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Partnerships in primary care in Australia: Network structure, dynamics and sustainability

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ABSTRACT

Partnerships represent a prescriptive form of network governance, based on the idea of co-operation. This article has four aims. The first is to describe why network governance and partnerships are important now, and what one particular example – Primary Care Partnerships – is addressing. The second is to analyse the network structure of two of these partnerships, and the third is to examine network dynamics. The fourth aim is to explore relationships and sustainability over the longer term. Two government-funded and steered partnerships, which were established to increase coordination between primary care services in Victoria, Australia, were examined. Annual interviews at three points in time between 2002 and 2005 were used to explore relationships between organizations within these two partnerships. The structure of two different communication networks, based on contacts for work and contacts for strategic information, were examined using social network analysis. Tracing network structures over time highlighted partnership dynamics. The network structures changed over the three years of the study, but an important constant was the continuing centrality of the independent staff employed to manage the partnerships. Over the longer term, it seems to be more important to fund independent partnership staff, rather than people who connect partnerships to the funding agency. If partnerships are seen as valuable in improving service coordination and health outcomes, then long term rather than just start-up funding support is required.

Introduction

Partnerships have become a common manifestation of network governance ideals. Network governance refers to a mode of governing that uses cooperation as its central coordinating mechanism. It is often used in a descriptive fashion, to understand the highly fragmented world of policy and administration that spans different levels of government, and crosses sectoral boundaries. This world, which reflects the growing complexity of society as well as changes in the ability of governments to govern, needs solutions that join-up the disconnected components of systems. So, network governance is also used in a prescriptive fashion, to describe deliberate attempts at joining up. The last decade has witnessed the proliferation of network forms of governing around the world, and one of the most common of these is the array of arrangements termed 'partnerships'.

Partnerships cover a multitude of coordination mechanisms, from public–private partnerships which can in effect be straightforward contracts, through to voluntary alliances between agencies where no funding is involved. The form of partnerships of interest here are those that represent a local and practical manifestation of the macro level principles of prescriptive network governance: They have been funded and are steered by governments and others, with the explicit purpose of increasing cooperation in order to reach desired ends.

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This paper has four aims. The first is to describe why network governance and partnerships have become important now, and what this particular example of partnerships – Primary Care Partnerships – is addressing. The second is to analyse the network structure of two of these partnerships. Who communicates with whom? How important are the different partners? The third is to examine network dynamics. Do particular organizations become more or less important over time? What happens when key actors leave the partnership? The fourth is to explore relationships and sustainability over the longer term. Should government see them as something that can be kick started with policy support and new funding, then left to their own devices? Are such partnerships sustainable without ongoing support?

Network governance and partnerships

Over the last three decades, governing trends in the public sector have changed considerably. As attention shifted to cutting costs and maximising outputs, laws and rules were de-emphasised while plans and targets became more important. Corporate management was a major strand of the new approach. Public organizations were to be seen as corporations, run along private sector lines by business managers. Plans and targets were emphasised, in line with a private sector approach rather than a traditional bureaucratic one (Considine & Lewis, 1999; Hood, 1991; Pollitt & Bouckaert, 2000). A new wave of market based reforms was promoted next. This blended the rationality of managerialism with one based on competition. The flagships of this form of governance included contracting out and market testing.

In the UK, the term the new public management (NPM) was coined to encompass these reform ideas (Hood, 1991). The NPM involved more active management, the use of quasi-market mechanisms and increased use of auditing and performance indicators (Ferlie & McGivern, 2003). Many large public bureaucracies were fragmented into smaller agencies and quangos of various types.

These plan-based and market-driven forms of governance peaked in the early 1990s, and a search for new ways of joining up fragmented systems has followed. Sullivan and Skelcher (2002) describe this new configuration as the congested state, involving different governing methods by a range of public and private actors at different levels. The congested state is a complex web of interconnections, used to steer society through the control of critical resources, and by coordinating interests, rather than having authority based on legal powers (Kooiman, 1993; Rhodes, 1997).

The challenge of outlining what governance means now, and what governments can do to govern following significant social changes and deliberate government strategies to reform the public sector, has been addressed in a number of ways. It has been labelled "new governance" (Radin et al., 1996) "modern governance" (Kooiman, 1993), or simply "governance" (Rhodes, 1997, 2000). Without a doubt, the need to coordinate the activities of a growing and increasingly diverse range of agencies involved in delivering public services requires novel approaches and new frameworks.

The term 'network' indicates both a conceptual model, and a form of coordination (Thompson, 2003). 'The network', comprising a wide array of state institutions, organized interests and others, is an important metaphor for describing governance in the fragmented and congested state. It represents a significant alternative to traditional forms of governance, with the mode of coordination based on relationships, rather than command and control in hierarchies and price and competition in markets (Considine & Lewis, 2003; Powell, 1990; Thompson et al., 1991).

Much of the more prescriptive view of networks sits within the management literature, and is focused on what kind of management is required for their smooth functioning (e.g. Kickert, Klijn, & Koppenjan, 1997; Mandell, 2001; Radin et al., 1996; Thompson, 2003). There is a more direct link to partnerships through these sources, where deliberate interventions to join-up organizations are the goal. In summary, network governance is both a description of, and proposed solution to, the need to coordinate multiple actors across organizational, sectoral, vertical and geographical boundaries.

Partnerships have become the most identifiable form of network governance, spanning boundaries to address coordination dilemmas. The term 'partnership' is used here to indicate a formalised network designed to manage interorganizational relationships (Kickert et al., 1997). Within these formalised networks, partners share responsibility for assessing the need for action, determining the action to be taken, and agreeing the means of implementation (Sullivan & Skelcher, 2002). In doing so they display network characteristics. However, partnerships which are externally mandated, and funded at least partially by competitive contracts, also rely upon and display hierarchical and market mechanisms and characteristics, in addition to their network attributes. They are very different from networks which emerge on the basis of mutual benefit, trust and reciprocity (Lowndes & Skelcher, 1998).

