

ORIGINAL RESEARCH

Mechanisms to achieve a successful rural physiotherapy public-private partnership: a qualitative study

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ABSTRACT:

Introduction: Longstanding gaps in physiotherapy service delivery exist in rural areas across Australia. In response to this, a large public rural health organisation contracted a private physiotherapy business to implement a public-private partnership (PPP) to supply physiotherapy to hospital inpatients, aged care facility residents and outpatients in four outer regional Australian towns. Treatment rooms were provided by the health organisation

for the private physiotherapists to see clients. This study explored how stakeholders defined the success of a PPP model of service delivery in a rural setting and examined if the model was successful according to stakeholder definitions. Barriers and enablers (mechanisms) were identified and linked to stakeholder-defined success measures.

Methods: A qualitative study was conducted using a constructive

inquiry design. Participants were purposively recruited, via email invitation and telephone follow-up. Participants comprised managers and clinicians from the rural public health organisation and the private physiotherapy business involved in setting up, working within or alongside the partnership. Semi-structured interviews were undertaken with all participants. Data were transcribed verbatim and analysed using framework analysis. Program logic was used to synthesise all information.

Results: Individual interviews were conducted with five staff from each partnering organisation, including managers and clinicians (total $n=10$). Two main themes and three subthemes were identified. All participants described the model as being successful. Elements of success included improved access to local services, and satisfied stakeholders. There were three mechanisms identified to successfully implement the service delivery model. The first mechanism was the provision of human and several other resources, which included the workforce model and the use of
Keywords:

allied health, Australia, barriers, constructive inquiry, contracting, enablers, physical therapy, program logic, workforce.

FULL ARTICLE:

Introduction

The allied health workforce are a highly skilled resource that has been shown to be effective in assisting people with chronic and complex care needs to regain greater levels of independence and wellbeing, quality of life and in reducing long term costs to health services associated with chronic conditions¹.

'Wicked' problems in rural and remote health include an ageing population with increasingly high levels of chronic ill health, chronic pain and comorbidities combined with poor access to health care, and difficulty recruiting and retaining health staff². While it is known that allied health professionals are skilled in meeting these healthcare needs, one of the greatest challenges currently facing Australia's rural and remote public health services is being able to attract and retain 'experienced' allied health professionals. Compared to doctors and nurses, allied health professionals are twice as likely to leave their rural or remote position³.

This is compounded by a significant underinvestment in primary and secondary care utilisation to an estimated shortfall of \$2 billion, with allied health representing one of the steepest declines in per capita Medicare expenditure⁴. Allied health services, in particular physiotherapy services, in rural and remote Australia sit in the primary and secondary care interface working to improve potentially preventable hospital admissions. The rates of potentially preventable hospital separations are 15–35% more likely for residents of regional areas, and more than twice as likely for residents of remote areas⁵.

This situation demonstrates an ongoing market failure for allied health professionals to meet rural and remote needs, which is reflective of a number of allied health issues including lack of appropriate business models to get the services where they are needed. This situation is juxtaposed with a growing allied health

workforce struggling to obtain employment. The allied health workforce paradox, similar to nursing, is where there is a perceived oversupply of allied health professionals but continued unmet community needs, in particular in rural and remote areas^{6,7}.

To overcome longstanding difficulties with recruitment to a part-time physiotherapy position and subsequent undersupply of physiotherapy services to a rural catchment, a private physiotherapy business and large rural public health organisation implemented an innovative public–private partnership (PPP) model of service delivery in four outer regional towns in Australia. In this model, the health organisation had a small amount of targeted funding to contract the private physiotherapy business for hospital inpatient, residential aged care facility and some priority outpatient physiotherapy services. Treatment rooms were provided by the health organisation, free of charge, and from there the private physiotherapists would see publicly funded clients alongside clients from several other funding streams, including worker's compensation, motor vehicle accident insured and veteran's affairs.

In order to guide the dissemination of successful new models of care, rural researchers describe the need to investigate how key barriers and enablers for effective implementation interact in real world settings⁸. In this study, the innovative PPP model was researched 3 years after implementation, allowing time for participants to reflect on their views on success, barriers and enablers.

