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Promoting effective interprofessional collaborative practice in the primary care setting: recommendations from Queensland physiotherapy private practitioners

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ABSTRACT

Background. Physiotherapy private practitioners represent a growing proportion of Australia's primary care workforce; however, they face significant barriers in integrating seamlessly within interprofessional teams. Historically, the landscape of primary care in Australia has been one where many physiotherapists work in monoprofessional private practice facilities at dispersed locations, potentially limiting collaborative and coordinated care. The aim of this study was to investigate strategies recommended by physiotherapists to promote effective interprofessional collaborative practice (IPCP) within the Australian private practice setting. **Methods.** Using interpretive description as the guiding methodological framework, semi-structured interviews were conducted with 28 physiotherapists in 10 private practice sites in Queensland, Australia. **Results.** Data analysis produced three themes that characterised physiotherapy private practitioners' recommendations to improve IPCP: (a) the need for improved funding and compensation, particularly addressing the limitations of the Medicare Chronic Disease Management program; (b) the development of integrated and secure digital communication systems to facilitate better information exchange; and (c) prioritising professional development and training to enhance collaboration. **Conclusions.** This research lays the groundwork for informed policy making to advance person-centred care and support the integration of services in the Australian healthcare system. The findings from this study indicate that promoting effective IPCP in physiotherapy private practice requires a comprehensive strategy that addresses systemic funding and compensation issues, enhances digital communication systems and optimises interprofessional education and training.

Keywords: interprofessional collaboration, interprofessional practice, person-centred care, physical therapy, physiotherapists, primary care, private practice, qualitative research.

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Introduction

Interprofessional collaborative practice (IPCP) is the process of enabling different healthcare professionals to work together to achieve a common goal and is recognised as an essential aspect of healthcare delivery (World Health Organization 2010; Reeves *et al.* 2017). The goal of IPCP is to facilitate effective communication, cooperation and teamwork among healthcare practitioners from different professions to provide comprehensive and coordinated patient care (World Health Organization 2010; Reeves *et al.* 2017). Physiotherapists are crucial members of interprofessional healthcare teams as their expertise in the assessment, diagnosis and treatment of a wide range of conditions affecting people across the lifespan makes them valuable contributors to comprehensive care (Physiotherapy Board of Australia and Physiotherapy Board of New Zealand 2015; deBoer *et al.* 2019; Australian Physiotherapy Association 2022).

The physiotherapy private practice setting in Australia provides services to a large proportion of the population (Australian Institute of Health and Welfare 2022). It is estimated that physiotherapy private practice is a AU$2.2 billion industry made up of more than 7000 businesses (Australian Physiotherapy Association and Nous Group 2020).

Physiotherapists employed in private practice are reported to account for nearly three-quarters of the Australian physiotherapy workforce (Department of Health and Aged Care 2023). The physiotherapy private sector is characterised by a diverse range of practice settings, including musculoskeletal private practices, sports and performance clinics, women's health and pelvic health clinics, neurological rehabilitation centres, pain management clinics and occupational health and workplace rehabilitation (Australian Physiotherapy Association 2022).

The landscape of primary care in Australia has traditionally been one where many health practitioners, including physiotherapists, operate in monoprofessional private practice settings at dispersed locations (Breadon *et al.* 2022). This may result in primary care practitioners working within their traditional scope of practice, isolated in professional 'silos' and may hinder collaborative and coordinated care (Nicholson *et al.* 2013). The nature of this clinical environment highlights the need to develop practical strategies that support sustainable models of IPCP specifically tailored for physiotherapy private practice. Such strategies should not only enhance the intensity of IPCP where necessary but also be context sensitive, ensuring they remain adaptable and responsive to Australia's ever-evolving healthcare system. Crucially, these strategies should emerge and develop from the physiotherapists themselves, as they possess first-hand experience and intimate knowledge of the challenges and opportunities of IPCP. By incorporating the perspectives of physiotherapy private practitioners, valuable insights can be gained that will contribute to the development of effective strategies aimed at supporting IPCP in this clinical setting. This study aimed to investigate strategies endorsed by physiotherapists to promote effective IPCP within the Australian private practice setting.

Methods

Design

A qualitative approach oriented toward interpretive description (ID) was employed (Thorne 2008). Interpretive description was chosen as the methodological framework for this study due to its unique ability to facilitate the exploration and interpretation of complex social phenomena, particularly in healthcare settings (Thorne *et al.* 2016). A fundamental assumption of ID is the subjective construction of reality based on individual experiences and interactions (Thorne 2008). The Consolidated Criteria for Reporting Qualitative Research checklist was used to ensure explicit and comprehensive reporting of this study (Tong *et al.* 2007). Ethics approval was obtained from the James Cook University Human Research Ethics Committee (H7951).