In reality, there are few 'pure' network forms of partnerships between organizations (Ferlie & McGivern, 2003), but a meaningful definition of a partnership must be more like a network than a market or hierarchy (Hage & Alter, 1997; Lowndes & Skelcher, 1998). Networks are often characterised as flat structures compared with hierarchies, and as based on values such as trust and egalitarianism, rather than price and competition. But real power differentials of course continue to exist between organizations within partnerships (Lewis, 2004).

As the discussion so far indicates, there is a crucial distinction to be made between self-organizing, bottom-up partnerships and those that are centrally determined by government and implemented as top-down policy. The second of these types, and the type of central interest here, reflects governments attempts to capture and institutionalize the positive effects of networking (for example increasing diversity through the involvement of a greater range of actors) by *mandating* that organizations and programmes become more formally connected to each other (O'Toole, 1997). In these partnerships: 'local agencies can do as they like, as long as they comply with government wishes' (Powell & Exworthy, 2002: 26).

Partnerships which are government initiated and funded, and are focused on better inter-agency coordination of services, display network characteristics, but have

not arisen spontaneously from local actors. Government funds them, including network manager positions, maintains a steering role, and measures their performance. Partnerships have some ability to shape their own local priorities, but cannot do so without reference to central government priorities. Tensions inevitably arise because the needs of a central authority, steering at a national or sub-national level, and the needs of local partnerships differ.

For example, short-term funding provided by central government with strict rules and accountability criteria, is likely to detract from partnership work and limit local flexibility (Mitchell & Shortell, 2000). The unwillingness or inability of higher tiers of government agencies to move from command and control models to more equal, flexible and open relationships is often a major difficulty. An analysis of Local Strategic Partnerships in the UK concluded that coordination between organizations is supported with funding, target setting and accreditation, but co-governance (meaning a more negotiated arrangement where partners have greater authority) has only weak support (Johnson & Osborne, 2003).

Evaluations of health partnerships have reported that short-term funding, tensions between central and local priorities, and the difficulty of keeping organizations engaged over time, are common challenges (Arora, Davies, & Thompson, 2000; Local Government Association, 2000). The importance of active and consistent political leadership has also been highlighted (e.g. Hayden & Benington, 2000). Clearly, government initiated and funded partnerships have coordination advantages, but they also face many challenges.

Pratt, Plamping, and Gordon (1998) argued that lasting partnerships occur when they are not dependent on external resources. Sustainability over a period of time is the real test of effective partnerships. What matters most in sustaining partnerships is that there are clear purposes for the partnership. The Audit Commission (1998) in the UK advocated four areas that public service partnerships should focus on. These included developing a vision for a community; formulating strategic objectives; planning activities that met agreed strategic objectives; and managing joint operations. Glendinning et al. (2001) identified various factors that can negatively impact on successful partnership working, which included structural or organizational differences between partners and a lack of a shared vision in terms of priorities.

As with all types of organizational restructuring, partnerships are not ends in themselves, they are just a way of achieving various objectives (Bossert, 1998). Some of the literature on partnerships cast them as a mechanism for decentralisation or delegation. For example, Bossert and Beauvais (2002) used a modified principal agent theory to analyse various forms of decentralisation in four developing countries. Peckham et al.'s (2005) review reported that decentralisation on its own was unlikely to produce a large impact upon organizational performance. Covering a different range of partnerships that aim to stimulate local economic development, the OECD Local Economic and Employment Development programme has emphasised this aspect along with financial structures that promote joint working (e.g. OECD, 2004). Myrna Mandell's research on partnerships in the US emphasises the importance of being cognizant of different kinds of partnerships and the purposes they serve, and much of her work (and other's) deals with voluntary partnerships, not driven by government (e.g. Mandell, 2001).

Much time and effort has been spent on categorising different types of partnerships, as they clearly have many different central purposes, and operate in very different contexts. There is also a substantial literature on what makes for successful partnerships. Neither of these is central here, but provides an important prelude to addressing this paper's aims of examining network structure, dynamics and sustainability, in order to make claims about the long term role of government in funding and steering partnerships.

Primary care partnerships in Victoria

In Australia, the states and territories retain the major responsibility for health service provision, with the Commonwealth responsible for providing substantial additional funding for hospitals, medical services and pharmaceuticals. The states and territories deliver services through community health services, hospitals, and other agencies, with local governments also providing a range of services. The presence of multiple actors operating at different levels (national, state, and local), in different sectors (government, private for-profit, and not-for-profit), providing many different services through agencies that vary enormously in size, generates the appeal for local partnerships as a solution to coordinating primary health care in the Australian context. The approach with the most conceptual applicability for examining these partnerships is one that sees them as a particular form of network governance – as managed networks (Lewis, 2005a). Their primary purpose is to coordinate a fragmented system that is highly decentralised.

Primary Care Partnerships (PCPs) were introduced in Victoria in 2001. The stated aim was to improve the health and well being of a catchments' population by better coordination of planning and service delivery (Department of Human Services, 2000). The partnerships are both funded and overseen by the Department of Human Services (DHS), with DHS central office providing policy direction and advice, and the regional offices responsible for partnership monitoring and accountability. As was the case in Britain, the new strategy retained the purchaser–provider split, but overlaid this with a collaborative approach to improving service delivery and outcomes (Sullivan & Skelcher, 2002). But unlike the British case, the Australian health system is very fragmented and decentralised, so the primary purpose was coordination rather than decentralisation.

In total, 32 partnerships were established across the state (reduced to 31 in 2005 following a merger between two neighbouring PCPs), with the majority covering two or three municipalities. Each PCP is required to include five core agencies – community health services (local centres employing a range of health professionals, funded mainly by state government); local governments; district nursing services; Divisions of General Practice (voluntary

associations of GPs located in the same geographically defined area); and aged care assessment services (generally run by hospital out-patient services). Each PCP must also have a minimum of two other partner agencies, with those included chosen by the PCP on the basis of local priorities.

DHS provided once-off establishment funding at the same level for each PCP, regardless of the number of partners or the size of the catchment area. Further funding was provided to develop community health plans, and to employ PCP Managers and other staff primarily devoted to service coordination and health promotion functions. The initial four year funding agreement ended in 2004, but was extended for a further two years, with additional funding available through competitive processes. In 2006, PCPs were granted recurrent funding with around AUS$150,000 (US$130,000) provided for each partnership per year.