The primary aim of this study was to investigate how success of a PPP model of service delivery in a rural setting was defined from the perspective of stakeholders from each organisation. The secondary aim of the study was to identify the barriers and enablers.

Methods

The study implemented a constructive inquiry design. This qualitative approach blends appreciative inquiry with other research methods⁹, in this case framework analysis and program logic. Individual semi-structured interviews were conducted. Participants were purposively recruited via email invitation and telephone follow-up, from an unrelated administrative officer.

Participants were provided with a copy of the interview questions via an email from the lead researcher after they agreed to the

interview (Table 1). The interview questions were written by the researchers using evidence from the literature, piloted with one participant and then refined prior to submission for ethics review. Interviews were audio-recorded and transcribed verbatim by the first author or a transcription service. Participants were offered the opportunity to check their interview transcript to ensure accuracy of information collected; no participants chose to review their transcript. The transcriptions had identifying information removed prior to analysis.

Table 1: Interview questions prepared for the study[†]

Category	Question(s)
The best of what is	<p>1. What is your understanding of the public health organisation and private physiotherapy business public-private physiotherapy service delivery model?</p> <p>2. What has been your experience of the model?</p> <p>3. What do you think success of this model looks like? Prompts: a. Define success for your organisation.</p> <p>4. Has the model been successful?</p> <p>5. What has contributed to this success? Prompts: a. What are the enablers?</p> <p>6. What has held back success? Prompts: a. What are the barriers?</p>
The best of what could be	7. Can you describe any emerging challenges and opportunities?
Action to achieve the ideal	8. In an ideal world, what would the model look like?

[†] Additional questions were to be asked to help clarify responses.

Characteristics of participants and researchers

Individuals invited to participate in the study comprised employees of the large public health organisation and private physiotherapy business involved with setting up or working within or alongside the partnership, and included managers and clinicians. These participants were chosen as they had knowledge of how the partnership was working at the sites for patients, staff and administration. Staff that had been dismissed by either organisation for reasons of misconduct were to be excluded from participation in the study; however, no staff met this exclusion criterion.

Twenty eligible public or private staff were invited to participate in the study and 10 individuals consented to be interviewed. Five were employed by the private practice including three that had directly provided the clinical services being investigated. From the public health organisation, five people were interviewed including staff from a range of management levels and covering the four towns being investigated. The reason for non-participation is unknown and the researcher cannot be sure the invitation email and phone message were received.

Interviews were conducted by the first author with consenting participants in 2017. The first author is a female physiotherapist, with Honours qualifications, who was supported by experienced researchers (AM, DS) and the Health Education and Training Institute's Rural Research Capacity Building Program. The first author had limited contact with the participants of the study prior to its commencement, but was employed at the time of the interviews as the health organisation's physiotherapy advisor, a role with strategic but no operational oversight for physiotherapy services at the facilities involved.

Data analysis

Framework analysis was employed as the thematic analysis approach using Microsoft Excel 2013. The five key stages of framework analysis (familiarisation, identifying a thematic framework, indexing, charting, and mapping and interpretation) were undertaken in a linear fashion and all data were collected before analysis began^{10,11}. The thematic framework for analysis related to the research questions and included defining perception of success as well as barriers and enablers (mechanisms) to the perception of success.

Data extraction was undertaken by the first author and a framework for ongoing data extraction was established. The second author (AM) then checked and analysed two transcripts against the framework to ensure researcher triangulation¹². Other triangulation strategies employed in the study design included examining the partnership from the perspectives of employees from both the public and private sectors and across the four sites¹³.

A logic model was selected to synthesise the data and visually display the findings. The logic model was used to provide a better understanding of 'what works, for whom, in what circumstances' (p. 21)¹⁴. The logic model shows the relationships between drivers, context, mechanisms and outcomes¹⁵. It clarified the meaning of success and built an understanding of the relationships between actions and results.

Ethics approval

Ethics approval was granted by Greater Western Human Research Ethics Committee, HREC reference no. LNR/17/GWAHS/41 (GWAHS 2017-033).

Results

The framework analysis was organised into two major themes: defining perception of success and mechanisms for perception of success. Within the latter theme, three subthemes emerged: provision of human and other resources, stakeholder engagement and streamlining processes.