Participants

Participants were physiotherapists registered with the Australian Health Practitioner Regulation Agency (AHPRA) working at private practice facilities in the region covered by the Northern Queensland Primary Health Network (NQPHN). Spanning an area of 510 000 km^2, this tropical region is home to an estimated 730 000 people (Northern Queensland Primary Health Network 2022). Most of the population live within the major regional centres of Cairns, Mackay and Townsville, while approximately 8% of inhabitants live in remote and very remote areas (Northern Queensland Primary Health Network 2022). Participants were eligible for inclusion in the study if they were: (a) employed in a private practice facility within the NQPHN region for no less than one month; (b) over the age of 18 years and willing to consent to the study; and (c) proficient in spoken and written English.

Physiotherapy private practitioners who took part in the first phase (Seaton *et al.* 2020) of a larger mixed methods study and who were interested in participating in further research, provided their contact information to the research team. These physiotherapists (n = 31) were subsequently emailed and provided with a participant information sheet detailing the study purpose, and the role and experience of the first author and interviewer as a male physiotherapist and current doctoral candidate. Recruitment was predominately convenience based, in that participants were selected on a first-come-first-served basis (Robinson 2014). This approach was used to efficiently recruit participants who were readily available and willing to participate in the study. A semi-purposive stratified element was also used to ensure physiotherapists worked at a range of private practice facilities, varying with respect to organisational model, service provision, team composition and geographic location (Robinson 2014). Participant recruitment was ceased once these purposive criteria were met.

Physiotherapists (n = 10) from a total of 10 different private practice facilities within the NQPHN region agreed to participate in the study. The physiotherapy private practitioners who agreed to participate in the study were then asked to identify other physiotherapists employed at their facility to take part in an interview through a process of snowball sampling. Invitations to participate in an interview were sent to all identified individuals, of which an additional 18 physiotherapists agreed.

Data collection

Face-to-face individual semi-structured interviews were conducted at each private practice facility and lasted approximately forty minutes (range 16–117 min). Interviews allowed for the exploration of each participant's unique perspectives, experiences and meanings in relation to IPCP within a flexible framework. The interview guide (Supplementary Appendix 1) was informed by the findings from an earlier online survey (Seaton *et al.* 2020) and was piloted by two experienced private practice physiotherapists. Simple demographic information (age, gender, entry-level physiotherapy qualification and years of clinical experience) was collected from the

participants at the commencement of the interview and memos were immediately recorded after each interview to ensure that a reflexive stance was maintained in relation to the research and participants (Birks *et al.* 2008).

All participants provided written informed consent and audio-recorded interviews were transcribed verbatim with the assistance of secure online transcription software (https://otter.ai). Each participant was provided with a copy of the interview transcription and an opportunity to make any necessary corrections or omissions before the analysis (Patton 2015). Minor amendments were made to one transcript.

Data analysis

Reflexive thematic analysis was employed to facilitate the identification of patterns or themes in the interview data (Braun and Clarke 2021). Familiarisation with the data through careful and repeated reading of interview transcripts and memos was the first analytical step, where initial impressions were noted to gain a sense of the content. The data were then analysed line-by-line in a process of open coding, searching for recurring concepts and ideas to generate initial codes. For the first five transcripts, coding was completed independently by two authors (JS and AJ) to sense-check ideas and explore multiple assumptions of the data in a reflexive manner (Braun and Clarke 2019). This approach emphasises the role of the researcher's reflexivity in coding and theme generation, focusing on an iterative cycle of familiarisation, coding, theme development and revision, with constant reflection on their own biases and assumptions. Crucial to this process was the authors' shared understanding of terminology and concepts relevant to IPCP, and the engagement in regular discussions among the multiprofessional research team to challenge and refine the developing themes (Braun and Clarke 2019). This collaborative approach added an additional layer of scrutiny and reflexivity, ensuring that the themes were representative of the data and aligned with the research aim. The codes were then consolidated and grouped into themes, and once the potential themes were identified, they were reviewed, refined and named with clear and concise descriptions accurately capturing their meaning. Finally, endorsed themes were populated with relevant quotes that were carefully selected to ensure accurate representation. Data were managed using NVivo software (QSR International; https://www.qsrinternational.com).

Results

Participants

Individual interviews were conducted with 28 physiotherapists (Table 1). The mean age of interview participants was 33 years (range 21–61 years) and they had approximately 9 years of clinical experience (range 1–38 years). Participants worked across 10 private practice facilities within the NQPHN region (Table 2).

