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**Emerging role of the Australian private health insurance sector in providing chronic disease management programs: Current activities, challenges and constraints**

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### Abstract

**Objective:** This study explored the current activities of a sample of Australian private health insurance (PHI) funds to support the care of people living with chronic conditions, following changes to PHI legislation in 2007 permitting funds to cover a broader range of chronic disease management (CDM) services.

**Methods:** A qualitative research design was used to gather perspectives from PHI sector representatives via semistructured interviews with eight participants. The interview data were analysed systematically using the framework analysis method.

**Results:** Three main types of activities were most commonly identified: (1) healthcare navigation (2) structured disease management and health coaching programs and (3) care coordination services. These activities were primarily conducted via telephone by a combination of in-house and third-party health professionals. PHI funds seem to be taking a pragmatic approach to the type of CDM activities currently offered, guided by available data and identified member need. Activities are focused on people with diagnosed chronic conditions exiting hospital, rather than the broader population at-risk of developing a chronic condition.

**Conclusions:** Despite legislation permitting PHI funds to pay benefits for CDM services being in place for more than 10 years, insurers are still in an early stage of implementation and evaluation of CDM activities. Primarily due to the regulated scope of PHI coverage in Australia, participants reported several challenges in providing CDM services, including identifying target groups, evaluating service outcomes and collaborating with other healthcare providers. The effectiveness of the approach of PHI funds to CDM in terms of the groups targeted and outcomes of services provided still needs to be established because evidence suggests that population-level interventions that target a larger number of people with lower levels of risks are likely to have greater benefit than targeting a small number of high-risk cases.

**What is known about the topic?:** Since 2007, PHI funds in Australia have been able to pay benefits for a range of out-of-hospital services, focused on CDM. Although a small number of program evaluations has been published, there is little information on the scope of activities and the factors influencing the design and implementation of CDM programs.

**What does this paper add?:** This paper presents the findings of a qualitative study reporting on the CDM activities offered by a sample of PHI funds, their approach to delivery and the challenges and constraints in designing and implementing CDM activities, given the PHI sector's role as a supplementary health insurer in the Australian health system.

**What are the implications for practitioners?:** Current CDM activities offered by insurers focus on health navigation advice, structured, time-limited CDM programs and care coordination services for people following a hospital admission. There is currently little integration of these programs with the care provided by other health professionals for a person accessing these services. Although the role of insurers is currently small, the movement of insurers into service provision raises considerations for managing potential conflicts in having a dual role as an insurer and provider, including the effectiveness and value of services offered, and how these programs complement other types of health care being received.

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# Emerging role of the Australian private health insurance sector in providing chronic disease management programs: current activities, challenges and constraints

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**Additional keywords:** health funding and financing, health systems, information management, population health.

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## Introduction

Chronic disease management (CDM) refers to an intervention designed to manage or prevent a chronic condition using a systematic approach to care, and potentially using multiple treatment modalities.<sup>1</sup> A broad range of interventions can be categorised as CDM, including care coordination, health coaching, risk appraisal and health promotion.<sup>2</sup> Since 2007, private health insurance (PHI) funds in Australia have been able to pay benefits for a broader range of services focused on health and disease management, including CDM programs.<sup>3</sup> Australia is not unique in having a health insurance sector offering CDM programs, with insurers in other countries, including the US and Germany, offering these programs for several years.<sup>4,5</sup>

Recent research on the PHI sector's involvement in primary health care in Australia and the implications for health equity reported a range of insurer activities, including enhanced access to general practitioner (GP) services, CDM and risk factor prevention programs, mental health programs and hospital transition support programs.<sup>6</sup> Evaluations of a small number of programs offered by large PHI funds to support people with chronic conditions have been published; these studies report mixed results in relation to improved health status, reduction in service utilisation and cost-effectiveness.<sup>7–10</sup> These evaluation studies focus on outcomes, primarily use of health services and healthcare costs, but do not provide insight into the processes of designing and implementing CDM programs, which is the focus of the present study.