Defining perception of success

Participants primarily described a successful PPP model of care in terms of improving patients' access to local services and satisfying stakeholders.

Stakeholders described success of the PPP model as primarily in improving access to local services for patients, previously unavailable in the four towns.

Success is where we have physiotherapy services where we didn't previously. (Public, interview 10)

So access is a success. (Private, interview 7)

This clear description of success being improved access for clients was across both sectors and was the primary definition for participants.

While it was considered a success to have a service at all, participants identified that there were multiple stakeholders to satisfy for a successful PPP and as a result satisfaction of stakeholders was also a measure of success. These stakeholders included staff at various levels of the partnering organisations as well as communities, general practitioners and patients.

Staff members that feel satisfied with the service provision that they've provided. (Private, interview 4)

We have happy communities, happy general practices, general practitioners, hopefully facility managers. (Public, interview 10)

Another important stakeholder were the patients. Improved health outcomes for patients was considered a success factor.

Better and quicker good health outcomes for patients. (Private, interview 9)

Participants from the partnering organisations also described financial viability as a requirement for a successful partnership.

It needs to be cost effective. (Public, interview 8)

It needs to be a profitable thing for us to sustain. (Private, interview 5)

Participants described that a successful partnership would be one that satisfies the requirements of several stakeholders and improves local access to services. All participants in the study described this public-private model as being successful.

Mechanisms for perception of success

Mechanisms to achieve the participants' definition of success included:

1. provision of human and other resources using (a) the workforce model and (b) several resources for the partnership
2. stakeholder engagement for (a) motivation and (b) consistency
3. streamlining processes for (a) content of contract and referral schedule, (b) administration, (c) managing private therapists in a public setting and (d) communication.

1a. The workforce model: The workforce model was identified by participants from both organisations as an enabler. The workforce model included utilising nursing staff to carry out recommendations between physiotherapist visits to enable an increased frequency of therapy.

The nursing staff have sort of, they know what to do, so that the physio can continue while the physiotherapist is not here. (Public, interview 6)

An allied health assistant workforce model was set up to further increase the frequency of service and was charged at a lesser rate than that for utilising the physiotherapist. The private practice employed the allied health assistant, who was able to carry out care plans delegated after the initial physiotherapy assessment.

The actual physiotherapist comes in, does an assessment, and it's the allied health assistant who does the day to day. (Public, interview 1)

The workforce model relied on appropriately skilled physiotherapists, able to provide a variety of hospital and outpatient services, which was recognised as being different to usual private practice work.

The requirements of some of those regional centres might be a little bit different to what we see here in our [private practice] clinics. (Private, interview 5)

Other physiotherapist characteristics identified as enablers included staff being willing to be flexible with scheduling times to provide ad hoc services.

A lot of the success initially was that our service providers could be quite flexible and that we would often either stay back later or work during lunch or just shuffle the day around to make that possible. (Private, interview 4)

1b. Use of several resources for the partnership: A substantial enabler to success was the utilisation of a variety of funding streams, referral pathways and facilities to resource the partnership.

Having the funding to continue to provide the service to those areas. (Private, interview 5)

Just the facilities available, so consistent use of the facilities. (Private, interview 7)

2a. Motivated stakeholders: Participants from both organisations described the enabler of the stakeholders being motivated for the partnership to be successful.

It was probably quite good timing initially when we were emerging as a clinic and we were always happy to look into expanding our services. (Private, interview 4)

Participants described the persistence, patience and perseverance displayed by executive from both organisations to set up and continue the partnership.

So his [the private practice manager] patience and perseverance ... There was a lot of red tape involved and I guess you've got to be persistent. (Public, interview 10)

2b. Consistency of stakeholders: Lack of consistent stakeholders was described by participants as a barrier. This related to turnover of staff in both the public and private settings and lack of orientation.

Turnover of site management probably has been a bit of a struggle. (Private, interview 3)

Being introduced to this model after it was all set up, not a great handover or anything like that. (Public, interview 2)

Recruitment and retention to rural positions was identified by both organisations as a barrier.

Workforce would be a barrier and trying to recruit to that position has been hard. (Private, interview 3)

Despite changes in physiotherapy staffing, the private physiotherapy business had been able to provide a service for 51 weeks per year for more than 3 years. The private practice director was a constant during the period and the business remained committed to providing the service.