Themes

Reflexive thematic analysis of the data produced three overarching themes: (a) funding and compensation; (b) integrated and secure digital communication systems; and (c) professional development and training.

Theme 1: Improved funding and compensation

This theme describes the perceived importance of adequate remuneration for physiotherapy private practitioners' time spent on collaborative activities, including formal interprofessional meetings. Most participants highlighted concerns regarding the limitations of the Medicare Chronic Disease Management (CDM) program, calling for improvements in funding and access to support IPCP and ensure better client outcomes. Participants considered government-level investment and structural changes within Australia's healthcare system as necessary to create an environment conducive for IPCP.

> ... if we're serious about ... interprofessional collaboration, spending at a government level needs to be looked at ... whether it's ... an extra visit on the [Medicare CDM] program, ... a sit-down meeting with the other professionals involved, or remuneration. (P24, Site 5)

Participants deemed financial compensation associated with providing physiotherapy services through the Medicare CDM program as insufficient in promoting IPCP. Participants claimed that the reimbursement structure of the CDM program did not adequately account for coordination and collaboration efforts required in comprehensively addressing the complex healthcare needs of people with chronic conditions. Participants subsequently stressed the need to increase the Medicare rebate for people receiving physiotherapy services in the CDM program to better reflect the time required to perform interprofessional tasks, such as writing letters and reports to referring medical practitioners.

> Clinicians need to be compensated for the time they spend liaising with other health professionals. It's as simple as that. Because if you're not [getting compensated], you get paid $56 for a half an hour Medicare [CDM] session ... and in that time, you're supposed to write them [clients] a program and write back to their GP [general practitioner] a summary of your session ... it's just all of this coordination that you don't get paid for ... so if you want interdisciplinary collaboration, you need to pay clinicians for the time that it takes. (P20, Site 1)

Table 1. Demographic and workplace information of participants.

Participant number	Gender	Highest tertiary qualification	Location of entry-level training	Physiotherapy experience (years)	Classification of workplace location (MMM)[A]	Principal physiotherapist[B]	Organisational model	Co-located
1	Female	Bachelor degree	Australia	1	MMM 2	No	Multiprofessional	No
2	Female	Bachelor degree	New Zealand	3	MMM 2	No	Multiprofessional	No
3	Male	Bachelor degree	Australia	9	MMM 2	No	Multiprofessional	No
4	Female	Bachelor degree	Australia	2	MMM 2	No	Monoprofessional	Yes
5	Female	Masters degree	Australia	10	MMM 2	No	Multiprofessional	No
6	Female	Bachelor degree	Argentina	3	MMM 2	No	Multiprofessional	No
7	Male	Bachelor degree	Australia	5	MMM 2	No	Monoprofessional	Yes
8	Male	Bachelor degree	Australia	7	MMM 2	No	Multiprofessional	No
9	Female	Bachelor degree	Australia	11	MMM 2	Yes	Monoprofessional	No
10	Female	Masters degree	Australia	13	MMM 2	Yes	Monoprofessional	Yes
11	Male	Bachelor degree	Australia	5	MMM 2	No	Monoprofessional	Yes
12	Male	Bachelor degree	Australia	1	MMM 2	No	Multiprofessional	Yes
13	Female	Bachelor degree	Australia	25	MMM 2	No	Monoprofessional	Yes
14	Male	Bachelor degree	Australia	2	MMM 4	No	Multiprofessional	Yes
15	Male	Graduate certificate	Australia	10	MMM 4	No	Multiprofessional	Yes
16	Male	Masters degree	Australia	12	MMM 2	Yes	Monoprofessional	Yes
17	Male	Bachelor degree	Australia	6	MMM 2	No	Multiprofessional	Yes
18	Male	Bachelor degree	Australia	5	MMM 2	No	Multiprofessional	Yes
19	Female	Masters degree	Estonia	5	MMM 2	No	Multiprofessional	No
20	Female	Bachelor degree	New Zealand	19	MMM 2	No	Multiprofessional	No
21	Male	Bachelor degree	Australia	5	MMM 2	No	Monoprofessional	Yes
22	Male	Graduate diploma	Australia	38	MMM 5	No	Multiprofessional	No
23	Male	Masters degree	Australia	15	MMM 4	Yes	Multiprofessional	Yes
24	Male	Masters degree	Australia	21	MMM 5	Yes	Monoprofessional	Yes
25	Female	Masters degree	Ireland	14	MMM 2	Yes	Multiprofessional	No
26	Female	Bachelor degree	Australia	1	MMM 2	No	Monoprofessional	Yes
27	Male	Masters degree	Australia	1	MMM 2	No	Monoprofessional	Yes
28	Male	Masters degree	Australia	15	MMM 2	Yes	Multiprofessional	Yes

[A]MMM, the Modified Monash Model classification system that categorises different areas in Australia based on population and geographical location. It consists of seven categories, with MMM Category 1 representing metropolitan areas and MMM Category 7 representing very remote communities.
[B]In the Australian physiotherapy private practice setting, a principal physiotherapist is typically owner or director of the clinic. Principal physiotherapists are responsible for the overall management and administration of their practice, which includes overseeing the financial aspects of the business, as well as hiring and managing other physiotherapists and support staff.

