

# The role of Primary Health Networks in cardiovascular disease prevention: A qualitative interview study

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## Abstract

**Background:** Since the inception of PHNs in Australia, their role in implementing chronic disease prevention activities in general practice has been unclear. This study aimed to qualitatively explore the views of PHN staff on the role of PHNs in promoting prevention, with a focus on cardiovascular disease (CVD) prevention.

**Methods:** Content analysis of PHN Needs Assessments was conducted to inform interview questions. Twenty-nine semi-structured interviews were conducted with 32 PHN staff, between June and December 2020, in varied roles across 18 PHNs in all Australian states and territories. Transcribed audio recordings were thematically coded, using the Framework Analysis method to ensure rigour.

**Results:** We identified three main themes: (a) Informal prevention: All respondents agreed the role of PHNs in prevention was indirect and, for the most part, outside the formal remit of PHN Key Performance Indicators (KPIs.) Prevention activities were conducted in partnership with external stakeholders, professional development and quality improvement programs, and PHN-funded data extraction and analysis software for general practice. (b) Constrained by financial incentives: Most interviewees felt the role of PHNs in prevention was contingent on the financial drivers provided by the Commonwealth government, such as Medicare funding and national quality improvement programs. (c) Shaped through competing priorities: The role of PHNs in prevention is a function of competing priorities. There was strong agreement amongst participants that the myriad competing priorities from government and local needs assessments impeded prevention activities.

**Conclusions:** PHNs are well-positioned to foster prevention activities in general practice. However, we found that PHNs role in prevention activities was informal, constrained by financial incentives and shaped through competing priorities. Prevention can be improved through a more explicit prevention focus at the Commonwealth government level. To optimise the role of PHNs, therefore, requires prioritising prevention, aligning it with KPIs and supporting stakeholders like general practice.

## KEYWORDS

cardiovascular disease, general practice, health economics, prevention, primary health network, value of prevention

**Abbreviations:** CVD, cardiovascular disease; GP, general practitioner; LHD, local health district; LHN, local hospital networks; MBS, Medicare benefits schedule; PHN, primary health network.

## 1 | INTRODUCTION

The Australian Government established 31 Primary Health Networks (PHNs) across Australia in 2015.<sup>1</sup> They are independent, not-for-profit organisations with regions closely aligned with state and territory Local Hospital Networks (LHNs) or equivalent.<sup>2</sup> PHNs evolved from 61 Medicare Locals, which replaced 120 Divisions of General Practice.<sup>3</sup> PHNs have skills-based boards, which clinical councils and community advisory committees inform. PHNs were created with two overarching objectives: One, to increase the efficiency and effectiveness of medical services, particularly for those at risk of poor health outcomes; and two, to improve coordination of care.<sup>4</sup>

To evaluate the performance of PHNs across a wide range of targets, the Australian Government developed a "PHN Program Performance and Quality Framework" that is periodically reviewed to reflect updated priorities. The framework contains more than 50 specific indicators that PHNs must work towards. PHNs must report on their performance across these indicators at either 6- or 12-month periods. Aggregated data are fed back to PHNs to evaluate their performance in an audit and feedback manner. These performance indicators align with the seven national priorities set out by the Commonwealth Government, including mental health, Aboriginal and Torres Strait Islander health, population health, health workforce, digital health, aged care and alcohol and other drugs (see Table 2).<sup>5</sup> It is not clear where CVD prevention fits within these priorities for PHNs, despite CVD being the leading cause of disease burden in Australians over 45 years.<sup>6</sup>

Commonwealth Government funding has recently been introduced to support CVD risk assessment in general practice through (a) a temporary Medicare Benefits Schedule (MBS) item for Heart Health Checks<sup>7</sup> and (b) the National Practice Incentives Program Quality Improvement Program (PIP QI).<sup>8</sup> New MBS items, including Heart Health Checks, only act as an adequate incentive to general practitioners to the degree that they cover the actual cost to the GP of conducting the consultation and exceed reimbursement amounts that were already available, such as items for chronic disease management or annual health checks. PIP QI includes financial incentives for practices to work with their PHN to share clinical audit data and review where to improve, including a focus on CVD risk assessment. These elements of funding may be capitalised upon to increase the amount of CVD preventative work PHNs undertake. It is not clear how PHNs are supporting practices to conduct a CVD risk assessment, and it is unknown how much emphasis PHNs put on engaging their practices to conduct prevention-based activities.<sup>9</sup>