Methods

Two PCPs were involved in this study, chosen on the advice of DHS that these were likely to be successful on the basis of their initial community health plans. These two should be at the leading edge of changes in PCPs, based on the DHS evaluation that their plans were good and they were likely to move ahead quickly. Hence, they are somewhat atypical and not necessarily reflective of the experience of all PCPs.

One of the PCPs is located in Melbourne and the other is in a rural area about 200 km from the Melbourne metropolitan area. Westbay (in the Melbourne metropolitan area) includes three local government areas, which cover a total population of 224,000. Its catchment area is very ethnically diverse, and in socio-economic terms, it covers a relatively poor area. Campaspe covers a single local government area, and has a population of 35,000. Although it is not wealthy compared to other parts of Victoria, it has an older population, and is wealthier and less culturally diverse than Westbay.

Members of each of these partnerships were interviewed in three successive years. This included PCP project staff, partner agency staff involved in the PCP, and staff from the regional office of the DHS (who generally have a representative on the PCPs in their geographical area). Table 1 provides details on who was interviewed and the timing of the three rounds of interviews. In the first year, interviews were conducted face to face, and averaged around one hour to complete. In the second and third years, interviews were conducted by telephone, and took between 30 and 45 min. Over the three years of the study, where the same people were still involved they were reinterviewed, and where they had been replaced the new incumbent was interviewed (see Table 1). All interviews were recorded and transcribed. The interview schedule itself was divided into a semi-structured component, allowing for open ended responses to questions about relationships between organizations, and the achievements of PCPs to date, and a structured component, which was used to generate the network data.

The more structured part involved asking respondents who they were in communication with in order to do their work, and who they went to for strategic information. The actual questions used were: "Looking back over the last six months, who are the people you had the most contact with *in order to do your work?*", and: "Over the last 6 months, who did you go to most when you wanted to get *strategic information about something in the PCP*?" These two questions were used to distinguish between day to day communication about work issues, and a more deliberate form of information seeking behaviour. No limitations were placed on the number of names that could be listed, and if people were having trouble recalling names they were prompted to think about people; 'in your agency, in your PCP, in DHS regional and central offices, and elsewhere'.

Table 1
Information on interviewees over the three survey years

Partnership	Number of interviewees[a]	Composition of interviewees	Year	Interview year
Westbay	19	3 PCP 11/15 Steering committee 2 DHS regional office 3 Health promotion	2002–2003	1
	19 10 yr1 10 new	2 PCP 12 Steering committee 2 DHS regional office 3 Health promotion	2004	2
	19 5 yr1 4 yr2 10 new	3 PCP 12 Steering committee 2 DHS regional office 2 Health promotion	2005	3
Campaspe	18	3 PCP 9/14 Steering committee 3 DHS regional office 3 Health promotion	2002	1
	20 13 yr1 7 new	2 PCP 12 Steering committee 3 DHS regional office 1 Community health 1 Service coordination 1 Health promotion	2003	2
	20 10 yr1 4 yr2 6 new	3 PCP 13 Steering committee 2 DHS regional office 1 Community health 1 Health promotion	2004	3

[a] yr1 indicates people interviewed from year 1 onwards, yr2 indicates people interviewed for the first time in year 2, and new means interviewed for the first time in that year.

The interview questions add to the analysis of network structure by illustrating contextual factors and providing a more evaluative examination of relationships than can be gained from the network structures alone. This approach combines structural and discursive approaches by examining networks as a set of connections, as well as a narrative about the use and value of those connections (Lewis, 2005b).

Conceiving of partnerships as a specific form of networks, calls into service a set of useful analytical techniques. Social network analysis provides a tool box of concepts and measurements that help to analyse network structure and potential effectiveness (Lewis, 2005a, 2005b). However these have rarely been used to examine partnerships. Moore et al. (2006) used social network analysis to demonstrate that network structures influence the

way organizations perceive their environment, and that those organizations more highly valued by partners are also more likely to see funding opportunities. In another example, it was used to assess coordination effectiveness, finding that the level was highest for service delivery and lowest for planning, with administration falling in between (Bolland & Wilson, 1994). Some key network concepts are discussed in the next section.

Network structures

The first part of the analysis compares the strategic information networks of both partnerships in their first year, shown in Figs. 1 and 2. The squares (PCP staff) and circles (all others) represent the individuals interviewed, and the lines between them and the direction of the arrowheads indicate who goes to whom for strategic information. They are labelled with both their organization and their individual number for ease of tracking over the three years. So, Fig. 1 shows that 13 actors nominated the PCP Manager 201 (labelled as PCP CEO in the diagram) as someone they go to for strategic information (in the middle of the figure), while the DHS actor (214) in the middle top of the figure is nominated by two people and nominates two others. In these figures, the size of the squares and circles represents the number of nominations they received (arrows pointing in).

Figs. 1 and 2 share similarities, the most obvious of which is the star shape around the PCP Manager in both, with a couple of other actors playing important secondary roles in providing strategic information. In both cases the PCP Manager is by far the most central actor, providing strategic information to most other actors in the network. However, while the other PCP Staff are also quite central in the network at Campaspe, they are noticeably less so at Westbay where only five nominations (three to one staff member and two to the other) are directed towards them. The importance of the chair (an honorary position) also varies. The chair at Westbay is the second most central actor in the network, while the Campaspe chair is more peripheral.

There are some underlying differences in the types of actors involved in each of the strategic information networks, which relate to the composition of the steering committees of the two partnerships. At Westbay, many more of the actors are from local government because there are three local governments involved and each of them is represented on the steering committee.