The need for high-quality health information has been recognised as a key feature of models of care for people with chronic conditions, with clinical information systems and decision support being two of the six system-level factors in the widely used chronic care model.<sup>11,12</sup> Information on an individual's current and changing health status is required to appropriately target CDM activities. However, PHI information systems were designed to facilitate the payment of claims, not support health and disease management, and PHI funds do not have direct access to clinical information; instead, they rely on both patients and healthcare providers to share data with them.<sup>13</sup> Hospital claims data are currently the most comprehensive data source available to Australian PHI funds, but their suitability for selecting people in need of CDM support is unknown.

Analysing the role of the PHI sector in supporting people with chronic conditions has not been researched in the Australian context. Previous research on the care needs of older Australians with multiple chronic conditions reported benefits and challenges of maintaining PHI, including considerable financial pressure to maintain insurance and access to private hospital care.<sup>14</sup> This research did not report on specific services accessed by the study participants. The present study focused on the perspective of PHI funds and investigated the different approaches used by PHI funds to support people with chronic conditions, as well as the factors influencing the design and implementation of CDM strategies, particularly data and information requirements. The study focused on the perspectives of smaller, non-profit PHI funds that have diverse membership profiles and operational environments due to their origins as restricted membership organisations and mutual societies serving a specific employee sector or geographic location.<sup>15</sup> As a result of these distinct characteristics, these PHI funds may take a

different approach to designing and implementing CDM programs than the larger funds that have published evaluations of CDM programs.

## Methods

The study used a qualitative research design with in-depth, semistructured interviews to explore PHI fund approaches to offering CDM activities, as well as challenges and constraints in designing and implementing strategies. Semistructured interviews were selected because this method allows a depth of response from each participant.<sup>16</sup>

## Sample

Participant sampling was criterion based. All participants had to be presently working in the PHI sector and hold a senior management role. Invitations to participate were sent via email to 19 PHI organisations. A target of 8–10 interviews was set, but a principle of saturation was used whereby interviews would continue until no new themes emerged.<sup>17</sup> Saturation was reached after eight interviews and no new interviews were scheduled. Participant and fund characteristics are presented in Table 1. Participants came from seven different PHI funds and one PHI industry association, representing approximately 20% of registered PHI funds in Australia. The participants reflect a diversity of perspectives based on fund size and level of PHI sector experience. The length of PHI sector experience of participants ranged from 1 to 20 years, with three participants employed for less than 2 years in the PHI sector and five participants employed for more than 2 years. Four of the participants interviewed were employed in clinical or health care-related roles focused on CDM services. In relation to the seven PHI funds represented, four funds had less than 100 000 members in total and three funds had between 100 000 and 400 000 members.

## Procedure

The email invitations sent to senior managers within PHI organisations described that the purpose of the interview was to

**Table 1. Participant and insurance fund characteristics**  
CEO, chief executive officer; PHI, private health insurance

Participant characteristics	<i>n</i>	Fund characteristics	<i>n</i>
Sex		Fund size (no. individual members)	
Female	6	<100 000	4
Male	2	100 000–400 000	3
Time employed in the PHI sector (years)		Type of fund	
≤2	3	Open fund	4
>2 (maximum 20 years)	5	Restricted member fund	3
Management level		Concentration of membership (>50% members)	
CEO	2	New South Wales	2
Executive management: insurance	2	Victoria	1
Executive management: clinical or healthcare focus	4	Queensland	3
		No geographical concentration	1

discuss the design and implementation of CDM programs. Due to the seniority of the participants, confirmation to participate in the interview through reply email to schedule an interview time was deemed consent to participate in the research.

Interviews were conducted via telephone, with the duration of interviews lasting from 30 to 60 minutes. Explicit consent was gathered from each participant at the beginning of the interview to audio record the interview for the purposes of transcription. The interview schedule was sent to participants 2 weeks before the interview. The study protocol was reviewed by the university institute that the researchers are affiliated with, the Australian Health Services Research Institute at the University of Wollongong, and deemed to be negligible risk research, and thus exempt from ethics review.