3a. Content of contract and referral schedule: There was a perception that the way the contract was set up, including referral schedule, would enable appropriate service provision, outline responsibilities of the partners and ensure appropriate service within the facilities. Referrals were only to be made by managers, to avoid the physiotherapist making their own referrals and choosing their own public patients.

There were very specific descriptors in there that outlined the type of clients that we would refer to the service and that the cluster manager, the facility manager was responsible for actually making those referrals. What we wanted to avoid was the situation where the physio might sweep through the ward and go, 'I'll see this patient, this patient, this patient'. (Public, interview 10)

The hourly-rate-for-service procurement model, outlined in the contract, involved the business invoicing for the time allocated to the patient with the intention of enabling flexibility to adjust the service to demands.

The beauty of this model, if you leave it fairly flexible, is that the physio can move their hours around as they need to ... and they'll go where the work is. (Public, interview 10)

In relation to the hourly-rate-for-service procurement model,

participants described a barrier of obtaining access for hospital inpatient physiotherapy. The ad hoc nature of these referrals led to difficulty scheduling time to see hospital inpatients on the same day as referral.

We go through periods where we don't get a lot of referrals and so we have other clients that we see and build our book and then we'll get a run of referrals from the health service that need to be seen and we don't have time on that given day to see them. (Private, interview 4)

3b. Streamlined administration processes for contracting and accounting: The administrative burden involved in contract management and accounting was identified as a barrier by executive from both organisations. The lengthy process to negotiate and finalise the initial contract and to provide contract extensions made it difficult to plan for staffing from within a small business.

It's taken a long time for anything to happen because we're waiting for other people and so from our perspective, from a scheduling and a staff management, it was a little bit challenging because we were expecting something to start on one date yet that kept getting pushed back. (Private, interview 4)

The lengthy process to ensure compliant procurement strategies and the time taken to obtain approval for an exemption from the state health policy directives regarding payment rates were significant barriers initially.

We had sought prior approval from the Ministry to be exempt from that where we've got these service gaps ... It was exhaustive. It was a huge business case. (Public, interview 10)

Lengthy health organisation invoice checking processes appeared to cause delays in payment, and significant time was spent following up accounts.

The exhaustive arrangements that are undertaken by the administrative offices on site to validate the invoices when they come in ... plus our whole invoicing and payment arrangements for health in general are so clunky that actually makes us quite difficult to do business with. (Public, interview 10)

I reckon there's been times where we've spent more time as an organisation going over our invoice and stats than the time we've attributed to service provision from a physio perspective. (Private, interview 4)

Sometimes the latency in the payment for services has been quite extended which for a small business means cash flow obviously is a concern. (Private, interview 5)

3c. Processes for managing private therapists in a public setting: Participants described a lack of clear processes for managing a private physiotherapist in a public setting with uncertainty about responsibility for managing the service, overseeing contract compliance and ensuring a fit-for-purpose

service identified as barriers.

It's not clear who's responsible for managing the service. (Public, interview 10)

A lack of clear processes for managing contractors led to difficulties obtaining access to computers and electronic medical records (eMR).

The physios have been using a nurse's login, whoever's there and documenting, because they don't have access because they're not an employee. (Public, interview 2)

This barrier extended to difficulties complying with the health organisation's mandatory training requirements, with physiotherapists not provided with access to the online mandatory training system, and payment for training not outlined in the contract.

So they still need to cover off all of our mandatory training procedures to be able to work in our facilities. (Public, interview 10)

3d. Processes for communication: Good communication between the partnering organisations, several stakeholders and patients was identified as an enabler in the partnership. Face-to-face communication was not always possible so electronic medical records (eMR) and telehealth enabled communication when staff were not at the same site.

Good communication between the staff and the service. That's obviously vital. (Private, interview 7)

Well they are here on separate days, but with the beauty of eMR, it's very easy to get an understanding of who is doing what. (Public, interview 1)

The use of telehealth for communication and meetings, rather than travelling to meet face to face, reduced travel time.