Mapping the ties between actors gives an overall picture of network structure, but it is sometimes difficult to see patterns within a network. An alternative approach to understanding differences in network structure is to use social network measures. One measure used – In-Degree Centrality, provides a measure of the '*receptivity or popularity*' of an individual actor, and is based on the number of ties directed towards an individual (Wasserman & Faust, 1994). Within our two networks, an actor with a large in-degree score is one who many other actors nominated as a contact in order to do their work, or to gain strategic information. Such actors would typically be described in the social network literature as enjoying a high level of prominence or

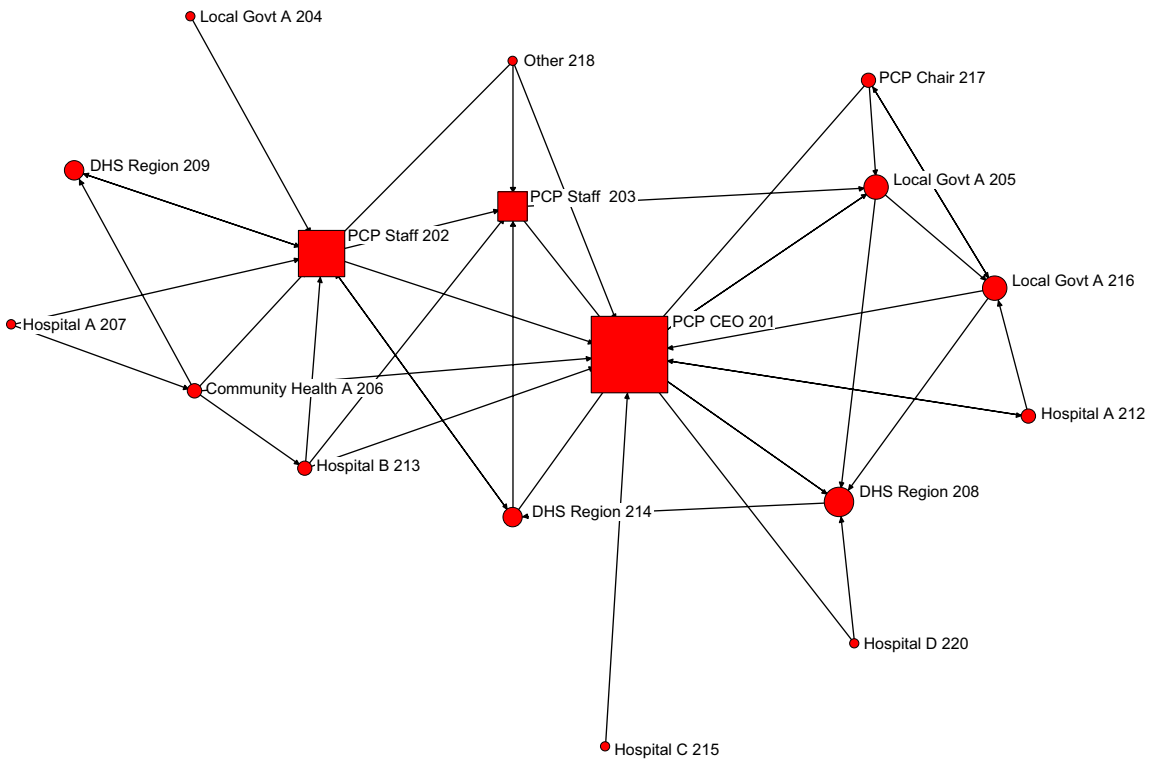

Fig. 1. Campaspe 'Strategic Information' network, year 1.

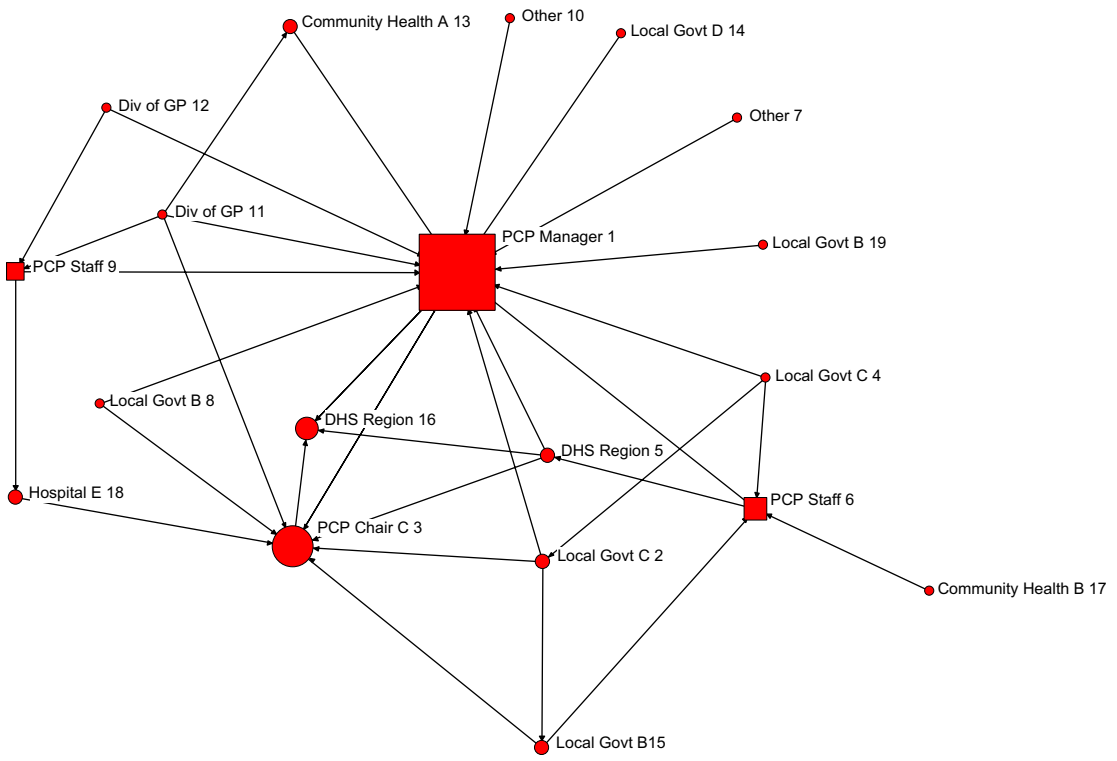

Fig. 2. Westbay 'Strategic Information' network, year 1.

prestige (Hanneman & Riddle, 2005). This measure is dependent upon network size, so a normalised figure which makes results comparable across networks of different sizes was used.