#### Interview schedule

The interview schedule was piloted with an individual with both research and PHI sector experience, and the final schedule was minimally revised following feedback. Interview questions relevant to the findings presented in this paper are listed below.

1. What is your perception of the role of PHI funds in CDM?
2. Can you briefly tell me about the current strategies that your fund uses to support people living with chronic diseases?
3. From your perspective, what is the most important information needed to design and implement CDM programs?
4. Can you comment on the adequacy of the data sources currently used by your fund to inform CDM programs?
5. How does your fund measure success in CDM programs?
6. Do you have any suggestions for recommendations that would help shape the future that you want to see for the PHI sector in the area of CDM?

#### Data analysis

The interviews were transcribed and analysed following the framework analysis method.<sup>18</sup> This method was developed for applied policy research and has been described as particularly suited to qualitative studies with specific questions, *a priori* issues and a pre-designed sample,<sup>19</sup> which aligned with the circumstances of this study. The five stages of framework analysis are familiarisation, identifying a thematic framework, indexing, charting, mapping and interpretation. Following familiarisation with the data, a thematic framework was developed and transcripts were systematically indexed, then charted into a spreadsheet. Mapping and interpretation linked the thematic areas back to the study aim and key areas of investigation. A process of member checking was conducted whereby analysed results were returned to participants for their review and validation.<sup>20</sup>

## Results

### Current CDM activities of PHI funds

All participants responded that their fund currently offers services to support insured members with chronic conditions, although these services were at different stages of maturity, ranging from funds that have established separate businesses to provide health and disease management programs to a fund with only one person dedicated to supporting the CDM needs of members. The main categories of CDM activities offered by PHI funds, activity eligibility criteria, mode of delivery and provider type are given in Table 2. Four participants reported that their fund offered telephone-based health navigation services provided by in-house staff. Any health fund member can call staff working in the navigation services to ask specific questions about the health and aged care systems, and for specific healthcare provider referrals. Four participants reported that their fund had contracts with third-party providers to offer telephone-based disease management and health coaching programs. These programs often focus on specific chronic conditions, such as diabetes, cardiovascular disease and mental health conditions, although some participants offered more general programs referred to as 'health coaching', in which tailored care plans were developed with individuals based on their specific health goals. Participants in these programs were recruited based on hospital claims data analysis and member self-referral.

Five participants reported that their fund offered care coordination services, predominantly provided via telephone with in-house staff. Care coordination services had the most detailed eligibility criteria for participation, including age (targeting older members aged >55 years) with at least one chronic disease diagnosis and high levels of hospital use (e.g. more than two hospitalisations in the past 2 years). Care coordination services were targeted at patients leaving hospital, with people identified before admission when clarifying patient eligibility for hospital benefits or after admission when insurance claims are received. Care coordination services involved an assessment and development of a care plan that identified specific supports that an individual would receive after hospitalisation, including nursing, allied health and meal delivery services.

Disease management and health coaching programs and care coordination services are offered as time-limited services, generally lasting from an initial period of 6 weeks to 3 months, and extending up to 12 months. All funds employ at least one staff member with a clinical background. The type of clinical positions employed varied across funds. The most common profession was registered nurse, but other clinicians included dietitians, pharmacists and mental health nurses.

**Table 2. Chronic disease management activities offered by private health insurance funds, showing the number of funds offering a service by mode of delivery and provider type**

	Activity eligibility criteria	Mode of delivery		Provider type	
		Telephone based	Face to face	In-house	Third party
Health navigation	Open to all members	4	–	4	–
Disease management and health coaching programs	Member self-referral and identification through hospital admissions	4	–	–	4
Care coordination services	Specific criteria based on hospital admission	4	1	4	1

In addition to the three activity categories, multiple participants also reported that their fund offered hospital substitution programs and education activities aimed at improving health literacy. Hospital substitution programs referred to a range of nursing services delivered at home. The existence of these services enable patients to be discharged earlier from hospital after surgical procedures. 'Education activities to improve health literacy' was a broad term used to refer to both marketing and communication materials distributed to the entire insured population, as well as targeted information provided to people enrolled in CDM programs that may assist them to self-manage their condition.