A recent report summarising high level, systematic review evidence found that most preventive interventions were effective, cost-effective and potentially cost-saving.<sup>10</sup> Preventable disease accounts for a substantial portion of health burden, with 46% of disability-adjusted life years (a measure combining the estimated years of potential life lost due to premature death and the years lived while sick with a disease at less than full health)<sup>11</sup> due to non-communicable disease attributable to modifiable risk factors globally.<sup>12</sup> In Australia, 38% of the overall disease burden in 2015 was

due to modifiable risk factors, and tens of thousands of deaths are attributable to lifestyle-related and metabolic risk factors.<sup>6,13</sup> CVD, in particular, provides an opportunity to improve population health with 86% of CVD-related health burden, in terms of DALYs, attributable to modifiable risk factors globally (79% in Australia).<sup>12</sup> Over 45,000 deaths in Australia in 2015 were due to CVD, second only to cancer.<sup>6</sup> Preventable disease also incurs an economic cost with billions of dollars in health expenditure, productivity and lost tax revenue attributable to lifestyle-related risk factors.<sup>14</sup> Therefore, it is essential to explore the role of PHNs regarding prevention activities and to what extent they prioritise these activities.

As organisations created to improve primary healthcare, and as one of primary healthcare's main goals to provide prevention services for the community,<sup>15</sup> the activities of PHNs must be known to understand better where prevention fits. Furthermore, as PHNs are relatively new organisations with little published literature on their operations and priorities, it is vital to evaluate the perceived value that PHNs place on conducting prevention activities and whether this value aligns with their published priorities and the activities which they perform with general practices.

In earlier work,<sup>16</sup> we collaborated with other prevention focused researchers to determine how the content of PHN Needs Assessments and Activity Plans shapes the work that PHNs conduct with general practices, with a focus on cardiovascular disease and chronic pain programs. This analysis facilitated the development of interview questions for the current study and enabled an insight into PHN executive level thinking.

### 1.1 | Aim

The aim of this study was to understand the current role of Primary Health Networks in promoting CVD prevention across Australia, with a focus on Project Managers and GP Liaison staff who work directly with general practices.

## 2 | METHODS

### 2.1 | Study design

A qualitative, semi-structured interview study.

### 2.2 | Setting and sample

The interviews were conducted between June and December 2020 during the COVID-19 pandemic by one researcher (SC) working with a study team from a range of backgrounds including general practice, behavioural science and health economics. Potential Interviewees were emailed a study information statement and consent form. All Interviewees signed a consent form and returned it via email. Interviewees were offered a \$50 Amazon

voucher in recognition of their time. Ethical approval was obtained from the Human Research Ethics Committee (project number 2020/255).

PHN contacts were initially identified from the study team's professional networks using a snowballing methodology. Authors also found interview participants at a PEN CS user summit (Pen CS Pty Ltd develops clinical audit software licenced to general practices via PHNs). Several PHN staff approached the researchers after this presentation about their interest in CVD prevention interventions. Additional participants were identified through interviewees' networks, using purposive sampling to obtain a diverse Interviewee group by location (metropolitan, regional) and role (frontline practice liaison, program managers).

## 2.3 | Data collection

### 2.3.1 | Development of interview schedule

A Content Analysis of online, publicly available PHN Needs Assessments ( $n = 31$ ) was conducted to inform interview questions (SC, CB). A Needs Assessment is a report produced by PHNs which details the health and service requirements of their local area. Our previous work found that CVD was mentioned in some but not all Needs Assessments and Activity Plans created by PHNs. Further information on this study is available elsewhere.<sup>16</sup>

The interview schedule was drafted by SC and CB, then reviewed and piloted with a PHN staff member and investigator on the study team (CDW).

### 2.3.2 | Interviews

All interviews were conducted by SC using online meeting software, Zoom or Microsoft Teams. Questions were based on a semi-structured interview schedule covering questions on the role, organisation and activities of their own PHNs, their engagement with general practices and their awareness or promotion of risk assessment and prevention tools (see Appendix 1). Audio recordings were de-identified using Interviewee ID numbers and transcribed verbatim. Any references to identifying information in the transcripts were removed from the saved files. At the discretion of staff members, some interviews included two participants.

### 2.3.3 | Analysis

After 29 interviews covering diverse roles and regions, themes around the role of prevention were consistent so no further interviews were conducted. A Framework Analysis method was used to analyse interview transcripts (SC, KP, CB), and interpretation of the results were discussed with the study team. This method is an

iterative (as opposed to linear) process of thematic analysis following the principles prescribed by Richie et al.<sup>10</sup> The first step in this process was for the team to familiarise themselves with the raw data (the verbatim transcripts). SC, CB and KP read through a subset<sup>5</sup> of transcripts and independently identified themes using both deductive (researcher driven, focused on CVD prevention) and inductive (response-based, covering broader prevention issues) methods. The authorship team identified recurring themes and ideas within the participant responses in the transcripts. The themes were then sorted into larger, overarching categories, with subthemes located within. The initial conceptual framework was then applied to raw data (5 transcripts), and was then further refined by the team. Once consensus was reached on the framework, all transcripts were coded by SC (19 transcripts) and KP (10 transcripts). Interpretation of results was discussed with the whole author team, including experts in qualitative methods (KP, LT, CB), public health with a focus on CVD prevention (SC, LT, CB), general practice (LT, CDW), experience working in a PHN (CDW) and a health economist with an interest in valuing prevention (PC).