Increasing the number of allied health services that a person with a chronic condition and complex care needs is entitled to in a calendar year under the Medicare CDM program was another proposed initiative to improve IPCP. The limited number of allied health services provided through the Medicare CDM program impacted physiotherapy private practitioners' ability to address the needs of people with chronic disease effectively and disrupted continuity of care. Increasing the number of allied health visits would provide physiotherapists with more opportunities to coordinate interventions and share information with other health practitioners.

> We know that the longer the injury or pain has been there, the longer it's going to take to get better, so five sessions with allied health are not enough. And as soon as they say they have to see a podiatrist … you are left with four [sessions]. Then they're seeing a psychologist, an exercise physiologist and a dietitian … and I'm like, what am I meant to achieve in a single session? Look, it's great that they have access to a multidisciplinary scheme because you need that for chronic conditions … but they're usually complex patients, so they need prolonged engagement with us and collaboration between lots of allied health [professionals]. (P6, Site 10)

Table 2. Characteristics of participating physiotherapy private practice sites.

Site number	Organisational model	Primary physiotherapy clinical area	Physiotherapy services provided[A]	Health professions employed	Co-located health services	Classification of facility location (MMM)
1	Multiprofessional	Neurological	DVA Medicare CDM Motor accident compensation NDIS Telehealth Work injury compensation	Exercise physiology (*n* = 2) Nursing (*n* = 1) Nutrition and dietetics (*n* = 4) Occupational therapy (*n* = 8) Physiotherapy (*n* = 6) Psychology (*n* = 4) Social work (*n* = 1) Therapy assistant (*n* = 5)	Nil	MMM 2
2	Monoprofessional	Paediatrics	NDIS Telehealth	Physiotherapy (*n* = 1)	Nil	MMM 2
3	Monoprofessional	Musculoskeletal	DVA Medicare CDM Motor accident compensation Telehealth Work injury compensation	Physiotherapy (*n* = 3)	Dental clinic General practice clinic Pathology Pharmacy Podiatry	MMM 2
4	Multiprofessional	Musculoskeletal	DVA Medicare CDM NDIS Work injury compensation	Exercise physiology (*n* = 1) Physiotherapy (*n* = 4)	Occupational therapy Speech pathology	MMM 4
5	Monoprofessional	Musculoskeletal	DVA Medicare CDM Work injury compensation	Physiotherapy (*n* = 1)	Massage therapy Podiatry	MMM 5
6	Multiprofessional	Pain	DVA Medicare CDM Motor accident compensation Telehealth Work injury compensation	Exercise physiology (*n* = 1) Medicine (*n* = 1) Occupational therapy (*n* = 1) Physiotherapy (*n* = 2) Psychology (*n* = 1)	Ear, nose and throat surgery clinic Obstetrics and gynaecology clinic Ophthalmology clinic Optometry Private hospital Psychology Speech pathology	MMM 2
7	Monoprofessional	Musculoskeletal	DVA Medicare CDM Motor accident compensation NDIS Telehealth Work injury compensation	Physiotherapy (*n* = 9)	Exercise physiology General practice clinic Massage therapy Orthopaedic surgery clinic Pathology Pharmacy Podiatry Psychology	MMM 2
8	Multiprofessional	Musculoskeletal	DVA Medicare CDM Motor accident compensation Work injury compensation	Nursing (*n* = 3) Medicine (*n* = 9) Physiotherapy (*n* = 1) Psychology (*n* = 1) Social work (*n* = 1)	Nil	MMM 5

(*Continued on next page*)

Table 2. (*Continued*).

Site number	Organisational model	Primary physiotherapy clinical area	Physiotherapy services provided[A]	Health professions employed	Co-located health services	Classification of facility location (MMM)
9	Multiprofessional	Musculoskeletal	DVA Medicare CDM Motor accident compensation NDIS Telehealth Work injury compensation	Exercise physiology (n = 3) Occupational therapy (n = 1) Physiotherapy (n = 6)	Audiology Cardiology clinic General practice clinic Paediatric clinic Pharmacy Private hospital Psychology	MMM 2
10	Multiprofessional	Musculoskeletal	DVA Medicare CDM Motor accident compensation NDIS Telehealth Work injury compensation	Massage therapy (n = 1) Physiotherapy (n = 6)	Nil	MMM 2

CDM, Chronic Disease Management; DVA, Department of Veterans' Affairs; MMM, Modified Monash Model; NDIS, National Disability Insurance Scheme.
[A]As denoted on Australian Physiotherapy Association 'Find a Physio' search tool (https://choose.physio/findaphysio).