There have been lots of meetings that we've had to do. I think there were some Skype ones or just over the phone rather than face to face and to make that sustainable for us. (Private, interview 5)

One participant identified that marketing the service to the community had enabled a positive public perception of additional facilities in the rural community.

They've got their own signage ... and they have uniforms and so forth, I think it gives the public perception [sic] of an extra facility to assist the community. (Private, interview 9)

Lack of processes for communication was identified as a barrier, particularly when there was a change in management and clinical staff providing the services. Participants identified that communication at the executive level did not always follow through to all levels of the organisation, including the site level.

Well the communication was a bit scattered between different levels of the organisation and stuff so no-one was really sure

of all the details. (Private, interview 7)

I think the feedback that I get and the feeling that I get from cluster managers is they don't quite understand everything. (Public, interview 10)

Timely communication with the clinicians and directors, to clarify a recommendation or seek support, was identified as a barrier, although it was acknowledged they were likely to be busy with other appointments.

If the physio's seen the patient the day before and now they're not on site and one of the clinicians wants to clarify something, that contact is really difficult. (Public, interview 2)

... our directors are hands on in the clinic a lot of time, making communication during clinic hours actually quite challenging from our perspective. (Private, interview 5)

Clear processes to enable timely communication between partnering organisations, within individual organisations and with the community was identified as a mechanism to achieve success.

Discussion

This study shows that a physiotherapy PPP model of service delivery was perceived to be a successful way to deliver services in a rural area. In this study, participants described a successful model as one that improves access to local services for patients and satisfies stakeholders. Mechanisms perceived to successfully implement the rural PPP model include the use of resources including human resources; consistent motivated stakeholders; and streamlined processes for administration, communication and management of the model.

PPPs are emerging as a means of addressing health service delivery shortfalls around the world¹⁶. With the complexity of rural allied health recruitment and retention, it has been recommended to avoid a 'one size fits all' approach and instead be creative and adopt an integrated, collaborative, intersectoral and sustained approach¹⁷. This PPP model is one such approach.

A strength of the PPP model from the perspective of each organisation was in improving access to services for patients. Dimensions of access described in the literature include accessibility, availability, acceptability, affordability and adequacy¹⁸. The participants interviewed particularly described improved accessibility, with the local service available within reasonable proximity to the consumer. Increasing access to physiotherapy, and allied health more broadly, is required to decrease the burden of chronic diseases, such as osteoarthritis and stroke, and reduce long term healthcare costs¹. Improved access is also likely to reduce potentially preventable hospital admissions, which are higher for residents in regional and remote areas⁵.

A mechanism contributing to success was the use of human and other resources. The human resources included appropriately skilled physiotherapists, who may require different skills to work in public and private practice. In New South Wales, Australia, around 11% of rural allied health clinicians work across both sectors¹⁹. The

workforce model also involved nursing staff and allied health assistants able to continue therapy between physiotherapist visits. Respondents did not report barriers of expanding scope of clinical practice or barriers related to an increase in workload for nurses. The allied health assistant model may provide cost and productivity efficiencies²⁰ and allows the physiotherapist to focus on the patients with more complex needs^{21,22}.

The partnership utilised several other resources including funding streams, referral pathways and infrastructure. The PPP provided services across the continuum of care to address primary health care, residential aged care and also hospital inpatient healthcare needs in line with the variety of funding streams utilised. The model is similar to an interdisciplinary, single-entry, public-private integrated primary health service model implemented in a rural area of Victoria, Australia²³; however, the Victorian model did not include the inpatient hospital setting. Although acknowledged as being difficult to implement, the pooling of funds from the variety of Australian federal and state funding programs, along with adequate infrastructure and information technology systems, was thought to provide opportunities to meet the community primary healthcare needs²⁴. PPPs could be considered in other rural areas as a way of pooling resources to provide a service, particularly when there are small amounts of funding available. The pooling of funds increases the total hours of work and may create a viable business opportunity, previously unavailable.

Motivated and consistent stakeholders was another described mechanism for success. In this PPP model the stakeholders demonstrated extraordinary commitment to making the partnership succeed. Other private physiotherapists may be motivated for PPP's. In rural Victoria, surveyed private physiotherapists were in favour of having partnerships between public and private practice and of governments developing programs to facilitate such partnerships²⁵. New graduate physiotherapists may also appreciate the benefits of working across public and private settings, with higher quality applicants applying for a shared part-time public and private position in another rural area²⁶.