## 3 | RESULTS

Twenty-nine semi-structured interviews were conducted with 32 PHN staff, covering 18 primary health networks in all states and territories of Australia. This included 38% from regional areas, 28% from metropolitan and 34% from mixed regions, including Western Australia, the Northern Territory and Tasmania. Interviewees included a mix of frontline GP liaison staff (28%) and program managers relating to general practice (72%). See Table 1.

No noticeable differences were observed between GP liaison staff and Program Managers. This may be due to the task focused, "front line" nature of both of these roles as we did not interview executives in this study.

Overall, our interviews found that PHN staff viewed prevention activities as informal, constrained by financial incentives, and shaped through competing priorities.

### 3.1 | Theme 1: The role of PHNs in prevention is informal

Many responses reflected the idea that PHNs did not exist to implement prevention activities within general practice. Many staff we interviewed did not see it as their role to increase prevention activities within general practice, but many did explain that they thought their PHN should place a greater emphasis on prevention. Overall, the role of prevention in PHN activities was described by PHN staff as being often informal, and they acknowledged that prevention was outside of the remit of most PHN activities. The interviewees explained that most PHNs do a lot of work around chronic disease management and acute care but not prevention.

TABLE 1 Interviewee characteristics

Characteristic	Interviews n (%)	Number of (%) PHNs interviewed from each jurisdiction
State or territory		
New South Wales	9 (31%)	4 (40%)
Western Australia	7 (24%)	3 (100%)
Queensland	4 (14%)	4 (57%)
Victoria	3 (10%)	3 (50%)
South Australia	2 (7%)	2 (100%)
Northern Territory	2 (7%)	1 (100%)
Tasmania	1 (3%)	1 (100%)
Australian Capital Territory	1 (3%)	1 (100%)
Total	29 (100%)	19 (61%)
Area		Interviews n (%)
Regional		11 (38%)
Metropolitan		8 (28%)
Mixed (WA, NT, Tas) <sup>a</sup>		10 (34%)
Total		29 (100%)
Professional roles		Interviews n (%)
Managers		21 (72%)
Frontline staff		8 (28%)
Total		29 (100%)

<sup>a</sup>Mixed regions include areas where PHNs cover both regional and metropolitan areas (eg Tasmania only has 1 PHN covering all cities and regions).

*"We don't do enough health prevention, preventative medicine. We do a lot of chronic disease management [eg diabetes drive, heart failure, asthma, cancer screening], but we just don't do enough prevention"* (interview 17, metro)

*We aren't an organisation that does preventative health..."* (interview 5, Mixed)

Nevertheless, PHNs identified many ways they did support prevention across a range of areas such as vaccination, COVID-19, cancer screening, and cardiovascular disease (sometimes via risk factors such as smoking or related health issues like diabetes). These activities were conducted via GP liaison roles, professional development and quality improvement programs, and PHN funded software such as clinical auditing tools to look at CVD risk assessment data. Aside from COVID-19, the main focus for prevention was commonly reported to be vaccination, but CVD prevention issues could arise under other priorities such as mental health or Indigenous health.

*"We work with the public health unit with the practices around doing cold chain orders for their vaccines..."* (interview 14, regional)

Chronic disease management to reduce hospitalisations was sometimes seen as a higher priority. These activities supported the

idea of PHNs informally engaging in prevention. Participants mentioned many different prevention activities, but CVD prevention was often a secondary outcome or one of many health areas rather than the main goal. This included physical activity promotion, social prescribing (referring patients to non-clinical community services to improve health and wellbeing) and using pharmacists within primary care to manage medications.