Theme 2: Advancing integrated and secure digital communication systems

This theme describes physiotherapy private practitioners' perceived need for integrated and secure digital communication systems which support effective IPCP, improve information exchange and ensure continuity of client care. Most participants were unsatisfied with the current state of electronic communication systems in the healthcare setting, citing slow progress, security concerns and technical limitations as barriers to effective implementation: 'We … need shared electronic communication platforms … but they need to be secure and … user-friendly.' (P22, Site 8).

Participants wanted improved communication channels and user-friendly, shared electronic platforms which enable seamless and secure information exchange among health practitioners from diverse professions. Many participants expressed frustrations about limited correspondence and information exchange with health practitioners working in different clinical settings and explained how they often relied on clients to bring relevant documents to their physiotherapy appointments. Without access to comprehensive and up-to-date information from all health practitioners involved in a client's care, participants reported difficulties in making informed decisions and providing continuous care.

> … the patient comes with a brief letter saying they need to see a physio [physiotherapist], but … you have no access to those records. We need access to those records to ensure continuity of care. Without … access to a patient's medical file, you cannot get collaboration. (P6, Site 10)

The potential of the My Health Record (MHR), an Australian Government initiative designed to centralise patient medical records for accessible and coordinated care, to support IPCP between health professionals from various clinical settings was acknowledged, but participants indicated that it had not met their expectations.

> … it is beneficial … to have unrestricted access to … medical information. That can … help interprofessional practice, but there's … too many ethical considerations with the My Health Record. I … have taken myself off it, so why would I use it with my clients? (P25, Site 10)

Theme 3: Prioritising professional development and training to enhance collaboration

This theme describes professional development opportunities and training strategies which physiotherapy private practitioners considered would promote effective IPCP. Physiotherapists emphasised the limitations of only receiving profession-specific training in reinforcing professional silos and advocated for interprofessional learning that incorporates the diverse perspectives on client care.

> There needs to be more courses … that … [are] tailored to suit a multitude of different health professionals, not just for physios. I know that a lot of physios go to the APA [Australian Physiotherapy Association] for their continuing education, but I feel like that can kind of pinpoint you into working only with physios and not working with other health professionals. (P1, Site 10)

Participants suggested that there was demand among physiotherapy private practitioners for practical guidance and resources on how to successfully implement IPCP. Participants indicated that physiotherapists in private practice required information on the operational aspects of IPCP, such as delegating tasks to other members of the interprofessional team.

> … we all know the importance behind it [interprofessional collaborative practice], so we don't need information on why we should do it. It would be more about how you actually do it. Some people go, 'well, how do I actually organise this? How do I sort of go through and how do I get professions talking to each other? How do we set up case conferences? (P3, Site 1)

Participants felt that training in developing meaningful client-centred participation goals would optimise IPCP. Several physiotherapists emphasised the significance of goal setting in facilitating IPCP and recommended the use of the International Classification of Functioning, Disability and Health (ICF) as a comprehensive framework.

> I think physios probably need to be trained in goal setting. If you don't get the goal setting right, you don't get interprofessional practice. It's the crux of it. We need to be identifying meaningful participation goals from the outset and I think the ICF is the best framework to go by because it's just a really easy way to look at goal setting. So, if you don't get a participation goal, you're not going to get therapists from different walks … working towards one overarching goal … and it turns into a multidisciplinary service. (P8, Site 1)

The university sector was also urged to play a greater role in supporting IPCP by better preparing physiotherapy students to engage in collaborative care models upon graduation. Integrating more mental health learning content into entry-level physiotherapy programs was suggested as a means of fostering understanding and facilitating collaboration between health practitioners from different professions in addressing clients' physical and mental health conditions.