Consistent stakeholders was described as a success mechanism. A significant turnover of staff from both the public and private organisations challenged the partnership. Difficulty recruiting and retaining physiotherapists in rural areas of Australia is well known²⁷⁻²⁹, as is the divide between the number of physiotherapists working in major cities (91.2 full-time equivalent (FTE) per 100 000 population) compared to outer regional areas (47.5 FTE per 100 000 population)³⁰. While there are a number of important factors contributing to optimal physiotherapy FTE requirements in rural areas³¹, it is important to note that funding models and numbers of public and private physiotherapists are seen as influential determinants of rural physiotherapy service levels³². There is also a higher turnover of allied health professionals than of nurses and doctors^{27,33}. Diversity of caseload, as seen in this PPP, may be a positive extrinsic incentive to prevent job dissatisfaction and increase retention of allied health professionals in rural and remote areas³. It has been identified previously that private physiotherapists generally remain longer in

rural areas than their public colleagues³⁴. The private practice director was a constant during the 3-year period and the business remained committed to providing the service. Contracting a business rather than an individual therapist allowed access to a pool of private physiotherapists to provide cover, something that would be unlikely if employing or contracting a single physiotherapist.

Streamlined processes was another perceived mechanism for success. The content of the contract and referral schedule was perceived and described as an enabler for a successful PPP. Flexibility was intended through an hourly-rate-for-service procurement model. In practice, an inability to plan inpatient appointments in advance appeared to limit access to hospital inpatient physiotherapy.

Streamlined administrative processes for contracting and accounting was another perceived mechanism for success. In this study, the administrative burden and delays for contracting and accounting were clearly described. Streamlined processes addressing accounting delays, caused by complex processes of checking invoices, multiple approvers and a lack of understanding of the model and contract by health organisation staff, would make it easier to do business. The complexity of paying for physiotherapy services is not isolated to this PPP, with the Victorian Transport Accident Commission recently streamlining processes by removing administrative barriers and speeding up payments for physiotherapy services after recognising the process was too complicated³⁵. Streamlining the administrative processes for contracting and accounting should reduce transaction costs and time, improve financial viability and improve stakeholder satisfaction.

Processes to manage private therapists in public setting is another perceived mechanism to achieve success. Many difficulties were described relating to physiotherapists not being directly employed by the health organisation and a lack of clear management responsibility for managing the therapists. Another physiotherapy PPP in Australia directly employed the physiotherapists to both organisations and therefore did not report these features²⁶. There is a need for the establishment of governance and operational processes to manage the complexity of the many organisations involved when implementing new models of primary health care in rural and remote areas⁸.

Processes for communication between the partnering organisations, within individual organisations and with the community is another perceived mechanism to achieve success. Communication with the community by further marketing of the service should improve awareness, which is an additional dimension of access³⁶.

PPPs may be another way to deliver services in rural areas, particularly where resources could be pooled to create a viable business opportunity. PPPs may provide a solution to improving access to health care and, through this, the health and wellbeing of rural people.

Strengths and limitations

To the best of the authors' knowledge, this is the first qualitative research investigating a contracting model of PPP in physiotherapy, and it provides a valuable contribution to the literature when considering PPPs at other sites. A limitation of the study is that only half of those invited to participate were interviewed and therefore participants may represent a more motivated view. The findings from this study relate to a specific PPP in four Australian outer regional towns, and the findings may be transferrable to similar rural areas and other allied health. Further research could include the perspective of patients as well as further economic evaluation, as these were outside the scope of the study.

Conclusion

This qualitative study showed that a novel physiotherapy PPP

model of service delivery was perceived by managers and clinicians in the partnering organisations as a successful way to deliver services in a rural area. Mechanisms perceived to successfully implement the service development model include the use of several resources including human resources; consistent motivated stakeholders; and streamlined processes for administration, communication and management of the model. The mechanisms perceived to successfully implement the model should be considered when setting up similar partnerships in rural physiotherapy and potentially other allied health disciplines. PPPs should be considered as another solution to address service gaps.

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