*"They (PHNs) do quite a lot of good work with different programs, as I say, around cancer screening and diabetes, and around promotion of physical activity. And, they're just starting to get into the field of, social prescribing and... social connectedness...and obviously mental health is a big component of the PHNs work."* (interview 1, regional)

Forming collaborations with other healthcare stakeholders such as Local Health Districts (LHDs) was seen as necessary to drive activities with prevention, but again the focus on CVD was indirect. Examples of working with stakeholders included national issues (eg building up COVID-19 testing capacity), local/state priorities (eg My Health For Life Diabetes prevention program in Queensland), and commissioned projects (eg working with the Australian Primary Health Care Nurses Association and practice nurses in heart failure clinics in Western Australia). Examples of working with other PHNs were uncommon (*"most of the PHNs work quite isolated from*

TABLE 2 Commonwealth priorities and link to themes

Commonwealth government priority areas	Interview quote linking prevention activities to priority area	Example of how to frame CVD prevention within priority
Mental health	"There's a role in prevention, certainly big role in terms of mental health and suicide prevention is very prominent issue at the moment." (interview 1, regional)	CVD outcomes are worse for people with mental health conditions
Aboriginal and torres strait islander health	"Prevention is not funded by the... by, um, Medicare, if you think about it. I mean, the health assessments, so we have the aboriginal health assessment, which is whole of life. But consistently my observation is that's not necessarily done well." (Interview 21, regional)	CVD outcomes are worse for Aboriginal and Torres Strait Islander peoples
Population health	"We're really moving into a space where we use the data analysis tools that we have to actually look at a population-based approach for the practices that we work with." (interview 2, metro)	CVD is the biggest health burden for the Australian population
Workforce	"We've got, um, an overarching program that is, that's come into fruition this year, which is about chronic conditions management and that includes basically looking at innovative workforce models and, um... new service... service delivery models." (interview 5, regional)	CVD hospitalisations can be reduced with better integration between hospital and primary care workforce (eg cardiac rehabilitation post-discharge)
Digital health	"There's funding now for electronic prescriptions, which is what I'm rolling out at the moment, ePathology, My Health Record uptake and registrations." (interview 15, metro)	Integrating CVD prevention tools with primary care systems (eg patient records, clinical audit software) can improve PHN and practice level data as well as GP and patient use of guidelines for better clinical outcomes
Aged care	"There's lots of aged care stuff coming down as well at the moment.; We aren't an organisation that does preventative health, um, although you could look at primary prevention or secondary prevention." (interview 5, regional)	Primary and secondary CVD prevention through appropriate medication and rehabilitation will reduce health burden in aged care
Alcohol and other drugs	"We, um, introduced some alcohol and other drug training, which was incentivised. So the doctors were being paid to do that. So that was, is, um... there's interest for the doctors to register for that because there's an identified need for that, there's not a lot of training and they're getting paid for that training." (interview 22, regional)	CVD outcomes are worse for people who abuse alcohol and other drugs

each other" Interview 1, regional), but there was some examples of collaboration on specific initiatives such as 10 PHNs involved in the Healthcare Homes trial.

*"So there's a huge range of prevention type activities. Either we do them via commission and/or what we do is we let the LHDs undertake prevention activities that reach into general practice, reach into primary care... We brought both the LHDs and St Vincent's Hospital all together under a diabetes resource collaborative." (interview 16, metropolitan)*

Successfully engaging with general practitioners and the practice team as a whole was seen as the cornerstone of PHN activities and provided opportunities to conduct CVD prevention activities in practice. PHNs approached GP engagement via two methods; proactive engagement and reactive engagement. Proactive engagement included providing clinical audit reports to practices or helping to roll out state/national programs (eg the Heart Foundation's Heart

Health Check toolkit). Reactive engagement included having a help desk for practices to call for support. All PHNs reported that they assign staff members specifically for the role of engaging general practices. This included developing Continuous Quality Improvement (CQI) templates for practices that GPs could adapt to conduct quality improvement activities.

*"So we have been highly encouraging practices to start using Topbar [a clinical decision support system]. And specifically, for the PIP QI [Practice Incentive Program Quality Improvement] measures...And that basically gives a good holistic preventive approach to the patient in terms of the measures." (interview 3, regional)*

### 3.2 | Theme 2: Constrained by financial incentives

Interviewees acknowledged that PHNs are not specifically funded to undertake prevention activities.

*"I guess in terms of primary prevention of chronic diseases, I'd like to see more... and...ongoing conversation, which I have with the PHN But, you know, I have to acknowledge that they're not funded to do that, you know? ...PHNs also are not really funded to undertake preventative health activities. And that, that's another significant deficit."* (interview 1, regional)

Nevertheless, an interviewee explained that as GPs are working within a business model, they may choose certain MBS items over others to make the consultation more financially viable for their practice. This can mean that MBS items explicitly created for prevention purposes, such as the Heart Health checks, do not receive adequate uptake by general practitioners and thus do not increase the amount of prevention activity taking place. This creates difficulty for PHNs to promote prevention when GPs feel they would be financially worse off by undertaking prevention activity.

*"[Medicare item for Heart Health Check] 699 doesn't pay as much as other health checks that the GP could bill for. This has led to lower uptake of the item than was hoped for"* (interview 13, regional)

Alternatively, an interviewee noted that GPs can be fearful of being audited and found to have inappropriately billed for services or incorrectly used the MBS items – leading to potential underbilling for some GPs. This may impact how PHNs approach GPs to conduct quality improvement activities.