Table 2 lists the top five ranked actors on the in-degree centrality measure for both the work and strategic information networks at Campaspe and Westbay, for each of the three years of the study. The strategic information network centrality results for Year 1 (top right-hand corner of Table 2), confirms the description of Figs. 1 and 2. At Campaspe, the PCP Manager and two PCP staff members were most central in the network, with an officer from the DHS Regional Office (208) and two local government representatives also relatively prominent. In contrast, at Westbay, while the PCP Manager is likewise the most central actor on this measure, the next most prominent actor is the PCP Chair, followed by a DHS regional official, with the two PCP staff members in fourth and fifth positions. The centrality measures for the 'work' network, indicate that the very top positions tend to be occupied by the same actors as in the strategic information network, with some changes in the top five.

Network dynamics

As Table 2 indicates, the pattern for the second year of results is generally quite similar to the first. PCP representatives are again the most centrally placed in both networks for both partnerships, with DHS also well represented in the top five. This is despite the departure of two key actors – the Campaspe PCP Manager, and the original Chair of Westbay. A third departure that made a lesser impact was the replacement of the original DHS person on the steering committee. Notably, the new Chair remains prominent in the network at Westbay. At Campaspe, one of the staff (203) became the new PCP Manager when the original Manager (201) left and her ranking in these measures reflect that new status. In the strategic information network, hospitals became more important in the second year for Campaspe, while community health and one of the divisions of general practice became more important at Westbay.

For the final year of the study, again a few key changes have occurred at Campaspe. Most significantly, another of the original three PCP staff (202) now occupies the role of Manager, with the previous Manager (203) moving on to a new role in community health but maintaining a position on the steering committee of the PCP. A new PCP staff member was also appointed (408). At Westbay, the original PCP Manager was still in place, and another staff member (509) had been appointed to replace the person who departed (46). The pattern is again quite similar to the previous years in relation to the work networks, with PCP staff remaining important in both partnerships, along with local government in Campaspe and community health in Westbay. Interestingly, in both partnerships, DHS has disappeared from the top five most central actors for both work and strategic information.

The composition and structure of these networks change markedly from year to year as actors enter and

Table 2
PCP top 5 actors by network in-degree centrality

	Work		Strategic information	
	Campaspe	Westbay	Campaspe	Westbay
Year 1	PCP CEO 201 PCP staff 202 PCP staff 203 DHS region 208 Local govt A 205 Hospital B 213 PCP chair 217	PCP manager 1 PCP chair 3 PCP staff 6 Comm health A 13 PCP staff 9	PCP CEO 201 PCP staff 202 PCP staff 203 DHS region 208 Local govt A 205 Local govt A 216	PCP manager 1 PCP chair 3 DHS region 16 PCP staff 6 PCP staff 9
Year 2	PCP staff 203 PCP staff 202 DHS region 208 Local govt A 205 PCP chair 217	PCP manager 1 PCP staff 6 DHS region 5 PCP chair 46 Comm health A 13	PCP staff 203 PCP staff 202 DHS region 208 PCP chair 217 Local govt A 205 Hospital A 210 Hospital B 212	PCP manager 1 PCP chair 46 PCP staff 6 Comm health A13 Div of GP 12 Other 136 DHS region 5 DHS region 92
Year 3	PCP staff 202 Comm health 203 PCP staff 408 Local govt A 205 Hospital A 342	PCP manager 1 PCP chair 46 Comm health A13 Other 136 PCP staff 509	PCP staff 202 PCP staff 408 Local govt A 205 Comm health 203	PCP manager 1 PCP chair 46 Comm health A 13 PCP staff 509

Note: Where more than five are included, it is because there are tied rankings.

leave, and personal and institutional relationships ebb and flow. Figs. 3–5 provide another way of looking at this dynamism by mapping the 'work' network at Campaspe over the three points in time. Fig. 3 (year 1) shows a fairly open structure with 78 ties linking the 18 actors in the network. The PCP Manager (201) and two PCP staff, along with a bureaucrat from the DHS regional office (208), clearly dominate. One individual from a local hospital (213), a local government representative (205), another DHS officer (214) and the PCP Chair (217) were also prominent.