#### *Information requirements and data sources for CDM implementation and evaluation*

Hospital claims data were the main source of data used to identify people to participate in CDM activities. Six funds ran reports to identify patients with specific chronic conditions, determined by a list of clinical diagnosis codes. Funds also reviewed hospital claims data to identify patients with multiple hospitalisations, long lengths of stay and high-cost episodes. Participant responses related to data and information requirements for CDM frequently referred to limitations of current data sources. The major limitation, noted by six respondents, is information on health status for people without a hospitalisation, particularly indicators of disease risk.

*We do need good claiming data, accurate claiming data, and being able to put that all together, but the bit that we don't have right now is some kind of really good risk identifier. (Participant 2)*

*Realistically, we need GP data, I think, to be effective in fully identifying those people before they end up with a chronic disease. (Participant 8)*

Indicators to evaluate and measure the success of CDM programs ranged from measures of program awareness, participation and satisfaction to more sophisticated measures to assess the effectiveness of the program, in terms of both its clinical or health effects and financial effect. Clinical measures included changes in weight and stress levels and assessment of quality of life. Financial measures included changes in service utilisation, such as the number of hospital admissions, length of stay, hospital readmission rates and costs of care paid by the insurer. Despite this broad range of measures, most participants acknowledged shortcomings in their approach to evaluating CDM programs and that formal program evaluations, if planned, were in the early stages.

*There's no point paying for services that have no ability to realise the benefits, but I do worry that we are not measuring or assessing the right things when it comes to the evidence base. (Participant 1)*

*...in terms of a real evaluation or impact framework still very early on. So, that's a key piece that we've got scoped up. (Participant 4)*

#### *Constraints and challenges affecting the role of PHI funds in offering CDM activities*

Most participants responded that PHI sector regulations constrain aspects of their role in supporting people with chronic

conditions. These regulatory issues were both broad, referring to the framework in which the PHI sector operates, and narrow, noting specific restrictions on the types of services that can be funded by PHI policies.

*I think there is a need for simplification of the legislation to support funds in providing chronic disease management and that's not without acknowledging, I guess, the complex dynamics about community rating, risk equalisation, adverse selection and portability. (Participant 1)*

*One example is telehealth, we can't pay benefits for that at the moment for allied health professionals so some flexibility in the way that care is being delivered in the future will be beneficial. (Participant 8)*

Participants reported challenges in negotiating an expanded role in offering CDM activities by PHI funds within the Australian healthcare system, particularly in building relationships with GPs and other healthcare providers.

*It's certainly been one of our biggest hurdles to get some level of respect with GPs and some level of trust and I think we're very, very slowly getting there. (Participant 7)*

Despite these constraints, PHI funds were generally optimistic about their future role in supporting CDM.

*I think there's a tremendous opportunity for us, and as little funds we might have to band together to actually make them cost-effective. If we could work effectively with primary health care and support, like a two-way support of each other, with primary healthcare providers. (Participant 2)*

*I'd like to see that we're an insurance and care company that we are actually sharing the health journey with someone and insurance is one of those products that support you. (Participant 4)*

## **Discussion**

The purpose of this study was to explore the emerging role of Australian PHI funds in providing CDM programs. The study findings indicate that all funds were implementing strategies to support people with chronic conditions, but these strategies were at different stages of maturity. Although there were different approaches in relation to organisational arrangements and in-house versus outsourced service provision, there were similarities in the types of activities offered, with three main activity categories reported by participants: (1) health navigation; (2) disease management and health coaching programs; and (3) care coordination services. CDM activities currently supported by PHI funds seem to be guided by a pragmatic approach based on available data and identified member need. Hospital claims data are the primary data source used to identify participants for CDM activities, so activities are focused on people with diagnosed chronic conditions exiting hospital, rather than the population at risk of developing a chronic condition.