*"They're very scared of, sort of billing the wrong thing. So you might have a GP who's not quite so savvy with MBS items and they, you know, they might be seeing a patient for 20 minutes, but they might kind of only like bill for a shorter consultation time 'cause...they're concerned that, oh, what if I get audited and I have to pay all that money back?"* (interview 9, Mixed)

Furthermore, interviewees with a clinical background were more dubious of the usefulness of the new MBS item numbers but those who worked solely in a PHN capacity thought they were a positive measure.

*"I welcome the fact that the Government has taken the initiative of doing that. In reality it's not really an incentive...And so you've got to have that twenty minutes in your day and if you're seeing 30 patients a day and you want to do a cardiovascular risk assessment, even for a handful of them, you know, can very quickly add an hour, or two..."* (Interview 1, Regional)

An interviewee noted that it was important for activities to be measurable and based on performance indicators as well as part of the funding for PHNs to effectively administer prevention activities.

*"Part of it's around incentivising GPs to do it... I think it's got to be brought back into the funding of the PHNs, or seen as being a KPI by which we're measured against and compared against others, 'cause the PHNs are collegiate but we're also competitive, we want to do well; we receive money from the Commonwealth for certain areas and certain conditions based on our needs assessment."* (interview 16, metro)

Interviewees explained that PHNs follow frameworks for quality improvement practices and implementing programmes, one of which is the 'Quadruple Aim' which determines that practice programmes need to be financially sustainable.

*"So the guiding principle for the patient centered medical home model is the quadruple aim. Right. Which is patient's experience of care, sustainable cost, population health and provider satisfaction."* (Interview 7, Mixed)

### 3.3 | Theme 3: Shaped through competing priorities

Interviewees described numerous priorities that were deemed to be of a higher importance than working on prevention. At the time of interviews, COVID-19 prevention and emergency response measures were viewed as a higher priority than other activities, including CVD prevention.

*"For the past three to four months...the practices have been working on prevention, of course, that infectious disease of COVID"* (interview 3, regional)

Many interviewees noted that a critical barrier to conducting or implementing prevention programs was the myriad competing priorities set out either by the Commonwealth government or determined by their Needs Assessments. For example, mental health is one of the main eight priority areas for PHNs to work on, which means all other areas compete for time, resources and labour.

*"We've got appalling mental health. I think everywhere's got appalling mental health now but there's a million schedules come down from the Commonwealth to...implement services for particular groups of people. And there's lots of aged care stuff coming down as well at the moment"* (interview 5, Mixed)

Furthermore, PHNs are constrained by the priorities set during funding cycles which are tied into competing priorities. An interviewee explained the very short time horizons of priorities program, which leads to difficulty showing positive outcomes of a specific prevention programme due to the lag time for its effect on patient health outcomes.



*"Just by nature of the outcomes that we're supposed to reach as a PHN, whatever we do is only ever within that funding period going to be contributory to an overarching improvement in X number of years time. We're not going to see, if we did something publicising a tool like yours we aren't going to see a decrease in the number of hospitalisations due to cardiovascular problems in the next year."* (interview 5, Mixed)

Interviewees noted that there are many priorities, and they change quickly. One interviewee articulated the pressure on PHNs as a *barrage* of new innovations created to influence prevention activities, overwhelming and burdensome to their time.

*I'm a bit app-ed out, you know? Every week I get pitched a new app that's going to do this, this and this and it is literally every week. And the developers will ring up and, you know, we really need to show you this, we've got Care Monitor; But it's also about us in terms of our priorities in terms of our (strategic?) plans, saying which projects we'll take on or not.* (interview 16, metro)

One interviewee who saw the value of conducting prevention activities determined that it was necessary to advocate to the PHN executives to prioritise prevention vs other activities. Another suggested that prevention activities were currently "ad hoc," so having prevention as a specific area of expertise might be helpful as this is how staff resources were allocated to other areas.

*"One of the things I would like to advocate for the PHN is to...include a prevention lens...across all of their programs and all of their activities. I've been trying to advocate for that with the executive, the PHN executive"* (interview 1, regional)

Some interviewees explained that they worked with large numbers of general practices wouldn't be deemed ready to engage in CVD prevention activities as they were still in the early stages of handling their data and practice population. In these situations, PHNs predominantly work towards getting the practices accredited, improving their data processes. Interviewees described conducting "quality improvement" as a whole, which seemed to refer to enhancing the quality of data, as a piece of work that was of a higher priority than conducting any one particular prevention area.