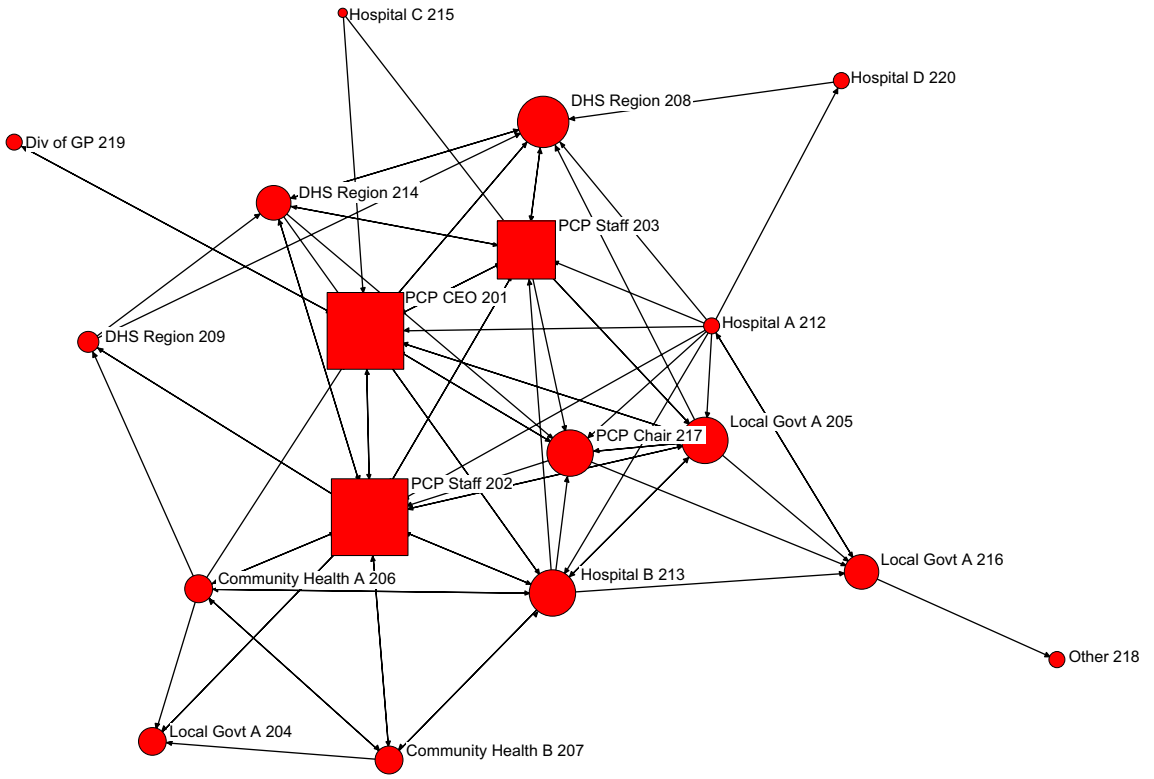

Fig. 3. Campaspe 'Work' network, year 1.

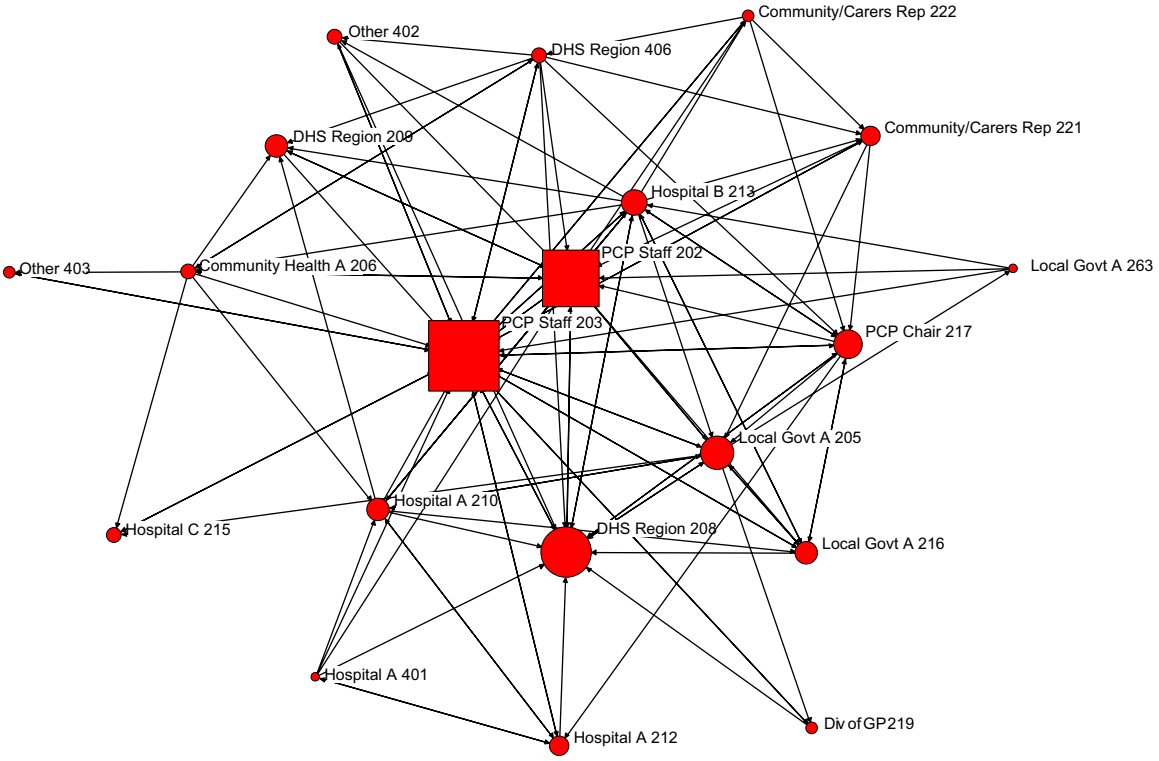

Fig. 4. Campaspe 'Work' network, year 2.

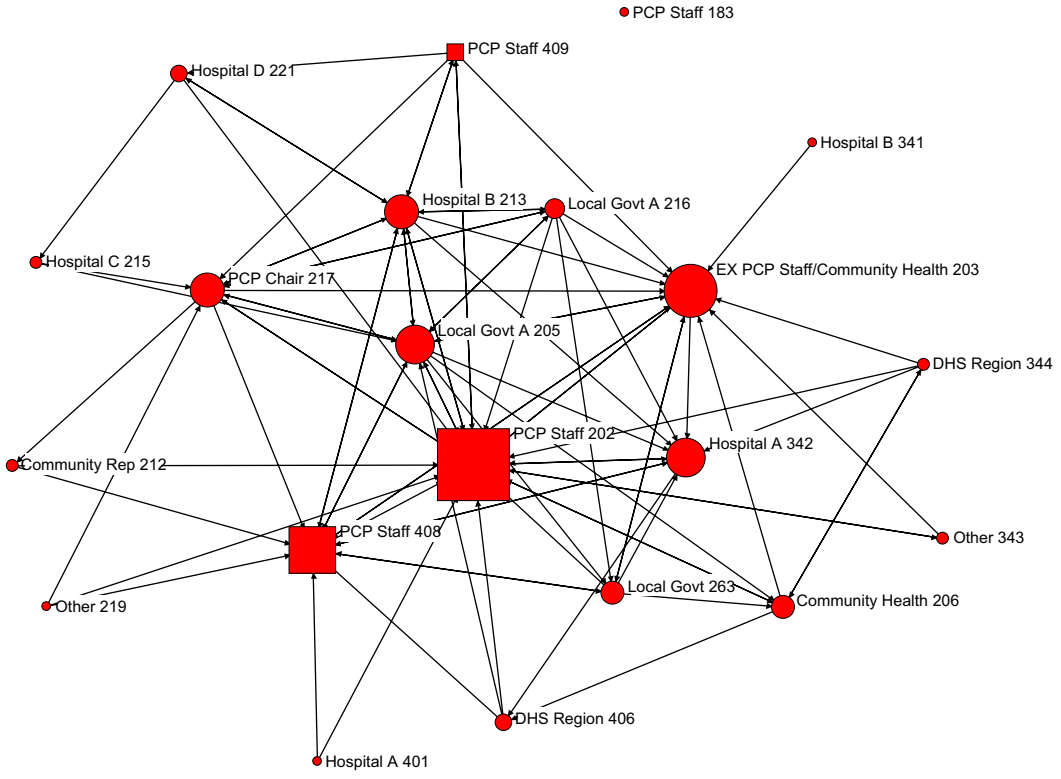

Fig. 5. Campaspe 'Work' network, year 3.