> Our knowledge of mental health … as a profession … is poor, so I don't think it's any surprise that physiotherapists don't interact with psychologists because we're probably too embarrassed to look stupid in front of them. When I graduated [university] five … or six years ago, it [mental health] was a small subject in our final year. So, for me personally, it's taken a lot of professional development to sort of upskill there. And … I'd say at least of quarter of the work I do now is pain education. So, that area … definitely needs to be focused on more. I think it will go a long way in improving collaboration between physiotherapists and psychologists … and probably OTs [occupational therapists] as well because they do lots of work in the mental health space too. (P7, Site 7)

Discussion

The aim of this study was to investigate strategies proposed by physiotherapists to promote effective IPCP within the Australian private practice setting. Three main themes characterised physiotherapy private practitioners' recommendations to improve IPCP: (a) funding and compensation; (b) integrated and secure digital communication systems; and (c) professional development and training. The study findings highlight crucial areas for intervention and emphasise the importance of a multifaceted approach to enhance IPCP in the context of physiotherapy private practice in Australia.

Existing healthcare financing arrangements may inadvertently discourage IPCP among Australian physiotherapy private practitioners. Fee-for-service payment models, whereby healthcare providers are reimbursed based on the number or type of services they provide, can lead to a focus on individual care (Breadon *et al.* 2022). Under a fee-for-service model, there is less incentive for healthcare providers to work collaboratively or integrate their services as each provider is remunerated separately for their services (Jia *et al.* 2021). This contrasts with other models such as bundled payments, where a single payment is made for all services related to a particular condition or procedure, incentivising healthcare providers to work together to manage costs and improve client outcomes (Jia *et al.* 2021). Participants in the current study indicated that financial remuneration for providing services under the Medicare CDM program was poor, noting that it fails to adequately compensate for the intensive non-clinical collaborative work that is regularly performed following a client consultation, such as preparing correspondence letters to referring medical practitioners. The value of these tasks in ensuring seamless coordinated and collaborative care should not be understated. Subsequently, there is an urgent need for policymakers to review the funding architecture of the Medicare CDM program to ensure that the rates of reimbursement are fair and reflect the demands of providing care to people with chronic conditions. In a fee-for-service environment, if financial reimbursement is perceived to be low when compared to the time required to provide a comprehensive service, healthcare providers may be forced to limit their interprofessional interactions or prioritise collaboration with health practitioners from certain professions over others. This may, in turn, lead to

fragmented care and poorer client outcomes, as healthcare needs go unmet. Ensuring adequate compensation for services provided under the Medicare CDM program may encourage more physiotherapy private practitioners to engage in IPCP. The intricate relationship between financial compensation for physiotherapy service provision in private practice and IPCP efficacy warrants further investigation.

This study emphasises the critical role of digital infrastructure in optimising IPCP for Australian physiotherapy private practitioners. In their clinical practice, physiotherapists may adopt a range of digital technologies including electronic health records, advanced patient management software and telehealth platforms (Keel *et al.* 2023). Although the potential of digital technologies such as integrated communication systems in promoting IPCP is evident (Socha-Dietrich 2021), the actual utility and efficacy of existing tools raise concerns. Many physiotherapists voiced apprehensions about the ability of the My Health Record (MHR) system to support IPCP, citing usability issues and community distrust related to privacy and confidentiality. Interoperable, accessible digital platforms can enhance quality of care by providing health practitioners comprehensive, up-to-date patient information, reducing dependence on individual accounts of medical histories (Socha-Dietrich 2021). Despite the ambitious objectives of the MHR (Australian Digital Health Agency 2018), the present scepticism suggests that it falls short in meeting the practical demands of Australian physiotherapy private practitioners. Currently, physiotherapy private practitioners are unable to choose suitable clinical information systems that are interoperable with the MHR and other digital initiatives such as secure messaging, nor can they participate in the efficient and timely sharing of consistent data to support consumer, practice and community-level planning (Allied Health Professions Australia 2023). Policymakers must therefore critically evaluate and enhance Australia's MHR system, ensuring it genuinely supports IPCP for physiotherapy private practitioners while addressing issues around data security and user experience.

This study highlights a notable gap between the content of physiotherapy entry-level training in Australia and the practical needs of physiotherapy private practitioners in clinical practice regarding IPCP. To address this gap, it is imperative to conduct further research in collaboration with the university sector to assess the current extent of IPCP instruction in their curricula. Participants stressed the importance of integrating more mental health training into physiotherapy entry-level curricula, suggesting that equipping physiotherapists with this knowledge would enable them to collaborate more effectively with mental health professionals, such as psychologists, in the clinical setting. This finding not only identifies a current deficit in training but presents an opportunity for educational institutions and peak professional organisations to enhance preparedness of physiotherapists entering the private practice workforce. Furthermore, the need for practical guidance on implementing IPCP underscores a broader gap between theoretical knowledge and practical application in the field. It is, however, possible that some participants lacked formal interprofessional education during their foundational physiotherapy training, potentially hindering their confidence and capability to engage in IPCP. Addressing this challenge through interventions such as facilitated interprofessional workshops could illuminate the significance of IPCP while fostering local community relationships. Primary Health Networks are optimally positioned to play a key role in these initiatives by enhancing collaborative models in primary care and emphasising the crucial nature of professional development and training for the advancement of IPCP among physiotherapy private practitioners (Breadon *et al.* 2022).