*"Quality improvement's a piece of work at the moment. We're going to undertake a practice census, and just cleaning up data and trying to ascertain... who's who in the zoo in practice, 'cause we haven't done that in a while."* (interview 13, regional)

### 3.4 | Associations between themes

To summarise the many competing priorities for CVD prevention, Table 2 demonstrates the link between the Commonwealth government determined key priority areas for PHN work and interviewees comments on work their PHN is doing that may fit into these key areas. These Commonwealth determined priority areas have not been created with the express interest of conducting prevention activities. However, it was clear from the interviewees that their PHNs were trying to conduct prevention activities within the priority areas. These areas compete with each other for staff time and resources.

The Commonwealth Government sets PHN priorities and funding, which in turn determines the roles that PHNs will have in meeting the priorities, whether directly or indirectly. Financing in general practice creates priorities which in turn creates support needs that PHNs need to meet. If PHNs cannot fit practice support needs into the Commonwealth defined priority areas and their funding, they try to meet these needs indirectly.

## 4 | DISCUSSION

Our interviews revealed three predominant themes involved in PHN prevention activities. These three themes were (a) Informal prevention, (b) Constrained by financial incentives and (c) Shaped through competing priorities. From our interviews with PHN staff, it was apparent that PHNs play a role in CVD prevention promotion, but this role is often informal. PHN priorities were reported to be primarily driven by funding from the Government of the day and the PHNs must work on schedules set out by the Commonwealth government, which compete with CVD prevention. This often did not translate into conducting practical prevention activities for their region, and we observed a mismatch between the issues identified in local needs assessments and the priority areas of the Commonwealth government. Therefore, advocates for CVD prevention need to frame their goals as addressing one or more key priorities to enable PHNs to allocate resources to this issue.

Interviewees elucidated the tensions present within the PHN workforce to conduct prevention activities that would best support general practices and their patient population whilst still meeting key government criteria and performance indicators, which do not specifically mention prevention. We found that many PHN staff members recognised the value of conducting prevention activities, and they placed high personal importance on such activities, but they acknowledged that the primary objectives of their organisations did not include CVD prevention. Many interviewees expressed their opinion that their PHN should place a greater emphasis on conducting prevention.

Nonetheless, it was apparent that PHNs did work on prevention activities, sometimes without the explicit acknowledgement that they were conducting prevention. However, without the clear focus

on specific prevention activities, prevention often seemed to present itself through activities and programmes as an afterthought or co-benefit of other aims.

PHNs are well placed to be champions of prevention activity within general practice, as the organisations created to support the work of general practice.<sup>2</sup> The World Health Organisation has determined that one of the main goals of primary care is to provide prevention services; therefore our interviews seem to indicate a mismatch between the purpose of primary health care and the priorities of PHNs.<sup>17</sup> A report by the Productivity Commission of the Australian Government determined that PHNs have a pivotal role to play in prevention and that funds should be allocated to them when directly related to prevention activities or management of chronic conditions.<sup>18</sup> Prevention, therefore, should be a formal role and funded accordingly, but it is not.

The PIP QI program is a priority for PHNs to support in general practice.<sup>8</sup> PIP QI has been designed to support quality improvement in general practice and is associated with 10 key data improvement measures; accredited practices can receive a payment for sharing their data. Undertaking this work could be seen as engaging in prevention activity, yet our interviewees often seemed to view quality improvement of data to be distinct from prevention activity. program Therefore, including CVD risk assessment and management as a defined priority area for federally funded continuous quality improvement programs is an important driver for PHNs to allocate resources to CVD prevention.

Although the Commonwealth government has implemented new MBS items such as the Heart Health Check,<sup>19</sup> which can be used to conduct prevention activities, our interviews have shown these items may not always fit with the business models of general practices. Many interviewees thought that there needed to be better remuneration for performing a CVD Heart Health Check and more to the PIP QI than just collecting risk factor data. This could be addressed by reviewing the current MBS items against GP business models and competing items and adding a quality improvement requirement to the PIP Q program beyond completing CVD risk assessment data.

A recent report summarising high level, systematic review evidence found that most preventive interventions were effective, cost-effective and potentially cost-saving.<sup>10</sup> However, many preventive interventions involve implementation activities outside of the health care sector which may be where the uncertainty about whose role it is to engage in prevention, expressed by some interviewees, may arise. Primary care providers do have a role when it comes to CVD prevention. For example, computer-assisted quality improvement tools used in primary care can improve health by facilitating more appropriate prescribing at the cost of \$7,406 per averted CVD event.<sup>20</sup>

Clearly then, there is strong evidence for the cost-effectiveness of prevention activities and that these activities are beneficial across myriad facets of society. Therefore, it is surprising to find little mention of specific program-focused programmes from

interviewees. It is even more surprising that many interviewees determined prevention activities to be simply outside of their remit. When put into context of published Commonwealth government literature, such as the Productivity Commissions' recent report,<sup>19</sup> which explicitly states that PHNs should be focussed on spending money in ways that promote prevention – it raises the question of where the information is getting lost in translation and at which point in the chain of command prevention is no longer seen as being necessary.