Fig. 4 (year 2) indicates a much more connected structure with 111 ties now linking 20 actors in the network – a 28% increase in the number of ties per actor over the previous year. There has been significant turnover, with seven of the 20 network members from the previous year having changed. However, the two PCP Staff (202 and 203) remain central players in the network as does actor 208, one of the original members from the DHS regional office. Only actor 203 who took on the role of PCP Manager became more central. The other prominent actors in the first year (205, 213 and 217), also declined in centrality. This signifies both a broadening of the range of actors that respondents nominated as important, but a continued focus on PCP staff.

Having become more densely connected in the second year, in the third year the 'work' network became more sparse with the number of ties falling from 111 to 90 despite the number of actors remaining the same at 20 (Fig. 5). Network turnover was again quite high with six members changing. Three actors became especially central – the two PCP staff (one a new addition to the network), and actor 203. As has been noted already, she served as a PCP staff member for the previous two years, but was by this time employed in community health. Aside from these three, only five other actors received more than five ties from other respondents in the network – one from local government (205) and two from different hospitals (213 and 342), and the PCP Chair (217). This pattern indicates a loosening of the network structure, but again, the continuing importance of PCP and ex-PCP staff is striking.

Clearly, the network structure and composition changed over the three years, but given the relatively high turnover in actors, it is difficult to gauge from these figures how institutional representation within the network altered. Table 3 lists the percentage of in-degree ties directed towards organizational groups within the 'work' networks. These are calculated by grouping the individual actors by organizational affiliation, aggregating the number of ties directed towards each group, and then expressing this figure as a percentage of total network ties. The network structures for work and strategic information were similar, so only the work networks are presented and discussed here.

For Campaspe, respondents consistently went most to PCP staff, with 38% of all ties directed towards them in the first year. This figure declined substantially in the second year as the network diversified, but rose marginally in the third year. Of the other types of actors represented in the network, local government representatives remained relatively central at Campaspe over the three years, while actors based in hospitals became more important – the percentage of ties to this group doubling to 20% over three years. The sharp rise for community health reflects the movement of one former PCP staff member, as discussed earlier. Perhaps of most interest, is the loss of centrality of DHS Regional office personnel, falling from 19% in year 1 to just 3.3% in year 3.

For Westbay, the PCP staff also rate consistently as the most highly nominated, and this rose slightly over the three years of the study. Local government actors declined steeply in importance from the first to the second year, but recovered somewhat in the third year. The impact of an unsettling amalgamation of the relevant DHS regional office with a contiguous one is clear in the third year, with the centrality of this group falling to zero. The relative importance of the PCP Chair at Westbay is also clear from this table, with the Chair ranging between 13% and 19% over the three years, compared with between 6.1% and 7.8% for Campaspe. Similarly hospitals were less important at Westbay, varying from 0% to 8.1%, while at Campaspe, they scored between 10% and 20%.

Table 3
Percentage of total network ties directed towards organizations:'Work' networks

	Year 1	Year 2	Year 3
Campaspe			
PCP staff	38.5	30.6	32.2
PCP chair	7.7	6.1	7.8
Hospitals	10.3	17.1	20
Community health	7.7	2.7	17.8
Local government	16.7	12.6	16.7
DHS region	16.7	18.9	3.3
Div of GP	1.3	1.8	0.0
Other	1.3	9.9	2.2
Westbay			
PCP staff	36	38.8	44.4
PCP chair	13.3	10.2	19.4
Hospitals	1.3	8.2	0.0
Community health	10.7	8.2	11.1
Local government	22.7	8.2	13.9
DHS region	9.3	12.2	0.0
Div of GP	4.0	0.0	2.8
Other	2.7	14.3	8.3

Partnership relationships and sustainability

A range of factors underpinning these structural attributes and network dynamism were canvassed with network members in relation to the control and management of the partnerships. The two most important themes identified from the interviews were partnership management and local versus central control. The theme of partnership management covers building relationships, engaging individual partner agencies, and managing the collaborative process. This theme was important throughout the three years, although the specific issues changed over time. The theme of tensions between local partnerships and the central authority included issues to do with the amount of direction and control from DHS, funding issues such as the amount and length of time, and the ability of local partnerships to influence central policy directions.

Partnership management

Many respondents referred to relationships as having changed and strengthened over the three years, noting the benefits of the shift to a more collaborative model. The interviewees' comments correspond to the network maps and measures reported above, reinforcing the importance of the PCP Staff, and also of having someone *not* from one of the organizations in the partnerships, doing the work of coordinating them. Despite this, some interviewees, particularly in later years, recognised that partnerships are not straightforward or easy. One respondent noted:

"I think partnerships are always going to be hard work. They always have a competitive edge. We're all running businesses and we all need for our businesses to survive." (Westbay, yr3)

Another issue raised was the ongoing talk about balancing both individual agency and partnership agendas. One interviewee was particularly negative, claiming that since agencies would never put the joint interests of the PCP above the interests of their own agency, PCPs were therefore a failure:

"I said … 'If we could come up with a service delivery model that improved the services to our community … and it impacted negatively on your agency, would you support it?' Everybody in the room said 'No'. Everybody." (Westbay, yr2).

This is in stark contrast to another respondent in the same partnership who commented:

"I truly believe PCP is us … PCP is not external to us, we are PCP, we make PCP work for our community and our organisations." (Westbay, yr2).