The current approach of PHI funds to offering CDM programs does not represent a comprehensive approach across the

spectrum of disease risk of the population. Australian PHI funds recognise the limitations of their current approach, but face several challenges in implementing CDM programs. PHI funds are prevented by legislation from covering out-of-hospital medical services covered by Medicare, including GPs and specialist physician consultations. As noted by participants, this limits insurers' ability to understand an individual's broader health service utilisation and to identify people to participate in programs at earlier stages of disease risk, before hospitalisation. The effectiveness of this approach in improving the health status of members is yet to be demonstrated because PHI funds are at the early stages of evaluating their programs. The 'prevention paradox' introduced by Geoffrey Rose<sup>21</sup> suggests that targeting large numbers of people at earlier stages of disease risk will have a greater effect on population health improvement than targeting a smaller number of high-risk individuals.

Targeting at-risk groups and providing broader CDM services may require collaboration with health providers, including analysing disparate data sources to build a more comprehensive picture of the health and healthcare journey of the target member population, but most PHI funds have limited experience in community-based health management and lack linkages with service providers, particularly in primary care. In addition, healthcare providers and patients view the primary function of insurers as businesses that pay for health services (although many smaller funds in Australia operate on a not-for-profit basis) and may be wary in sharing additional health information with insurers. It is important to note that ethical issues relating to insurers having greater access to health information are somewhat offset by the current system of community rating enshrined in the *Private Health Insurance Act (2007)* that means that insurers cannot charge differential premiums to people with differing levels of disease risk.

Despite optimism for the future role of PHI funds in supporting people with chronic conditions, several tensions related to the value proposition of PHI CDM activities were expressed in this study. Although government regulation has supported PHI funds having a role in CDM since 2007, the interviews suggest there are still questions of legitimacy related to the role of PHI. Most participants responded that they were providing care navigation and care coordination services, but there are other potential providers of these services in the Australian health system, such as enhanced primary care services involving nurses<sup>22</sup> and community pharmacies.<sup>23</sup> Ultimately, the CDM services offered by PHI funds need to be seen by both patients and providers as effective for them to be taken up and sustainable in the future. PHI funds that, in recent years, have introduced an increasing number of insurance policies with health service exclusions or excess copayments<sup>24</sup> may not naturally be regarded as the best fit for providing CDM services, and patients may even perceive a conflict of interest in receiving CDM services from the same organisation to which they pay insurance premiums, despite efforts to delineate functions within insurers.

This study found that most current CDM programs supported by PHI funds, either provided in-house or supported by a third party, are yet to be evaluated. Evidence of effectiveness may be an important component of future viability because, from a resourcing perspective, these programs require ongoing allocation of financial and human resources. The positive effect

of PHI-supported CDM activities should not be assumed, and should be demonstrated through formal program evaluations. The study findings suggest that the PHI sector will struggle to expand its role in CDM in the absence of broader business and policy transformation related to data availability and relationships with both patients and providers.

This study has several limitations and caution needs to be taken in generalising study findings. The participants interviewed in this study represent only a sample of Australian PHI funds. The study presented the perspective of smaller, non-profit funds that have not been represented in previous PHI sector research. The research design focused on the perspective of PHI funds providing CDM services, but the perspective of other stakeholders, particularly patients receiving services funded by PHI funds, would be a valuable area of future research.

## Conclusion

PHI funds in Australia want to expand beyond the traditional role of an insurer to offer CDM services. However, despite legislation permitting funds to pay benefits for CDM activities for more than 10 years, insurers are still in an early stage of implementation and evaluation of CDM activities, with the main category of activities being health navigation, disease management and health coaching programs and care coordination services. PHI funds have experienced several challenges in expanding CDM activities related to regulatory constraints, information gaps and relationships with other healthcare stakeholders, including patients and providers.

## Competing interests

The authors declare that they have no competing interests.

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