Our findings suggest that the role of PHNs in prevention is indirect because of financial constraints and competing priorities. If a PHN seeks to focus on CVD prevention as a formal program of work to address this issue in their Needs Assessment,<sup>16</sup> this may reduce capacity for other priority areas set by the Federal government. However, if CVD prevention is funded as a priority such as through the PIP QI program, then it can become a direct area of activity for PHNs. There is some flexibility in the use of funds within PHNs that can be directed to CVD prevention to address local needs, but our findings show this is not systematic under the current funding drivers.

## 4.1 | Strengths and limitations

The main strengths of our study are a diverse sample covering regional and metropolitan areas in every state and territory of Australia and a diverse research team to aid interpretation of the results. Furthermore, to the authors' knowledge, this is the first study to explore perceptions of PHNs about the nature of their role. The demographics of the study – 32 participants from an array of PHNs across Australia – provide a rich qualitative insight into the work conducted by PHNs. A limitation of this interview study was that it was conducted during the COVID-19 pandemic. Thus, many of the interviewee's answers to the interview schedule were with this distraction in mind, which had changed usual practice in areas with outbreaks. COVID-19 was also determined to be a conflicting priority within our framework analysis as it was found to overshadow other types of prevention activity. Although we obtained a diverse sample in terms of frontline GP liaison staff and program managers, we did not seek to recruit higher executives or decision-makers who may have different views on the role of PHNs in conducting prevention. We acknowledge the inherent limitations with a snowballing sampling methodology. However, due to the organisational structure of PHNs and the nature of staff networking, it was decided that this methodology would be most feasible for this study. Furthermore, although we used snowballing, the majority of our participants were professionally unrelated and separated by state and territory boundaries. Furthermore, it is possible that we have oversampled PHN staff with a specific interest in CVD prevention; but the purpose of our study was to investigate how CVD prevention may fit within more formal Needs Assessments and programs of work.



## 4.2 | Future research

This study describes the role of PHNs in health prevention in Australia and in doing so highlights barriers to more effective CVD preventive activity in general practice. Our interview participants (frontline GP liaison staff and program managers) identified the PHN role in prevention as informal, constrained by financial incentives, and shaped through competing priorities for prevention, providing evidence that financial drivers and local and Commonwealth priority areas may impede CVD-specific preventive activity conducted by PHNs. For PHNs to be able to perform preventive activity in general practice successfully, prevention should be a focus of the Commonwealth government and passed down to PHNs via key priorities, embedded in schedules, KPIs, and sufficient funding to support the implementation of these priorities. Furthermore, general practitioners need to be personally incentivised to conduct prevention activities and remunerated for their time. They also require MBS items that are focused on prevention which fit specifically with their business models. Future research may investigate how to evaluate and quantify the value of indirect (informal) work of PHNs, such as in prevention; and explore whether CVD prevention priorities change once COVID-19 disruptions have ended.

## 5 | CONCLUSION

Our interviews reveal that individuals in PHNs do deem prevention to be a high priority, but they are constrained by the barriers of funding and competing priorities. We identified prevention activities being addressed indirectly by PHNs, which was dependent on financial drivers and competing priorities. PHNs are positioned to foster prevention activities in general practice and local communities, but this could be improved if supported with a more explicit prevention focus at the Federal government level. External stakeholders seeking to implement prevention programs in primary health must work within the frameworks that drive PHN activities and align with the financial drivers and business model prevalent in primary care. The role of PHNs in conducting prevention requires optimising. This may be achieved through aligning prevention with Key Performance Indicators and by the Commonwealth government determining prevention to be a priority.

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## CONFLICTS OF INTERESTS

The authors declare that they have no competing interests.

## AUTHORS' CONTRIBUTIONS

CB and LT conceived the study. SC, CB and CDW drafted the interview schedule. SC conducted the interviews. SC, KP and CB conducted the framework analysis. SC, KP and CB drafted the

manuscript. All authors contributed to interpreting the data and revising the manuscript. All authors approved the final version of the manuscript.