Comments about hospitals were often negative in the early years, particularly in relation to hospitals not seeing the point of getting involved, or thinking they are the major and most important health service provider in the area. The two PCPs had varying views on whether their engagement with hospitals had grown, with Campaspe being notably more positive. This resonates with the greater importance of hospital staff in the networks at Campaspe than Westbay, indicated by the centrality measures.

Local government involvement was seen to be relatively poorly developed in the Westbay partnership, both in relation to people being uncertain whether local governments should have a major role, and in relation to them not being highly engaged in the PCP. Though discussed more in later years, perceptions remained mixed, even for the local government representatives themselves. At Westbay, few people spoke positively about local government engagement. Again, this fits with their relatively low network centrality, discussed earlier.

An obvious point where disengagement is likely to occur is GPs and the divisions of general practice, which are funded by the national government. GPs in Australia receive the vast majority of their funding on a fee-for-service basis, and have few financial incentives to become involved in partnership meetings and planning activities. Early comments reflected this difficulty in engaging GPs. In later years, their role was spoken about in a more positive manner. However, the divisions do not feature as central in the networks for either PCP, even in the final year. One interviewee from Campaspe pointed to improved relations with both the division and the Aboriginal Medical Service (AMS) as signs of PCPs working to overcome the boundaries between state funded primary care activities and Commonwealth funded general practice:

"I guess one of the organizations, in particular the AMS at Echuca, Njernda, and the division [of general practice] have got a much closer relationship and that was in fact, I guess in some ways driven by PCP activities in the original phase and PCP personnel." (Campaspe, yr3).

This resonates with issues of GPs' power in partnerships in the British literature. Primary Care Groups were introduced into the NHS and were charged with a 'duty of partnership', however, there were problems caused by the unequal distribution of power, which meant that GPs formed powerful majorities in these organizations (Hudson & Hardy, 2001). Despite the contextual differences, which mean that in Australia, GPs have the power to simply stay out of the partnerships rather than dominate them, similar problems of power inequalities within partnerships are apparent.

Local versus central control

Interviewees noted a number of tensions around control. Some reported that competition had not disappeared, relating this to the way the funding is distributed:

"there's still a bit of competition but that's sometimes because of the way the department rolls out the dollars. They actually roll it out in a fairly competitive manner." (Westbay, yr1).

The need for specific funding for partnerships in order for them to work was raised often. With an initial three years of funding, and then an extension for another two years, it is not surprising that the issue of whether the funding for PCPs would continue was also raised frequently. Respondents noted the short-sightedness of the funding arrangements, and their impact in undermining trust with DHS and with each other. Many spoke about the importance of resources dedicated to the partnership work:

"…it's all very well having the will to work together but you need, having some dedicated resources which are based solely on cooperation as opposed to everybody just having to make do within their own, it's much better. Concrete, resourced cooperation." (Westbay, yr1).

Some informants felt that the partnerships had become sufficiently embedded to enable important elements of the relationships to be sustained without continuing support:

"[T]here's been some really, really strong players and networks developed in the last 12 months which I think if PCP funding was perhaps to be not ongoing, there would still be a really strong relationship there and we would be right." (Campaspe, yr3).

The tension between local level flexibility and central government direction setting was spoken of by a number of interviewees throughout the three years and is encapsulated by the following comment:

"So I think DHS usually has their agenda and things are fine if we're meeting their agenda and if we happen to go off in a different direction, that sometimes throws them and they do like to be in charge … if you want to work in true collaboration, you don't have total control…" (Westbay, yr1).

Overall, the themes arising from the interviews largely reinforced the data on network structure and network

dynamics. In particular they point to the ongoing importance of PCP staff as network managers and facilitators, and to a diminution in the importance of the funding agency as the partnerships progress.

Discussion and conclusions

This paper had four aims. The first was to describe government-funded and steered partnerships, demonstrating that they can be usefully conceived of as a prescriptive form of network governance, and to describe what PCPs were designed to address the coordination dilemmas faced by a fragmented system of primary health care. This paper does not examine whether local coordination was improved, which has been reported elsewhere (Lewis, 2005a).

The second aim was to analyse the network structure of two partnerships. The analysis suggests that independent staff, acting as dedicated partnership coordinators, play a crucial role in holding partnerships together. It also indicates the important role played by staff from the funding authority, particularly in accessing strategic information. Examining network dynamics across three years was the third aim, pointing to a surprising amount of resilience given the number of individual actors who left the partnerships and the number of new actors coming in. The informal connections between partners seemed to generate enough soft infrastructure for the partnerships to be able to cope with departures and arrivals. Of course, if enough people left all at once, it is likely that the networks would collapse. Those employed to coordinate the partnerships are by far the most central to their functioning. This did not diminish across the three years of the study, while direct connections to the funding body did. The falling centrality of DHS actors relates to an apparent fall in their importance after an initial establishment period. This highlights that funding staff within the partnerships, rather than concentrating on maintaining a strong connection to the funding agency, might be the most crucial ingredient in successful partnerships over time.

The final aim was to examine sustainability and the role of government. The analysis indicates that partnerships require long term support and not just start-up funding, resonating with the partnership literature from elsewhere. The centrality of PCP staff in both partnerships and both kinds of network, and across the three years, indicates a need for independent (of partner agencies) and dedicated funding and support for network staff positions over a substantial period of time. Perhaps eventually these positions would become redundant, but after three years they were still crucial.

Of course it is impossible to know what would happen if these positions were removed. Perhaps the networks would be re-built by others who were prepared to take on the coordination role in addition to their individual organizational role. However, given the stretched resources of the many small organizations involved in delivering primary care, it seems unlikely that this could simply be picked up and added to an existing role beyond a short period of time. And the independent status of partnership staff seems important, so allocating these positions to people who already have organizational affiliations risks their affiliation being more important than the partnership. Partnerships which continue to have central political and financial support, and independent partnership staff, seem well placed to succeed.

This paper shows that a focus on networks also promises much in examining structures and relationships. It is not easy to find evidence of partnership successes in the short term, as they require time and resources to become established and take on longer term problems. Network analysis can be used to generate an approach that answers some important evaluative questions about partnerships, before the longer term effects of partnerships are observable.

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