The inclusion of participants from only one region of Australia provided a unique opportunity for an in-depth exploration of physiotherapists' experiences of IPCP within a variety of private practice settings. Study participants had a range of clinical experience and their characteristics (including gender, level of highest educational attainment and primary physiotherapy clinical area) are comparable to publicly available data on the Australian physiotherapy workforce (Department of Health and Aged Care 2023), thereby increasing the potential application of the research findings to physiotherapy private practitioners across different Australian regions. Furthermore, given the global expectation for IPCP as a standard of care (WHO 2010), the findings from this research may be of interest to private sector physiotherapists internationally, as well as health practitioners from other professions who work in similar clinical settings with similar clientele.

The main limitation of this study was a potential selection bias because participants eligible for study inclusion were chosen from a list of survey respondents who expressed interest in further research (Seaton *et al.* 2020). Physiotherapy private practice sites were, however, carefully selected to ensure that recruited participants were 'information-rich' (Patton 2015). The omission of specific demographic data related to participants' remuneration structures was an additional study limitation. Whether participants were compensated through a salaried arrangement or a commission-based system was not ascertained. This distinction could potentially influence clinicians' perspectives on IPCP, given that their payment model might affect inclinations towards client retention. As such, the potential differences in attitudes between those on a salary vs those on a commission could not be explored, which may have provided richer context to the findings. Furthermore, the current study does not document how physiotherapists working in private practice conceptualise IPCP. The significance of understanding participants' conceptualisations of IPCP cannot be understated as it informs the relevance and applicability of the proposed strategies in the unique context of private practice. Previous research suggests that physiotherapy private practitioners may associate IPCP with routine clinical tasks such as sending and receiving

client correspondence (Seaton *et al.* 2020). Future studies would benefit from utilising conceptual frameworks (for example, InterPACT) to systematically classify and analyse various interprofessional activities (Xyrichis *et al.* 2018).

Conclusion

This research lays the groundwork for informed policy making that will optimise client care and the integration of services in the Australian healthcare landscape. The findings from this study indicate that promoting effective IPCP in physiotherapy private practice requires a multifaceted approach, addressing systemic funding and compensation issues, enhancing digital communication systems and prioritising interprofessional education and training. Implementing these proposed measures will support sustainable models of IPCP in physiotherapy private practice and ensure that physiotherapists working in this setting are well-equipped to address the inherent complexities in contemporary healthcare delivery.

Supplementary material

Supplementary material is available online.

References

Allied Health Professions Australia (2023) Pre-budget submission 2023. Allied Health Professions Australia, Melbourne, Victoria, Australia. Available at https://ahpa.com.au/wp-content/uploads/2023/02/MSC1762-Allied-Health-Professions-Pre-Budget-Submission-2023_FINAL.pdf [Verified 14 September 2023]

Australian Digital Health Agency (2018) Australia's national digital health strategy: framework for action: how Australia will deliver the benefits of digitally enabled health and care. Australian Digital Health Agency, Canberra, ACT, Australia. Available at https://www.digitalhealth.gov.au/sites/default/files/2020-11/Framework_for_Action.pdf [Verified 14 September 2023]

Australian Institute of Health and Welfare (2022) Medicare-subsidised GP, allied health and specialist health care across local areas: 2021–22. Australian Institute of Health and Welfare, Canberra, ACT, Australia. Available at https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-gp-allied-health-and-specialis [Verified 14 September 2023]

Australian Physiotherapy Association (2022) Future of physiotherapy in Australia: a 10-year vision policy white paper. Australian Physiotherapy Association, Melbourne, Victoria, Australia. Available at https://australian.physio/sites/default/files/APA_Future_of_Physio_White_Paper_FW.pdf [Verified 14 September 2023]

Australian Physiotherapy Association and Nous Group (2020) Value of physiotherapy in Australia. Australian Physiotherapy Association, Melbourne, Victoria, Australia. Available at https://australian.physio/sites/default/files/Report_FA_WEB.pdf [Verified 14 September 2023]

Birks M, Chapman Y, Francis K (2008) Memoing in qualitative research: probing data and processes. *Journal of Research in Nursing* **13**, 68–75. doi:10.1177/1744987107081254

Braun V, Clarke V (2019) Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health* **11**, 589–597. doi:10.1080/2159676X.2019.1628806

Braun V, Clarke V (2021) One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology* **18**, 328–352. doi:10.1080/14780887.2020.1769238