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## APPENDIX 1

### STAFF SEMI-STRUCTURED INTERVIEW GUIDE

#### PART 1. CONTEXT

1. How would you describe your role within your PHN?
2. How do you engage with general practices?
3. What work does this predominantly encompass?
4. How does this role fit within the structure of the PHN?
5. What prevention activities are you aware of taking place in your PHN? (eg chronic disease management programme, chronic disease care plans, Healthy Habits app from RACGP, My Health for Life)
6. What is your perception/views of the risk assessment and prevention activities currently carried out in your PHN?
7. Are you aware of any similar programmes that are being conducted in other PHNs?
8. How would you describe knowledge transfer or engagement between your PHN and other PHNs regarding prevention activities?

#### PART 2. INTERVENTION READINESS

1. Do you have any thoughts on ways your PHN could increase engagement with general practices for CVD prevention activities? (HealthPathways, clinical audit tools, patient prevention summaries/reminder sheets, additional monitoring and reporting of performance measures, PIP QI).
2. How would you describe the receptiveness of General Practices in your PHN to engage in risk assessment or prevention programmes?
3. What are your views on implementing a new CVD risk assessment and prevention activity in your PHN?
4. We would like to document any CVD risk assessment resources your PHN uses with General Practice. Does your PHN use:
5. Clinical audit & feedback reports on CVD risk assessment (prompt: Pen CS, POLAR)
6. HealthPathways section on CVD risk assessment
7. Local website with CVD risk assessment information
8. Local prevention/lifestyle programs involving CVD risk assessment (prompt: My Health For Life)
9. GP training (prompt: online modules or workshops for CPD points)
10. Other resources (prompt: apps, training)
11. Would it be possible to see de-identified examples of the above so we can compare how different PHNs promote CVD risk assessment?

#### PART 3. BARRIERS AND FACILITATORS

1. What CVD risk assessment tools are you aware of being used by GPs or practice nurses in the PHN? (prompt: existing tools eg [cvdcheck.com.au](http://cvdcheck.com.au), Best Practice/Medical Director, PIP QI app in Topbar)
2. What do you think are the main barriers to using these current tools? (prompt: capability, opportunity and motivation barriers eg knowledge, communication, access, time, attitudes)
3. What do you think might increase use of these tools? (prompt: planned activities in CVD prevention eg MBS items for Heart Health Check, PIP QI, new guidelines)
4. Are there any systemic barriers such as lack of reimbursement under Medicare or other programmes that prohibit your PHN from conducting CVD risk assessment or prevention activities?
5. Do you think that CVD risk assessment or prevention activities are well evaluated or audited in your PHN? (by how much, level of improvement? Ways to improve quality of data or number of practices engaged?)
6. Show resources at [www.auscvdrisk.com.au](http://www.auscvdrisk.com.au) to prompt any further ideas for implementation (topbar version).

## APPENDIX 2

## Thematic framework

- 1.0 GP engagement: encompassing the activities that PHN's undertake with practices (including GPs, practice nurses, practice managers, administration staff):
  - 1.1 Role of practice support staff
  - 1.2 Activities within a practice (eg audits, training)
  - 1.3 Networking/education events (eg workshops)
  - 1.4 Quality improvement processes (eg timeframes, outcomes, specifying how PHNs undertake quality improvement in general practice, itemising targets, KPIs and setting timeframes)
- 2.0 Stakeholder engagement: detailing the ways in which PHNs approach and engage with other stakeholders:
  - 2.1 PHN commissioned work with other groups (eg Improvement Foundation)
  - 2.2 Involvement in state/national programs (eg HealthPathways, PIP QI, My Health For Life)
  - 2.3 Organisation between PHNs (eg QLD PHN data collaborative, GP Liaison Officer Network)
- 3.0 Competing priorities: the other programs and services PHNs deliver which may conflict with the work of CVD prevention:
  - 3.1 Scope of funding (eg no specific funding for prevention)
  - 3.2 Competing programs/priorities (eg COVID is a competing prevention priority)
  - 3.3 Lack of collaboration (eg PHNs isolated despite doing similar work)
  - 3.4 GP barriers (eg PHN perception of distrust about sharing data)
- 4.0 GP incentives: describing the ways in which PHNs encourage general practices to undertake quality improvement
  - 4.1 Financial (eg practice manager approach to business, profit, cost vs external payments)
  - 4.2 Continuing professional development (eg PHNs creating online learning modules)
- 5.0 Implementation strategies: areas in which we may form alliances to implement CVD prevention activities with the PHN
  - 5.1 Tools (eg Pen CS for clinical auditing, health pathways)
  - 5.2 Advocacy (within PHN, to executives)
- 6.0 Frameworks: frameworks and multiorganisational/interdisciplinary programs of work which PHNs are involved in
  - 6.1 Frameworks (eg quadruple aim: improved patient experience, improved provider experience, population health, sustainable cost)
  - 6.2 Multidisciplinary/team care (eg identify/coordinate care for patients with heart failure)
  - 6.3 Patient activation (eg waiting room iPads)