weare BHumSvs, is a research assistant, School of Medicine, Griffith University, Brisbane Queensland.

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correspondence afp@racgp.org.au