Breadon P, Romanes D, Fox L, Bolton J, Richardson L (2022) A new Medicare: strengthening general practice. Grattan Institute, Melbourne, Victoria, Australia. Available at https://grattan.edu.au/wp-content/uploads/2022/12/A-new-Medicare-strengthening-general-practice-Grattan-Report.pdf [Verified 14 September 2023]

deBoer H, Andrews M, Cudd S, Leung E, Petrie A, Chan Carusone S, O'Brien KK (2019) Where and how does physical therapy fit? Integrating physical therapy into interprofessional HIV care. *Disability and Rehabilitation* **41**, 1768–1777. doi:10.1080/09638288.2018.1448469

Department of Health and Aged Care (2023) Physiotherapists 2020–2021. Department of Health and Aged Care, Canberra, ACT, Australia. Available at https://hwd.health.gov.au/alld-dashboards/index.html [Verified 14 September 2023]

Jia L, Meng Q, Scott A, Yuan B, Zhang L (2021) Payment methods for healthcare providers working in outpatient healthcare settings. *Cochrane Database of Systematic Reviews* **1**, CD011865. doi:10.1002/14651858.CD011865.pub2

Keel S, Schmid A, Keller F, Schoeb V (2023) Investigating the use of digital health tools in physiotherapy: facilitators and barriers. *Physiotherapy Theory and Practice* **39**, 1449–1468. doi:10.1080/09593985.2022.2042439

Nicholson C, Jackson C, Marley J (2013) A governance model for integrated primary/secondary care for the health-reforming first world – results of a systematic review. *BMC Health Services Research* **13**, 528. doi:10.1186/1472-6963-13-528

Northern Queensland Primary Health Network (2022) Health needs assessment 2022–2024. Northern Queensland Primary Health Network, Cairns, Queensland, Australia. Available at https://www.nqphn.com.au/about-us/reports-and-plans/health-needs-assessment [Verified 14 September 2023]

Patton M (2015) 'Qualitative research and evaluation methods.' 4th edn. (Sage: Thousand Oaks, CA, USA)

Physiotherapy Board of Australia and Physiotherapy Board of New Zealand (2015) Physiotherapy practice thresholds in Australia and Aotearoa New Zealand. Physiotherapy Board of Australia, Canberra, ACT, Australia. Available at https://www.physiotherapyboard.gov.au/documents/default.aspx?record=WD15%2f16750&dbid=AP&chksum=LWuk27uBUFj5MTUort6Qug%3d%3d [Verified 14 September 2023]

Reeves S, Pelone F, Harrison R, Goldman J, Zwarenstein M (2017) Interprofessional collaboration to improve professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews* **6**, CD000072. doi:10.1002/14651858.CD000072.pub3

Robinson OC (2014) Sampling in interview-based qualitative research: a theoretical and practical guide. *Qualitative Research in Psychology* **11**, 25–41. doi:10.1080/14780887.2013.801543

Seaton JA, Jones AL, Johnston CL, Francis KL (2020) The characteristics of Queensland private physiotherapy practitioners' interprofessional interactions: a cross-sectional survey study. *Australian Journal of Primary Health* **26**, 500–506. doi:10.1071/PY20148

Socha-Dietrich K (2021) Empowering the health workforce to make the most of the digital revolution. OECD Health Working Papers, No. 129. OECD Publishing, Paris, France.

Thorne S (2008) 'Interpretive description.' (Left Coast Press: Walnut Creek, CA, USA)

Thorne S, Stephens J, Truant T (2016) Building qualitative study design using nursing's disciplinary epistemology. *Journal of Advanced Nursing* **72**, 451–460. doi:10.1111/jan.12822

Tong A, Sainsbury P, Craig J (2007) Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care* **19**, 349–357. doi:10.1093/intqhc/mzm042

Xyrichis A, Reeves S, Zwarenstein M (2018) Examining the nature of interprofessional practice: an initial framework validation and creation of the InterProfessional Activity Classification Tool (InterPACT). *Journal of Interprofessional Care* **32**, 416–425. doi:10.1080/13561820.2017.1408576

World Health Organization (2010) Framework for action on interprofessional education and collaborative practice. World Health Organization, Geneva, Switzerland. Available at https://apps.who.int/iris/handle/10665/70185 [Verified 14 September 2023]

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Contributor	Statement of contribution
Jack Seaton	Designed the study (85%)
	Conducted the data collection (100%)
	Analysed the data (80%)
	Wrote the paper (100%)
Anne Jones	Designed the study (5%)
	Analysed the data (10%)
	Edited the paper (40%)
Catherine Johnston	Designed the study (5%)
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